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25 March 2008

To whom it may concern

Assessment Report for White River ("CanAlask") Ni-PGE project

Herewith the Assessment Report for work conducted by White River Resources Inc. on the White River Ni-PGE project in 2007 in the Whitehorse Mining District.

The package includes two hard copy volumes of one report entitled:

1. **Volume I of II Assessment Report Summarizing the Geological, Geochemical and Geophysical Surveys on the White River Nickel-PGE Project**

2. **Volume II of II Appendices Assessment Report Summarizing the Geological, Geochemical and Geophysical Surveys on the White River Nickel-PGE Project**

In addition a DVD with electronic copies of both reports, including all figures and maps is included.

The DVD includes

- **Folder:** WRR Assessment Report 2007
  - WRRAssessmentReport20080325.doc – 36.365 MB
  - WRRAssessmentReport20080325.pdf – 4.719 MB

- **Folder:** WRR Assessment Report Appendices
  - this includes Sub-Folders of all appendices from Appendix A to Appendix I, including Appendix I and II – 200 MB

- **Folder:** WRR Assessment Report Maps and Figures
  - **Sub-Folder: Figures**: includes all figures used in Volume 1 of the Assessment Report – 91.7 MB
  - **Sub Folder: Maps:** includes all maps accompanying Volume 1 of the Assessment Report – 183 MB

- **Folder:** WRR Assessment Report Data
  - **Sub-Folder: Geotech Ltd Data**: This includes all raw data pertaining to the VTEM survey data collected by Geotech Ltd – 597 MB

- **Sub-Folder: Scott Hogg and Associates Ltd Data:** This includes all raw data pertaining to the analysis of the VTEM survey data carried out by Scott Hogg and Associates – 847 MB

Please do not hesitate to contact me should you have any queries with regard to the above.

Yours sincerely

Ian McCutcheon
Project Geologist

Volume I of II

Assessment Report

Summarizing the

Geological, Geochemical and Geophysical Surveys

on the

White River Nickel-PGE Project

Owners: White River Resources Inc./ StrataGold Corp.

Beaver Creek area, Yukon Territory
Whitehorse Mining District

June 18 – July 22, 2007

ANT 23-26, 57-58, 60, 76-80, 97, 115, 135, 206, 208, 210, 263, 265, Claims (115K/02)
YC40402 – 40405, YC40436 – 40437, YC40439, YC40455 – 40459, YC40476, YC40494, YC40514, YC40585, YC40587, YC40589, YC40642, YC40644

ONION 1-25, WR 1-69, 83-94, 101-121, WHITE 1-18, 20, CANA 1-6, MICRO 1-4, 6, 10-12, RIVER 1-8 and WENG 1F, 2F, 3-10, HAND 1-27 Claims (115F/15, 16)
YA96595-9660 (Onion 1-13), YA97913 – 97924 (Onion 14-25), YB96868 – 96936 (WR 1-69), YB9694 – 896959 (WR 83 – 94), YB97334 – 97354 (WR 101-121), YB38234 – 38251 (White 1-18), YB38252 (White 20), YA97083 – 97088 (Cana 1-6), 86108 – 86109 (Micro 1-2), 86111 – 86112 (Micro 3-4), 86115 (Micro 6), 86367 – 86368 (Micro 10-11), 86360 (Micro 12), YB38253 – 38260 (River 1-8), YA96585 – 96586 (Weng 1F-2F), YA96732 – 96739 (Weng 5-10), YC40715 – 40741 (Hand 1-27)

PIC 1 - 156 Claims, (115F/16)
YC40742 –40825 (PIC 1-84), YC40979 – 40984 (PIC 85-90), 151-152), YC40832 – 40891 (PIC 91 – 150), YC40985 – 40990 (PIC 151-156)

Block A: 62° 3' 25" N, 140° 50' 10" W (NTS Sheet 115K/02)
Block B: 61° 57' 25" N, 140° 32' 15" W (NTS Sheet 115K/02 and 115F/15)
Block C: 61° 51' 50" N, 140° 19' 00" W (NTS Sheet 115F/16)

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March 14, 2008

Executive Summary

White River Resources Inc., a wholly owned subsidiary of Umbono Capital Partners, purchased the White River Nickel-PGE project from Xstrata plc in June 2007. During the summer of 2007 White River Resources Inc., conducted exploration on the White River Nickel-PGE project located in south-western Yukon approximately 400 km north west of Whitehorse and adjacent to the Alaska Highway.

The project area consists of three blocks of claims, Blocks A, B and C, totaling 694 claims over an area of approximately 33 800 acres. Blocks B and C include the known lateral extent of the northwest-southeast striking White River Intrusive Complex (WRIC). The WRIC was the focus of the exploration program conducted in 2007. The majority of the claims in Block B are held by StrataGold Corporation. White River Resources Inc. will earn a 75% option on these claims should it spend $3 million by the end of 2009.

With an interpreted strike length of approximately 29 km the WRIC is the second largest ultramafic-mafic complex of its kind in the Kluane Mafic-Ultramafic Belt. This metallogenic province extends along the North American Cordillera from British Columbia to eastern Alaska within the Wrangellia Terrane and includes the past producing Wellgreen Ni-Cu-PGE deposit some 90 km to the south of the White River project. The Kluane Mafic-Ultramafic belt is the second largest belt of nickeliferous intrusions in North America. Only the Circum-Superior belt is larger.

The WRIC occurs as a steeply dipping sill like body that intrudes volcanic and sedimentary units of Station Creek and Hasen Creek Formations of the Skolai Group. The WRIC is believed to be a strongly favourable setting for magmatic Ni-Cu-PGE sulphide mineralization, because it is considered a feeder system with a high volume of magma flow to the Nikolai Group basalts that overlie the Skolai Group.

Sporadic exploration on the property since the 1950's has revealed numerous high-grade showings along the footwall contact within marginal gabbro of the WRIC. Previous sampling campaigns along these showings have returned values of 4-6% Ni. Exceptionally high values of 27% Ni, and 30g/t Au highlight the prospectivity of the property.

The epigenetic Main and Footwall Zones of the CanAlask deposit occur within Block B in the footwall to the WRIC and these have been the focus of much of the previous exploration efforts on the property. Between 1954 and 1958 CanAlask Nickel Mines completed 518.2 m of drifting on two levels (2400' and 2700') to exploit this resource. Access was via an adit along the east bank of the White River. A resource of 390,235 tons grading 1.35% Ni was established in 1968 for the CanAlask deposit. This estimate is not NI43-101 compliant.

The magmatic and hydrothermal settings likely share a common origin, with hydrothermal mineralization deposited from late-stage fluids related to the magmatic mineralizing event. At the Wellgreen deposit, the vast majority of mineralization is magmatic, with a much smaller proportion of hydrothermally-derived mineralization. Therefore the size of hydrothermally derived showings in the footwall may be indicative of the potential size of proximal magmatic deposits.

Some CAD$463,351.451 was used to conduct exploration in the summer of 2007. Almost 70% (CAD$321,815) of the cost of the program was spent on conducting a tightly spaced 1676 kilometre helicopter-borne Versatile Time Domain Electromagnetic (VTEM) survey over Blocks B and C. Results of the VTEM survey were analyzed by Scott Hogg and Associates Ltd and these have revealed a number of drill targets for the 2008 field season. The field camp was shared with the Yukon Geological Survey (YGS) and much of the field work including, mapping, sampling and regional orientation was conducted in conjunction with the YGS.

The 2008 exploration program will focus on follow up drilling and field investigations of the VTEM anomalies in Blocks B and C with a more detailed field program including mapping, geochemical sampling and a VTEM survey planned for Block A.

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Map 3d: Block C Geotech VTEM System B-Field Profiles Time Channels 0.234 – 6.578 ms (in pocket)

Map 3e: Block C Geotech VTEM System dB/dt Profiles Time Channels 0.234 – 6.578 ms (in pocket)

Map 3f: Block C Geotech VTEM System Total Magnetic Intensity Map (in pocket)

1.0 Introduction

1.1 Introduction

From June 18th to July 22nd 2007, White River Resources Inc. ("WRR") conducted a surface and helicopter-borne exploration program on the White River Nickel-PGE Project located south of Beaver Creek, Yukon Territory, Canada (Figure 1). The focus of exploration was for potential nickel, and platinum group element ("Ni-PGE") deposits associated with the White River Intrusive Complex ("WRIC"), a member of the Kluane Mafic-Ultramafic Belt situated within the Wrangellia Terrane. The exploration area comprised three distinct blocks of claims referred to as Blocks A, B and C.

The WRIC and similar intrusive bodies within the Kluane Mafic-Ultramafic Belt have been favourably compared to the world class Noril'sk Ni-Cu-PGE deposits in Russia. The Wellgreen deposit some 90 km to the southeast of the WRIC is the only known past producer of Ni-Cu-PGE within the Kluane Belt and produced some 171 652 tonnes of ore with an average grade of 2.23% Ni, 1.39% Cu, 0.073% Co and 2.15 g/t Pt and Pd (Carne, 1987). The Wellgreen deposit provides a useful analogy and reference for exploration strategies at the White River project.

A resource of 390,235 tons grading 1.35% Ni was established in 1968 for the CanAlask Main and Footwall Zone deposits (T. Antoniuk, 1968, FL file R-11664). A revised estimate that factored in dilution by L. Hulbert (1995) gave an "ore reserve of 1,800,000 tonnes of 0.86% Ni". These figures are not NI43-101 compliant (Schulze, 2007).

There were two main aims to the fieldwork at White River in 2007. The first was to complete a 1676 line kilometre helicopter-borne Versatile Time Domain Electromagnetic (VTEM) geophysical survey across the two blocks of claims where the most historical exploration had been carried out (Blocks B and C). The second, to orientate and familiarize WRR with the geology, claims, and environment, as well as ground truth previous work and carry out due diligence sampling of historical showings. Field work on Blocks A, B, and C included field mapping and reconnaissance sampling.

The site camp at the White River Crossing RV Camp was shared with the Yukon Geological Survey (YGS) and most of the field mapping was done in conjunction with the 1:50 000 scale maps that the YGS were producing across the area. In addition introductions were made with the White River First Nations (WRFN) and Kluane First Nations (KFN).

A total of CAD$463,351.45 was filed for assessment work in October 2007 on the relevant claims. Of this CAD$244,018.12 (this excludes the 10% administration and overhead fee) was spent on exploration on the StrataGold Corp. claims. Table 1 below details these expenses and includes compilation and preparatory work completed prior to the field season work. A full summary of expenses is detailed in Appendix A.

Table 1: Summary of Expenses

Description of Costs	Amount
VTEM Survey	$321,815.00
Geological Personnel	$30,466.44
Camp Logistics/Accommodation	$30,246.86
Travel - Commercial Air	$6,822.60
Helicopter Costs	$18,199.50
Consulting	$23,865.75
Accommodation/Travel/Logistics/Field Supplies	$13,124.30
Field Supplies	$7,066.93
Assay and Petrography Costs	$5,241.34
Office Administration	$4,382.73
Safety Courses	$2,120.00
Total	**$463,351.45**

1.1.1 Underlying Agreements

WRR can earn a 75% interest in the StrataGold claims in Block B (179 claims, 8,317 acres including WENG 1F, 2F 3-11, ONION 1-25, WR 1-69, 83-94, 101-121, WHITE 1-18, CANA 1-6, MICRO 1-11, and RIVER 1-8) by incurring exploration and development expenses of $1,500,000 by the end of 2008 and a further $1,000,000 by the end of 2009. $500,000 was spent in 2006 by Falconbridge to make a total of $3,000,000 by the end of 2009. The KLUX 13-16 claims are owned 100% by StrataGold and do not fall under the option agreement.

In September 2006 Xstrata plc, finalized its acquisition of Falconbridge Ltd. The terms of agreement of StrataGold claims, and claim ownership of non-StrataGold claims were transferred to Xstrata plc. Following the purchase of the property from Xstrata, WRR effectively took over Falconbridge's responsibilities as the mandated operator on the StrataGold claims.

The breakdown of required expenses still outstanding to StrataGold until the end of 2009 is presented in Appendix A.

WRR can earn a 100% interest in the remainder of claims in Blocks A, B and C (517 claims, 25,486 acres) from Xstrata by spending $2 million by June 26, 2012. This agreement includes a 2% NSR and off-take provisions.

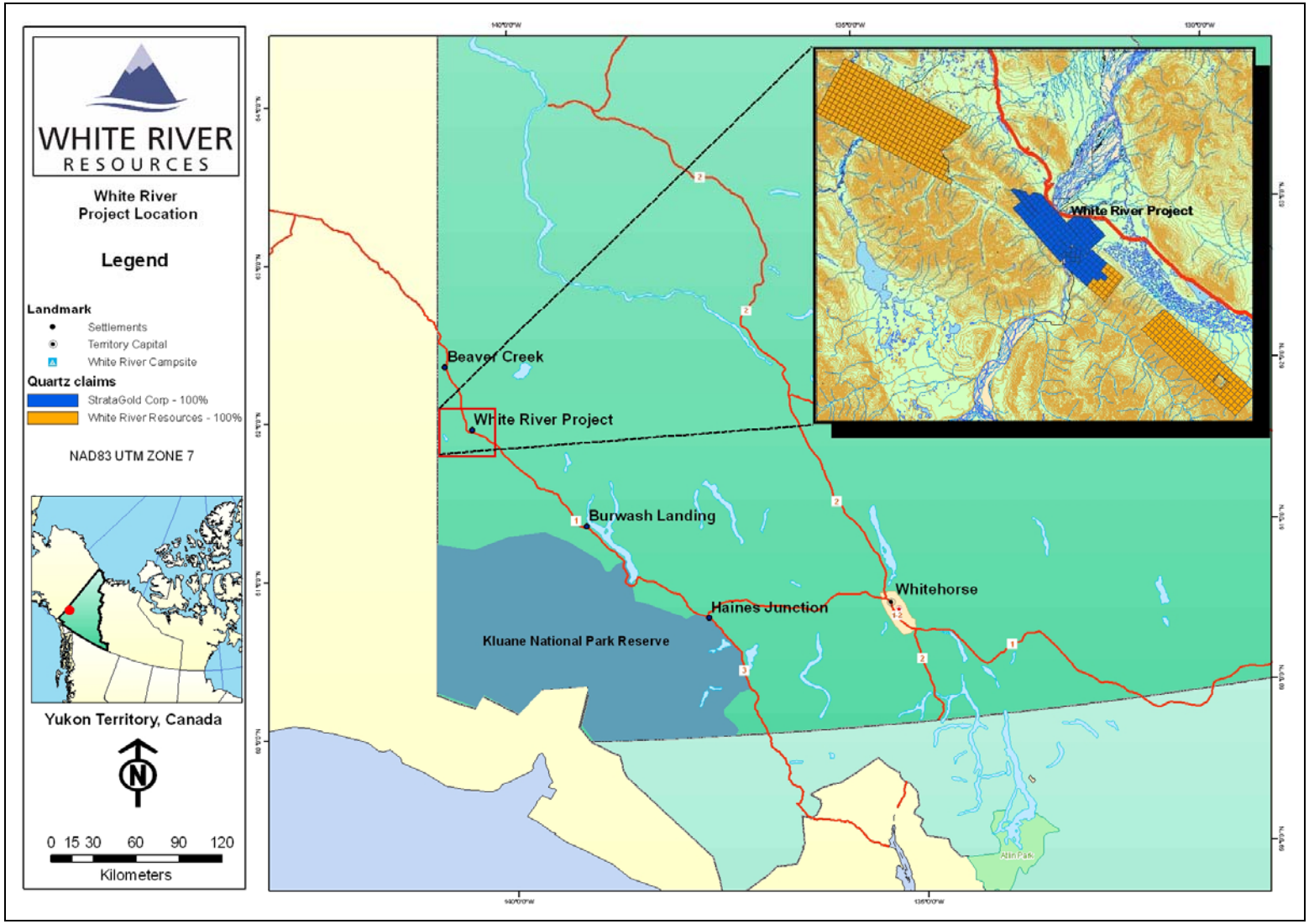


Figure 1: Locality map

1.2 Sources of Information

This report is based on information obtained from assessment reports and internal documents, including geological, geophysical and geochemical maps, rock, soil and silt geochemical results, and results from several episodes of past drilling. Government reports, including Yukon Minfile reports, as well as personal communication with Yukon government geologists, particularly Mr. Stephen Israel of Whitehorse, Yukon, were also used as source material.

Most notable among private sector sources, largely assessment reports, are those pertaining to T. Antoniuk, CanAlask Nickel Mines Ltd, Expatriate Resources Ltd and Uravan Minerals Inc. A large amount of geological information was obtained from Open File 3057, Geological Survey of Canada, by Dr. Hulbert, concerning the geology and metallogeny of the Kluane Mafic-Ultramafic Belt within the Yukon Territory.

Much of the historic data and some geological data used in this report were taken from a compilation by Mr. John Pattison, performed under contract to Falconbridge in late 2005.

This report is also based on results from the 2006 Falconbridge program and 2005 Falconbridge field visit.

Sections of this report have been taken directly from the NI43-101 report written for Falconbridge by Carl Schulze, All-Terrane Mineral Exploration Services in February 2007.

This report is also based on the results of the 2007 WRR exploration program, and on results of compilation of all historic data.

2.0 Property Description and Location

The White River Ni-PGE project consists of three main claim blocks covering much of the WRIC. From northwest to southeast these are the Block A, Block B and Block C claim blocks (Figure 2 and Map 1 in pocket).

Block A consists of 332 contiguous Yukon quartz mining claims, the ANT 1 – 330, 332, 334, comprising about 6,806 hectares (16,819 acres). This block is centered at 62° 3' 25" N, 140° 50' 10" W (NTS Sheet 115K/02), roughly 20 kilometres northwest of the CanAlask deposits and covering the potential northwestern extension of the WRIC.

Block B consists of the WENG 1F, 2F 3-11, ONION 1-25, WR 1-69, 83-94, 101-121, WHITE 1-18, CANA 1-6, MICRO 1-11, and RIVER 1-8 claims, under option from StrataGold Corp, and the HAND 1-27 claims, 100% owned by WRR. These form a contiguous block of 206 full and fractional quartz mining claims, comprising 3,856 hectares (9,527acres). The "Main Zone" of the CanAlask deposit is located at 61° 57' 25" N, 140° 32' 15" W, on NTS Sheet 115F/15; the "Discovery showing" is located at 62° 0' 13" N, 140° 37" 15"W, on NTS Sheet 115K/02.

Block C consists of 156 contiguous full and fractional Yukon quartz mining claims, the PIC 1-156 claims, entirely held by WRR. The claims cover about 3,018 hectares (7,456 acres) and are centered at 61° 51' 50" N, 140° 19' 00" W (NTS Sheet 115F/16). The KLUX 13–16 claims remain 100% owned by StrataGold Corp. and are situated within Block C.

Blocks A and B are separated by a parcel of Class A First Nations land; the WRFN IR-16A tract; Blocks B and C are separated by another parcel of Class A land, the WRFN R-35A block. Both parcels entitle the White River First Nation to surface and subsurface rights. The White River First Nation has not finalized its land claim agreement, although the land selection process is considered complete (Schulze, 2007).

All claims are contiguous and unpatented (Table 2, Figure 2) and have not undergone a legal survey. Details of underlying agreements are stated in Section 1.1.1, "Underlying Agreements"; expiry dates are stated in Table 2

The property areas were acquired to cover the WRIC, one of the largest ultramafic complexes within the Kluane Mafic-Ultramafic Belt. This complex has high potential to host magmatic nickel-copper sulphide mineralization similar to the Wellgreen nickel-copper deposit about 90 kilometres to the southeast within the Quill Creek Complex of the Kluane Mafic-Ultramafic Belt. A secondary target is the epigenetic CanAlask deposit, consisting of two major zones of copper – nickel sulphide mineralization, called the "Main" and "Footwall" zones respectively, located just east of the White River. By 1968, a resource of 390,235 tons grading 1.35% Ni was established (T. Antoniuk, 1968, FL file R-11664). Hulbert (1995) stated that this does not factor in dilution, thus a more realistic estimate is of an "ore reserve of 1,800,000 tonnes of 0.86% Ni". It must be noted that these estimates were released prior to establishment of current resource estimate standards under National Instrument 43-101, do not distinguish between resource categories, have not been substantiated by WRR, and should not be relied upon. The parallel "Footwall zone" occurs about 75 metres to the north, and is characterized by "narrow intervals of moderate copper and nickel grade" (Hulbert, 1995) intersected by several drill holes.

Past mine workings consist of underground excavations on several levels accessed by an adit along the east bank of the White River. There are also small surface excavations, likely for extraction of small bulk samples, in the Main and Footwall Zone areas. Numerous small trenches occur in the CanAlask area; a few also occur in the "Discovery" area in the northern portion of Block B. Previous drill sites have been reclaimed or have undergone natural re-vegetation and are difficult to locate.

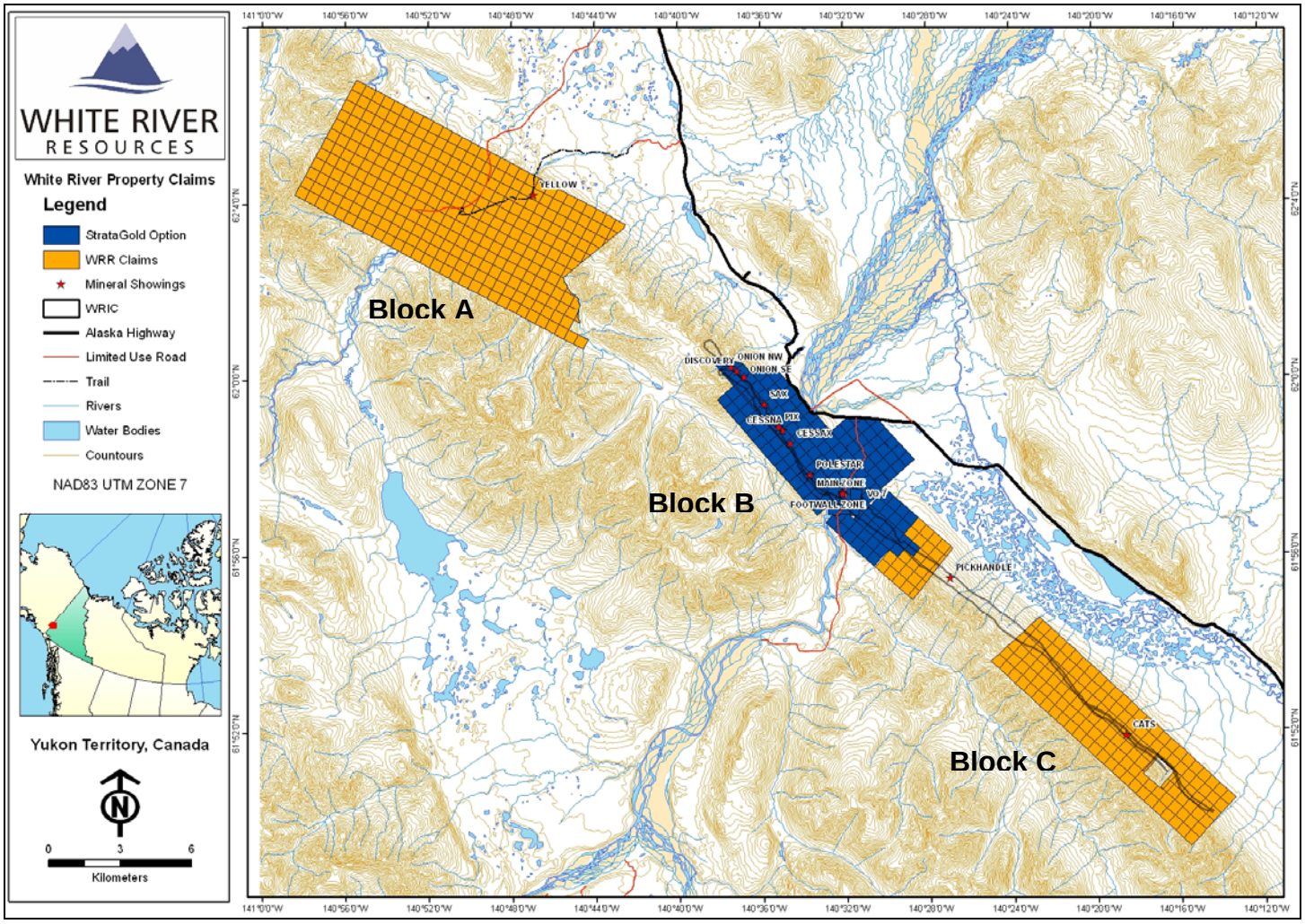


Figure 2: Distribution of claims
The areas between Blocks A and B and Blocks B and C are unresolved First Nations Claims areas. Mineral showings are highlighted. Refer to Map 1 (in pocket) for more detail

There are no existing tailings ponds, or major bulk sample excavations, and waste deposits consist of small tailings piles comprising a few tonnes each along an existing access road to the CanAlask deposit (Schulze, 2007). The 2007 program resulted in no significant disturbances.

The adit has not been sealed, although Falconbridge ensured high visibility through warning signs and markings in 2006. There are no other known environmental liabilities on the property (Schulze, 2007). All 2007 activities were properly permitted.

The area is now covered by two YGS 1:50 000 scale bedrock geology map sheets: Miles Ridge Area (Open File 2007-7, covering parts of NTS 115F/15,16 and 15K1/2) and Koidern River Area (Open File 2007-8, covering parts of NTS 115F/9, 15, 16 and 115G/12).

Table 2 (a-c): Claim status for Block A, Block B and Block C respectively

Table 2 a: Block A claim status

Grant Number	Claim Name	Claim Owner	Recording Date	Expiry Date
YC40380-40530	ANT 1-151	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-08
YC40531	ANT 152	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-09
YC40532	ANT 153	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-08
YC40533	ANT 154	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-09
YC40534	ANT 155	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-08
YC40535	ANT 156	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-09
YC40536	ANT 157	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-08
YC40537	ANT 158	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-09
YC40538-40570	ANT 159 - 191	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-08
YC40571	ANT 192	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-09
YC40572	ANT 193	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-08
YC40573	ANT 194	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-09
YC40574-4-575	ANT 195 - 196	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-08
YC40576	ANT 197	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-09
YC40577-40578	ANT 198 - 199	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-08
YC40579	ANT 200	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-09
YC40580	ANT 201	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-08
YC40581	ANT 202	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-09
YC40582	ANT 203	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-08
YC40583-40584	ANT 204 - 205	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-09
YC40585	ANT 206	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-10
YC40586	ANT 207	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-09
YC40587	ANT 208	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-10
YC40588	ANT 209	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-09
YC40589	ANT 210	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-10
YC40590-40591	ANT 211 - 213	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-09
YC40593	ANT 214	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-11
YC40594	ANT 215	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-09
YC40595	ANT 216	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-11
YC40596	ANT 217	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-08
YC40598-40625	ANT 219 - 246	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-08
YC40626	ANT 247	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-09
YC40627	ANT 248	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-08
YC40628	ANT 249	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-09
YC40629-40633	ANT 250 - 254	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-08
YC40634-40637	ANT 255 - 258	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-09
YC40638	ANT 259	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-10
YC40639	ANT 260	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-09
YC40640-40645	ANT 261 - 266	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-10
YC40646-40648	ANT 267 - 269	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-11
YC40649	ANT 270	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-10
YC40650	ANT 271	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-11
YC40651	ANT 272	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-10

YC40652	ANT 273	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-11
YC40653	ANT 274	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-10
YC40654	ANT 275	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-08
YC40655	ANT 276	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-10
YC40656-40689	ANT 277 - 310	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-08
YC40690-40699	ANT 311 - 320	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-09
YC40700	ANT 321	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-10
YC40701	ANT 322	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-09
YC40702-40709	ANT 323 - 330	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-10
YC40711	ANT 332	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-10
YC40713	ANT 334	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-10
YC40714	ANT 336	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-10

Table 2 b: Block B claim status

Grant Number	Claim Name	Claim Owner	Recording Date	Expiry Date
YA96595-96597	ONION 1 - 3	StrataGold Corporation - 100%.	19-Dec-86	19-Mar-16
YA96598-96599	ONION 4 - 5	StrataGold Corporation - 100%.	19-Dec-86	19-Mar-19
YA96600-96607	ONION 6 - 13	StrataGold Corporation - 100%.	19-Dec-86	19-Mar-22
YA97913-97914	ONION 14 - 15	StrataGold Corporation - 100%.	23-Jun-87	19-Mar-15
YA97915-97916	ONION 16 - 17	StrataGold Corporation - 100%.	23-Jun-87	19-Mar-18
YA97917-97924	ONION 18 - 25	StrataGold Corporation - 100%.	23-Jun-87	19-Mar-22
YB96868-96887	WR 1 - 20	StrataGold Corporation - 100%.	18-Oct-96	10-Apr-16
YB96888	WR 21	StrataGold Corporation - 100%.	18-Oct-96	10-Apr-15
YB96889	WR 22	StrataGold Corporation - 100%.	18-Oct-96	10-Apr-14
YB96890	WR 23	StrataGold Corporation - 100%.	18-Oct-96	10-Apr-15
YB96891-96892	WR 24-25	StrataGold Corporation - 100%.	18-Oct-96	10-Apr-14
YB96893-96899	WR 26-32	StrataGold Corporation - 100%.	18-Oct-96	10-Apr-15
YB96900	WR 33	StrataGold Corporation - 100%.	18-Oct-96	10-Apr-14
YB96901	WR 34	StrataGold Corporation - 100%.	18-Oct-96	10-Apr-16
YB96902	WR 35	StrataGold Corporation - 100%.	18-Oct-96	10-Apr-14
YB96903	WR 36	StrataGold Corporation - 100%.	18-Oct-96	10-Apr-16
YB96904-96905	WR 37 - 38	StrataGold Corporation - 100%.	18-Oct-96	10-Apr-15
YB96906-96907	WR 39 - 40	StrataGold Corporation - 100%.	18-Oct-96	10-Apr-17
YB96908-96909	WR 41 - 42	StrataGold Corporation - 100%.	18-Oct-96	10-Apr-15
YB96910	WR 43	StrataGold Corporation - 100%.	18-Oct-96	10-Apr-17
YB96911-96913	WR 44 - 46	StrataGold Corporation - 100%.	18-Oct-96	10-Apr-14
YB96914-96927	WR 47 - 60	StrataGold Corporation - 100%.	18-Oct-96	10-Apr-16
YB96928	WR 61	StrataGold Corporation - 100%.	18-Oct-96	10-Apr-15
YB96929-96931	WR 62 - 64	StrataGold Corporation - 100%.	18-Oct-96	10-Apr-16
YB96932	WR 65	StrataGold Corporation - 100%.	18-Oct-96	10-Apr-13
YB96933	WR 66	StrataGold Corporation - 100%.	18-Oct-96	10-Apr-15
YB96934-96936	WR 67 - 69	StrataGold Corporation - 100%.	18-Oct-96	10-Apr-13
YB96948-96955	WR 83 - 90	StrataGold Corporation - 100%.	18-Oct-96	10-Apr-15
YB96956-96959	WR 91 - 94	StrataGold Corporation - 100%.	18-Oct-96	10-Apr-13
YB97334	WR 101	StrataGold Corporation - 100%.	11-Feb-97	10-Apr-15
YB97335-97341	WR 102 - 108	StrataGold Corporation - 100%.	11-Feb-97	10-Apr-19
YB97342-97346	WR 109 - 113	StrataGold Corporation - 100%.	7-Mar-97	10-Apr-15
YB97347-97354	WR 114 - 121	StrataGold Corporation - 100%.	7-Mar-97	10-Apr-13
YB38234-38241	WHITE 1 - 8	StrataGold Corporation - 100%.	31-Aug-93	10-Apr-21
YB38242	WHITE 9	StrataGold Corporation - 100%.	31-Aug-93	10-Apr-18
YB38243	WHITE 10	StrataGold Corporation - 100%.	31-Aug-93	10-Apr-21
YB38244	WHITE 11	StrataGold Corporation - 100%.	31-Aug-93	10-Apr-18
YB38245	WHITE 12	StrataGold Corporation - 100%.	31-Aug-93	10-Apr-17
YB38246	WHITE 13	StrataGold Corporation - 100%.	31-Aug-93	10-Apr-18
YB38247-38251	WHITE 14 - 18	StrataGold Corporation - 100%.	31-Aug-93	10-Apr-17
YB38252	WHITE 20	StrataGold Corporation - 100%.	31-Aug-93	10-Apr-17
YA97083	CANA 1	StrataGold Corporation - 100%.	18-Mar-87	10-Apr-16
YA97084	CANA 2	StrataGold Corporation - 100%.	18-Mar-87	10-Apr-20
YA97085	CANA 3	StrataGold Corporation - 100%.	18-Mar-87	10-Apr-16
YA97086	CANA 4	StrataGold Corporation - 100%.	18-Mar-87	10-Apr-20

YA97087	CANA 5	StrataGold Corporation - 100%.	18-Mar-87	10-Apr-16
YA97088	CANA 6	StrataGold Corporation - 100%.	18-Mar-87	10-Apr-20
86108-86109	MICRO 1 - 2	StrataGold Corporation - 100%.	28-Apr-64	10-Apr-16
86111	MICRO 3	StrataGold Corporation - 100%.	28-Apr-64	10-Apr-20
86112	MICRO 4	StrataGold Corporation - 100%.	28-Apr-64	10-Apr-16
86115	MICRO 6	StrataGold Corporation - 100%.	28-Apr-64	10-Apr-16
86367	MICRO 10	StrataGold Corporation - 100%.	28-May-64	10-Apr-20
86368	MICRO 11	StrataGold Corporation - 100%.	28-May-64	10-Apr-16
86360	MICRO 12	StrataGold Corporation - 100%.	28-May-64	10-Apr-16
YB38253-38260	RIVER 1 - 8	StrataGold Corporation - 100%.	31-Aug-93	10-Apr-17
YB06099	WENG 11	StrataGold Corporation - 100%.	15-Jul-87	10-Apr-20
YA96585	WENG 1F	StrataGold Corporation - 100%.	19-Dec-86	10-Apr-16
YA96586	WENG 2F	StrataGold Corporation - 100%.	19-Dec-86	10-Apr-16
YA96732-96739	WENG 3-10	StrataGold Corporation - 100%.	16-Jan-87	10-Apr-16
YC40715-40741	HAND 1 - 27	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-13

Table 2 c: Block C claim status

Grant Number	Claim Name	Claim Owner	Recording Date	Expiry Date
YC40742-40825	PIC 1 - 84	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-11
YC40979-40984	PIC 85 - 90	White River Resources Inc. - 100%.	28-Nov-05	28-Nov-11
YC40832-40891	PIC 91 - 150	White River Resources Inc. - 100%.	3-Oct-05	3-Oct-11
YC40985-40990	PIC 151 - 156	White River Resources Inc. - 100%.	28-Nov-05	28-Nov-11

3.0 Access, Physiography and Climate

This section is taken from C. Schulze's NI43-101 report (2007).

The northern portion of Block B including all areas north of the White River, occur along Miles Ridge, a steep northwest-southeast trending small mountain range with elevations to about 5,500 feet (1,675 metres). The east flank of the ridge is rugged and locally impassable, with steep terrain incised by numerous small streams. Tundra vegetation covers ridgelines, although much of the upper portions of the east flank, including the target areas, are devoid of vegetation. Stunted conifer and scrub covers areas below 4,000 feet (1,220 metres).

The project area to the east of the White River, within Block B, covers a lower area of moderate relief, with local steep hills in the southeastern portion of the block. Elevations range from about 2,200 feet (670 metres) along the White River to about 5,000 feet (1,525 metres) in extreme southern areas, although most areas are below 3,500 feet (1,075 metres). Vegetation consists of immature hardwood and mixed forest in well-drained areas, with a large portion covered by boggy or swampy areas with stunted conifer and/or willow scrub.

Block C covers very similar terrain to that of Miles Ridge, with similar tundra vegetation covering elevations to 6,000 feet (1,830 m). Several benches of moderate to gentle relief occur below the 1,200-metre level.

The central portion of Block A, west of Beaver Creek, consists of moderate terrain largely covered by muskeg with stunted conifers, with numerous narrow steep stream valleys. The western area, bounded by Sanpete Creek is rugged, particularly along the northwest side of this creek, with Chair Mountain attaining an elevation of about 5,500 feet (1,675 metres). Ed Mountain in the north-central area attains an elevation of 5,100 feet (1,550 metres). Terrain west of Beaver Creek is very rugged, exceeding 5,500 feet in height. Rugged areas above tree line are commonly devoid of vegetation, although tundra vegetation covers areas of moderate terrain.

The area has a typically sub-arctic montane climate, with short fairly warm summers. Summer temperatures along valley floors are typically in the 15^{o} to 25^{o}C range. Winters are long and very cold, with average temperatures in the -20^{o} to -30^{o} C range. Precipitation is light, falling mostly as rain, with snowpack accumulations usually less than one metre. The exploration season extends from early June through late September. Water access for diamond drilling is fair during the field season, although the small streams likely become dry shortly following the onset of winter.

Seasonal access to the CanAlask deposits is by a rough road usable by 4 x 4 vehicles, extending south for roughly 3.5 kilometres from the Alaska Highway about 1.5 km east of the White River bridge. The project area to the east of the White River, within Block B is accessible by all-terrain or "Argo" amphibious vehicles. All other project areas are accessibly only by helicopter.

The southeastern portion of Block B, and Block A, are large enough and of suitably moderate to gentle terrain to accommodate mining facilities, potential mill processing sites, heap leach pads, and waste disposal sites. Suitable terrain for such facilities is extremely limited on Miles Ridge, complicated by its partial encapsulation by the White River First Nation parcel. Land for cultural development is also somewhat limited on Block C, bounded by a wildlife preserve to the northeast, although flat terrain is available for property expansion just north of the southeastern portion.

Some facilities, including good lodging and restaurant facilities and a limited work force, are available in the village of Beaver Creek, with a population of 90, located along the Alaska Highway about 55 km north of the White River bridge. Full service facilities, including an available skilled work force, are available at Whitehorse, located along the Alaska Highway about 400 kilometres to the southeast. The deepwater port at Haines, Alaska, is accessible by paved highway 490 km to the south. The Alaska Highway is a major paved highway, connecting the

Beaver Creek area both to southern Canada and to Alaska, just northwest of Beaver Creek. A diesel generator supplies electrical power to Beaver Creek; these facilities would have to be upgraded, or independent facilities built, to service any future mining and milling operations.

4.0 History

This section is taken largely from the summary provided by J. Pattison (2005), The Yukon Minfile and C. Schulze's NI43-101 report (2007).

4.1 History of Block A

Only minor exploration has occurred within the present confines of Block A. The most significant work occurred at the Chair gold prospect, a strongly gossanous occurrence along the eastern flank of Chair Mountain. This was first staked as the ICE claim(s) in 1966 by D. Backstrom, and then re-staked as the BILLY claim(s) in 1980 by K. Gruber. It was re-staked as the RAIN claims in 1982 by Harjay ECL which re-staked it again in 1982 as the CHAIRGOLD claims. In 1988 B. Harris staked the SLUMP claims to the east. Exploration uncovered pyritic quartz veining hosting minor copper mineralization, as well as strongly altered intrusive rock. Exploration on the SLUMP claims revealed quartz-barite veining with minor gold, and minor copper-lead-zinc veining.

The only other noteworthy occurrence prior to the 2006 season is the Yellow showing, staked as the YELLOW and PL claims by Harjay ECL in 1987, which performed hand trenching later that year. Exploration revealed pyrrhotite and chalcopyrite as massive clots and fracture fillings in a 15-metre wide shear zone crosscutting an ultramafic sill; assays returned low nickel and platinum-group metal values.

On October 3, 2005 Falconbridge staked the ANT 1-330, 332, 334, 336 claims. In 2006 Falconbridge conducted reconnaissance-style silt sampling and geological mapping program along most major streams. A total of 210 silt samples were collected at 250 metre intervals along the main streams, and larger tributaries. Some detailed mapping and sampling were done at the "Marilyn Creek" stock and "Manson Brook" (Chair Mountain) occurrence. A total of 68 rock samples and 14 soil samples were collected in Block A.

4.2 History of Block B – CanAlask Area

Interest in the CanAlask area was first sparked with the discovery of the CanAlask showing in 1952 by P. Eikland, W. Theriault and F. Hickey. The three prospectors staked 32 WHITE, WOLVERINE and CARIBOU claims in March 1953, covering the occurrence (rusty mineralized volcano-sedimentary rocks exposed on a bluff on the east bank of the White River). The claims were optioned to Prospectors Airways Company Ltd. on behalf of a syndicate including Noranda Mines Ltd. and Kerr Addison Gold Mines Ltd (Yukon Minfile, 2006). The syndicate drilled 14 holes totaling 1652.3 m before dropping the option in March, 1954.

In 1954 CanAlask Nickel Mines Limited (an amalgamation of Ontario Nickel Mines Ltd. and Frobisher Ltd.) optioned the CanAlask property. Between 1954 and 1958 CanAlask completed 518.2 m of drifting on two levels (2400' and 2700'). Access was via an adit on the 2700' level. CanAlask completed 466.7 m of underground and 1,025 m of surface drilling on the showing. CanAlask also optioned several other claim groups along the White River Intrusive Complex (WRIC), including the CATS and DOGS claim groups located in the WRIC about 18 km southeast of the CanAlask deposit. After 1958 no further work was done on CanAlask or on any of the surrounding properties. The CanAlask claims were allowed to lapse in 1963.

The CanAlask area was re-staked as the MICRO 1-9 claims in March, 1964 by P. Versluce, H. Versluce and C. Gibbons, who conducted trenching in 1965 and 1966. In 1967 the property was optioned to Discovery Mines Ltd., Rayrock Mines Ltd. and Consolidated Canadian Faraday Ltd. In 1967, the syndicate performed magnetometer, IP and EM geophysical surveys, bulldozer trenching and diamond drilling (2 surface holes totaling 370.9 metres). In 1968, Faraday

transferred its interest to Pacific Petroleum Ltd; the underground workings were re-opened and 370.9 metres of underground drilling was done, as well as 1,005.9 metres of drilling from surface.

The option was dropped, and the owners performed more trenching in 1970. In 1972, the property was optioned to the Nickel Syndicate (Canadian Superior Exploration Ltd., Aquitaine, Home Oil Ltd. and Getty Minerals Ltd.). The Nickel Syndicate conducted mapping and geophysical surveys (magnetometer and EM) and drilled 7 holes (VQ-1 to VQ-7) totaling 640 m. The option was terminated in 1974. The owners rehabilitated the portal in 1978 (Yukon Minfile, 1978).

In 1986 the property was optioned to the Kluane Joint Venture, consisting of All-North Resources Ltd. and Chevron Minerals Ltd. and joint-ventured with Rockridge Mining Corporation. This Joint Venture conducted mapping, magnetometer and VLF surveys, minor geochemical surveying and 603.2 metres of diamond drilling in 5 holes over the Main Zone area in1987.

In 1986 Polestar Exploration Inc. staked the V 1-36 claims over the WRIC northwest and southeast of the CanAlask deposit. Polestar conducted prospecting and collected “approximately” 374 soil and 223 rock samples. Harjay Exploration Co. Ltd. staked the CT 1-17 claims to the north and the WR 17-26 claims to the southwest. Brian Lueck staked the KM 1-12 claims to the west in October, 1987. In 1988 Lodestar Exploration Ltd conducted magnetometer and VLF surveying on the CT claims. In 1989 G. Harris staked the LOBO 1-10 claims about one kilometre to the southwest.

In 1993 Expatriate Resources purchased a 100% interest in the CANA, MICRO, WENG and ONION claim groups and later that year staked the WHITE 1-18 and 20, and the RIVER 1-8 claims. They carried out trenching, magnetometer and VLF surveying, and geochemical and geological surveying. In 1994 Cachet Enterprises Corporation entered into an option to earn a 50% interest in the MICRO claims. Cachet conducted magnetic, VLF and horizontal loop EM surveys and drilled 11 holes totaling 1,472 m. Cachet dropped the option in 1996.

In 1996 Expatriate expanded its property position to cover all of the WRIC between the CanAlask deposit and the Discovery Showing. A 253 line-km Dighem V helicopter-borne magnetometer and frequency domain EM survey was flown over the property, now expanded to resemble the present Block B. Traverse lines were flown at a bearing of 045° with an average separation of 100 m. In 1997 Expatriate conducted a Max-Min survey to locate weak to moderate strength airborne conductors situated in the WRIC close to the CanAlask deposit and then drilled ten holes for 1,277.7 metres to test them.

In 1999 Uravan Minerals Inc. entered into an option agreement to earn a 60% interest in the property. Uravan focused its attention on the northern portion of Block B on Miles Ridge.

The claims were transferred to the StrataGold Corporation in May, 2003. In August 2005, Falconbridge visited the CanAlask and Onion areas, obtaining numerous samples for ICP analysis, including copper and nickel analysis, as well as samples for whole rock analysis. In October 2005 Falconbridge finalized its agreement to earn an 80% interest in all claims held by the StrataGold Corporation. The HAND 1-27 claims were staked by Falconbridge on the 3rd October 2005 along the southeast border of Block B.

In 2006 Falconbridge conducted a surface exploration program that consisted of refurbishment of 26.80 kilometres of previously cut line on the “CanAlask” grid. Some 22.35 line kilometers of UTEM-3 electromagnetic surveying of these lines was conducted. Limited geological mapping and due diligence rock sampling of surface expressions and small tailings piles of the Main Zone of the CanAlask deposit was performed. An additional 16.65 kilometers of line was cut on the contiguous “Pole” grid which underwent 12.925 line km of UTEM-3 surveying. Detailed geological mapping of most of the “Pole” grid as well as soil sampling at 50 m station spacing along central portions of this grid and some silt sampling was also conducted.

In September 2006 Xstrata plc, finalized its acquisition of Falconbridge Ltd. The terms of agreement of StrataGold claims, and claim ownership of non-StrataGold claims were transferred to Xstrata plc.

4.3 History of Block B – Miles Ridge area

In 1952 prospectors working on Miles Ridge at the western end of the WRIC, 7 km northwest of the CanAlask showing, discovered a nickel-copper occurrence known as the Discovery showing. The showing was staked as the BETH claims in July 1952 by Prospectors Airways Ltd. In September 1953 CanAlask Nickel ML staked the MARG claim(s) nearby to the west as follow-up to aeromagnetic survey results.

The BETH area was re-staked as the ELLIK etc claims in 1956 by Per Johnson and W. Abraham, who conducted sampling and hand trenching; then as the SUCCESS block by G. Harris in 1957. It was re-staked as the ONION block in July, 1960 by Conwest, then as the FOX and SPARKY claims in 1964, then as the JUMBO claims in 1964 and finally as the OWL block in July 1965. Cominco Ltd. optioned the property in 1966 and conducted mapping and sampling. The showing area was re-staked as the PORKY block in 1967, as the SPARKY in 1968 and as the MICRO claims in 1969, by C. Gibbons, who also was involved in staking the MICRO claims still extant in the CanAlask area.

In 1986 the showing area was re-staked as the ONION block by the Kluane Joint Venture, consisting of All-North Resources Ltd. and Chevron Minerals Ltd., which optioned it to Rexford Minerals Ltd. Rexford conducted geochemical sampling and geological mapping in 1987 and geophysical surveying in 1988, before adding more ONION claims in 1989. In 1993 Expatriate purchased a 100% interest in the ONION claims, and, in 1996 surrounded these with the WR claims.

In 1998 Expatriate conducted prospecting and silt sampling on Miles Ridge. The work occurred across a seven-kilometre portion of the footwall contact of the WRIC that included the Discovery showing area.

In 1999 Uravan Minerals Inc. entered into an option agreement to earn a 60% interest in the property. In 2001 Uravan conducted detailed mapping, lithogeochemical sampling, surface magnetometer, Max Min and IP surveys on Miles Ridge. A petrographic and lithogeochemical study of the rock samples collected was also done.

In 2002 Uravan drilled two holes (495 m) to test weak Max-Min conductors in the vicinity of the Onion SW and Sax Ni-Cu occurrences on Miles Ridge.

The claims were transferred to the StrataGold Corporation in 2003. Following a site visit in August 2005 Falconbridge finalized its agreement to earn an 80% interest in all claims held by the StrataGold Corporation in October of the same year.

In 2006 Falconbridge refurbished 11.05 km of picketed and cut line on Miles Ridge which underwent a UTEM-3 survey. Rock sampling (40 samples) and some silt sampling (10 samples) was conducted across the WRIC.

4.4 History of Block C

In 1953, CanAlask Nickel Mines staked the CATS and DOGS claim groups to cover an elongate, 3.2 km long aeromagnetic anomaly at the southeastern end of the WRIC. Pieces of serpentinized copper-nickel sulphide-bearing ultramafic float were reportedly found at scattered locations throughout the area. A winter road was built and an attempt was made to drill the area in 1954 but the drill was unable to penetrate the overburden.

The showings were re-staked as the BEAN 1-4 claims in 1966 by R.A. Dickson, and as the NICU 1-4 claims in 1967 by General Enterprises Ltd. In 1967 General Enterprises carried out bulldozer trenching.

In 1968 P. Versluce and R. Hilker re-staked this area as the JJ 1-22 and GG 1-56 claims, and performed bulldozer trenching in 1969. The results of the trenching are not known. The owners staked the M 1-14 and 19-61 claims to the northwest in 1973 and added more claims in 1974 and 1975.

In 1975, Western Mines Limited (a Brascan subsidiary) optioned the property and conducted mapping, prospecting and limited magnetometer surveys over the area. No significant nickel mineralization was found but numerous vein-hosted copper sulphide showings were discovered in volcanic and sedimentary rocks of the Skolai Group. Western Mines conducted geological mapping in 1976 before dropping its option.

In 1986 the Kluane Joint Venture re-staked the areas as the CATS 1-20 and DOGS 1-16 claims, and optioned the property to Silverquest Resources Ltd. in April, 1987. Later that year, Silverquest conducted prospecting and soil sampling surveys over the area. The Harjay Exploration Co Ltd. tied on the PILLOW 1-11 claims to the west in 1987 and performed prospecting and sampling in 1988.

Archer, Cathro and Associates (1981) Ltd. re-staked the showing as the KLU 1-24 claims in 1994 and the KLUX 1-26 claims in 2000, on behalf of the Donjek Joint Venture, comprised of Expatriate Resources Ltd. and Strategic Minerals Ltd (Yukon Minfile, 2006). All but the KLUX 13-16 claims were allowed to lapse before the joint venture performed rock sampling and prospecting on the remaining four claims in 2001. The claims were transferred to Expatriate Resources in 2002 and then to StrataGold in 2003.

On October 3rd 2005 Falconbridge staked the PIC 1-156 claims. In 2006 Falconbridge conducted a limited mapping, prospecting and sampling program within Block C. Some 26 rock samples and 24 silt samples were collected and analyzed. Prospecting of known peridotite units along “Lunchbox Creek” led to the discovery of a small limonitic occurrence that returned elevated copper values.

5.0 Geological Setting

5.1 General Geology

The project area is underlain by rocks of the Late Paleozoic to Middle Mesozoic Wrangellia Terrane. This major accretional terrane has been identified along the Pacific Margin of the Canadian Cordillera from as far south as northwestern Idaho, through British Columbia and southeastern Alaska (Figure 3). The Wrangellia Terrane, and the Alexander Terrane are believed to be part of the second major accretional event that make up the Canadian Cordillera and together they form the Insular Superterrane (Schulze, 2007). The Wrangellia Terrane may have drifted some 4000 km prior to collision with the north western margin of North America by the middle Jurassic and is bounded to the east by the regional scale transpressional Denali Fault. Late Mesozoic and Cenozoic dextral strike-slip faulting along the Denali may have reactivated the Wrangellia/Alexander suture defined by the Duke River Fault to the west (Israel and Van Zeyl, 2004).

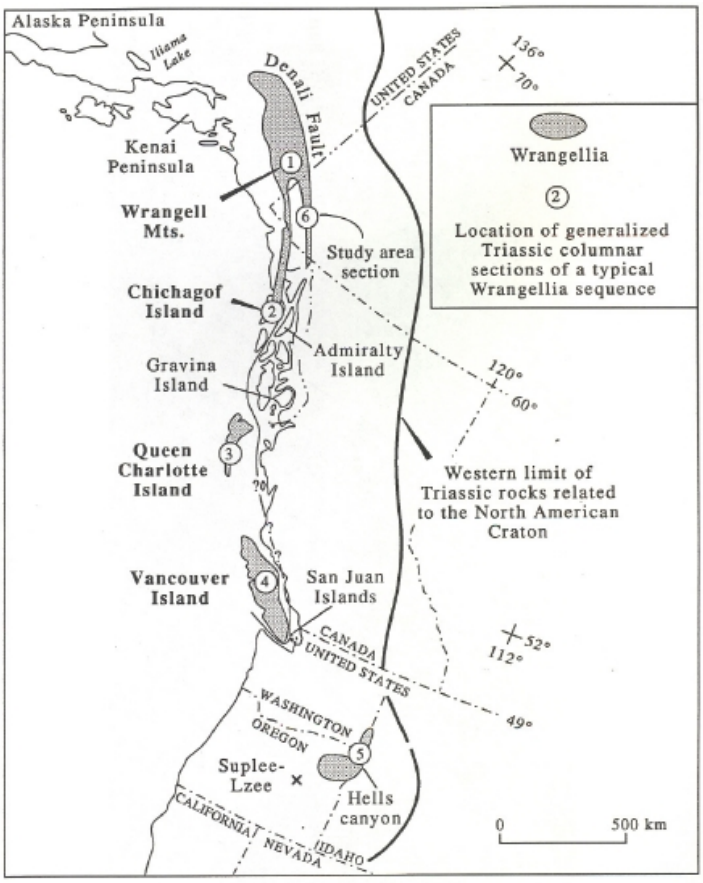


Figure 3: Extent of the Wrangellia Terrane.
The Wrangellia Terrane occurs along the western margin of North America from southern Alaska to north western Idaho (Hulbert, 1995).

Stratigraphically the Pennsylvanian (?) to Permian Skolai Group comprises the oldest rocks in the project area and form the base of the Wrangellia Terrane. The Skolai Group can be divided into the older Station Creek Formation and the younger Hasen Creek Formation. The Station Creek Formation represents a volcanic island arc and consists predominantly of volcanic rocks that includes andesitic and basaltic volcanics that grade upward to medium grained tuffs with local

volcanic breccias. The upper 400 m of the Station Creek Formation consists of sedimentary units including shales, siltstones and limestones that form a gradational contact with the overlying Hasen Creek Formation and mark the start of subsidence of the volcanic arc. This gradational contact or “Transition Zone” is understood to be the point of intrusion of many of the Ni-Cu-PGE bearing ultramafic bodies in the Kluane Mafic-Ultramafic Belt. The Station Creek Formation has been estimated to be approximately 1000 m thick however the base of the formation has not been exposed (Hulbert, 1995; Israel *et al*, 2006). Following arc subsidence the marine sediments of the Hasen Creek Formation were deposited largely consisting of chert, black shales, sandstones and limestones with minor conglomerates. The Hasen Creek Formation is approximately 800 m thick (Hulbert, 1995). Sill-like gabbroic units (possibly Maple Creek Gabbros) that occur throughout the Hasen Creek Formation are interpreted to be of Lower Permian age (Schulze, 2007).

The Kluane Mafic-Ultramafic Belt is made up of a number of intrusive ultramafic bodies that intrude into the Skolai Group at or near the Station Creek-Hasen Creek contact (Hulbert, 1995). These Triassic ultramafic bodies are believed to be feeders into the widespread subaerial flood basalt volcanism of the Nikolai Group that unconformably overlies the Hasen Creek Formation. The Nikolai is some 1000 m thick and consists of a sequence of basalt flows with minor interbedded limestones. Contrary to previous research the Skolai and Nikolai Groups have been extensively folded in the project area during a number of phases of folding and related low-angle thrust faulting. Field mapping by the YGS in the Quill Creek and Duke River areas to the southeast support these observations (Israel and Van Zeyl, 2004; Israel *et al*, 2005).

Late Triassic to early Jurassic strata of the Nizina and Chitistone Limestones and McCarthy Formation comprise the upper sequence of the Wrangellia Terrane (Hulbert, 1995). These strata were not observed in the project area during the field season. The Kluane Range Intrusions are the youngest rocks evident in the project area and are Lower Cretaceous in age. A stratigraphic column representing the typical stratigraphy of the study area is presented in Figure 4. Age dating of the various sedimentary units is largely based on fossil records and controls.

More details relating to the regional geology and tectonic and structural history of the area can be found in Hulbert’s exhaustive research (1995) as well as Israel and Van Zeyl (2005); Israel *et al* (2006); Israel and Cobbett (2008) and references therein.

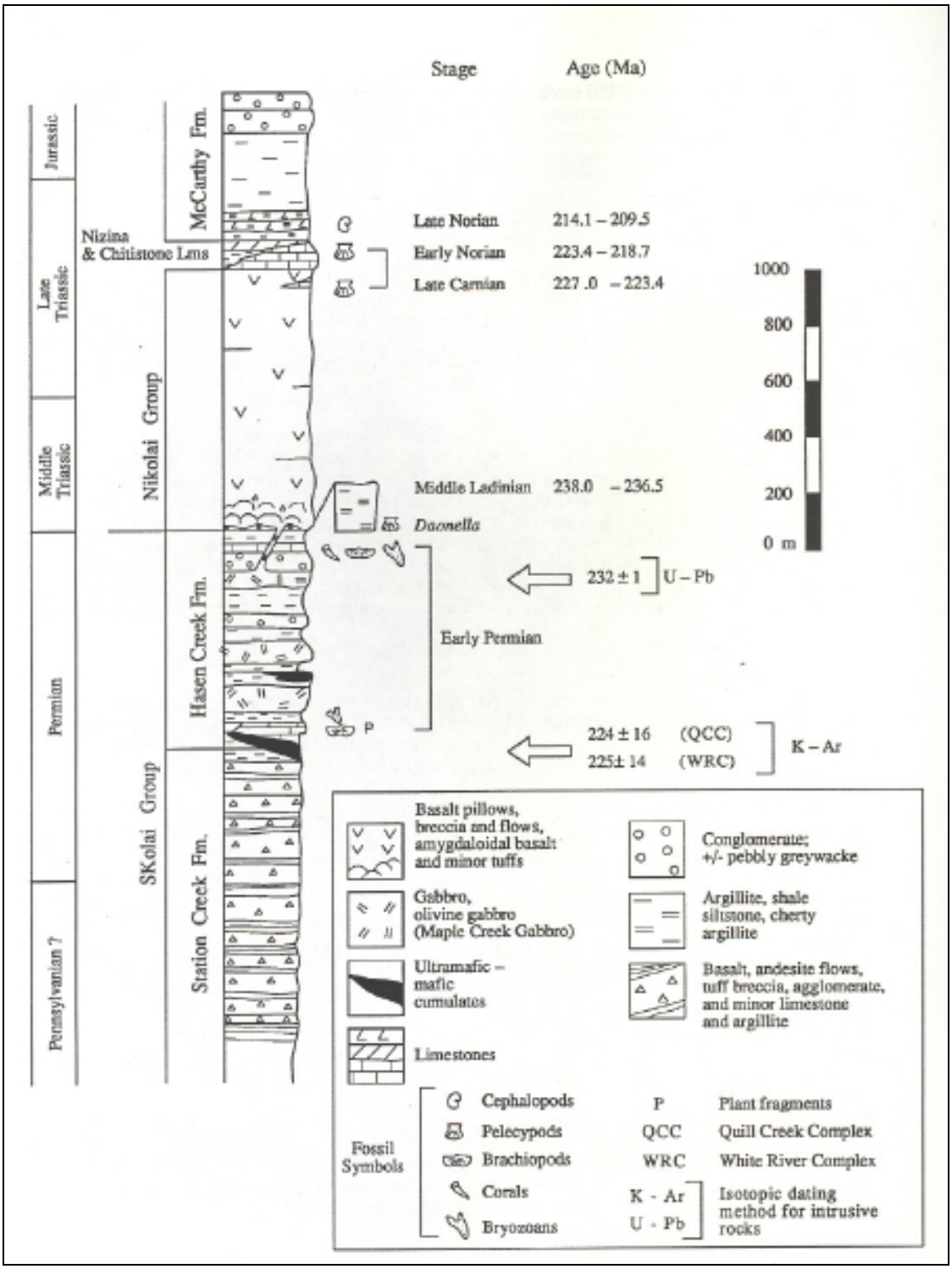


Figure 4: Generalized stratigraphic column for the Wrangellia Terrane (Hulbert, 1995)

5.2 Property Geology and Geological Model

This section is taken largely from C. Schulze's NI43-101 report (2007).

The Kluane Ni-Cu-PGE metallogenic terrane is the second largest nickeliferous belt in North America, second only to the Circum-Superior belt. The Kluane Mafic-Ultramafic Belt is made up of a number of intrusive Triassic ultramafic bodies that intrude into the Skolai Group at or near the Station Creek-Hasen Creek contact (Hulbert, 1995). The WRIC is considered to be the second largest of these bodies and is the focus of exploration in the project area. The WRIC is approximately 29 km in length and ranges in thickness from 100-300 m. This sill like body strikes at 135° and dips to the southwest at 50°-90° (Figure 5).

The WRIC is relatively well exposed on Miles Ridge west of the White River where it occurs as a sill-like body of ultramafic and mafic rocks 100 to 150 m thick dipping about 50° to the southwest. The northern margin of the WRIC represents the basal footwall contact zone while the southern margin delineates the upper hanging wall intrusive contact. The intrusion itself is comprised mostly of peridotite and dunite. There is insufficient bedrock exposure to map out zonation within the intrusion; however, where the basal contact is exposed a narrow (< 3 m wide) gabbroic phase commonly occurs. The gabbro is medium to coarse-grained, highly oxidized and often contains at least minor amounts of pyrrhotite and chalcopyrite. A quartz-carbonate alteration halo roughly 50 m wide envelopes the WRIC. It is derived from mafic-ultramafic rocks plus some of the adjacent wallrocks. Rocks within this halo have a fine-grained waxy grey to buff coloured matrix that weathers orange, and are commonly laced with thin quartz and carbonate veins. Fine disseminations of pyrite are present locally. Numerous small Ni-Cu-PGE sulphide showings occur along the basal contact. Previous reports support the idea that embayments and topographic depressions in the floor of the WRIC provide excellent exploration targets as these enhance the gravity segregation of co-existing magmatic sulphides (Hulbert, 1995; Lahusen 2002). Uravan Minerals targeted the Discovery-Onion SE and Sax-Cessna embayments with their drilling efforts in 2002. However, no significant economic intersections were found in drillholes C02-002 and C02-003, which tested these targets.

The WRIC is poorly exposed on the east bank of the White River. Based on magnetic surveys and drill records, it is interpreted as being 250 to 600 m wide, striking at 120° and dipping steeply to the southwest. It is predominantly ultramafic in composition and appears to possess a crude cumulate stratigraphy (Hulbert, 1995). A discontinuous gabbroic phase is developed along the basal (northeast) contact. This contact has been drill tested at relatively shallow depths at 60 to 120 m intervals along a strike length of 1.4 km. The only significant intersection was in borehole VQ-7 which intersected 0.76% Ni and 0.24% Cu over 3.05m in the basal gabbroic phase of the intrusion.

At its southeast end the WRIC appears to bifurcate, possibly due to folding, into two sill-like horizons.

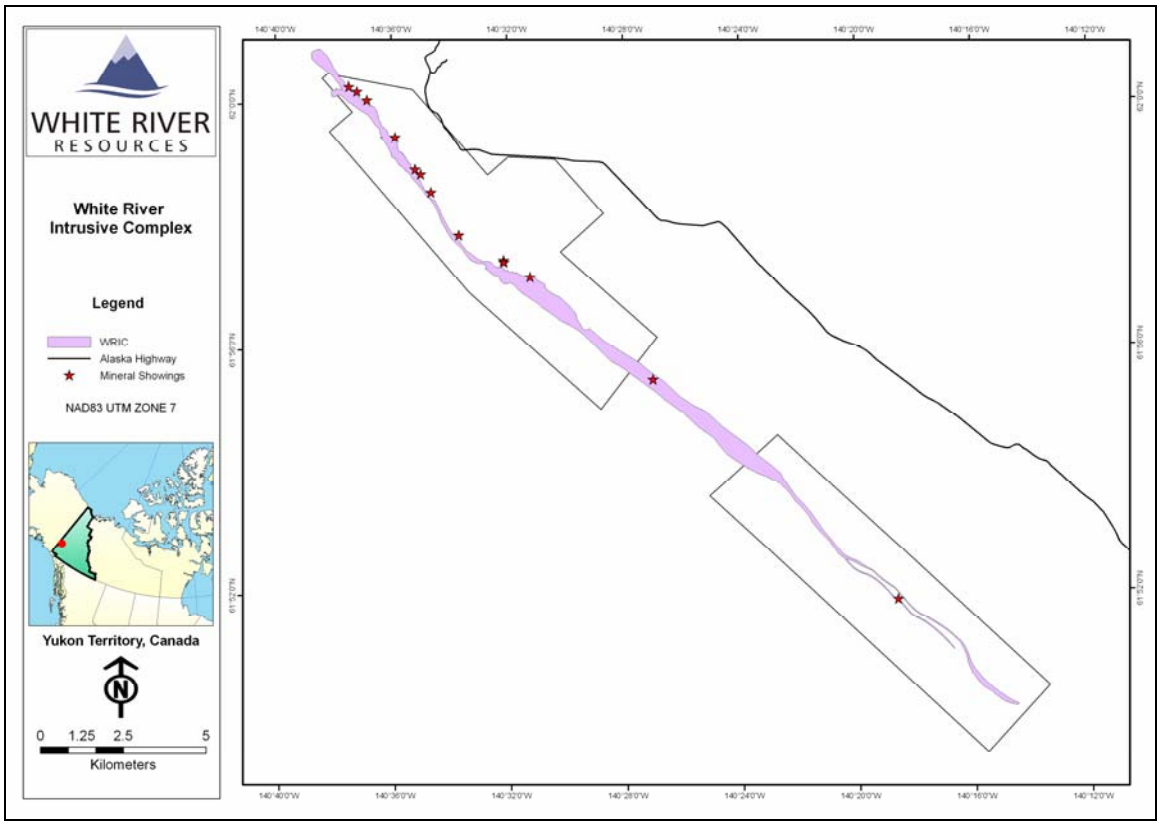


Figure 5: Current interpreted extent of WRIC within Blocks B and C.
Although the Yellow Showing may be an outlier of the WRIC no obvious and sizeable ultramafic bodies with similar characteristics to the WRIC have been identified in Block A. The red stars indicate mineral showings and occurrences.

The interpretation that the WRIC acts as a feeder to the Nikolai basalts forms part of the model for the presence of potential Ni-Cu-PGE bearing sulphide occurrences at the base of the ultramafic sill (Figure 6). Analogies to Noril'sk-style Ni-mineralization have been recognized by Hulbert (1995).

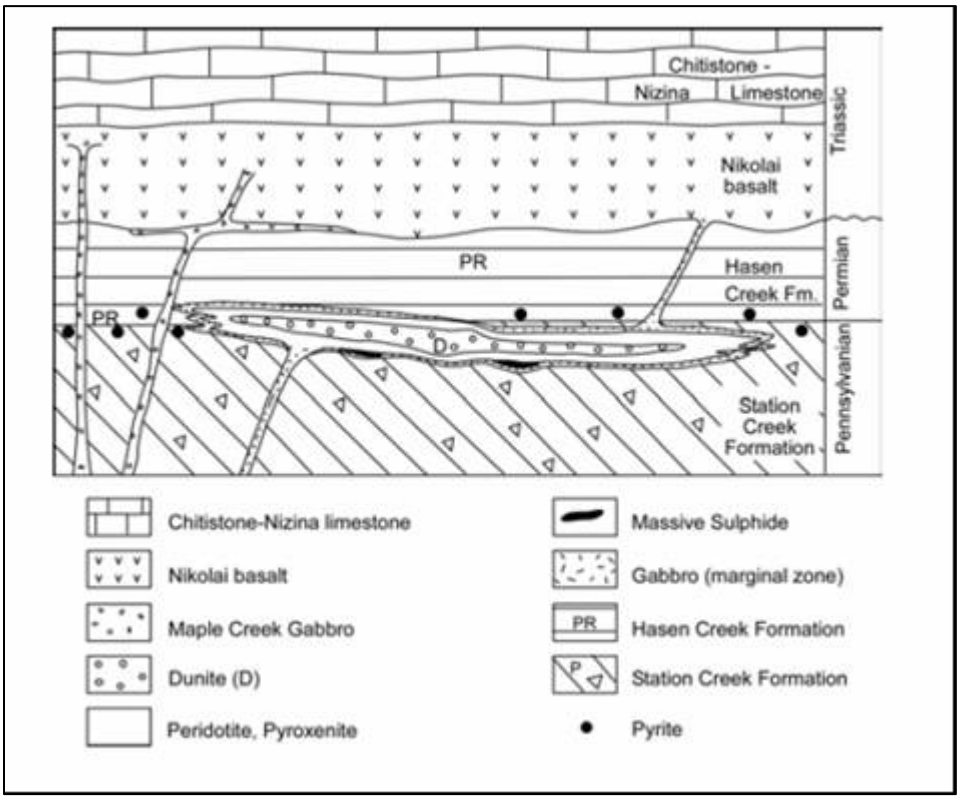


Figure 6: Proposed geological model
for the emplacement of the WRIC and associated Ni-Cu-PGE bearing sulphides at the basal contacts of the ultramafic sill (after Hulbert and Stone, 2006)

Similarities between the WRIC and the Noril'sk-Talnakh deposit are listed below (From Expatriate, 1995 and Uravan, 2001 reports).

- The showings are associated with ultramafic intrusions related to Lower Triassic flood basalts
- Middle Triassic Nikolai basalts compare favourably with extensive lavas of Siberian platform
- Sill-like bodies emplaced in Upper Permian clastic sedimentary and tuffaceous volcanic rocks near the contact with overlying flood basalts
- Ultramafic cumulates and associated mineralization within Kluane occurs at or near contact of Permian Hasen Creek and Station Creek formations
- Petrological and geochemical evidence suggests that the ore-bearing intrusions formed through emplacement of multiple phases of magma of differing composition, crystallinity and immiscible sulphide content.
- Well mineralized intrusions produced much greater contact aureoles than would be expected for their size
- Evidence of a metasomatic alteration front-halo surrounding Main Zone and quartz carbonate alteration halo in Onion through Cessna zones is evident
- Massive sulphide occurrences with significant Ni-Cu-PGE grade occur in gabbro (Discovery) and zones of massive sulphide (Ni-Cu, Co+PGE's) in highly altered sediments within FW of WRIC (Main, FW zones)
- Gabbroic phase occurring near and forming the FW contact of the WRIC and clastic and sedimentary volcanoclastic rocks that define parts of the FW
- Nowhere else in Triassic record does significant Ni mineralization occur

6.0 Deposit Types

This section is taken from C. Schulze's NI43-101 report (2007).

Two deposit types comprise the focus of exploration in the White River Intrusive Complex area: deposits formed by "magmatic segregation" within a melt, and "epigenetic" hydrothermal and/or replacement style deposits. The former is typified by the Wellgreen deposit in the Burwash area; the latter is typified by the Main and Footwall zones of the CanAlask deposit.

Magmatic cumulate deposits form during gradual precipitation of silicate and sulphide minerals from a mafic or ultramafic magma in a subsurface or surface environment. These may occur both as magma chambers (large, roughly spherical bodies) and as "feeders", which are narrow, elongate bodies formed from injection of magma into permeable environments that may or may not parallel pre-existing stratigraphy. The Wellgreen deposit is an example of the latter setting.

The parent magma is primarily of an "ultramafic" composition, with low silica and high magnesium and iron contents. Lithification from magma occurs progressively over time, commonly with discrete lithological zones that are increasingly magnesium and iron rich inbound from sill margins. A typical zonation, also observed at the Wellgreen deposit southeast of the project area, consists of marginal gabbro units, followed inbound by pyroxenite, peridotite and centered on dunite (> 90% olivine) units. Sulphide mineralization also may occur, and is "immiscible", prone to precipitation at specific times during dyke formation history. Important sulphide minerals are pyrrhotite (a barren iron sulphide), and chalcopyrite and pentlandite (copper and nickel sulphides respectively). Mineralized horizons are commonly enriched in platinum-group metals (PGM's), which can also occur within separate horizons, or "reefs".

More than 90% of the sulphide mineralization at Wellgreen occurs as disseminations within the marginal "footwall" gabbro zone (Hulbert, 1995), indicating that the sulphides precipitated at the same time as the gabbro. This footwall zone is within basal marginal areas of the sill, which is northwest-southeast striking and steeply west-dipping; thus footwall mineralization occurs along the northeast side of the sill. Mineralization is densest near the gabbro – footwall host-rock margin, decreasing progressively towards the interior of the dyke. Lenses of massive sulphide mineralization occur as well. The Wellgreen deposit hosts several major gabbro-hosted zones.

Epigenetic deposits consist of skarn and replacement style mineralization, as well as vein, fracture and breccia-hosted sulphides. Here, the metals and sulphur complexes are transported within hydrothermal fluids, which are essentially composed of metal ion-bearing hot water, usually with other impurities including silica, carbon dioxide and other vapour-based "volatiles". Under favourable conditions of structural preparation, most commonly fault or fracture zones or permeable rock units, these acidic fluids are able to migrate from the intrusive-host rock contact, causing formation of mineralized zones within favourable host rock depositional environments. If the host rock is calcareous, "skarns" may form, with new minerals formed from the reaction of pre-existing calcareous minerals with silica-enriched fluids.

Replacement-style mineralization occurs within reactive rock units, most commonly with a calcareous matrix, including limestone units. Here, metal-bearing and alteration minerals have replaced pre-existing minerals, resulting from introduction of ion-rich acidic fluids and subsequent dissolution of the original minerals and emplacement of the introduced ions into the original mineral lattice, forming new minerals. Vein and fracture-hosted mineralization occurs in strongly fractured to brecciated host rock which is less reactive, restricting deposition to zones of pore space, and inhibiting the formation of pervasive mineralization.

Within the Kluane Mafic-Ultramafic belt, zones of epigenetic mineralization tend to occur within the footwall host rock, up to 200 metres from the ultramafic sill contact. The mineralized zones at CanAlask occur within brecciated and fractured andesites, displaying characteristics both of skarn

and replacement-style deposits as well as vein and fracture-controlled deposits. Ultramafic host rocks typically contain up to 0.2% silicate nickel, which has a strong affinity with chrome.

Observations and results from the 2005 Falconbridge field visits to the WRIC indicated that it has strong potential to host sizeable nickel – copper deposits. The WRIC is part of an enormous mafic-ultramafic open system, interpreted to be the feeder system for overlying Nikolai Volcanics flood basalts. The subdued internal zonation indicates a dynamic flow environment; the thick alteration halo suggests a large volume of ultramafic magma passed through it. Numerous moderate to high-tenor nickel sulphide showings occur along the length of the intrusion, indicating widespread contamination and sulphide segregation (Pattison, 2005).

7.0 Exploration Program

7.1 Field Work: Mapping, Sampling and Orientation

The exploration plan for 2007 followed Falconbridge's proposed exploration plan as detailed in Carl Schulze's 2007 43-101 report. This proposed an airborne EM survey with follow-up drilling with associated mapping and general prospecting.

The exploration plan was focused primarily on observing and monitoring the VTEM survey, ground-truthing previous mapping and sampling, locating historical showings, due diligence sampling, and local and regional mapping and orientation of the geological setting of the White River Igneous Complex (WRIC) and Wrangellia Terrane.

Of enormous benefit was the field mapping done in conjunction with the 1:50 000 scale maps that the YGS were producing across the project area. The regional mapping provided some critical insight into the structural complexity of the WRIC and local Wrangellia Terrane as well as improve the understanding of the geological history and setting of the area.

Given the extent of previous surface sampling campaigns and WRR's lack of familiarity with the geology and terrain a surface sampling program was not deemed necessary for 2007. Only due diligence sampling of the historical showings as well as sites of potential mineralization and interest were planned.

A summary map of exploration work carried out in 2007 as well as historic sample and drill site locations is presented in Map 2 (in pocket).

7.2 Structural Mapping

An initial understanding and appreciation of the structural complexity of the WRIC and the immediate hangingwall and footwall rocks was gained from the field work in 2007. Pattison (2005) states that the WRIC and surrounding rocks exposed on Miles Ridge do not appear to be folded. Traverses and 1:50 000 scale mapping carried out in conjunction with the YGS during the 2007 field season clearly show that this is not the case.

The Station Creek and Hasen Creek Formations have been extensively folded in the area of interest. Certainly there was evidence of folding and deformation on the north faces of Miles Ridge (Block B) and CanAlask Ridge (*Unofficial Name* - Block C) and in Block A. Figures 7 and 8 give an indication of some of the folding and faulting evident in the blocks of interest.

The rocks have been folded and re-folded numerous times as part of successive phases of contraction and deformation during the accretion of the Wrangellia Terrane (Israel and Cobbett, 2008).

A significant strike-slip fault was identified along the hangingwall contact and possibly the footwall contact of the WRIC (Figure 9 and Figure 10). The fault appears to have a similar trend to the strike of the WRIC itself and parallels the regional scale Denali/Shakwak transpressional fault to the east and Duke River Fault to the west. The proximity of this fault to the Denali/Shakwak fault means that faulting and re-activation of these faults is likely to have occurred.



Figure 7: Folding of Hasen Creek limestones.
View to the northwest along Miles Ridge. The limestones of the Hasen Creek Formation are in contact with the overlying Nikolai Group basalts



Figure 8: Overturned Nikolai basalts underlying Hasen Creek Formation limestones on Miles Ridge

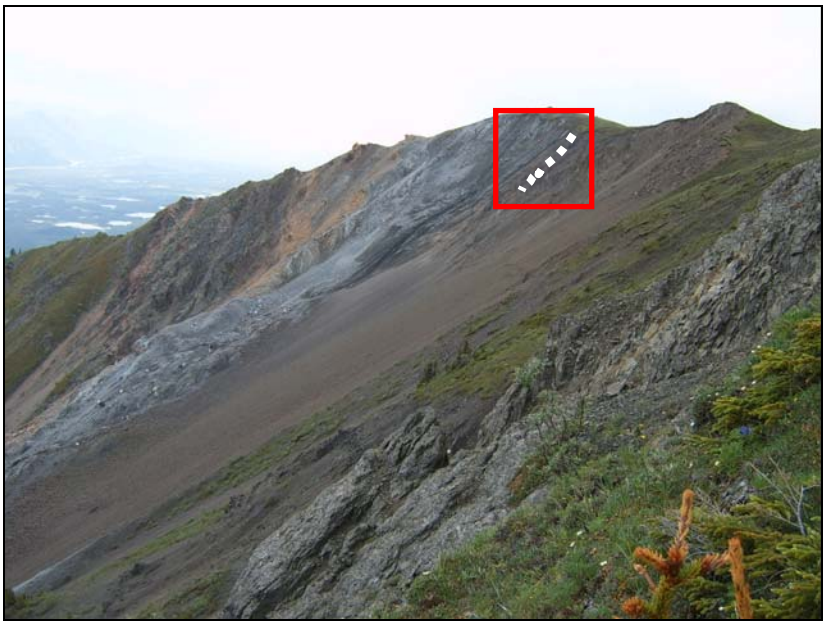


Figure 9: Miles Ridge scree slope.
View to the southeast. A significant strike-slip fault zone occurs on the hangingwall contact of the WRIC as indicated by the dashed white line



Figure 10: Close up of Miles Ridge strike-slip fault zone on hanging wall contact.
The fault zone consists of extremely weathered, friable clay material.

The relationship between the presence of strike-slip faulting along the contacts of the WIRC as well as possible normal faulting and Riedel shears along Miles Ridge to the regional scale faults is tenuous at this stage. However, it again highlights the structural complexity of the area.

Mapping of the WRIC and immediate wallrocks to the east of the White River and in Block C was less successful in identifying the extents and contacts of the WRIC. The mapping was limited by

the rugged topography and the dense bush as well as a lack of exposure of the WRIC in gullies and streams. Ultramafics were only positively identified in a gully at the Cats showing and in an outcrop located in the southeastern extent of Block B. Ultramafic float was identified in Block C but the source of these samples were not found. No outcrop or exposure of the immediate alteration halo was identified east of the White River either.

Very little mapping has been carried out on in Block A in the past. Only limited traverses were conducted in Block A. These included traverses on Ed Mountain, Chair Mountain and Cottonwood Mountain. Limited mapping was conducted on Chair Mountain in the Manson Brook occurrence area. Flood basalts of the Nikolai Group were identified on the southeast facing ridge above the Manson Brook occurrence. Mapping on Ed Mountain as well as a ridge to the immediate west of Beaver Creek and Ed Mountain revealed basalts, and limestones of the Station Creek formation and diorites and porphyry's possibly related to the Kluane Ranges Suite. Site visits to Cottonwood Mountain adjacent to and northwest of Block A revealed intensely folded limestones units of the Hasen Creek Formation and record significant stages of deformation on a regional scale. The limestones form impressive cliffs from Miles Ridge to Cottonwood Mountain.

The regional 1:50 000 scale maps prepared by the YGS can be used as reference for Block A (Israel *et al,* 2007a).

The reader is referred to the Property Geology section of Carl Schulze's NI43-101 and the excellent maps prepared in 2006 referred to therein for more details on the geology of Blocks A, B and C.

7.3 Mineralization

A total of 36 samples were collected and assayed during the 2007 field season. No new mineral showings or mineralized horizons were discovered in 2007.

Some thirteen half-core samples were collected from the borehole C02-002 which was located at the White River RV camp. These were collected purely for petrographic analysis and to determine if any mineralogical zoning could be recognized through the core. The samples were collected based on the logging conducted by L. Lahusen in 2002. Care was taken to sample each different rock type identified by Lahusen. The analysis was carried out by Microsearch CC in Johannesburg, South Africa. It is noteworthy to point out that rocks that were identified as clinopyroxenite or feldspathic dunite in the core log were classified as very strongly altered (serpentinized, magnetized) chromitiferous? dunites. The full report is available in Appendix B.

The majority of the showings listed in the Yukon Min File were located and sampled (Figure 11). It should be noted that for some of the showings only the approximate location could be determined based on co-ordinates and descriptions detailed in previous exploration and assessment reports and literature.

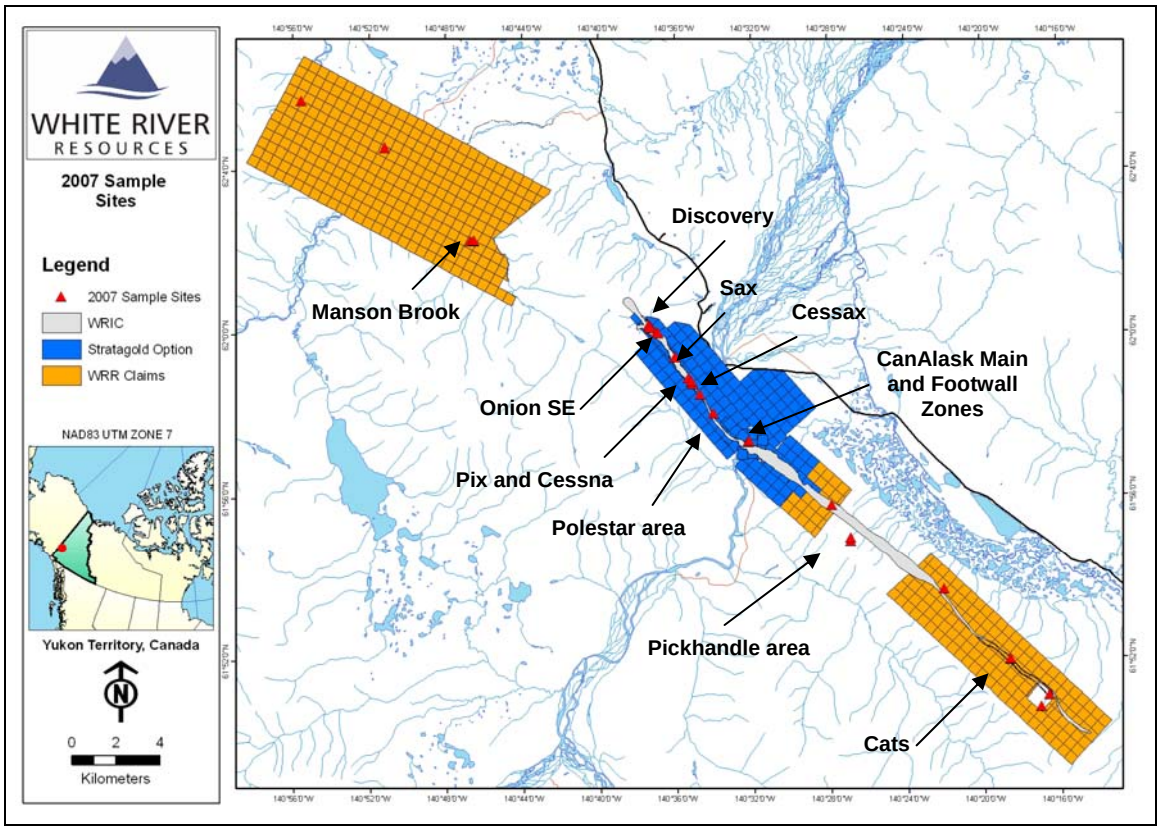


Figure 11: 2007 Sampling sites
Refer to Map 2 (in pocket) for more detail

Table 3 details the showings and occurrences located in 2007.

Table 3: List of showings located and samples collected during the 2007 Field Season

Locality ID	Showing Located	Number of Samples	Block
Ed Mountain		1	A
Manson Brook Occurrence	Yes	4	A
Ant Block		1	A
Yellow showing	No	0	A
Onion NW showing	No	0	B
Discovery showing	Yes	5	B
Onion SE showing	Yes	3	B
Sax showing	Yes	3	B
Pix showing	Yes	2	B
Cessna showing	Yes	3	B
Cessax showing	Yes - approximate	1	B
Polestar showing - area	No	1	B
CanAlask Main Zone deposit	Yes	4	B
Borehole VQ-7	No	0	B
Pickhandle showing - area	Yes - approximate	3	B/C
Cats showing	Yes	2	C
Block C SE		2	C
Block C NW		1	C
Total		**36**	

The showings proved to be fairly unremarkable at surface, largely due to the degree of weathering and intensity of deformation. The following background values for Ni, Cu, Co and Pt and Pd in the project area were established in 2001 by Uravan Minerals Inc for their geochemical sampling campaign; Ni: 2050 ppm, Cu: 40 ppm, Co: 128 ppm, Pt: 21 ppb, Pd: 32 ppb and total PGE: 54.5 ppb (Fraser, 2001. Assessment report #094331).

All samples were collected in the field using an Estwing geological hammer and placed into sample bags with a unique sample number and sealed with zap-straps. Sample site co-ordinates were recorded using a handheld Garmin GPS. Each sample site was marked with flagging tape and labeled in the field. The samples were transported to Whitehorse in sealed rice bags and dispatched to ACME Laboratories in Vancouver on Greyhound from Whitehorse on 21 July 2007. The dispatch of these samples was arranged by John Small of Small's Expediting under instruction from Ian McCutcheon.

Assay results were received electronically from ACME laboratories on the 24th August, 6th September and 12th September 2007. The assay certificates from ACME Laboratories are attached in Appendix C. Rock sample descriptions and locations are detailed in Appendix D.

What follows is a detailed account of the recognized mineral showings and occurrences in the project area.

7.3.1 Block A Showings

The **Yellow showing** was not located in 2007. Hand trenching by Harjay ECL in 1987 revealed the Yellow Showing as sulphides (pyrrhotite and chalcopyrite) occurring as massive clots and fracture fillings in a 15-metre wide shear zone cross-cutting an ultramafic sill. As a consequence the Yellow Showing has been reported as a possible northwestern extension of the WRIC. The Yellow Showing was not located by Falconbridge in 2006 either. The Yellow showing is believed to be located in the northeastern section of Block A along the banks of Sanpete Creek.

The **Marilyn Creek stock** described in Schulze's 2007 report was also not located in 2007.

The **Manson Brook Occurrence** was located and sampled on the 3rd July 2007 (Figure 12). The occurrence is found on the southeastern flank of Chair Mountain in the southeastern section of Block A and occurs as a two distinct, exposed, yellow-orange slopes separated by a flat bench (hence the "chair"). The literature describes the occurrence as consisting of "strongly silicified, argillically altered and limonitic basaltic flows" (Schulze, 2007). Visible sulphides were evident in the highly oxidized, weathered, gossanous outcrop (or rubble crop) sampled at the top of the lower slope consistent with the reported "minor chalcopyrite-bearing occurrences [that] exist within the broad alteration package and within basaltic rocks along the northern margin" (Schulze, 2007). Identification of lithologies proved to be fairly difficult in the field. Certainly secondary iron staining was very prevalent in the area. The "pronounced glacial moraine" above the lower slope extending east toward Sanpete Creek was also investigated but not sampled. Four 2007 grab samples from the occurrence were assayed the results of which are shown in Table 4.

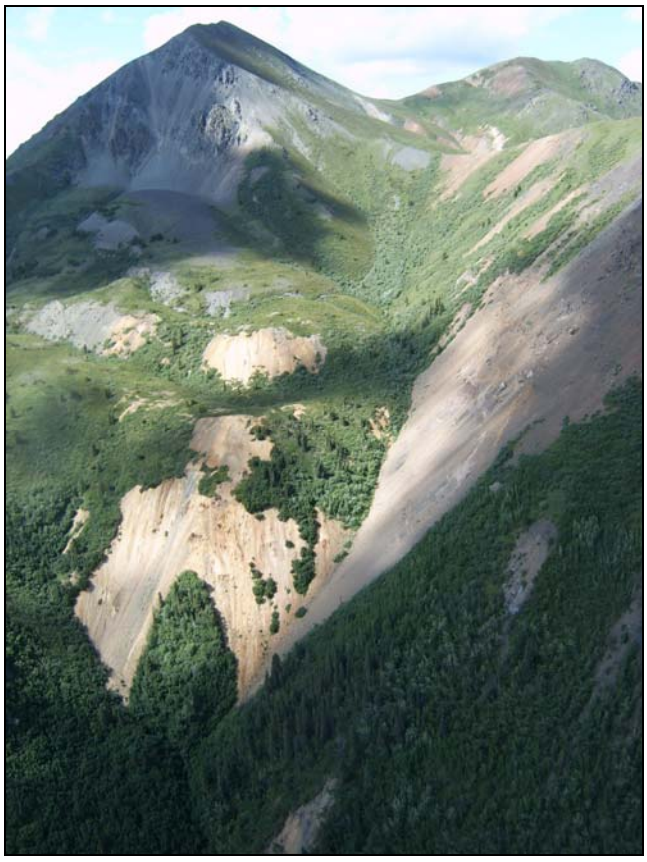


Figure 12: Manson Brook occurrence
Southeastern flank of Chair Mountain

Table 4: 2007 assay results from Manson Brook occurrence

Sample ID	Rock Type	Ni ppm	Cu ppm	Co ppm	Au ppb	Pt ppb	Pd ppb
IM001-030707	Altered volcanic?	2.8	38.2	6.5	<1	0.5	0.7
IM002-030707	Altered volcanic?	1.8	34.9	3.3	<1	0.3	1.2
IM003-030707	Altered volcanic?	20.6	544	20.1	<1	1.1	4.4
IM004-030707	Altered volcanic?	84.9	370.1	43.3	<1	3.3	12.2

Certainly the results from the above samples did not prove as promising as those returned in 2006 (Schulze, 2007). Only the Cu values in sample IM003-030707 and IM004-030707 were significantly above background.

Two additional samples were collected in Block A. One sample (IM001-300607) was collected on the southeastern slopes of Ed Mountain at a contact between basalts and a highly weathered, sedimentary unit with significant secondary iron-oxide staining. The second sample (IM001-110707) was collected on a ridge immediately to the west of Beaver Creek and Ed Mountain. Visible sulphides, most likely pyrite were observed in hand specimen. Both of these samples returned economically insignificant results as shown in Table 5. Only minor elevated Cu is evident in sample IM001-110707.

Table 5: 2007 assay results from Block A

Sample ID	Rock Type	Ni ppm	Cu ppm	Co ppm	Au ppb	Pt ppb	Pd ppb
IM001-300607	Quartz Porphyry	13.3	27	5.8	<1	<.1	1.1
IM001-110707	Volcanic	66.8	103.2	43.5	<1	13.7	10.4

7.3.2 Block B Showings

The **Onion NW showing** was not located in 2007. According to previous reports very little information is available. It was first documented in a report for Cominco Ltd. (1966). It is described as consisting of thin (<10 cm thick) bands of semi-massive to massive, weakly foliated bands of pyrrhotite, pentlandite and chalcopyrite in the marginal gabbroic phase of the WRIC. No geochemical information is available and the location is very approximate, although it is believed to occur towards the northern end of the WRIC some 400m northwest of the Discovery showing. Neither Uravan Minerals nor Falconbridge were able to locate the showing in 2002 or 2005/2006 respectively (Pattison, 2005; Schulze, 2007).

The **Discovery showing** was located on the 21st June 2007 and is found toward the northern end of the WRIC within Block B. The showing was first documented in a 1956 Cominco Ltd. report. The showing is located on the edge of a small ridge, toward the base of a scree slope at the contact between the ultramafics and the quartz-feldspar alteration halo. The showing occurs as an exposed trench about 10 m x 2 m in size that was blasted out in 1988. The trench consists of extremely weathered, oxidized, and unconsolidated mafic and footwall material (Figure 13). The quartz-carbonate contact rocks at the showing have been sheared and intensely deformed with evidence of two different slickenside events. The showing produced some samples with visible disseminated sulphides, however, the samples had been extremely weathered. Previous reports cited this showing as one of the most promising. A 2001 grab sample of heavily mineralized gabbro assayed 4.69% Ni, 0.79% Cu, and 6.83 g/t total PGM's. Five 2007 grab samples were assayed the results of which are shown in Table 6.



Figure 13: Discovery showing trench.
View to the northwest. Roy Stevenson is standing on the contact between the highly oxidized and weathered WRIC ultramafic and the quartz-carbonate alteration halo.

Table 6: 2007 assay results from the Discovery showing

Sample ID	Rock Type	Ni ppm	Cu ppm	Co ppm	Au ppb	Pt ppb	Pd ppb
IM001-130707	Ultramafic	2683	2322	137.9	49	273.7	526.6
IM002-130707	Ultramafic	1343.4	365.9	96.5	12	40.1	109.3
IM003-130707	Ultramafic	2305.9	3938.4	122.2	78	350	962.3
IM004-130707	Ultramafic	2224.5	24.5	128.5	2	12.9	6.4
IM005-130707	Ultramafic	2628.1	52.1	153.4	3	29.2	34.6

Although previous samples have produced significant nickel results the 2007 nickel values are consistent with values in the silicate nickel range. However, the copper and palladium values in sample IM003-130707 appear fairly elevated. The Pd:Pt ratio is greater than 2:1, indicating that the source of the Pd may be a sulphide.

The **Onion SE showing** was located and sampled on the 13th July 2007 (Figure 14). The showing is located 300 m to the south and up a gully from the Discovery showing and was discovered in 1987. The showing occurs at the contact of strongly sheared and altered mafic-ultramafic rocks with the altered footwall Station Creek volcanics. Secondary iron and copper (malachite) staining as well as micas are evident. Although sulphides were not readily visible in the ultramafics, they were present, as pyrites, in the footwall Station Creek volcanics. Samples from the showing collected by Uravan Minerals in 2001 contain up to 6.96% Ni, 0.02% Cu, trace PGM's, 3.08 g/t Au and only 0.10% S. One sample assayed up to 27.4% Ni, 0.18% Co and 30.6 g/t Au. Spectacular values of 19.2% Ni, 0.02% Cu, 4100ppb Au, 50ppb Pt, 100ppb Pd were also returned during a sampling campaign in 1987. The anomalous metal content is likely due to supergene enrichment of Ni and Au, and leaching of Cu and PGE's. High Ni and low Cu and PGE's is probably due to the presence of niccolite rather than Ni-Cu sulphides and the PGE's would appear to better assimilate with sulphur than arsenic. The Onion SE showing has been identified as hydrothermal "skarn" alteration as opposed to the magmatic mineralization identified at Discovery (Fraser, 2001; Lahusen, 2002).

Despite these promising results, sampling in 2005 between Onion SE and Sax showings only returned nickel values in the 0.20% range. Three 2007 grab samples were assayed the results of which are shown in Table 7.

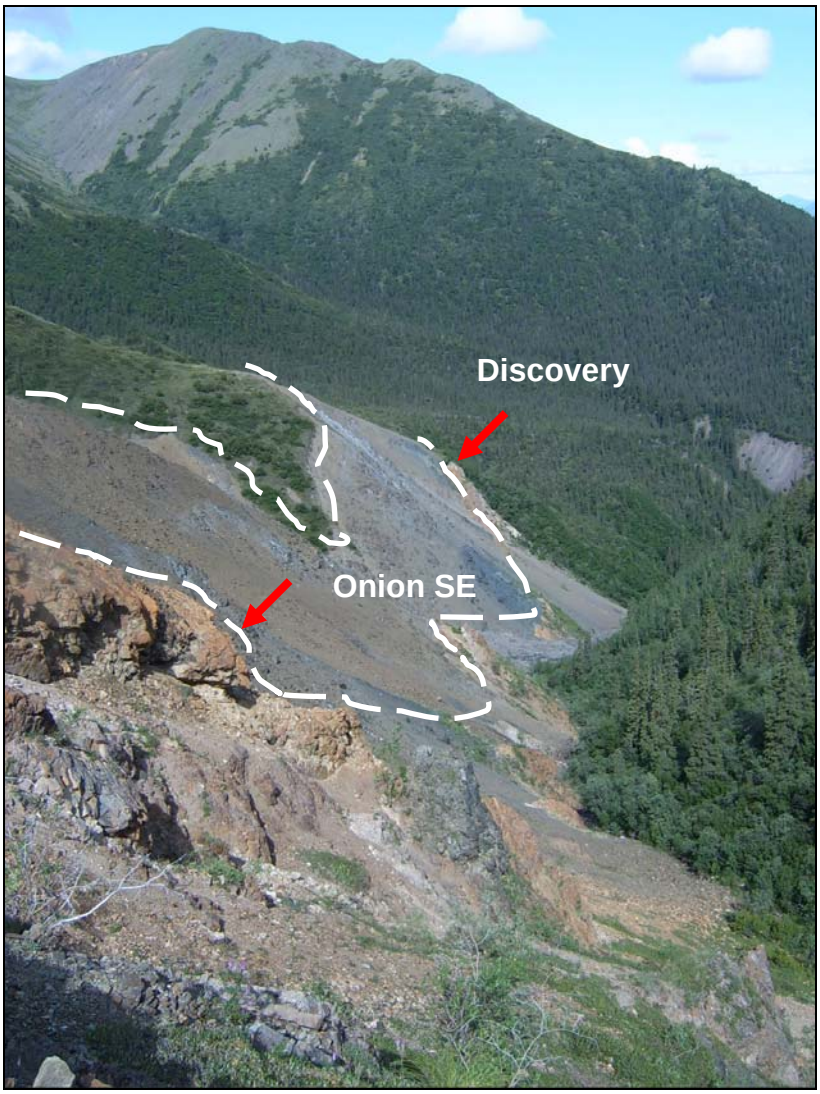


Figure 14: Onion SE showing.
View to the northwest toward the Discovery showing in the background. The ultramafic can be seen as a grey-blue weathered outcrop with no vegetation (between the dashed white lines). The quartz-carbonate alteration halo is visible as buff-coloured weathered outcrops.

Table 7: 2007 assay results from the Onion SE showing

Sample ID	Rock Type	Ni ppm	Cu ppm	Co ppm	Au ppb	Pt ppb	Pd ppb
IM006-130707	Quartz Feldspar	1343.3	21.5	91.6	2	14.4	9
IM007-130707	Volcanic tuff ?	60.2	90.3	17.3	2	0.5	2.3
IM008-130707	Ultramafic	1140.1	30.3	90.9	5	23.6	15.4

The results shown above do not support the encouraging results described in the Uravan reports.

The **Sax showing** was located and sampled on the 28th June 2007. The showing was discovered in 1988 based on fine grained limonitic gabbro float samples that returned assay values of 0.44% Ni, 0.22% Cu, 140 ppb Pt and 440 ppb Pd. The showing occurs as a small, 2 m thick, extremely weathered, oxidized, dark rusty-coloured gossanous outcrop at the top of a long small ridge that extends perpendicular to the north from Miles Ridge (Figure 15). The showing occurs at the

contact between the WRIC ultramafic and the quartz-carbonate alteration halo. It was difficult to determine whether the host rock was in fact a gabbro as described in Schulze (2007). Minor disseminated and net-textured sulphides were evident to 1% similar to previous exploration findings (Schulze, 2007). Three 2007 grab samples from the showing were assayed the results of which are shown in Table 8.



Figure 15: Sax showing.
The showing occurs as a highly weathered gossanous outcrop.

Table 8: 2007 assay results from the Sax showing

Sample ID	Rock Type	Ni ppm	Cu ppm	Co ppm	Au ppb	Pt ppb	Pd ppb
IM001-280607	Ultramafic	2114.9	326.5	123.2	<1	39.4	77
IM002-280607	Ultramafic	2977	1389.6	148.5	16	147.8	306.5
IM009-130707	Ultramafic	3146.4	1472.5	157.9	40	157.6	415.5

Sample IM009-130707 produced the most promising nickel assay of 0.315% Ni with 0.15% Cu and 0.16 g/t Pt and 0.42 g/t Pd. This is fairly consistent with the original assay results of previous exploration campaigns.

The **Pix showing** was located on the 28th June 2007 (Figure 16). The showing was discovered by Uravan Minerals Inc in 2001 based on samples that reported values of 2300-4460 ppm Ni and >54.5 ppb Pt+Pd (Fraser, 2001). The showing occurs toward the southern portion of Miles Ridge as a small outcrop in a gully at the contact between the WRIC and the immediate altered footwall units. The outcrop is exposed over approximately 5 m and has been weathered and deformed. Secondary copper staining (malachite), veining, micas, possibly graphite and altered ultramafic/quartz rocks were evident. Visible, disseminated sulphide, possibly pyrrhotite were

evident in the rock samples. Two 2007 grab samples were assayed the results of which are shown in Table 9.

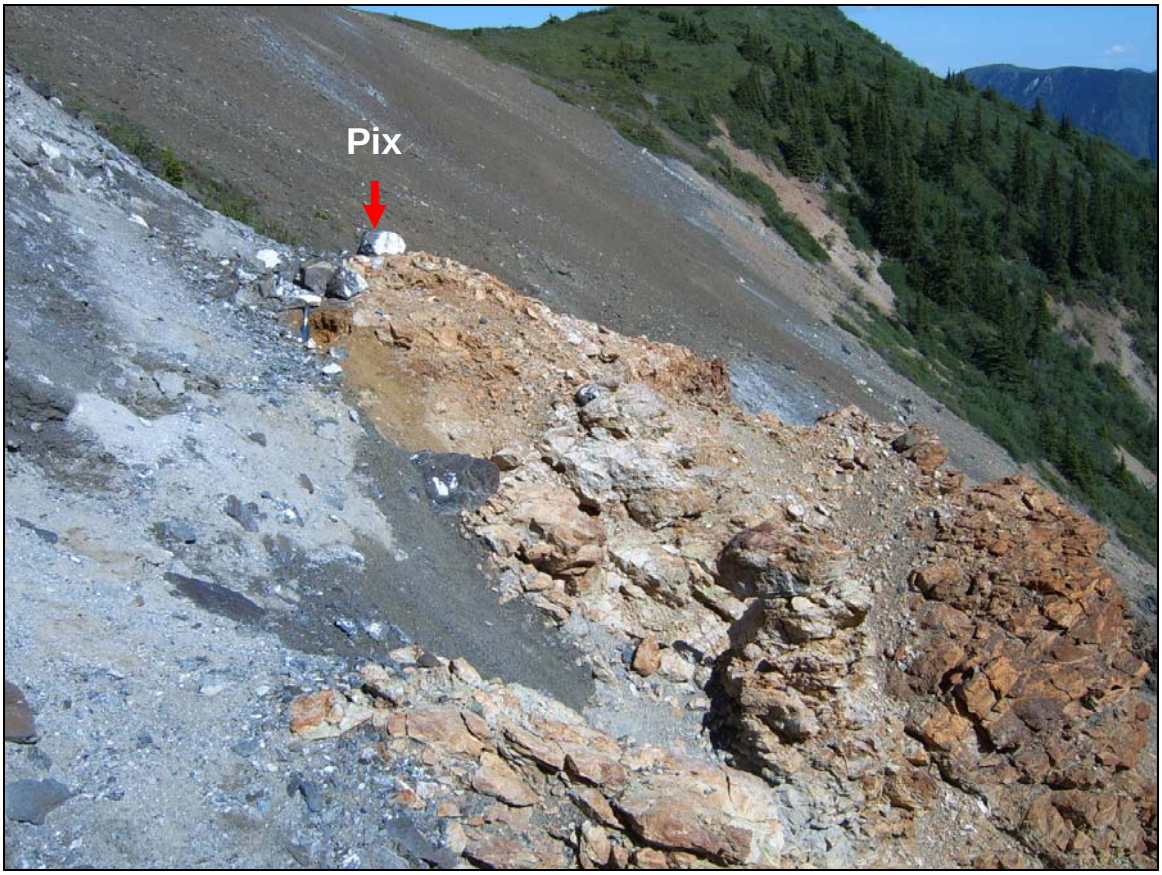


Figure 16: Pix showing

Table 9: 2007 assay results from the Pix showing

Sample ID	Rock Type	Ni ppm	Cu ppm	Co ppm	Au ppb	Pt ppb	Pd ppb
IM010-130707	Ultramafic	2809.5	22.5	169.9	2	35.3	67.2
IM011-130707	Quartz Feldspar	2121.7	1087.6	103.8	34	183.5	346.1

These results support Uravan's geochemical findings as discussed in the paragraph above.

The **Cessna showing** was located on the 28th June 2007. The showing was discovered by Expatriate Resources in 1998 and is defined by a 4.0 m chip sample that assayed 0.21% Ni, 0.18% Cu and 770ppb Pt+Pd. The showing occurs on the northern ridge of Miles Ridge Scree Slope (Figure 17), on a fairly steep and rugged east facing slope. It occurs as an extremely weathered, oxidized, dark rusty-coloured gossanous outcrop, similar to the Sax showing, at the contact of limonitic ultramafics and the altered quartz-carbonate footwall rocks. Secondary iron and copper staining, pyrite and micas were visible in the gossanous horizon. Three 2007 grab samples from the showing were assayed the results of which are shown in Table 10.

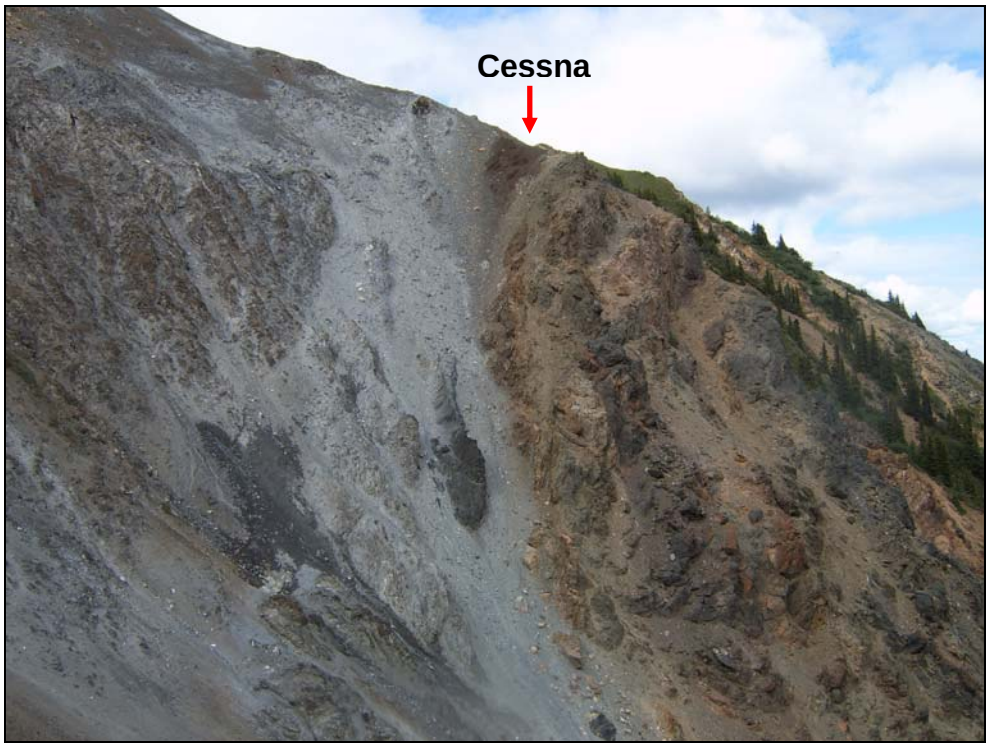


Figure 17: Cessna showing
View to the northwest

Table 10: 2007 assay results from the Cessna showing

Sample ID	Rock Type	Ni ppm	Cu ppm	Co ppm	Au ppb	Pt ppb	Pd ppb
IM002-100707	Ultramafic	1815.7	1698.6	97	30	162.1	496.1
IM012-130707	Ultramafic	2616.2	2892.8	111.8	247	486.9	814.2
IM013-130707	Ultramafic	2578.3	35.2	141.4	3	15.7	26.2

Grab sample IM012-130707 is significant in that it assayed 0.26% Ni, 0.29% Cu and 486ppb Pt and 814ppb Pd. This is elevated when compared to the original chip 4.0 m chip sample collected by Expatriate in 1998.

The **Cessax showing** was located and sampled on the 10th July 2007. The showing was discovered by Uravan Minerals Inc. in 2001 when a grab sample of marginal gabbro at the gabbro quartz carbonate contact returned values of 0.385% Ni, 0.056% Cu, 161 ppm Co and 934 ppb total PGE's. The showing occurs toward the top of an extremely steep south-east face of a ridge to the south east of the Miles Ridge Scree Slope. It occurs at the contact of extremely weathered, unconsolidated and deformed limonitic ultramafics and the immediate footwall quartz-carbonate alteration halo. One 2007 grab sample from the showing was assayed the results of which are shown in Table 11.

Table 11: 2007 assay results from the Cessax showing

Sample ID	Rock Type	Ni ppm	Cu ppm	Co ppm	Au ppb	Pt ppb	Pd ppb
IM001-100707	Ultramafic	2612.9	15.2	129.4	<1	20.3	21

The one sample taken from the Cessax showing reported values in the silicate-nickel range.

For safety reasons the **Polestar showing** at the southern end of Miles Ridge was not located in 2007. One sample was collected approximately 300 m north of the showing at the approximate contact between the ultramafic and altered footwall. The one assay's results are shown in Table 12.

Table 12: 2007 assay results from the Polestar showing area

Sample ID	Rock Type	Ni ppm	Cu ppm	Co ppm	Au ppb	Pt ppb	Pd ppb
IM014-130707	Ultramafic	585.1	139.7	66.6	3	7.3	13.7

The results from the one sample collected north of the Polestar showing did not reveal any results of economic significance.

The **CanAlask Main Zone deposit** was located on the 16th June 2007. The CanAlask area was accessed from a 4x4 track from the campsite. The entrance to the adit could be viewed from a pathway, accessed from the 4x4 track. Entry to the adit was cordoned off by Falconbridge in 2006 (Figure 18).



Figure 18: Entrance to the CanAlask Adit on the east bank of the White River. Access to the adit has been cordoned off and is not recommended.

Interest in the CanAlask area was first sparked with the discovery of the CanAlask showing in 1952 by P. Eikland, W. Theriault and F. Hickey. The three prospectors staked 32 WHITE, WOLVERINE and CARIBOU claims in March 1953, covering the occurrence.

In 1954 CanAlask Nickel Mines Limited (an amalgamation of Ontario Nickel Mines Ltd. and Frobisher Ltd.) optioned the CanAlask property. Between 1954 and 1958 CanAlask completed 518.2 m of drifting on two levels (2400' and 2700'). Access was via the adit shown in Figure 18 on the 2700' level.

The showing is bounded by volcanics of the Station Creek Formation and occurs some 200 m into the footwall of the WRIC. The volcanics are light green-grey in colour, homogenous, highly serpentinized, with no clearly defined bedding. Epigenetic mineralization is structurally controlled

and consists of disseminations, fracture fillings, veins, and breccia fillings and semi-massive to massive irregular replacement-style pyrrhotite, pyrite, chalcopyrite, and pentlandite (Schulze, 2007). Semi-massive sulphides (predominantly chalcopyrite and pyrite) were clearly evident in samples from the CanAlask Main Zone gossan (Figure 19). Four 2007 grab samples were assayed the results of which are shown in Table 13.



Figure 19: CanAlask Main showing

Table 13: 2007 assay results from the CanAlask showing and adit entrance

Sample ID	Rock Type	Ni ppm	Cu ppm	Co ppm	Au ppb	Pt ppb	Pd ppb
IM001-140707	Altered FW Rock	>10000	357	295.2	12	<.1	2.3
IM002-140707	Altered FW Rock	3628.7	81.1	110.7	8	6.3	8.6
IM003-140707	Altered FW Rock	>10000	382.1	1702.9	72	2.2	3.7
IM004-140707	Semi-Massive Sulphide	2170.3	>10000	176.6	1744	0.2	0.8

The sample results at the CanAlask Adit and at the CanAlask showing clearly show the high Ni values associated with the showing. The Pt and Pd values are however, economically insignificant. The high Cu values and low Ni values in the semi-massive sulphide sample (IM004-140707) is notable and indicative of an epigenetic origin.

No attempt was made to locate the position of **borehole VQ-7** in 2007. This has been identified as the only significant drill intersection in the WRIC to date (Pattison, 2005), and was drilled by the Nickel Syndicate in 1973. Borehole VQ-7 intersected 0.76% Ni, and 0.24% Cu over 3.05m. The mineralization occurs at the footwall contact of the WRIC in the marginal gabbroic phase of the intrusion (Pattison, 2005).

7.3.3 Block C Showings

The **Cats showing** was located on the 27th June 2007 and occurs along a gully, toward the base of CanAlask Ridge (Figure 20) in relatively dense bush. It occurs as two thin (1-2m thick), steeply dipping (80°) arms of a fold. The showing consists of dark grey, magnetic, fine to medium-grained serpentinized rock with disseminated lenses of sulphides occurring along grain boundaries. A summary of exploration in the Cats area has been compiled by Pattison (2005). Exploration by Silverquest resources in 1987 revealed weak to moderately anomalous Pt (20-50ppb), Pd (20-35 ppb) and Ni (100-2200 ppm) values in soil results. Grab samples of serpentinized peridotite with up to 2% disseminated Po contained 3100 ppm Ni, 500 ppm Cu, 75 ppb Pt, and 160 ppb Pd. Two 2007 grab samples were assayed the results of which are shown in Table 14.

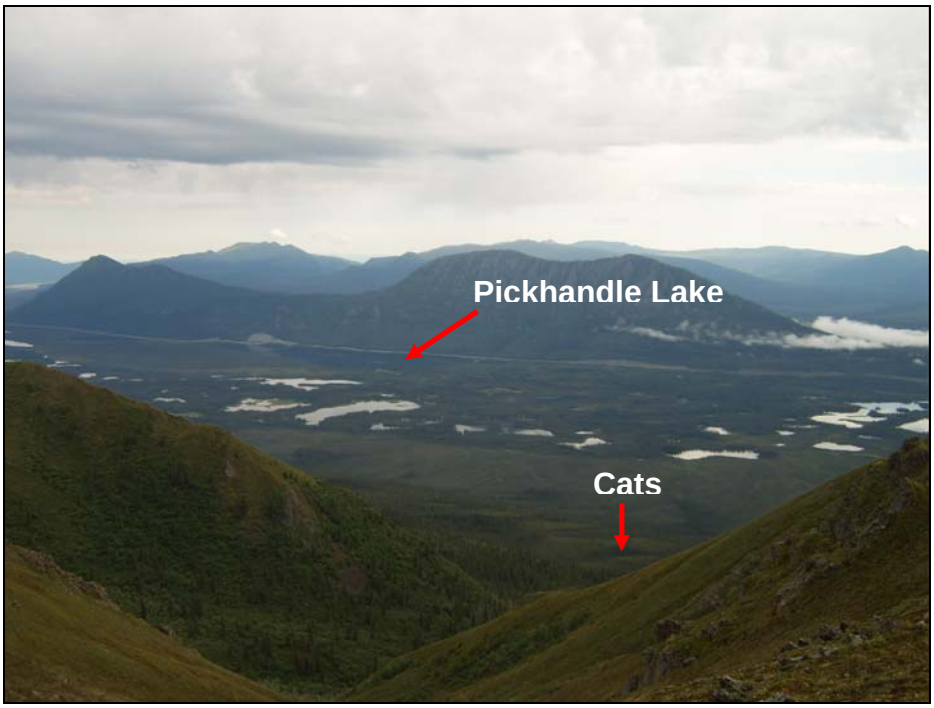


Figure 20: Cats showing
View to the north. The showing occurs toward the base of CanAlask Ridge. The Alaska Highway and Pickhandle Lake area are clearly visible in the photograph

Table 14: 2007 assay results from the Cats showing

Sample ID	Rock Type	Ni ppm	Cu ppm	Co ppm	Au ppb	Pt ppb	Pd ppb
IM001-270607	Ultramafic	2568.8	373.9	161.6	<1	23.4	37.2
IM002-270607	Ultramafic	2171.3	198.4	124.4	<1	34.5	38.4

The assay results returned Ni values in the silicate-nickel range. These are consistent with previous exploration work in the area.

An attempt was made to locate the **Pickhandle showing** on the 9th July 2007. The exact location of the showing is not known although a sample of mineralized peridotite float collected by CanAlask Nickel Mines in 1953 reportedly assayed 0.56% Ni and 6.55% Cu (Falconbridge file R-11659) (Pattison, 2005). Polestar Exploration Inc. collected talus and soil samples from the area in 1987. The talus samples contained up to 2142 ppm Ni and soil samples contained up to 1260

ppb Au and 2250 ppm Cu. Three 2007 grab samples from the area were assayed the results of which are shown in Table 15.

Table 15: 2007 assay results from the Pickhandle showing area

Sample ID	Rock Type	Ni ppm	Cu ppm	Co ppm	Au ppb	Pt ppb	Pd ppb
IM001-090707	Volcanic	27.2	71.2	17.1	<1	0.8	5.5
IM002-090707	Ultramafic	1304.3	81.4	105.1	<1	23	21
IM003-090707	Ultramafic float ?	4.6	79.5	23.2	<1	0.3	<.5

The results of the float samples collected from the Pickhandle showing area returned no values of economic interest.

Three additional samples were collected in Block C. The assay results are shown in Table 16.

Table 16: 2007 assay results from Block C

Sample ID	Rock Type	Area	Ni ppm	Cu ppm	Co ppm	Au ppb	Pt ppb	Pd ppb
IM001-070707	Schistose volcanic	Block C SE	26	22.7	5	3	1.6	2.8
IM002-070707	Ultramafic float	Block C SE	2009.7	59.8	138.1	<1	30.5	49.6
IM001-080707	Ultramafic float	Block C NW	6.3	15.4	23.9	<1	0.2	2.6

Only sample IM002-070707 returned values consistent with silicate Ni within an ultramafic setting.

7.4 VTEM Survey

7.4.1 VTEM Survey Specifications

The decision to fly the VTEM survey over Blocks B and C was based on the fact that the majority of historical exploration and mineral showings occur in these blocks, particularly Block B. Only reconnaissance sampling and field mapping was deemed necessary for Block A.

The survey was flown at nominal traverse line spacing of 50 m running perpendicular to the strike of the WRIC. This line spacing was chosen because of the rugged topography as well as the limited understanding of the ultramafic and potential conductors at depth. Tie lines running parallel to the WRIC (perpendicular to the traverse lines) were spaced 500 m apart.

A total of 1676 line kilometers were flown over Blocks B and C. Figure 21 below shows the spatial distribution of the flight lines over the project area. Data compilation and processing was carried out by the application of Geosoft OASIS Montaj and programs proprietary to Geotech Ltd. Final data presentation and data archiving was completed in Geotech Ltd's Aurora office, Ontario, Canada by July 31 2007. Final reports and deliverables were received in hard-copy in Johannesburg, South Africa on the 10th August 2007.

The final Geotech Ltd report is presented in Appendix E. The Geotech Ltd maps that accompany this report are presented as Maps 3a-c (Block B) and Maps 3d-f (Block C) in pocket.

The survey was completed in 32 days. The survey was mobilized to the White River Crossing RV camp on the 20 June 2007 and was completed on the 22nd July 2007.

Only four standby days were charged due to the weather. Rain, cloud cover and local static from nearby storms/clouds contributed to weather days.

There were technical and personnel difficulties during the survey and these included:

- Troubleshooting Radar Altimeter
- Troubleshooting Transmitter
- Intermittent fault on B-field system
- Unstable signal

Three different pilots were responsible for the helicopter flights which involved three handovers. There was also a change over between the geophysicist and operator. Only after the third technical difficulty with the system was a system engineer brought to the White River site to resolve the issues.

In addition the rugged topography played a role in the progress of the survey. It became apparent and necessary on many flight lines for the helicopter to approach the top of the ridges from a much higher elevation than the 80 m stipulated in the contract simply because of the topographic gradient.

A crew of a pilot, with a combination of crew chief/systems engineer and geophysicist/operator was present for the duration of the field season. The survey was flown using an A-star B3 helicopter, operated by TRK Helicopters Ltd.

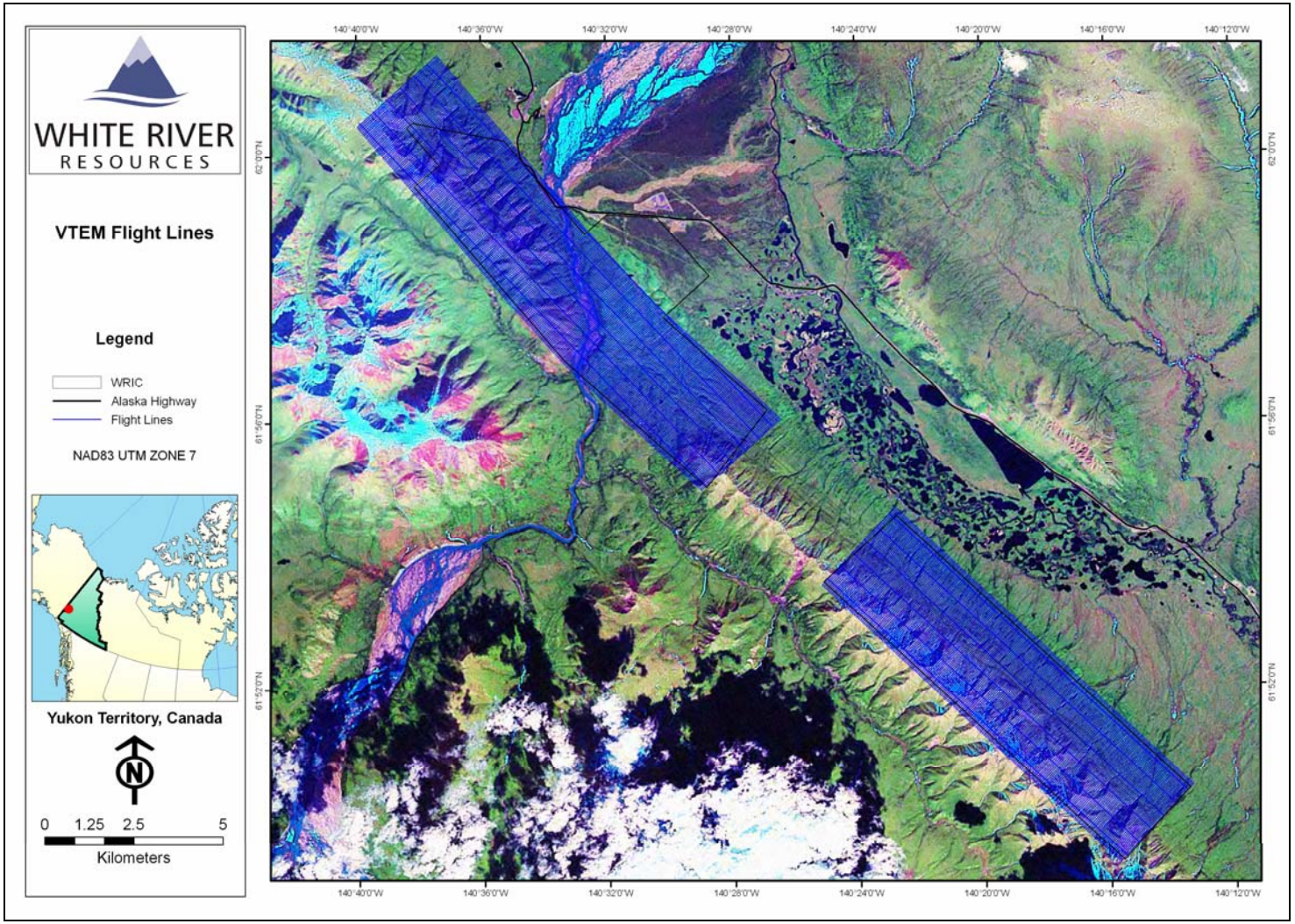


Figure 21: VTEM flight lines across Blocks B and C.
Refer to Map 2 (in pocket) for more detail

7.4.2 VTEM QAQC

Although the quality control and quality assurance (QAQC) of the data was carried out internally by Geotech Ltd, QAQC of the preliminary and final data was outsourced to Scott Hogg and Associates Ltd on behalf of WRR. Two separate QAQC reports on the data were filed; the first on the 19th July 2007 following completion of the survey in Block B and the second on the 15th August 2007 following the release of the final database by Geotech Ltd. The two QAQC reports are presented in Appendix F.

The first QAQC report reviewed the VTEM profile response on each of the lines and found that there was no significant concern about the primary SF channels. The data was also recommended for Conductivity Depth Imaging (CDI) sections without the complications of IP. Given the technical difficulties experienced during the survey this was received as good news. As expected a conductor/conductive zone was noted to follow the central magnetic axis which appears to follow the strike of the WRIC.

The second QAQC report reviewed all the data with a focus on Block C. The report noted that the terrain clearance, as measured by the radar altimeter, was well above 200 m in the southwest bound lines in Block C. These are the lines that were flown uphill. The measured terrain clearance for the downhill lines was reasonable. In addition the uphill flight lines in Block C were flown faster than the downhill lines. The lines sampled in Block B showed the normally expected longer duration for the climb uphill, but the results, in terms of terrain clearance, were not much better. It was concluded from this that the pilot responsible may not have had the necessary experience to handle the rugged topography. The report concluded that although there were some shortcomings in terms of terrain clearance they were largely limited to one line direction. In light of the close line spacing of 50 m, however, it is unlikely that any significant target could be missed.

There were some SF profiles that were notably noisier than others. This is considered to be a relative comparison and it is unlikely that the higher noise level will significantly limit the identification and analysis of most anomalies. As discussed in above and in section 7.4.1, there were many system maintenance days and references to troubleshooting in the Geotech Ltd report that may have been related to noise problems.

The report also noted that the BF profile information is a new development for Geotech Ltd. In principal the B field is of benefit since the early time amplitudes, associated with poor conductors, are not overemphasized and the dynamic range needed for profile presentations is reduced. The BF profile is not necessary for profile shape analysis or the calculation of the CDI sections.

7.4.3 CDI Sections

CDI sections of the VTEM survey data were received on the 10th September 2007. The Downhill flight line CDI sections of the VTEM survey are presented in Appendix G (Block B) and Appendix H (Block C).

A CDI section along Line1440, between the Discovery and Onion SE showings is shown in Figure 22. The following note from Scott Hogg briefly describes this CDI section.

The CDI sections are based on the assumption of horizontal layers of infinite extent; i.e., no change laterally. In the case of a continuous near horizontal conductor that varies gradually in terms of thickness, conductivity and depth the CDI can be very accurate. However, at some point that is difficult to define, the assumptions become significantly invalid. Real 2D EM inversion is only possible for a simple plate like source and may be used on specific anomalies but not in a flight line by flight line sense like the CDI. The CDI presentation is a popular and powerful graphic but it must be analyzed with a good measure of geophysical intuition, especially with reference to the response profile and anomaly shape. Unfortunately, even with experience, interpretation ambiguity cannot be ruled out.

Scott Hogg believes that the main central anomaly is similar to the white outline shown in Figure 22. Such a form would be consistent with the source of the magnetic anomaly that is a steeply southwest dipping dyke or stratigraphic horizon. It is uncertain as to whether the horizontal layer at the northeastern end terminates as indicated by the white outline, or in fact, warps downward as suggested by the CDI. There could be two levels, the one indicated to the northeast and a second deeper level under the D2 label where the CDI levels off briefly. If there were two levels, displaced by a normal fault, the CDI would not show a sharp transition since it would be trying to rationalize two different depths from both layers simultaneously. At best one would see a gradual transition not unlike the one evident in the profile.

There is a risk in both over- or under-interpreting the significance of the detail in the CDI's

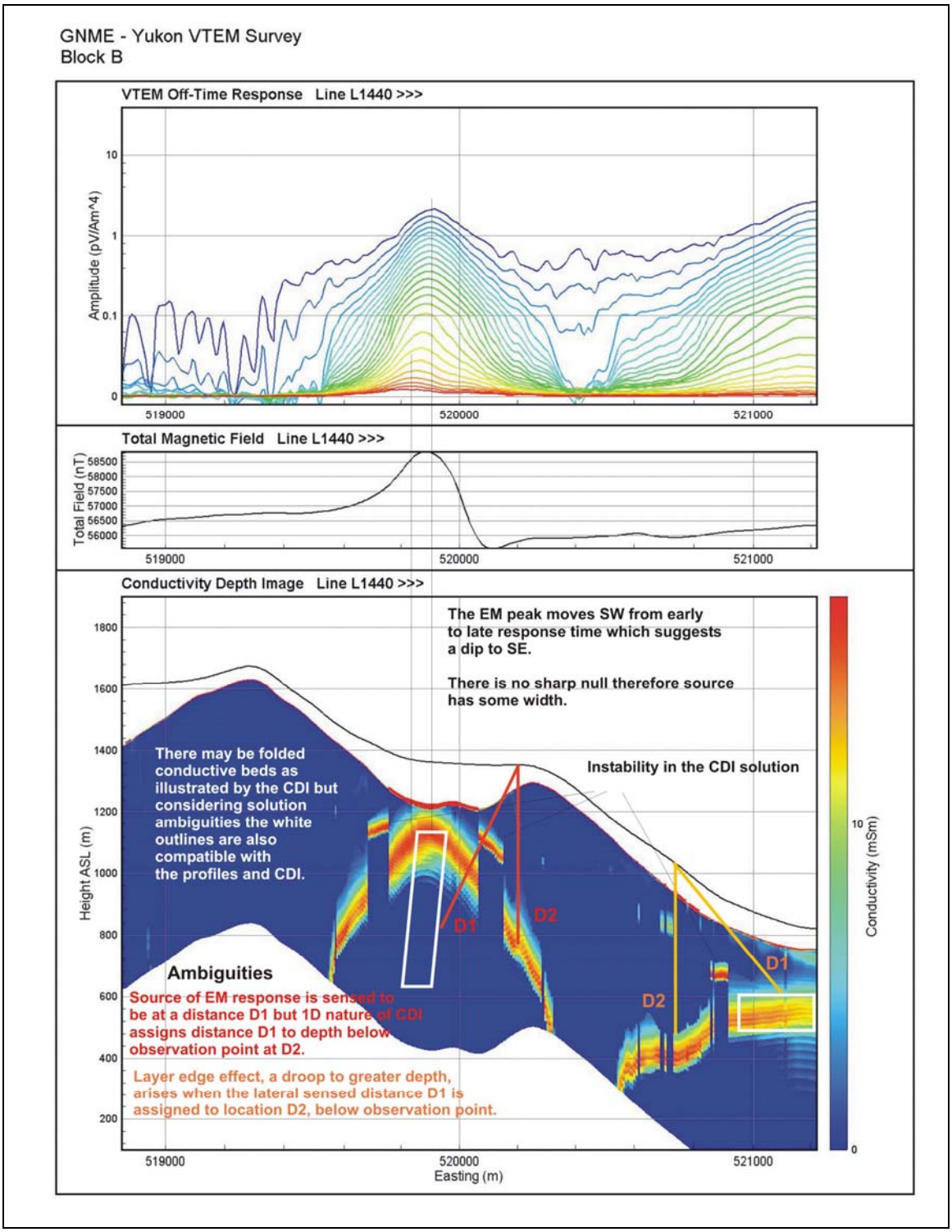


Figure 22: Annotated CDI section on VTEM flight line 1440.

7.4.5 CDI Analysis

CDI analysis and reports were received on the 17th October 2007 from Scott Hogg and Associates Ltd. The Final CDI analysis report is presented in Appendix I.

The CDI profiles were reviewed individually in conjunction with the EM profile database, and profile maps. In both Blocks B and C, the terrain clearance of the system was much greater when the helicopter was climbing as opposed to descending. For this reason the interpretation has focused on the lines flown downhill.

The location of interpreted conductors has been indicated on the interpretation maps (Figure 23 Block B and Figure 24 Block C). The following two sub-sections have been taken from Scott Hogg and Associates Ltd 2007 report.

7.4.5.1 Block B CDI Analysis

Within Block B a conductor extends from the southeastern margin of the area to almost the northwest margin. It is coincident with a linear magnetic unit over its full length.

Areas recommended for follow up work in 2008 are highlighted and labeled as B1, B2, and B3 in Figure 23. Sources of these conductors could be thin and steeply dipping ultramafics of the WRIC such as at B1. At B2 the conductor tends to a southwestern dip and may connect to a smaller conductor parallel and to the southwest of the main conductor at depth forming a single synclinal form. The width and conductivity at B2 increase significantly and there are some indications of multiple conductive and magnetic layers. Site B3**,** associated with line 1410, indicates a zone of shallow high conductivity where the parallel zones have connected near surface and/or melded into a wider conductor. Drilling in 2008 will focus on these three areas however there are numerous conductors throughout Block B that warrant further investigation.

In many of the CDI sections, particularly in the northwest an anticline form is suggested. An anticline structure implies that the electromagnetic anomaly is associated with a folded conductive bed. This is at odds with the appearance of the associated magnetic anomaly that reflects a steeply dipping intrusive. An alternative explanation for the electromagnetic anomaly is possible that is more in keeping with steeply dipping conductors that could be related to a steeply dipping magnetic intrusive. A single vertical sheet conductor has a null response directly above it and as the system moves off to either side the sheet is energized and an anomaly develops. The increasing lateral displacement of the system from the conductor is attributed to depth by the CDI process and the image of the vertical conductor appears as an inverted “V” in the CDI. As the dip of the conductor decreases the apparent plunge of the CDI flank will approach the true dip, but until the dip reaches about 10 degrees it will be overestimated by the CDI representation. With this in mind, the flanks of the anticline form, mentioned above may be significantly steeper than inferred by the CDI presentation and could therefore be separate, near parallel, steeply dipping conductors. If the dips were slightly divergent a broader null zone would occur between the two conductors. This would introduce the geological possibility of conductors within or flanking a steeply dipping magnetic intrusive. At B3 the two conductors have electrically joined, at least at surface, and a conductive apex is created.

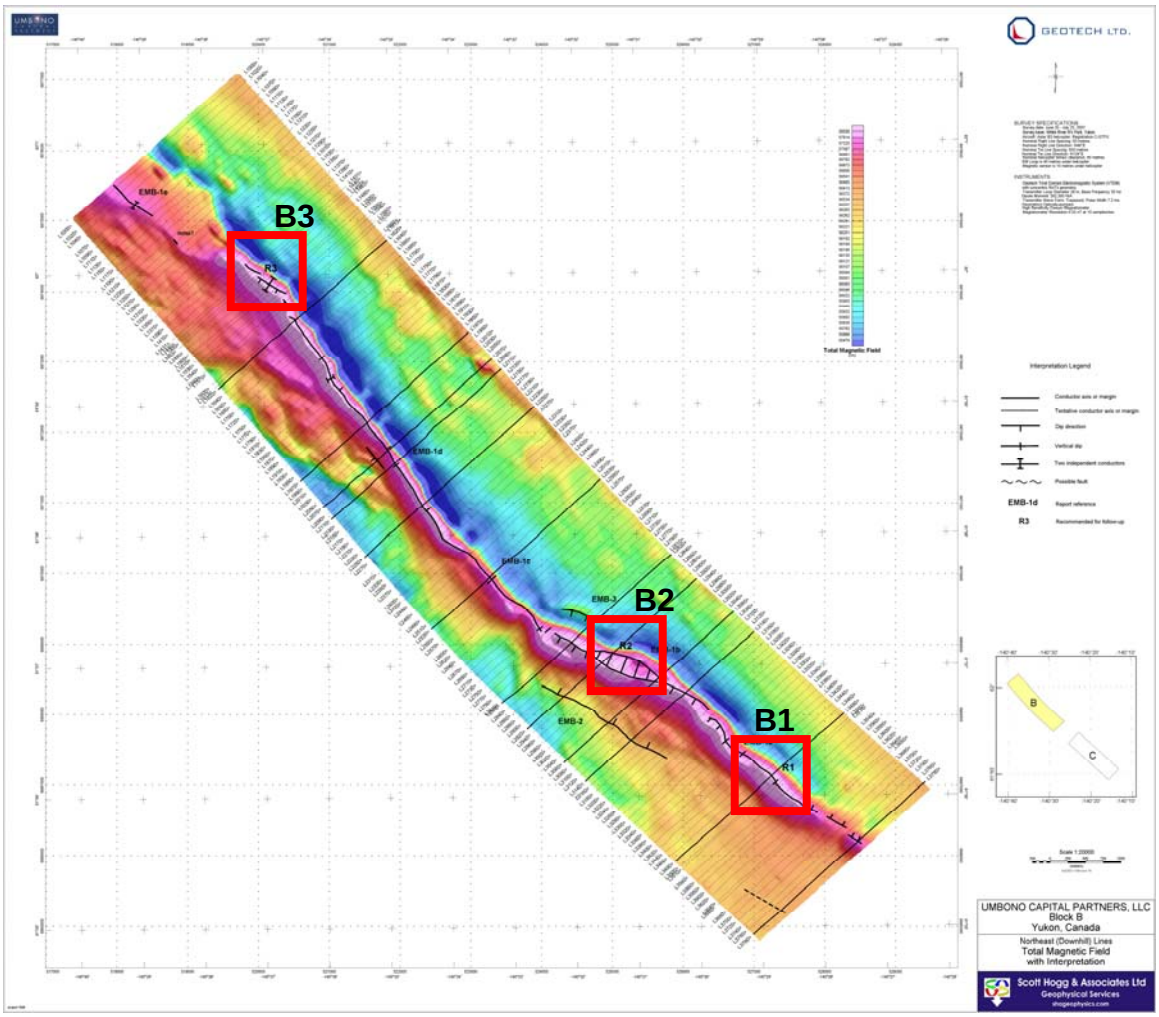


Figure 23: Conductors and areas of potential follow up interest in Block B – B1, B2 and B3 anomalies

7.4.5.2 Block C CDI Analysis

Like Block B three areas for follow up investigation were identified in Block C: C1, C2, and C3 (Figure 24). A conductor extends the length of Block C. It enters the southeastern corner of the area with a profile shape that suggests a steeply dipping source. Continuing to the northwest the conductor begins to reflect a northeast dip with relatively high conductivity at the southwestern end but becoming less conductive to the northeast. This conductive layer or interface persists across the entire area and it is not certain whether it reflects a geological horizon in the bedrock or the interface between bedrock and the overlying scree. Such an interface may host conductive clays that would give rise to a conductivity anomaly. On many lines a shallower weaker conductive horizon is also evident but is less continuous along line. Along the northeastern margin of the survey block there is an increase in the EM response indicating an approach to a more conductive zone. The shape of this anomaly along the survey margin is never fully defined and thus the nature of the source is unknown. It is possible that the valley floor hosts conductive clay sediments that could be the source.

Northwest of the C1 anomaly the response shape is more complex and in addition to the northeast dipping unit a second conductor with a southwest, possibly steep dip, has been noted.

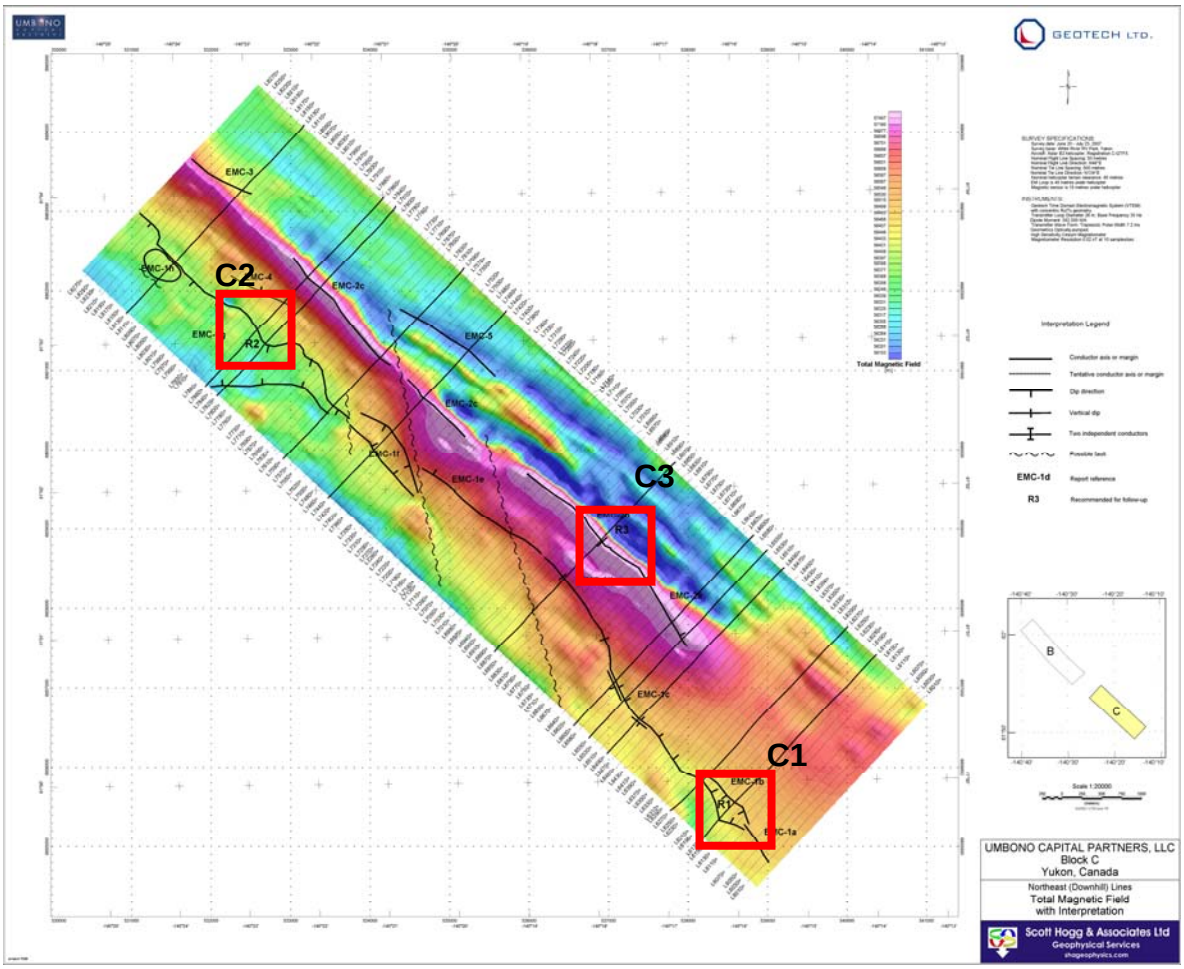


Figure 24: Conductors and areas of potential follow up interest in Block C – C1, C2 and C3 anomalies

Just northwest of this the possibility of a steeply dipping source or the apex of a conductive layer is evident. Two parallel northwest-southeast lineaments, possibly faults have been interpreted from the VTEM data and these occur toward the centre of Block C. Between these two lineaments the CDI solutions are less distinct but tend to infer a conductive layer with northeastern dip.

Southeast of the C2 anomaly the margins of the conductor are more sharply defined and there is the suggestion of two conductive layers. The interpretation is not clear but it is suspected that a shallow bedrock interface conductor overlies a deeper conductor with limited horizontal extent, dipping to the northeast. The zone of conductivity broadens to the northwest from the C2 anomaly.

The C1 and C2 EM anomalies were noted for their thickness and suggestion of broad zones of high conductivity near surface.

A second conductor to the north and almost parallel to the first is coincident with a magnetic linear that reflects a dyke or steeply inclined geological horizon. The profile shape of the southern section suggests a northeastern dip and the associated conductivity is low. In the vicinity of the C3 anomaly the response amplitude and conductivity increase and the profile shape suggests a near vertical dip. Although the general conductivity of the conductor is low to moderate follow up

investigation may be warranted. To the northwest the axis continues as a null type profile response, but the associated conductivity usually appears to be too low to create a corresponding CDI response. Smaller conductors to the northwest are evident as null type profile responses but do not follow the magnetic axis. It is very possible that the null response of these conductors is not associated with a conductor but a resistive rock that interrupts the continuity of the deeper conductive layer.

8.0 Interpretation and Conclusions

8.1 Interpretations

Results from the VTEM survey and CDI analysis of this data have highlighted areas for follow up work in 2008 as described in Section 7. The VTEM results were encouraging for a number of reasons. The areas identified in Block B and Block C coincided with known showings and are coincident with the mapped extent of the WRIC (at B2, B3 and C3). The location of the VTEM conductor is not entirely coincident with previous geophysical conductors and as a result has not been sufficiently tested by previous drilling. Anomalies such as C1 and C2 although not coincident with magnetic highs do warrant further investigation as little to no ground work has been conducted on them in the past. In addition the CDI analysis suggests a structurally more complex WRIC that could be interpreted as having an anticlinal structure as opposed to the previously interpreted steeply dipping dyke-like structure. This interpretation would compliment the regional mapping conducted by the YGS in 2007 (Israel and Cobbett, 2008). At this stage this is only speculative and will only be confirmed with drilling in 2008.

More discussion relevant to each of the anomalies in Block B and Block C is detailed in the following sub-sections.

8.1.1 Block B 2008 Drill Targets

All three of the anomalies identified by Scott Hogg and Associates Ltd in Block B occur within the StrataGold option properties.

The B1 anomaly has not been drill tested (Figure 25). The ultramafic has been identified in this area and has been delineated from the 1996 magnetic survey as well as the 2007 magnetic survey. The B1 anomaly also occurs at the southeastern end of the 2006 UTEM “Pole” conductor. Some soil sampling has been conducted over the B1 anomaly although no significant values were returned.

Previous drilling campaigns have targeted the marginal gabbro. Based on the assumption that the WRIC dips steeply to the southwest the boreholes have been inclined and orientated to the northeast. 2008 drilling will follow similar drill orientations, however, it will be a good idea to test the assumption that the WRIC is a folded body and to drill a vertical borehole into the WRIC to intersect the hinge of the suspected fold. This would be extremely useful in determining the attitude of the WRIC at Line 1440 (Figure 22) and similar anomalous CDI sections.

The areas in which the B2 and B3 anomalies occur in Block B (Figure 23) have been drill-tested in the past. In the B2 area, boreholes VQ-1, VQ-2, VQ-5, VQ-6, and VQ-7 drilled in 1973 by the Kluane Nickel Syndicate tested magnetometer and EM conductors and boreholes 97-074, -075, -076, -077, -078 and -079 drilled in 1997 by Expatriate Resources Ltd tested coincident magnetic and EM conductors identified from a Dighem helicopter-borne survey flown in 1996 and follow up ground MaxMin and magnetic surveys in 1997. Of these boreholes only VQ-7 returned encouraging results within the marginal gabbro situated at the base of the ultramafic (0.76% Ni and 0.24% Cu over 3.05 m). The boreholes drilled in 1997 only returned assays of 0.30% Ni and 0.05% Cu over 9 – 12 m intersections. These intersected disseminated sulphide zones within feldspathic peridotite and gabbro. The anomalous geophysical response was attributed to well developed fault zones within the ultramafic and mafic rocks. No further work was recommended to test geophysical anomalies in this area in the 1997 Expatriate Resources assessment report (Carne, 1997).

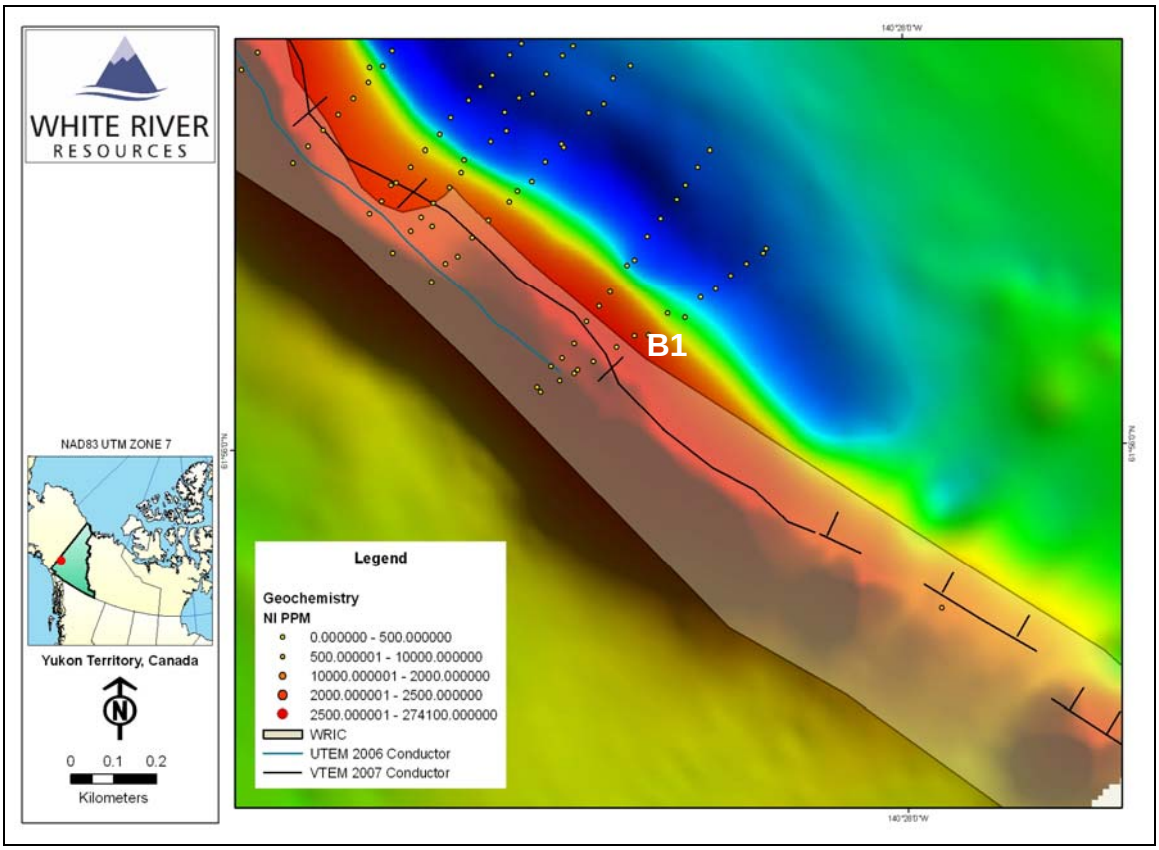


Figure 25: B1 anomaly in Block B overlain onto aeromagnetic data.

There is good reason to believe that the boreholes drilled in 1973 and 1997 did not actually intersect the B2 conductor. The conductor occurs some 50 m to the south of boreholes VQ-7 and 97-076. These two boreholes were drilled at -60° at an azimuth of 26° to depths of 110.03 m and 171.91 m respectively. This may have tested the 1997 HLEM conductor but does not sufficiently test the VTEM conductor (Figure 26). Boreholes 97-074 and 97-075 were abandoned in overburden although they were collared within the limits of the B2 anomaly. It is anticipated that boreholes drilled in the B2 area will be drilled to a depth of 300-500 m to sufficiently test the conductor.

Borehole C02-002 drilled by Uravan Minerals Inc. in 2002 tested a Max-Min (HLEM) conductor in the B3 area. The borehole was drilled at -65° at an azimuth of 50° to a depth of 229.12 m. The borehole did not intersect economic mineralization of any significance. This anomaly occurs within the Onion SE showing area and is coincident with numerous high grade nickel surface samples. According to the Uravan assessment report (Lahusen, 2002) the borehole sufficiently tested the geophysical and coincident geochemical anomalies and as a result significantly reduced the potential for finding large magmatic-hosted Ni-Cu-PGE bearing sulphides along the contact of the WRIC. Lahusen (2002) stated that the source of the geophysical anomalies was the result of the high concentrations of magnetite and titanomagnetite occurring in the clinopyroxenite. The reason for the high concentration of the magnetite is believed to be the result of the combined serpentinization and epigenetic hydrothermal alteration events that occurred in the sulphur poor environment of the WRIC (Lahusen, 2002). C02-002 was drilled along VTEM flight line 1463 which occurs between two conductors identified by Scott Hogg. The conductor is stronger to the northwest along lines 1440 and 1410. On line 1463 there is strong conductivity approximately 100 – 150 m directly below the collar of C02-002, however given the orientation of

the borehole there is good reason to believe that it has not sufficiently tested the conductor identified in the CDI analysis (Figure 27 and Figure 28).

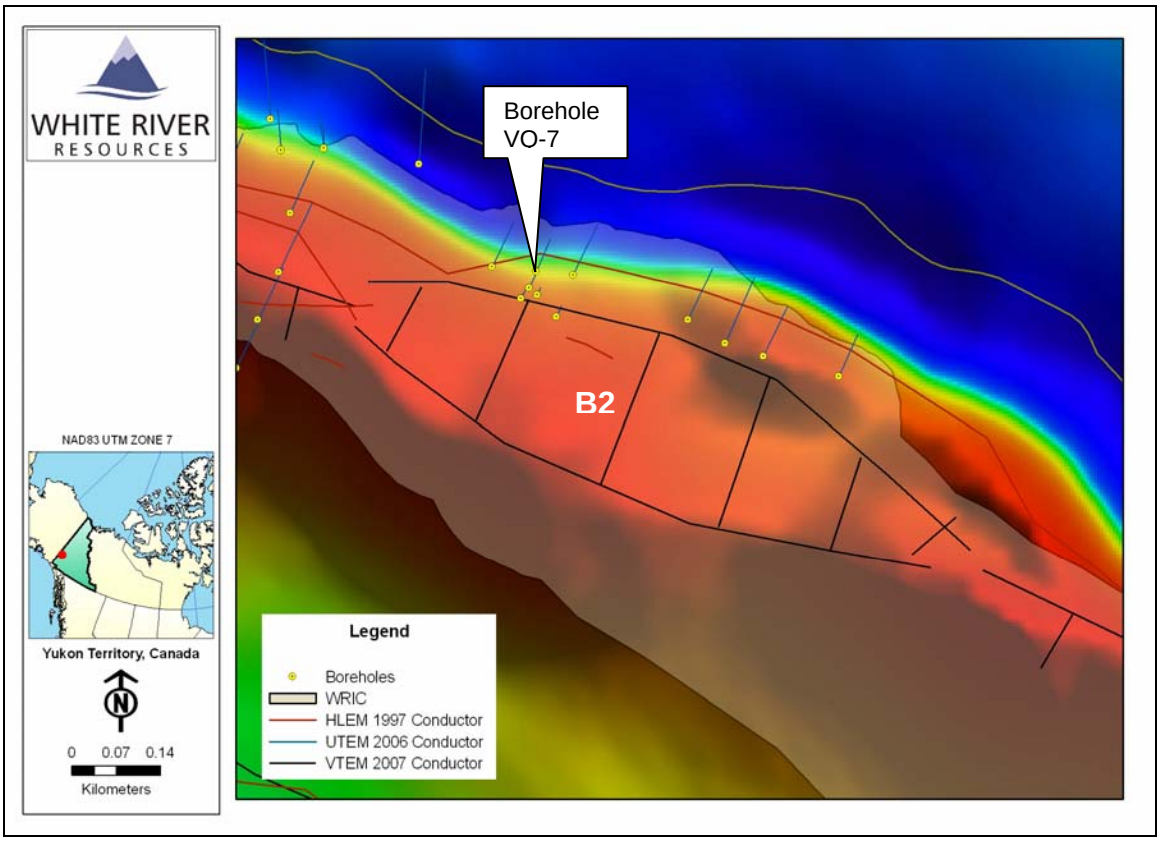


Figure 26: The broad B2 anomaly in Block B.
Previous borehole drilling has not sufficiently tested the VTEM conductor.

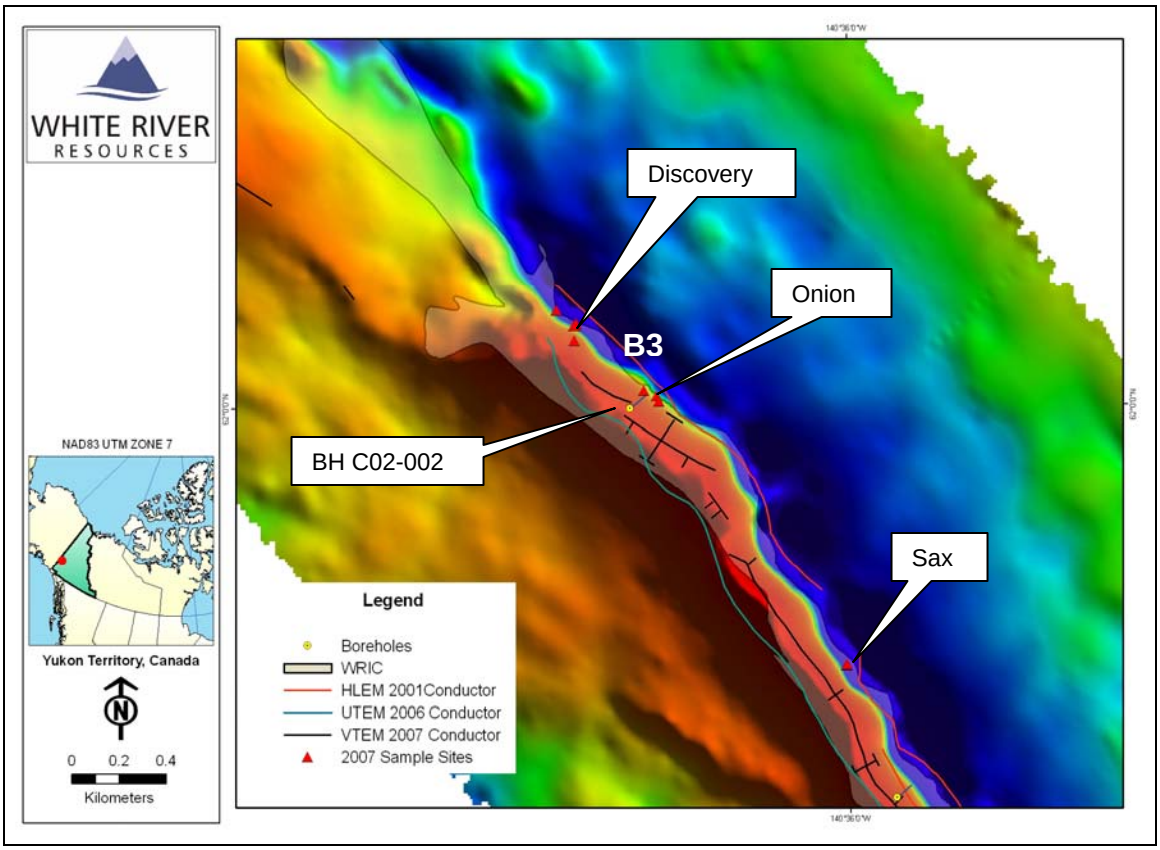


Figure 27: B3 anomaly in Block B.
Previous borehole drilling may not have sufficiently tested the VTEM conductor.

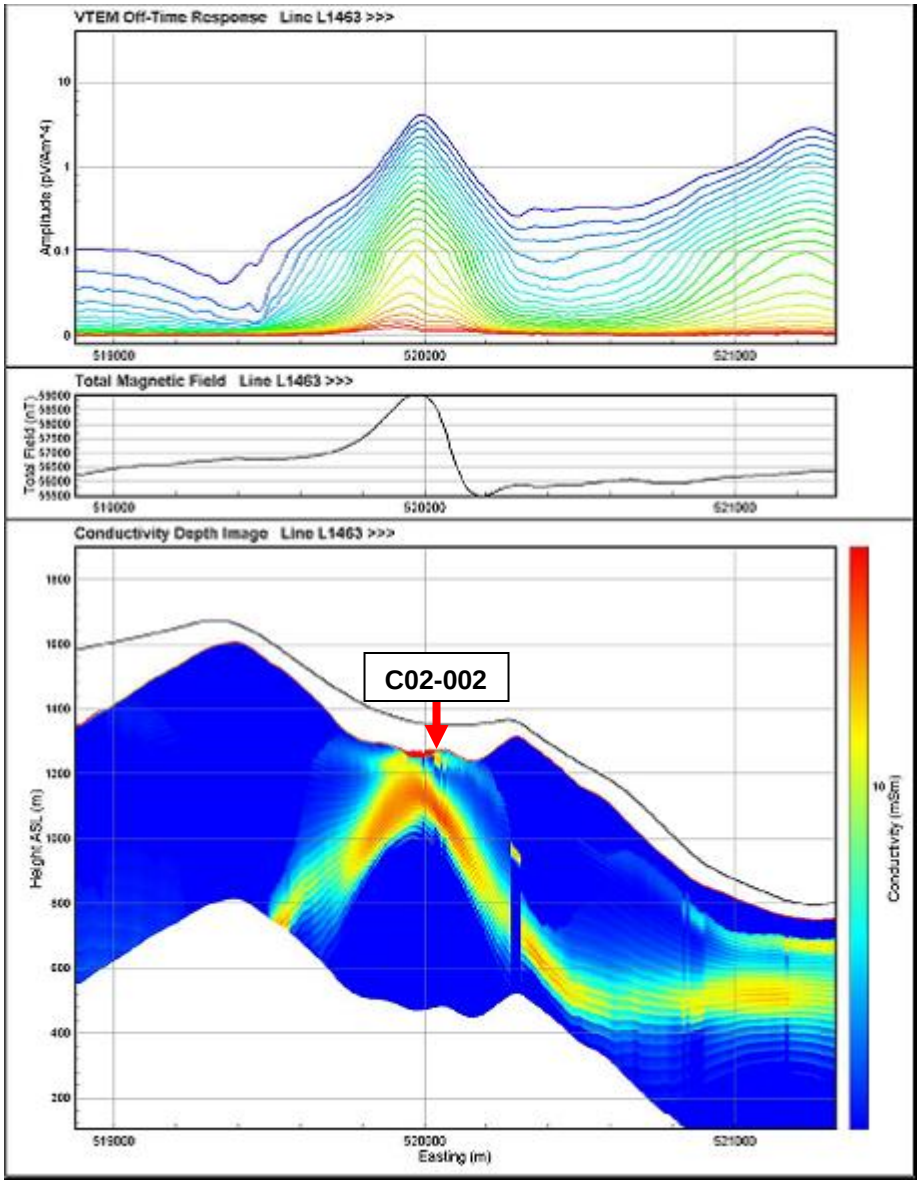


Figure 28: CDI Section through VTEM flight line 1463.
The collar location of where C02-002 was sited is shown. The borehole was drilled at -65° at an azimuth of 50° to a depth of 229.12 m and would not have sufficiently tested the high conductive response at depth shown in the CDI section

8.1.2 Block C 2008 Drill Targets

Prior to the VTEM survey no geophysical surveys had taken place over the Block C area. No geochemical sampling has taken place over the C1 and C2 anomalies (Figure 24) and these two anomalies do not coincide with the previously understood extension of the WRIC across Block C as defined by the magnetic survey. It is possible that the C1 and C2 anomalies could be formational anomalies. Surface expressions of these anomalies will be investigated in 2008 with possible drill follow up.

Grab samples downstream of the C1 anomaly by Silverquest Resources for the Kluane Joint Venture in 1987 returned values of between 2200-3100 ppm Ni and up to 500 ppm Cu. However, these samples coincide with the extension of the WRIC and a magnetic high.

The C2 anomaly has been mapped as an andesite. A 2007 traverse in this area revealed folding in units of the Station Creek Formation. The units were identified as weathered and altered mudstones with visible iron staining. Regional grab sampling by Polestar Exploration Inc. in 1987 revealed very low values for Ni and Cu (<150 ppm).

The C3 anomaly is coincident with the high magnetic response associated with a mapped serpentinized peridotite which is most likely the southern extension of the WRIC. The WRIC has been mapped as two thin (30 m) limbs interpreted as a fold. This anomaly occurs 1 km to the south-east and along strike of the Cats showing. The CDI profile along flight line 6870 suggests that there is a possibility of an anticline at C3 and that this could be connected to an anticline suggested in the CDI to the south (Figure 29). Drilling at C3 and possible drilling south along the flight line will aid in confirming the hypothesis that the ultramafic is indeed folded as suggested by both surface mapping and the CDI analysis. Certainly a folded WRIC in this area would compliment the regional mapping conducted by the YGS (Israel and Cobbett, 2008).

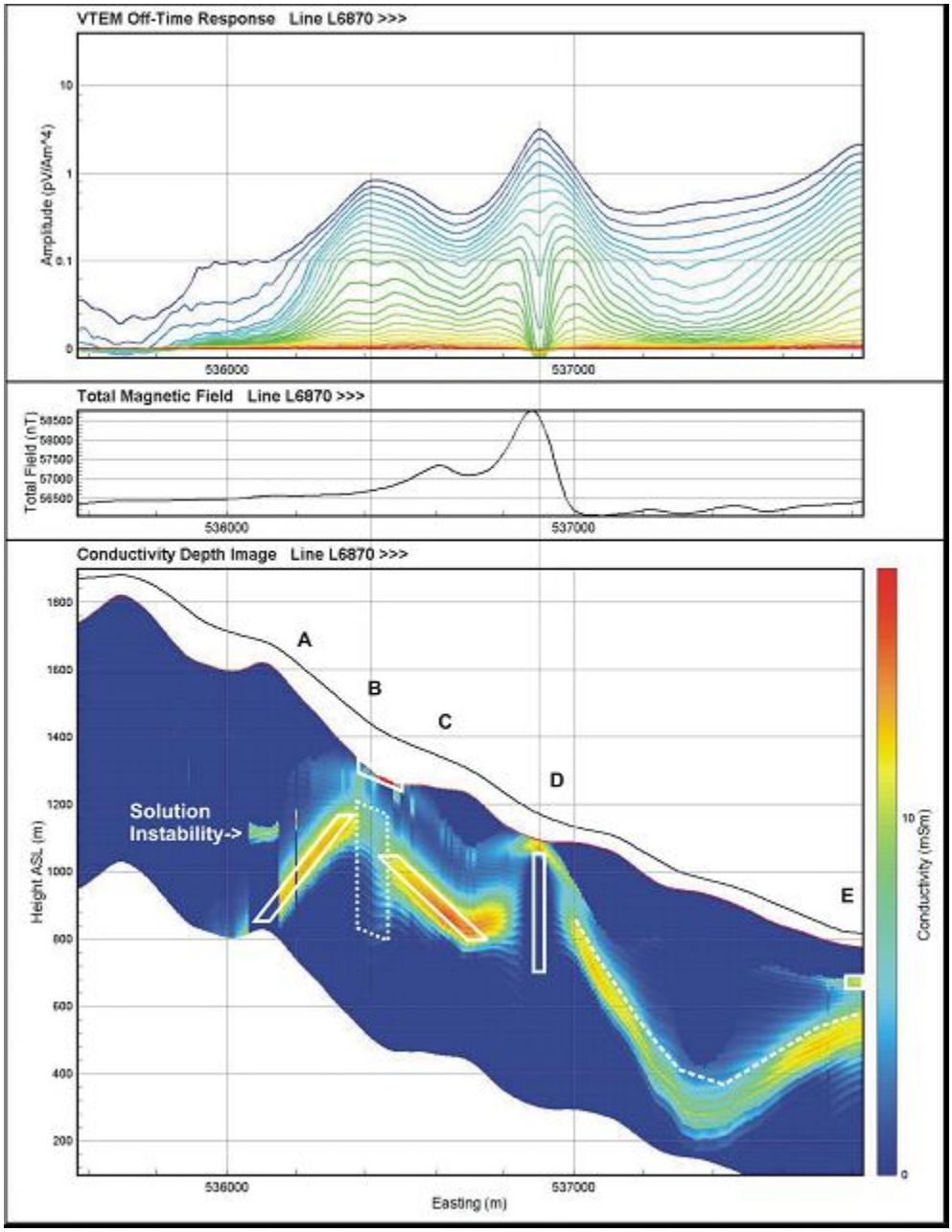


Figure 29: CDI section through VTEM flight line 6870.
C3 is located at D. At B the broad early-time peak is reflected by zone of high surface conductivity. The late-time channels indicate the beginnings of a central null that would be characteristic of an underlying steeply dipping source for which the responses at A and C would be edge effects. This interpretation is uncertain and the dipping layers at A and C may be the correct representation. At D a thin steeply dipping source is clearly reflected by the mid-time channels.

8.2 Conclusions

In addition to the 2007 field season a number of the conclusions described by Schulze (2007) from the 2006 field season are relevant here.

- The White River Intrusive Complex (WRIC) is a favourable setting for magmatic copper-nickel sulphide mineralization because of the nature of the intrusion, and the presence of abundant small magmatic showings along the footwall margin (Pattison, 2005). The WRIC occurs as a fairly linear northwest-southeast striking, steeply southwest-dipping dyke, occurring most commonly between hanging wall Hasen Creek sediments and footwall Station Creek andesitic volcanics. The lack of internal zonation indicates the environment within the intrusion was dynamic and the thick alteration halo in the host rocks suggests a considerable volume of ultramafic magma passed through it (Pattison, 2005). Several small Ni-Cu-PGE showings occur along the footwall margin and these were identified during the 2007 field season

- Two types of deposit settings occur: mineralization of magmatic origin, consisting of disseminated to semi-massive Cu-Ni sulphides +/- PGE's largely within basal gabbros of the WRIC along the footwall contact; and epigenetic mineralization of hydrothermal origin, including vein and fracture-filling, skarn and replacement settings within footwall andesites. The Wellgreen Ni-Cu deposit, located about 110 kilometres to the southeast, typifies the magmatic setting; the CanAlask deposit typifies the epigenetic setting.

- The magmatic and hydrothermal settings likely share a common origin, with hydrothermal mineralization deposited from late-stage fluids related to the magmatic mineralizing event.

- At the Wellgreen deposit, the vast majority of mineralization is magmatic, with a much smaller proportion of hydrothermally-derived mineralization. This suggests a high magmatic: hydrothermal ratio; therefore the size of hydrothermally derived showings in the footwall may be indicative of the potential presence of proximal magmatic deposits. Using this model, the size of the CanAlask deposit suggests strongest potential for a large magmatic deposit that may occur in the B2 to B1 anomaly area, including the immediate northwestern side of the White River.

- The camp share with the YGS was of enormous benefit, not only in terms of costs savings related to helicopter usage and general running of camp costs but also in terms of the knowledge gained from people like Steve Israel, Don Murphy and Jeff Bond. Certainly a regional understanding of the Wrangellia Terrane as well as a local orientation of the geological framework of the WRIC and surrounding country rocks was developed.

- The decision to use the VTEM system over any other EM system available on the market today proved to be a successful one. As the most powerful deep-seeing EM system available six target areas for follow up work were recommended for 2008. The choice of 50 m line spacing also proved to be beneficial as the rugged topography proved to be a challenge to the pilots. Although there were some shortcomings in terms of terrain clearance they were largely limited to one line direction. In light of the close line spacing of 50 m it is unlikely that any significant target could be missed.

9.0 Recommendations

- **Budget**

A base-case preliminary budget of CAD$ 3,649,400 including a 20% contingency and administration costs for 2008 is detailed below:

Line Items	CAD
Direct drilling costs •	1,578,000
Direct airborne geophysics costs •	333,000
Direct geological and camp costs • • •	541,000
SUB-TOTAL FIELD COSTS	**2,452,000**
General and administration	707,000
SUB-TOTAL BUDGET FOR 2008	**3,159,000**
Additional 20% contingency on exploration	490,400
TOTAL BUDGET FOR 2008	**3,649,400**

- **Drilling**

With an anticipated drill program planned for 2008 of twelve boreholes totaling 4,200 m it has been imperative to secure one drill rig with a drilling company with the ability to drill to depths of 500 m on Miles Ridge. Geotech Drilling Services Ltd has been identified as the drilling service provider. Important considerations for the drilling program include access to and availability of fuel, and water and access to drill sites which may be limited by the topography. Limited blasting for construction of pads and trenching is expected which will require mechanical diggers (possibly self-propelled, but very small) for trenching and pad construction. Pads will have to be re-countered and re-seeded.

The topographic nature of the project area will require dedicated and competent long-line helicopter support. Trans North Helicopters are the preferred service providers in this department.

Due to the lambing season on Miles Ridge drilling will only start in July.

- **Airborne Geophysics**

It is anticipated that Block A will undergo a helicopter-borne VTEM survey with a line spacing of 50 m. The survey will include some 1700 line km similar in scope to the 2007 VTEM survey. Blocks B and C should not require further airborne surveys.

- **Human Resources and Field Camp Considerations**

The start of the 2008 field will begin in June. This will allow for the mobilization and set up of a camp to accommodate drillers, field assistants, environmental monitors, geologists, airborne geophysics crew, helicopter pilots, mechanics, cooks, and medics prior to the start of the drilling campaign in June. The field season is expected to be completed by late to mid August.

- **Mapping, Trenching and Sampling**

It is recommended that Block A undergo a detailed 1:20 000 scale mapping program and a detailed soil and rock sampling program to complement and expand on the mapping and sampling program conducted by Falconbridge in 2006. Detailed 1:10 000 scale mapping is anticipated for Block B and Block C with a focus on areas around the recommended drill targets.

It is anticipated that trenching will be required to ground truth surface expressions of anomalies identified from the VTEM survey. Additional sampling of these trenches will be required.

- **DH Geophysical Surveying**

Down hole geophysical surveying of the drilled boreholes is recommended. This will require input from a contract geophysicist based on site for the duration of the drill program so as to allow for immediate follow up drilling to any anomalous responses.

- **Consulting**

It is recommended to enlist the services of Steve Israel (YGS) to contribute to the structural interpretation of the areas of interest. This will compliment any mapping and drilling conducted on Blocks A, B and C and will add to the understanding of the current 1:50 000 scale maps of the area.

CDI generation and interpretation of VTEM results will be conducted by Scott Hogg and Associates. Review of the borehole drilling plan for 2008 will also be carried out by Scott Hogg.

- **First Nations**

It will be necessary to establish a more formal agreement with the First Nations in the form of a Memorandum of Understanding (MOU). Following discussions and meetings with the First Nations it is envisaged that the WRFN and KFN become more actively involved in the project as environmental monitors, and field/geological/drilling assistants. A formal field visit to the project area to include elders and youth of the WRFN and KFN to introduce the community to the process of geological exploration and mining is anticipated.

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WHITE RIVER
RESOURCES

Map 1
White River Property Claims

Legend

- StrataGold Option Claims
- WRR Claims
- White River Camp 2007

Adjacent Claims

- Active
- Expired
- First Nation Lands
- Kluane National Park
- Kluane Wildlife Sanctuary
- Alaska Highway
- Limited Use Road
- Trail
- Rivers
- Water Bodies

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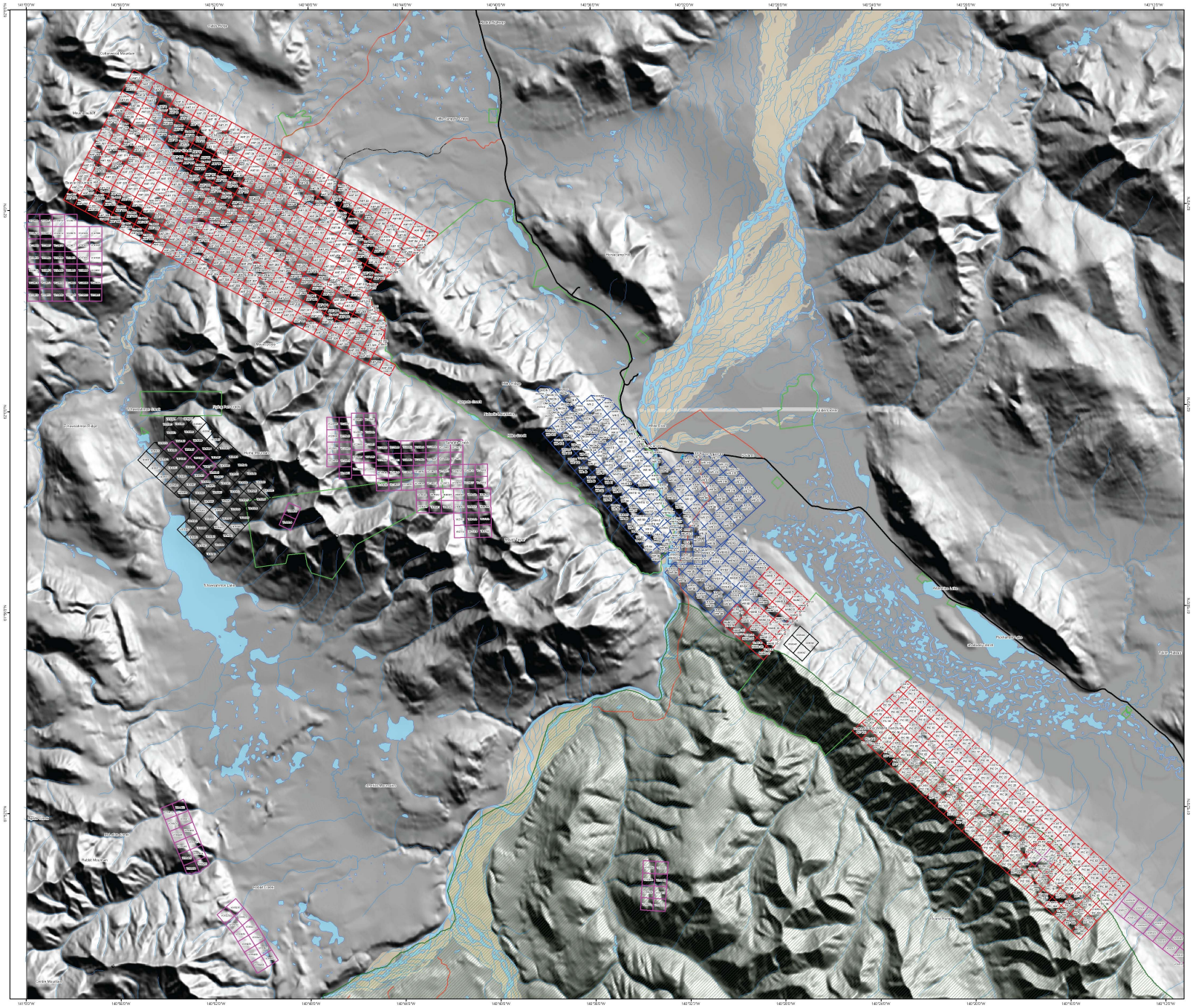


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WHITE RIVER
RESOURCES

Map 2
White River Property
Assessment Work
2007
Showing Aeromagnetic Data
Overlay on Blocks B and C

Legend

- StrataGold Option Claims
- WRR Claims
- White River Camp 2007
- White River Intrusive Complex
- 2007 Sample Sites
- VTEM Conductor
- VTEM Flight Lines
- Historic Boreholes
- Surface Borehole Trace
- Historic Sample Sites
- Alaska Highway
- Limited Use Road
- Trail
- Rivers
- Water Bodies

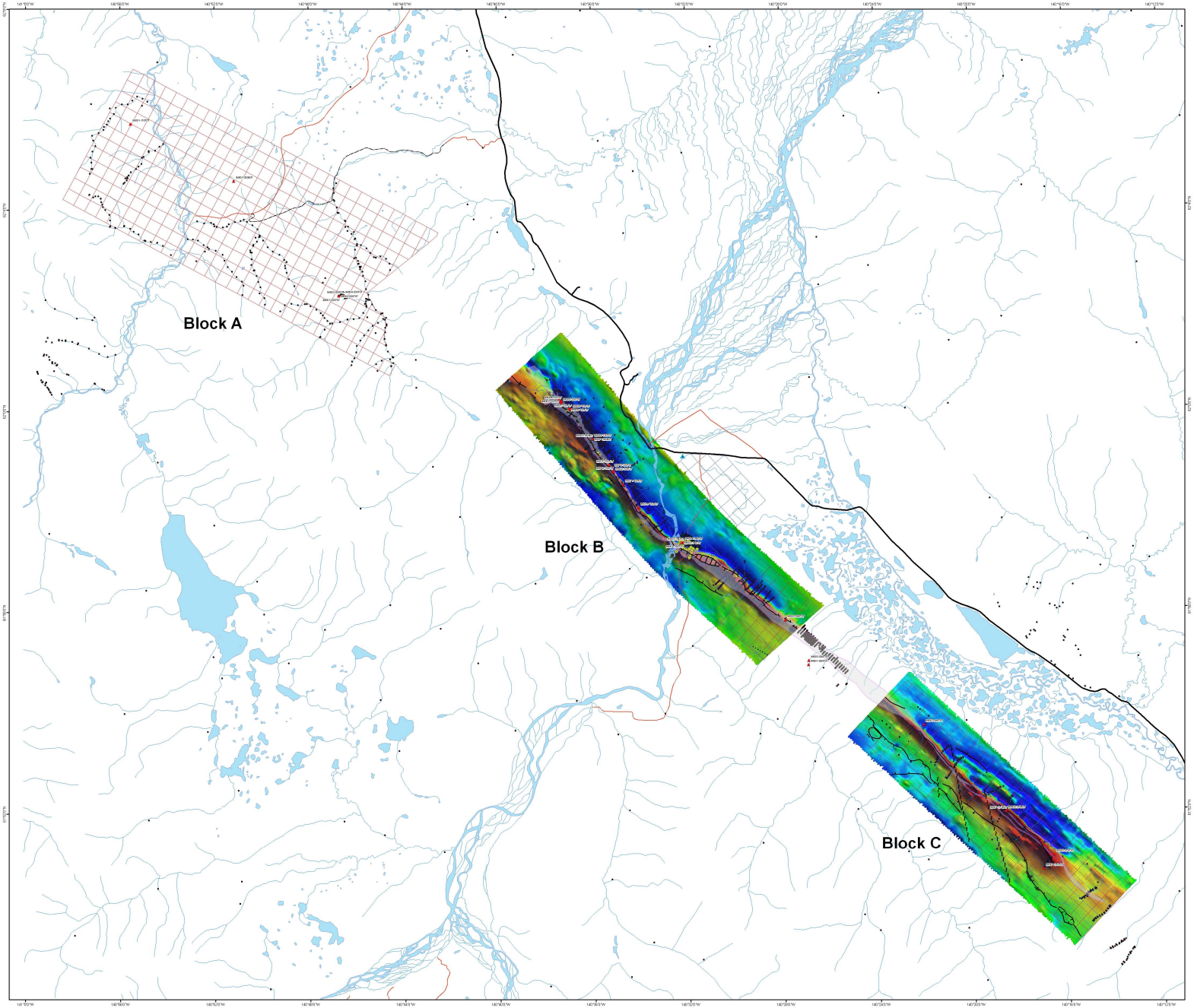
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Volume II of II

Appendices

Assessment Report

Summarizing the

Geological, Geochemical and Geophysical Surveys

on the

White River Nickel-PGE Project

Owners: White River Resources Inc./ StrataGold Corp.

Beaver Creek area, Yukon Territory
Whitehorse Mining District

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Appendices

Appendix I: Author's Statement of Qualifications

Appendix II: List of Personnel Involved in Project

Appendix A: 2007 Expenses Sheet

Appendix B: Microsearch CC Petrographic Analysis

Appendix C: ACME Laboratories Original Analytical Results Certificates

Appendix D: Sample Descriptions and Locations

Appendix E: Geotech Ltd VTEM Survey Report

Appendix F: Scott Hogg and Associates Ltd QAQC Reports

Appendix G: Block B Downhill CDI Sections

Appendix H: Block C Downhill CDI Sections

Appendix I: Scott Hogg and Associates Ltd Interpretation Report of the VTEM Database

Appendix I: Authors Statement of Qualifications

I, Ian McCutcheon, hereby certify that:

1) I am an employee of White River Resources Inc a wholly owned subsidiary of the Umbono Group of Companies

2) I graduated with a Bachelor of Science Honours Degree in geology from the University of the Witwatersrand, Johannesburg, South Africa in 2002.

3) I am a member in good standing of the Geological Society of South Africa and registered with the South African Council for Natural Scientific Professions (SACNASP) Cand. Sci. Nat. reg no. 100024/03

4) I have worked as a geologist in Southern Africa for a total of 5 years since my graduation from the University of the Witwatersrand.

6) I am responsible for preparation of all sections of the assessment report entitled "Assessment Report Summarizing the Geological, Geochemical and Geophysical Surveys on the White River Nickel-PGE Project". I was active on-site during most of the program of roughly 34 days from June 18 to July 22, 2007.

Dated this 14th Day of March, 2008

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Appendix II: List of Personnel Involved in Project

The following personnel were involved with the White River project:

White River Resources:
Ian McCutcheon, Project Geologist
Paul Nex, Senior Geologist
Dylan Morgan, Project Manager

Helicopter services were provided by Trans North Helicopters
Pilots: Shaun Whitford
Brett Kapernick

Geotech Limited:
Field Operation Manager: Shawn Grant
Project Manager: Harish Kumar
Crew chief: Colin Lennox
Operators: Darrel Hamill
Ioan Serbu
Geophysicist: Sean Hayes
System engineer: Victor Vetrov

The survey pilot and the mechanic engineer were employed directly by the helicopter operator for the VTEM survey – TRK Helicopters Ltd.

Pilots: Roy Stevenson
Pierre Forand
Randy Marks
Engineer: M. Morton

Aurora Geosciences Ltd provided mobilization, construction and camp operation duties
First Aid and Cook: Janbro Brault
Cooks Assistant: Lucas Halliday

Maps
3 a – c
Maps accompanying Appendix E:

Map 3a: Block B Geotech VTEM System B-Field Profiles Time Channels 0.234 – 6.578 ms

Map 3b: Block B Geotech VTEM System dB/dt Profiles Time Channels 0.234 – 6.578 ms

Map 3c: Block B Geotech VTEM System Total Magnetic Intensity Map

Maps
3 d – f

Maps accompanying Appendix E:

Map 3d: Block C Geotech VTEM System B-Field Profiles Time Channels 0.234 – 6.578 ms

Map 3e: Block C Geotech VTEM System dB/dt Profiles Time Channels 0.234 – 6.578 ms

Map 3f: Block C Geotech VTEM System Total Magnetic Intensity Map

Appendix A: 2007 Expenses Sheet

Note on the submission of Assessment Work expenses in October 2007 to the Yukon Mining Recorder and StrataGold option agreement expenses

CAD$463,351.45 was submitted as Assessment Work in October 2007 to the Yukon Mining Recorder for the work conducted on all the claims (Blocks A, B and C) in the summer of 2007, (see e-mail confirming submission below). It should be noted that not all the invoices from various service providers had been received by the submission date deadline, 3rd October 2007, but in order to maximize the assessment expenditures we were allowed to use pro-forma's to calculate the total assessment figure.

Of the total amount submitted some **CAD$244,018** was spent on the 179 StrataGold claims. Applying the 10% administrative and overhead costs (**CAD$24,401.8**) as per section 4g of the FB-SGV letter (Dated 29 September 2005) the total amount of exploration work expenses conducted on the StrataGold claims for 2007 is **CAD$268,240.**

Falconbridge spent **CAD$568,749.91** on exploration on the StrataGold property in 2006. Using the additional **$68,749.91** over and above the required **CAD$500,000** to date a total of **CAD$336,989.91** has been spent on exploration in 2007 and White River Resources must spend **CAD$1,163,010.09** by the end of 2008 to maintain the option agreement with StrataGold. A further **CAD$1,000,000.00** must be spent in 2009.

Year	Company	Required Expenses on SG Claims	Actual Expenses on SG claims	Expenses Year on Year
2006	Falconbridge	$500,000.00	$568,749.91	$500,000.00
2007	WRR		$268,240.00	$336,989.91
2008	WRR	$1,500,000.00		$1,163,010.09
2009	WRR	$1,000,000.00		$1,000,000.00
	Total	**$3,000,000.00**	**$836,989.91**	**$3,000,000.00**

It was a simple exercise to expense the VTEM and consulting expenses based on the number of flight lines flown over the StrataGold claims in Block B. 53.65% of the VTEM survey expenses and consulting expenses was conducted on the StrataGold claims.

Logistics and Personnel costs included; camp logistics and accommodation, commercial air travel, field supplies, logistics, safety courses and office administrative expenses. These expenses were also weighted based on the amount of VTEM flight lines flown over the StrataGold properties. 53.41 % of the Logisitics and Personnel costs were attributed to the StrataGold claims.

The regional and claim specific field expenses were then weighted based on the amount of samples collected, helicopter hours flown and man days worked on specific claims or spent on regional reconnaissance mapping and orientation. 49.90% of the Claim specific in-field costs and 25.79% of the Regional in-field costs were attributed to the StrataGold property.

Of the total amount of work conducted, **52.66%** of expenses were attributed to the StrataGold claims.

Below is a break-down of these expenses showing the StrataGold subset of expenses.

Description of Costs	Amount	StrataGold Subset	SG %
VTEM Survey	$321,815.00	$172,657.69	53.65
Claim Specific in field expenses	$23,850.27	$11,902.39	49.90
Regional in field expenses	$12,511.05	$3,226.91	25.79
Logistics & Personnel	$81,309.37	$43,426.86	53.41
Consulting	$23,865.75	$12,804.27	53.65
Total	**$463,351.45**	**$244,018.12**	52.66
Add 10 % Administrative and Overhead Fee		**$24,401.81**	
Sub-Total		**$268,419.93**	

E-mail Confirming submission of Assessment Work expenses:

From: Dylan Morgan [mailto:dylan.ski.morgan@gmail.com]
Sent: 03 October 2007 09:02 PM
To: eellingham@gnme.ca; 'Dorian Wrigley'; 'Ian McCutcheon'; 'Paul Nex'; rmontjoie@gnme.ca
Subject: WRR assesment filing

I have submitted the filing for all claims according to the discussions last week. Discussions with the Mining Recorder and YGS led to some substantive changes to the assessment work calculations, including a reduction in the total calculated assessment work from $468k to $431k, but allowing a more beneficial distribution. This resulted in the delay (I had been looking to submit on Monday), but also a reduction in our final bill with no penalty in terms of retention.

The summary:

- All Block A claims will now be coming due in 2008 (222 had to be renewed, of which 29 had to be paid-in-lieu)
- **183 claims were renewed on Blocks B and C, for a total of 656claim-years,** with the result that all Block C claims will come due in 2011 or later, **while all Block B claims will come due in 2013, or later**
- **Total cost dropped from a projected $12k to $7,350.**
- **None of the Stratagold claims had work filed, since they are all good to 2013, and most far past that**

Regards,

Dylan Morgan
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A break down of the expenses submitted to the mining recorder on 3rd October 2007 is detailed below.

Date	Supplier	Description	CAD excl GST
14-May-07	Geotech Ltd	VTEM	$170,600.00
25-Jul-07	Geotech Ltd	VTEM	$124,015.00
1-Aug-07	Geotech Ltd	VTEM	$27,200.00
	Umbono	Geology Personnel IM Man Days in field - Claim Specific	$2,765.74
	Umbono	Geology Personnel PN Man Days in field - Claim Specific	$1,393.73
	Umbono	Geology Personnel IM Man Days in field - Regional	$5,049.79
	Umbono	Geology Personnel PN Man Days in field - Regional	$3,711.22
	Umbono	Geology Personnel DM Man Days in field	$12,600.00
	Umbono	Geology Personnel IM Salary - May	$4,549.20
	Umbono	Geology Personnel PN Salary - April May	$396.76
29-Jun-07	Aurora Geosciences	Camp Logistics/Accommodation	$9,135.00
30-Jun-07	Aurora Geosciences	Camp Logistics/Accommodation	$990.89
19-Jul-07	Aurora Geosciences	Camp Logistics/Accommodation	$5,258.75
16-Jul-07	Aurora Geosciences	Camp Logistics/Accommodation	$1,674.89
26-Jul-07	Aurora Geosciences	Camp Logistics/Accommodation	$3,127.50
31-Jul-07	Aurora Geosciences	Camp Logistics/Accommodation	$3,024.17
31-Aug-07	Aurora Geosciences	Camp Logistics/Accommodation	$747.66
25-Jul-07	White River RV Camp	Camp Logistics/Accommodation	$6,288.00
	Rennies Travel	Travel - Commercial Air (Ian)	$4,548.40
	Rennies Travel	Travel - Commercial Air (Paul)	$2,274.20
13-Jun-07	Trans North Helicopters	Helicopter Costs - Claim Specific	$14,890.50
13-Jun-07	Trans North Helicopters	Helicopter Costs - Regional	$3,309.00
14-Jun-07	Elaine Ellingham	Consulting	$5,088.00
7-Sep-07	Elaine Ellingham	Consulting	$11,277.75
19-Sep-07	Scott Hogg	Consulting	$7,500.00
18-Jul-07	Small's Expediting	Accommodation/Travel/Logistics/Field Supplies	$701.27
5-Sep-07	Ian Claims	Accommodation/Travel/Logistics/Field Supplies	$2,091.35
5-Sep-07	Ian Claims	Accommodation/Travel/Logistics/Field Supplies	$196.86
5-Sep-07	Ian Claims	Accommodation/Travel/Logistics/Field Supplies	$2,637.51
1-Aug-07	Dylan Claims	Accommodation/Travel/Logistics/Field Supplies	$5,489.24
1-Aug-07	Dylan Claims	Accommodation/Travel/Logistics/Field Supplies	$3.64
	Dylan Claims	Accommodation/Travel/Logistics/Field Supplies	$2,004.43
8-Jun-07	Cansel	Field Supplies	$3,426.00
28-May-07	Corstor	Field Supplies	$52.74
28-May-07	IRL Supplies	Field Supplies	$1,429.52
5-Sep-07	Ian Claims	Field Supplies	$2,158.67
	Acme Labs - deemed	Assays - claim specific	$3,727.02
	Acme Labs - deemed	Assays - regional	$338.82
	Microsearch - proforma	Petrographic Analysis - claim specific	$1,073.28
	Microsearch - proforma	Petrographic Analysis - regional	$102.22
	WGM	Office Administration	$446.60

	RBC Bank	Office Administration	$227.15
	Umbono	Office Administration - printing couriering	$3,708.98
	Arctic Response	Predator+Egress Safety Course	$1,870.00
	Arctic Response	Unrestricted Firearms Course	$250.00
		Total	**$463,351.45**

A detailed break down of all expenses and invoices received are attached in the following electronic files:
Assessment Calculator v2.0.xls (this details the general ledger GL submitted to the mining recorder on 3rd October 2007)
and
WRR Account Expenses 2007.xls (this details all invoices to date on the WRR property)

Appendix B: Microsearch CC Petrographic Analysis

Microsearch CC

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e-mail: thatchere@acenet.co.za

TO: Ian McCutcheon, Geologist, White River Resources Inc, Umbono Group of Companies

AT: e-mail: imccutcheon@umbono.co.za

REFERENCE: Richard Montjoie's e-mail of 13th September, 2007

SUBJECT: PETROGRAPHIC DESCRIPTION OF THIN SECTION

SAMPLE NO.: C02-002_1 **CLIENT ID.:** MUG **DONE BY:** ECT

DATE: 07/11/07

LOCALITY: 16.58-16.77m IN DRILLHOLE (IM-001, 15/07/07), YUKON, CANADA

FIELD IDENTIFICATION: DRILLHOLE CORE/ FELDSPATHIC DUNITE

CONSTITUENT MINERALS (EST.VOL.%):

Olivine, completely altered to Serpentine, Bowlingite, fine-grained, secondary Magnetite	95
Comagmatic Opaque Minerals	3
Intercumulus Pyroxene, completely replaced by Amphibole (Tremolite?)	2
Biotite	Minor

TEXTURAL AND MINERALOGICAL FEATURES:

Almost completely altered (serpentinised, bowlingitised, secondarily magnetitised, amphibolised, etc), fine- to probably medium-grained, fairly even-grained, granular (cumulate igneous) texture with no obvious mineral fabrics. Complete alteration of the olivine and the low content of intercumulus minerals makes it impossible to define olivine grain boundaries, and therefore determine size, of the olivine grains, but one gets the impression that they were probably not coarse. The orange-brown bowlingitisation of serpentine veinlets within olivine indicates that the rock has been weakly affected by oxidation and hydration at some stage (not necessarily in the weathering environment).

Olivine probably formed roughly equant to somewhat elongated anhedral subrounded, cumulus grains. However, it has been completely altered in typical veinlet-and-island style with no relict olivine remaining. Even the "islands" have been completely serpentinised. The irregular network of serpentine veinlets (not the "islands") has been partly altered to orange-brown bowlingite and is accompanied by stringers, veinlets and small segregation bodies, as well as disseminated grains, of fine-grained secondary magnetite, which constitutes about 10% of the olivine. Occasional transgressive, planar serpentine veinlets up to 0.15 mm wide also occur

and may be followed by bodies of secondary magnetite as well. **Comagmatic opaque minerals** are somewhat irregularly distributed, occurring both as inclusions in, and interstitially to, the serpentinised olivine. They mostly form small, equant cumulus grains and subhedral (isometric) crystals ranging in size from <50 µm to 0.34 mm. However, occasional, somewhat larger, interstitial and partly moulded (intercumulus) grains, e.g triangular 0.6 mm, also occur. They appear to be entirely of oxide phases, probably mainly chromite. Their ragged, and somewhat frilly margins indicate that they are probably rimmed by secondary magnetite. An **intercumulus pyroxene** phase is also present, occurring as anhedral grains, up to about 1.0 mm across, moulded to the shapes of surrounding olivine grains. It has, however, been completely altered, mainly on a single-crystal basis, to a colourless amphibole, probably tremolite. Occasional small plates of colourless (bleached) **biotite** also occur interstitially.

LITHOLOGICAL CLASSIFICATION: Very Strongly Altered (Serpentinised, Bowlingitised, Secondarily Magnetitised, Amphibolised, etc), Chromitiferous(?) Dunite

GENERAL COMMENTS:

Quite strongly magnetic.
No reaction to dilute HCl.
There are no indications of the presence of plagioclase.

END OF C02-002_1

SUBJECT: PETROGRAPHIC DESCRIPTION OF THIN SECTION

SAMPLE NO.: C02-002_2 **CLIENT ID.:** MUG **DONE BY:** ECT

DATE: 07/11/07

LOCALITY: 52.27-52.42m IN DRILLHOLE (IM-002, 15/07/07), YUKON, CANADA

FIELD IDENTIFICATION: DRILLHOLE CORE/ FELDSPATHIC DUNITE

CONSTITUENT MINERALS (EST.VOL.%):

Olivine, completely altered to Serpentine, Bowlingite, fine-grained, secondary Magnetite	96
Comagmatic Opaque Minerals	3
Intercumulus Pyroxene, completely replaced by Amphibole. Probably Tremolite	1
Biotite	Minor

TEXTURAL AND MINERALOGICAL FEATURES:

Almost completely altered (serpentinised, bowlingitised, secondarily magnetitised, amphibolised, etc), fine- to medium-grained, probably fairly even-grained, granular

(cumulate igneous) texture with no obvious mineral fabrics. Complete alteration of the olivine and the low content of intercumulus minerals makes it impossible to define olivine grain boundaries, and therefore determine size of the olivine grains, but one gets the impression that they were probably not coarse. The orange-brown bowlingitisation of serpentine veinlets indicates that the rock has been weakly affected by oxidation and hydration at some stage (not necessarily in the weathering environment). Very similar to C02-002_1, although the olivine content is marginally higher.

Olivine probably formed roughly equant to somewhat elongated, anhedral subrounded, cumulus grains. However, it has been completely altered in typical veinlet-and-island style with no relict olivine remaining. Even the "islands" have been completely serpentinised and often show classical hour-glass structure. The irregular network of serpentine veinlets (not the "islands") has been partly altered to orange-brown bowlingite and is accompanied by stringers, veinlets and small segregation bodies, as well as disseminated grains, of fine-grained secondary magnetite, which constitutes about 10% of the olivine. Occasional transgressive, planar serpentine veinlets up to 0.15 mm wide also occur and may be followed by bodies of secondary magnetite as well. **Comagmatic opaque minerals** are somewhat irregularly distributed, occurring both as inclusions in, and interstitially to, the serpentinised olivine. They mostly form small, equant grains and subhedral (isometric) crystals, ranging in size from <30 µm to 0.37 mm. However, occasional somewhat larger, interstitial and partly moulded (intercumulus) grains, e.g. ovoid 0.43 mm, also occur. They appear to be entirely of oxide phases, probably mainly chromite. Their ragged, and somewhat frilly margins indicate that they are probably rimmed by secondary magnetite. An **intercumulus pyroxene** phase is also present, occurring as anhedral grains, up to about 1.0 mm across, moulded to the shapes of surrounding olivine grains. It has, however, been completely altered, mainly on a single-crystal basis, to a colourless amphibole, probably tremolite. Occasional small plates of colourless (bleached) **biotite** also occur interstitially.

LITHOLOGICAL CLASSIFICATION: Very Strongly Altered (Serpentinised, Bowlingitised, Secondarily Magnetitised, Amphibolised, etc), Chromitiferous(?) Dunite

GENERAL COMMENTS:

Quite strongly magnetic.
No reaction to dilute HCl.
There are no indications of the presence of plagioclase.

END OF C02-002_2

SUBJECT: PETROGRAPHIC DESCRIPTION OF THIN SECTION

SAMPLE NO.: C02-002_3 **CLIENT ID.:** MUG **DONE BY:** ECT

DATE: 07/11/07

LOCALITY: 68.12-68.25m IN DRILLHOLE (IM-003, 15/07/07), YUKON, CANADA

FIELD IDENTIFICATION: DRILLHOLE CORE/ CLINOPOYROXENITE

CONSTITUENT MINERALS (EST.VOL.%):

Olivine, completely altered to Serpentine, Bowlingite, fine-grained, secondary Magnetite	95
Comagmatic Opaque Minerals	4
Intercumulus Pyroxene, completely replaced, either by fine-grained flaky Biotite or by Serpentine and Secondary Magnetite	1
Biotite	Minor

TEXTURAL AND MINERALOGICAL FEATURES:

Almost completely altered (serpentinised, bowlingitised, secondarily magnetitised, amphibolised, etc), fine- to probably medium-grained, fairly even-grained, granular (cumulate igneous) texture with no obvious mineral fabrics. Complete alteration of the olivine and the low content of intercumulus minerals makes it impossible to define olivine grain boundaries, and therefore determine size of the olivine grains, but one gets the impression that they were probably not coarse. The orange-brown bowlingitisation of serpentine veinlets indicates that the rock has been weakly affected by oxidation and hydration at some stage (not necessarily in the weathering environment). Very similar to C02-002_1 and C02-002_2.

Olivine probably formed roughly equant to somewhat elongated anhedral, subrounded, cumulus grains. However, it has been completely altered in typical veinlet-and-island style with no relict olivine remaining. Even the “islands” have been completely serpentinised and often show classical hour-glass structure. The irregular network of serpentine veinlets (not the “islands”) has been partly altered to orange-brown bowlingite and is accompanied by stringers, veinlets and small segregation bodies, as well as disseminated grains, of fine-grained secondary magnetite, which constitutes about 10% of the olivine. Occasional transgressive, planar serpentine veinlets up to 0.15 mm wide also occur and may be followed by bodies of secondary magnetite as well. **Comagmatic opaque minerals** are somewhat irregularly distributed, occurring both as inclusions in, and interstitially to, the serpentinised olivine. They mostly form small, equant grains and subhedral (isometric) crystals ranging in size from <30 µm to 0.36 mm. However, occasional somewhat larger, interstitial and partly moulded (intercumulus) grains, e.g. irregular 0.44 mm, also occur. They appear to be entirely of oxide phases, probably mainly chromite. Their ragged, and somewhat frilly margins indicate that they are probably rimmed by secondary magnetite. The **intercumulus pyroxene**, which formed anhedral, interstitial grains, up to 0.68 mm across, has been completely replaced mainly by aggregates of fine-grained, red-brown biotite in this section. Occasional small plates of colourless (bleached) **biotite** also occur interstitially.

LITHOLOGICAL CLASSIFICATION: Very Strongly Altered (Serpentinised, Bowlingitised, Secondarily Magnetitised, etc), Chromitiferous(?) Dunite

GENERAL COMMENTS:

Quite strongly magnetic.

No reaction to dilute HCl.

END OF C02-002_3

SUBJECT: PETROGRAPHIC DESCRIPTION OF THIN SECTION

SAMPLE NO.: C02-002_4 **CLIENT ID.:** MUG **DONE BY:** ECT

DATE: 07/11/07

LOCALITY: 71.35-71.45m IN DRILLHOLE (IM-004, 15/07/07), YUKON, CANADA

FIELD IDENTIFICATION: DRILLHOLE CORE/ DIORITE DYKE

CONSTITUENT MINERALS (EST.VOL.%):

Groundmass	55
Sericite	22.5
Amphibole (probably Tremolite)	22
Epidote(?)	5.5
Chlorite	5
Limonite	Minor
Phenocrysts	45
Clinopyroxene (Augite) including very minor internal Amphibole, Chlorite, etc.	45
Opaque Minerals	Trace

TEXTURAL AND MINERALOGICAL FEATURES:

Partly altered (amphibolised, sericitised, chloritised, epidotised, etc), very fine- to medium-grained (<20 µm to 4.0 mm), porphyritic (igneous) texture with no obvious mineral fabrics. The phenocryst : groundmass ratio is approximately 45:55. Very weakly affected by oxidation and hydration seen as the impregnation and coating of occasional small mineral grains in the groundmass by red-brown limonite.

The **groundmass** has been strongly altered to form a fine-grained, felted mass of sericite with somewhat more irregularly distributed amphibole and chlorite. Small opaque mineral crystals, mostly isometric (cubic, etc), or complex-isometric in form, and up to 0.13 mm in size, are also quite common; they appear to be predominantly of oxide phases. The sericite forms very fine-grained segregation bodies that have probably replaced plagioclase. The amphibole tends to be preferentially concentrated in areas interstitial to the sericite masses but also occur within them and the chlorite segregations, forming small bladed and prismatic crystals, up to 0.19 mm long and randomly orientated; these are very pale brown to colourless and are probably close to tremolite in composition. Epidote is fairly evenly, rather sparsely disseminated throughout the groundmass as small equant grains and prisms, up to 70 µm long, greyish in colour; its identify needs to be checked out by more detailed investigation

(including XRD analysis). Colourless chlorite occurs in small to quite large, irregular segregation patches enclosing disseminated amphibole; the largest of these patches occur around the margins of clinopyroxene phenocrysts.

Phenocrysts and glomerophenocrysts are almost entirely of clinopyroxene (augite) which forms equant and short to quite elongate prismatic subhedral to euhedral crystals, up to 4.0 mm long, occasionally segregated to form glomerophenocrysts up to 4.95 mm across. It is

pale green in colour and only very weakly pleochroic, often showing simple and broad lamellar twinning. One phenocryst, 1.24 mm across, has been completely replaced by an aggregate of tremolite, rimmed by chlorite and small segregations of tremolite are often also found within the clinopyroxene phenocrysts. One triangular shaped microphenocryst of an opaque oxide phase, possibly a Cr-spinel, 0.44 mm across, was also found.

LITHOLOGICAL CLASSIFICATION: Partly Altered (Amphibolised, Sericitised, Epidotised(?), Chloritised, etc), Clinopyroxene (Augite)-Phyric Meladolerite

GENERAL COMMENTS:

Non magnetic.
No reaction to dilute HCl.

END OF C02-002_4

SUBJECT: PETROGRAPHIC DESCRIPTION OF THIN SECTION

SAMPLE NO.: C02-002_5 **CLIENT ID.:** MUG **DONE BY:** ECT

DATE: 07/11/07

LOCALITY: 106.79-106.90m IN DRILLHOLE (IM-005, 15/07/07), YUKON, CANADA

FIELD IDENTIFICATION: DRILLHOLE CORE/ CLINOPYROXENITE

CONSTITUENT MINERALS (EST.VOL.%):

Olivine, completely altered to Serpentine, fine-grained, secondary Magnetite	97
Comagmatic Opaque Minerals	3
Intercumulus Pyroxene, completely altered to a fine-grained flaky mineral (not identified)	Minor
Fracture-Veinlets of the same fine-grained flaky mineral	Minor
Biotite	Minor

TEXTURAL AND MINERALOGICAL FEATURES:

Almost completely altered (serpentinised, secondarily magnetitised, etc), fine- to probably medium-grained, fairly even-grained, granular (cumulate igneous) texture

with no obvious mineral fabrics. A very weak, superimposed, planar mineral fabric seems to be related to subtle variations in the percentage of secondary magnetite. Complete alteration of the olivine and the low percentage of intercumulus minerals make it impossible to define olivine grain boundaries and thereby determine grain size, but one gets the impression that they were probably not coarse.

Olivine probably formed roughly equant to somewhat elongated, anhedral, subrounded cumulus grains. However, it has been completely altered in typical veinlet-and-island style with no relict olivine remaining. Even the ”islands” have been completely serpentinised and occasionally show poorly developed hour-glass structure (but are mostly finely lamellar). The more open, irregular networks of serpentine veinlets is accompanied by stringers, veinlets and small segregation bodies, as well as disseminated grains, of fine-grained secondary magnetite, which constitutes about 12% of the olivine. **Comagmatic opaque minerals** are somewhat irregularly distributed, locally clustered or segregated, occurring both as inclusions in, and interstitially to the serpentinised olivine. They mostly form small, equant grains and subhedral (isometric) crystals, ranging in size from <25 µm to 0.22 mm. However, occasional larger, interstitial and partly moulded (intercumulus) grains, e.g. 0.6 mm irregular, also occur. They appear to be entirely of oxide phases, probably mainly chromite. They often have ragged and somewhat frilly margins, probably as a result of rimming by fine-grained, secondary magnetite. **Intercumulus pyroxene** occurs rather sporadically as anhedral, moulded, interstitial grains, up to 0.54 mm across, but has been completely replaced by fine-grained aggregates of a flaky mineral. This mineral looks very similar to the “biotite” in C02-002_3, but is only very pale brown in colour here and was not positively identified here. Parallel sets of very thin, irregular-planar and discontinuous **fracture-veinlets** containing the same fine-flaky mineral cut across parts of the section area. Occasional small plates of colourless(bleached) **biotite** also occur interstitially..

LITHOLOGICAL CLASSIFICATION: Very Strongly Altered (Serpentinised, Secondarily Magnetitised, etc), Chromitiferous(?) Dunite

GENERAL COMMENTS:

Quite strongly magnetic.
Reacts to dilute HCl at isolated spots in the hand specimen, probably on fracture-veinlets.
The only significant difference between this sample and C02-002_1, _2 and _3 is that it is unaffected by bowlingitisation.

END OF C02-002_5

SUBJECT: PETROGRAPHIC DESCRIPTION OF THIN SECTION

SAMPLE NO.: C02-002_6 **CLIENT ID.:** MUG **DONE BY:** ECT

DATE: 07/11/07

LOCALITY: 124.58-124.76m IN DRILLHOLE (IM-005, 15/07/07), YUKON, CANADA

FIELD IDENTIFICATION: DRILLHOLE CORE/ CLINOPYROXENITE

CONSTITUENT MINERALS:

Olivine, completely altered to Serpentine, fine-grained, secondary Magnetite	93
Comagmatic Opaque Minerals	3
Intercumulus Pyroxene, completely altered	

to a fine flaky mineral (not identified)	1.5
Fracture-veinlet of the same fine-flaky mineral (not identified)	1.5
Phlogopite, including intergrown fine-grained secondary Magnetite	1

TEXTURAL AND MINERALOGICAL FEATURES:

Almost completely altered (serpentinised, secondarily magnetitised, etc), fine- to probably medium-grained, fairly even-grained, granular (cumulate igneous) texture with no obvious mineral fabrics. Complete alteration of the olivine and the low percentage of intercumulus minerals makes it impossible to define the olivine grain boundaries and thereby determine grain size, but one gets the impression that they were probably not coarse.

Olivine probably formed roughly equant to somewhat elongated, anhedral, subrounded cumulus grains. However, it has been completely altered in typical veinlet-and-island style with no relict olivine remaining. Even the ”islands” have been completely serpentinised. They occasionally show poorly developed hour-glass structure but are mainly finely lamellar in structure. The more open, irregular networks of serpentine veinlets is accompanied by stringers, veinlets and small segregation bodies, as well as disseminated grains, of fine-grained secondary magnetite, which constitutes about 12% of the olivine. **Comagmatic opaque minerals** are somewhat irregularly distributed, locally clustered or segregated, occurring both as inclusions in, and interstitially to the serpentinised olivine. They mostly form small, equant grains and subhedral (isometric) crystals, ranging in size from <25 µm to 0.39 mm, and appear to be entirely of oxide phases, probably mainly chromite. They often have ragged and somewhat frilly margins, probably as a result of rimming by fine-grained, secondary magnetite. **Intercumulus pyroxene** occurs as anhedral, moulded, interstitial grains, up to 0.88 mm across, but have been completely replaced by aggregates of a fine flaky mineral, similar to that in C02-002_5 but partly altered in addition to clay minerals. Cross-cutting **fracture-veinlets**, up to 0.51 mm wide, are occupied by a similar mineral but here the plates or fibres are aligned perpendicularly to the veinlet walls and have annealed to form a single, continuous, composite grain extinguishing simultaneously. It is probably tremolite but has been partly altered to clay minerals, accompanied by limonite. **Biotite** is somewhat more common than in the other dunites so far examined from this suite occurring as interstitial, anhedral, colourless (bleached) plates, up to 0.77 mm across, with considerable amounts of fine-gained magnetite intergrown along cleavage planes.

LITHOLOGICAL CLASSIFICATION: Strongly Altered (Serpentinised, Secondarily Magnetitised, etc), Tremolite(?) Fracture-Veined, Chromitiferous(?) Dunite

GENERAL COMMENTS:

Quite strongly magnetic.
Reacts to dilute HCl at places on white veinlets very similar to those encountered in the thin section, indicating the presence of calcite.
Very similar to C0-002_5 and closely related to C02-002_1, _2 and 3. The intercumulus pyroxene and biotite contents are marginally higher and, like C02-0025, no bowlingite is developed.

END OF C02-002_6

Microsearch CC

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TO: Ian McCutcheon, Geologist, White River Resources, Umbono Group of Companies

AT: e-mail: imccutcheon@umbono.co.za

REFERENCE: Richard Montjoie's e-mail of 13th September, 2007

SUBJECT: PETROGRAPHIC DESCRIPTION OF THIN SECTION

SAMPLE NO.: C02-002_7 **CLIENT ID.:** MUG **DONE BY:** ECT

DATE: 12/11/07

LOCALITY: 162.1-162.2m IN DRILLHOLE (IM-007, 15/07/07), YUKON, CANADA

FIELD IDENTIFICATION: DRILLHOLE CORE/ FELDSPATHIC DUNITE

CONSTITUENT MINERALS (EST.VOL.%):

Olivine, completely altered to Serpentine, Bowlingite, fine-grained, secondary Magnetite	88.5
Foliated Tremolite Veinlet	5
Comagmatic Opaque Minerals	4
Intercumulus Pyroxene, completely altered to fine-grained Chlorite, etc	1.5
Biotite, including intergrown fine-grained Secondary Magnetite	1

TEXTURAL AND MINERALOGICAL FEATURES:

Almost completely altered (serpentinised, bowlingitised, secondarily magnetitised, amphibolised, etc), fine- to probably medium-grained, fairly even-grained, granular (cumulate igneous) texture with no obvious mineral fabrics. Complete alteration of the olivine and the low content of intercumulus minerals makes it impossible to define olivine grain boundaries, and therefore determine size, of the olivine grains, but one gets the impression that they were probably not coarse. The section is cut across length-wise by a foliated tremolite veinlet <0.15-0.78 mm wide, probably a shear-veinlet.

Olivine probably formed roughly equant to somewhat elongated anhedral subrounded, cumulus grains. However, it has been completely altered in typical veinlet-and-island style with no relict olivine remaining. Even the "islands" have been completely serpentinised. Strong bowlingitisation, both grey and red-brown in colour, has partly obscured the serpentine structure. The more open, irregular networks of serpentine veinlets are accompanied by stringers, veinlets and small segregation bodies, as well as disseminated grains, of fine-grained secondary magnetite, which

constitutes about 10% of the olivine. The **foliated tremolite veinlet** varies in width between <0.15 and 0.78 mm and is often partly brownish in colour, probably as a result of limonite staining. **Comagmatic opaque minerals** are somewhat irregularly distributed, occurring both as inclusions in, and interstitially to, the serpentinised olivine. They mostly form small, equant grains and subhedral (isometric) crystals ranging in size from <35 µm to 0.27 mm and appear to be entirely of oxide phases, probably mainly chromite. They often have ragged, and somewhat frilly margins, probably as a result of rimming by fine-grained, secondary magnetite. **Intercumulus pyroxene** occurs as anhedral, moulded, interstitial grains, up to1.33 mm across, but these have been completely replaced by aggregates of fine flaky chlorite. The **biotite** content is similar to that seen in C02-002_1, occurring as interstitial, anhedral, colourless plates, up to 0.67 mm across, with considerable amounts of fine-grained magnetite intergrown along cleavage planes. It is often reddish-brown in colour but has commonly been partly to very strongly bleached.

LITHOLOGICAL CLASSIFICATION: Strongly Altered (Serpentinised, Secondarily Magnetitised, Bowlingitised, etc), Tremolite Fracture-Veined, Chromitiferous(?) Dunite

GENERAL COMMENTS:

Quite strongly magnetic.
Reacts to dilute HCl at places in the hand specimen, indicating the presence of calcite.
Probably weakly affected by shearing.
Very similar to C0-002_5 and C0-002_6, and closely related to C0-002_1, _2 and _3.

END OF C02-002_7

SUBJECT: PETROGRAPHIC DESCRIPTION OF THIN SECTION

SAMPLE NO.: C02-002_8 **CLIENT ID.:** MUG **DONE BY:** ECT

DATE: 12/11/07

LOCALITY: 172.45-172.58m IN DRILLHOLE (IM-008, 15/07/07), YUKON, CANADA

FIELD IDENTIFICATION: DRILLHOLE CORE/ SILICIFIED ZONE

CONSTITUENT MINERALS (EST.VOL.%):

Olivine, completely altered to Serpentine and strongly Bowlingitised	63
Fine-Grained Calcite-Tremolite	31.5
More Coarsely Crystalline Calcite	2
Opaque Minerals	2
Leucoxene Vein	1.5
Quartz	Minor

TEXTURAL AND MINERALOGICAL FEATURES:

A very strongly, almost completely, altered, dunite. Not only has it been altered in the usual way (serpentinised, secondarily magnetitised, etc) but it has been strongly invaded by fine-grained calcite-tremolite and affected by oxidation and hydration. The oxidation and hydration have resulted in the almost complete replacement of serpentinised olivine by dark to pale brown bowlingite and the alteration of fine-grained secondary magnetite to hematite and goethite. The calcite-tremolite alteration is accompanied by some more coarsely crystalline clear calcite. In addition to the alteration, oxidation and hydration, the rock is cut across by a subparallel set of veins and veinlets. The widest vein, up to 1.38 mm wide at one point, is occupied mainly by massive leucoxene.

In parts of the section, the highly altered **olivine** occurs as individual grains, up to 2.18 mm in size, enveloped in fine-grained chlorite and tremolite. These grains are generally light orange-brown in colour. In other parts of the section the altered olivine occurs in darker brown masses often with associated irregular bodies of fine-grained hematite and goethite, up to 2.43 mm across (tri-lobate), replacing secondary magnetite. The **fine-grained calcite-tremolite** varies somewhat in composition from place to place. In most areas tremolite appears to be predominant over calcite and occurs in a very fine-grained, felted mass. However, in a few areas fine-granular calcite is predominant over tremolite. Somewhat **more coarsely crystalline calcite** occurs sporadically, often in small segregations, as anhedral, often triangular shaped grains, up to 1.34 mm in size. **Opaque minerals** occur partly in small to quite large finely skeletal masses, the latter being up to 2.43 mm across (tri-lobate), as mentioned above. There are also some small equant grains and subhedral to euhedral (isometric) crystals, ranging in size from <35 µm to 0.22 mm. probably of chromite (or more likely an alteration product thereof), mainly embedded in the highly altered olivine. A vein along part of one edge of the section area, and varying in width between about 0.85 and 1.38 mm, is occupied entirely by what appears to be massive, slight brownish, dark grey **leucoxene** which is affected by a network of what looks like shrinkage cracks. A few other very thin veinlets of tremolite and calcite are also present. Occasional very small segregations and short stringers of fine-grained **quartz**, as grains up to 50 µm in size, occur within areas of fine-grained calcite-tremolite.

LITHOLOGICAL CLASSIFICATION: Completely Altered (Serpentinised, Secondarily Magnetitised, Amphibolised, Carbonated, etc), Oxidised and Hydrated (Bowlingitised, Hematitised, Goethitised, etc), Chromitiferous(?) Dunite

GENERAL COMMENTS:

Non magnetic.
Strong reaction to dilute HCl.

END OF C02-002_8

SUBJECT: PETROGRAPHIC DESCRIPTION OF THIN SECTION

SAMPLE NO.: C02-002_9 **CLIENT ID.:** MUG **DONE BY:** ECT

DATE: 12/11/07

LOCALITY: 178.5-178.65m IN DRILLHOLE (IM-009, 15/07/07), YUKON, CANADA

FIELD IDENTIFICATION: DRILLHOLE CORE/ MARGINAL GABBRO

CONSTITUENT MINERALS (EST.VOL.%):

Olivine, completely altered to Serpentine, Bowlingite, fine-grained Secondary Magnetite, etc	61.5
Calcite Veinlets	17
Intercumulus Pyroxene, completely replaced by Amorphous Dark Brown Material, Calcite, etc	15
Opaque Minerals	5.5
Biotite	1

TEXTURAL AND MINERALOGICAL FEATURES:

Calcite fracture-veined, strongly altered (serpentinised, bowlingitised, carbonated, secondarily magnetitised, etc), very fine- to medium-grained (<35 µm to 4.18 mm), xenomorphic-granular (cumulate igneous) texture. No primary mineral fabrics are evident but a shear fabric, related to the preferred orientation of parallel sets of foliated fractures, is developed in parts of the section. Weakly affected by oxidation and hydration, seen as the probable alteration of fine-grained secondary magnetite to hematite, minor bowlingitisation of serpentinised, olivine, etc.

Olivine formed roughly equant to somewhat elongated, anhedral, subrounded, cumulus grains, ranging in size from <0.3 to at least 2.0 mm. Complete alteration and interference from serpentine and calcite veining often makes it impossible to define grain boundaries. It has been completely altered in veinlet-and-island style to serpentine with no relict olivine remaining. Signs of relict hour-glass structure are often seen in the olivine islands. The fine-grained secondary magnetite developed as a byproduct of serpentinisation has, for the most part, migrated out of the olivine to segregate as stringers and skeletal masses following shear-fractures. **Intercumulus pyroxene** forms irregular anhedral grains, up to 4.18 mm across, but mostly less than 1.51 mm, lying interstitially to, and partly moulded to the shapes of,surrounding olivine grains. It has been completely altered and replaced by dark reddish-brown, rather amorphous looking material which is difficult to resolve, but probably includes some carbonate and tremolite. **Calcite veinlets** form an irregular network which varies in intensity in different parts of the section. It partly follows the shear-fracture system in a braided network but there are also many veinlets, up to 0.5 mm wide, cutting across this direction. **Opaque minerals** include both a comagmatic phase, probably chromite, and fine-grained secondary magnetite (probably largely replaced by hematite). Probable chromite is somewhat irregularly distributed amongst the serpentinised olivine as small, subhedral to euhedral (isometric) crystals ranging in size from <35 µm to 0.49 mm but mostly less than 0.25 mm. These are locally clustered and segregated. What was probably originally fine-grained secondary magnetite forms stringers and large skeletal masses (up to 11 mm long) locally developed in the shear-fracture system. Occasional platy grains, up to 1.32 mm long, occur within the 11 mm long finely skeletal mass. **Biotite** occurs sporadically as anhedral plates, sometimes showing a similar intercumulus form to that of the pyroxene, and up to 1.05 mm in size. It is generally dark red-brown in colour but sometimes shows signs of bleaching.

LITHOLOGICAL CLASSIFICATION: Calcite Fracture-Veined and Weakly Sheared, Very Strongly Altered (Serpentinised, Secondarily Magnetitised, Bowlingitised, etc), Chromitiferous(?) Peridotite

GENERAL COMMENTS:

Non magnetic.

Strong reaction to dilute HCl.
The pyroxene content is considerably higher than in any of the other olivine rich samples so far examined from this suite.

END OF C02-002_9

SUBJECT: PETROGRAPHIC DESCRIPTION OF POLISHED THIN SECTION IN TRANSMITTED LIGHT

SAMPLE NO.: C02-002_10 **CLIENT ID.:** MUG **DONE BY:** ECT

DATE: 12/11/07

LOCALITY: 185.32-185.44m IN DRILLHOLE (IM-010, 15/07/07), YUKON, CANADA

FIELD IDENTIFICATION: DRILLHOLE CORE/ QUARTZ CARBONATE ALTERATION ZONE

CONSTITUENT MINERALS (EST.VOL.%):

Carbonate Mineral (Dolomite?)	63
Quartz	19
Leucoxene	10
Opaque Minerals (mainly Sulphides)	8

TEXTURAL AND MINERALOGICAL FEATURES:

Weakly sulphide-mineralised, fractured and microveined, very fine- to fine-grained (<10 µm to 0.22 mm), alteration/replacement texture. No obvious mineral fabrics but cut across by a network of, mostly planar, veinlets.

The **carbonate mineral** occurs mainly as a very fine- to fine-grained background aggregate of greyish grains in the size range <10 µm to 0.22 mm, which is often partly annealed and somewhat amorphous looking. This does not react significantly to dilute HCl and is therefore likely to be dolomite rather than calcite. Occasional small, discontinuous veinlets, up to 0.24 mm wide, of a clear, colourless, crystalline carbonate mineral also occur. **Quartz** is mainly concentrated along a cross-cutting network of planar veinlets, which are up to 0.68 mm wide. Within these the quartz forms inequigranular aggregates of anhedral, interlocking grains, in the size range <10 µm to 0.43 mm. The larger of these grains show strong undulose extinction. Quartz is also quite common amongst the background grey carbonate as scattered grains (up to 0.1 mm in size) and small segregations. **Leucoxene** is fairly evenly

distributed throughout the background grey carbonate as, usually rather ragged, patches ranging in size from <85 µm to 1.16 mm. It is brownish/dark grey in colour. **Opaque minerals** are more irregularly distributed as roughly equant to somewhat irregular segregation bodies, up to 1.33 mm across (at the edge of the section), but mostly less than 0.73 mm. Occasional discrete subhedral to euhedral (rectangular) crystals also occur. They appear to be predominantly of sulphide phases, probably mainly pyrite.

LITHOLOGICAL CLASSIFICATION: Weakly Sulphide Mineralised, (Carbonate-) Quartz Microveined, Leucoxene-Quartz-Carbonate (Dolomite?) Alteration/ Replacement Rock

GENERAL COMMENTS:

Non magnetic.
No reaction to dilute HCl.
The leucoxene is probably derived from the breakdown of ilmenite, indicating that the rock being altered and replaced was probably not a peridotite or dunite but more likely a gabbro or diorite.
The opaque minerals will be examined and described in more detail under reflected light.

END OF C02-002_10 PTST

SUBJECT: PETROGRAPHIC DESCRIPTION OF THIN SECTION

SAMPLE NO.: C02-002_11 **CLIENT ID.:** MUG **DONE BY:** ECT

DATE: 12/11/07

LOCALITY: 185.44-185.56m IN DRILLHOLE (IM-011, 15/07/07), YUKON, CANADA

FIELD IDENTIFICATION: DRILLHOLE CORE/ QUARTZ CARBONATE ALTERATION ZONE

CONSTITUENT MINERALS (EST.VOL.%):

Carbonate Mineral (Dolomite?)	66
Quartz	26
Leucoxene	8
Barite(?)	Minor
Limonite	Minor
Opaque Minerals (Sulphides)	Trace

TEXTURAL AND MINERALOGICAL FEATURES:

Weakly fractured, microveined and carbonate-segregated, very fine- to fine-grained (<10 µm to 0.63 mm), alteration/replacement texture. No obvious mineral fabrics but cut across by a network of veinlets and segregations probably of at least two

generations. Weakly affected by oxidation and hydration, seen as limonite coatings and impregnations, at the edges of the section area.

Two main types of **carbonate mineral** are present; 1) predominant is a greyish and less well crystallised carbonate which forms the general background as an aggregate of anhedral grains in the size range <20 µm to 0.63 mm (mostly less than 0.3 mm); it has often been partly remobilised into an irregular network of rather diffuse veinlets; 2) less common is a clear, crystalline, often prismatic carbonate which form veinlets and discontinuous segregation bodies up to 3.17 mm wide; subprismatic carbonate crystals within these are up to 2.3 mm long. Both types of carbonate show only very weak, fine reaction to dilute HCl,

indicating that they are probably of dolomite. **Quartz** is quite abundantly disseminated and irregularly segregated amongst the background greyish carbonate as small, anhedral grains, mostly in the size range <10-60 µm but with occasional larger grains up to 0.24 mm. Only small amounts have segregated into planar veinlets, up to 0.12 mm wide, but mostly less than 50 µm. **Leucoxene** is fairly evenly distributed amongst the background grey carbonate as small, irregular patches, up to 0.44 mm across, brownish grey in colour. A few euhedral (prismatic) crystals of **barite(?)**, up to 1.7 mm long, are present amongst the prismatic carbonate in the largest of the carbonate veins or segregations where it is up to 3.57 mm wide. Small amounts of less well formed barite(?) crystals also occur along the margins of this segregation where it narrows and starts to taper out. One very small cluster of tiny **opaque mineral** (sulphide) grains, up to 60 µm in size, was noted amongst the background greyish carbonate and fine-grained quartz.

LITHOLOGICAL CLASSIFICATION: (Barite(?))-Quartz-Carbonate-Microveined Leucoxene-Quartz-Carbonate (Dolomite?) Alteration/Replacement Rock

GENERAL COMMENTS:

Non magnetic.
Weak, very fine reaction to dilute HCl.
The identification of barite(?) should be checked as one (only) of the prisms appears to show inclined extinction.
Only very minor traces of sulphide mineralisation are present.

END OF C02-002_11

SUBJECT: PETROGRAPHIC DESCRIPTION OF THIN SECTION

SAMPLE NO.: C02-002_12 **CLIENT ID.:** MUG **DONE BY:** ECT

DATE: 12/11/07

LOCALITY: 197.03-197.12m IN DRILLHOLE (IM-012, 15/07/07), YUKON, CANADA

FIELD IDENTIFICATION: DRILLHOLE CORE/ SEDIMENTS-BLACK SHALE

CONSTITUENT MINERALS (EST.VOL.%):

Carbonate Minerals	47
Quartz	30.5
Sericite	19
Opaque Minerals, including Leucoxene	3.5
Limonite	Fairly Common

TEXTURAL AND MINERALOGICAL FEATURES:

Partly altered (carbonated, etc), very fine- to fine-grained (<20 µm to 0.67 mm), granoblastic/lepidoblastic (regional metamorphic) texture. Exhibits a weak mineral banding; there are zones in which large rounded bodies of quartz are present, other layers which are characterised by the presence of dark (opaque mineral) strips and laminae, and yet others in which neither of these structures are prominent. The rounded, often ovoid, or irregular ovoid, quartz bodies range in size from <0.14 to 7.29 mm. They could be interpreted as pebbles or as tectonic boudins (tectonites). Quite a strong foliation is developed, particularly in more sericitic layers. The foliation and dark lamination may bend around or be truncated against, the quartz bodies, indicating that they were probably present prior to at least some of the deformation and regional metamorphism. They could, therefore, be pebbles. Affected by oxidation and hydration, particularly along one edge of the section area where limonite is quite strongly developed as a coating and impregnation.

Carbonate minerals are prominent throughout the “matrix” to the rounded quartz bodies but are more strongly concentrated in broader, less micaceous microbands. They mostly occur as small, anhedral, greyish grains which have been extensively recrystallised to form somewhat coarser, and more crystalline, lighter coloured grains, up to 0.37 mm in size. This lighter coloured carbonate has been partly remobilised in places to form networks of cross-cutting veinlets which may also invade the rounded quartz bodies. The hand specimen shows rather patchy reaction to dilute HCl which suggests that both dolomite and calcite may be present. **Quartz** is mainly confined to rounded, often ovoid, or irregular ovoid bodies ranging in size from <0.14 to 7.29 mm. Within them it forms inequigranular aggregates of anhedral grains <20 µm to 0.87 mm in size. These are often fractured and microveined by carbonate and may show rather weak undulose extinction. A few scattered, small individual quartz grains also occur amongst the background carbonate. **Sericite** is particularly prominent along certain, more strongly foliated (and weakly laminated) horizons where it forms small flakes and platelets showing preferred orientation to largely define the foliation. It also occurs in lower concentrations outside of these horizons amongst the background greyish carbonate. **Opaque minerals** occur partly along thin, discontinuous strips and lenses which are particularly prominent within the more micaceous microbands where they may be up to 2.7 mm long and are often gently buckled. Smaller lenticular aggregates of discrete grains, up to 0.28 mm in size, also occur. They appear to be predominantly of oxide phases, often somewhat brownish in colour, indicating that hydroxides may also be present, and probably include a high percentage of leucoxene/rutile.

LITHOLOGICAL CLASSIFICATION: Partly Altered (Carbonated, etc), Sericite-Quartz-Carbonate Schist

GENERAL COMMENTS:

Non magnetic.
Patchy stong reaction to dilute HCl.
Interpretation of the possible mode of origin of this rock is quite difficult without back-up information. It could be of tectonised alteration/replacement origin and shows some similarities to _10 and _11. However, it has a significant sericite content and banded structure which indicates that a metasedimentary origin is also possible. The rounded quartz bodies could be interpreted as metamorphosed pebbles or tectonites.
Green minerals are seen in the hand specimen as a coating on surfaces or along localised veinlets. These look very much like secondary copper minerals but were unfortunately not intersected by the thin section.

END OF C02-002_12

SUBJECT: PETROGRAPHIC DESCRIPTION OF THIN SECTION

SAMPLE NO.: C02-002_13 **CLIENT ID.:** MUG **DONE BY:** ECT

DATE: 12/11/07

LOCALITY: 210.06-210.25m IN DRILLHOLE (IM-013, 15/07/07), YUKON, CANADA

FIELD IDENTIFICATION: DRILLHOLE CORE/ SEDIMENTS-BLACK SHALE

CONSTITUENT MINERALS (EST.VOL.%):

Carbonate Mineral, probably mainly Calcite	49
Opaque Minerals, probably mainly Carbonaceous	48.5
Quartz	2.5
Muscovite and Sericite	Minor

TEXTURAL AND MINERALOGICAL FEATURES:

Very fine- to fine-grained (< 10 µm to 0.65 mm), partly altered (carbonate and opaque minerals partly recrystallised), chemical/organic (weakly epiclastic) sedimentary texture. No banding or lamination are evident. Exhibits a very weak fabric related mainly to the preferred orientation of irregular, somewhat elongated segregations of opaque minerals. Some of the carbonate has recrystallised to form planar veinlets which are discordant to the mineral fabric.

The **carbonate mineral** mainly forms equant to somewhat elongated grains, which are mostly in the size range <20 µm to 0.15 mm but with occasional larger, blocky grains up to 0.26 mm across. Small amounts of carbonate have recrystallised and been partly remobilised to form thin, mainly planar, sometimes irregular veinlets which lie discordantly to the weak mineral fabric. It reacts quite strongly to dilute HCl and is probably mainly calcite. **Opaque minerals** include tiny to very small grains (<10-85 µm) which have partly segregated and annealed to form somewhat elongated, irregularly shaped bodies, up to 0.65 mm long These are partly (but not

always) aligned to define the weak mineral fabric. Somewhat larger, equant grains, up to 0.49 mm across, are often embedded in these. They may possibly include both carbonaceous (graphite or amorphous carbon) and oxide phases but no indications of the presence of sulphides were detected in transmitted light. Small, equant to somewhat elongated grains of **quartz,** up to 0.15 mm long, are quite evenly distributed throughout and are probably of epiclastic origin (silt to very fine sand). Occasional **muscovite** plates up to 94 µm long and smaller **sericite** flakes, are present.

LITHOLOGICAL CLASSIFICATION: Calcareous, Carbonaceous Shale

GENERAL COMMENTS:

Non magnetic.
Fairly strong reaction to dilute HCl.

END OF C02-002_13

Microsearch CC

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AT: e-mail: imccutcheon@umbono.co.za

REFERENCE: Richard Montjoie's e-mail of 13th September, 2007

SUBJECT: PETROGRAPHIC DESCRIPTION OF POLISHED THIN SECTION UNDER REFLECTED LIGHT

SAMPLE NO.: C02-002_10 **CLIENT ID.:** MUG **DONE BY:** ECT

DATE: 15 /11/07

LOCALITY: 185.32-185.44m IN DRILLHOLE (IM-010, 15/07/07), YUKON, CANADA

FIELD IDENTIFICATION: DRILLHOLE CORE/ QUARTZ CARBONATE ALTERATION ZONE

PETROGRAPHIC LITHOLOGICAL CLASSIFICATION: Weakly Sulphide Mineralised, (Carbonate-) Quartz Microveined, Leucoxene-Quartz-Carbonate (Dolomite?) Alteration/ Replacement Rock

MAGNETIC RESPONSE OF HAND SPECIMEN: Non magnetic

EST. VOL. % OF OPAQUE MINERALS PRESENT: 4

OPAQUE MINERALS (EST. VOL. % OF TOTAL OPAQUES):

Pyrite	95
Chalcopyrite	5
Rutile and Leucoxene	Very Common – not quantified

TEXTURAL AND MINERALOGICAL FEATURES:

In transmitted light the opaque minerals were described as being irregularly distributed as roughly equant to somewhat irregular segregation bodies, up to 1.39 mm across (at the edge of the section), but mostly less than 0.73 mm. Occasional discrete subhedral to euhedral (rectangular) crystals also occur. They appear to be predominantly of sulphide phases, probably mainly pyrite.

Under reflected light the scattered sulphide bodies are confirmed to be predominantly of **pyrite**, in some cases incorporating much smaller amounts of **chalcopyrite**. Fine disseminations of chalcopyrite are also quite common.

The largest sulphide body present, 1.33 mm across, is situated close to the edge of the section, and is half-ovoid in shape, weakly skeletal in internal structure. It consists mainly of very finely porous pyrite which encloses small anhedral grains of more solid pyrite, up to 90 μm in size. Together, the latter comprise about 17% of the total pyrite content. An equant anhedral chalcopyrite grain, 25 μm across, is attached to one end and extends into an adjoining fine dissemination of chalcopyrite 630 μm across. Within this dissemination chalcopyrite grains are up to 35 μm in size and some pyrite is also present as grains up to 70 μm across. An ovoid pyrite body, 620 μm long, is situated close by on the other side of the chalcopyrite dissemination and is of finely porous pyrite with inclusions of more solid pyrite. Some leucoxene and rutile are incorporated into the margins of, and are partly included by, both bodies. Other examples of pyrite bodies and occurrences include; 1) a short planar stringer of elongated anhedral pyrite grains leading off one corner of a roughly equant pyrite body 498 μm across; projections off the edge of this stringer follow a secondary planar stringer direction; 2) a boot-shaped skeletal body, 1.16 mm across, of finely porous and solid pyrite with no associated chalcopyrite; 3) an irregular ovoid body, 813 μm long, with no associated chalcopyrite; 4) a hemispherical body 664 μm across with no associated chalcopyrite; 5) an approximately round body, 560 μm in diameter, with an included cluster, 100 μm across, of anhedral chalcopyrite grains; 6) a half-ovoid body, 523 μm in size, with no associated chalcopyrite; 7) a short (subequant) rectangular body, 515 μm in size, with no associated chalcopyrite; 8) a rectangular body 260 μm long; 10) a trapezoidal crystal of solid pyrite; 10) a pyritohedron of solid pyrite, 115 μm long. Many other small pyrite bodies, mostly less than 500 μm in size, are present. Close to pyrite occurrence 9 there is a large dissemination of fine-grained chalcopyrite, 1.1 mm across, in which individual very irregular-lobate chalcopyrite grains are up to 75 μm in size; a few pyrite grains, up to 86 μm across, are also present as well as much fine-grained rutile. Many other, usually much smaller, chalcopyrite disseminations are present, e.g. 380 μm with grains up to 45 μm in size.

The pyrite and chalcopyrite in this section appear to be closely associated with each other paragenetically, although there appears to have been two phases of pyrite growth; 1) early, more solid pyrite, and 2) later, finely porous pyrite and the chalcopyrite seems to be more closely associated with the latter.

END OF C02-002_10 PTSR

SAMPLE_ID	CODE	FROM	TO	WIDTH	DESCRIPTION	ANALYSIS
C02-002_1	FDUN	16.58	16.77	0.19	Feldspathic Dunite	THIN SECTION
C02-002_2	FDUN	52.27	52.42	0.15	Feldspathic Dunite	THIN SECTION
C02-002_3	CLPX	68.12	68.25	0.13	Clinopyroxenite	THIN SECTION
C02-002_4	DIOR	71.35	71.45	0.1	Diorite Dike	THIN SECTION
C02-002_5	CLPX	106.79	106.9	0.11	Clinopyroxenite	THIN SECTION
C02-002_6	CLPX	124.58	124.76	0.18	Clinopyroxenite	THIN SECTION
C02-002_7	FDUN	162.1	162.2	0.1	Feldspathic Dunite	THIN SECTION
C02-002_8	SIL	172.45	172.58	0.13	Silicified Zone altered FDUN/MGBR	THIN SECTION
C02-002_9	MGBR	178.5	178.65	0.15	Marginal Gabbro	THIN SECTION
C02-002_10	QZCB	185.32	185.44	0.12	Quartz Carbonate Alteration Zone	THIN SECTION
C02-002_11	QZCB	185.44	185.56	0.12	Quartz Carbonate Alteration Zone	THIN SECTION
C02-002_12	SED	197.03	197.12	0.09	Sediments - Black Shale	THIN SECTION
C02-002_13	SED	210.06	210.25	0.19	Sediments - Black Shale	THIN SECTION

Appendix C: ACME Laboratories Original Analytical Results

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WHOLE ROCK ICP ANALYSIS

White River Resources PROJECT Canalask-Yukon File # A705611

8 King Street East, Suite, Toronto Ontario M5C 1B5 Submitted by: Ian McCutcheon

SAMPLE#	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	Ni ppm	Sc ppm	LOI %	TOT/C %	TOT/S %	SUM %
1M001-130707	42.32	8.84	13.48	18.92	7.81	.84	.41	1.06	.10	.18	.302	2338	27	5.2	.10	.97	99.76
1M002-130707	42.87	7.94	11.64	20.03	7.84	.68	.49	.98	.10	.17	.390	1427	27	6.5	.33	.30	99.81
1M003-130707	40.54	8.64	13.57	16.65	8.40	.68	.41	.99	.12	.15	.290	2006	26	8.8	.87	.74	99.50
1M004-130707	36.95	2.59	10.23	34.87	1.71	.02	.10	.24	.02	.15	.624	2032	10	12.1	.16	<.01	99.87
1M005-130707	35.98	1.24	10.74	37.30	.12	.01	<.04	.09	.02	.08	.860	2297	6	13.1	.15	.06	99.86
1M006-130707	27.46	4.41	9.25	22.03	5.17	.03	.12	.47	.02	.15	.489	1351	14	30.1	8.58	.04	99.87
1M007-130707	58.53	15.49	10.99	1.81	2.91	1.49	2.63	.67	.34	.13	.012	135	18	4.8	.61	1.32	99.82
1M008-130707	42.25	7.71	10.16	21.81	7.97	.49	.61	.88	.07	.16	.404	1261	25	7.3	.54	.16	99.98
1M009-130707	39.82	4.63	13.87	29.63	4.00	.34	.19	.39	.05	.17	.577	2734	15	5.8	.04	.78	99.82
RE 1M009-130707	39.72	4.63	13.93	29.75	4.03	.34	.18	.40	.04	.17	.578	2677	15	5.7	.03	.81	99.82
1M010-130707	36.35	.72	10.07	37.98	.14	.01	<.04	.02	<.01	.10	.951	2457	5	13.3	.14	.02	99.97
1M011-130707	25.09	3.88	8.82	13.61	16.72	.03	.43	.38	.03	.15	.159	2052	11	29.5	8.55	.89	99.06
1M012-130707	37.30	4.12	15.77	24.30	6.28	.03	.09	.40	.05	.16	.464	2376	12	10.3	.02	.49	99.57
1M013-130707	33.77	1.22	11.17	34.24	.56	<.01	<.04	.11	.02	.15	.619	2296	7	17.7	2.20	.01	99.87
1M014-130707	37.31	12.87	10.59	12.97	20.67	.01	<.04	.71	.14	.24	.091	566	43	4.2	.02	<.01	99.89
1M001-140707	38.87	13.89	11.42	12.61	14.12	.18	.61	.65	<.01	.15	.014	8267	18	6.1	.39	2.48	99.67
1M002-140707	38.25	11.74	7.14	6.23	17.90	.09	2.26	.41	.06	.25	.045	3243	33	15.0	3.93	.50	99.79
1M003-140707	28.76	7.80	30.27	5.46	6.05	.09	1.04	.44	<.01	.09	.012	50704	13	13.1	1.25	16.41	99.55
1M004-140707	36.08	8.26	19.30	10.75	16.21	.08	.06	.50	<.01	.14	.006	1989	14	5.6	.03	7.97	97.24
STANDARD SO-18/CSC	58.14	14.05	7.61	3.44	6.34	3.71	2.17	.71	.83	.41	.558	68	25	1.9	3.25	4.13	99.88

GROUP 4A - 0.200 GM SAMPLE BY LIBO2/LI2B4O7 FUSION, ANALYSIS BY ICP-ES. (LIBO2/LI2B4O7 FUSION MAY NOT BE SUITABLE FOR MASSIVE SULFIDE OR HIGH BARITE SAMPLES.) LOI BY LOSS ON IGNITION. TOTAL C & S BY LECO. (NOT INCLUDED IN THE SUM)

- SAMPLE TYPE: ROCK R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data___ FA ____ **DATE RECEIVED:** AUG 2 2007 **DATE REPORT MAILED:** SEP 10 2007

BRITISH COLUMBIA CERTIFIED ASSAYER Raymond Chan

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ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9001 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

White River Resources PROJECT Canalask-Yukon File # A705611 (a)

8 King Street East, Suite, Toronto Ontario M5C 1B5 Submitted by: Ian McCutcheon

SAMPLE#	Ba ppm	Be ppm	Co ppm	Cs ppm	Ga ppm	Hf ppm	Nb ppm	Rb ppm	Sn ppm	Sr ppm	Ta ppm	Th ppm	U ppm	V ppm	W ppm	Zr ppm	Y ppm	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm
1M001-130707	126.7	1	137.9	1.0	10.9	1.8	6.6	9.9	1	58.4	.4	.8	.3	237	.2	62.7	15.0	7.3	17.5	2.29	10.1	2.46	.85	2.75	.50	2.56	.48	1.30	.20	1.26	.18
1M002-130707	193.3	1	96.5	1.1	10.3	1.5	5.6	12.2	1	87.5	.3	.6	.3	227	.3	52.2	14.1	6.6	16.3	2.17	10.3	2.29	.80	2.49	.48	2.40	.47	1.26	.20	1.17	.18
1M003-130707	118.3	1	122.2	1.0	11.7	2.0	6.4	8.2	1	84.3	.5	1.7	.6	232	.2	69.2	16.0	16.2	38.2	4.56	19.1	3.43	1.03	3.30	.58	2.74	.54	1.43	.22	1.33	.20
1M004-130707	24.9	<1	128.5	.1	3.5	.4	1.4	2.9	<1	17.1	.1	.2	.1	80	<.1	12.6	3.5	1.4	3.3	.47	2.1	.53	.18	.63	.11	.53	.12	.33	.05	.31	.05
1M005-130707	5.9	1	153.4	<.1	2.2	.2	.5	.9	<1	3.3	.1	<.1	.1	59	<.1	5.1	1.3	.8	1.6	.22	.9	.25	.05	.24	.04	.21	.05	.13	.02	.16	.02
1M006-130707	113.9	<1	91.6	.4	6.0	.5	2.3	3.8	<1	229.9	.1	.3	.1	119	.1	24.0	6.7	1.6	5.2	.77	4.2	1.06	.24	1.10	.20	1.10	.20	.57	.10	.55	.09
1M007-130707	588.6	<1	17.3	1.1	14.4	2.0	3.6	59.2	<1	135.7	.2	1.9	2.5	189	.4	65.8	27.4	12.4	23.3	3.85	18.4	4.09	1.03	4.45	.76	3.91	.75	2.09	.31	2.00	.30
1M008-130707	214.8	1	90.9	.7	9.8	1.2	5.3	16.2	<1	102.2	.3	.6	.2	216	.2	45.1	13.0	3.9	12.1	1.78	8.8	1.97	.54	2.13	.40	2.07	.42	1.09	.16	1.05	.16
1M009-130707	90.8	1	157.9	.3	5.8	.7	2.1	4.6	1	87.8	.1	.4	.1	132	.1	24.8	6.7	2.7	6.4	.84	4.1	.95	.37	1.10	.21	1.03	.21	.55	.09	.58	.08
RE 1M009-130707	93.1	<1	155.5	.3	5.7	.7	2.1	4.3	1	82.2	.1	.3	.1	128	.1	24.2	6.4	2.8	6.3	.84	4.0	.96	.36	1.12	.21	1.02	.21	.59	.09	.56	.07
1M010-130707	4.2	<1	169.9	<.1	2.4	<.1	.2	.8	<1	2.7	<.1	<.1	.1	41	.1	1.0	.3	.5	.4	.05	<.3	.06	<.02	<.05	.01	<.05	<.02	.03	.01	<.05	.01
1M011-130707	6153.1	1	103.8	.8	4.7	.6	2.0	12.6	<1	1210.6	.1	.3	.2	94	.3	21.4	5.9	2.4	5.9	.77	3.7	.93	.37	1.04	.18	1.04	.19	.51	.07	.45	.07
1M012-130707	42.1	<1	111.8	.2	5.2	.7	2.5	3.4	1	6.7	.3	.4	.2	109	.4	24.8	6.1	2.7	6.3	.85	3.8	.95	.38	1.05	.20	1.03	.19	.53	.07	.52	.07
1M013-130707	91.3	<1	141.4	.2	1.8	.2	.6	1.1	<1	31.5	<.1	.1	<.1	49	<.1	6.2	1.6	.8	1.6	.21	1.1	.24	.08	.31	.05	.25	.04	.16	.02	.16	.02
1M014-130707	6.7	<1	66.6	.1	9.0	1.4	1.9	.7	1	15.2	.1	.6	.4	305	1.0	49.3	15.8	6.1	16.3	2.34	10.8	2.58	.88	2.72	.48	2.49	.49	1.46	.21	1.44	.21
1M001-140707	503.6	1	295.2	.4	13.1	1.5	1.2	10.6	<1	43.7	.3	.2	.2	216	.6	46.2	6.9	1.0	2.4	.41	2.2	.47	.13	.69	.12	.80	.16	.49	.09	.52	.08
1M002-140707	547.0	<1	110.7	1.0	10.1	.8	.9	45.5	<1	314.8	.1	.2	.2	212	.6	24.5	12.1	2.0	4.6	.67	3.2	1.05	.34	1.34	.30	1.73	.39	1.14	.18	1.21	.19
1M003-140707	586.0	<1	1702.9	.3	5.6	1.1	.3	21.5	<1	88.6	.2	.1	.1	137	.2	37.7	6.1	1.0	2.2	.37	1.9	.40	.11	.57	.11	.67	.14	.41	.06	.44	.07
1M004-140707	35.3	<1	176.6	.1	8.0	.9	.5	1.2	<1	16.5	.3	.5	.2	218	.3	29.9	11.4	1.6	4.2	.69	3.6	.84	.09	.97	.20	1.18	.26	.80	.12	.84	.14
STANDARD SO-18	506.7	2	29.0	7.1	17.3	10.1	22.5	27.5	16	446.9	6.8	10.7	16.6	215	15.6	297.4	34.9	12.5	28.5	3.51	14.6	2.79	.89	2.78	.53	2.83	.58	1.74	.27	1.66	.26

GROUP 4B - REE - 0.200 GM BY LiBO2/LI2B4O7 FUSION, ICP/MS FINISHED.
- SAMPLE TYPE: ROCK R150
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data___ FA ____ **DATE RECEIVED:** AUG 2 2007 **DATE REPORT MAILED:** SEP 10 2007

Raymond Chan

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ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9001 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

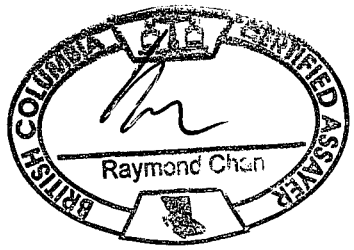
White River Resources PROJECT Canalask-Yukon File # A705611 (b)

8 King Street East, Suite, Toronto Ontario M5C 1B5 Submitted by: Ian McCutcheon

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	As ppm	Cd ppm	Sb ppm	Bi ppm	Ag ppm	Au ppb	Hg ppm	Tl ppm	Se ppm
1M001-130707	.7	2322.0	6.3	89	2683.0	1.5	.4	.4	<.1	.3	53.9	.01	.2	3.3
1M002-130707	.5	365.9	3.8	64	1343.4	3.2	.3	.1	<.1	.2	14.0	<.01	.2	1.0
1M003-130707	.6	3938.4	4.3	74	2305.9	22.4	.4	.8	.1	1.5	57.7	.02	.3	4.5
1M004-130707	.1	24.5	.5	28	2224.5	1.0	<.1	<.1	<.1	<.1	1.2	.01	.1	.5
1M005-130707	.1	52.1	.7	17	2628.1	1.1	<.1	<.1	<.1	<.1	1.9	<.01	.1	<.5
1M006-130707	.2	21.5	1.8	39	1343.3	339.6	.1	.1	<.1	<.1	1.3	.70	<.1	.5
1M007-130707	1.0	90.3	4.0	104	60.2	17.7	.2	.5	<.1	.2	1.3	.01	<.1	1.2
1M008-130707	.1	30.3	3.6	56	1140.1	12.7	.3	.1	<.1	.2	2.6	.02	.1	.5
1M009-130707	.2	1472.5	2.8	50	3146.4	16.9	.2	<.1	.1	.5	28.5	.02	.1	2.6
RE 1M009-130707	.2	1497.3	2.7	52	3151.4	17.4	.2	<.1	.1	.5	217.9	.02	.1	3.6
1M010-130707	<.1	22.5	.5	31	2809.5	1.4	<.1	<.1	<.1	<.1	.8	<.01	<.1	<.5
1M011-130707	.2	1087.6	3.8	36	2121.7	1641.0	.2	4.3	.1	.5	26.7	.03	.1	4.1
1M012-130707	.3	2892.8	5.3	52	2616.2	2.1	.4	.1	.4	.6	130.6	<.01	.3	5.7
1M013-130707	.1	35.2	.6	48	2578.3	33.0	<.1	<.1	<.1	<.1	4.1	<.01	<.1	.7
1M014-130707	.2	139.7	.4	65	585.1	1.2	.2	<.1	<.1	<.1	1.4	<.01	<.1	.5
1M001-140707	.1	357.0	2.3	890	>10000	37.3	3.0	1.3	.5	2.1	11.8	.05	<.1	15.5
1M002-140707	.2	81.1	36.2	199	3628.7	960.8	1.7	24.1	.4	2.1	6.7	.01	<.1	3.1
1M003-140707	.3	382.1	10.8	55	>10000	28.4	.1	3.3	5.1	14.1	77.3	.08	.2	>100
1M004-140707	1.6	>10000	2.4	2337	2170.3	3.1	11.6	.2	1.1	26.2	1055.8	.28	<.1	19.4
STANDARD DS7	20.1	97.7	66.6	383	52.1	44.6	5.7	4.9	4.4	.8	62.4	.20	4.0	4.4

GROUP 1DX - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-MS.
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY.
- SAMPLE TYPE: ROCK R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data___ FA ____ **DATE RECEIVED:** AUG 2 2007 **DATE REPORT MAILED:**.....SEP 10 2007



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ACME ANALYTICAL LABORATORIES LTD. (ISO 9001 Accredited Co.)
852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEM PRECIOUS METALS ANALYSIS

White River Resources PROJECT Canalask-Yukon File # A705611

8 King Street East, Suite, Toronto Ontario M5C 1B5 Submitted by: Ian McCutcheon

SAMPLE#	Au ppb	Pt ppb	Pd ppb	Sample kg
G-1	2	<.1	<.5	-
1M001-130707	49	273.7	526.6	1.22
1M002-130707	12	40.1	109.3	1.42
1M003-130707	78	350.0	962.3	1.02
1M004-130707	2	12.9	6.4	1.85
1M005-130707	3	29.2	34.6	1.11
1M006-130707	2	14.4	9.0	1.69
1M007-130707	2	.4	2.3	1.46
1M008-130707	5	23.6	15.4	1.34
1M009-130707	40	157.6	415.5	1.98
RE 1M009-130707	33	143.6	431.5	-
1M010-130707	2	35.3	67.2	1.48
1M011-130707	34	183.5	346.1	1.48
1M012-130707	247	486.9	814.2	1.33
1M013-130707	3	15.7	26.2	1.24
1M014-130707	3	7.3	13.7	1.66
1M001-140707	12	<.1	2.3	1.48
1M002-140707	8	6.3	8.6	.88
1M003-140707	72	2.2	3.7	1.56
1M004-140707	1744	.2	.8	1.27
STANDARD FA-10R	488	487.9	487.3	-

GROUP 3B-MS - FIRE GEOCHEM AU PT PD - 30 GM SAMPLE FUSION, DORE DISSOLVED IN ACID, ANALYZED BY ICP-MS.
- SAMPLE TYPE: ROCK R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data 1 FA ____ DATE RECEIVED: AUG 2 2007 DATE REPORT MAILED: Sept 10/07

BRITISH COLUMBIA CERTIFIED ASSAYER
Clarence Leong

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ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9001 Accredited Co.)

WHOLE ROCK ICP ANALYSIS

White River Resources PROJECT Canalask-Yukon File # A705612

8 King Street East, Suite, Toronto Ontario M5C 1B5 Submitted by: Ian McCutcheon

SAMPLE#	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	Ni ppm	Sc ppm	LOI %	TOT/C %	TOT/S %	SUM %
1M001-280607	40.26	4.77	12.37	29.91	4.15	.29	.22	.50	.07	.17	.587	1925	16	6.4	.06	.28	99.95
1M002-280607	39.42	4.72	13.82	28.64	4.24	.28	.27	.46	.05	.18	.601	2652	16	6.8	.02	.77	99.82
1M002-100707	38.60	5.25	14.15	25.65	4.60	.15	.19	.58	.07	.17	.645	1716	19	9.5	.01	.57	99.77
RE 1M002-100707	38.82	5.20	14.01	25.53	4.63	.15	.19	.56	.07	.17	.641	1702	18	9.6	.01	.59	99.79
1M001-100707	30.25	.39	10.26	36.56	.89	<.01	<.04	.01	.01	.13	.782	2270	5	20.4	3.16	<.01	99.99
1M001-090707	55.17	15.82	4.27	.38	17.88	.03	<.04	.58	.06	.11	.007	28	18	5.7	.13	1.69	100.02
1M002-090707	26.76	1.93	10.81	27.64	.33	.01	<.04	.16	.02	.13	.675	1433	8	31.3	8.00	<.01	99.97
1M003-090707	50.60	18.17	9.77	3.51	3.88	6.04	2.29	.88	.45	.21	<.001	8	24	4.1	.45	.01	99.90
1M001-270607	38.94	2.12	9.26	35.86	.07	.02	.04	.10	.02	.13	.725	2123	9	12.4	.07	.55	99.96
1M002-270607	40.03	1.38	12.18	33.92	.12	.03	<.04	.09	.02	.24	.607	1874	6	11.1	.02	.41	99.98
1M001-070707	57.47	19.42	4.46	2.27	.49	3.15	5.22	1.29	.10	.05	.006	24	30	5.9	1.02	.41	99.84
1M002-070707	38.33	3.22	14.87	30.69	.80	.03	.08	.29	.05	.16	.733	1797	11	10.5	.03	.12	99.98
1M001-080707	47.66	19.52	10.87	3.78	6.80	3.15	3.41	.98	.58	.22	.004	27	19	2.9	.11	.01	99.88
1M001-300607	58.85	18.91	4.27	1.46	4.28	4.95	4.00	.39	.21	.19	.003	16	5	2.3	.01	.32	99.81
1M001-030707	69.36	14.77	3.89	1.84	.29	1.77	3.60	.40	.11	.03	<.001	37	12	3.8	.01	1.76	99.86
1M002-030707	71.84	14.09	3.24	1.06	.49	2.68	2.91	.37	.11	.02	.004	24	10	3.1	.01	.99	99.92
1M003-030707	59.16	15.99	7.13	2.75	5.06	4.37	.64	.73	.25	.10	.010	28	16	3.7	.08	1.23	99.90
1M004-030707	49.21	13.73	9.73	6.54	8.26	2.96	.04	1.27	.13	.22	.031	95	32	7.8	1.13	.14	99.94
1M001-110707	47.89	16.35	10.19	7.75	10.28	1.65	1.41	.62	.16	.20	.037	100	37	3.4	.21	.09	99.96
STANDARD SO-18/CSC	57.70	14.42	7.54	3.51	6.27	3.81	2.20	.73	.80	.41	.577	42	25	1.9	3.19	4.23	99.87

GROUP 4A - 0.200 GM SAMPLE BY LIBO2/LI2B4O7 FUSION, ANALYSIS BY ICP-ES. (LIBO2/LI2B4O7 FUSION MAY NOT BE SUITABLE FOR MASSIVE SULFIDE OR HIGH BARITE SAMPLES.) LOI BY LOSS ON IGNITION. TOTAL C & S BY LECO. (NOT INCLUDED IN THE SUM)

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- SAMPLE TYPE: ROCK R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data___ FA ____ **DATE RECEIVED:** AUG 2 2007 **DATE REPORT MAILED:** SEP 05 2007

BRITISH COLUMBIA CERTIFIED ASSAYER Raymond Chan

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(ISO 9001 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

White River Resources PROJECT Canalask-Yukon File # A705612 (a)

8 King Street East, Suite, Toronto Ontario M5C 1B5 Submitted by: Ian McCutcheon

SAMPLE#	Ba ppm	Be ppm	Co ppm	Cs ppm	Ga ppm	Hf ppm	Nb ppm	Rb ppm	Sn ppm	Sr ppm	Ta ppm	Th ppm	U ppm	V ppm	W ppm	Zr ppm	Y ppm	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm
1M001-280607	102.5	<1	123.2	.3	6.6	.9	3.0	5.4	1	60.6	.2	.4	.2	141	.1	31.5	8.2	3.1	6.7	1.03	4.7	1.27	.40	1.40	.25	1.38	.26	.73	.10	.69	.10
1M002-280607	123.8	<1	148.5	.4	6.1	1.0	2.5	6.9	1	91.8	.2	.3	.2	128	.1	26.9	7.7	2.6	5.8	.89	4.5	1.11	.39	1.25	.22	1.19	.23	.66	.10	.59	.09
1M002-100707	78.8	<1	97.0	.5	7.2	.8	3.1	5.2	1	34.3	.2	.4	.2	145	.3	33.1	8.0	3.0	6.6	.95	5.2	1.20	.39	1.33	.25	1.38	.25	.75	.10	.69	.09
RE 1M002-100707	78.7	<1	99.8	.6	6.4	.9	3.3	5.8	1	34.6	.2	.4	.2	150	.3	33.4	8.4	3.0	6.7	.98	5.1	1.27	.37	1.42	.27	1.49	.26	.73	.09	.67	.10
1M001-100707	18.7	<1	129.4	.3	.9	<.1	<.1	.5	<1	18.9	<.1	.1	<.1	32	.1	<.5	.2	.1	.2	.02	<.3	<.05	<.02	<.05	.01	<.05	<.02	<.03	<.01	<.05	<.01
1M001-090707	7.9	<1	17.1	<.1	14.6	1.5	3.3	<.5	1	19.8	.2	1.8	4.4	191	.5	60.3	13.1	10.0	19.2	2.61	11.0	2.36	.79	2.18	.38	2.03	.38	1.13	.15	1.06	.17
1M002-090707	6.1	<1	105.1	.2	2.5	.2	.7	<.5	<1	6.5	<.1	.1	.1	61	.1	8.8	2.6	.9	2.2	.33	1.5	.43	.07	.47	.08	.39	.08	.26	.03	.22	.03
1M003-090707	617.8	1	23.2	.7	15.2	2.1	5.6	46.7	1	655.7	.3	2.2	1.5	326	.2	70.1	23.4	19.6	39.5	5.65	25.8	5.61	1.66	4.85	.78	3.98	.70	1.92	.28	1.78	.26
1M001-270607	11.1	<1	161.6	.1	4.2	.1	.3	2.0	<1	2.1	<.1	.1	<.1	86	.1	4.2	1.9	.4	.9	.16	.9	.22	.04	.30	.05	.24	.06	.16	.02	.15	.02
1M002-270607	5.2	<1	124.4	.1	5.1	.1	.4	.9	<1	3.5	<.1	.1	<.1	53	.1	5.4	1.5	.4	1.0	.14	.8	.19	.07	.23	.04	.20	.04	.13	.01	.13	.02
1M001-070707	1866.9	2	5.0	1.7	22.7	3.8	5.1	107.1	2	99.0	.2	2.2	1.1	167	.7	118.7	27.1	3.9	12.5	2.09	10.4	3.15	.93	3.22	.66	3.85	.81	2.60	.38	2.63	.41
1M002-070707	18.5	<1	138.1	.7	4.9	.5	1.5	3.4	<1	6.1	.2	.2	.1	102	.2	18.4	4.9	1.6	4.0	.57	2.7	.73	.22	.80	.16	.82	.15	.44	.06	.44	.06
1M001-080707	676.7	1	23.9	1.7	20.0	2.1	5.4	99.3	1	774.5	.2	2.5	.7	271	.3	63.5	24.7	17.3	39.0	5.52	25.9	5.94	1.69	5.22	.84	4.03	.73	2.10	.31	2.00	.28
1M001-300607	719.5	1	5.8	.4	23.3	3.3	4.3	62.8	1	1335.5	.2	2.9	1.6	115	.1	112.3	17.8	15.4	33.9	4.54	19.6	3.75	1.06	2.97	.51	2.72	.49	1.46	.23	1.64	.25
1M001-030707	1418.8	1	6.5	.4	16.3	4.8	4.2	63.6	3	84.3	.3	4.1	2.0	61	.9	155.6	24.4	12.3	26.8	3.34	14.1	2.92	.57	2.77	.55	3.33	.68	2.32	.39	2.58	.42
1M002-030707	818.0	<1	3.3	.4	12.7	4.4	4.2	53.6	1	133.9	.2	3.8	1.9	53	.8	151.3	26.8	11.4	24.5	3.12	13.6	3.00	.65	3.00	.60	3.53	.75	2.48	.41	2.79	.43
1M003-030707	192.6	<1	20.1	.2	18.4	2.6	6.8	13.6	2	584.6	.4	4.7	1.7	149	1.3	104.8	21.8	24.2	50.3	6.03	25.5	4.61	1.40	3.96	.68	3.26	.62	1.92	.29	2.02	.32
1M004-030707	30.2	<1	43.3	<.1	15.9	2.3	6.5	.5	1	332.2	.3	.8	.4	278	.7	74.4	30.7	8.4	20.6	3.13	15.9	4.09	1.54	4.71	.89	4.71	.86	2.56	.35	2.25	.31
1M001-110707	371.3	<1	43.5	.6	15.4	.9	1.6	21.7	5	345.2	.1	.5	.3	265	.1	31.9	18.6	5.0	11.9	1.62	8.3	2.06	.75	2.44	.49	2.58	.54	1.72	.23	1.65	.25
STANDARD SO-18	504.8	<1	28.1	6.6	17.5	9.9	22.0	27.4	15	420.8	6.5	10.9	15.7	210	14.9	301.3	35.9	11.7	26.5	3.36	13.9	2.92	.86	2.92	.54	2.98	.57	1.70	.26	1.80	.26

GROUP 4B - REE - 0.200 GM BY LiBO2/LI2B4O7 FUSION, ICP/MS FINISHED.
- SAMPLE TYPE: ROCK R150
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data___ FA ____ DATE RECEIVED: AUG 2 2007 DATE REPORT MAILED: SEP 0 5 2007

Raymond Chan

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GEOCHEMICAL ANALYSIS CERTIFICATE

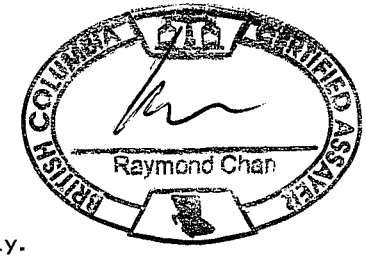
White River Resources PROJECT Canalask-Yukon File # A705612 (b)

8 King Street East, Suite, Toronto Ontario M5C 1B5 Submitted by: Ian McCutcheon

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	As ppm	Cd ppm	Sb ppm	Bi ppm	Ag ppm	Au ppb	Hg ppm	Tl ppm	Se ppm
1M001-280607	.2	326.5	2.8	42	2114.9	19.0	.2	.1	.1	.2	3.4	<.01	.1	.8
1M002-280607	.2	1389.6	3.4	43	2977.0	18.2	.2	.1	.2	.6	20.6	.02	.1	2.7
1M002-100707	.3	1698.6	4.9	41	1815.7	<.5	.3	<.1	.2	.5	46.3	.01	.2	3.5
RE 1M002-100707	.3	1769.5	5.1	43	1830.0	<.5	.3	.1	.3	.4	39.0	.01	.2	3.6
1M001-100707	.1	15.2	.5	30	2612.9	8.3	.1	.1	<.1	<.1	<.5	.01	<.1	<.5
1M001-090707	4.8	71.2	8.9	92	27.2	21.5	.3	.2	.2	.1	1.6	.01	<.1	2.3
1M002-090707	<.1	81.4	.9	14	1304.3	.7	<.1	.1	<.1	<.1	2.3	<.01	<.1	<.5
1M003-090707	.4	79.5	1.7	74	4.6	1.0	<.1	.4	<.1	<.1	4.1	<.01	<.1	<.5
1M001-270607	<.1	373.9	2.5	49	2568.8	<.5	.1	<.1	<.1	.1	1.1	<.01	<.1	1.2
1M002-270607	.1	198.4	1.5	55	2171.3	<.5	<.1	<.1	<.1	<.1	4.8	<.01	<.1	1.3
1M001-070707	9.7	22.7	20.2	26	26.0	11.3	<.1	1.1	.1	.8	<.5	.04	.1	.7
1M002-070707	.2	59.8	1.3	29	2009.7	1.5	.1	<.1	<.1	<.1	4.3	<.01	.1	.6
1M001-080707	.1	15.4	.9	61	6.3	.7	<.1	.1	<.1	<.1	2.3	<.01	<.1	<.5
1M001-300607	1.8	27.0	5.2	47	13.3	<.5	<.1	<.1	.1	<.1	.6	<.01	<.1	<.5
1M001-030707	.7	38.2	9.1	37	2.8	2.7	.1	<.1	.8	<.1	4.0	.01	<.1	1.4
1M002-030707	.9	34.9	2.8	29	1.8	1.8	<.1	<.1	.7	<.1	1.8	<.01	<.1	1.1
1M003-030707	.8	544.0	4.8	55	20.6	1.7	.1	.1	.5	.3	1.8	.06	<.1	2.5
1M004-030707	.8	370.1	1.7	133	84.9	.5	.3	<.1	.1	<.1	.7	.01	<.1	<.5
1M001-110707	.3	103.2	.8	48	66.8	24.0	<.1	<.1	<.1	<.1	<.5	.01	<.1	<.5
STANDARD DS7	19.4	100.6	67.4	392	53.7	45.8	5.9	4.5	4.2	.8	55.1	.20	4.0	3.4

GROUP 1DX - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-MS.
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY.
- SAMPLE TYPE: ROCK R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data___ FA ____ **DATE RECEIVED:** AUG 2 2007 **DATE REPORT MAILED:** SEP 05 2007



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(ISO 9001 Accredited Co.)

GEOCHEM PRECIOUS METALS ANALYSIS

White River Resources PROJECT Canalask-Yukon File # A705612

8 King Street East, Suite, Toronto Ontario M5C 1B5 Submitted by: Ian McCutcheon

SAMPLE#	Au ppb	Pt ppb	Pd ppb
1M001-280607	<1	39.4	77.0
1M002-280607	16	147.8	306.5
1M002-100707	30	162.1	496.1
RE 1M002-100707	43	169.7	498.1
1M001-100707	<1	20.3	21.0
1M001-090707	<1	.8	5.5
1M002-090707	<1	23.0	21.0
1M003-090707	<1	.3	<.5
1M001-270607	<1	23.4	37.2
1M002-270607	<1	34.5	38.4
1M001-070707	3	1.6	2.8
1M002-070707	<1	30.5	49.6
1M001-080707	<1	.2	2.6
1M001-300607	<1	<.1	1.1
1M001-030707	<1	.5	.7
1M002-030707	<1	.3	1.1
1M003-030707	<1	1.1	4.4
1M004-030707	<1	3.3	12.2
1M001-110707	<1	13.7	10.4
STANDARD FA-10R	471	461.4	457.1

GROUP 3B-MS - FIRE GEOCHEM AU PT PD - 30 GM SAMPLE FUSION, DORE DISSOLVED IN ACID, ANALYZED BY ICP-MS. SEMI-QUANTITATIVE FOR RH.
- SAMPLE TYPE: ROCK R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

AUG 23 2007

Data___ FA ____ **DATE RECEIVED:** AUG 2 2007 **DATE REPORT MAILED:**.....

BRITISH COLUMBIA CERTIFIED ASSAYER
Raymond Chan

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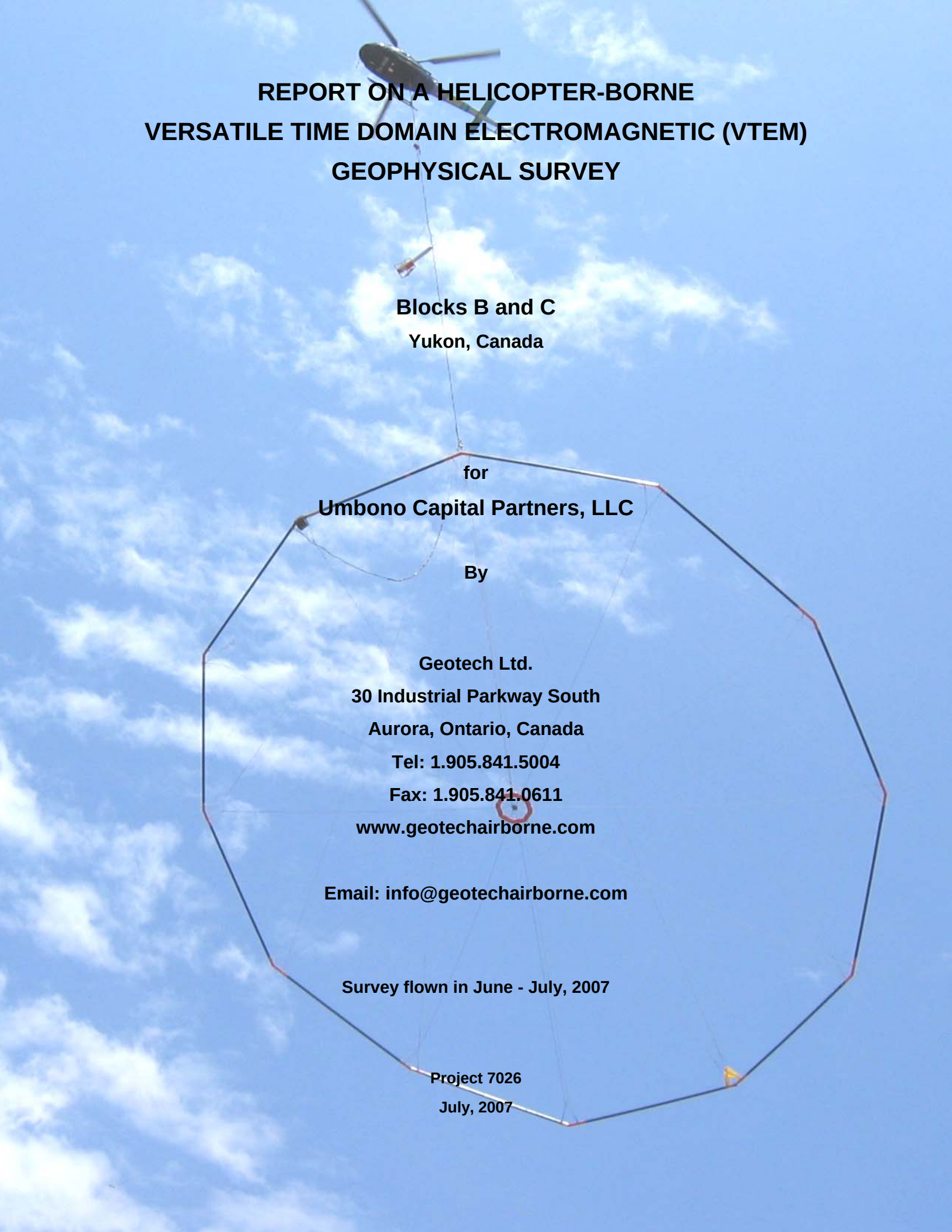
Appendix D: Sample Descriptions and Location

	SAMPLE ID	Date	X	Y	Z	LOCALITY ID	ROCK_TYPE	STRAT	GRAIN SIZE	TEXT	COLOUR
1	IM001-130707	13-Jul-07	519709	6874635		DISCOVERY	Ultramafic	WRIC	M		Grey/Brown
2	IM002-130707	13-Jul-07	519794	6874572	1143	DISCOVERY	Ultramafic	WRIC	M		Grey/Brown
3	IM003-130707	13-Jul-07	519792	6874581	1166	DISCOVERY	Ultramafic	WRIC	M		Dark Brown
4	IM004-130707	13-Jul-07	519782	6874571	1164	DISCOVERY	Ultramafic - Peridotite	WRIC	M		Black
5	IM005-130707	13-Jul-07	519785	6874511	1194	DISCOVERY	Ultramafic	WRIC	F-M		Black
6	IM006-130707	13-Jul-07	520082	6874305	1235	ONION SE	QZCB ?	WRIC FW	M	RECRY	White Green
7	IM007-130707	13-Jul-07	520136	6874283	1254	ONION SE	Volcanic tuff ?	Station Creek	F-M		Dark Grey
8	IM008-130707	13-Jul-07	520144	6874262	1260	ONION SE	Ultramafic	WRIC	M		Dark Grey
9	IM001-280607	28-Jun-07	520942	6873176	1238	SAX	Ultramafic	WRIC	M	Cumulate	Dark Green Black
10	IM002-280607	28-Jun-07	520942	6873176	1238	SAX	Ultramafic	WRIC	M	Cumulate	Dark Green Black
11	IM009-130707	13-Jul-07	520944	6873178	1243	SAX	Ultramafic	WRIC	F-M		Dark brown/red
12	IM010-130707	13-Jul-07	521555	6872215	1346	PIX	Ultramafic	WRIC	M	Cumulate Fresh	Dark Grey/Black/Green
13	IM011-130707	13-Jul-07	521555	6872218	1348	PIX	QZCB ?	WRIC	F-M	RECRY	Pale with green and orange
14	IM002-100707	10-Jul-07	521722	6871980	1410	CESSNA	Ultramafic	WRIC	F-M	Altered	Orange/Brown
15	IM012-130707	13-Jul-07	521725	6871969	1401	CESSNA	Ultramafic	WRIC	M	Oxidized	Orange/Brown
16	IM013-130707	13-Jul-07	521684	6872085	1433	CESSNA	Ultrmafic	WRIC	M	Deformed	Black
17	IM001-100707	10-Jul-07	522083	6871486	1392	CESSAX	Ultramafic	WRIC	M		Dark grey
18	IM014-130707	13-Jul-07	522673	6870641	1254	POLESTAR - area	Ultramafic	WRIC	M	RECRY	Pale green
19	IM001-140707	14-Jul-07	524268	6869345	724	CANALASK MAIN ZONE	Altered		M-C	RECRY	Pale Green
20	IM002-140707	14-Jul-07	524266	6869346	724	CANALASK MAIN ZONE	Altered		M-C	RECRY	Pale Green
21	IM003-140707	14-Jul-07	524262	6869343	724	CANALASK FW ZONE	Altered		M-C		Pale Green Orange
22	IM004-140707	14-Jul-07	524325	6869365	751	CANALASK FW ZONE	Semi-Massive Sulphide		F-M		Yellow Orange
23	IM001-090707	9-Jul-07	528938	6864852	1287	PICKHANDLE - Area	Volcanic	Station Creek?	F-M		Grey/Orange/Brown
24	IM002-090707	9-Jul-07	528078	6866497	1040	PICKHANDLE	Ultramafic	WRIC	M	Crystalline	Dark grey
25	IM003-090707	9-Jul-07	528953	6865005	1236	PICKHANDLE	Ultramafic float	WRIC	M		Dark grey
26	IM001-270607	27-Jun-07	536253	6859460	1108	CATS	Ultramafic	WRIC	M	Cumulate	Black
27	IM002-270607	27-Jun-07	536257	6859465	1108	CATS	Ultramafic	WRIC	F-M	Cumulate	Green Black
28	IM001-070707	7-Jul-07	537648	6857324	1221	BLOCK C SE	Schistose volcanic	Station Creek?	M		Dark Grey
29	IM002-070707	7-Jul-07	538032	6857856	1036	BLOCK C SE	Ultramafic float	WRIC	M		Black
30	IM001-080707	8-Jul-07	533198	6862649	929	BLOCK C NW	Ultramafic float	WRIC	M		Black
31	IM001-300607	30-Jun-07	507685	6882685	1389	ED MOUNTAIN	Quartz Porphyry?	Station Creek?	M		Grey
32	IM001-030707	3-Jul-07	511586	6878453	1347	CHAIR MTN	?	?	M		Orange/Brown
33	IM002-030707	3-Jul-07	511586	6878453	1347	CHAIR MTN	?	?	M		Orange/Brown
34	IM003-030707	3-Jul-07	511732	6878456	1323	CHAIR MTN	?	?	M		Orange/Brown
35	IM004-030707	3-Jul-07	511742	6878467	1320	CHAIR MTN	?	?	M		Dark grey
36	IM001-110707	11-Jul-07	503880	6884791	1332	ANT BLOCK	?	Hasen Creek	M		Grey

	SAMPLE ID	WEATHERING	OXIDATION	MAGNETIC?	MINERALOGY	Mineralisation
1	IM001-130707	High	Iron Staining	Very Weak	Olivine, Pyoxenes	Visible sulphides
2	IM002-130707	High	Iron Staining	Very Weak	Olivine, Pyoxenes	Visible sulphides
3	IM003-130707	Very High	Iron Staining	Very Weak	Secondary iron oxides	Visible sulphides
4	IM004-130707	Moderate	Minor Iron Staining	Moderate to Strong	Olivine, Pyoxenes	
5	IM005-130707	Moderate		Moderate to Strong	Altered mafic minerals Magnetite	
6	IM006-130707	Moderate	Minor Iron Staining	No	Altered Quartz, feldspars, pyroxenes with some secondary copper oxides	
7	IM007-130707	Moderate	Iron Staining	No		2% Sulphides
8	IM008-130707		Minor Iron Staining	No	Olivines, Pyroxenes and micas	1 % Sulphides
9	IM001-280607	Moderate	Iron Staining	Weak	Olivine, Pyroxene	1-2% Sulphides
10	IM002-280607	High	Iron Staining	Weak	Olivine, Pyroxene	2-5% Sulphides
11	IM009-130707	Very High	Iron Staining	Weak	Weathered and altered mafic minerals with iron oxides	2-5% Sulphides
12	IM010-130707	Moderate	No	Moderate	Olivine, pyroxenes, minor plag	None
13	IM011-130707	High	Copper Oxides	No	Quartz, feldspar, altered mafic minerals, secondary copper oxides, pyrite, possibly graphite, micas, veining	2-5% Sulphides
14	IM002-100707	High	Iron Staining	Weak	Olivines, Pyroxenes with Malachite, pyrite, and micas	2% Sulphides
15	IM012-130707	High	Iron Staining	Weak	Olivines, Pyroxenes with Malachite, pyrite, and micas	2% Sulphides
16	IM013-130707	Moderate to high	Iron Staining	Moderate	Altered mafic minerals - olivine, pyroxene	
17	IM001-100707	High	Iron Staining	Weak	Olivine, pyroxenes, minor plag	
18	IM014-130707	High	Oxidized	No	Altered and weathered mafic minerals	No
19	IM001-140707	High	Iron Staining	No	Altered pyroxenes micas	No
20	IM002-140707	High	Iron Staining	No	Altered pyroxenes micas	No
21	IM003-140707	High	Oxidized	No	Altered pyroxenes micas	No
22	IM004-140707	High	Oxidized	Yes	Sulphides - pyrite and pyrrhotite	90% Sulphides
23	IM001-090707	High	Iron Staining	No		<1% Sulphides
24	IM002-090707	Moderate-high	Iron Staining	Weak	Olivine, Proxenes, minor plag	No Visible Sulphides
25	IM003-090707	Moderate	No	Weak	Olivine pyroxenes	
26	IM001-270607	Moderate	Iron Staining	No	Olivine, Pyroxene, Interstitial Altered Feldspars	No Visible Sulphides
27	IM002-270607	Low	Minor Iron Staining	No	Olivine, Pyroxene, Interstitial Altered Feldspars	1% Visible Sulphides
28	IM001-070707	High	Iron Staining	No		
29	IM002-070707	Moderate	Minor Iron Staining	Weak	Olivine pyroxenes	No Visible Sulphides
30	IM001-080707	Moderate	Minor Iron Staining	Weak	Olivine pyroxenes	No Visible Sulphides
31	IM001-300607	Moderate	Iron Staining	No	Plagioclase, quartz, dark matrix	<1% sulphides
32	IM001-030707	High	Iron Staining	No		
33	IM002-030707	High	Iron Staining	No	Quartz?	
34	IM003-030707	High	Iron Staining	No		
35	IM004-030707	Moderate	Moderate Iron Staining	No	Pyroxenes?	
36	IM001-110707	Moderate	No	No	Quartz, feldspar	<1% Sulphides

	SAMPLE ID	Additional Description
1	IM001-130707	Lichen
2	IM002-130707	
3	IM003-130707	More Gossaniferous than above samples
4	IM004-130707	Peridotite outcrop above Discovery trench
5	IM005-130707	Magnetite shear zone
6	IM006-130707	Alteration zone. Ultrmafics and sediments. Green crystals with cros cutting qtz feldspar veins
7	IM007-130707	FW to WRIC
8	IM008-130707	Visible Sulphides. Near FW contact
9	IM001-280607	Greasy lustre
10	IM002-280607	Sax Gossan adjacent to FW alteration zone
11	IM009-130707	Sax Gossan adjacent to FW alteration zone
12	IM010-130707	Dunite above contact with QZCB
13	IM011-130707	Alteration zone adjacent to ultramafics. Check thin section
14	IM002-100707	Extremely altered, gossaniferous rubble cro
15	IM012-130707	Extremely altered, gossaniferous rubble cro
16	IM013-130707	Deformed outcrop on ridge to the NW above Cessna showing, near contact zone with FW
17	IM001-100707	Near contact with FW. Extremely altered and possibly sheared
18	IM014-130707	Extremely weathered at surface. Appears gossaniferous at surface. Pale green with <1mm black mafic minerals
19	IM001-140707	Fly rock sample near adit entrance
20	IM002-140707	Fly rock sample near adit entrance
21	IM003-140707	Fly rock sample near adit entrance with secondary copper oxides and a yellow oxide?
22	IM004-140707	Fly rock at Main Zone showing
23	IM001-090707	Gossaniferous
24	IM002-090707	Cross cutting quratz/feldspar veins. Weathers orange brown. Dense rock
25	IM003-090707	Could be volcanic?
26	IM001-270607	
27	IM002-270607	Serpentinised Slickenslides
28	IM001-070707	
29	IM002-070707	Possibly Peridotite
30	IM001-080707	Possibly Peridotite
31	IM001-300607	
32	IM001-030707	Altered
33	IM002-030707	Altered
34	IM003-030707	Secondary copper, altered
35	IM004-030707	Relatively heavy
36	IM001-110707	Steve describes this as the most difficult rock to identify on the western side of the Denali Fault

Appendix E: Geotech Ltd VTEM Survey Report



REPORT ON A HELICOPTER-BORNE VERSATILE TIME DOMAIN ELECTROMAGNETIC (VTEM) GEOPHYSICAL SURVEY

Blocks B and C

Yukon, Canada

for

Umbono Capital Partners, LLC

By

Geotech Ltd.

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Survey flown in June - July, 2007

Project 7026

July, 2007

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REPORT ON A HELICOPTER-BORNE
VERSATILE TIME DOMAIN ELECTROMAGNETIC SURVEY

Blocks B and C, Yukon, Canada

Executive Summary

During the period of June 20th to July 23rd, 2007, Geotech Ltd. carried out a helicopter-borne geophysical survey for Umbono Capital Partners over two blocks in Yukon, Canada.

Principal geophysical sensors included a versatile time domain electromagnetic (VTEM) system and a cesium magnetometer. Ancillary equipment included a GPS navigation system and a radar altimeter. A total of 1676 line-km were flown.

In-field data processing involved quality control and compilation of data collected during the acquisition stage, using the in-field processing centre established at White River RV Park, in Yukon. Preliminary and final data processing, including generation of final digital data products were done at the office of Geotech Ltd. in Aurora, Ontario.

The processed survey results are presented as electromagnetic stacked profiles and total magnetic intensity grid.

Digital data includes all electromagnetic and magnetic products plus positional, altitude and raw data.

1. INTRODUCTION

1.1 General Considerations

These services are the result of the Agreement made between Geotech Ltd. and Umbono Capital Partners, LLC to perform a helicopter-borne geophysical survey over two blocks in Yukon, Canada.

1676 line-km of geophysical data were acquired during the survey.

Ian McCutcheon, acted on behalf of Umbono Capital Partners, LLC during data acquisition and data processing phases of this project.

Survey blocks are as shown in Appendix A.

The crew was based in White River RV Park, Yukon for the acquisition phase of the survey, as shown in Section 2 of this report.

Survey flying was completed on July 22nd, 2007. Preliminary data processing was carried out daily during the acquisition phase of the project. Final data presentation and data archiving was completed in the Aurora office of Geotech Ltd. by July, 2007.

1.2. Survey and System Specifications

Survey blocks ware flown at nominal traverse line spacing of 50 metres, at north-east to south-west direction. Tie lines were flown perpendicular to traverse lines.

Where possible, the helicopter maintained a mean terrain clearance of 80 metres, which translated into an average height of 40 meters above ground for the bird-mounted VTEM system and 65 meters for the magnetic sensor.

The survey was flown using an Astar B3 helicopter, registration C-GTFX. The helicopter was operated by TRK Helicopters Ltd. Details of the survey specifications may be found in Section 2 of this report.

1.3. Data Processing and Final Products

Data compilation and processing were carried out by the application of Geosoft OASIS Montaj and programs proprietary to Geotech Ltd.

Databases, grids and maps of final products are presented to Umbono Capital Partners, LLC.

The survey report describes the procedures for data acquisition, processing, final image presentation and the specifications for the digital data set.

1.4. Topographic Relief and cultural features

Survey blocks are located in the south-western part of Yukon, Canada, approximately 20 kilometers east of the border with Alaska, USA. Access by road is provided by the Alaska Highway (Hwy-1), which intersects one of the blocks.

Topographically, the survey area exhibits a very complex relief, with elevation range from 690 metres to 1800 metres above sea level. Due to this variation in topography the survey could not be flown at the planned terrain clearance.

Several lakes, rivers and swamp areas are observed.

Special care is recommended in identifying cultural features that might be detected in the survey area.

2. DATA ACQUISITION

2.1. Survey Area

The survey block (see location map, Appendix A) and general flight specifications are as follows:

Survey block	Line spacing (m)	Area (Km^2)	Line-km	Flight direction	Line number
B	50	44.6	894.5	N46°E	L1000 - 3790
	500		85.9	N134°E	T4110 - 4160
C	50	36.6	743.3	N146°E	L6001 - 8270
	500		70.3	N134°E	T8910 - 8960

Table 1 - Survey block

Survey block boundaries co-ordinates are provided in Appendix B.

2.2. Survey Operations

Survey operations were based in White River RV Park, Yukon for the acquisition phase of the survey.

The following table shows the timing of the flying.

Date	Flight #	Km Flown	Block	Crew Location	Comments
20-June-07				White River RV Park	Mobilization
21-June-07	1, 2	159	B	White River RV Park	Production
22-June-07			B	White River RV Park	System troubleshooting
23-June-07			B	White River RV Park	System troubleshooting
24-June-07			B	White River RV Park	System troubleshooting
25-June-07	3	12	B	White River RV Park	Limited production – troubleshooting
26-June-07	4, 5, 6, 7	192	B	White River RV Park	Production
27-June-07		129	B	White River RV Park	Limited production – troubleshooting
28-June-07			B	White River RV Park	System troubleshooting
29-June-07	13	12	B	White River RV Park	Test flight
30-June-07	14	60	B	White River RV Park	Production aborted due to weather
1-July-07	15, 16	111	B	White River RV Park	Production delayed due to weather
2-July-07				White River RV Park	No production due to weather

3-July-07	17, 18, 19	21	B	White River RV Park	Production aborted due to weather
4-July-07	20, 21, 22	117	B	White River RV Park	Production
5-July-07	23	12	B	White River RV Park	Production low – crew change
6-July-07	24, 25, 26, 27, 28	129	B	White River RV Park	Production
7-July-07	29, 30, 31	96	C	White River RV Park	Limited production – system troubleshooting
8-July-07				White River RV Park	System maintenance
9-July-07				White River RV Park	System maintenance
10-July-07				White River RV Park	System maintenance
11-July-07				White River RV Park	System maintenance
12-July-07				White River RV Park	System maintenance
13-July-07				White River RV Park	System maintenance
14-July-07				White River RV Park	Test flights
15-July-07	32	12	C	White River RV Park	Test flight
16-July-07	33, 34, 35, 36	191	C	White River RV Park	Production
17-July-07				White River RV Park	No production due to weather
18-July-07	37, 38, 39	131	C	White River RV Park	Production aborted due to weather
19-July-07	40, 41	110	C	White River RV Park	Production
20-July-07	42, 43	24	C	White River RV Park	Limited production – system troubleshooting
21-July-07	44, 45, 46, 47, 48	124	C	White River RV Park	Production
22-July-07	49, 50	98	C	White River RV Park	Production, survey complete
23-July-07				White River RV Park	Demobilization

Table 2 - Survey schedule

2.3. Flight Specifications

The nominal EM sensor terrain clearance was 40 m (EM bird height above ground, i.e. helicopter is maintained 80 m above ground). Nominal survey speed was 80 km/hour. The data recording rates of the data acquisition was 0.1 second for electromagnetics and magnetometer, 0.2 second for altimeter and GPS. This translates to a geophysical reading about every 2 metres along flight track. Navigation was assisted by a GPS receiver and data acquisition system, which reports GPS co-ordinates as latitude/longitude and directs the pilot over a pre-programmed survey grid.

The operator was responsible for monitoring of the system integrity. He also maintained a detailed flight log during the survey, tracking the times of the flight as well as any unusual geophysical or topographic feature.

On return of the aircrew to the base camp the survey data was transferred from a compact flash card (PCMCIA) to the data processing computer.

2.4. Aircraft and Equipment

2.4.1. Survey Aircraft

An Astar B3 helicopter, registration C-GTFX - owned and operated by TRK Helicopters Ltd. - was used for the survey. Installation of the geophysical and ancillary equipment was carried out by Geotech Ltd.

2.4.2. Electromagnetic System

The electromagnetic system was a Geotech Time Domain EM (VTEM) system. The configuration is as indicated in Figure 1 below.

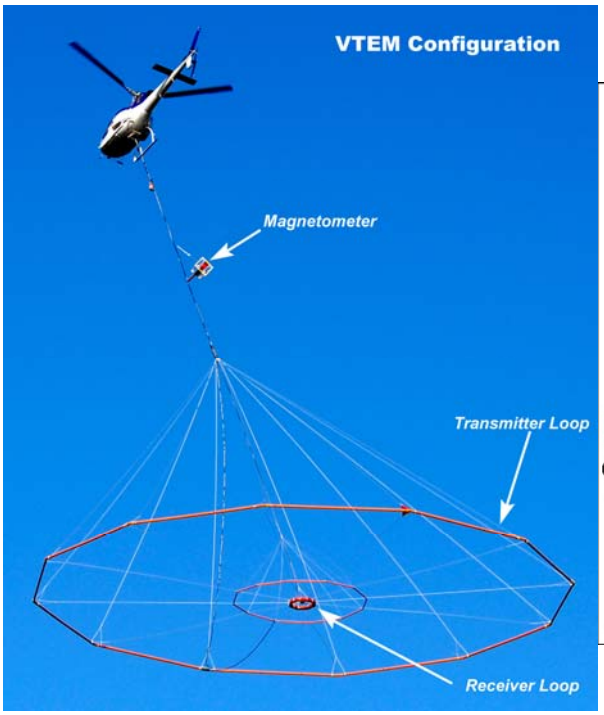


Figure 1 – VTEM configuration

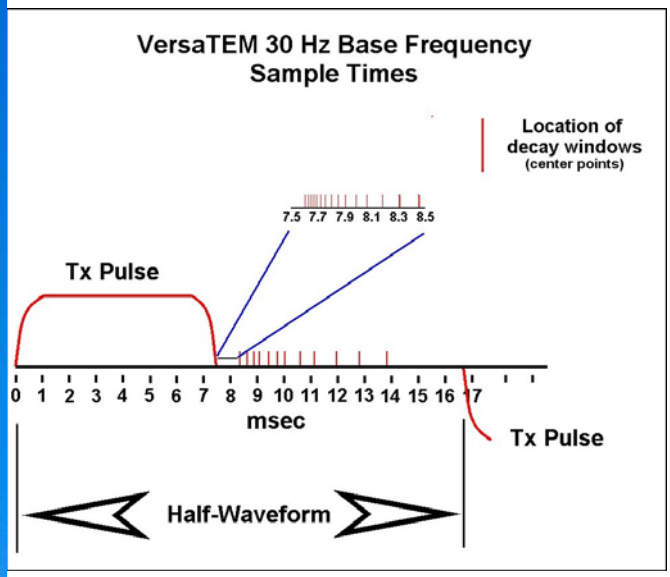


Figure 2 – Sample times

Receiver and transmitter coils are concentric and Z-direction oriented.
The receiver decay recording scheme is shown diagrammatically in Figure 2.

Twenty-four measurement gates were used in the range from 120 μs to 6578 μs, as shown in Table 3.

VTEM Decay Sampling scheme				
Array Index	(Microseconds)			
	Time Gate	Start	End	Width
10	120	110	131	21
11	141	131	154	24
12	167	154	183	29
13	198	183	216	34
14	234	216	258	42
15	281	258	310	53
16	339	310	373	63
17	406	373	445	73
18	484	445	529	84
19	573	529	628	99
20	682	628	750	123
21	818	750	896	146
22	974	896	1063	167
23	1151	1063	1261	198
24	1370	1261	1506	245
25	1641	1506	1797	292
26	1953	1797	2130	333
27	2307	2130	2526	396
28	2745	2526	3016	490
29	3286	3016	3599	583
30	3911	3599	4266	667
31	4620	4266	5058	792
32	5495	5058	6037	979
33	6578	6037	7203	1167

Table 3 - VTEM decay sampling scheme

Transmitter coil diameter was 26 metres, the number of turns was 4.
Transmitter pulse repetition rate was 30 Hz.
Peak current was 180 Amp.
Pulse width was 7.2 ms
Duty cycle was 43%.

Peak dipole moment was 382,300 NIA.

Receiver coil diameter was 1.2 metre, the number of turns was 100.
Receiver effective area was 113.1 m^2
Wave form – trapezoid.
Recording sampling rate was 10 samples per second.

The EM bird was towed 42 m below the helicopter.

2.4.3. Airborne magnetometer

The magnetic sensor utilized for the survey was a Geometrics optically pumped cesium vapour magnetic field sensor, mounted in a separated bird, towed 15 metres below the helicopter, as shown on figure 1. The sensitivity of the magnetic sensor is 0.02 nanoTesla (nT) at a sampling interval of 0.1 seconds. The magnetometer sends the measured magnetic field strength as nanoTeslas to the data acquisition system via the RS-232 port.

2.4.4. Ancillary Systems

2.4.4.1. Radar Altimeter

A Terra TRA 3000/TRI 40 radar altimeter was used to record terrain clearance. The antenna was mounted beneath the bubble of the helicopter cockpit.

2.4.4.2. GPS Navigation System

The navigation system used was a Geotech PC based navigation system utilizing a NovAtel's WAAS enable OEM4-G2-3151W GPS receiver, Geotech navigate software, a full screen display with controls in front of the pilot to direct the flight and an NovAtel GPS antenna mounted on the helicopter tail.
The co-ordinates of the block were set-up prior to the survey and the information was fed into the airborne navigation system.

2.4.4.3. Digital Acquisition System

A Geotech data acquisition system recorded the digital survey data on an internal compact flash card. Data is displayed on an LCD screen as traces to allow the operator to monitor the integrity of the system. The data type and sampling interval as provided in table 4.

DATA TYPE	SAMPLING
TDEM	0.1 sec
Magnetometer	0.1 sec
GPS Position	0.2 sec
RadarAltimeter	0.2 sec

Table 4 - Sampling Rates

2.4.5. Base Station

A combine magnetometer/GPS base station was utilized on this project. A Geometrics Cesium vapour magnetometer was used as a magnetic sensor with a sensitivity of 0.001 nT. The base station was recording the magnetic field together with the GPS time at 1 Hz on a base station computer.

The base station magnetometer sensor was installed where the crew was housed, away from electric transmission lines and moving ferrous objects such as motor vehicles.

The magnetometer base station's data was backed-up to the data processing computer at the end of each survey day.

3. PERSONNEL

The following Geotech Ltd. personnel were involved in the project.

Field

Field Operation manager:	Shawn Grant
Project manager:	Harish Kumar
Crew chief:	Colin Lennox
Operators:	Darrel Hamill
	Ioan Serbu
Geophysicist:	Sean Hayes
System engineer:	Victor Vetrov

The survey pilot and the mechanic engineer were employed directly by the helicopter operator – TRK Helicopters Ltd.

Pilots:	Roy Stevenson
	Pierre F.
Engineer:	M. Morton

Office

QC Geophysicist:	Nick Venter
Data Processing / Reporting:	Marta Orta

Data acquisition and processing phases were carried out under the supervision of Andrei Bagrianski, Surveys Manager. Overall management of the project was undertaken by Edward Morrison, President, Geotech Ltd.

4. DATA PROCESSING AND PRESENTATION

4.1. Flight Path

The flight path, recorded by the acquisition program as WGS 84 latitude/longitude, was converted into the UTM coordinate system in Oasis Montaj.

The flight path was drawn using linear interpolation between x,y positions from the navigation system. Positions are updated every second and expressed as UTM eastings (x) and UTM northings (y).

4.2. Electromagnetic Data

A three stage digital filtering process was used to reject major sferic events and to reduce system noise. Local sferic activity can produce sharp, large amplitude events that cannot be removed by conventional filtering procedures. Smoothing or stacking will reduce their amplitude but leave a broader residual response that can be confused with geological phenomena. To avoid this possibility, a computer algorithm searches out and rejects the major sferic events. The filter used was a 16 point non-linear filter.

The signal to noise ratio was further improved by the application of a low pass linear digital filter. This filter has zero phase shift which prevents any lag or peak displacement from occurring, and it suppresses only variations with a wavelength less than about 1 second or 20 metres. This filter is a symmetrical 1 sec linear filter.

The results are presented as stacked profiles of EM voltages for the time gates, in linear - logarithmic scale for both B-field and dB/dt response.

Generalized modeling results of the VTEM system, written by Geophysicist Roger Barlow, are shown in Appendix C.

Graphical representation of the VTEM output voltage of the receiver coil is shown in Appendix D.

4.3. Magnetic Data

The processing of the magnetic data involved the correction for diurnal variations by using the digitally recorded ground base station magnetic values. The base station magnetometer data was edited and merged into the Geosoft GDB database on a daily basis. The aeromagnetic data was corrected for diurnal variations by subtracting the observed magnetic base station deviations.

Tie line levelling was carried out by adjusting intersection points along traverse lines. A micro-levelling procedure was applied to remove persistent low-amplitude components of flight-line noise remaining in the data.

The corrected magnetic data was interpolated between survey lines using a random point gridding method to yield x-y grid values for a standard grid cell size of approximately 0.2 cm at the mapping scale. The Minimum Curvature algorithm was used to interpolate values onto a rectangular regular spaced grid.

5. DELIVERABLES

5.1. Survey Report

The survey report describes the data acquisition, processing, and final presentation of the survey results.

The survey report is provided in two paper copies and digitally in PDF format.

5.2. Maps

Final maps were produced at a scale of 1:20,000. The coordinate/projection system used was NAD83, UTM zone 7 north. All maps show the flight path trace and topographic data. Latitude and longitude are also noted on maps.

The following maps are presented on paper,

- dB/dt profiles, Time Gates 0.234 – 6.578 ms in linear - logarithmic scale
- B-field profiles, Time Gates 0.234 – 6.578 ms in linear - logarithmic scale
- Total Magnetic intensity contours and colour image

5.3. Digital Data

Two copies of CD-ROMs were prepared.

There are two (2) main directories,

Data	contains databases, grids and maps, as described below. There are two sub-directories for each survey block.
Report	contains a copy of the report and appendices in PDF format.

- Databases in Geosoft GDB format, containing the following channels:

X:	X positional data (meters – NAD83, utm zone 7 north)

Y:	Y positional data (meters – NAD83, utm zone 7 north)
Lon:	Longitude data (degree – WGS84)
Lat:	Latitude data (degree – WGS84)
Z:	GPS antenna elevation (meters - ASL)
Radar:	Helicopter terrain clearance from radar altimeter (meters - AGL)
DEM:	Digital elevation model (meters)
Gtime1:	GPS time (seconds of the day)
Mag1:	Raw Total Magnetic field data (nT)
Basemag:	Magnetic diurnal variation data (nT)
Mag2:	Total Magnetic field diurnal variation corrected data (nT)
Mag3:	Leveled Total Magnetic field data (nT)
SF[10]:	dB/dt 120 microsecond time channel (pV/A/m^4)
SF[11]:	dB/dt 141 microsecond time channel (pV/A/m^4)
SF[12]:	dB/dt 167 microsecond time channel (pV/A/m^4)
SF[13]:	dB/dt 198 microsecond time channel (pV/A/m^4)
SF[14]:	dB/dt 234 microsecond time channel (pV/A/m^4)
SF[15]:	dB/dt 281 microsecond time channel (pV/A/m^4)
SF[16]:	dB/dt 339 microsecond time channel (pV/A/m^4)
SF[17]:	dB/dt 406 microsecond time channel (pV/A/m^4)
SF[18]:	dB/dt 484 microsecond time channel (pV/A/m^4)
SF[19]:	dB/dt 573 microsecond time channel (pV/A/m^4)
SF[20]:	dB/dt 682 microsecond time channel (pV/A/m^4)
SF[21]:	dB/dt 818 microsecond time channel (pV/A/m^4)
SF[22]:	dB/dt 974 microsecond time channel (pV/A/m^4)
SF[23]:	dB/dt 1151 microsecond time channel (pV/A/m^4)
SF[24]:	dB/dt 1370 microsecond time channel (pV/A/m^4)
SF[25]:	dB/dt 1641 microsecond time channel (pV/A/m^4)
SF[26]:	dB/dt 1953 microsecond time channel (pV/A/m^4)
SF[27]:	dB/dt 2307 microsecond time channel (pV/A/m^4)
SF[28]:	dB/dt 2745 microsecond time channel (pV/A/m^4)
SF[29]:	dB/dt 3286 microsecond time channel (pV/A/m^4)
SF[30]:	dB/dt 3911 microsecond time channel (pV/A/m^4)
SF[31]:	dB/dt 4620 microsecond time channel (pV/A/m^4)
SF[32]:	dB/dt 5495 microsecond time channel (pV/A/m^4)
SF[33]:	dB/dt 6578 microsecond time channel (pV/A/m^4)
BF[10]:	B-field 120 microsecond time channel (pV*ms)/(A*m4)
BF[11]:	B-field 141 microsecond time channel (pV*ms)/(A*m4)
BF[12]:	B-field 167 microsecond time channel (pV*ms)/(A*m4)
BF[13]:	B-field 198 microsecond time channel(pV*ms)/(A*m4)
BF[14]:	B-field 234 microsecond time channel (pV*ms)/(A*m4)
BF[15]:	B-field 281 microsecond time channel (pV*ms)/(A*m4)
BF[16]:	B-field 339 microsecond time channel (pV*ms)/(A*m4)

BF[17]: B-field 406 microsecond time channel (pV*ms)/(A*m4)
BF[18]: B-field 484 microsecond time channel (pV*ms)/(A*m4)
BF[19]: B-field 573 microsecond time channel (pV*ms)/(A*m4)
BF[20]: B-field 682 microsecond time channel (pV*ms)/(A*m4)
BF[21]: B-field 818 microsecond time channel (pV*ms)/(A*m4)
BF[22]: B-field 974 microsecond time channel (pV*ms)/(A*m4)
BF[23]: B-field 1151 microsecond time channel (pV*ms)/(A*m4)
BF[24]: B-field 1370 microsecond time channel (pV*ms)/(A*m4)
BF[25]: B-field 1641 microsecond time channel (pV*ms)/(A*m4)
BF[26]: B-field 1953 microsecond time channel (pV*ms)/(A*m4)
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BF[30]: B-field 3911 microsecond time channel (pV*ms)/(A*m4)
BF[31]: B-field 4620 microsecond time channel (pV*ms)/(A*m4)
BF[32]: B-field 5495 microsecond time channel (pV*ms)/(A*m4)
BF[33]: B-field 6578 microsecond time channel (pV*ms)/(A*m4)
PLM: Power line monitor

Electromagnetic B-field and dB/dt data is found in array channel format between indexes 10 – 33, as described above.

- Database VTEM_waveform.gdb in Geosoft GDB format, containing the following channels:

  Time: Sampling rate interval, 10.416 microseconds
  Volt: output voltage of the receiver coil (volt)

- Grids in Geosoft GRD format, as follow,

  Mag_***bb***: Total magnetic intensity (nT)
  DEM_***bb***: Digital elevation model (m)

  Where,
  bb represents the block name

  A Geosoft .GRD file has a .GI metadata file associated with it, containing grid projection information.
  Grid cell size of 10 meters was used.

- Maps at 1:20,000 scale in Geosoft MAP format, as follow,

Mag:	Total magnetic intensity contours and colour image
dB/dtProf:	dB/dt profiles, Time Gates 0.234 – 6.578 μs in linear - logarithmic scale
BfieldProf:	B-field profiles, Time Gates 0.234 – 6.578 μs in linear - logarithmic scale

- Google Earth file *Flight_Path.kmz* showing the flight path of the block.

  Free version of Google Earth software can be downloaded from, http://earth.google.com/download-earth.html

- A *readme.txt* file describing the content of digital data, as described above.

6. CONCLUSIONS

A helicopter-borne versatile time domain electromagnetic (VTEM) geophysical survey has been completed over two blocks in Yukon, Canada.

The total area coverage is 81.2 km^2. Total survey line coverage is 1676 line kilometres. The principal sensors included a Time Domain EM system and a magnetometer. Results have been presented as stacked profiles and contour colour images at a scale of 1:20,000.

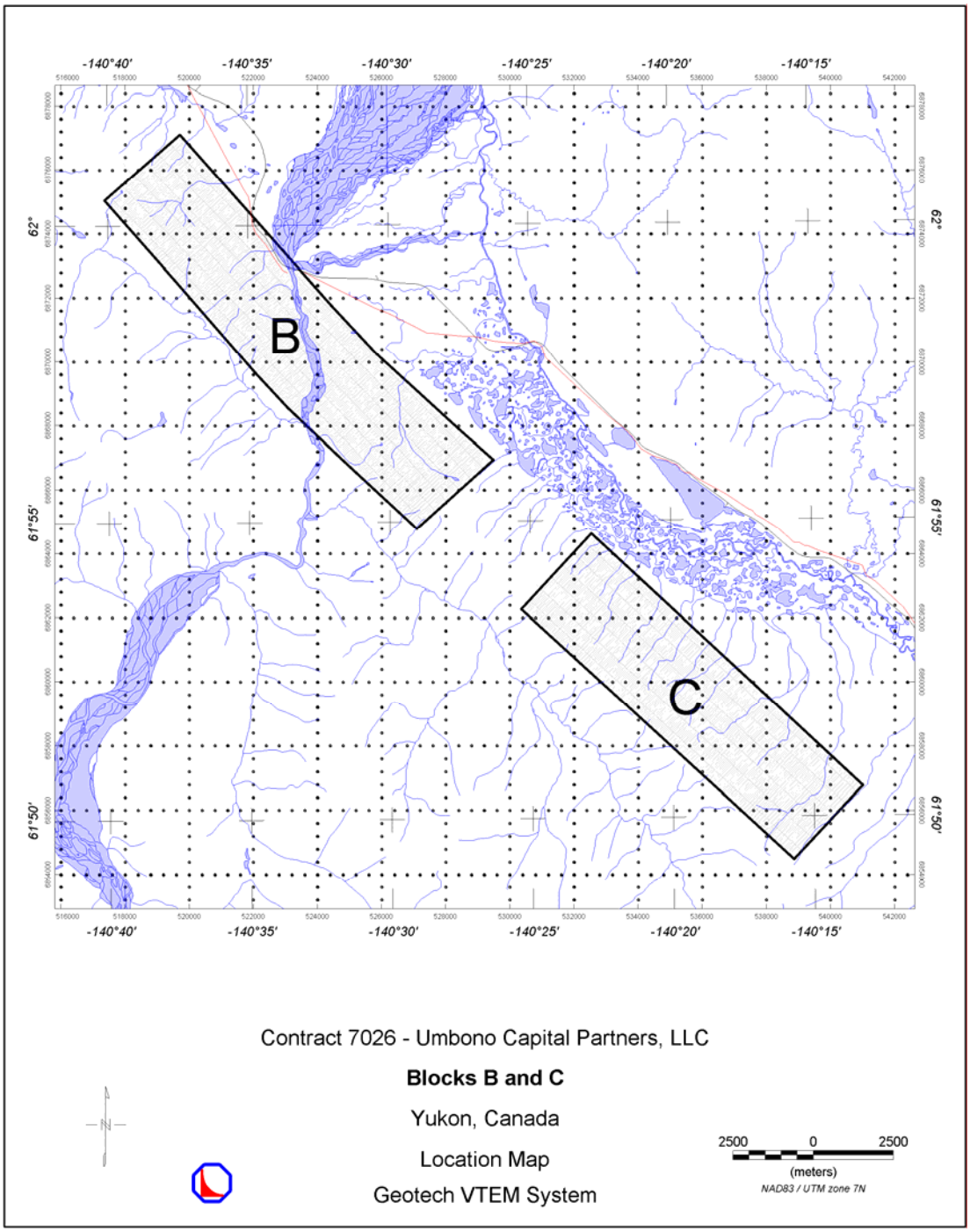
Final data processing at the office of Geotech Ltd. in Aurora, Ontario was carried out under the supervision of Andrei Bagrianski, Surveys Manager.

Respectfully submitted,

Marta Orta
Geotech Ltd.
July 2007

APPENDIX A

SURVEY BLOCKS LOCATION MAP



APPENDIX B

SURVEY BLOCK COORDINATES
(NAD83, UTM zone 7 north)

Block B

X	Y
519705	6877110
524424	6871775
525853	6870241
528403	6867894
529487	6866946
527097	6864784
524831	6866890
523063	6868566
522071	6869638
519625	6872459
517358	6875040

Block C

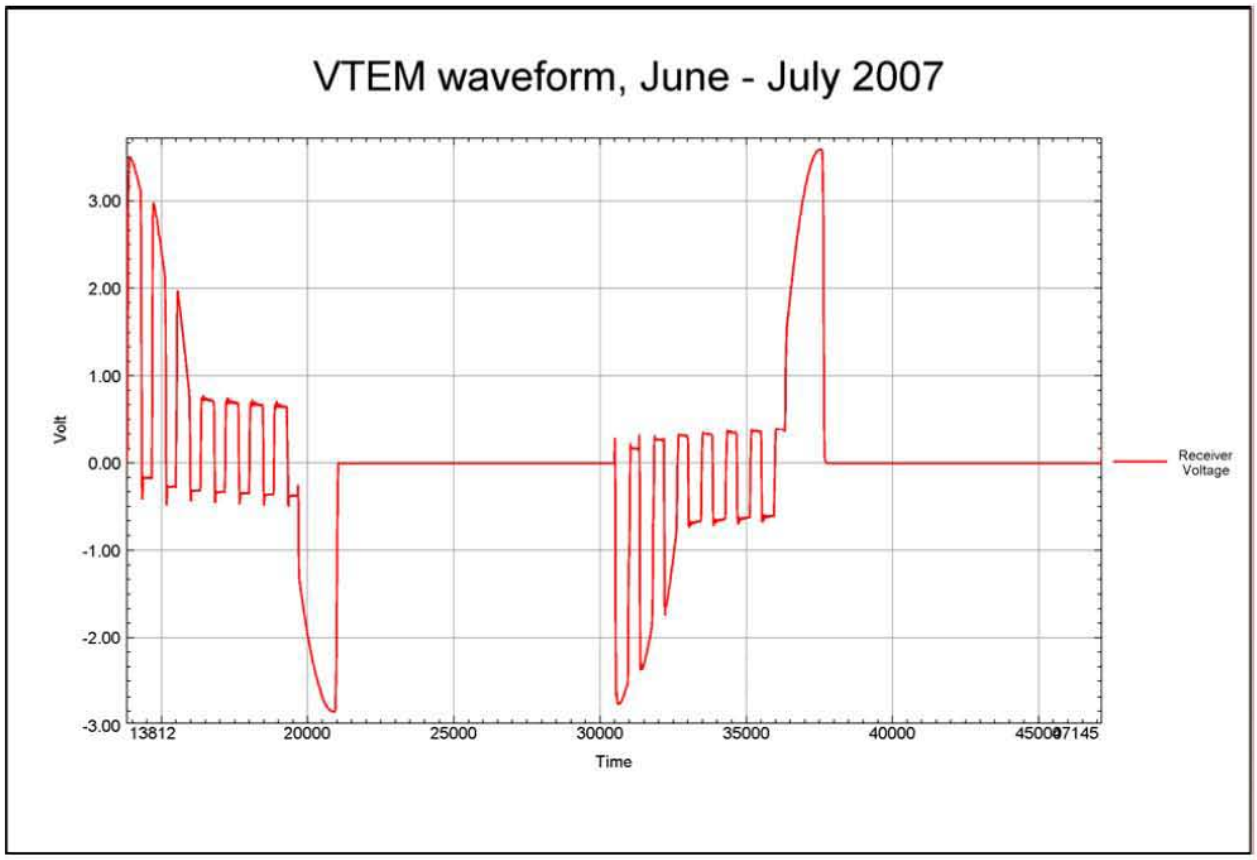
X	Y
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541008	6856788
538864	6854496
530359	6862268

APPENDIX C

MODELING VTEM DATA

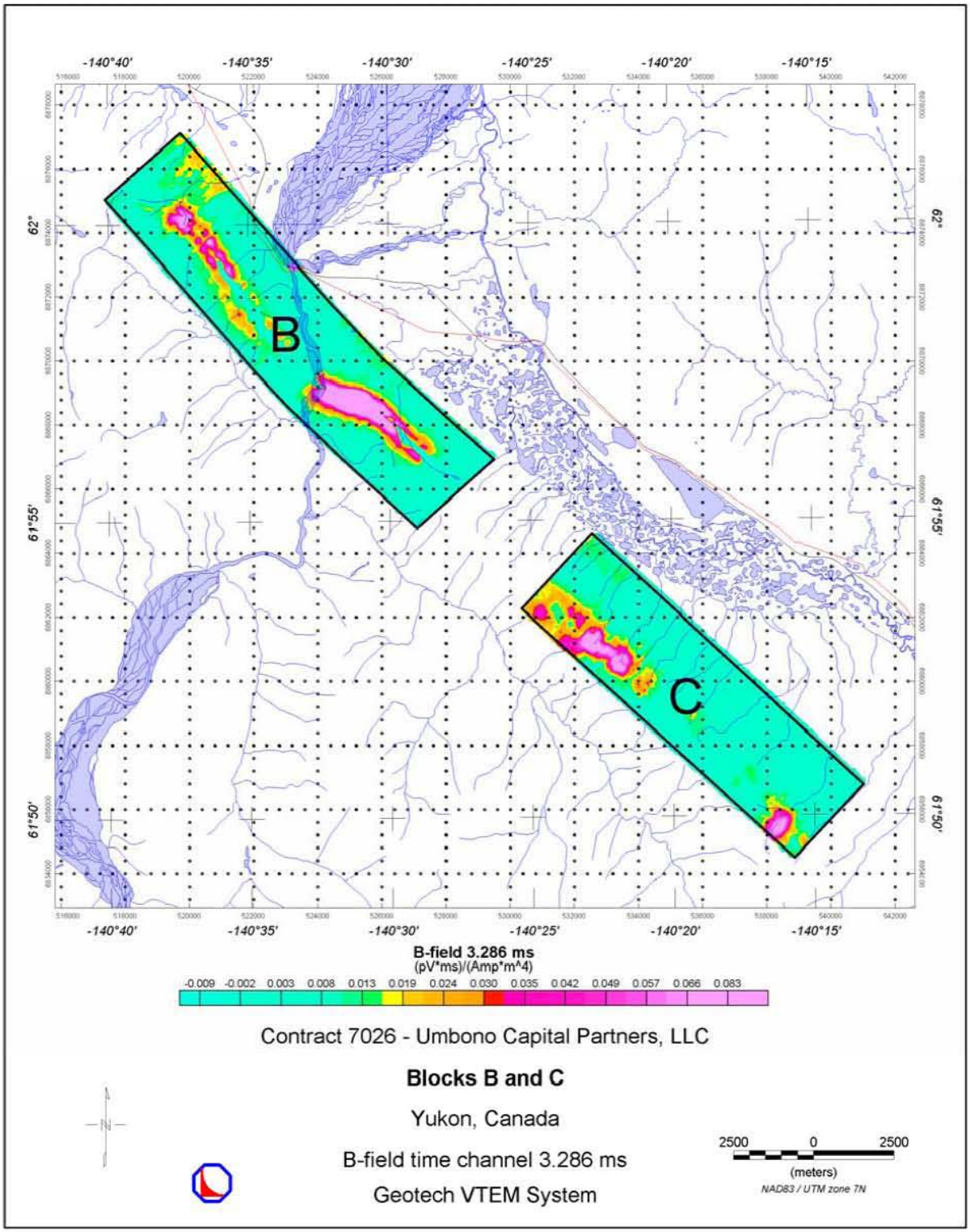
APPENDIX D

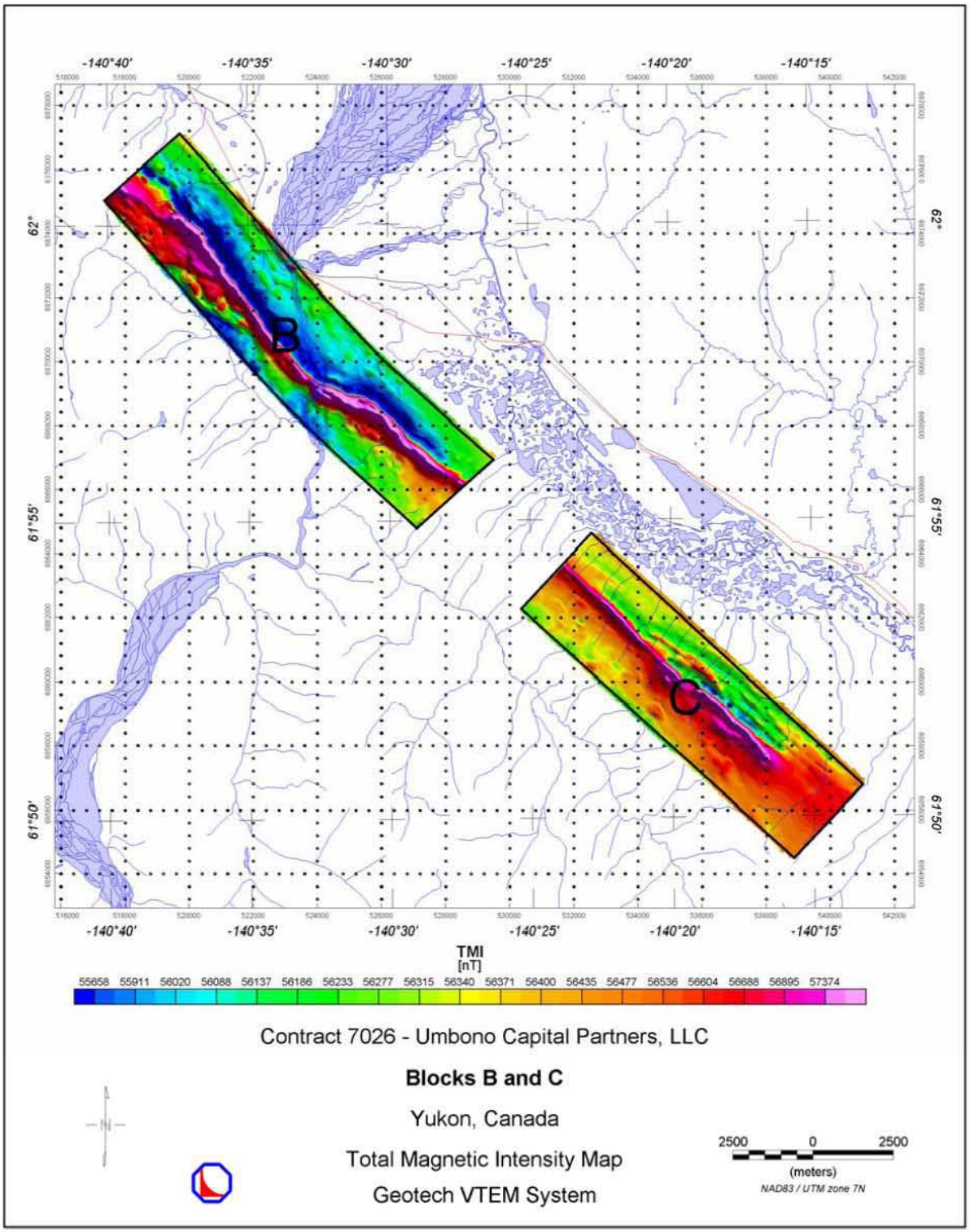
VTEM WAVE FORM



APPENDIX E

GEOPHYSICAL MAPS


-140°40'
-140°35'
-140°30'
-140°25'
-140°20'
-140°15'
62°
61°55'
61°50'
B
C
B-field 3.286 ms
(pV*ms)/(Amp*m^4)
-0.009 -0.002 0.003 0.008 0.013 0.019 0.024 0.030 0.035 0.042 0.049 0.057 0.066 0.083
Contract 7026 - Umbono Capital Partners, LLC
Blocks B and C
Yukon, Canada
B-field time channel 3.286 ms
Geotech VTEM System
2500 0 2500
(meters)
NAD83 / UTM zone 7N


-140°40'
-140°35'
-140°30'
-140°25'
-140°20'
-140°15'
62°
61°55'
61°50'
B
C
TMI
[nT]
55658 55911 56020 56088 56137 56186 56233 56277 56315 56340 56371 56400 56435 56477 56536 56604 56688 56895 57374
Contract 7026 - Umbono Capital Partners, LLC
Blocks B and C
Yukon, Canada
Total Magnetic Intensity Map
Geotech VTEM System
2500 0 2500
(meters)
NAD83 / UTM zone 7N

MODELING VTEM DATA

Introduction

The VTEM system is based on a concentric or central loop design, whereby, the receiver is positioned at the centre of a 26.1 meters diameter transmitter loop that produces a dipole moment up to 625,000 NIA at peak current. The wave form is a bi-polar, modified square wave with a turn-on and turn-off at each end. With a base frequency of 30 Hz, the duration of each pulse is approximately 7.2 milliseconds followed by an off time where no primary field is present.

During turn-on and turn-off, a time varying field is produced (dB/dt) and an electro-motive force (emf) is created as a finite impulse response. A current ring around the transmitter loop moves outward and downward as time progresses. When conductive rocks and mineralization are encountered, a secondary field is created by mutual induction and measured by the receiver at the centre of the transmitter loop.

Measurements are made during the off-time, when only the secondary field (representing the conductive targets encountered in the ground) is present.

Late in 2006, Geotech Ltd. incorporated a B-Field measurement in the VTEM system. The B-Field measurements have the advantage of containing more spectral energy at low spectral frequencies than the dB/dt measurements; hence, greater amplitudes and accuracies when encountering targets with higher conductances (> 500 Siemens). The converse is true at higher spectral frequencies where dB/dt measurements are best applied. The B-field is most widely used in nickel exploration where a small percentage of targets are extremely conductive (> 2500 Siemens) and less resolvable or invisible (below the noise threshold) using dB/dt measurements.

Efficient modeling of the results can be carried out on regularly shaped geometries, thus yielding close approximations to the parameters of the measured targets. The following is a description of a series of common models made for the purpose of promoting a general understanding of the measured results.

Variation of Plate Depth

Geometries represented by plates of different strike length, depth extent, dip, plunge and depth below surface can be varied with characteristic parameters like conductance of the target, conductance of the host and conductivity/thickness and thickness of the overburden layer.

Diagrammatic models for a vertical plate are shown in figures A and G at two different depths, all other parameters remaining constant. With this transmitter-receiver geometry, the classic **M** shaped response is generated. Figure A shows a plate where the top is near surface. Here, amplitudes of the duel peaks are higher and symmetrical with the zero centre positioned directly above the plate. Most important is the separation distance of the peaks. This distance is small when the plate is near surface and widens with a linear relationship as the plate (depth to top) increases. Figure G shows a much deeper plate where the separation distance of the peaks is much wider and the amplitudes of the channels have decreased.

Variation of Plate Dip

As the plate dips and departs from the vertical position, the peaks become asymmetrical. Figure B shows a near surface plate dipping 80º. Note that the direction of dip is toward the high shoulder of the response and the top of the plate remains under the centre minimum.

As the dip increases, the aspect ratio (Min/Max) decreases and this aspect ratio can be used as an empirical guide to dip angles from near 90º to about 30º. The method is not sensitive enough where dips are less than about 30º. Figure E shows a plate dipping 45º and, at this angle, the minimum shoulder starts to vanish. In Figure D, a flat lying plate is shown, relatively near surface. Note that the twin peak anomaly has been replaced by a symmetrical shape with large, bell shaped, channel amplitudes which decay relative to the conductance of the plate.

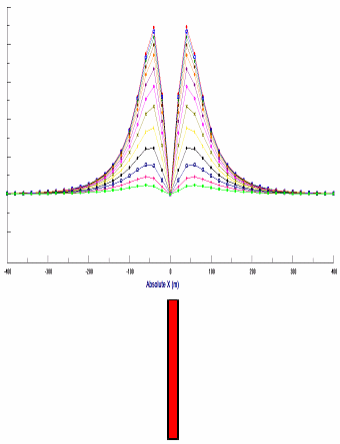
Figure H shows a special case where two plates are positioned to represent a synclinal structure. Note that the main characteristic to remember is the centre amplitudes are higher (approximately double) compared to the high shoulder of a single plate. This model is very representative of tightly folded formations where the conductors where once flat lying.

Variation of Prism Depth

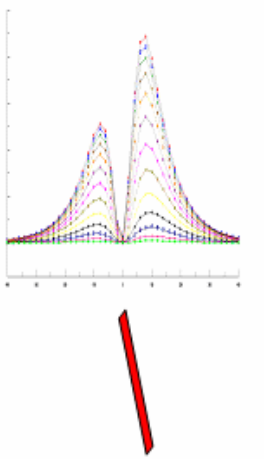
Finally, with prism models, another algorithm is required to represent current on the plate. A plate model is considered to be infinitely thin with respect to thickness and incapable of representing the current in the thickness dimension. A prism model is constructed to deal with this problem, thereby, representing the thickness of the body more accurately.

Figures C, F and I show the same prism at increasing depths. Aside from an expected decrease in amplitude, the side lobes of the anomaly show a widening with deeper prism depths of the bell shaped early time channels.

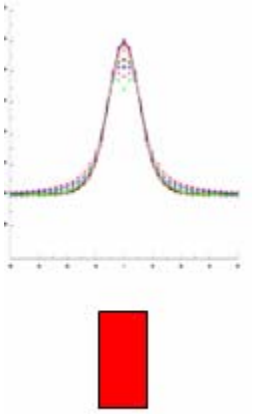
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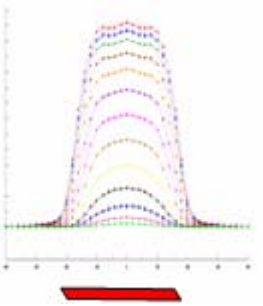
B



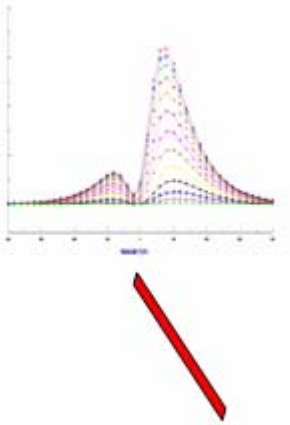
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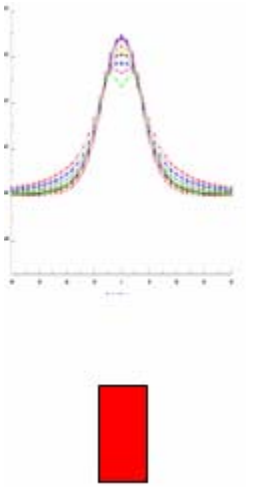
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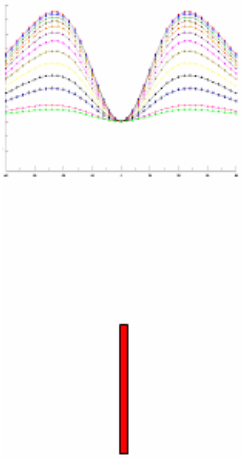
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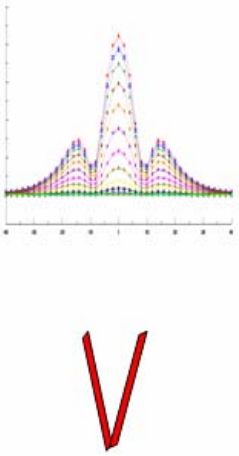
F



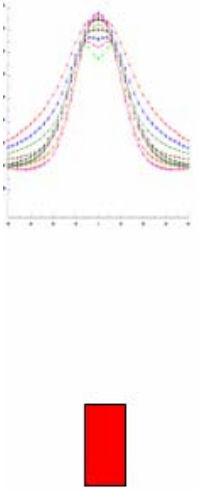
G



H



I



General Modeling Concepts

A set of models has been produced for the Geotech VTEM® system with explanation notes (see models A to I above). The reader is encouraged to review these models, so as to get a general understanding of the responses as they apply to survey results. While these models do not begin to cover all possibilities, they give a general perspective on the simple and most commonly encountered anomalies.

When producing these models, a few key points were observed and are worth noting as follows:

- For near vertical and vertical plate models, the top of the conductor is always located directly under the centre low point between the two shoulders in the classic **M** shaped response.

- As the plate is positioned at an increasing depth to the top, the shoulders of the **M** shaped response, have a greater separation distance.

- When faced with choosing between a flat lying plate and a prism model to represent the target (broad response) some ambiguity is present and caution should be exercised.

- With the concentric loop system and Z-component receiver coil, virtually all types of conductors and most geometries are most always well coupled and a response is generated (see model H). Only concentric loop systems can map this type of target.

The modelling program used to generate the responses was prepared by PetRos Eikon Inc. and is one of a very few that can model a wide range of targets in a conductive half space.

General Interpretation Principals

Magnetics

The total magnetic intensity responses reflect major changes in the magnetite and/or other magnetic minerals content in the underlying rocks and unconsolidated overburden. Precambrian rocks have often been subjected to intense heat and pressure during structural and metamorphic events in their history. Original signatures imprinted on these rocks at the time of formation have, it most cases, been modified, resulting in low magnetic susceptibility values.

The amplitude of magnetic anomalies, relative to the regional background, helps to assist in identifying specific magnetic and non-magnetic rock units (and conductors) related to, for example, mafic flows, mafic to ultramafic intrusives, felsic intrusives, felsic volcanics and/or sediments etc. Obviously, several geological sources can produce the same magnetic response. These ambiguities can be reduced considerably if basic geological information on the area is available to the geophysical interpreter.

In addition to simple amplitude variations, the shape of the response expressed in the wave length and the symmetry or asymmetry, is used to estimate the depth, geometric parameters and magnetization of the anomaly. For example, long narrow magnetic linears usually reflect mafic flows or intrusive dyke features. Large areas with complex magnetic patterns may be produced by intrusive bodies with significant magnetization, flat lying magnetic sills or sedimentary iron formation. Local isolated circular magnetic patterns often represent plug-like igneous intrusives such as kimberlites, pegmatites or volcanic vent areas.

Because the total magnetic intensity (TMI) responses may represent two or more closely spaced bodies within a response, the second derivative of the TMI response may be helpful for distinguishing these complexities. The second derivative is most useful in mapping near surface linears and other subtle magnetic structures that are partially masked by nearby higher amplitude magnetic features. The broad zones of higher magnetic amplitude, however, are severely attenuated in the vertical derivative results. These higher amplitude zones reflect rock units having strong magnetic susceptibility signatures. For this reason, both the TMI and the second derivative maps should be evaluated together.

Theoretically, the second derivative, zero contour or colour delineates the contacts or limits of large sources with near vertical dip and shallow depth to the top. The vertical gradient map also aids in determining contact zones between rocks with a susceptibility contrast, however, different, more complicated rules of thumb apply.

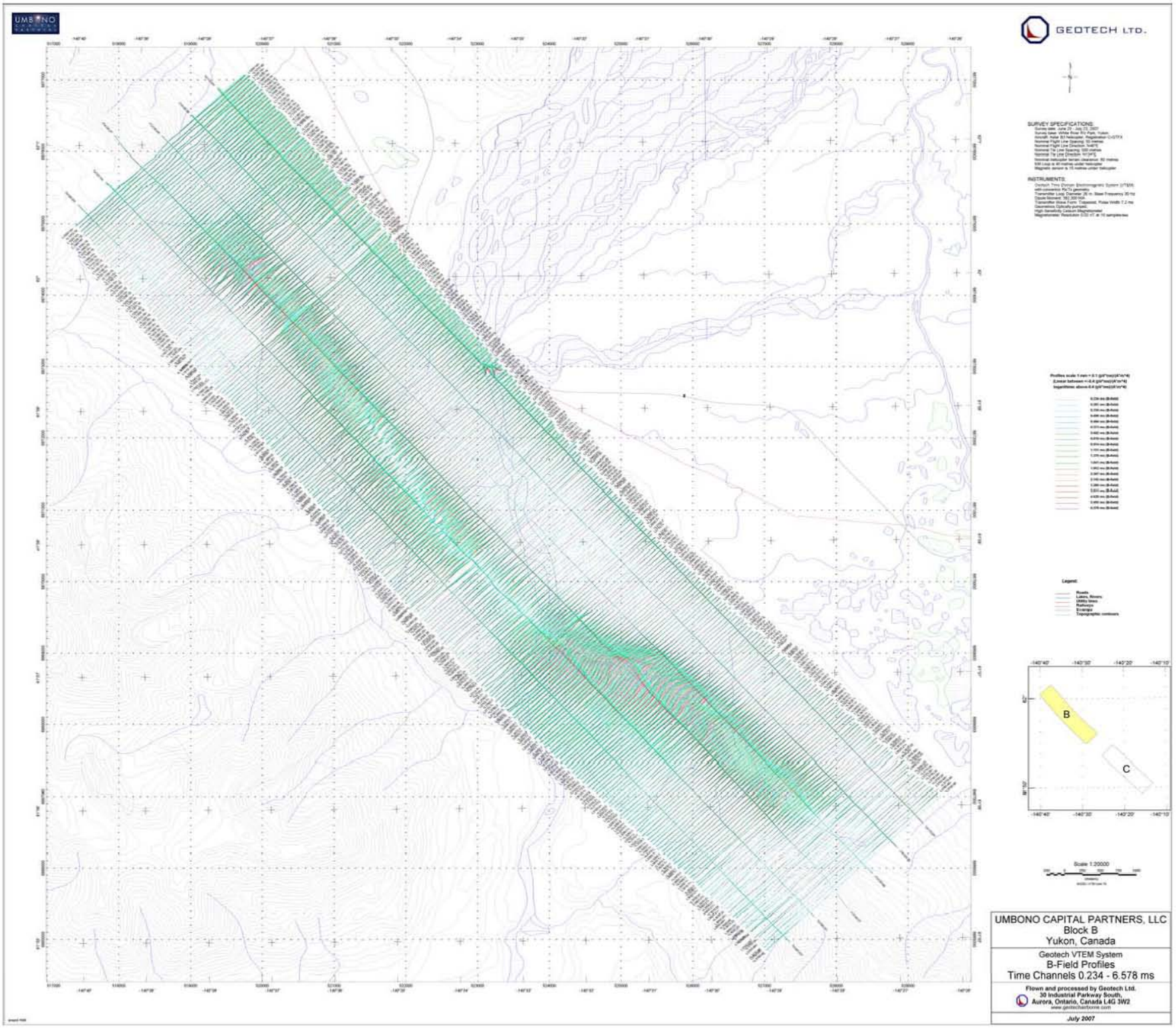
Concentric Loop EM Systems

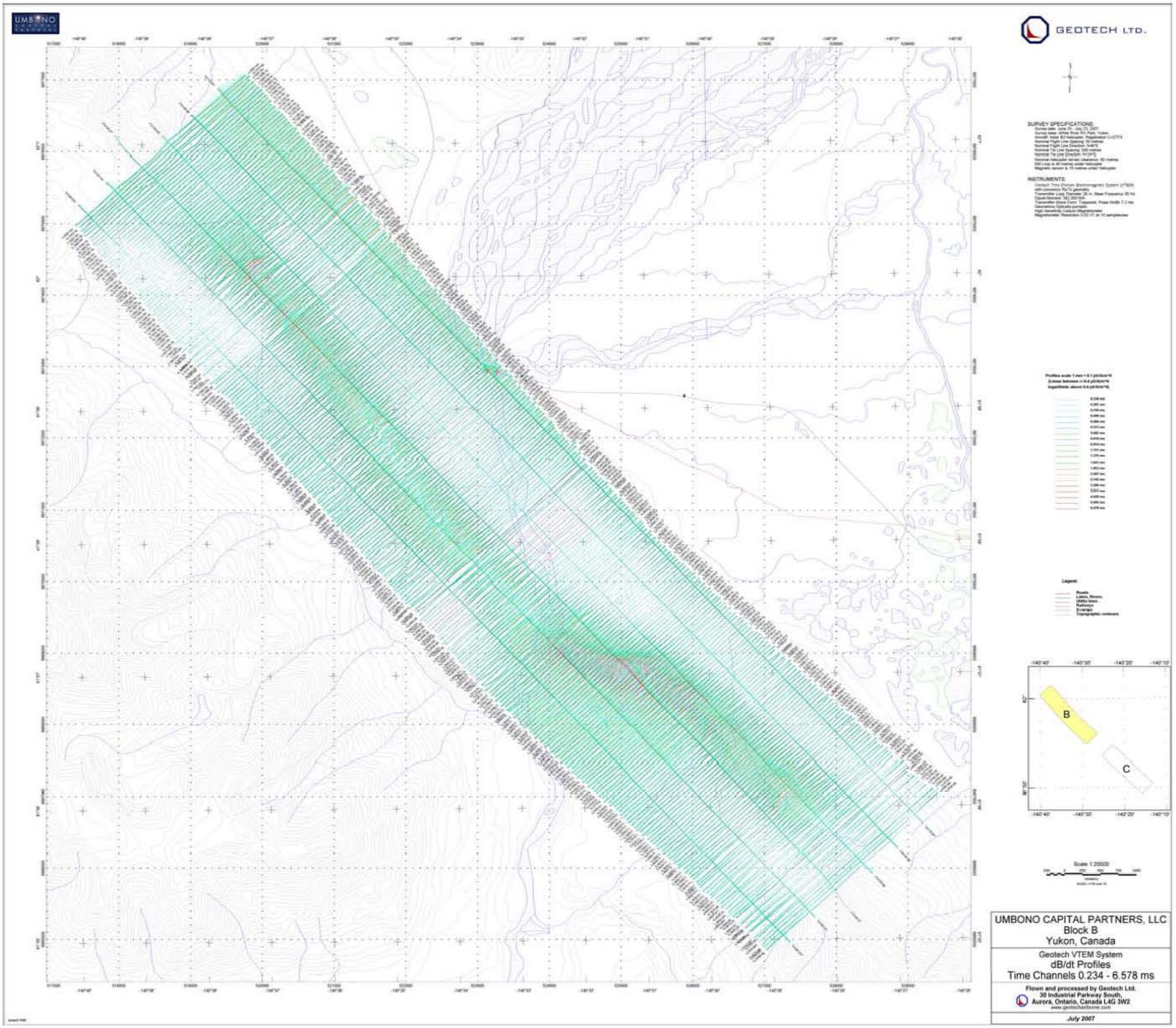
Concentric systems with horizontal transmitter and receiver antennae produce much larger responses for flat lying conductors as contrasted with vertical plate-like conductors. The amount of current developing on the flat upper surface of targets having a substantial area in this dimension, are the direct result of the effective coupling angle, between the primary magnetic field and the flat surface area. One therefore, must not compare the amplitude/conductance of responses generated from flat lying bodies with those derived from near vertical plates; their ratios will be quite different for similar conductances.

Determining dip angle is very accurate for plates with dip angles greater than 30º. For angles less than 30º to 0º, the sensitivity is low and dips can not be distinguished accurately in the presence of normal survey noise levels.

A plate like body that has near vertical position will display a two shoulder, classic **M** shaped response with a distinctive separation distance between peaks for a given depth to top.

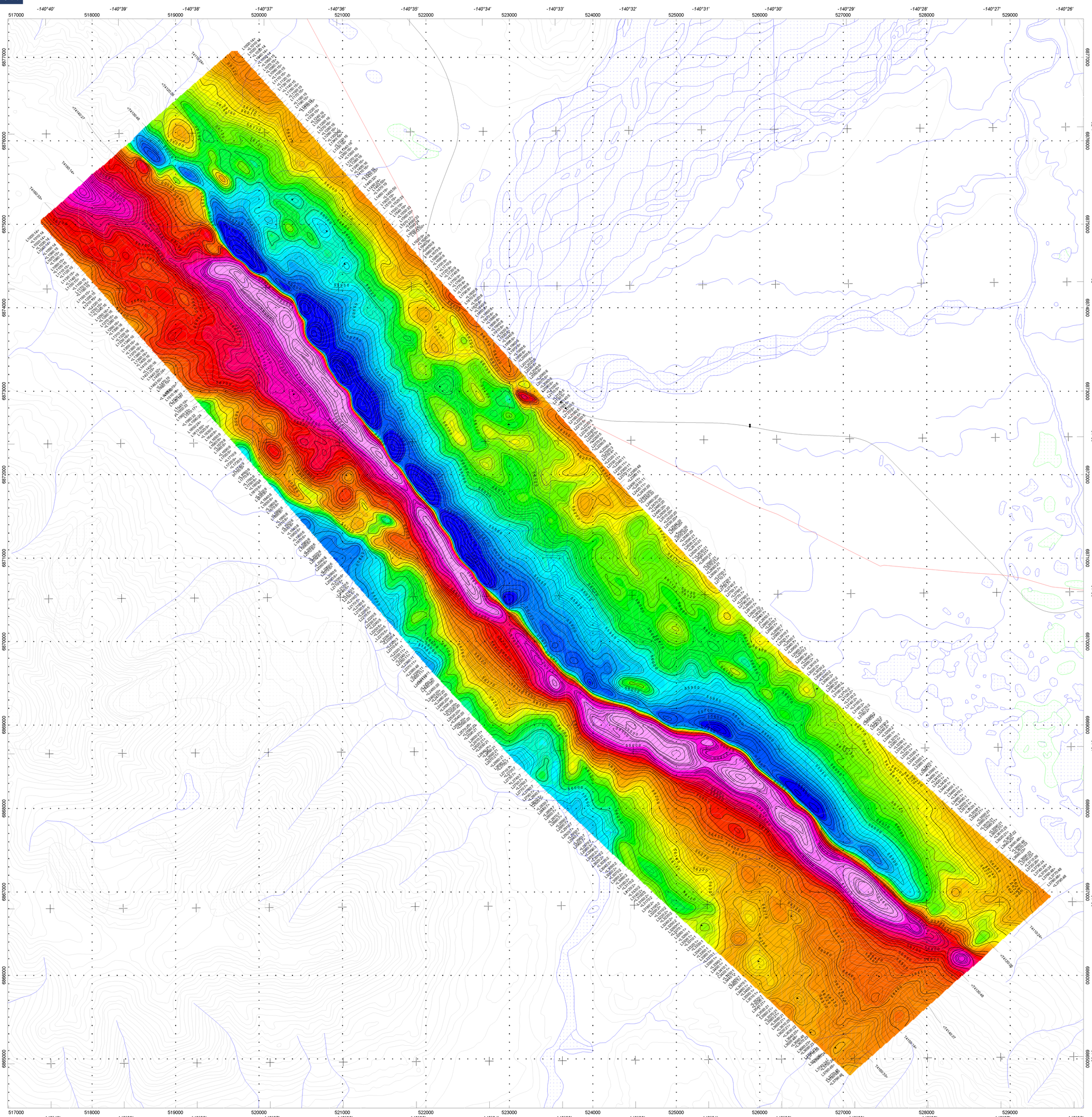
It is sometimes difficult to distinguish between responses associated with the edge effects of flat lying conductors and poorly conductive bedrock conductors. Poorly conductive bedrock conductors having low dip angles will also exhibit responses that may be interpreted as surfacial overburden conductors. In some situations, the conductive response has line to line continuity and some magnetic correlation providing possible evidence that the response is related to an actual bedrock source.


GEOTECH LTD.
SURVEY SPECIFICATIONS:
INSTRUMENTS:
Legend:
B
C
Scale 1:20000
UMBONO CAPITAL PARTNERS, LLC
Block B
Yukon, Canada
Geotech VTEM System
B-Field Profiles
Time Channels 0.234 - 6.578 ms
Flown and processed by Geotech Ltd.
30 Industrial Parkway South,
Aurora, Ontario, Canada L4G 3W2
www.geotechairborne.com
July 2007


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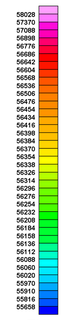


SURVEY SPECIFICATIONS:

Survey date: June 20 - July 23, 2007
Survey base: White River RV Park, Yukon
Aircraft: Astar B3 helicopter, Registration C-GTFX
Nominal Flight Line Spacing: 50 metres
Nominal Flight Line Direction: N46°E
Nominal Tie Line Spacing: 500 metres
Nominal Tie Line Direction: N134°E
Nominal helicopter terrain clearance: 80 metres
EM Loop is 40 metres under helicopter
Magnetic sensor is 15 metres under helicopter

INSTRUMENTS:

Geotech Time Domain Electromagnetic System (VTEM) with concentric Rx/Tx geometry
Transmitter Loop Diameter 26 m, Base Frequency 30 Hz
Dipole Moment: 382,300 NIA
Transmitter Wave Form: Trapezoid, Pulse Width 7.2 ms
Geometrics Optically-pumped,
High Sensitivity Cesium Magnetometer
Magnetometer Resolution 0.02 nT at 10 samples/sec



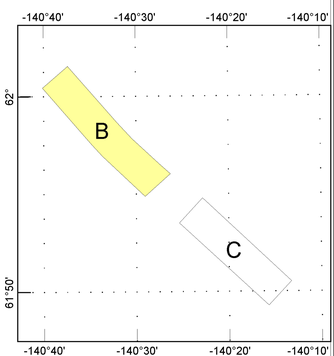
TMI (nT)

contour intervals:

2 nT
10 nT
50 nT

Legend:

Roads
Lakes, Rivers
Utility lines
Railways
Swamps
Topographic contours



Scale 1:20000

250 0 250 500 750 1000
(meters)
NAD83 / UTM zone 7N

UMBONO CAPITAL PARTNERS, LLC
Block B
Yukon, Canada

Geotech VTEM System
Total Magnetic Intensity Map

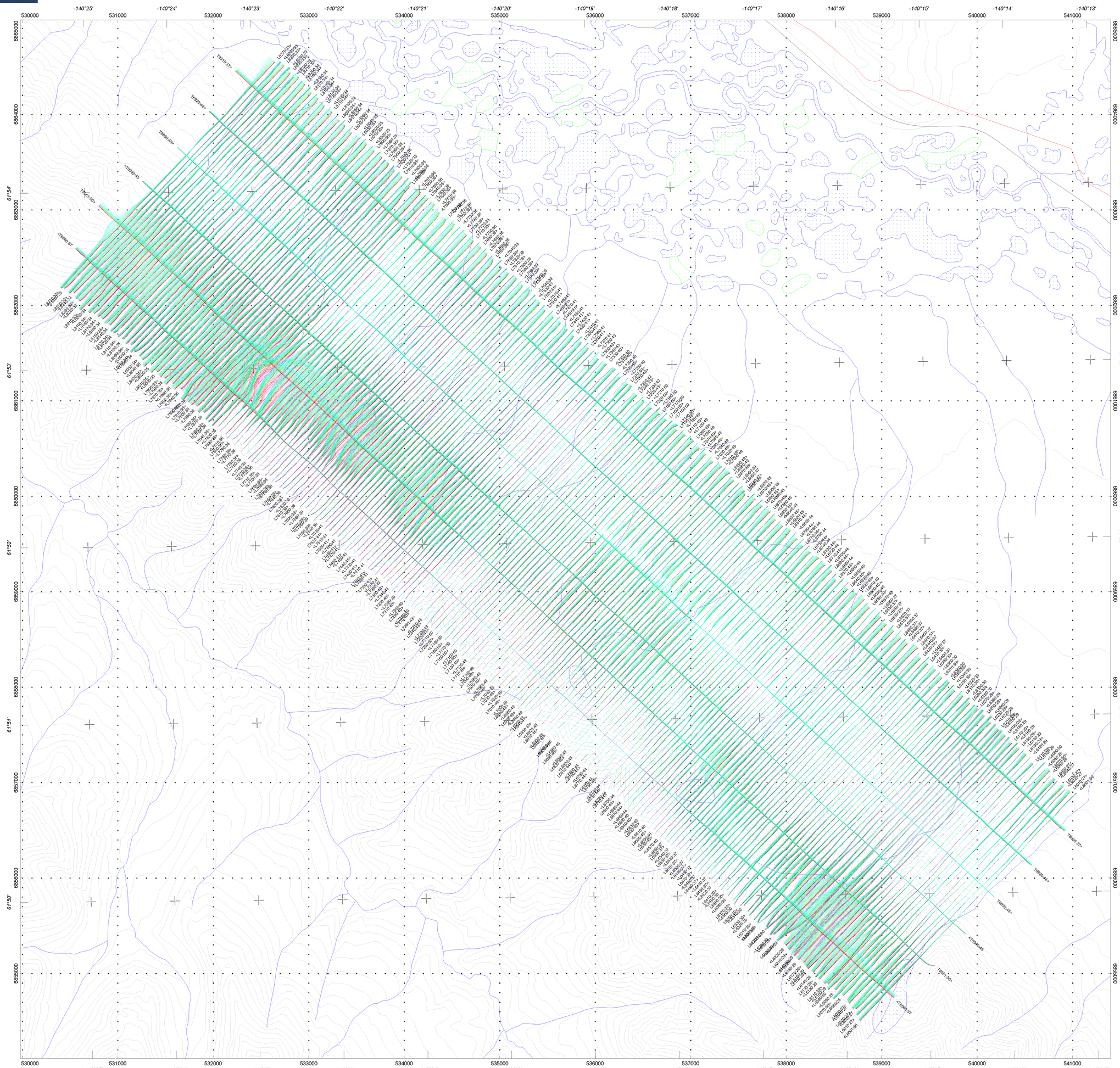
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project 7026

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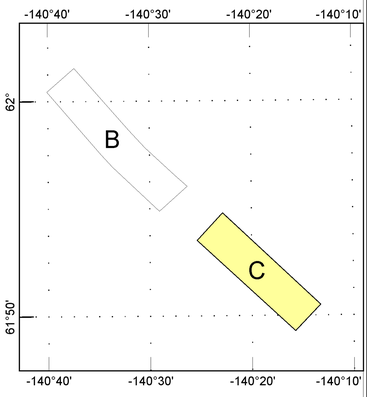
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Transmitter Wave Form: Trapezoid, Pulse Width 7.2 ms
Geometrics Optically-pumped,
High Sensitivity Cesium Magnetometer
Magnetometer Resolution 0.02 nT at 10 samples/sec

Profiles scale 1 mm = 0.1 (pV*ms)/(A*m^4)
(Linear between +/-0.4 (pV*ms)/(A*m^4)
logarithmic above 0.4 (pV*ms)/(A*m^4)

- 0.234 ms (B-field)
- 0.281 ms (B-field)
- 0.339 ms (B-field)
- 0.406 ms (B-field)
- 0.484 ms (B-field)
- 0.573 ms (B-field)
- 0.682 ms (B-field)
- 0.818 ms (B-field)
- 0.974 ms (B-field)
- 1.151 ms (B-field)
- 1.370 ms (B-field)
- 1.641 ms (B-field)
- 1.953 ms (B-field)
- 2.307 ms (B-field)
- 2.745 ms (B-field)
- 3.286 ms (B-field)
- 3.911 ms (B-field)
- 4.620 ms (B-field)
- 5.495 ms (B-field)
- 6.578 ms (B-field)

Legend:

- Roads
- Lakes, Rivers
- Utility lines
- Railways
- Swamps
- Topographic contours



Scale 1:20000

250 0 250 500 750 1000

(meters)

NAD83 / UTM zone 7N

UMBONO CAPITAL PARTNERS, LLC
Block C
Yukon, Canada

Geotech VTEM System
B-Field Profiles
Time Channels 0.234 - 6.578 ms

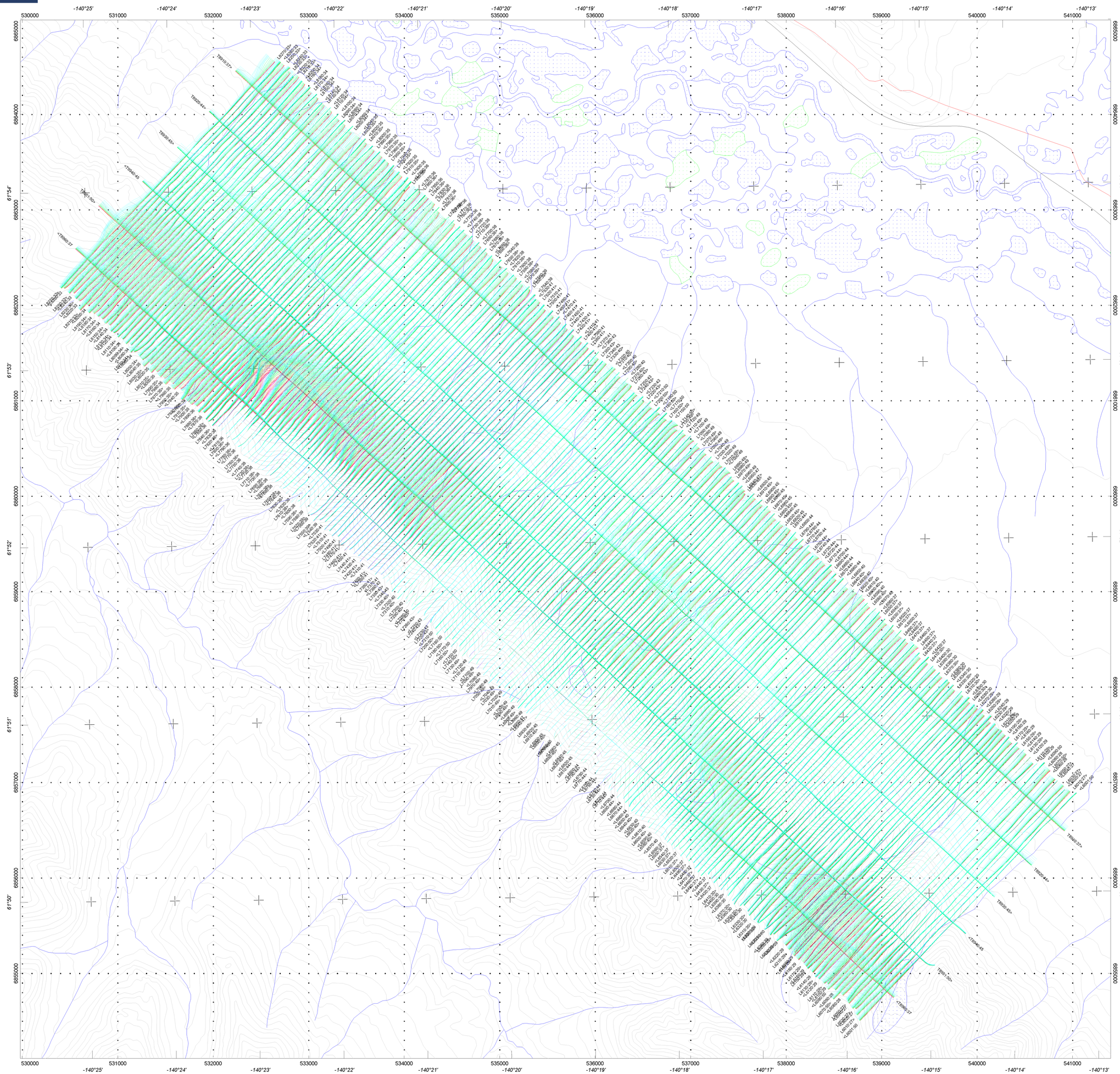
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30 Industrial Parkway South,
Aurora, Ontario, Canada L4G 3W2
www.geotechairborne.com

July 2007

project 7026

UMBONO CAPITAL PARTNERS

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INSTRUMENTS:

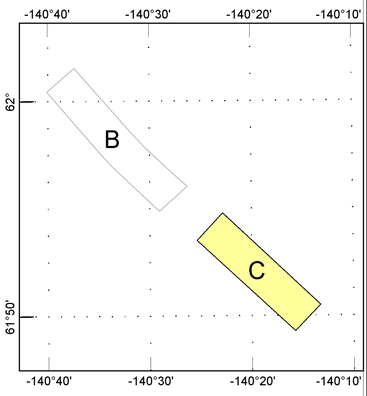
Geotech Time Domain Electromagnetic System (VTEM) with concentric Rx/Tx geometry
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Dipole Moment: 382,300 NIA
Transmitter Wave Form: Trapezoid, Pulse Width 7.2 ms
Geometrics Optically-pumped,
High Sensitivity Cesium Magnetometer
Magnetometer Resolution 0.02 nT at 10 samples/sec

Profiles scale 1 mm = 0.1 pV/A/m^4
(Linear between +/-0.4 pV/A/m^4
logarithmic above 0.4 pV/A/m^4)

0.234 ms
0.281 ms
0.339 ms
0.406 ms
0.484 ms
0.573 ms
0.682 ms
0.818 ms
0.974 ms
1.151 ms
1.370 ms
1.641 ms
1.953 ms
2.307 ms
2.745 ms
3.286 ms
3.911 ms
4.620 ms
5.495 ms
6.578 ms

Legend:

Roads
Lakes, Rivers
Utility lines
Railways
Swamps
Topographic contours



Scale 1:20000

250 0 250 500 750 1000
(meters)
NAD83 / UTM zone 7N

UMBONO CAPITAL PARTNERS, LLC
Block C
Yukon, Canada

Geotech VTEM System
dB/dt Profiles
Time Channels 0.234 - 6.578 ms

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July 2007

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530000 531000 532000 533000 534000 535000 536000 537000 538000 539000 540000 541000

-140°25' -140°24' -140°23' -140°22' -140°21' -140°20' -140°19' -140°18' -140°17' -140°16' -140°15' -140°14' -140°13'

6865000 6864000 6863000 6862000 6861000 6860000 6859000 6858000 6857000 6856000 6855000

61°54' 61°53' 61°52' 61°51' 61°50'

N

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58028
57370
57098
56898
56776
56686
56642
56604
56568
56536
56506
56476
56454
56434
56416
56398
56384
56370
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56338
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56296
56276
56254
56232
56208
56184
56158
56136
56112
56088
56060
56020
55970
55910
55816
55658

TMI (nT)

contour intervals:

2 nT
10 nT
50 nT

Legend:

Roads
Lakes, Rivers
Utility lines
Railways
Swamps
Topographic contours

-140°40' -140°30' -140°20' -140°10'

62°

61°50'

B

C

Scale 1:20000

250 0 250 500 750 1000

(meters)

NAD83 / UTM zone 7N

UMBONO CAPITAL PARTNERS, LLC
Block C
Yukon, Canada

Geotech VTEM System
Total Magnetic Intensity Map

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30 Industrial Parkway South,
Aurora, Ontario, Canada L4G 3W2
www.geotechairborne.com

July 2007

project 7026

Appendix F: Scott Hogg and Associates Ltd QAQC Reports

Scott Hogg & Associates Ltd.
Geophysical Services
85 Curlew Drive, Suite 104
Toronto, Canada, M3A 2P8
www:shageophysics.com
Tel: (416) 444-8245 Fax: (416) 444-4409

July 19, 2007

Umbono Capital Partners

Attn: Richard Montjoie / Ian McCutcheon

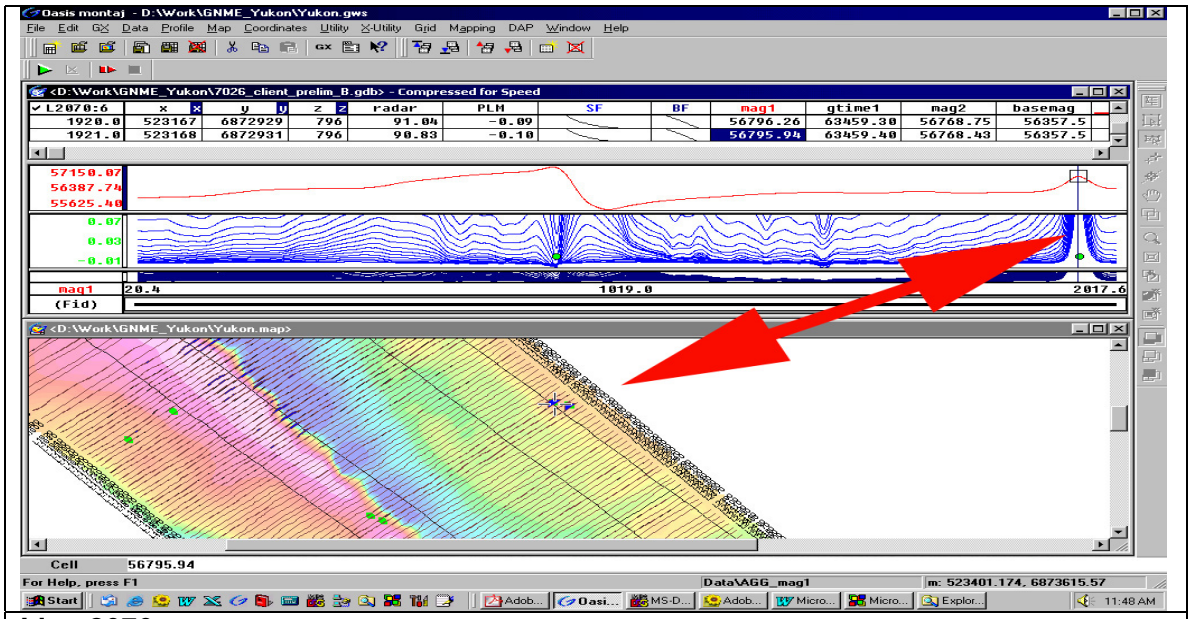
Burwash Area / Yukon, Canada
Preliminary Review

We have downloaded the database **7026_client_prelim_B.gdb** from the Geotech FTP site. In profile mode we have reviewed the VTEM profile response on each of the lines and have no significant concern about the primary SF channels. The response on Line 2320 was missing but this was likely an oversight since the BF channels were there.

There are some anomalies of potential interest that we noted.

NE end of Lines 2070/2080/2090

There is an interesting, strong, all channel EM peak on these 3 lines, coincident with a local magnetic anomaly.



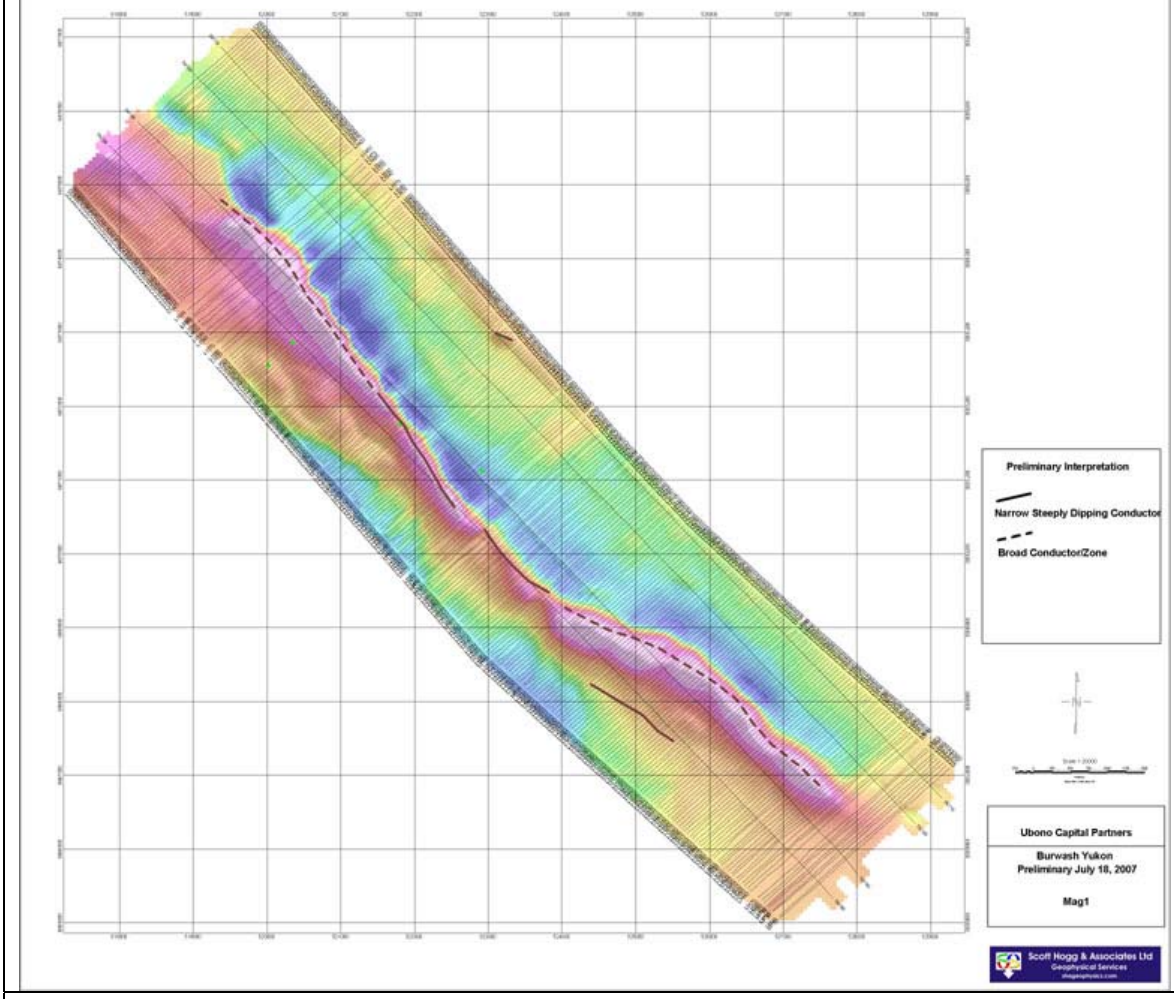
Line 2070

Main Magnetic Axis

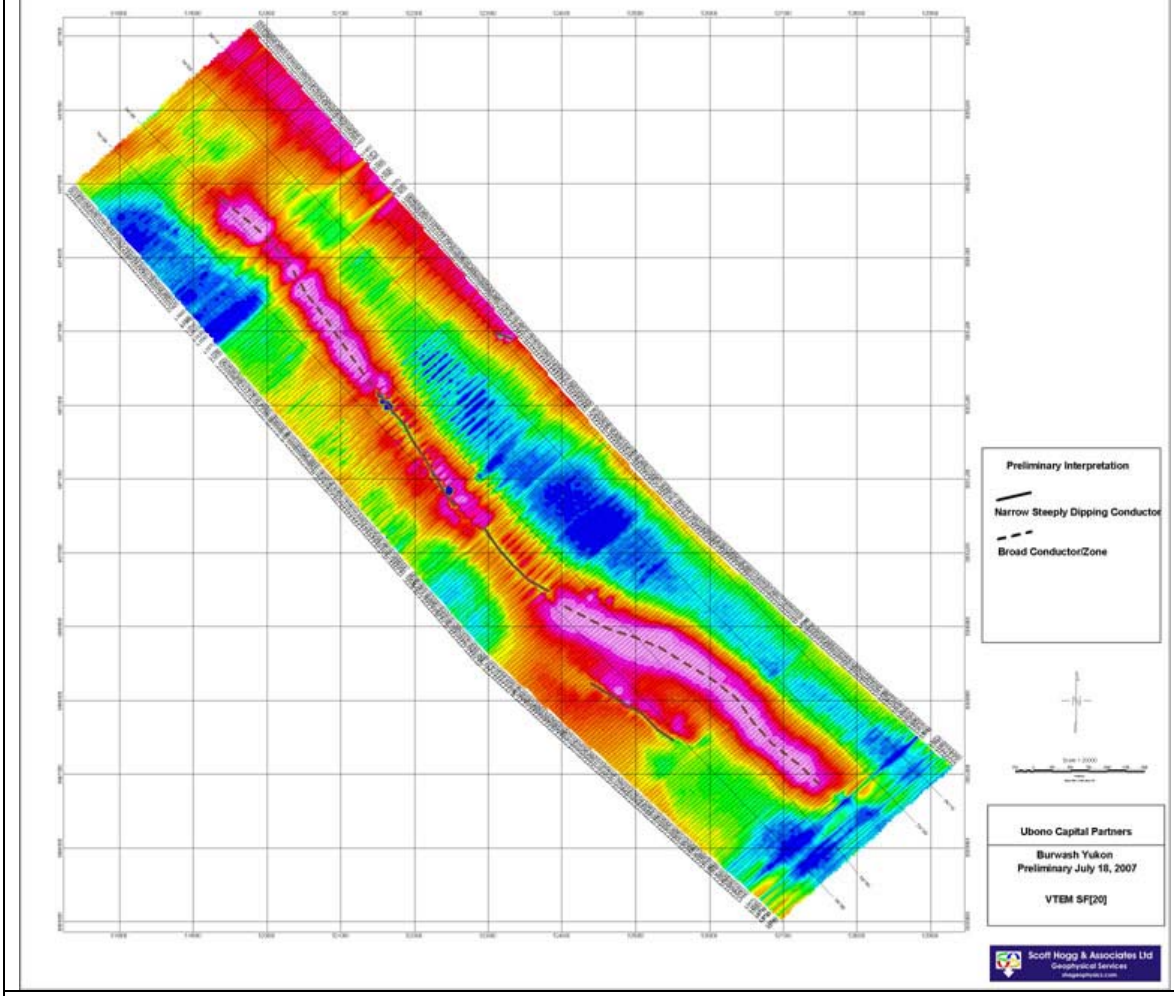
A conductor / conductive zone follows the central magnetic axis. Sections of this conductor present a sharp null flanked by peaks, a response shape that can reflect a thin steeply dipping conductor. To create the null the conductor needs to be quite uniform and relatively thin, perhaps less than 10metres. These conductor sections have been indicated on a preliminary interpretation map with a solid black line.

Along the same general magnetic axis there are significant response peaks without the associated null. This type of response is normally associated with a broader, flat lying conductive zone or a least a wide steeply dipping zone.

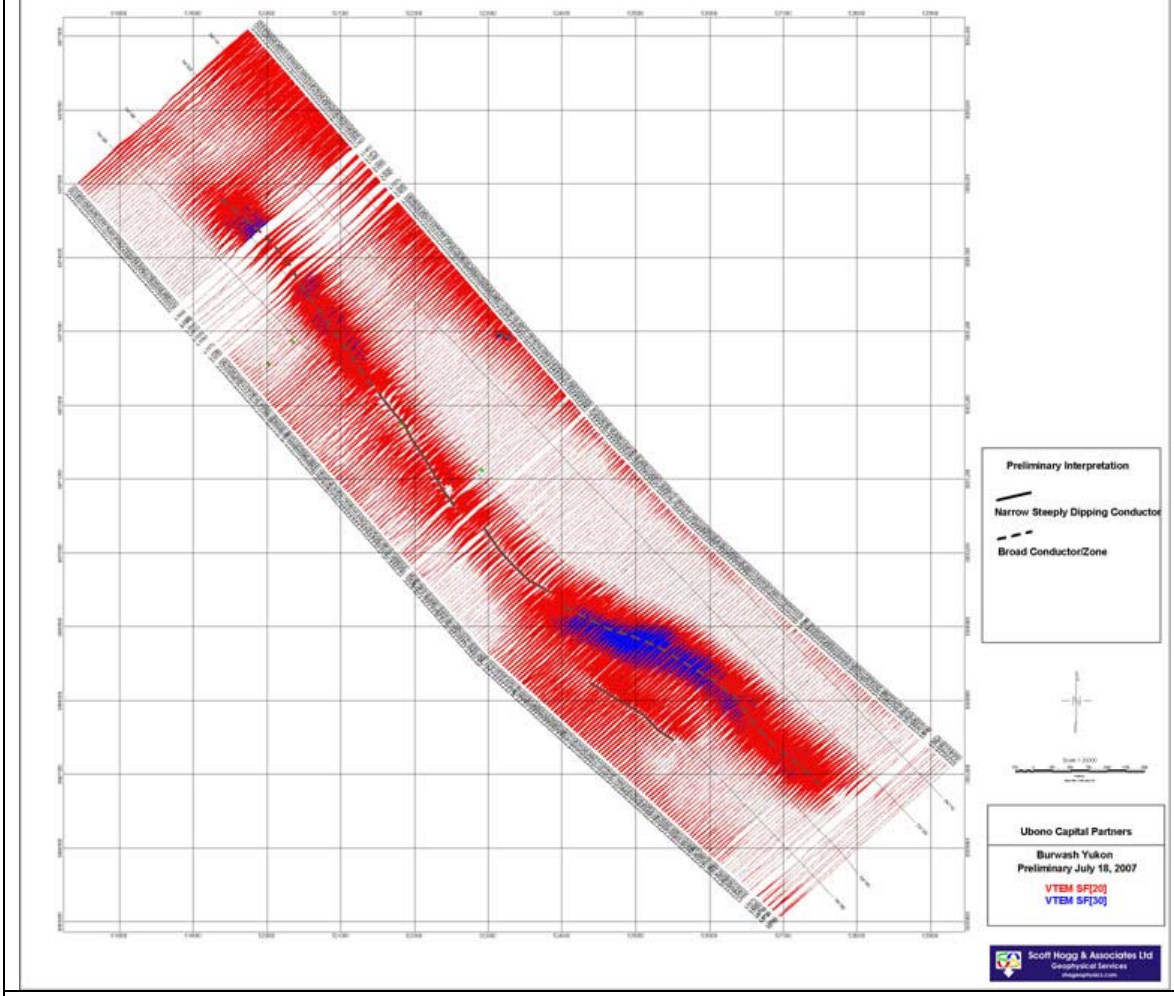
These different response forms along axis may reflect a change in dip, a change in width or possibly completely different sources of conductivity.



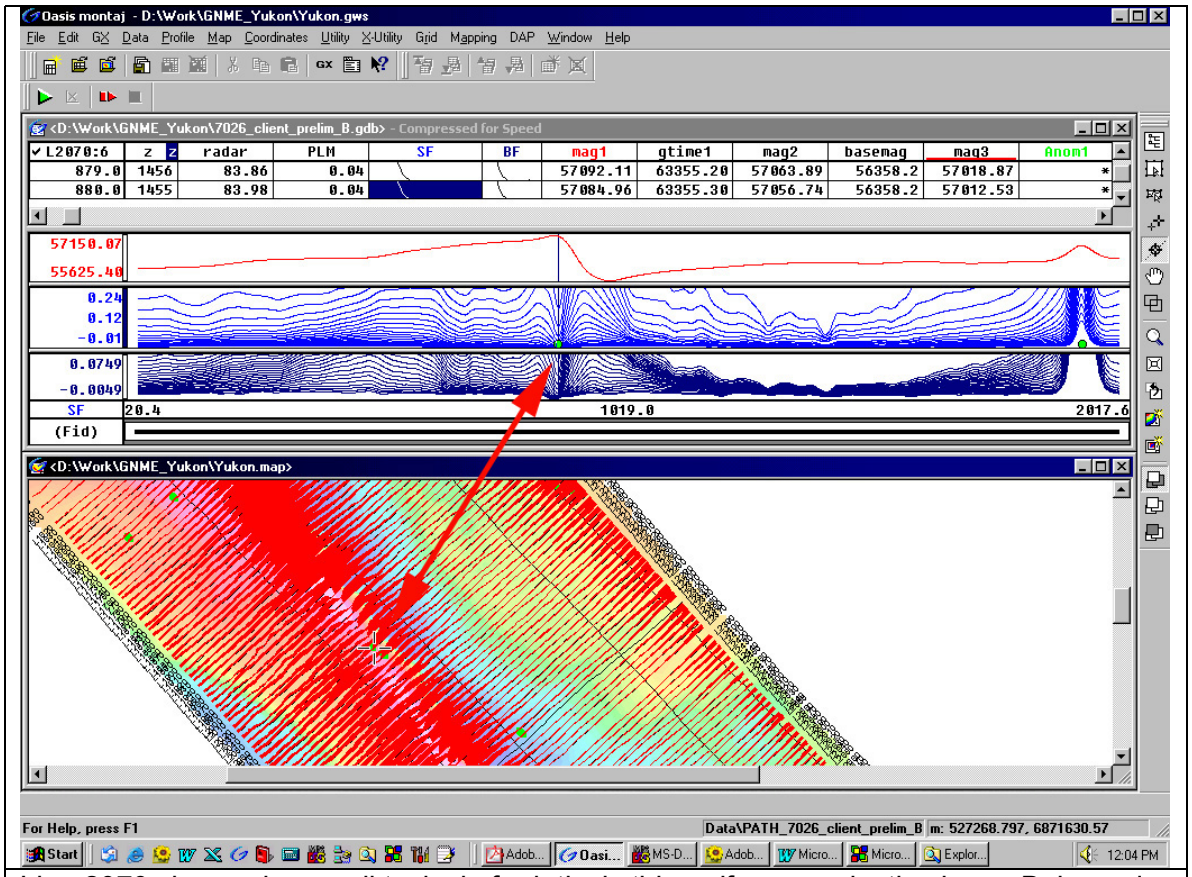
Mag background with some conductors indicated



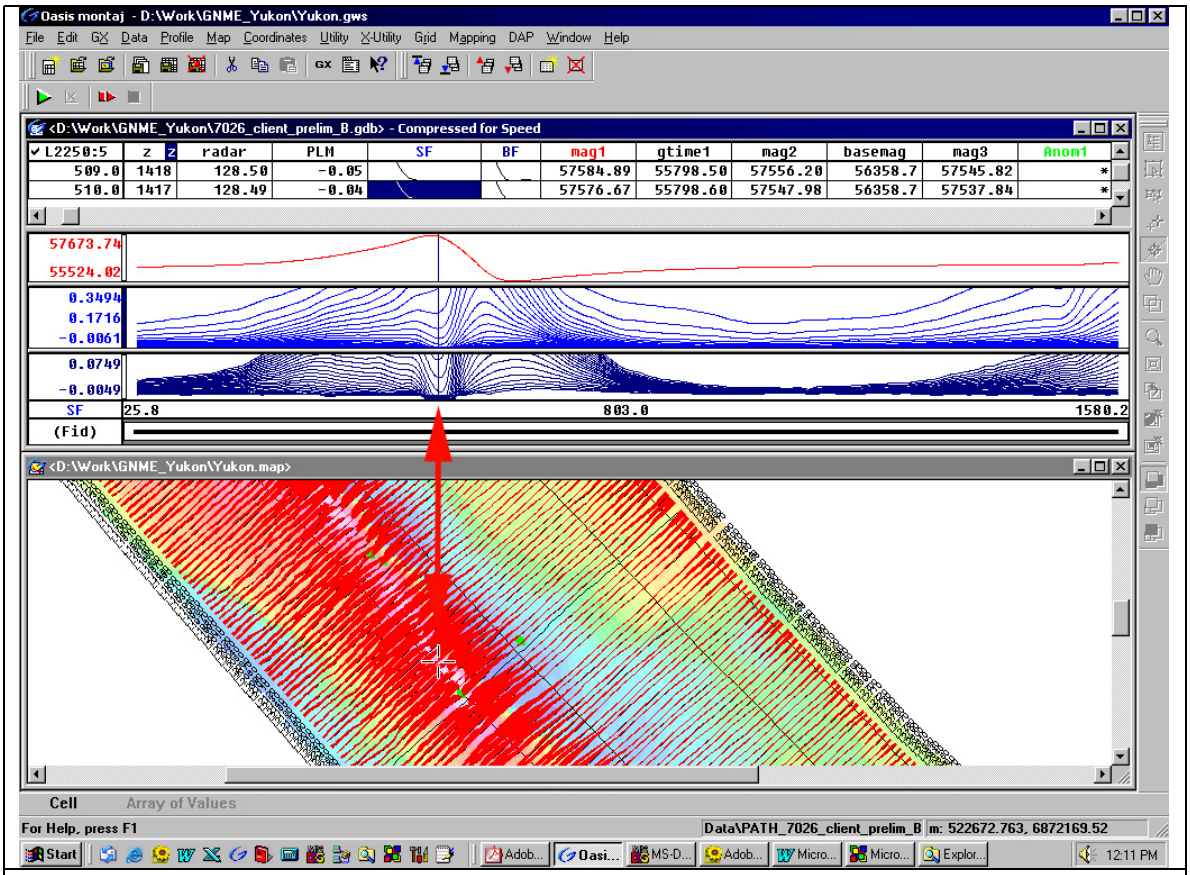
VTEM channel 20 as background illustrates null associated with some conductor sections



VTEM channel 20 and 30 in log profile form. Note nulls and high late-time response in blue at some locations.



Line 2070 shows sharp null typical of relatively thin uniform conductive layer. Balanced side lobes here suggest steep dip.



Line 2250 has a wider null and dominant peak to north suggests northeast dip.

These comments are offered as first impressions. I don't know if this information is new or already known and understood. If you have any specific queries let me know.

I think this data might be well suited to CDI sections without the complications of IP effect. There are certainly changes happening along strike.

Yours sincerely,
Scott Hogg

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August 15, 2007

Umbono Capital Partners

Attn: Richard Montjoie / Ian McCutcheon

Burwash Area / Yukon, Canada
Preliminary Review

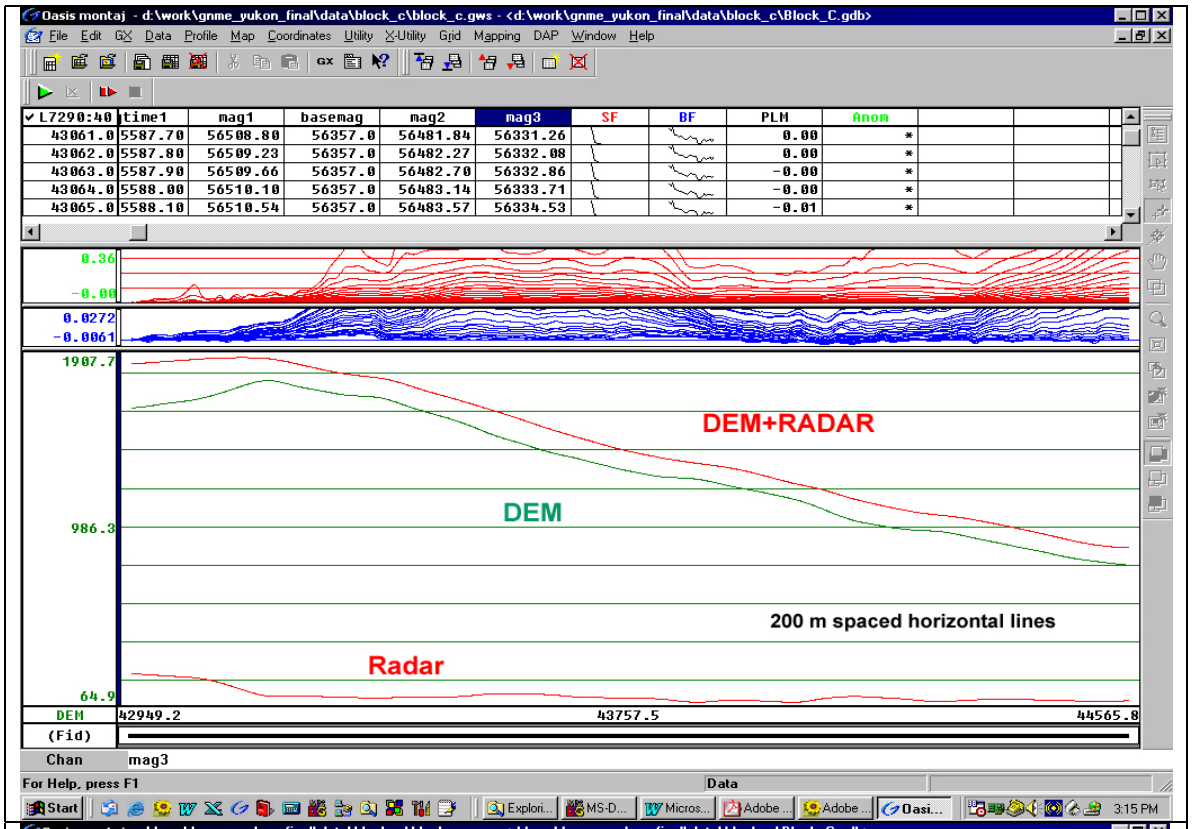
We have downloaded the final database files from the Geotech FTP site. Since Block B was largely reviewed in our assessment of July 15, the focus here is on Block C.

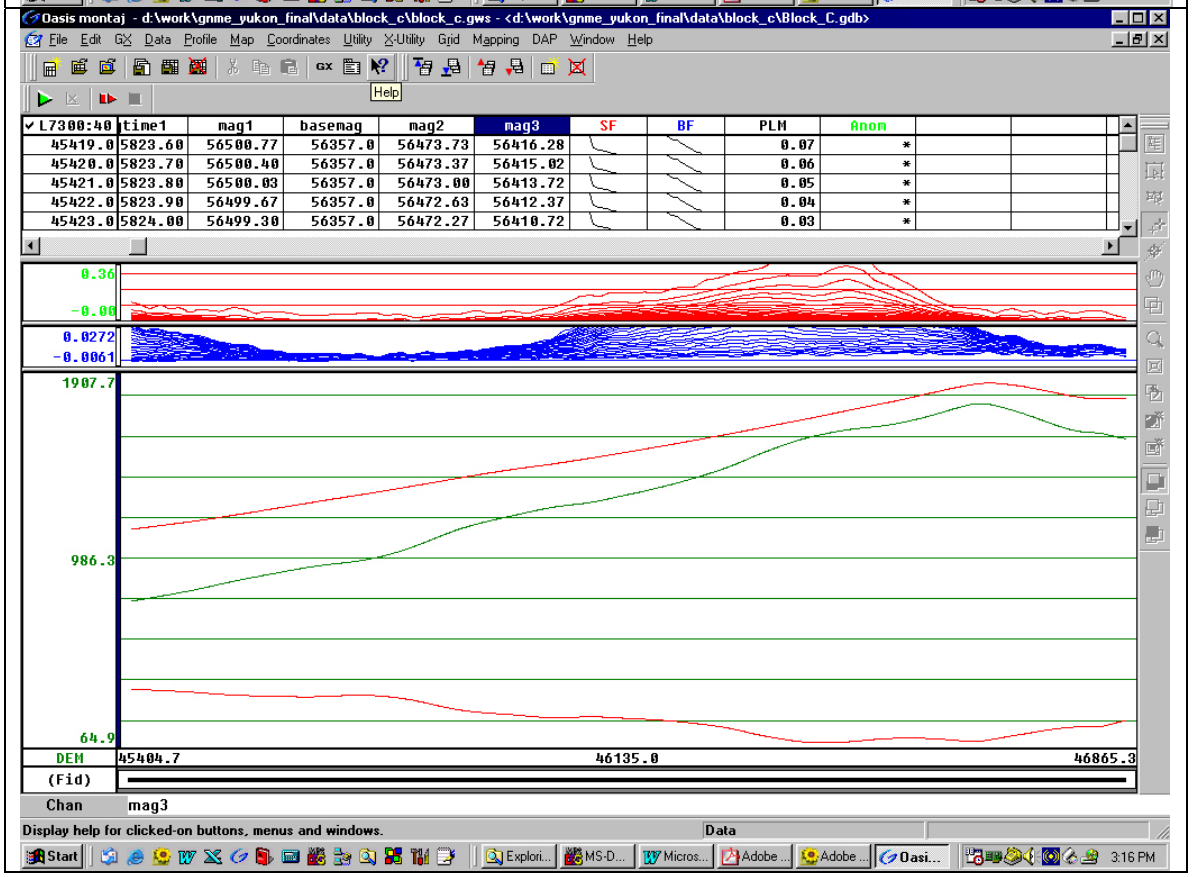
Terrain Clearance

As you are aware the terrain clearance, as measured by the radar altimeter, is well above 200 metres for the southwest bound lines in Block C. This is the line direction that is uphill. For the northeast direction, downhill, the measured terrain clearance is quite reasonable. The terrain is tough but I do not think the pilot was sufficiently skilled or properly directed, to make a good job of maintaining a lower clearance. Selected lines from each block in the table below indicate the line direction and the flight duration in seconds. In Block C the uphill lines were flown faster than the downhill. The lines sampled in Block B show the normally expected longer duration for the climb, but the results, in terms of terrain clearance, are not much better.

Block	Line	Duration (sec)	Direction
C	7290	161	Downhill
C	7300	146	Uphill
C	7310	179	Downhill
C	7320	143	Uphill
B	1520	162	Uphill
B	1530	144	Downhill
B	1540	130	Downhill
B	1450	179	Uphill

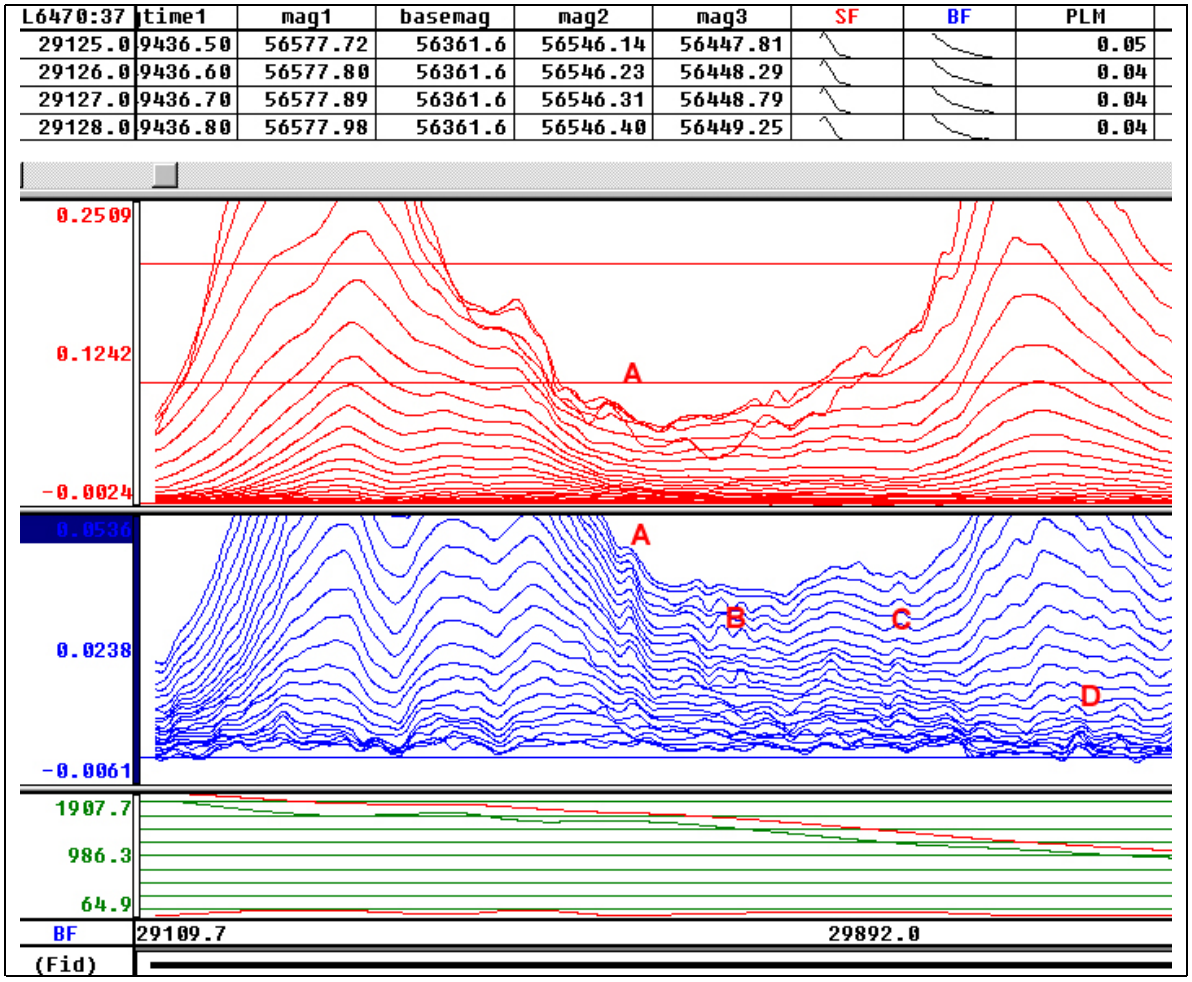
In the following illustrations the terrain clearance of the helicopter, RADAR, is presented in conjunction with the terrain profile, DEM. On line 7290 the helicopter is headed downhill and the terrain clearance is in the order of 100 m. On line 7300 the aircraft is headed uphill and the terrain clearance starts at about 400 m. and does not approach 100 m until almost at the summit of the mountain.


Oasis montaj - d:\work\gnme_yukon_final\data\block_c\block_c.gws - <d:\work\gnme_yukon_final\data\block_c\Block_C.gdb>
File Edit GX Data Profile Map Coordinates Utility X-Utility Grid Mapping DAP Window Help
L7290:40 time1 mag1 basemag mag2 mag3 SF BF PLM Anom
43061.0 5587.70 56508.80 56357.0 56481.84 56331.26 0.00 *
43062.0 5587.80 56509.23 56357.0 56482.27 56332.08 0.00 *
43063.0 5587.90 56509.66 56357.0 56482.70 56332.86 -0.00 *
43064.0 5588.00 56510.10 56357.0 56483.14 56333.71 -0.00 *
43065.0 5588.10 56510.54 56357.0 56483.57 56334.53 -0.01 *
0.36
-0.00
0.0272
-0.0061
1907.7
DEM+RADAR
DEM
986.3
200 m spaced horizontal lines
Radar
64.9
DEM 42949.2 43757.5 44565.8
(Fid)
Chan mag3
For Help, press F1
Data
Start
3:15 PM


Oasis montaj - d:\work\gnme_yukon_final\data\block_c\block_c.gws - <d:\work\gnme_yukon_final\data\block_c\Block_C.gdb>
File Edit GX Data Profile Map Coordinates Utility X-Utility Grid Mapping DAP Window Help
Help
L7300:40 time1 mag1 basemag mag2 mag3 SF BF PLM Anom
45419.0 5823.60 56500.77 56357.0 56473.73 56416.28 0.07 *
45420.0 5823.70 56500.40 56357.0 56473.37 56415.02 0.06 *
45421.0 5823.80 56500.03 56357.0 56473.00 56413.72 0.05 *
45422.0 5823.90 56499.67 56357.0 56472.63 56412.37 0.04 *
45423.0 5824.00 56499.30 56357.0 56472.27 56410.72 0.03 *
0.36
-0.00
0.0272
-0.0061
1907.7
986.3
64.9
DEM 45404.7 46135.0 46865.3
(Fid)
Chan mag3
Display help for clicked-on buttons, menus and windows.
Data
Start
3:16 PM

VTEM

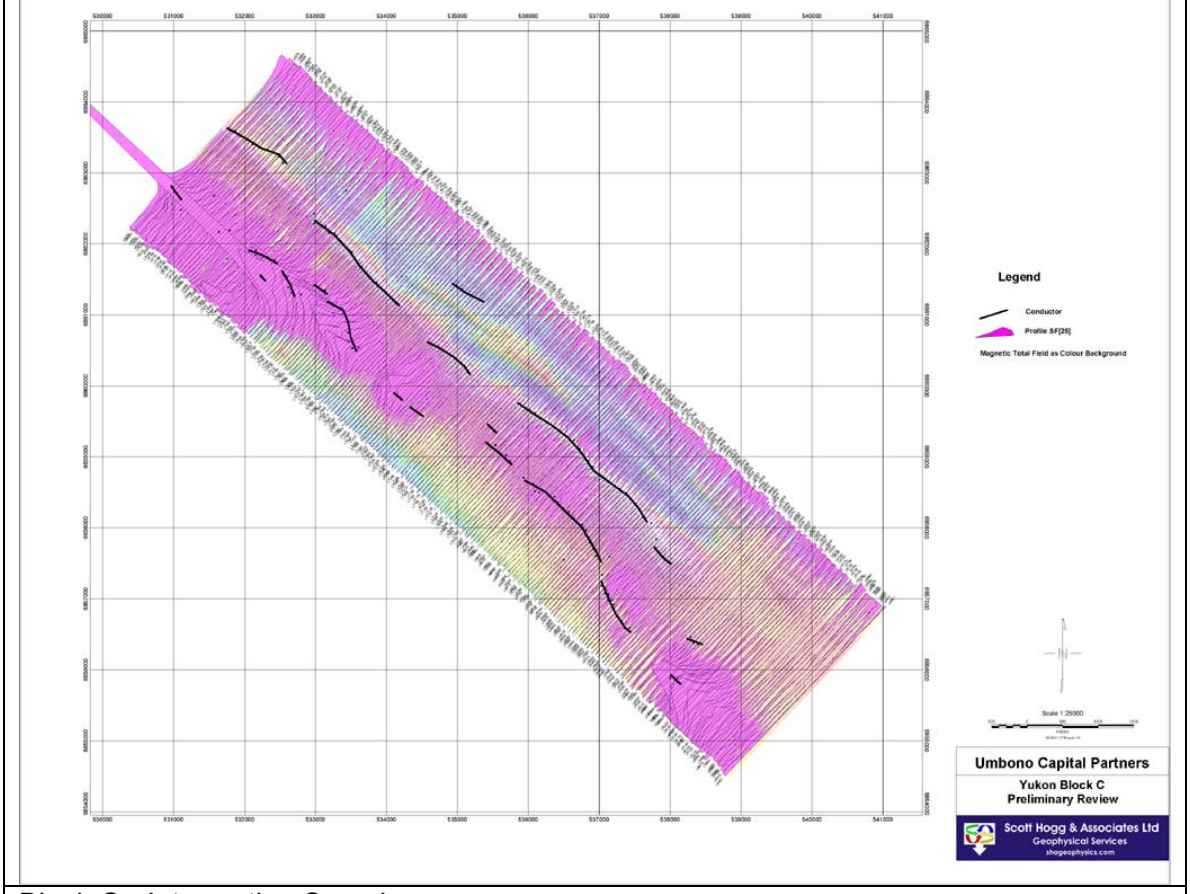
The performance of the VTEM system was reasonable but some lines and flights are noisier than others, for example Line 6470, flight 37. In the Geotech report there are many system maintenance days and references to troubleshooting that may have related to noise problems.



For Line 6470 illustrated above, noise is evident on the early SF channels. The SF measurement relates to the voltage sensed in the receiver coil, dB/dT, and is a direct measurement. The B Field is obtained by integrating the measured dB/dT either numerically or electronically. The Geotech report does not explain their method of deriving of the BF channels. The amplitude of the early time BF channels will be notably attenuated relative to their SF counterparts but such re-scaling will not create "new" anomalies. At the location A an early time bump is evident in SF and in BF a ripple across all channels is evident. This BF noise ripple was probably induced by the SF bump. At B, and C there are small bumps on BF channels that are noise. Such localized variations in the decay curve cannot be real. The late time BF bump at D might be theoretically possible but the likelihood of it being a real response is essentially zero.

Map Overview

We went through the profile data for Block C and identified various conductors. Emphasis was given to those that had the characteristic response shape associated with a thin steeply dipping source. These locations were plotted on a map and conductor axes were drawn. This effort was very preliminary and intended solely to provide a general reference to the more obvious conductive units. There are also some flat-lying conductive areas in the northwest and southwest corners with high amplitude responses that may have significant conductance. The CDI sections will help identify those that may be of exploration interest.



Block C - Interpretive Overview

Summary

Although there are some shortcomings in terms of terrain clearance they are largely limited to one line direction. In light of the close line spacing of 50 m. I don't think that any significant target could be missed.

There are some SF profiles that are notably more noisy than others. This is a relative comparison and I do not believe the higher noise level will significantly limit the identification and analysis of most anomalies.

The BF profile information is a new development for Geotem. In principal the B field is of benefit since the early time amplitudes, associated with poor conductors, are not over-emphasized and the dynamic range needed for profile presentations is reduced. The BF profile is not necessary for profile shape analysis or the calculation of the CDI sections.

Yours sincerely,
Scott Hogg

The EM interpretation process used, places considerable emphasis on determining an understanding of the general conductive patterns in the area of interest. Each area has different characteristics and these can effectively guide the detailed process used.

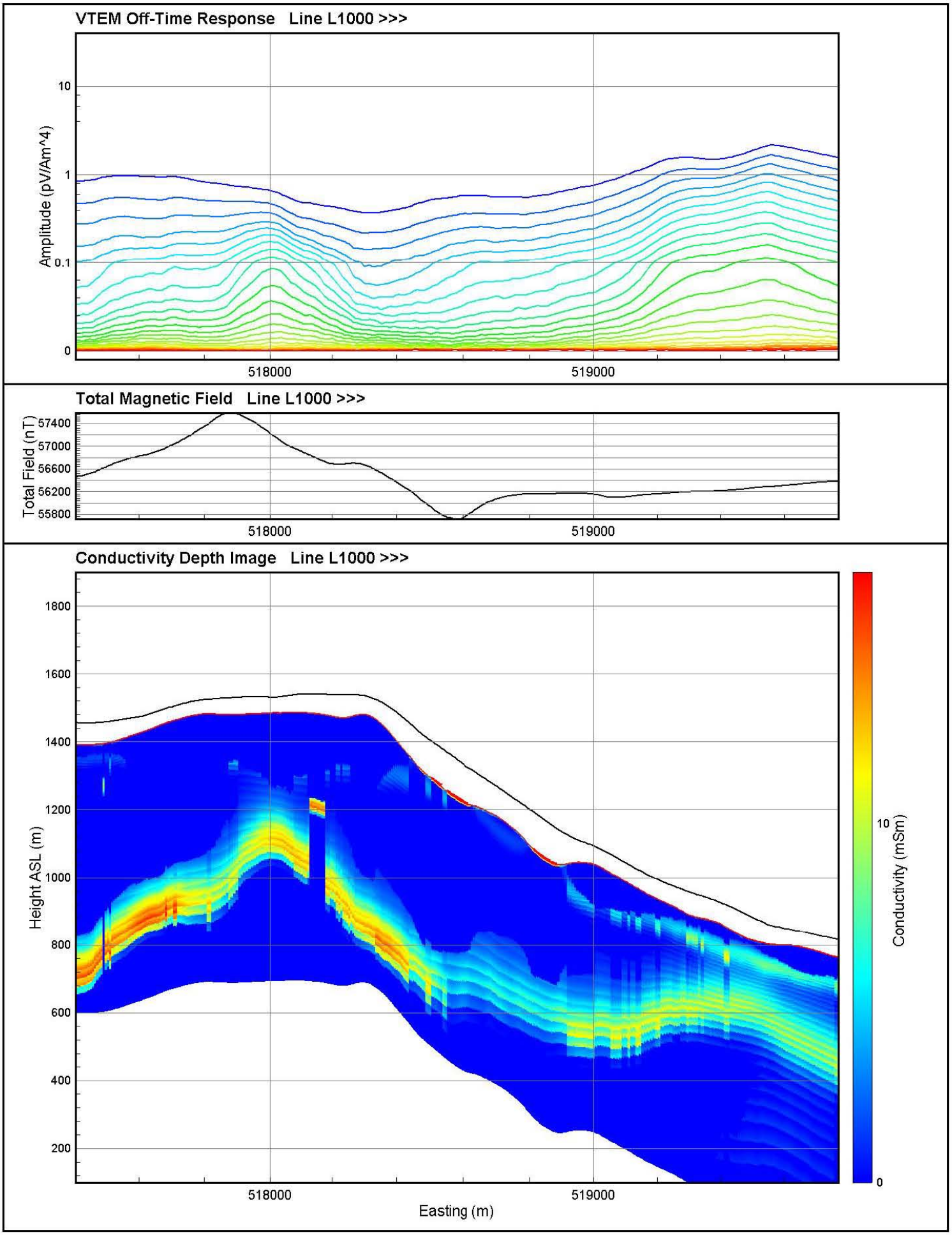
The first stage is to determine which time gates are most descriptive of the overall conductance patterns. Maps of the time gates that represent the range of responses can be very informative.

Next, stacking the relevant channels as profiles on the flight path together with the second vertical derivative of the TMI is very helpful in revealing correlations between the EM and Magnetics.

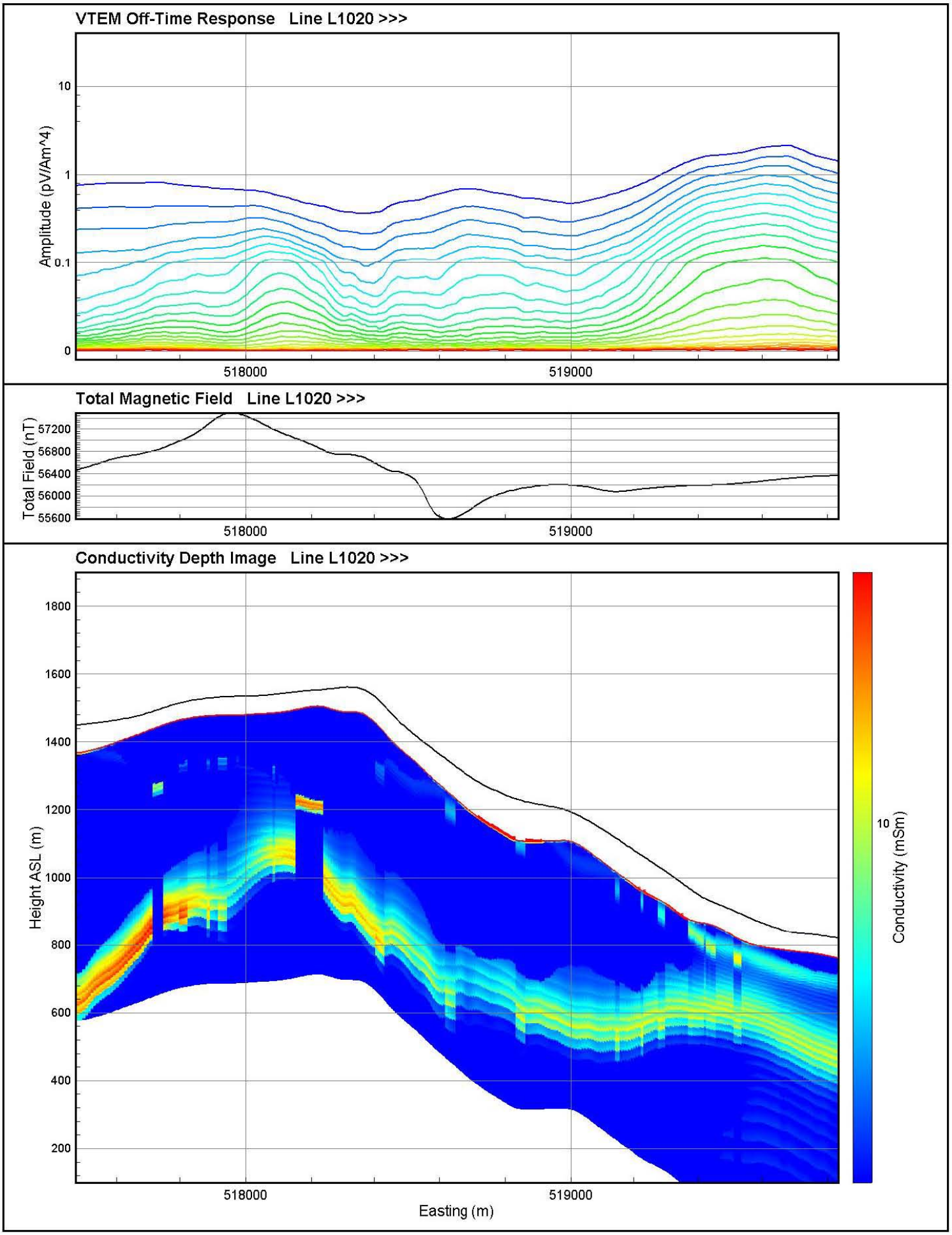
Next, key lines can be profiled as single lines to emphasize specific characteristics of a conductor or the relationship of one conductor to another on the same line. Resistivity Depth sections can be constructed to show the relationship of conductive overburden or conductive bedrock with the conductive anomaly.

Appendix G: Block B Downhill CDI Sections

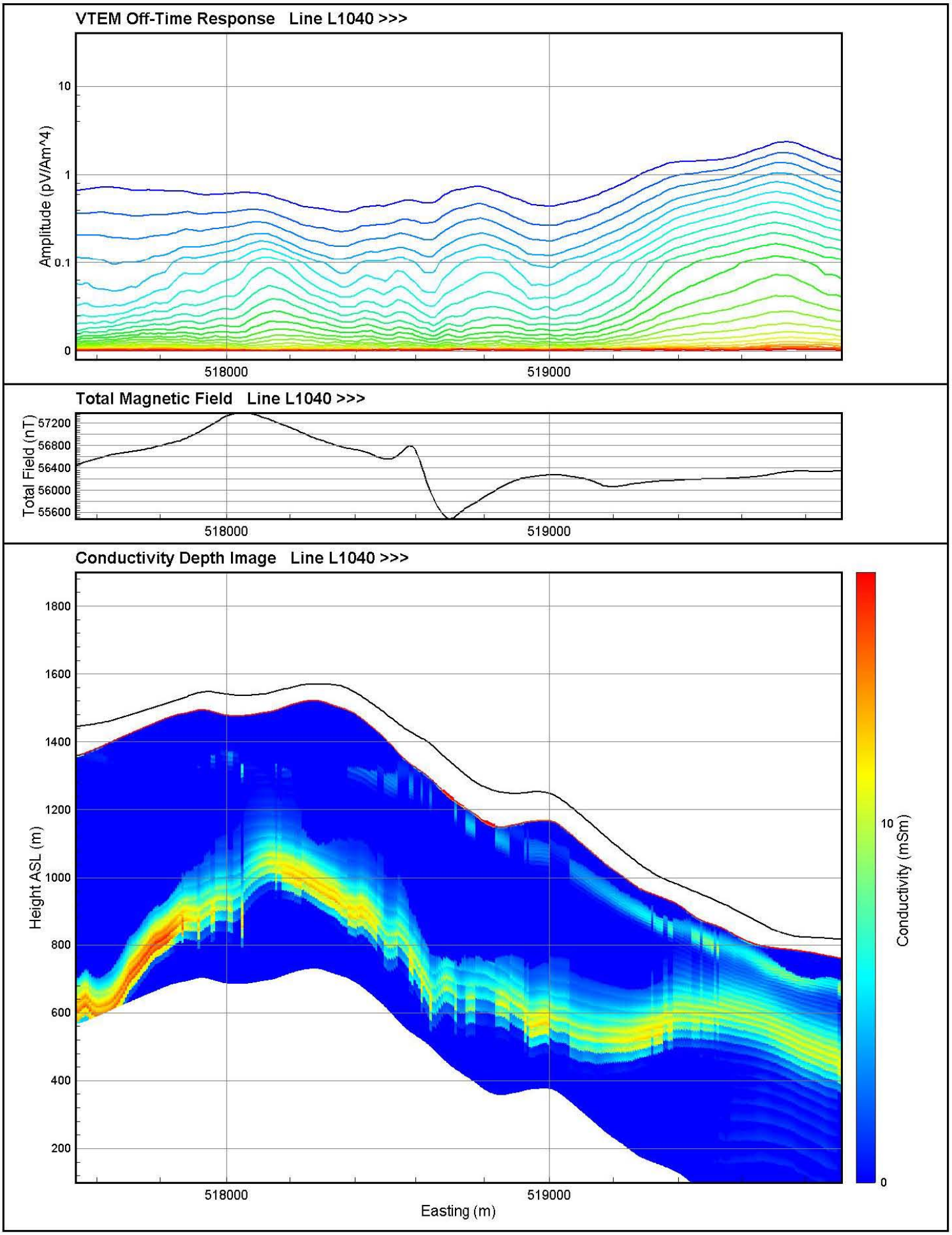
GNME - Yukon VTEM Survey
Block B



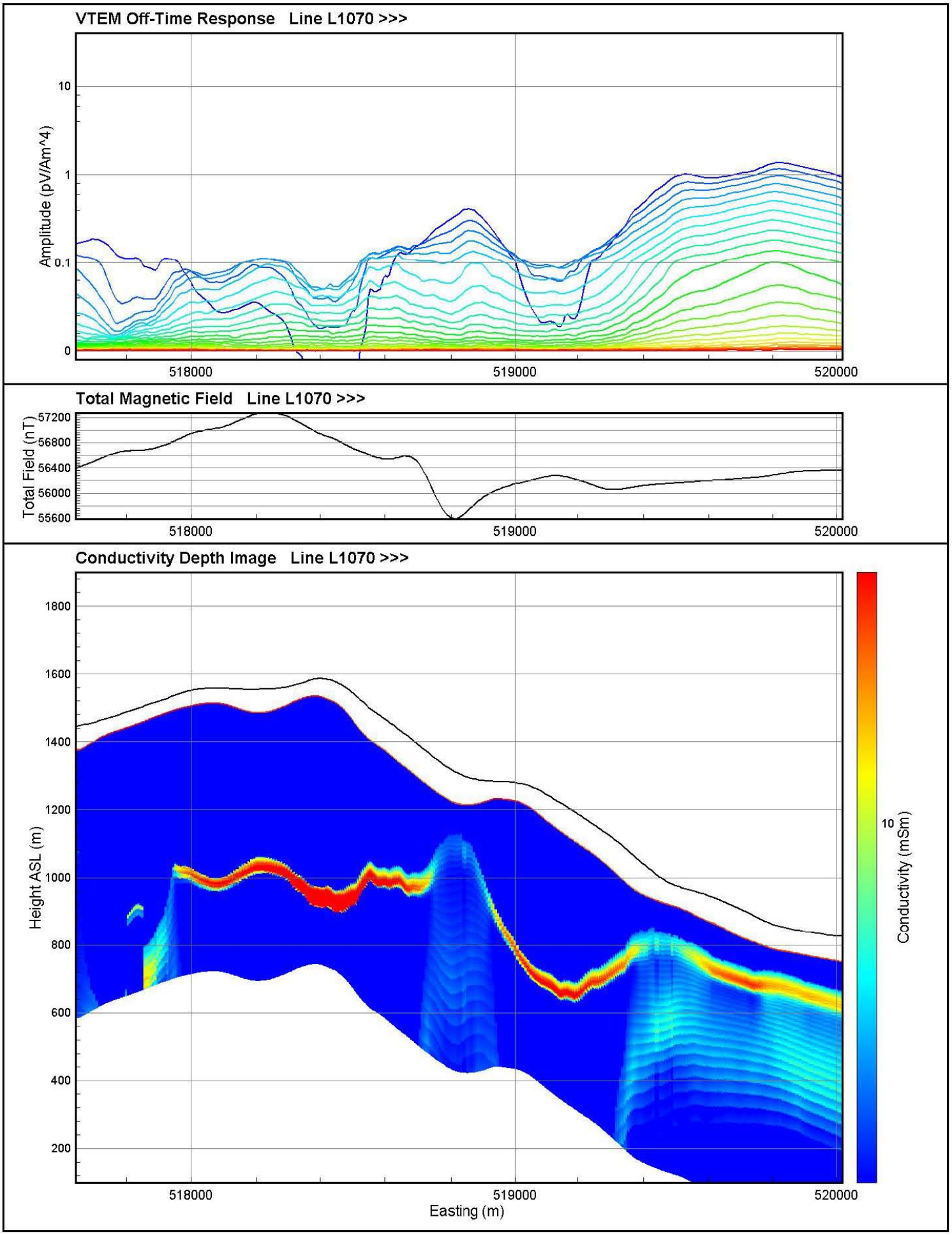
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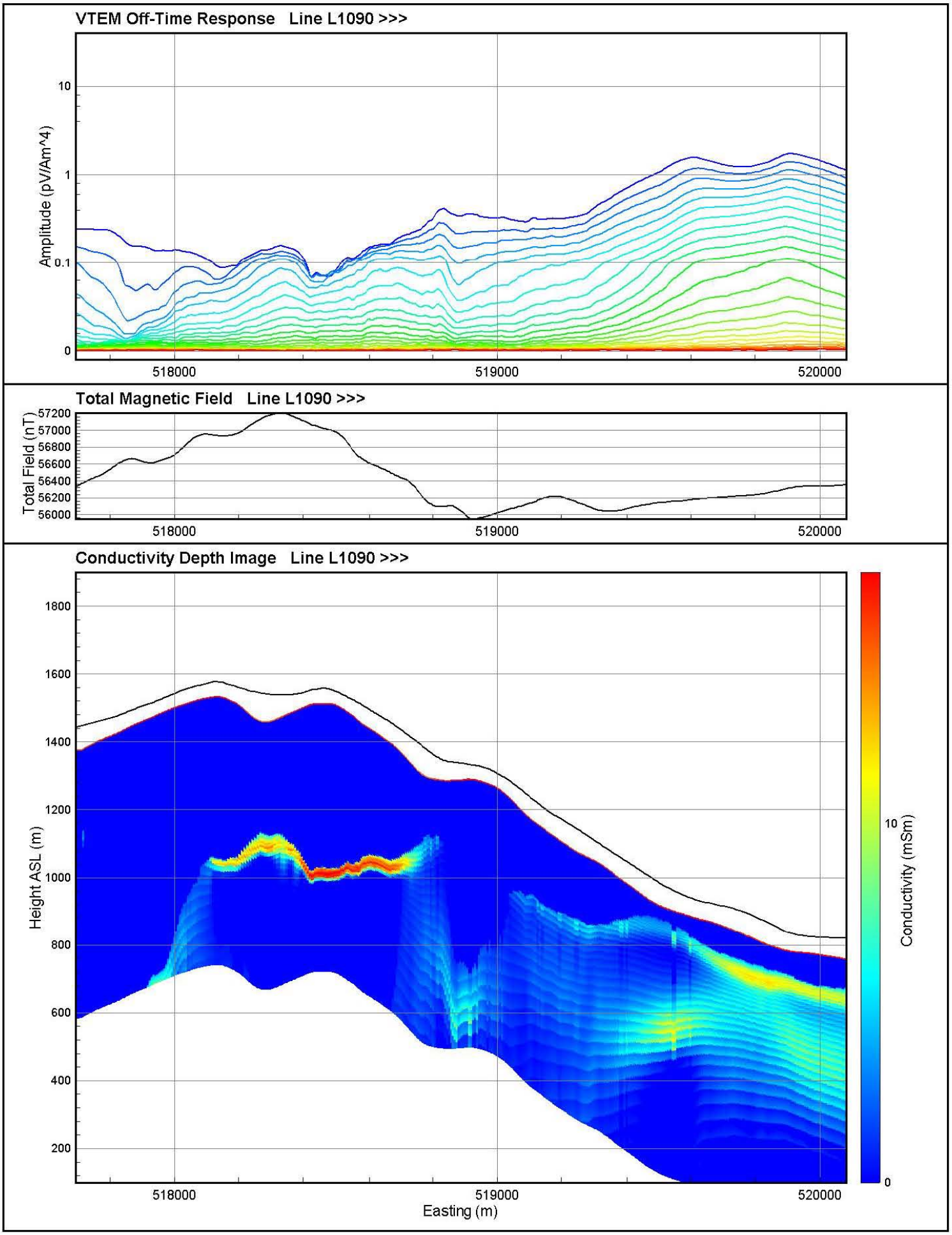
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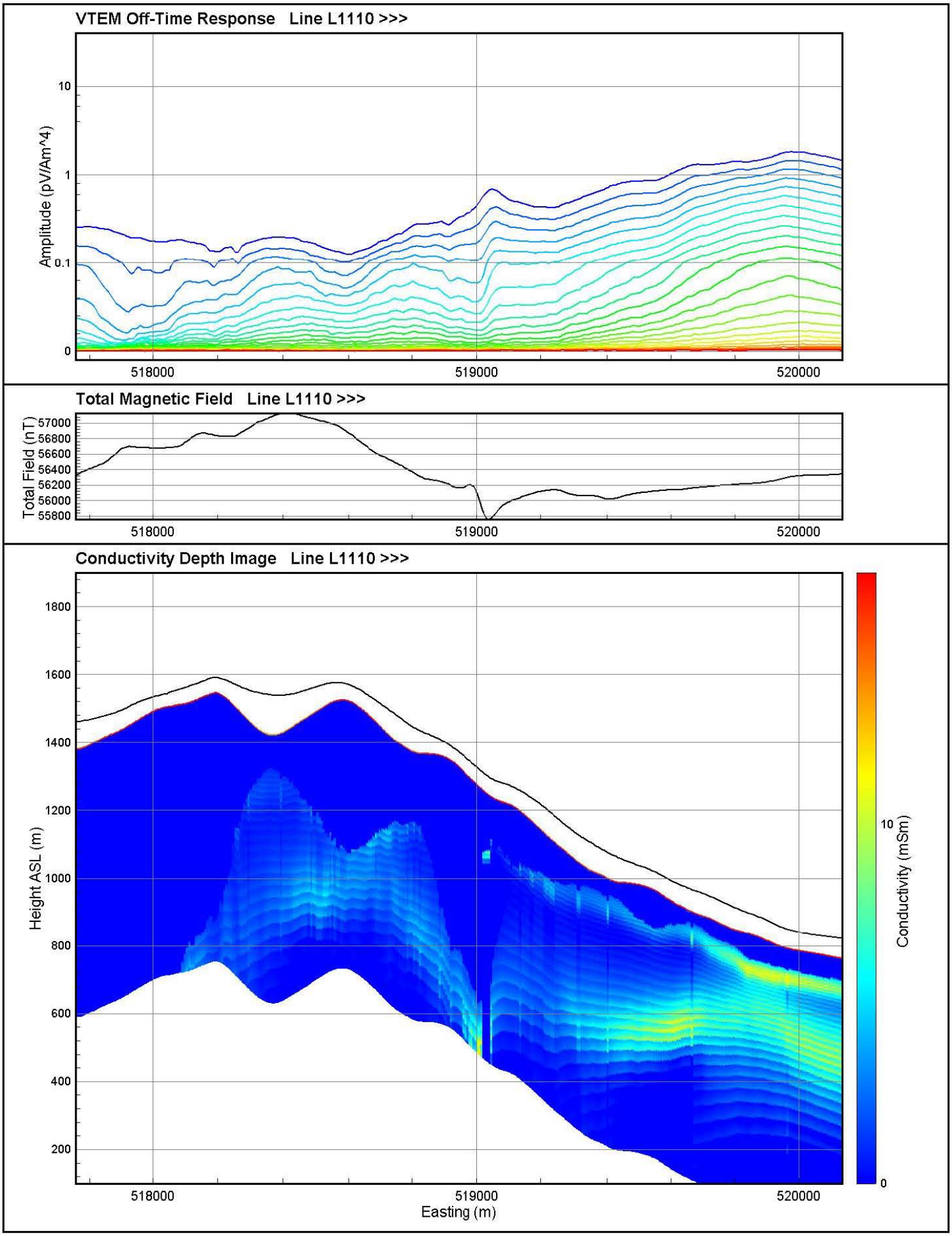
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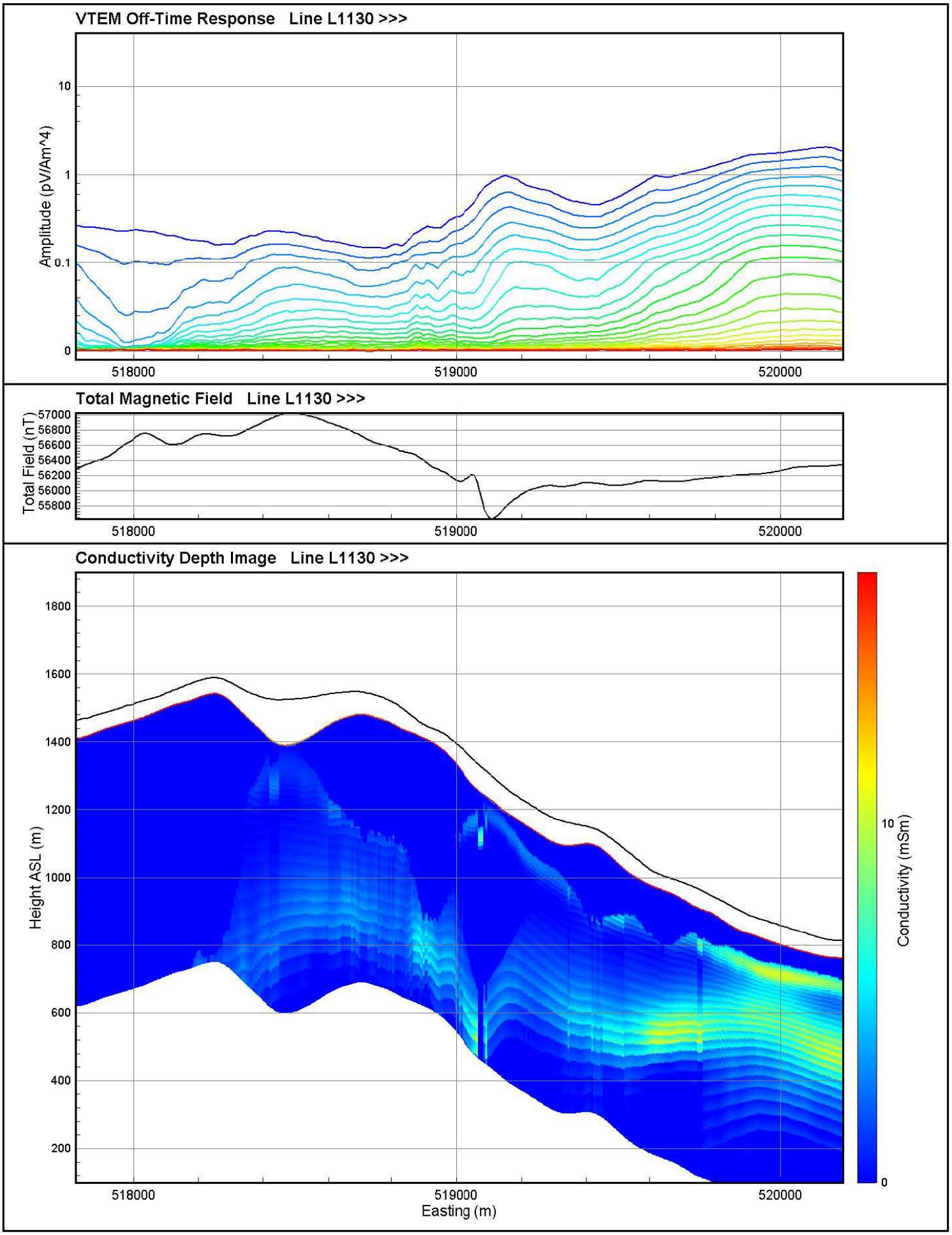
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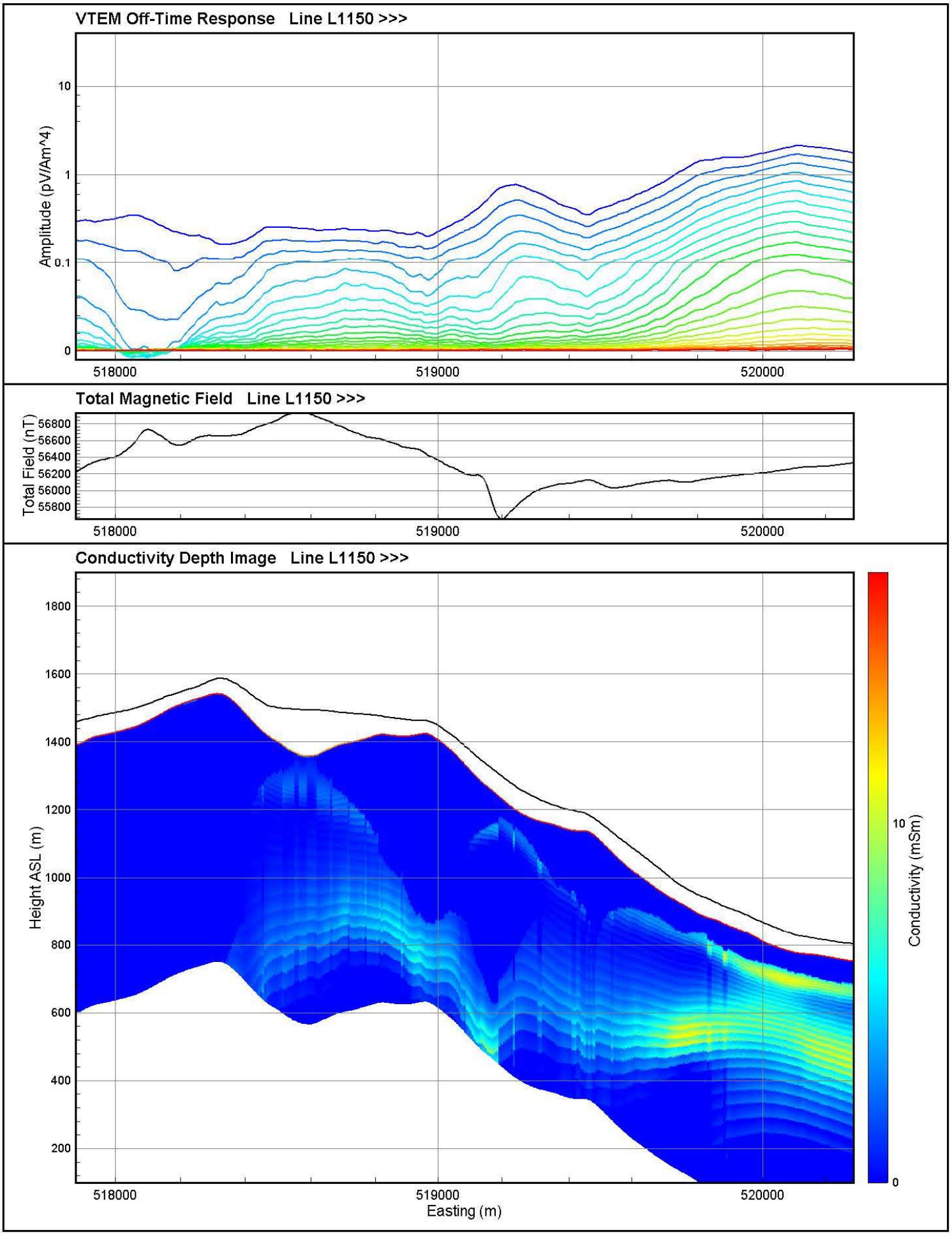
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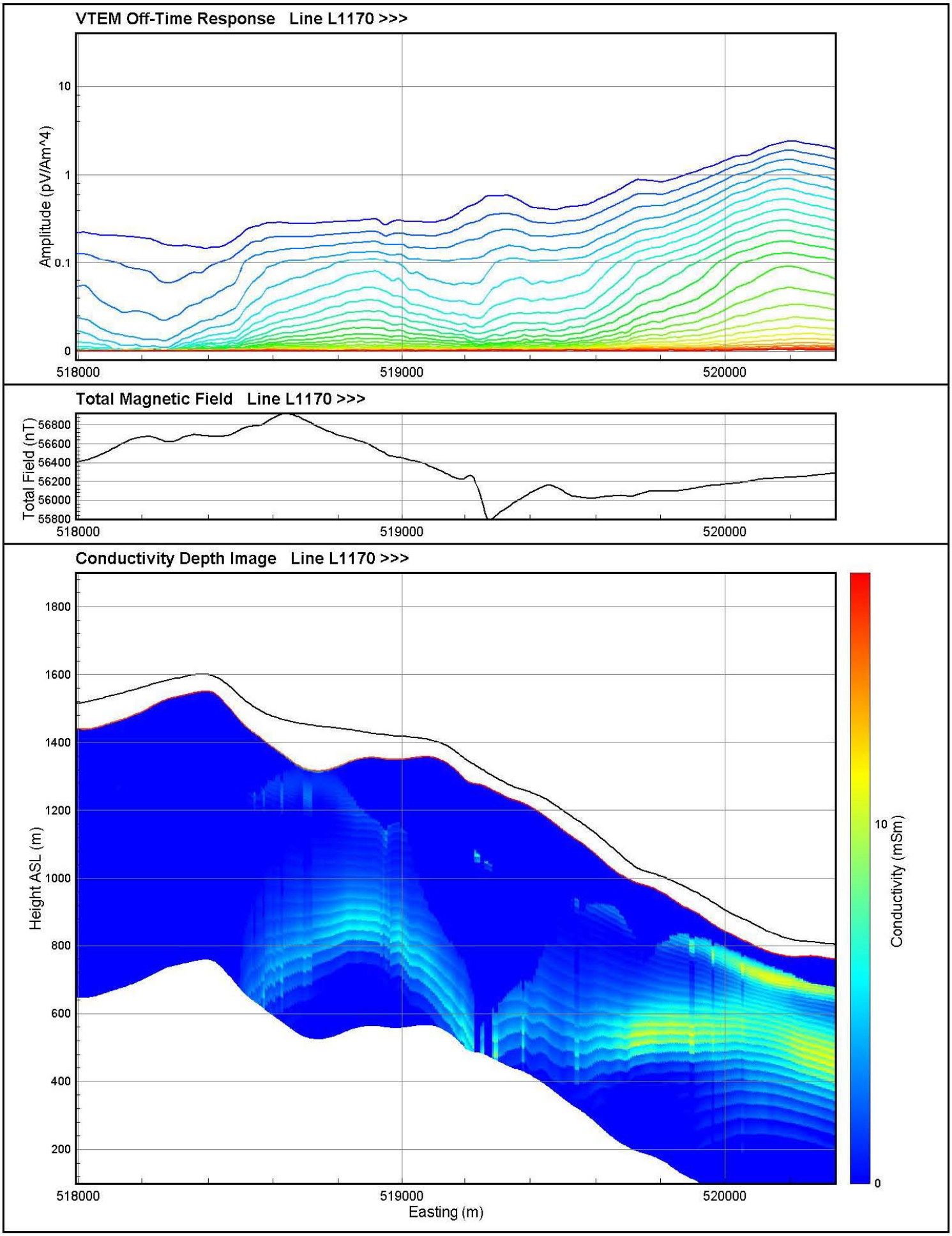
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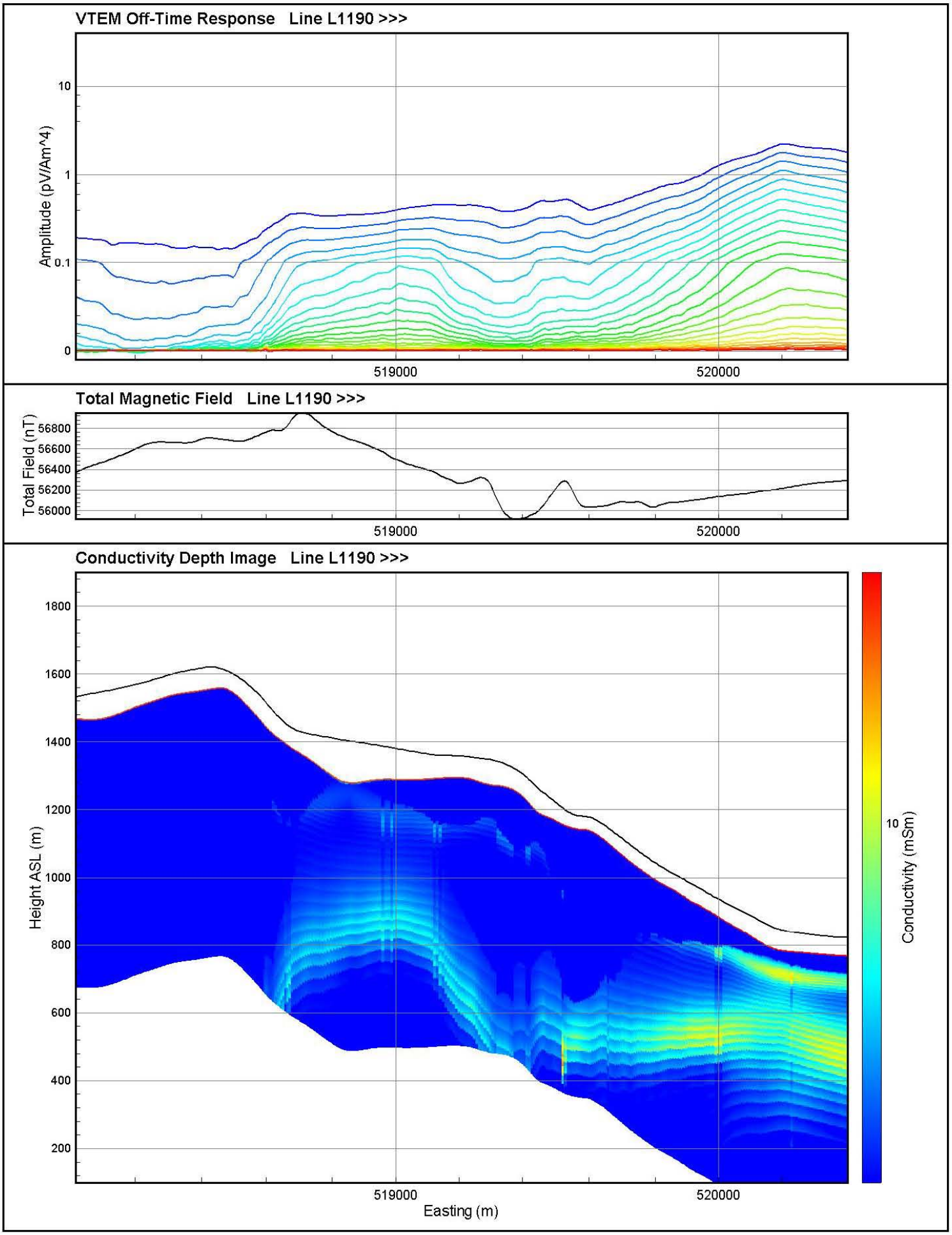
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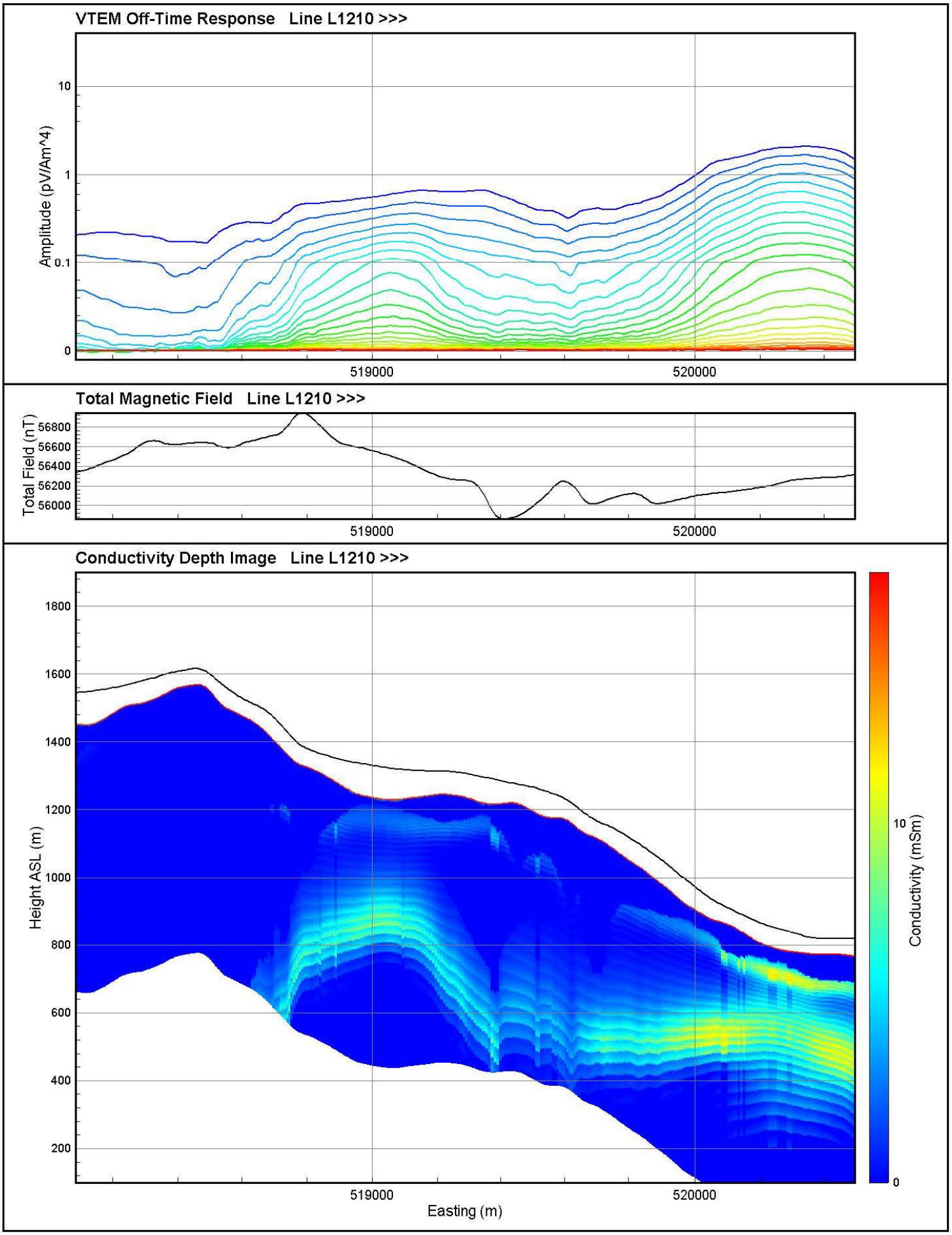
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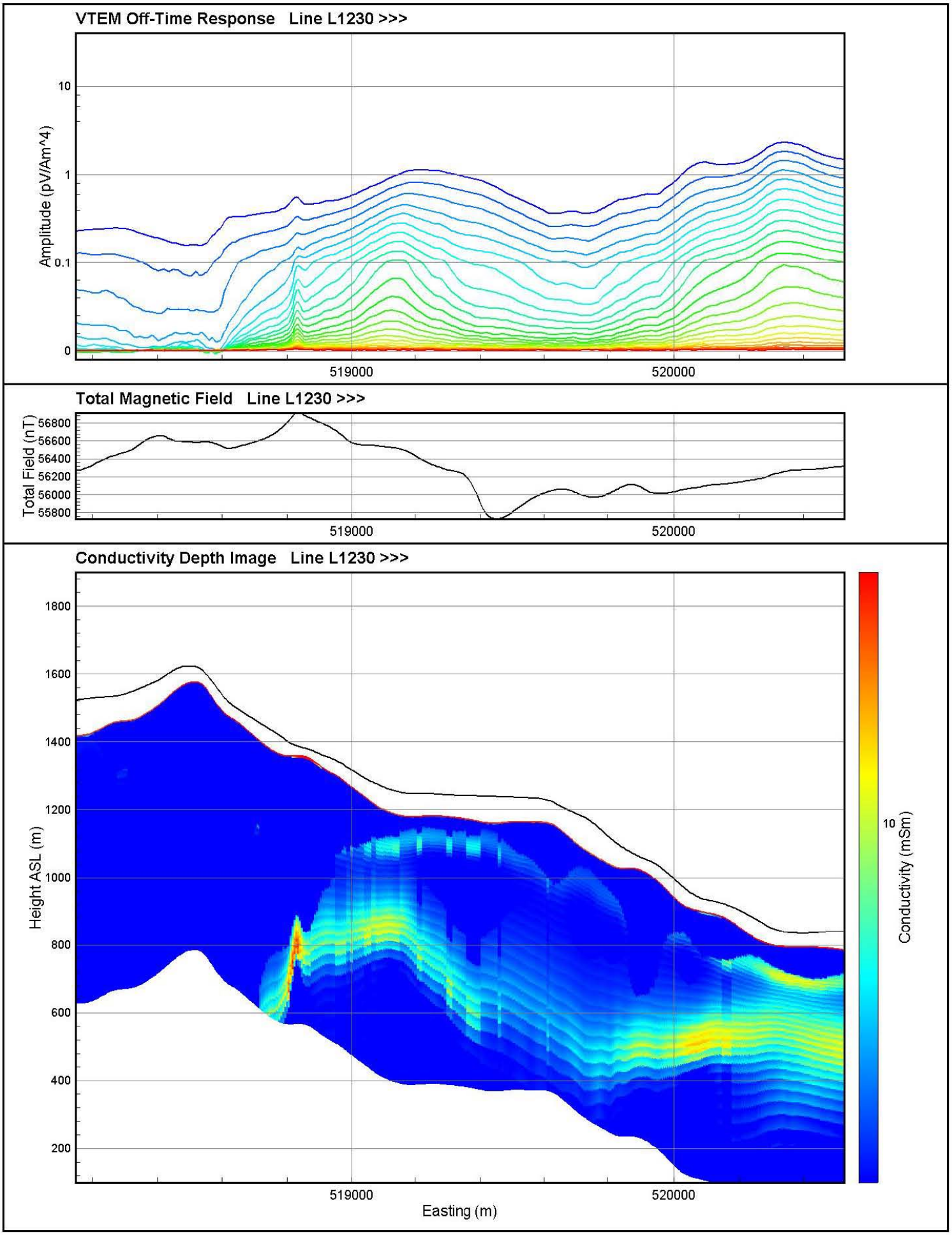
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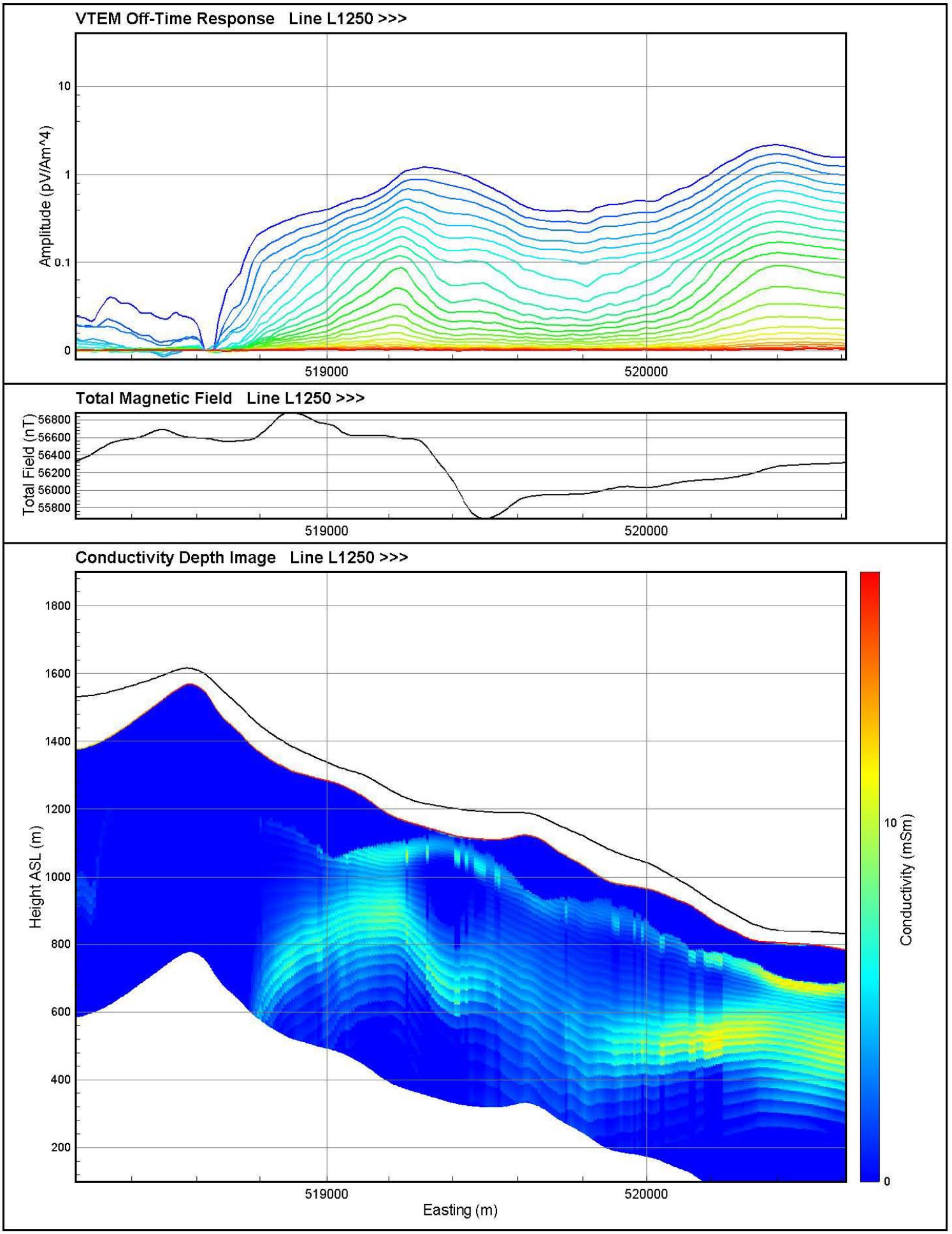
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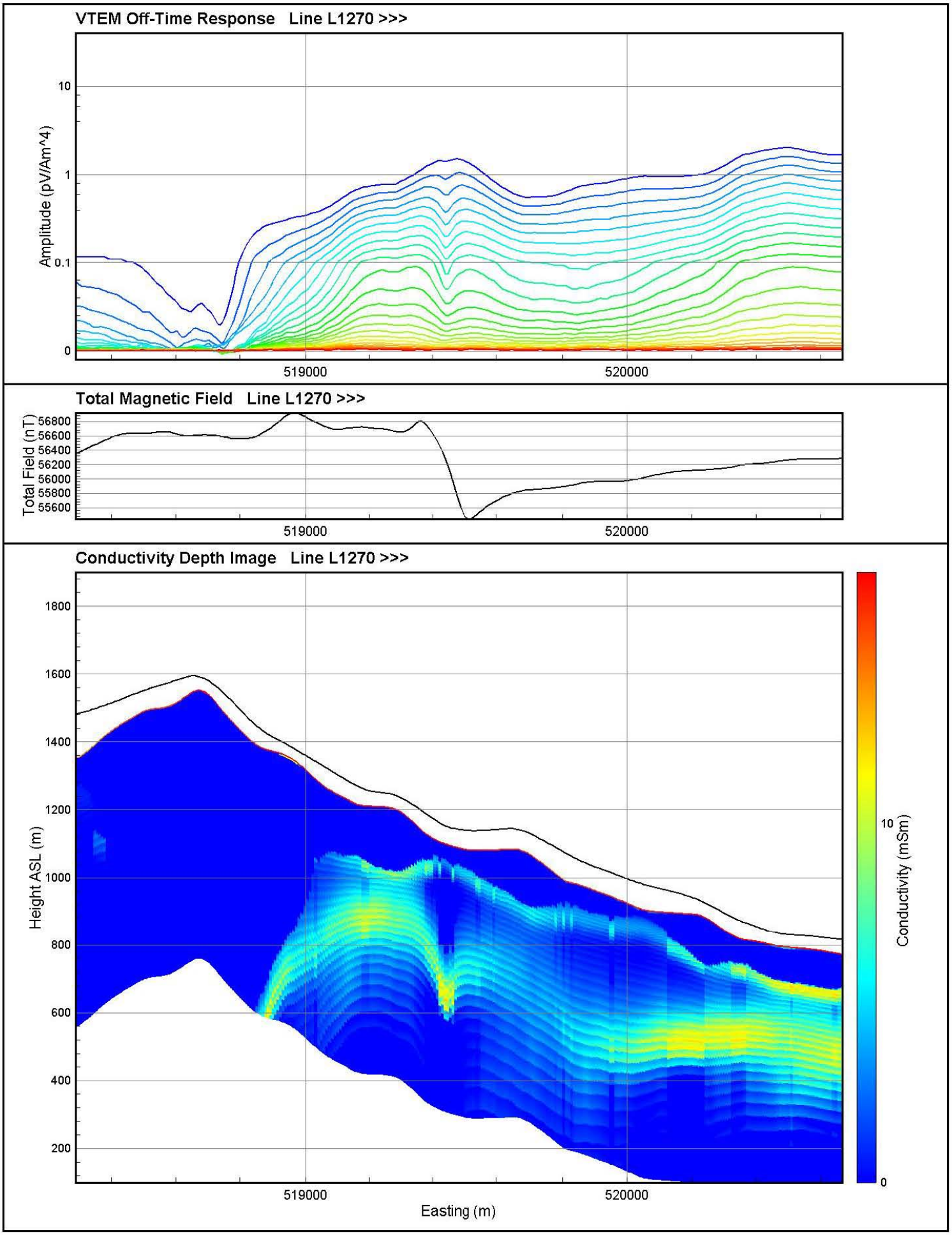
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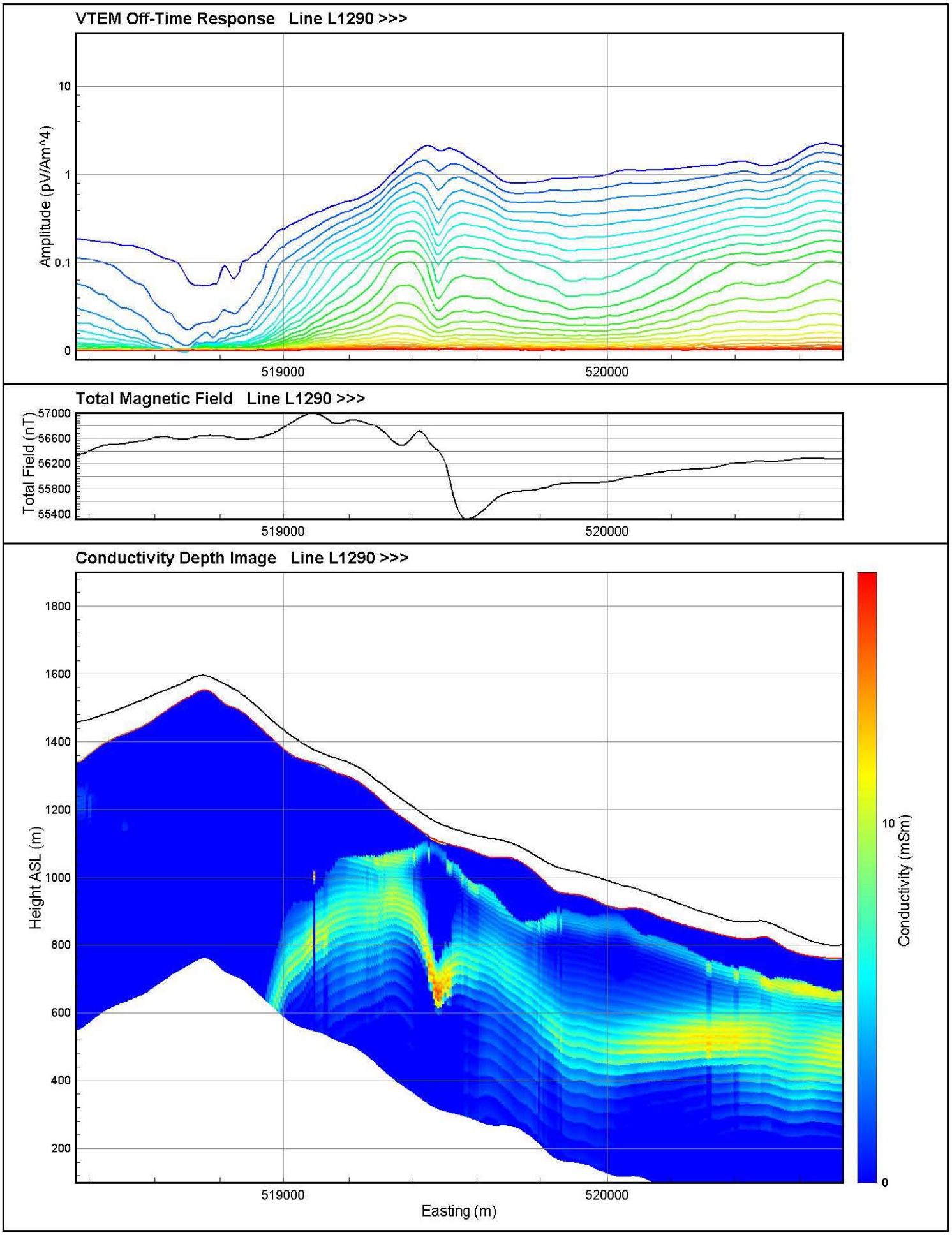
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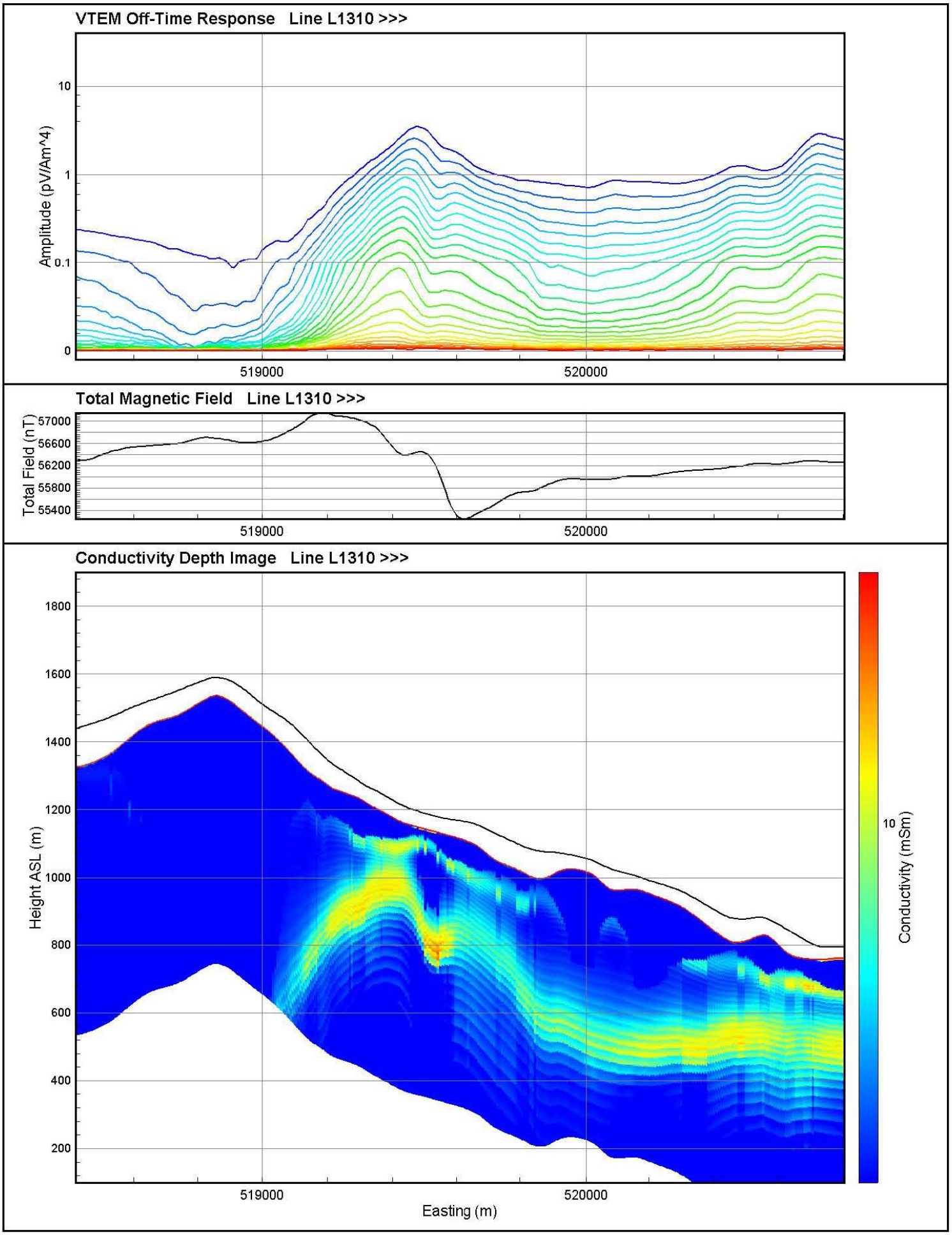
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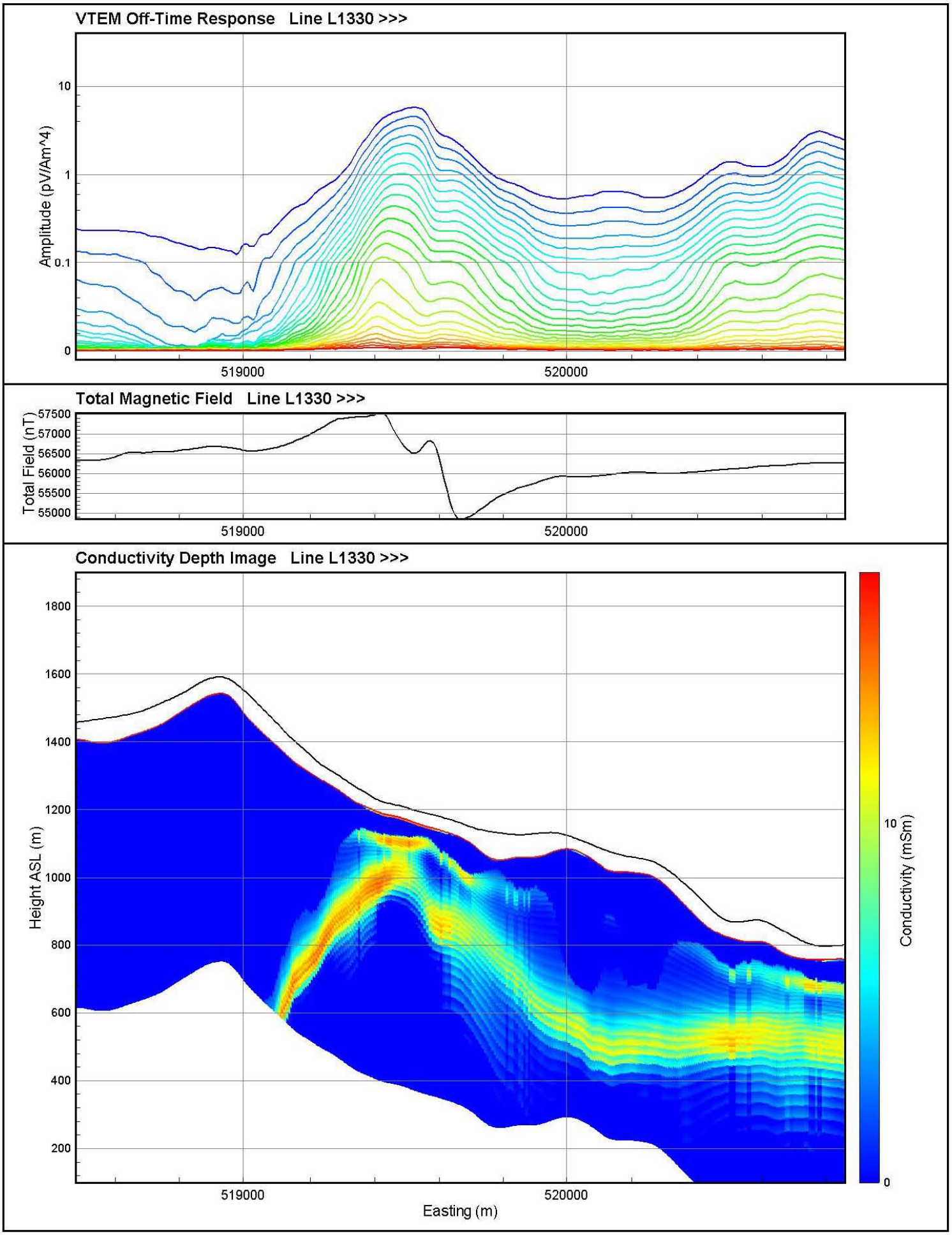
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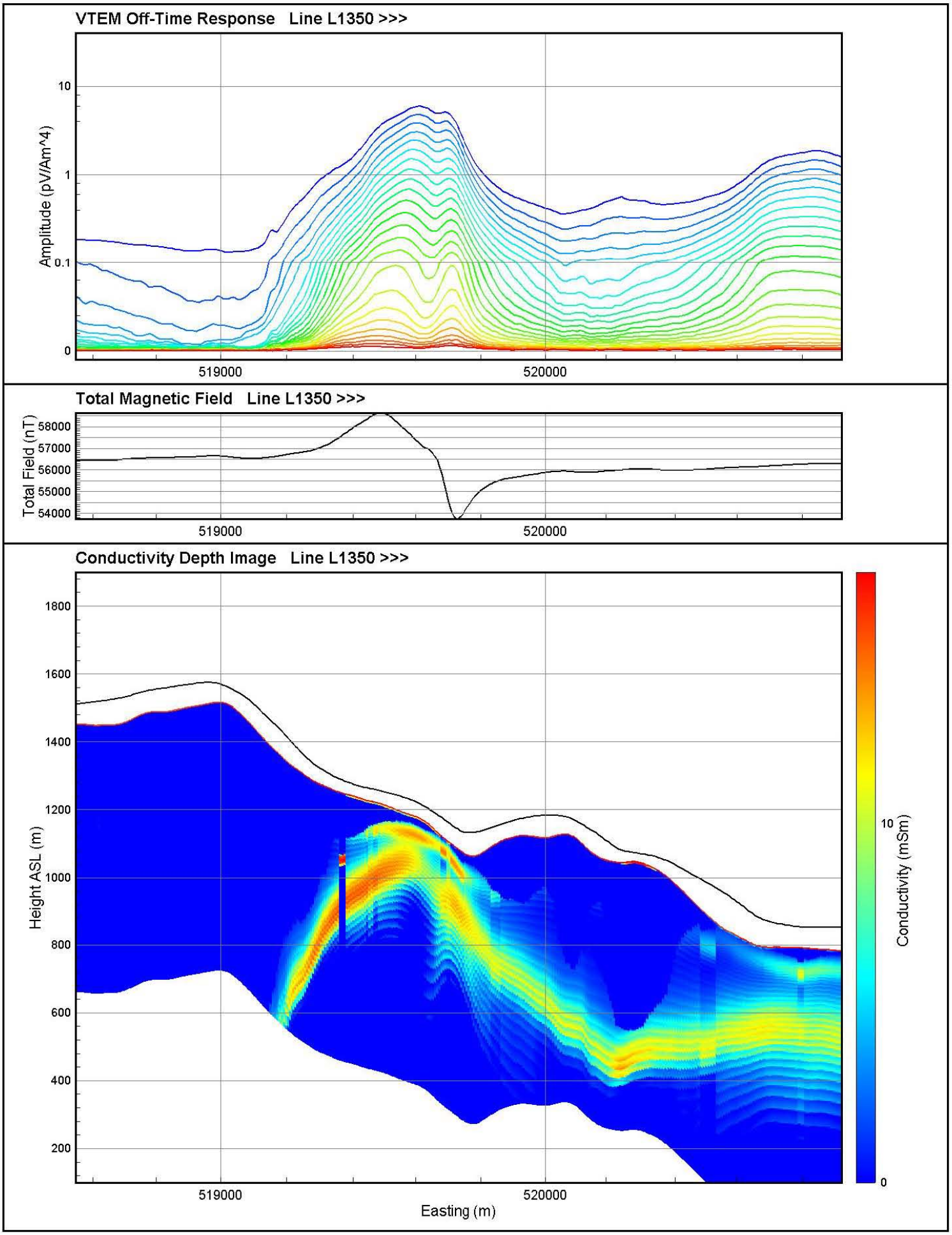
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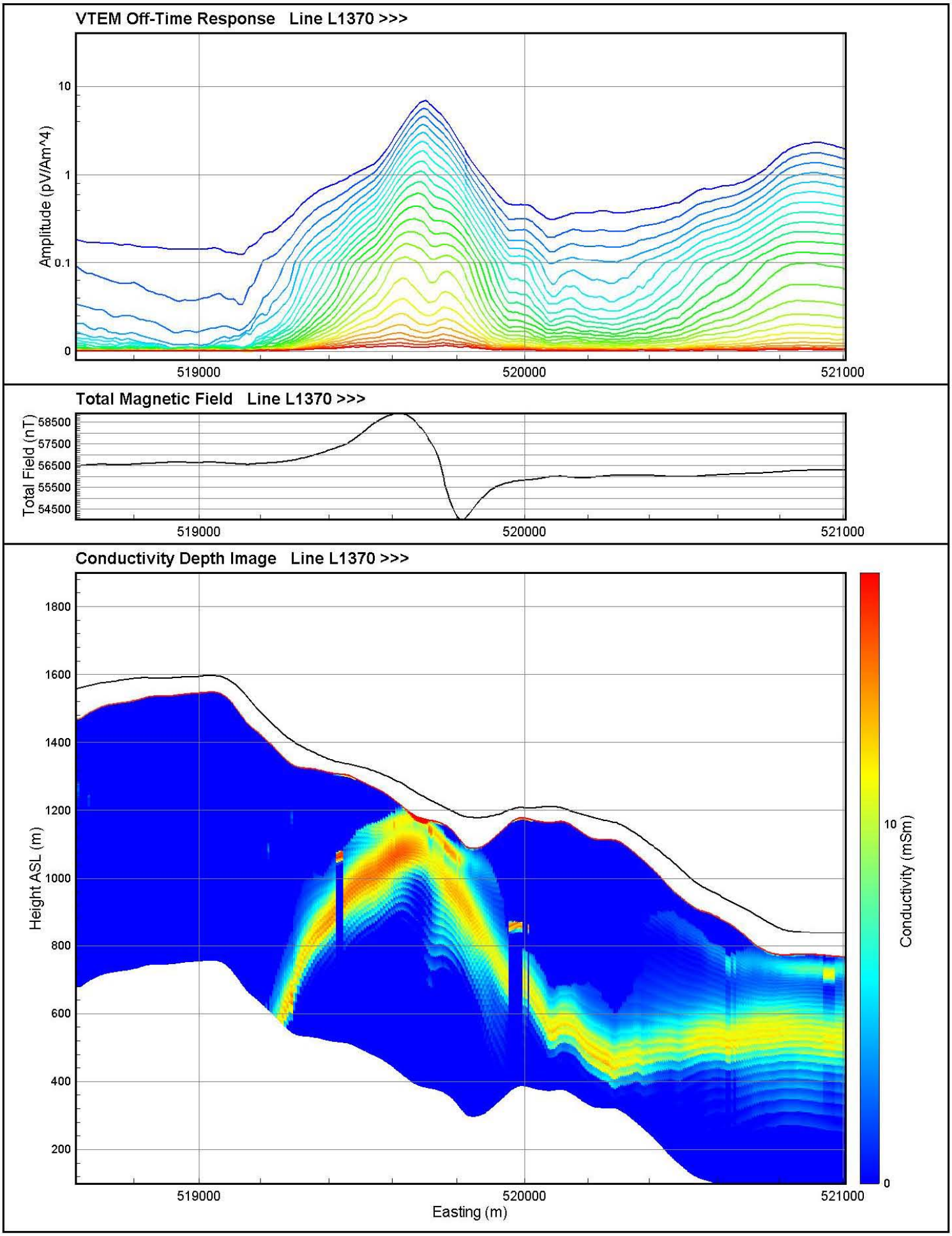
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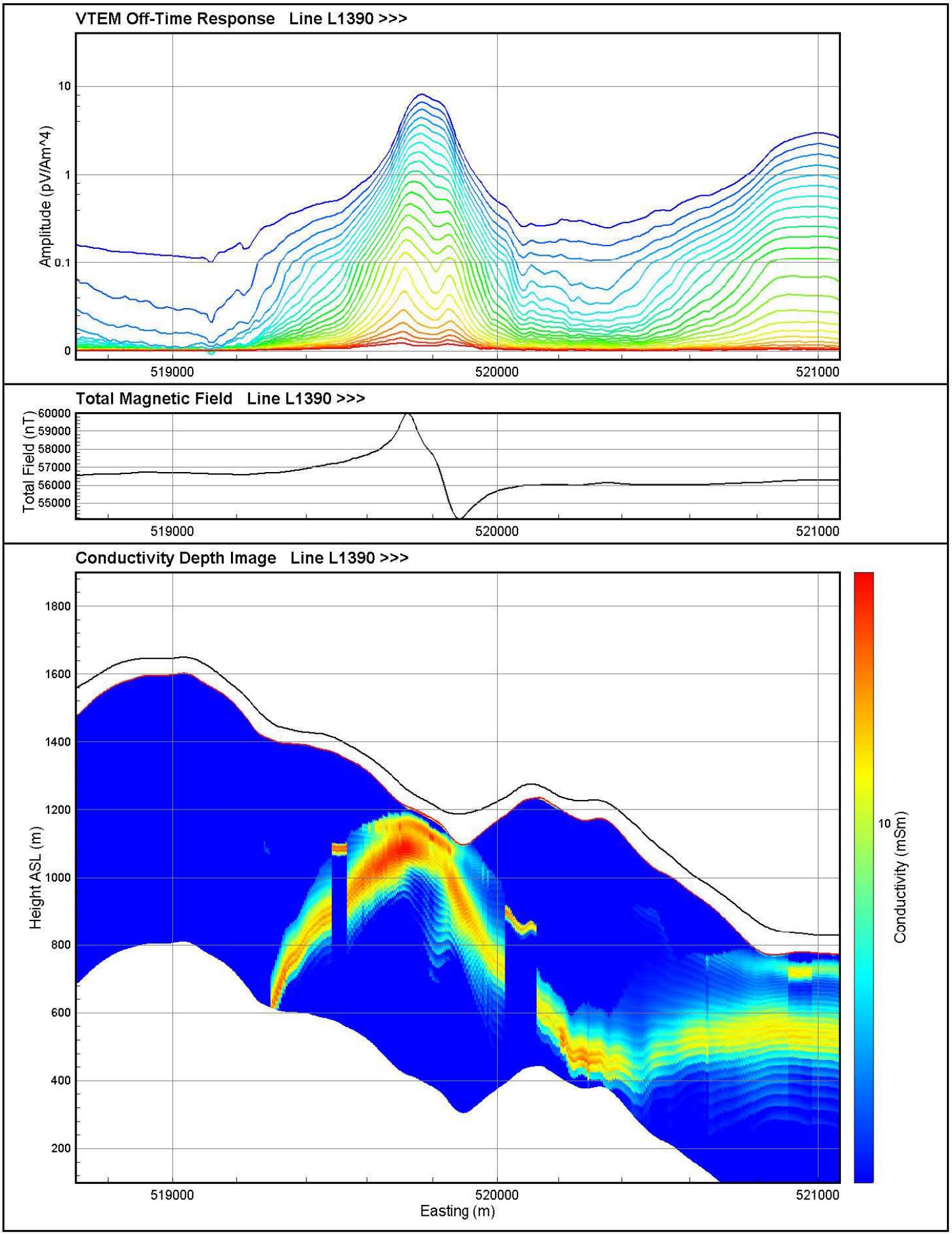
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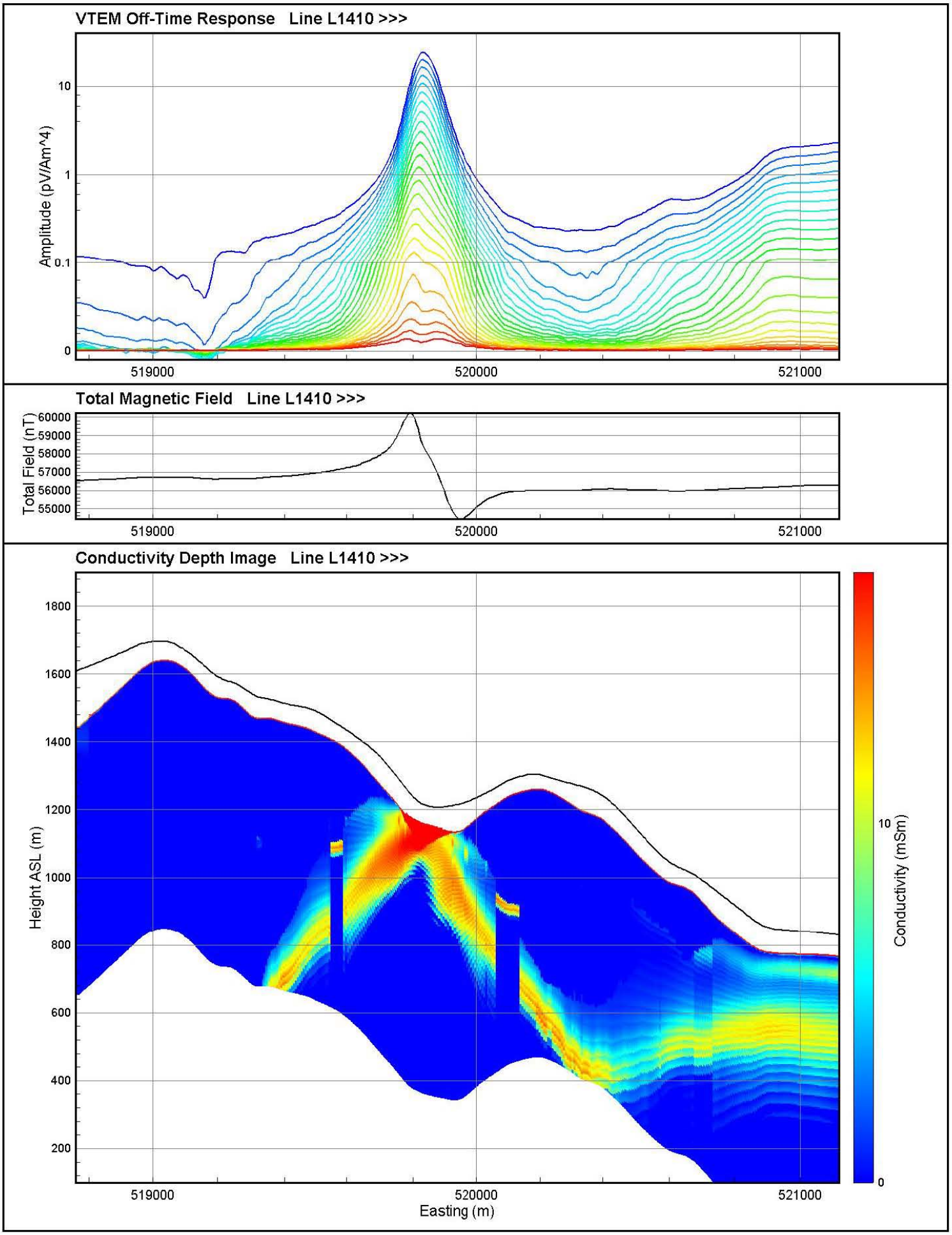
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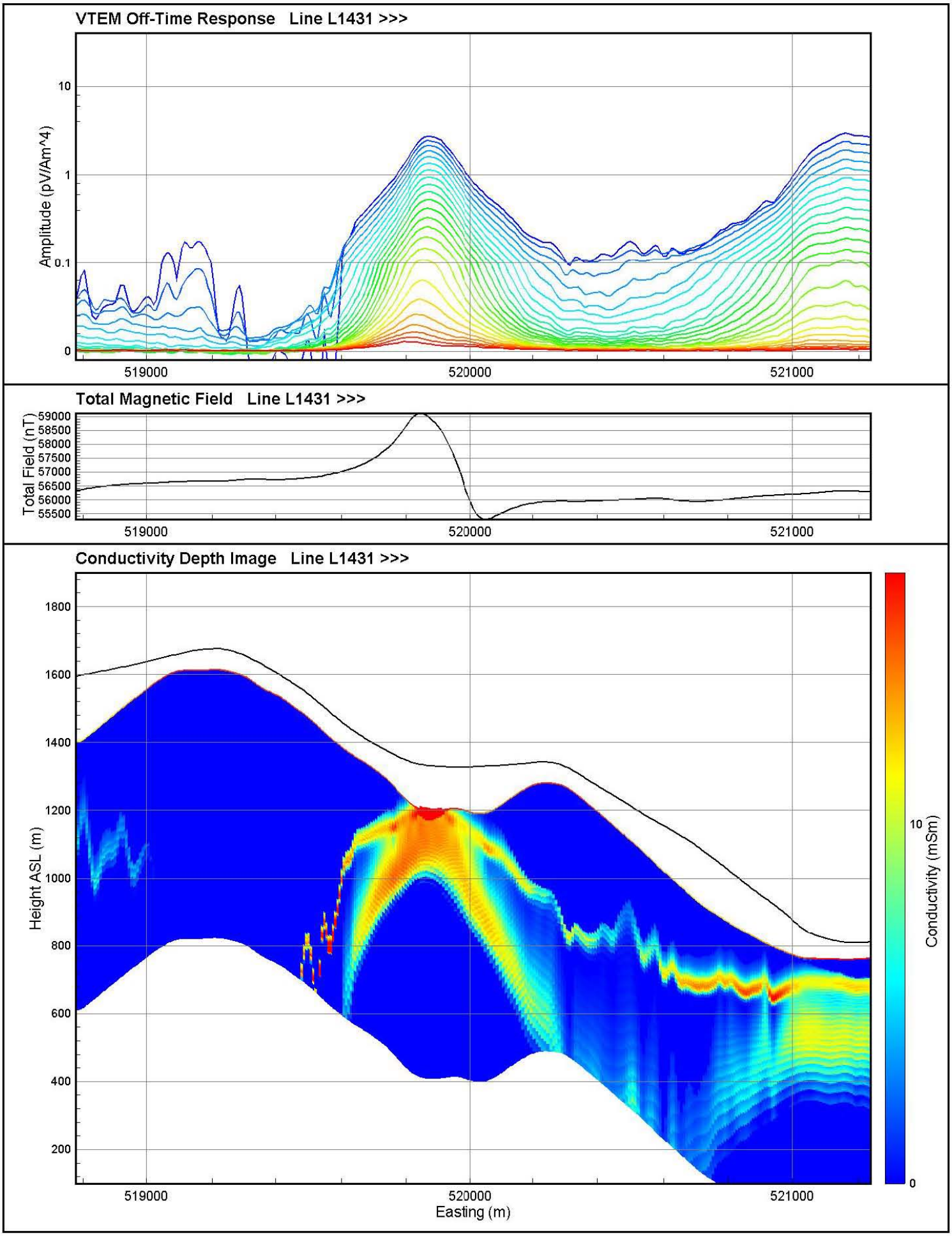
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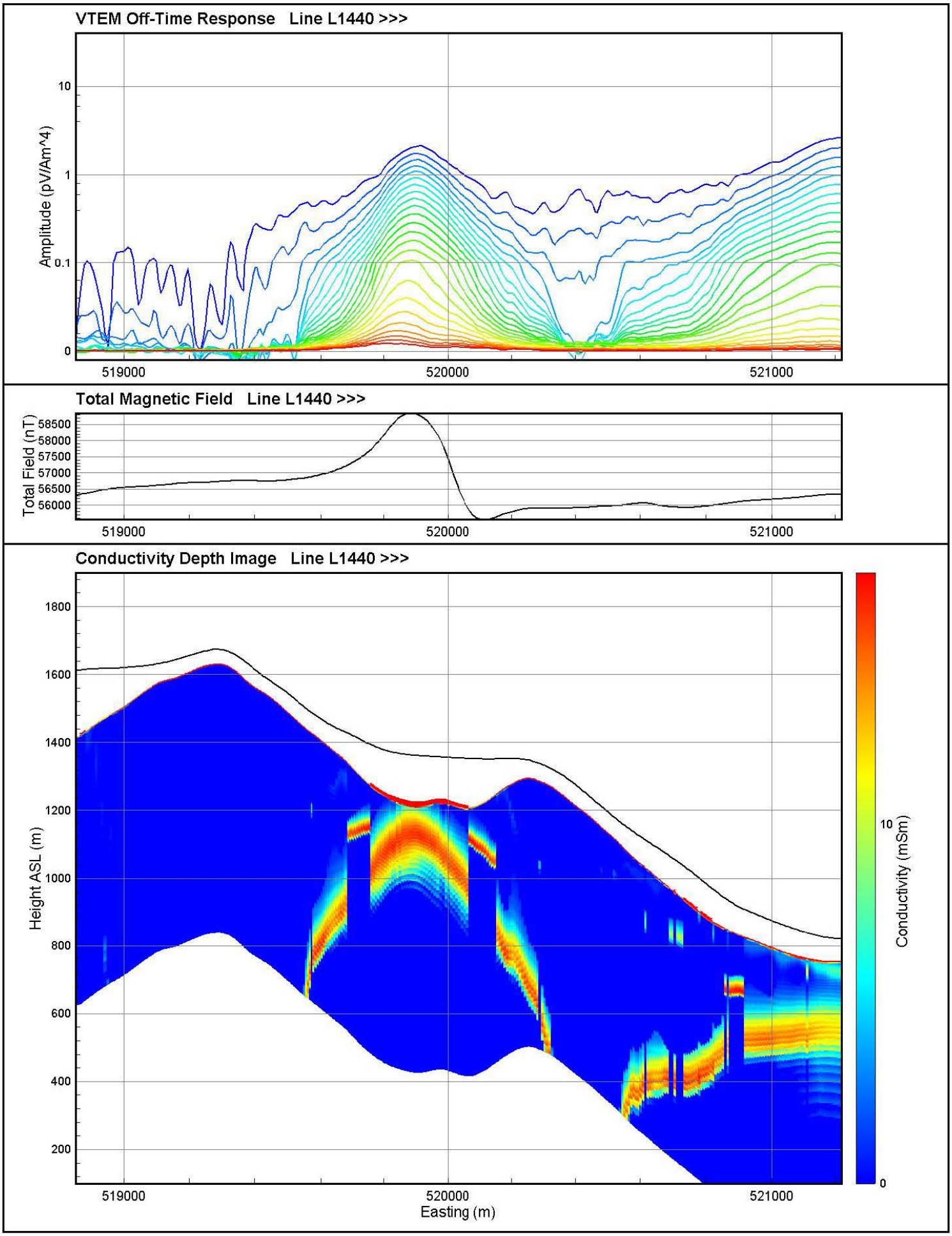
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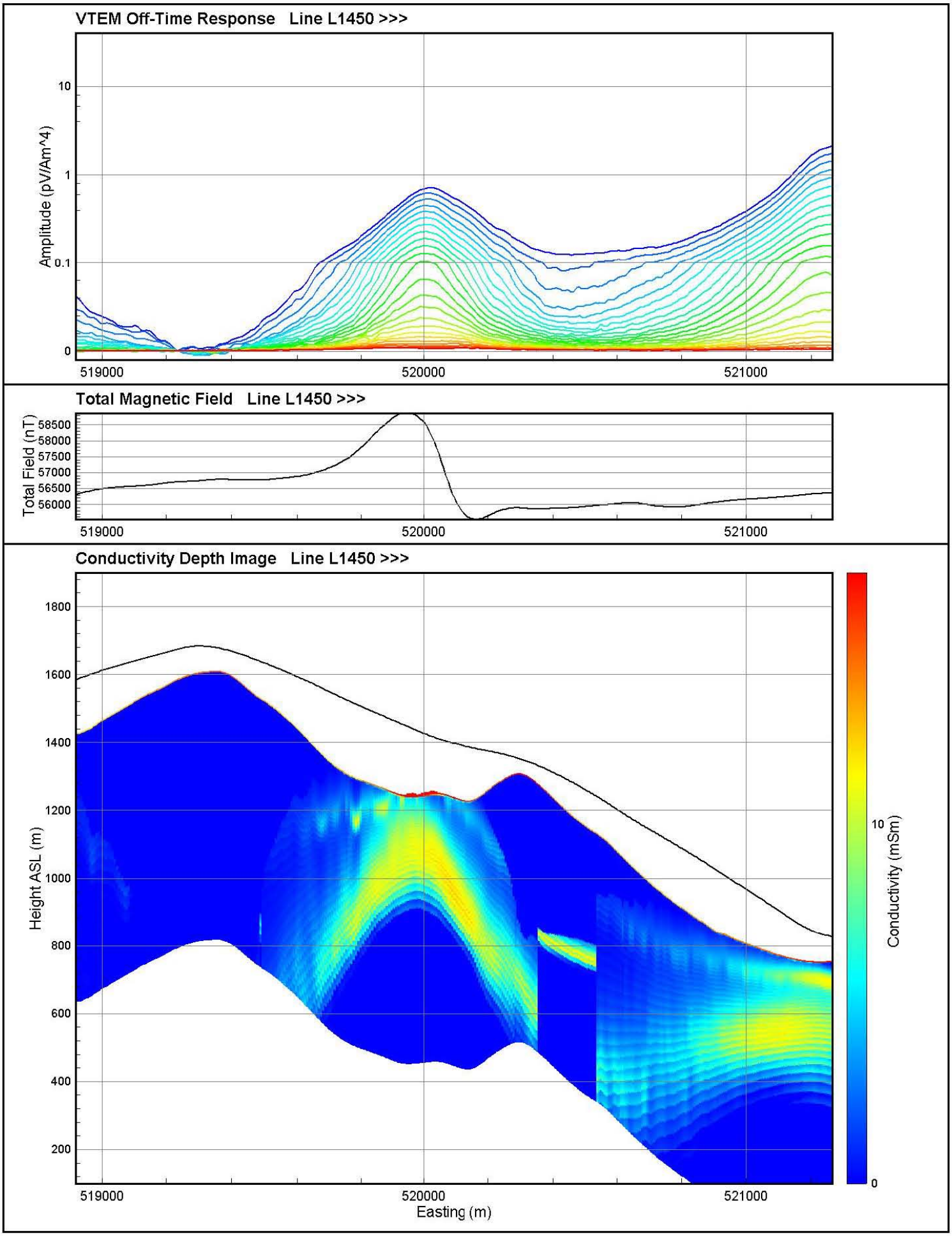
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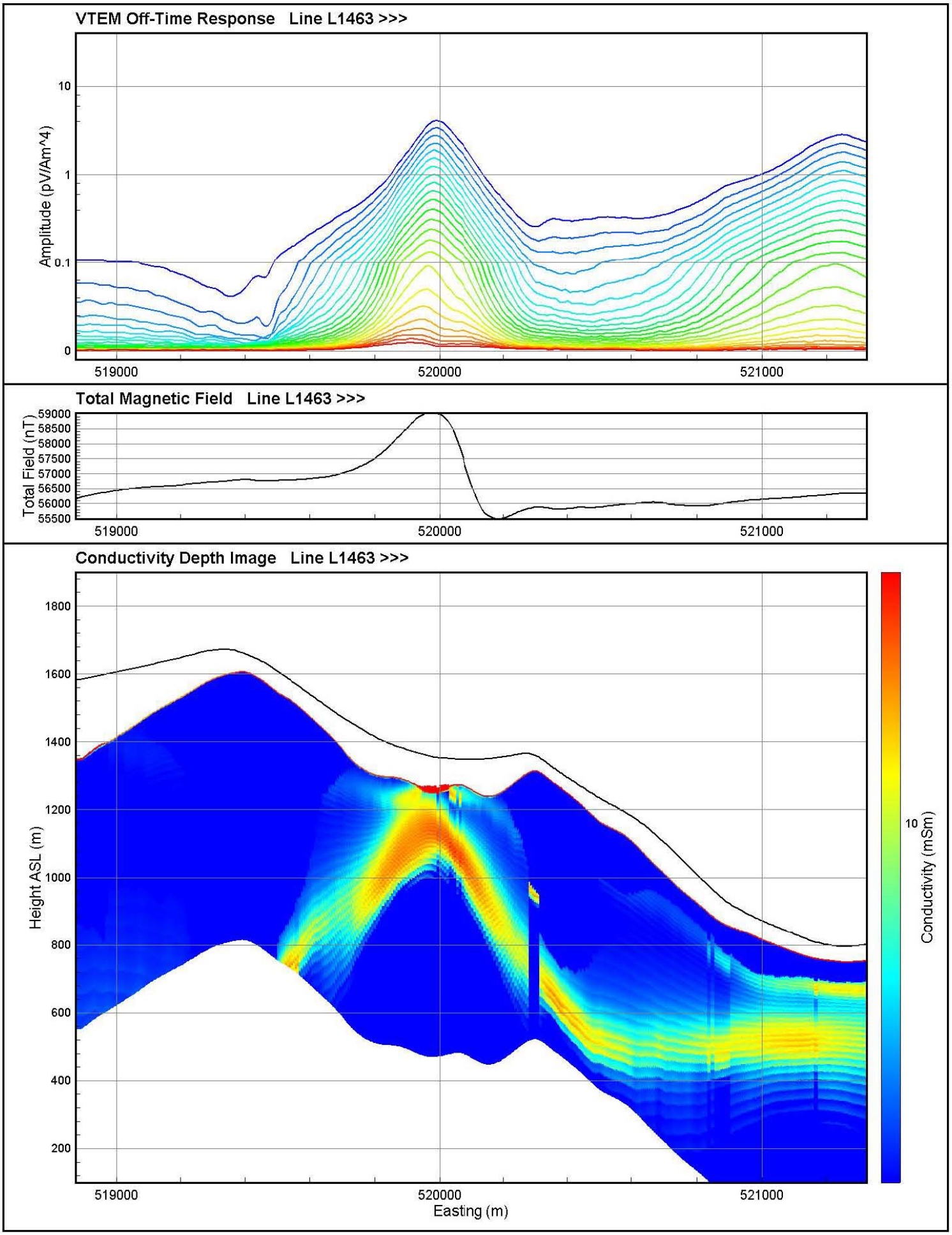
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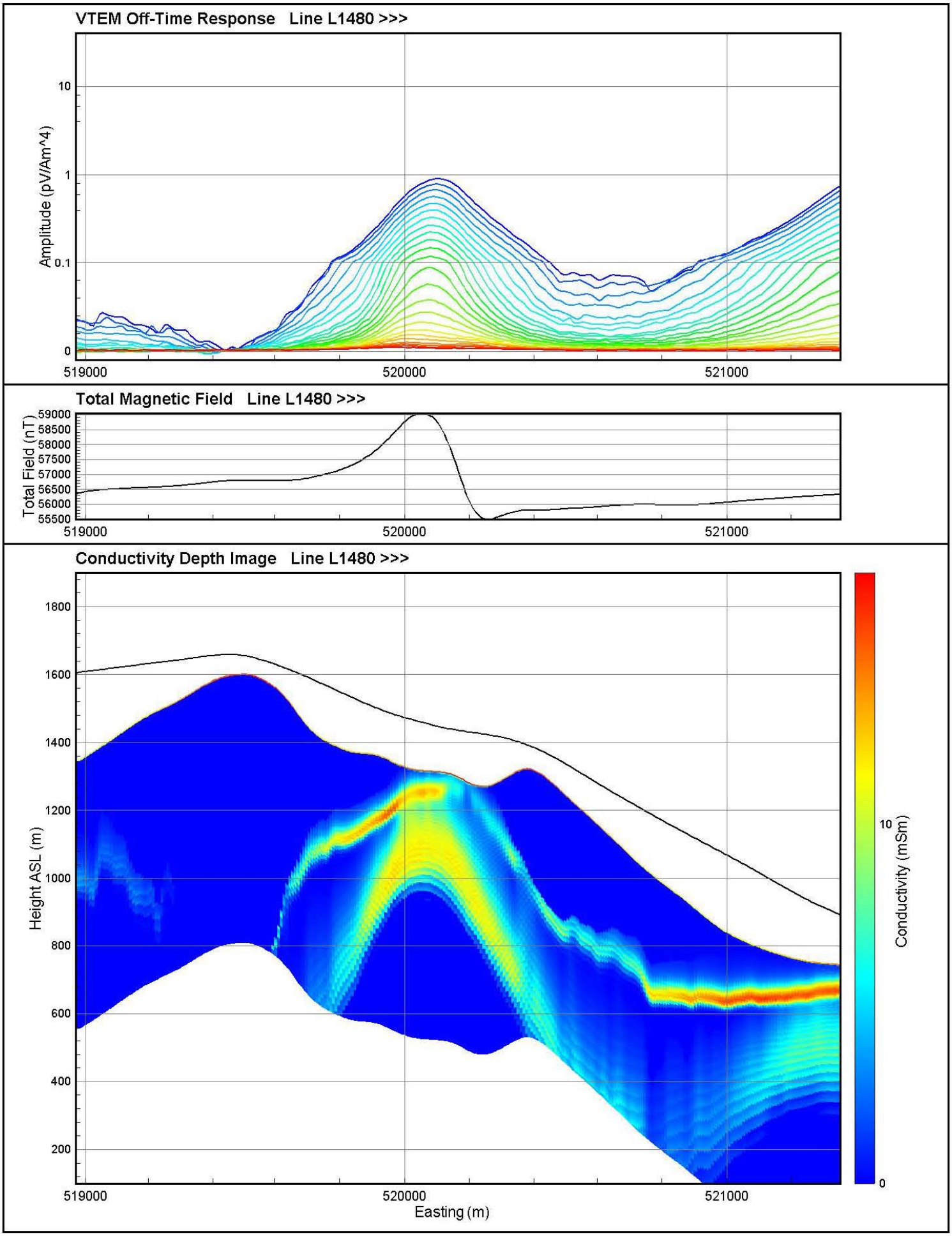
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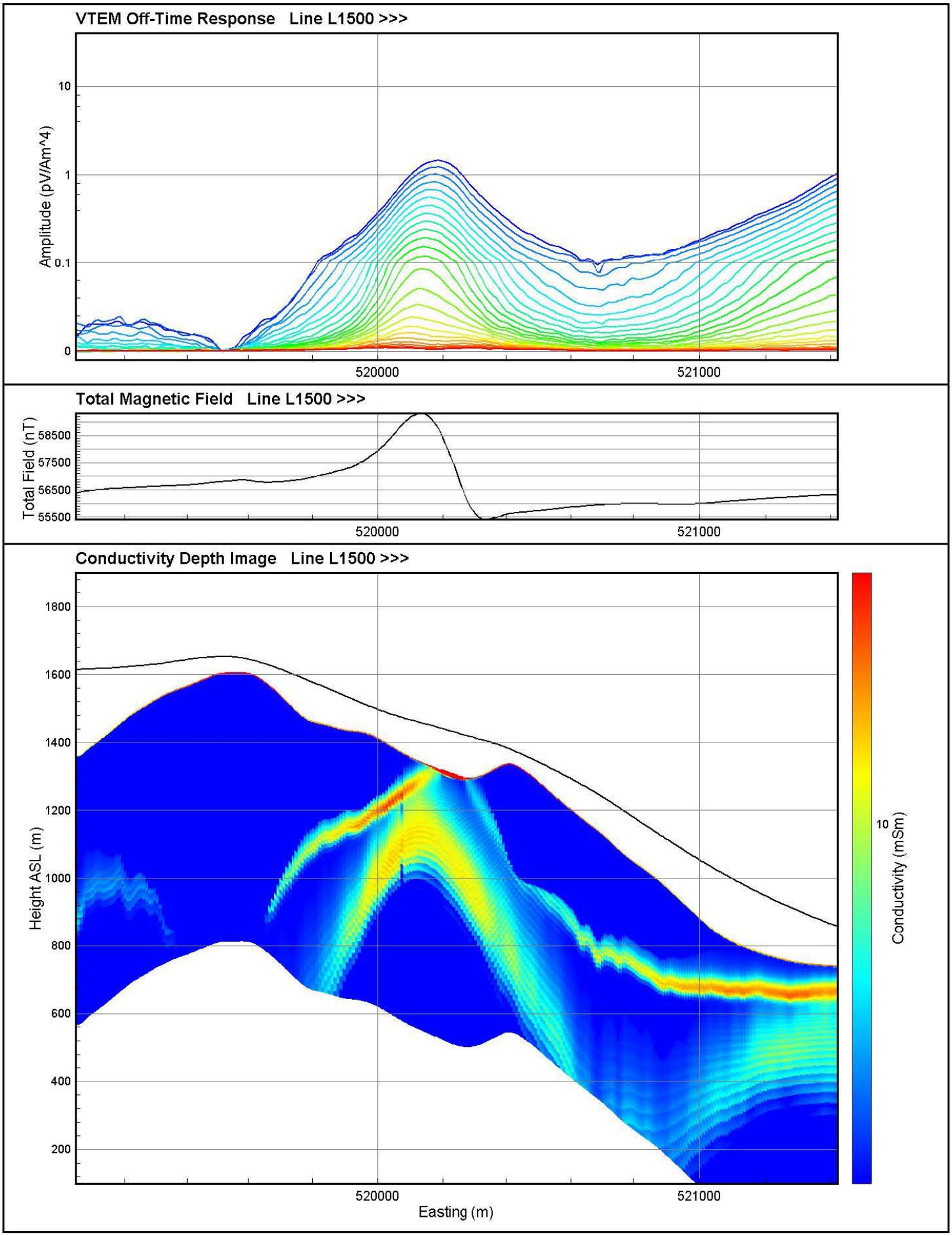
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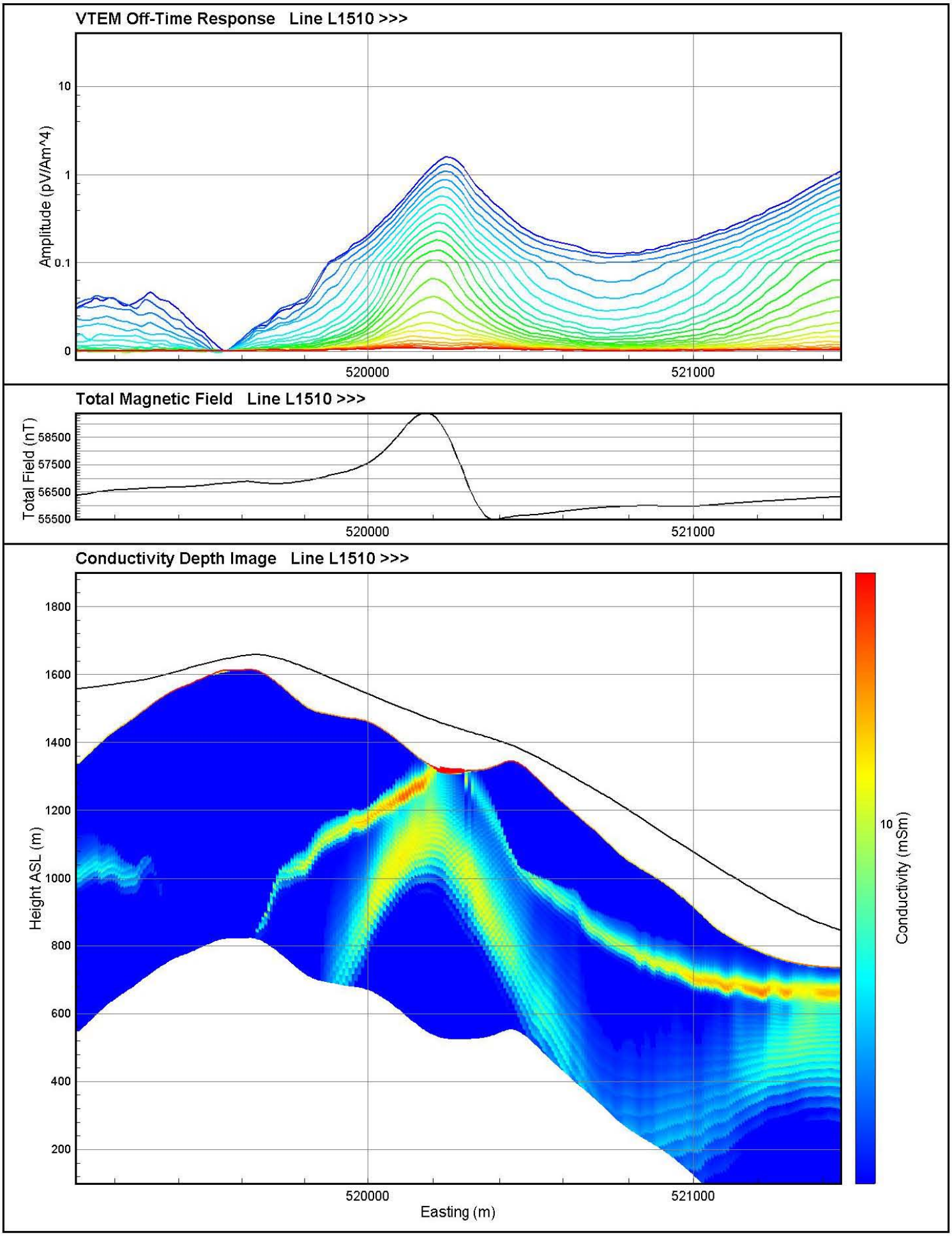
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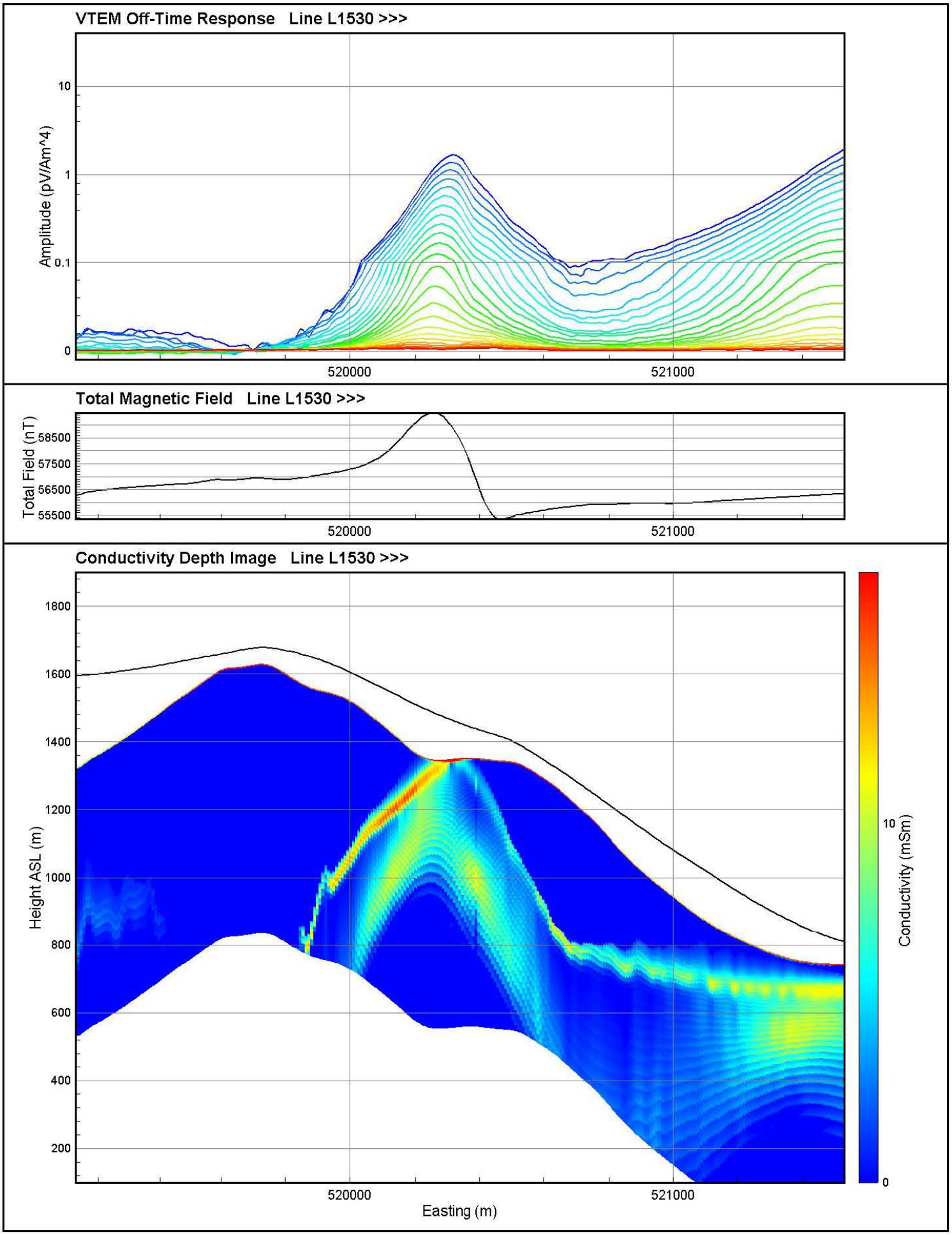
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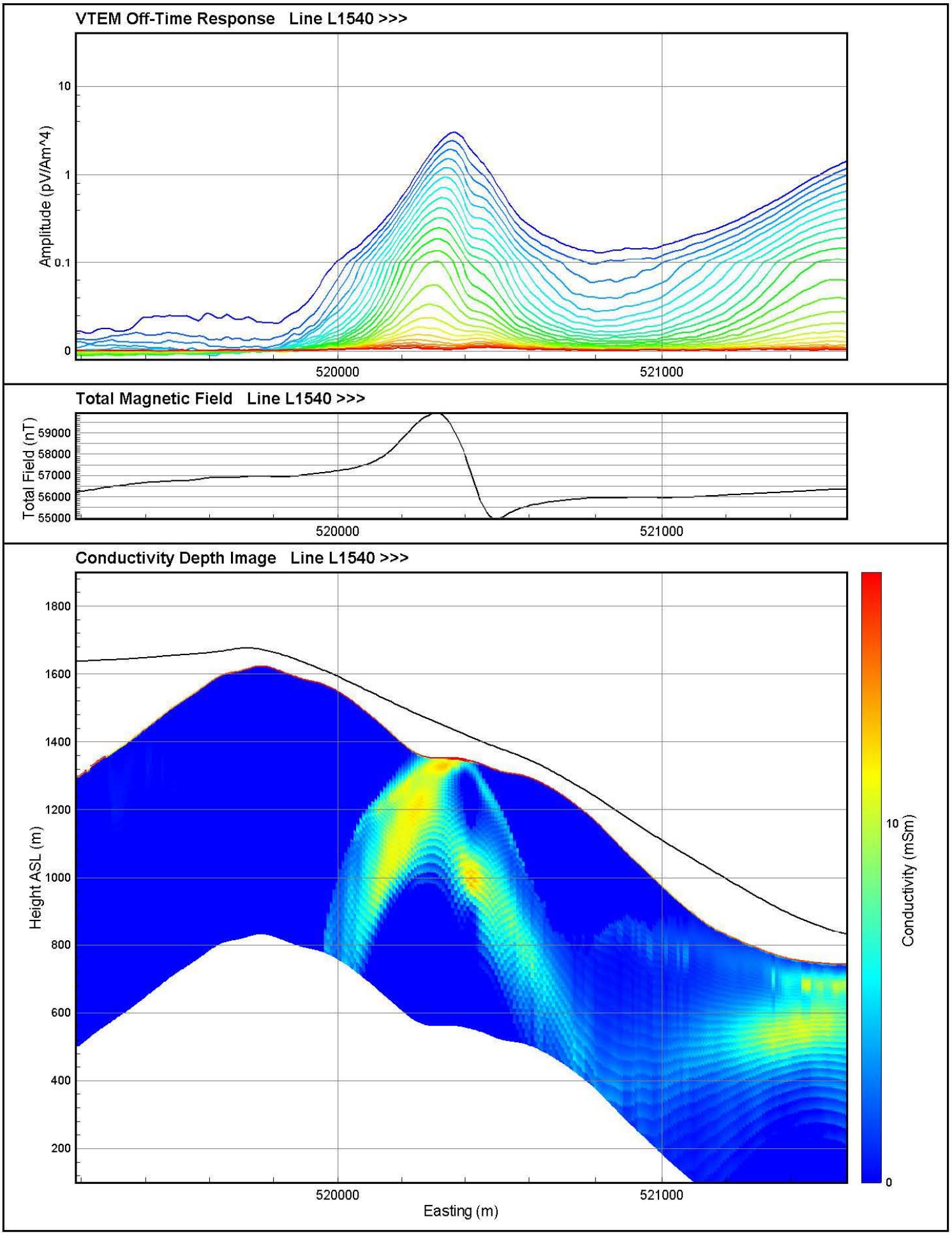
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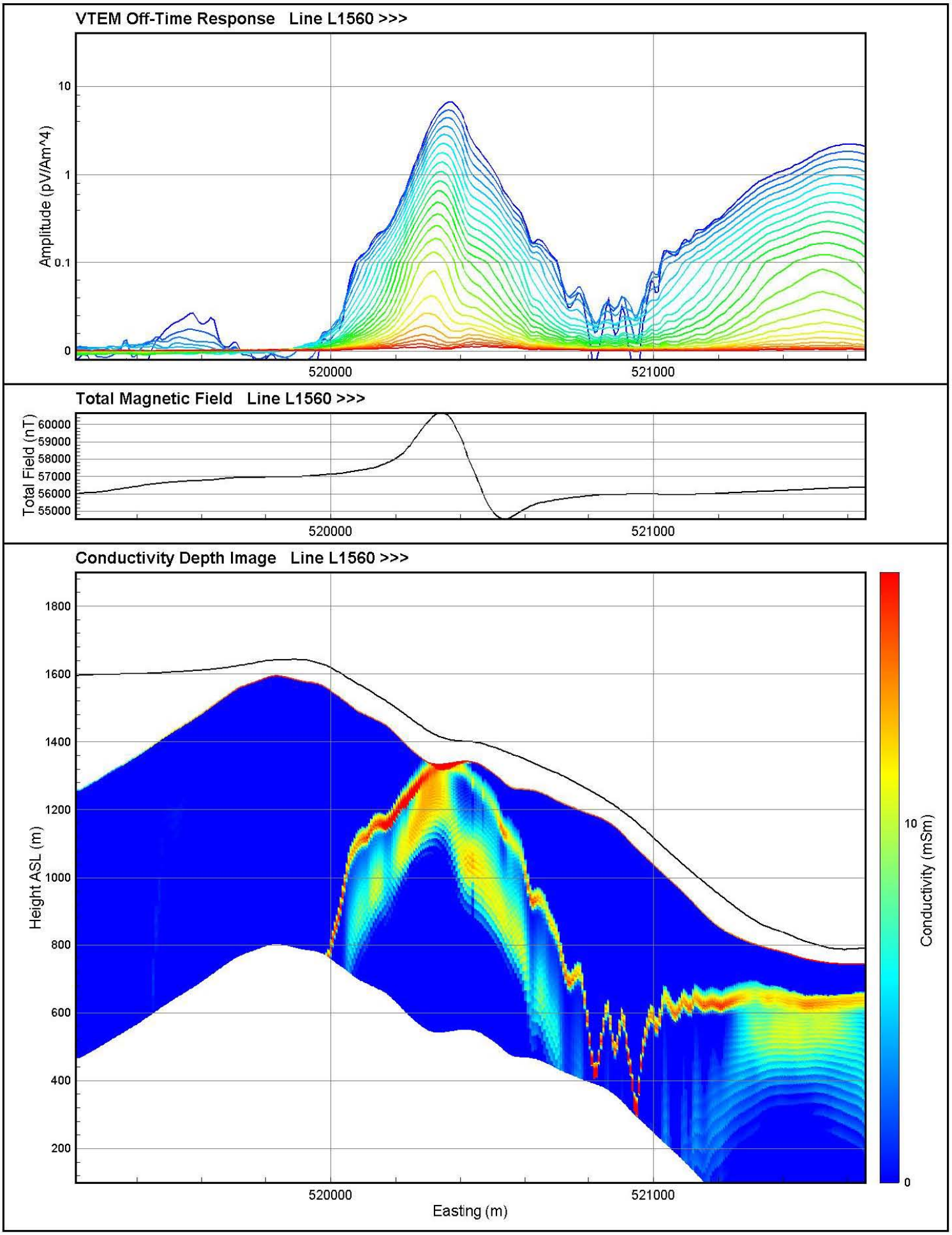
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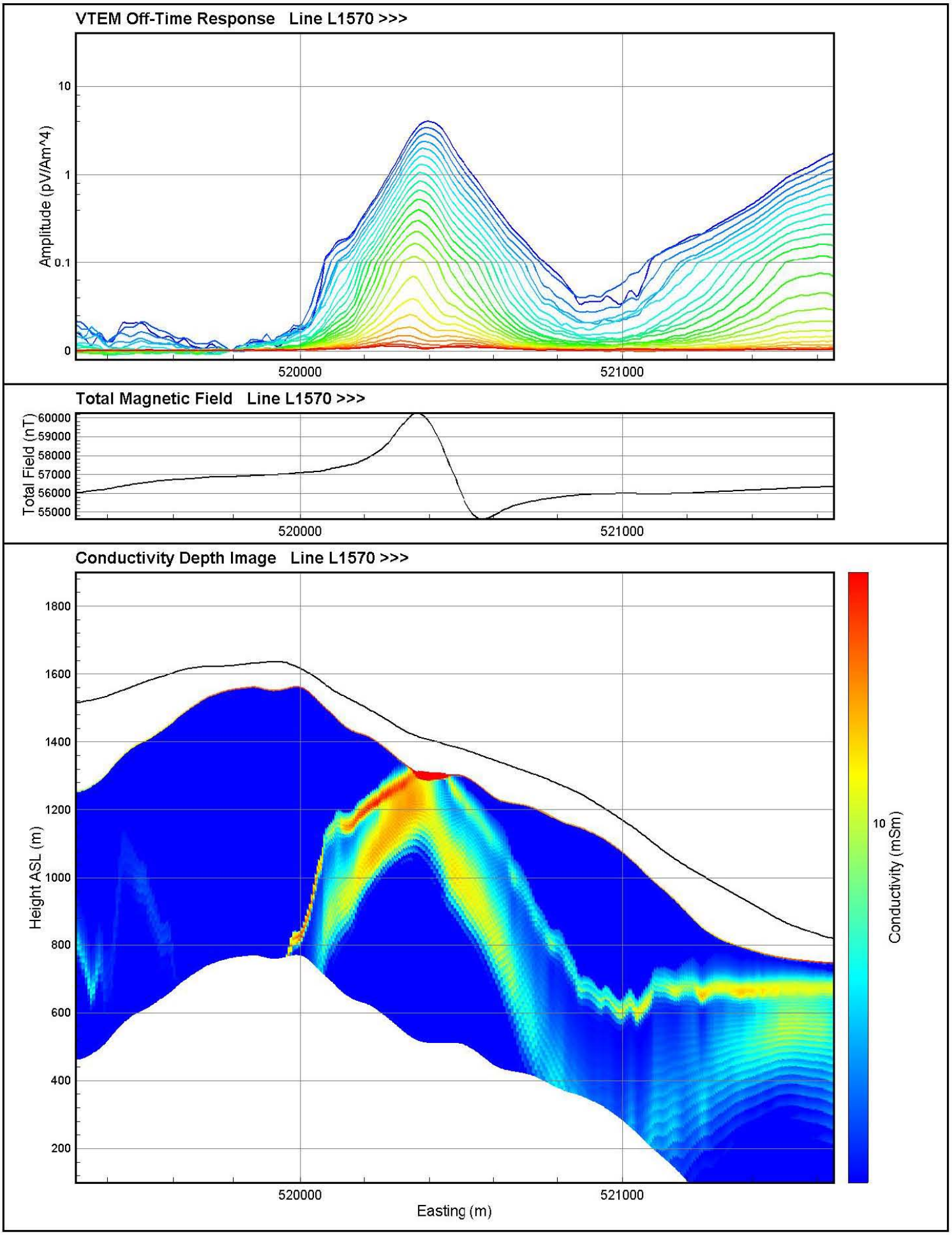
GNME - Yukon VTEM Survey
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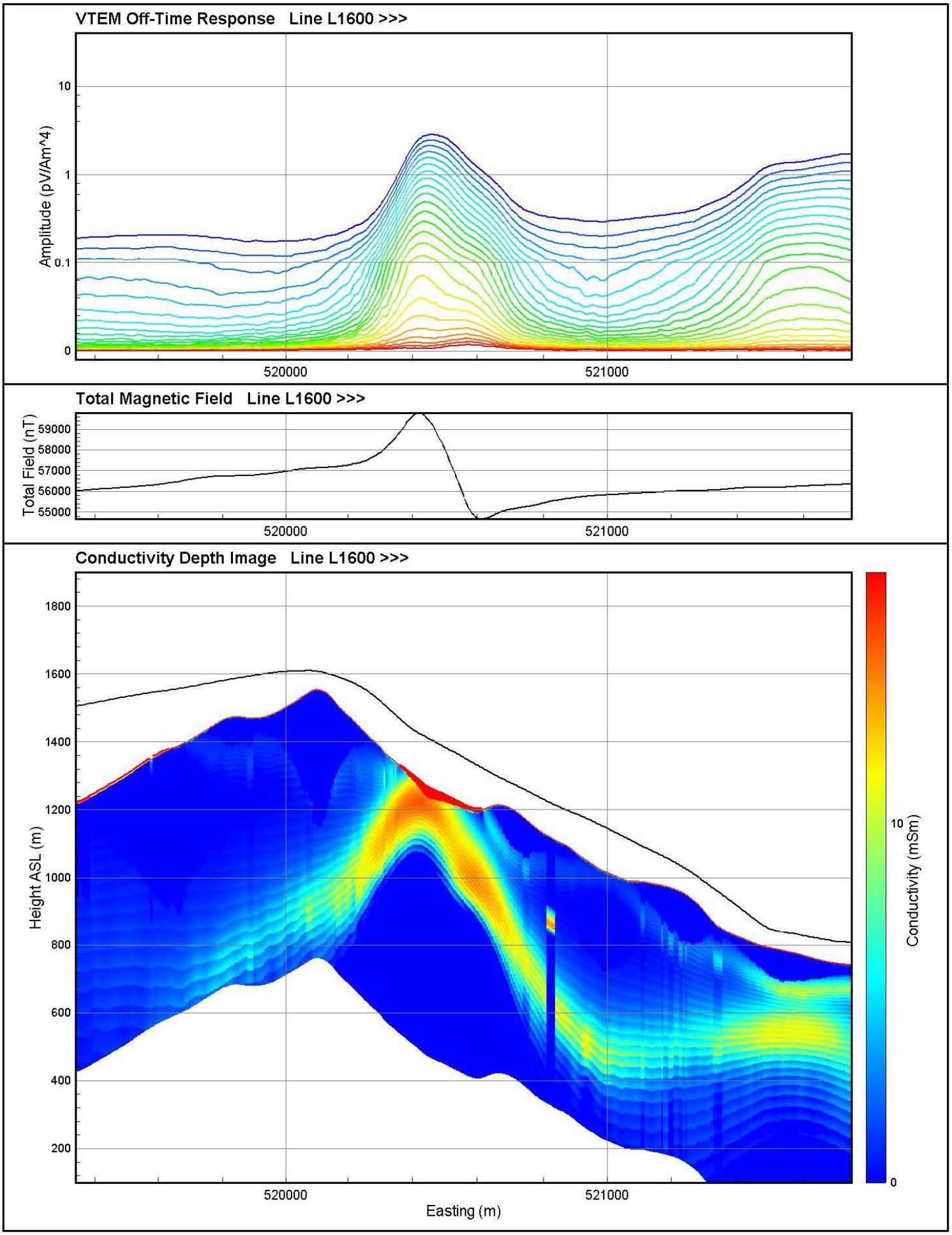
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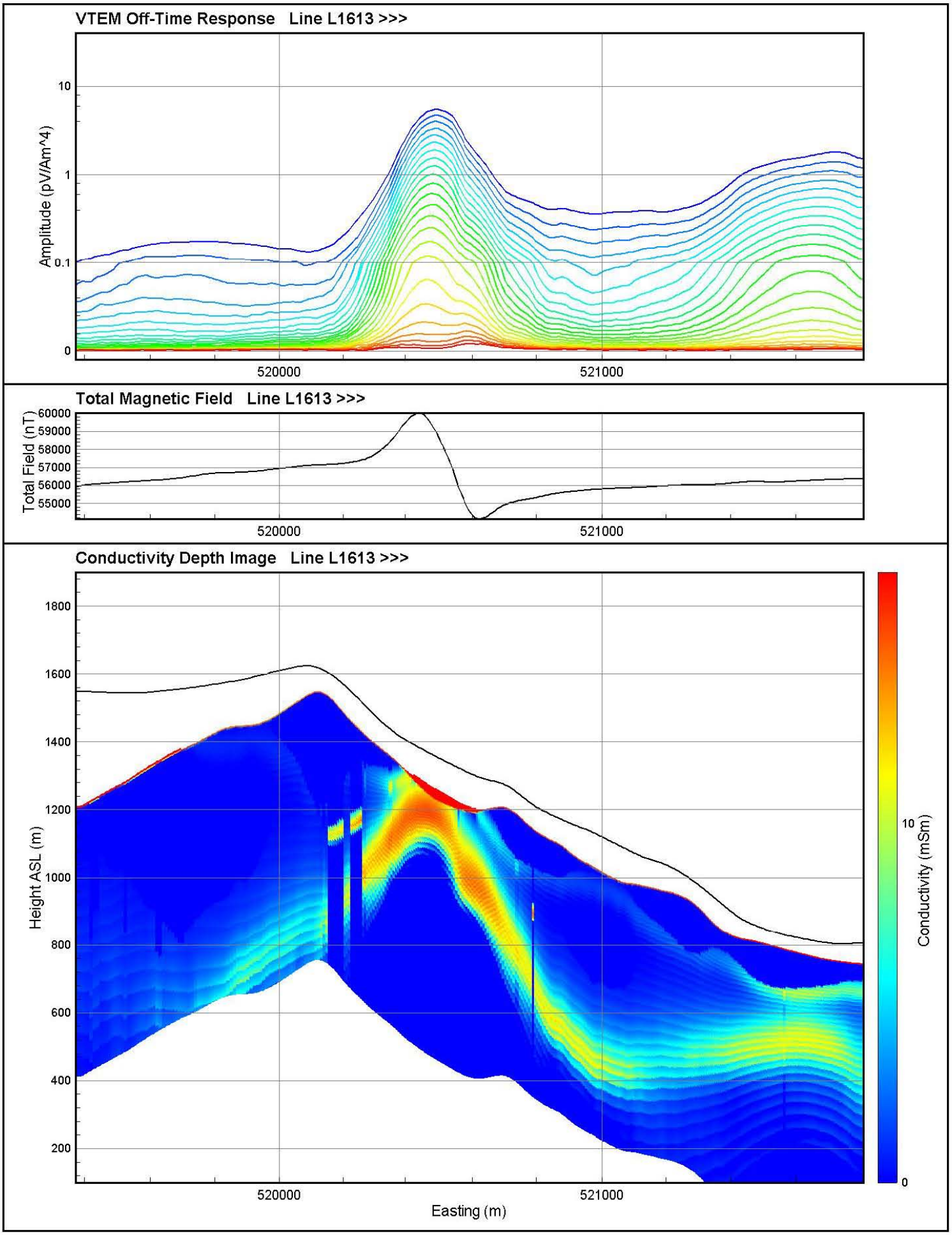
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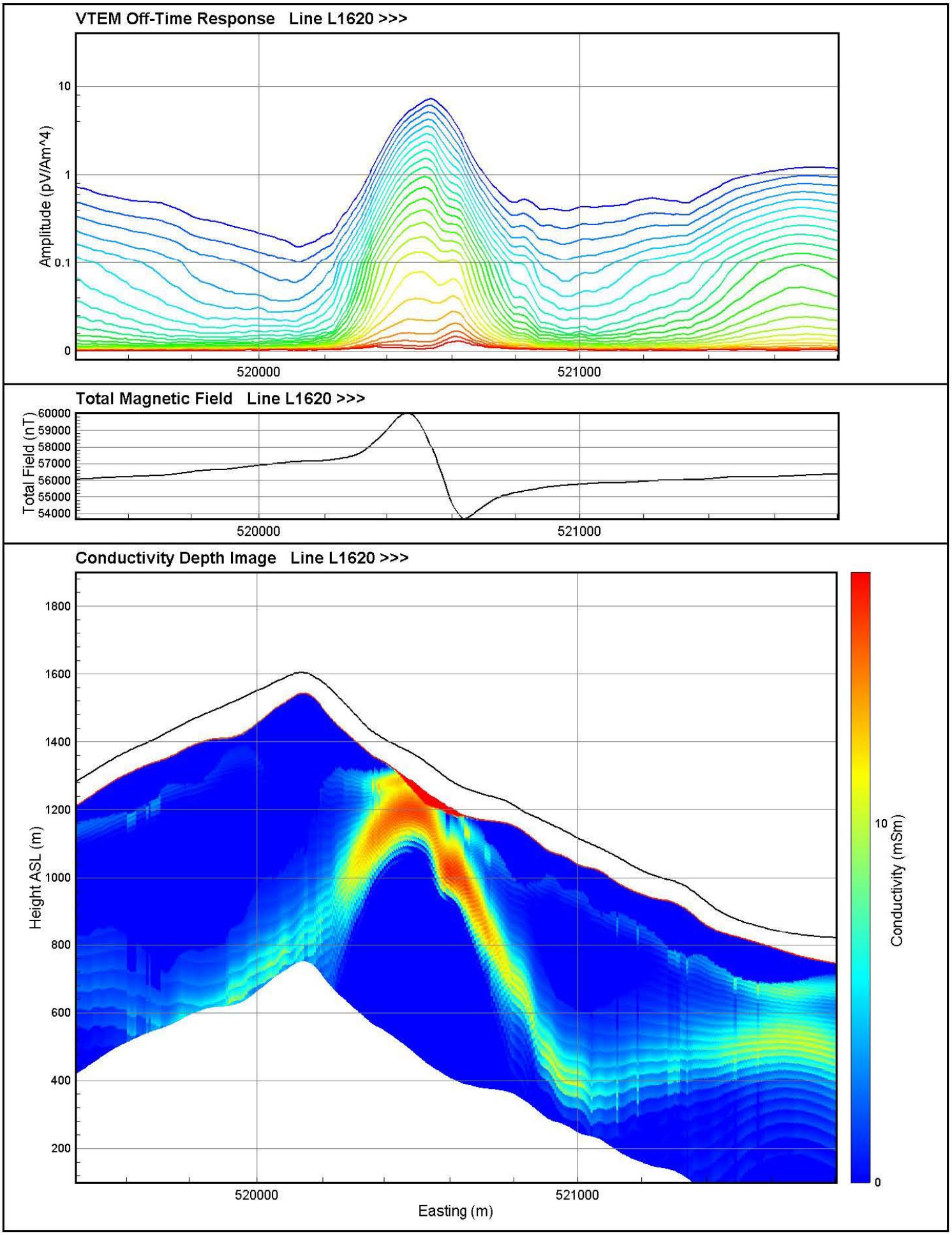
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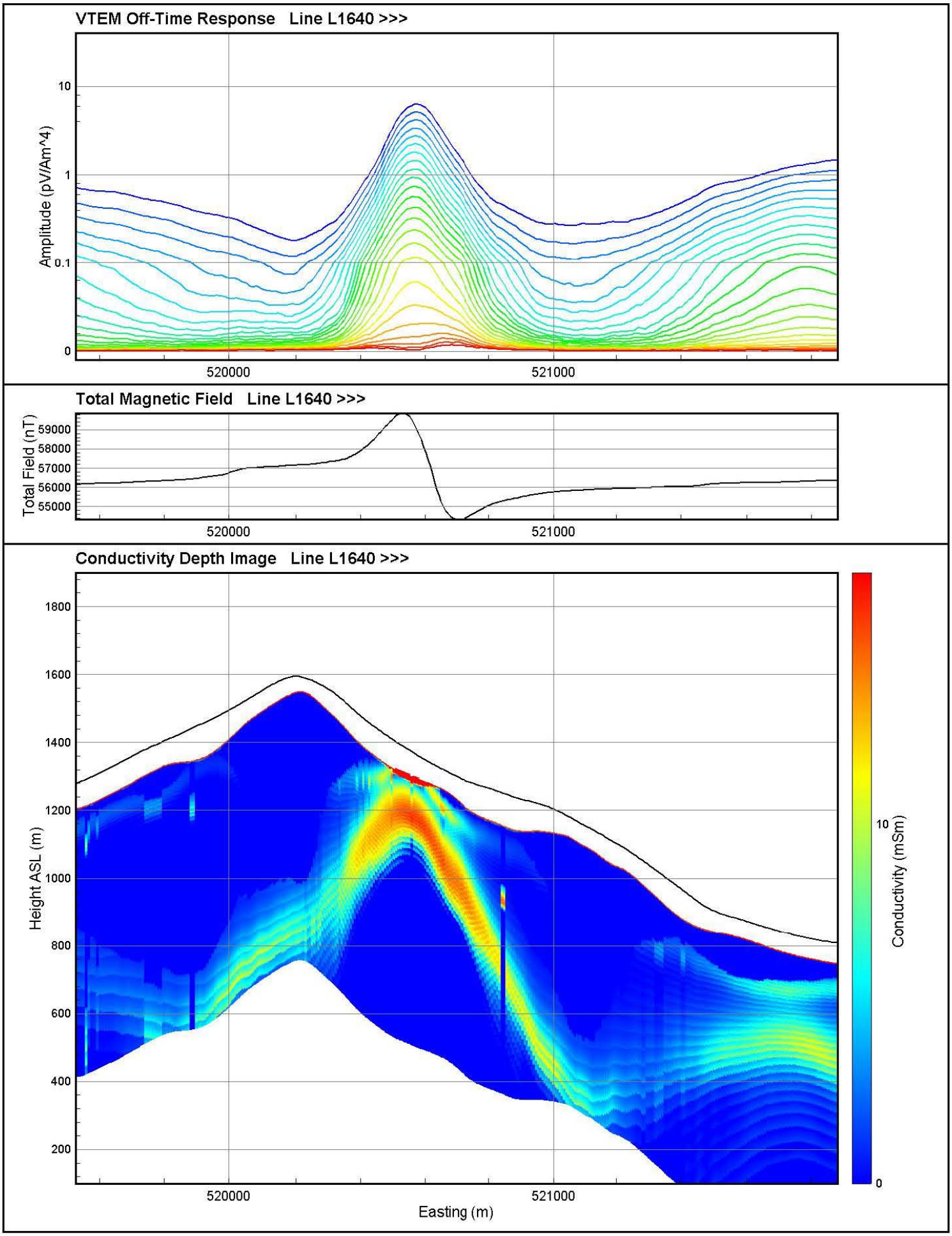
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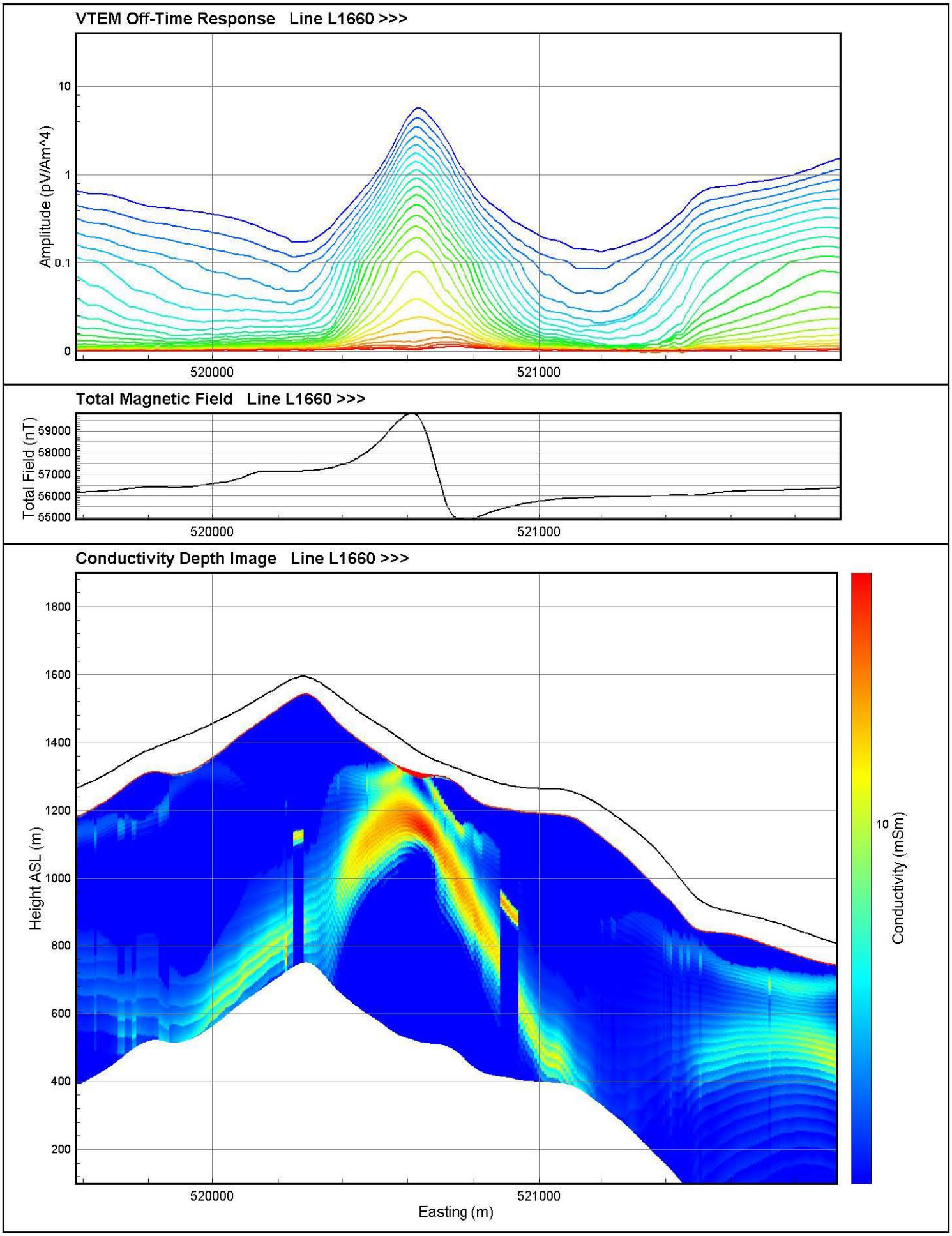
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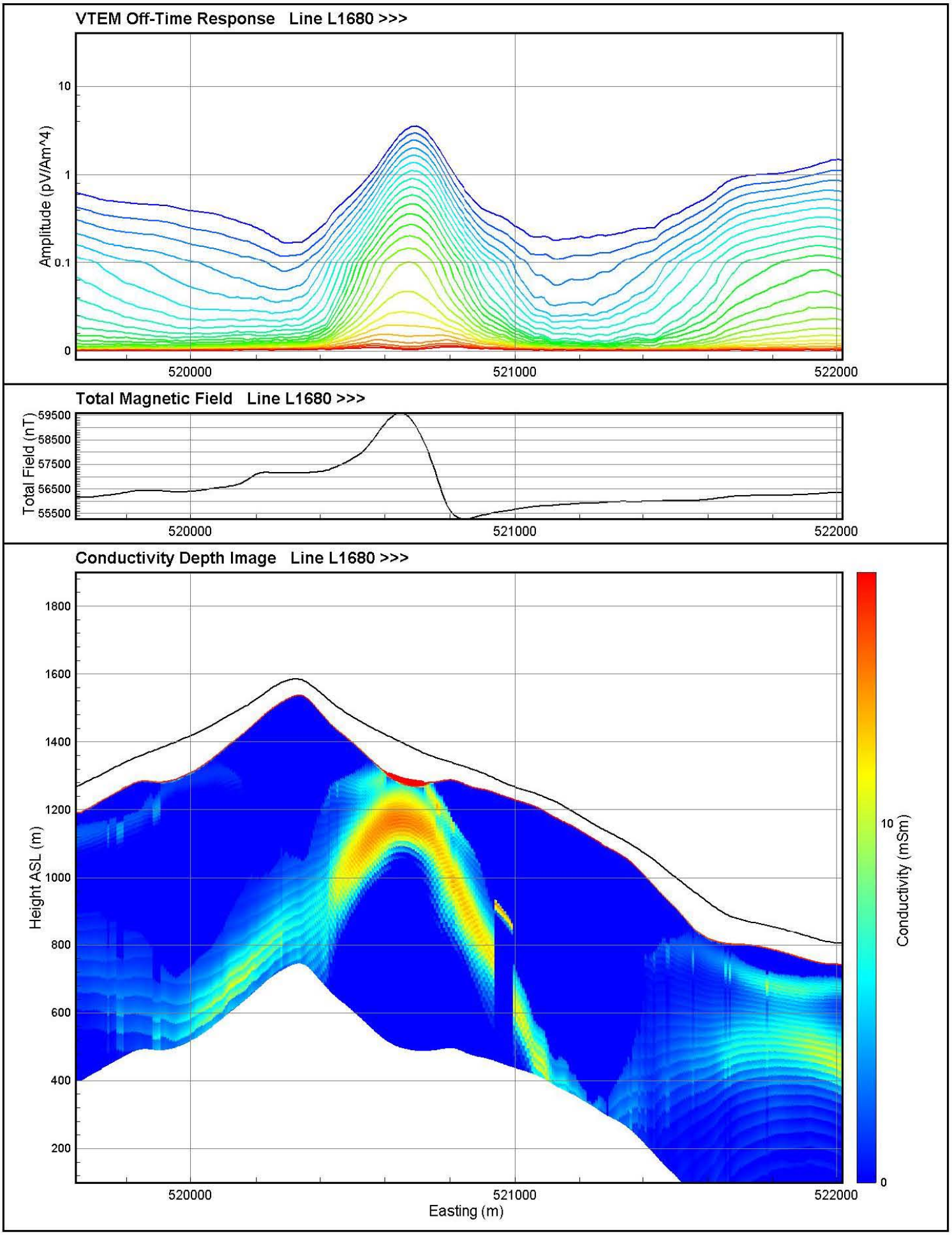
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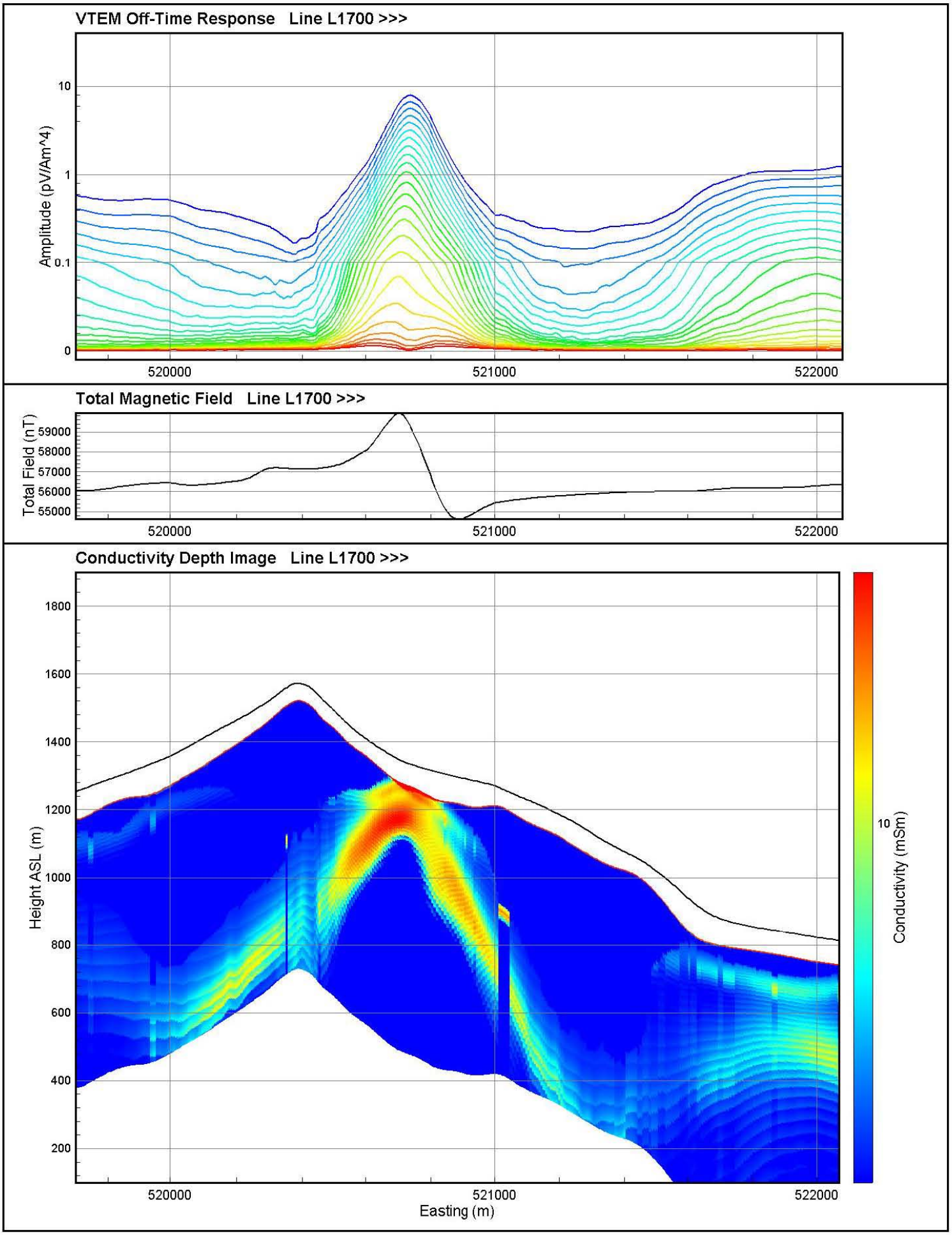
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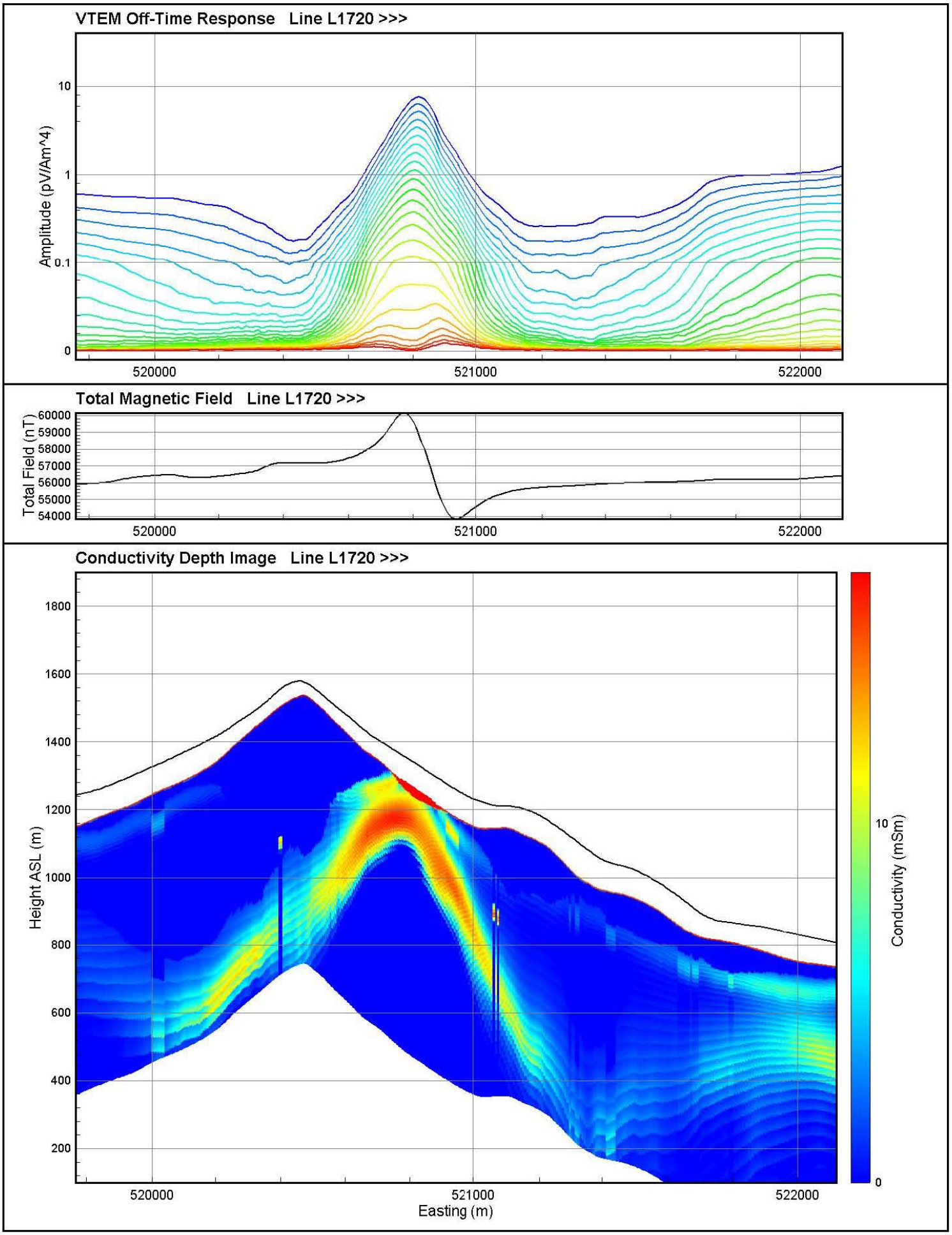
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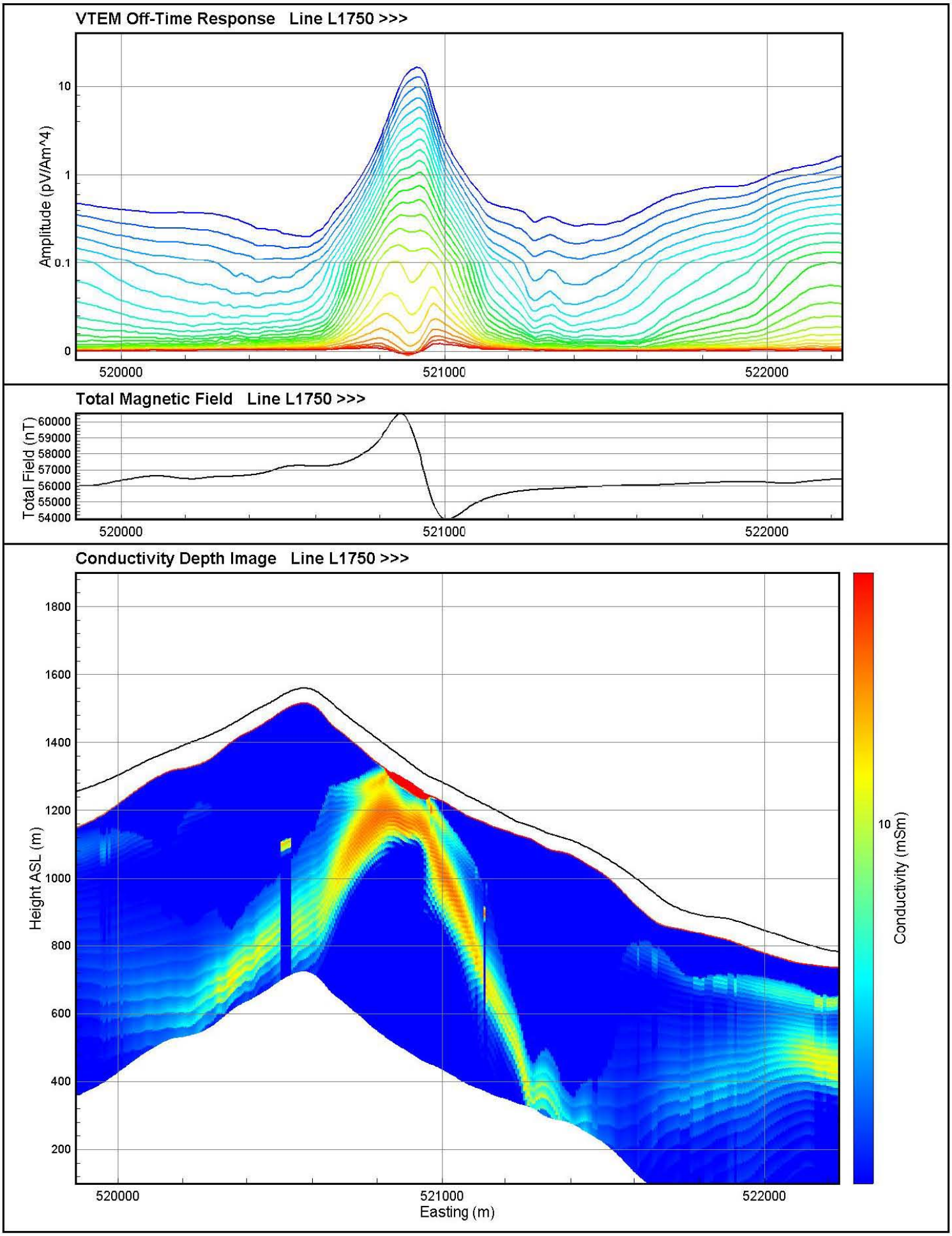
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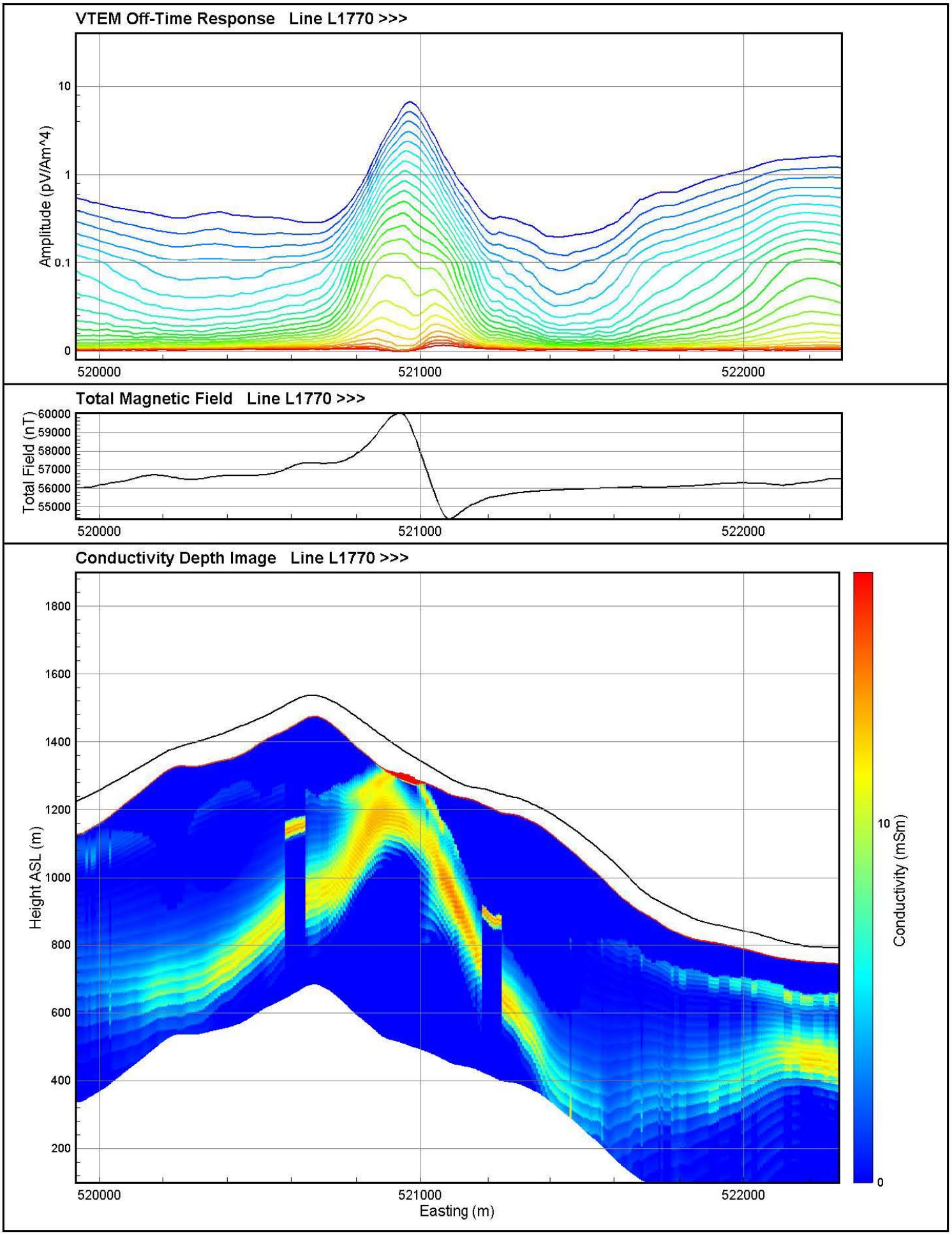
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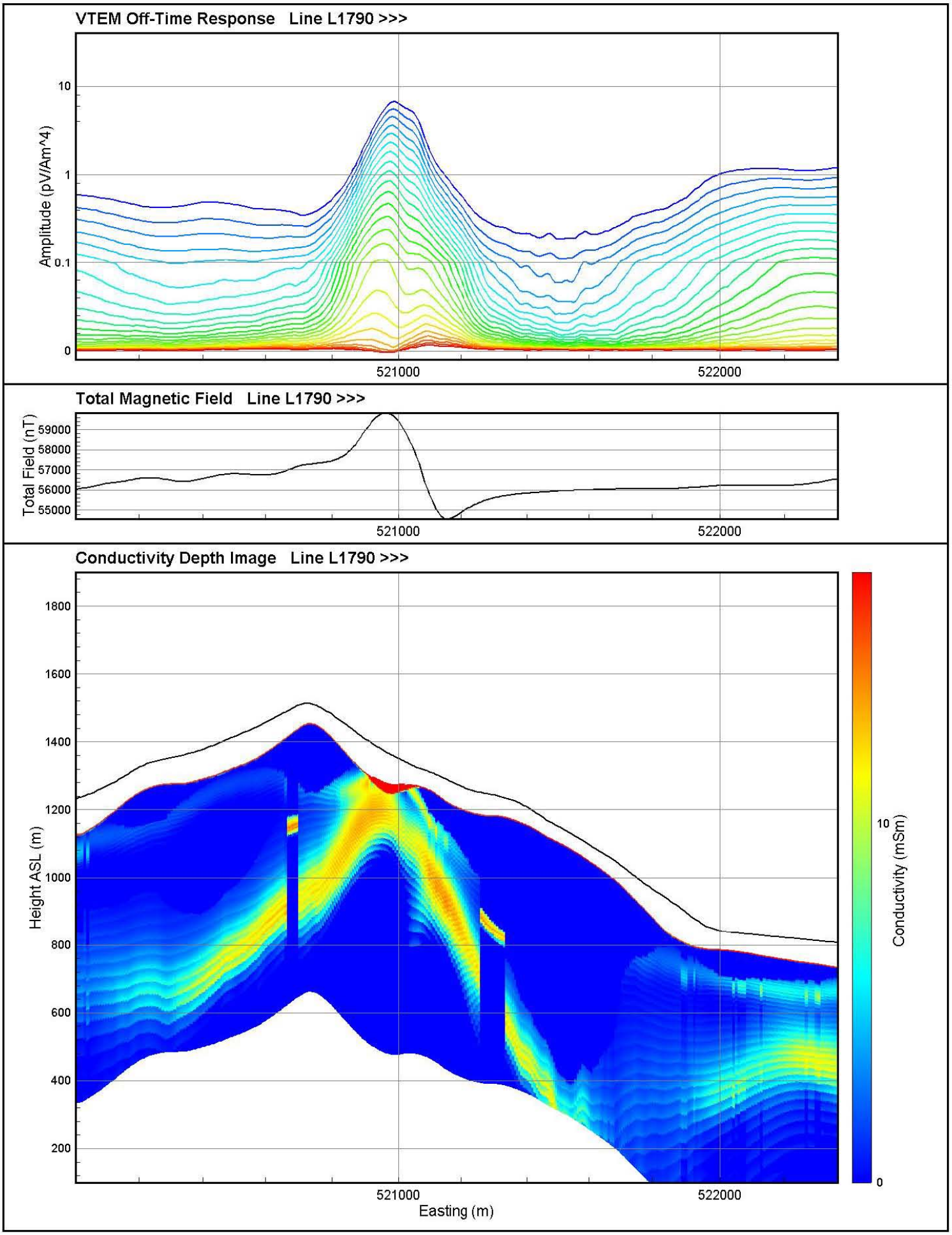
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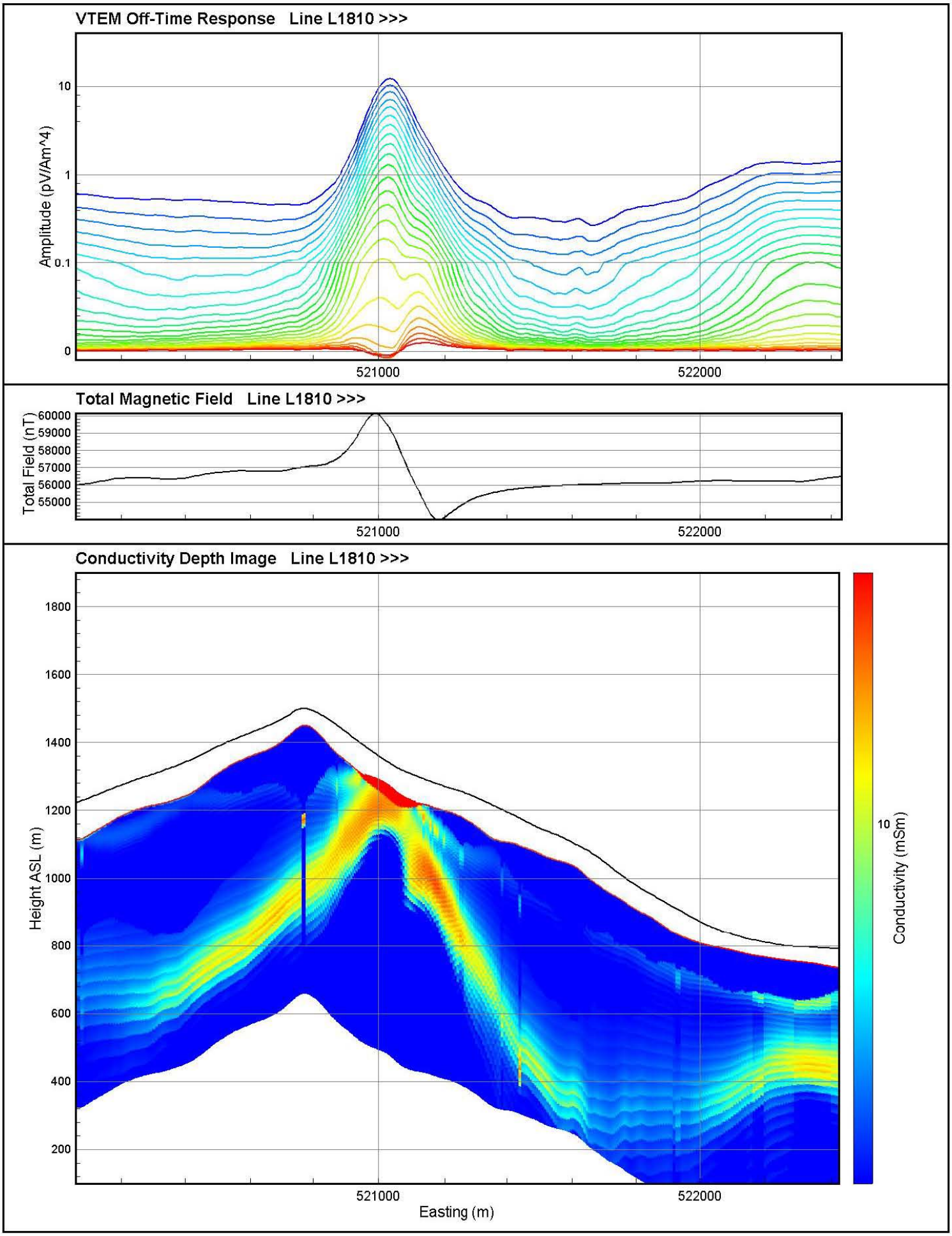
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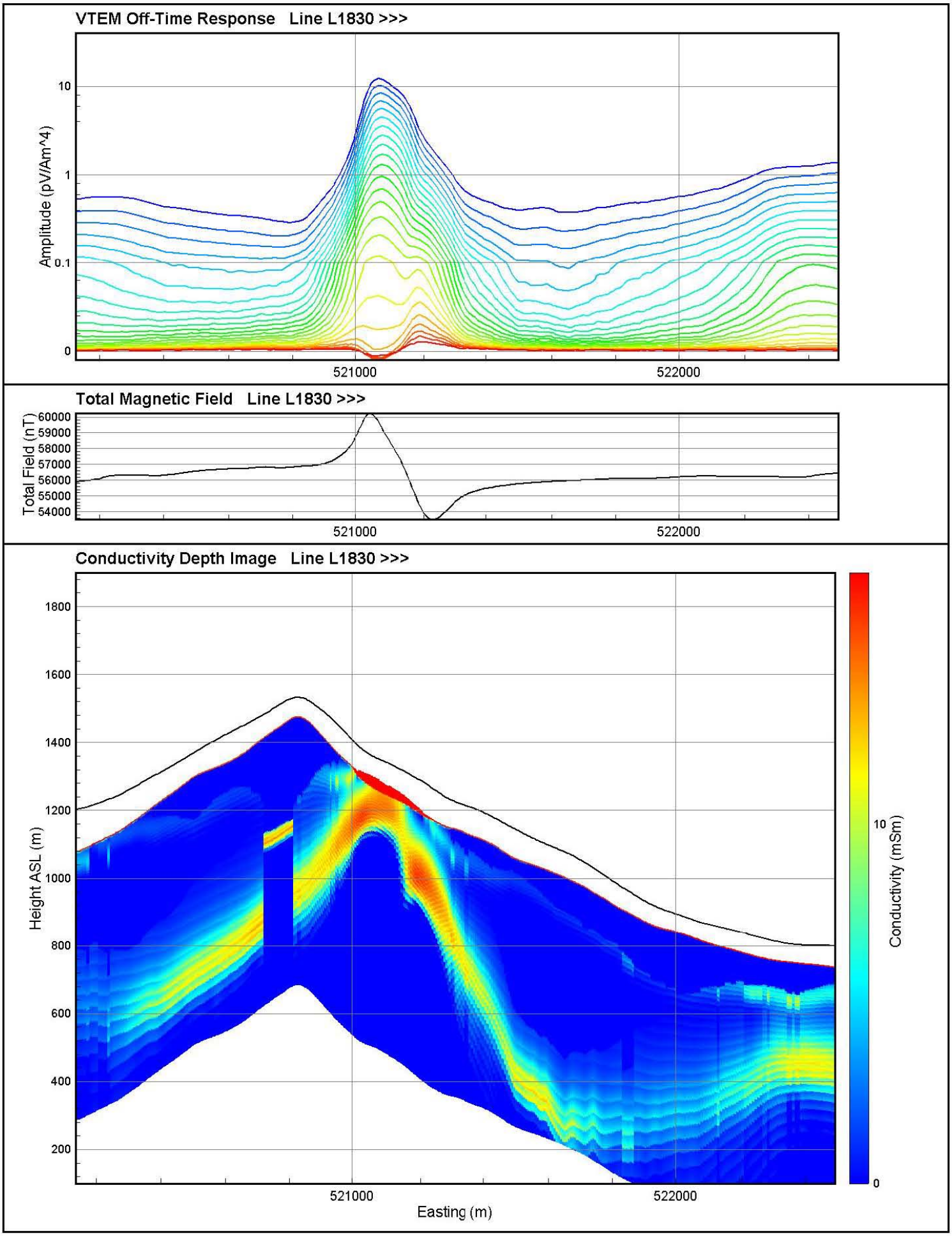
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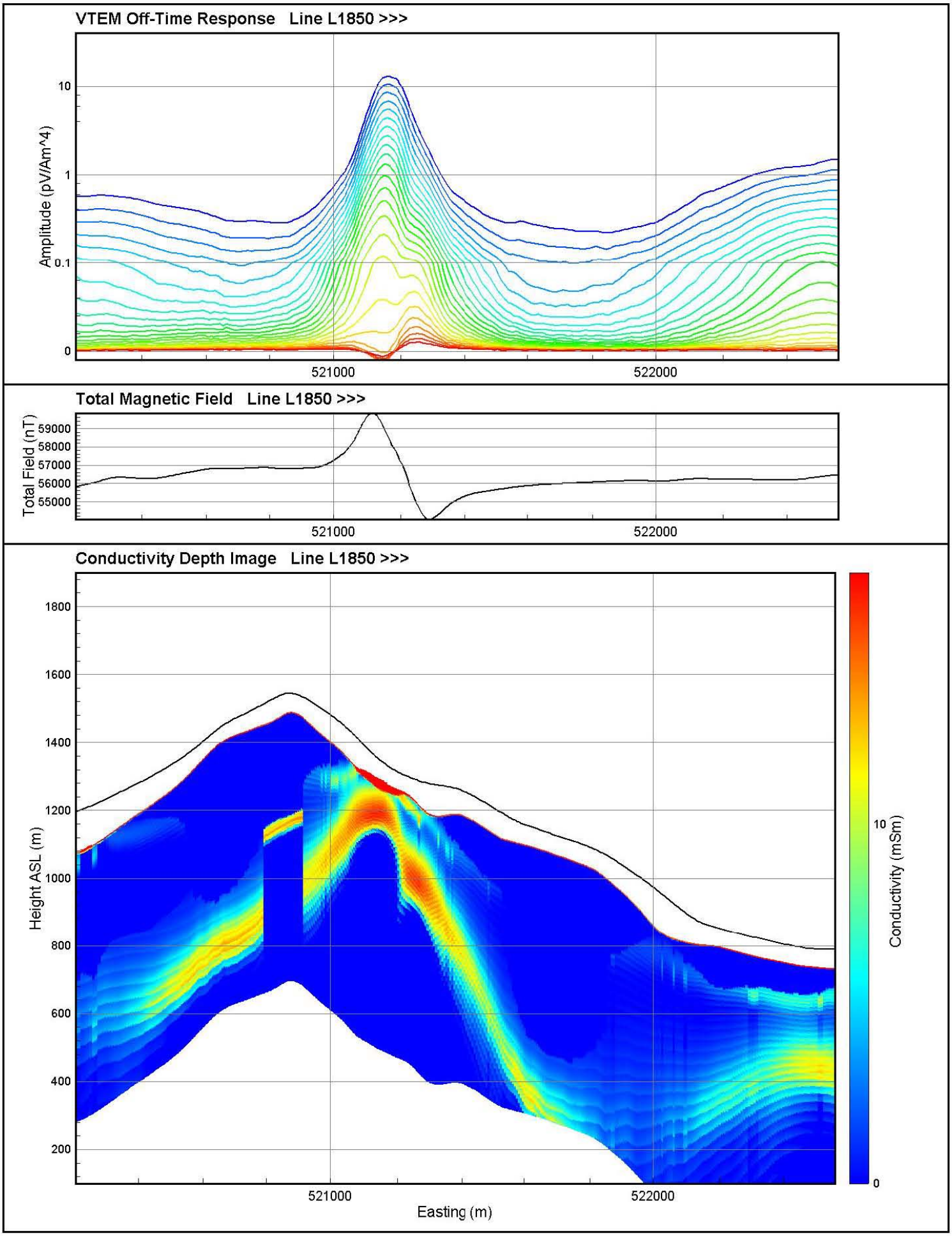
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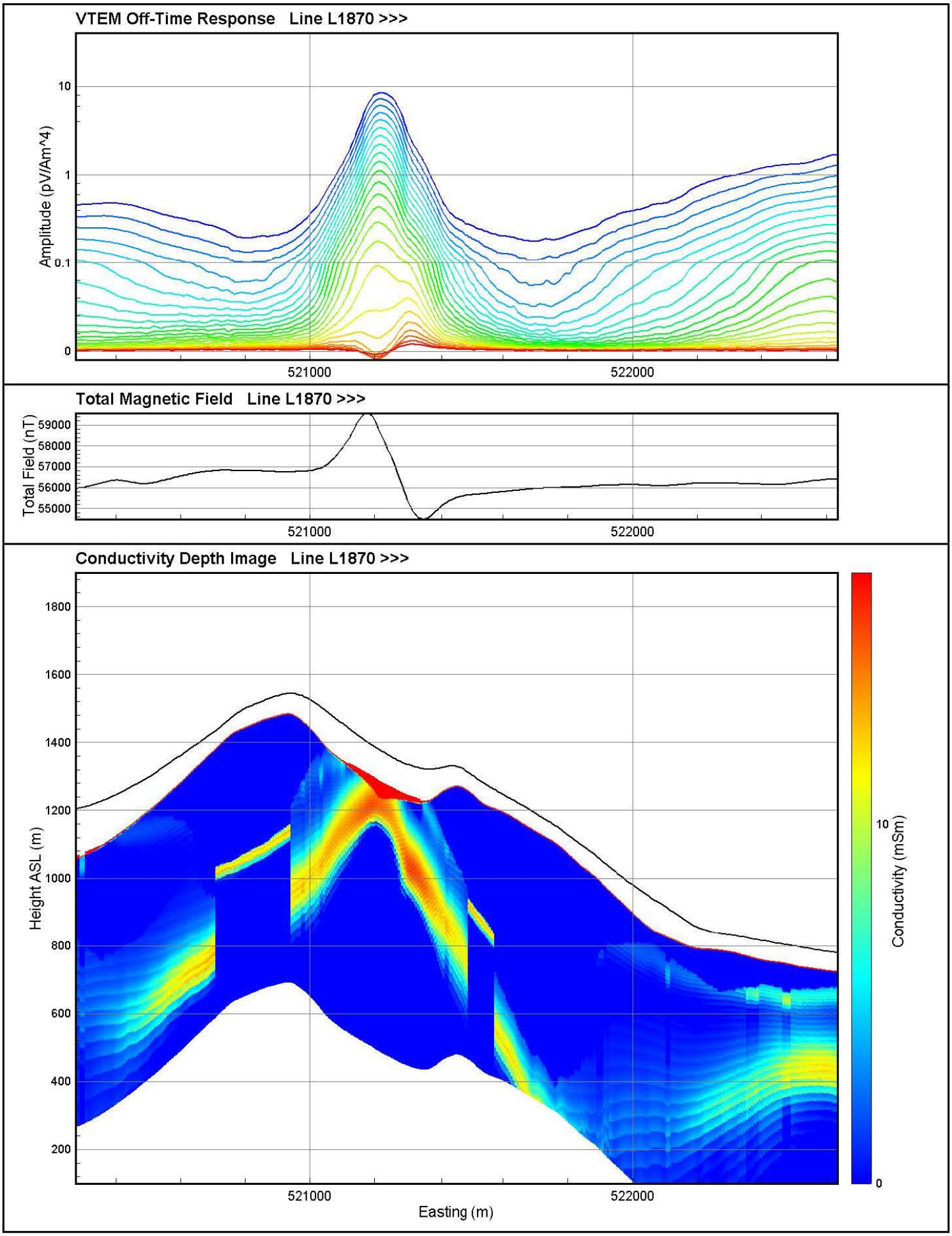
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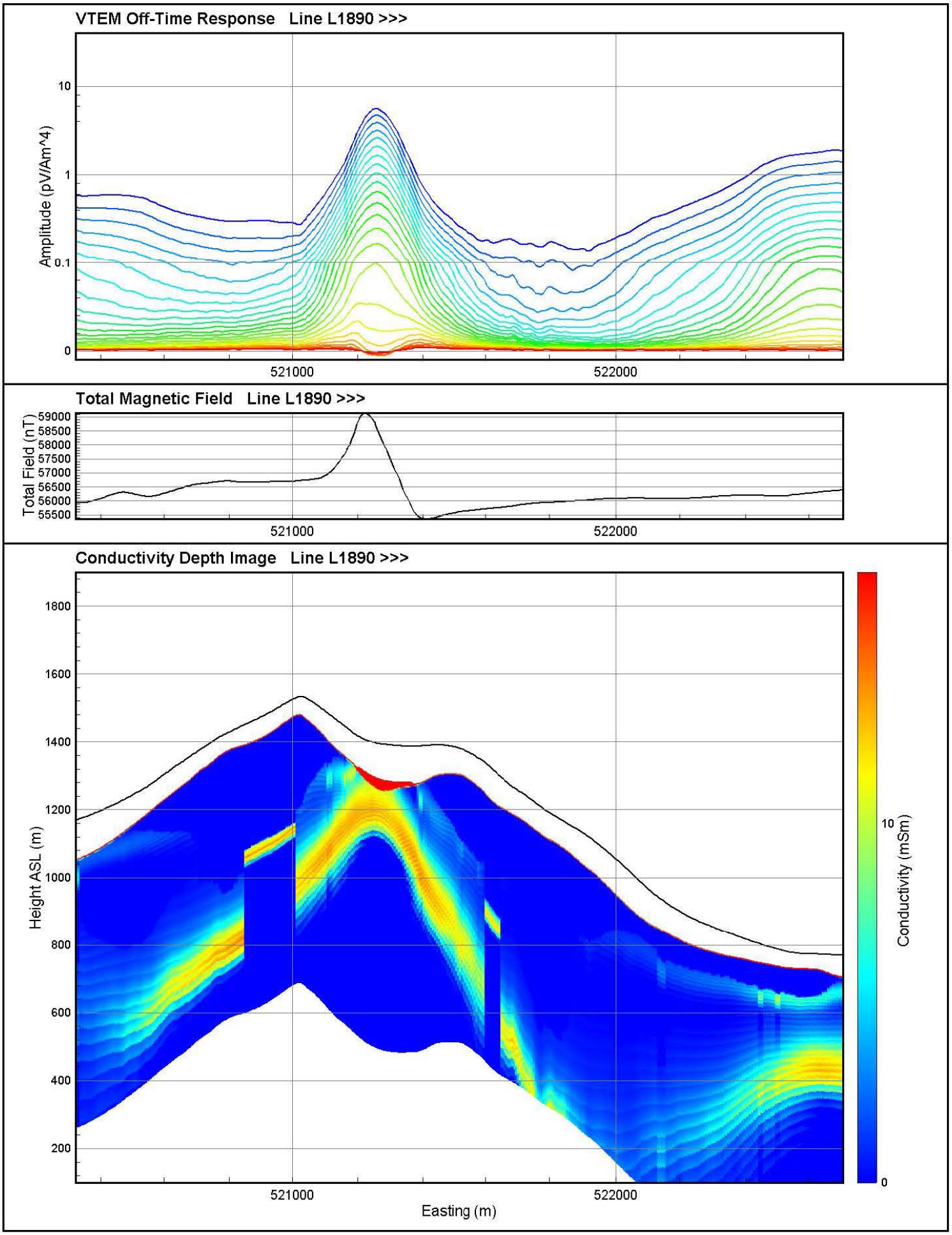
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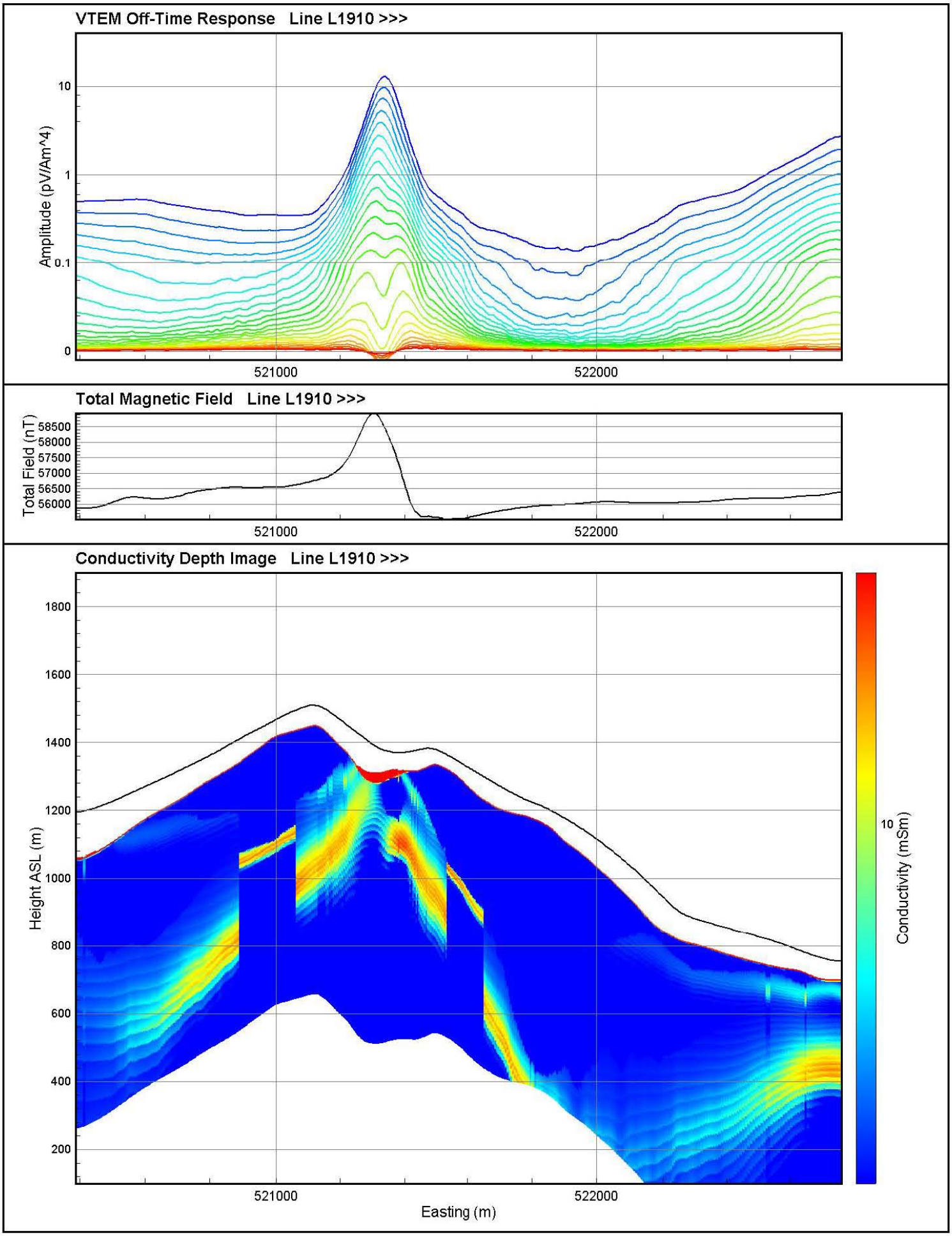
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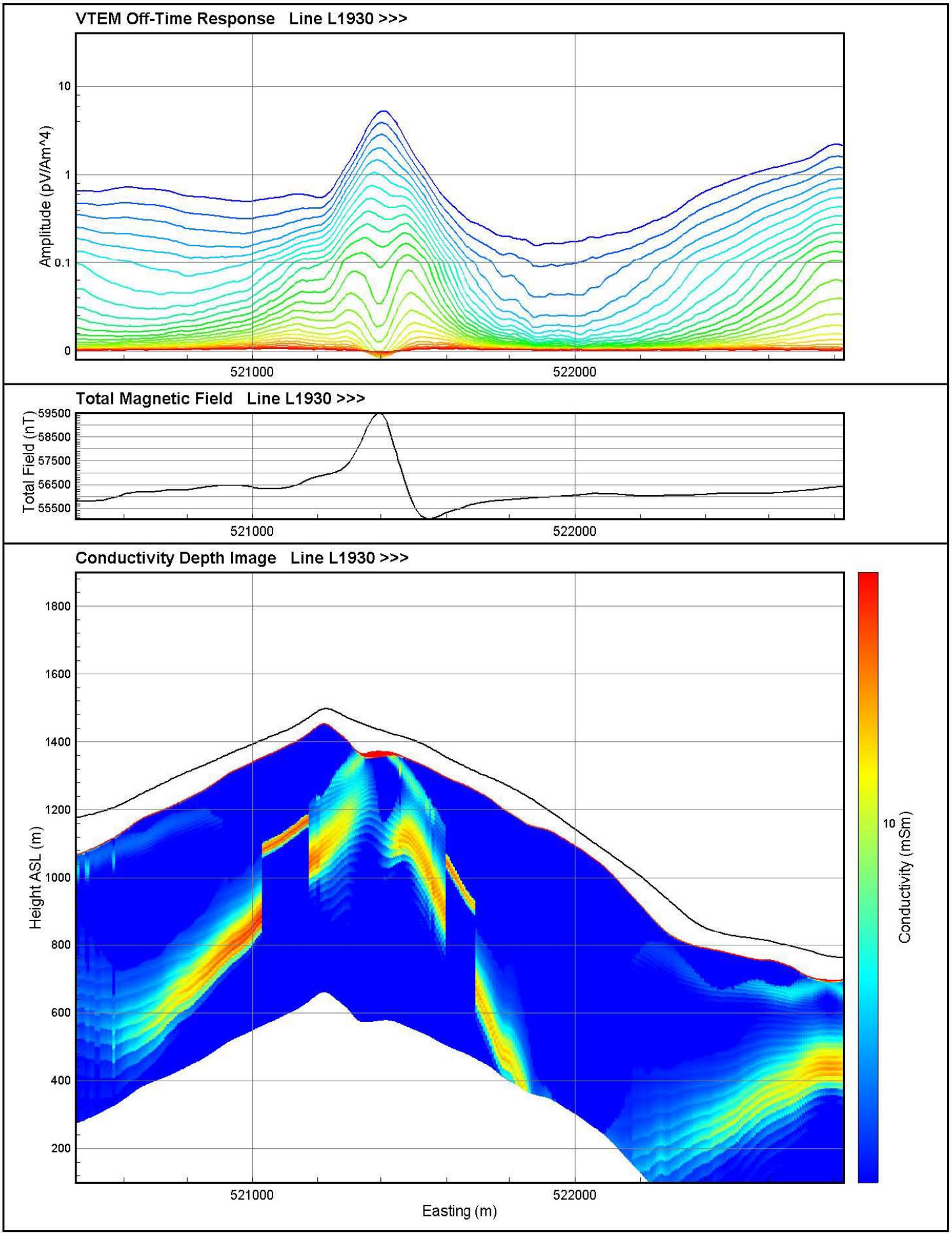
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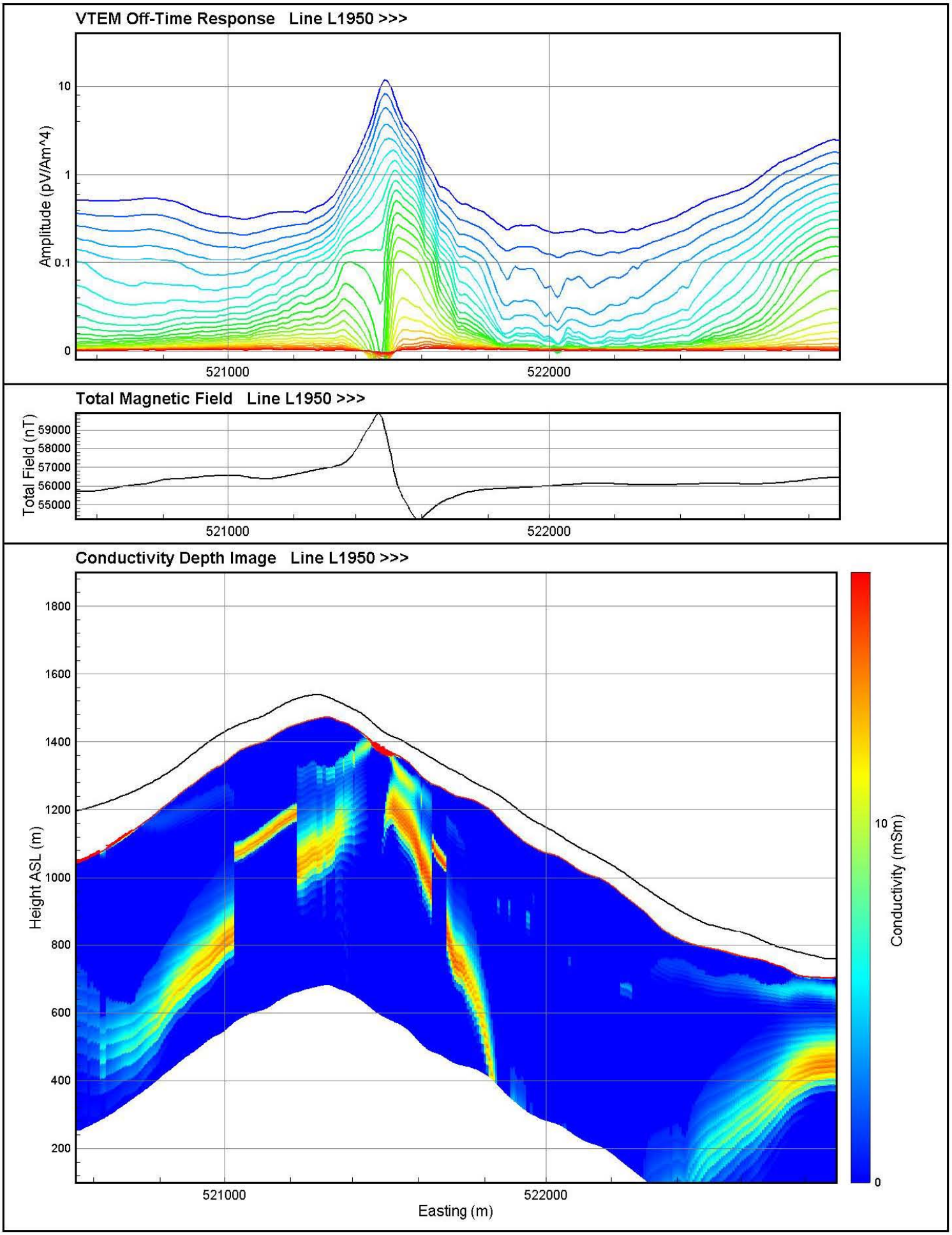
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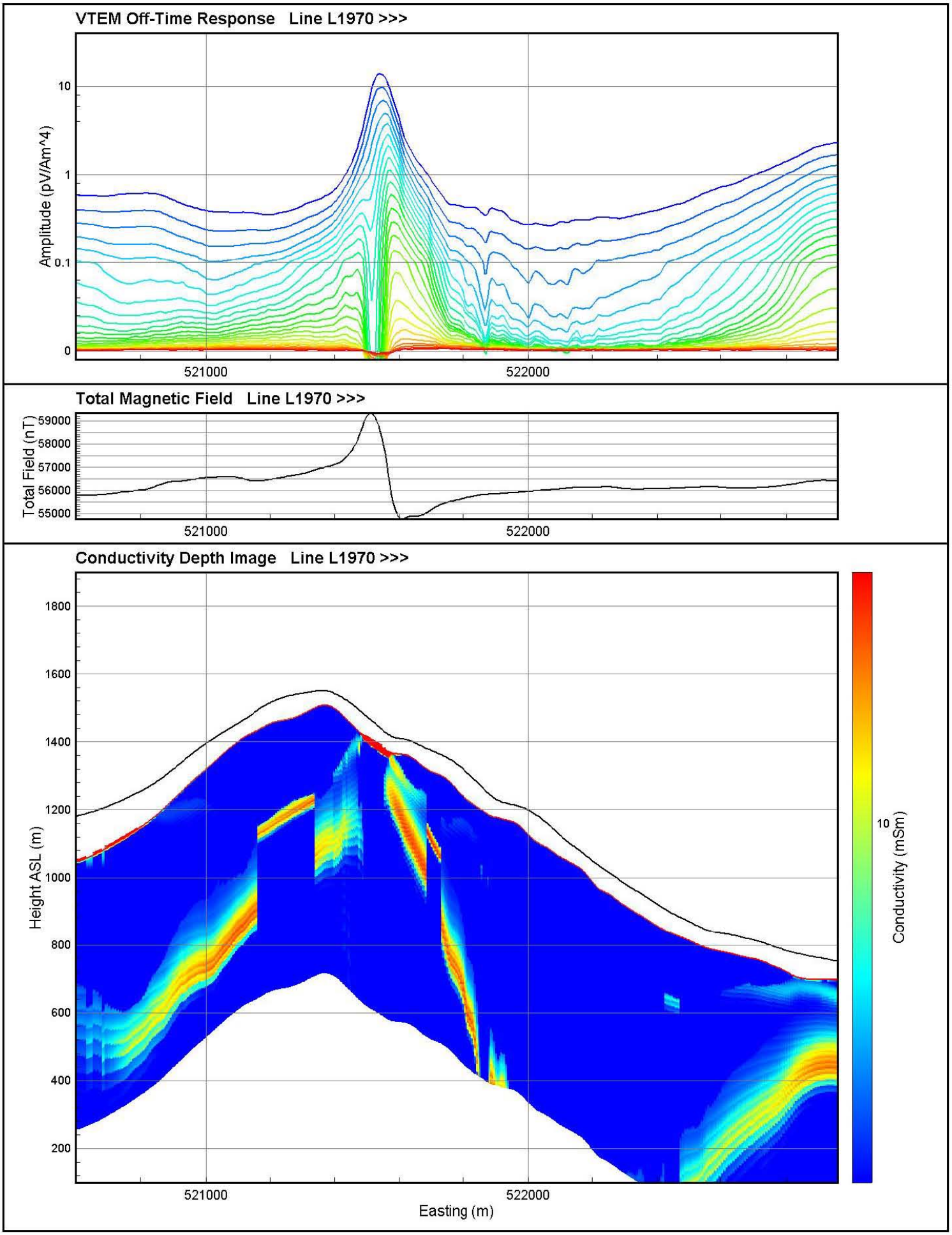
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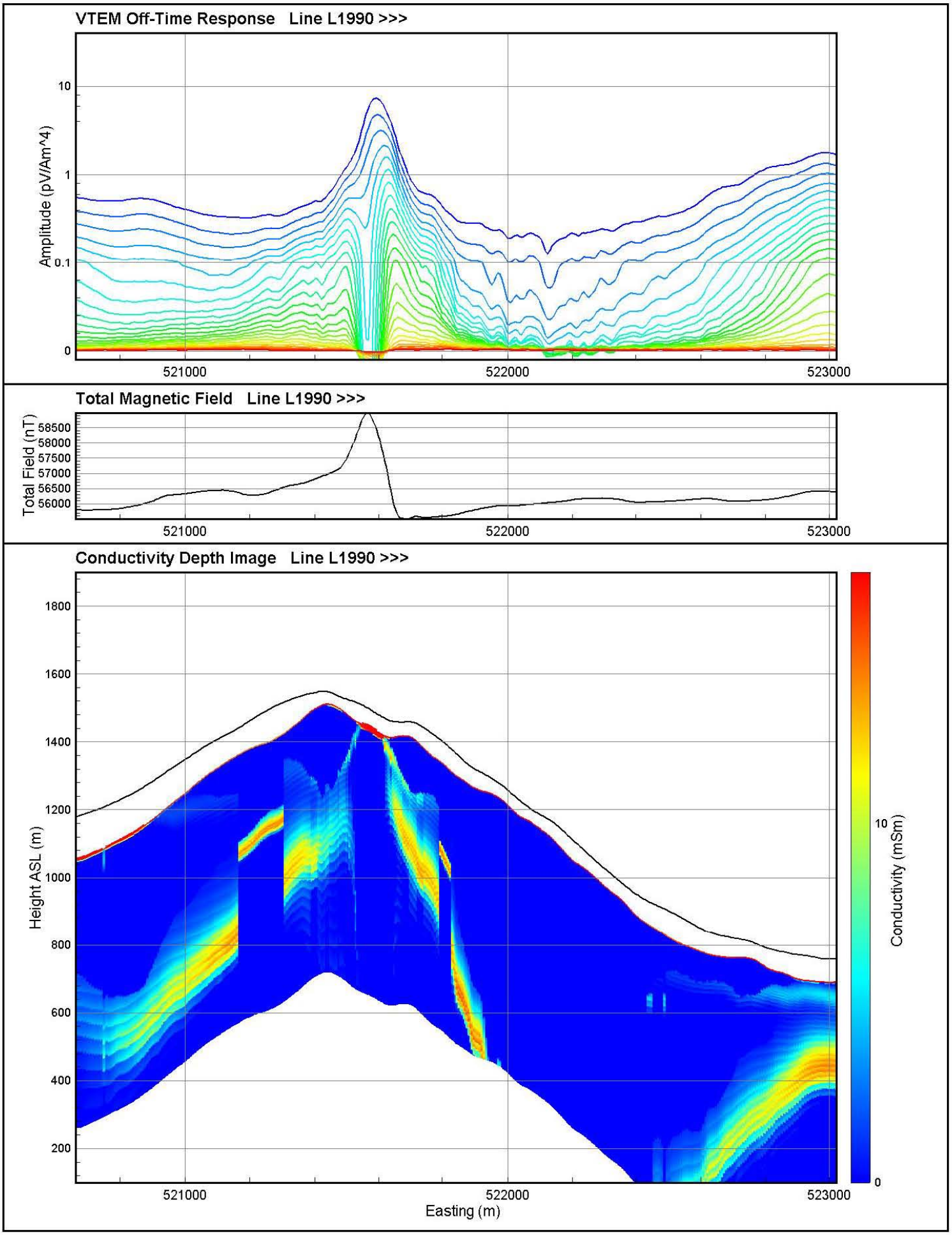
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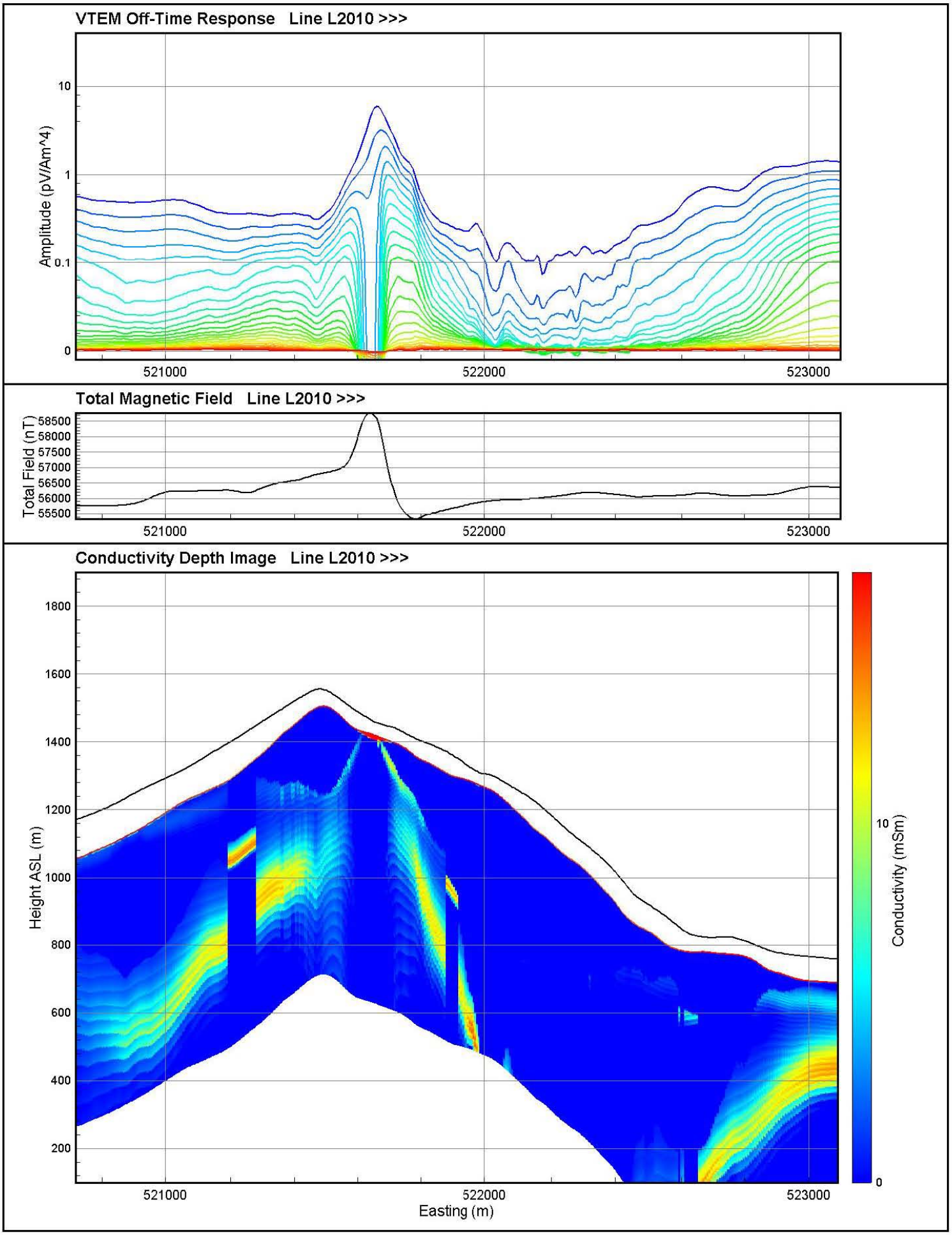
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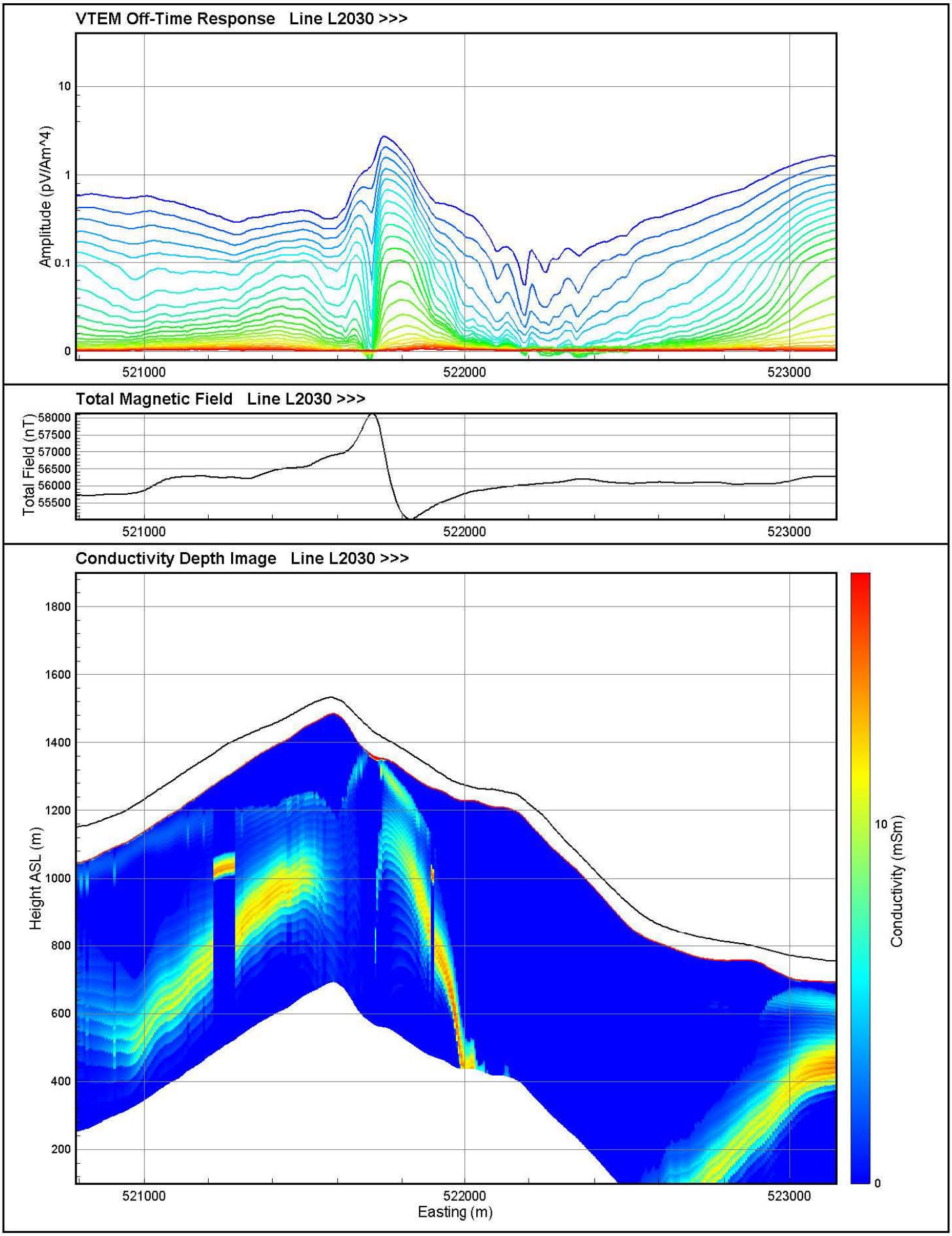
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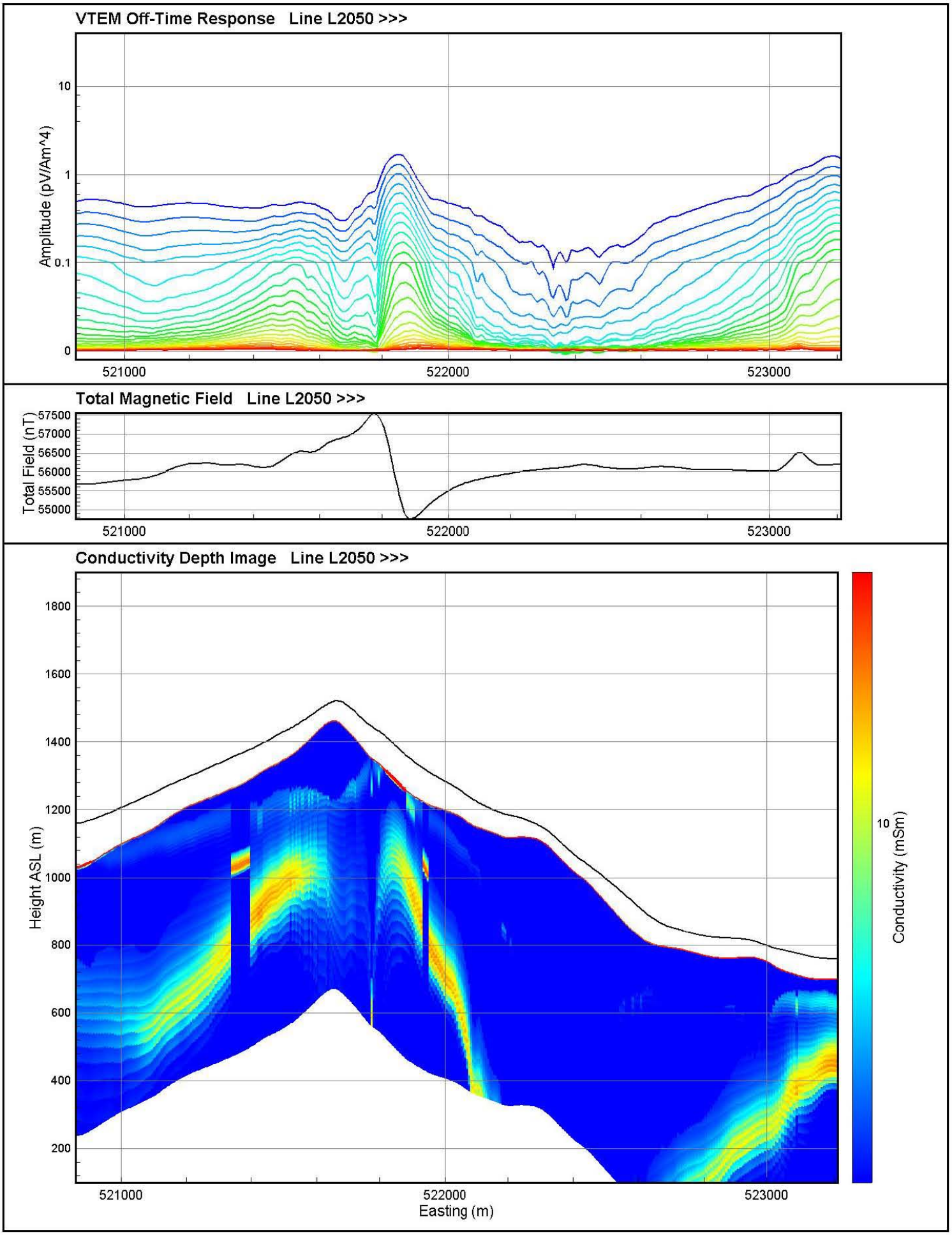
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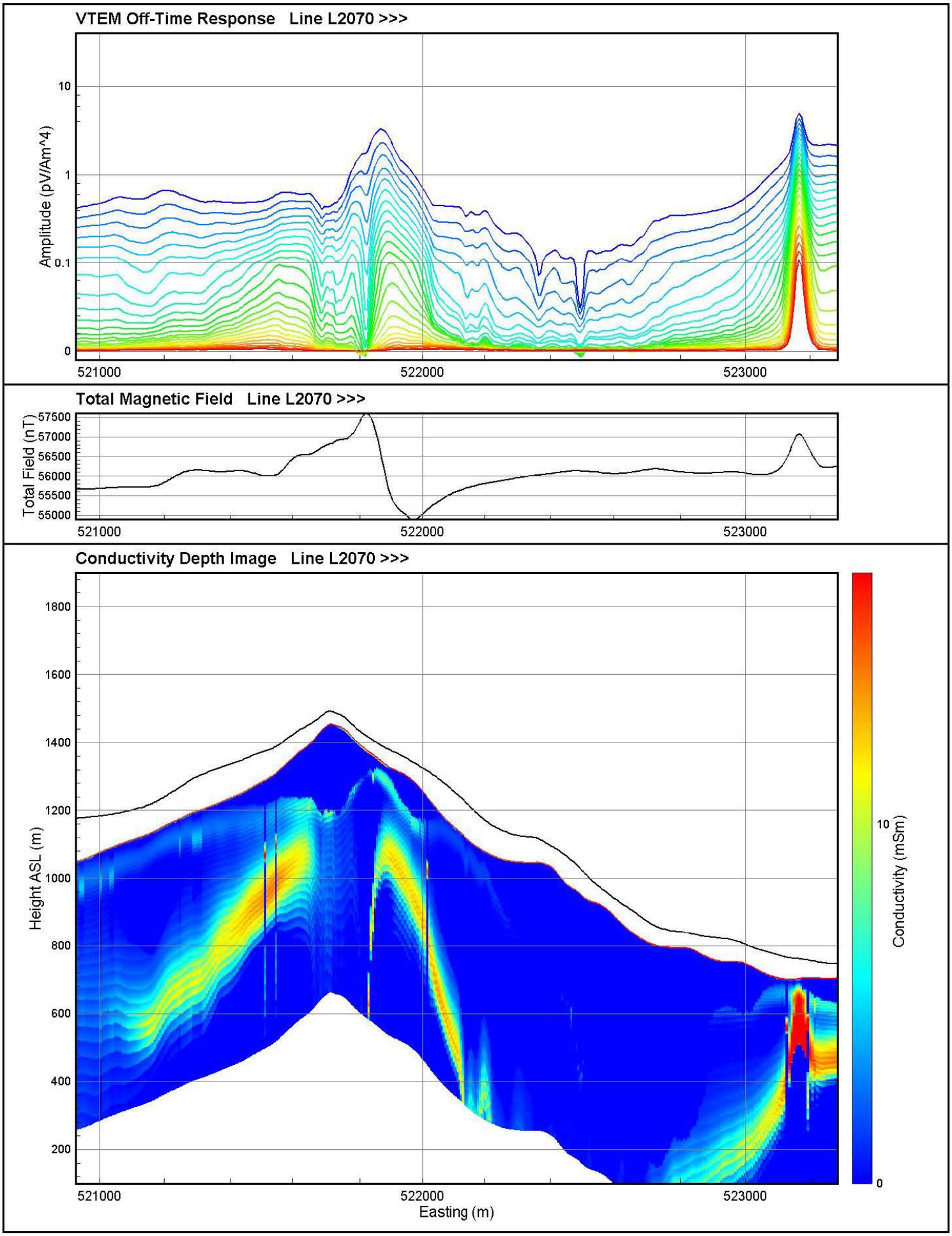
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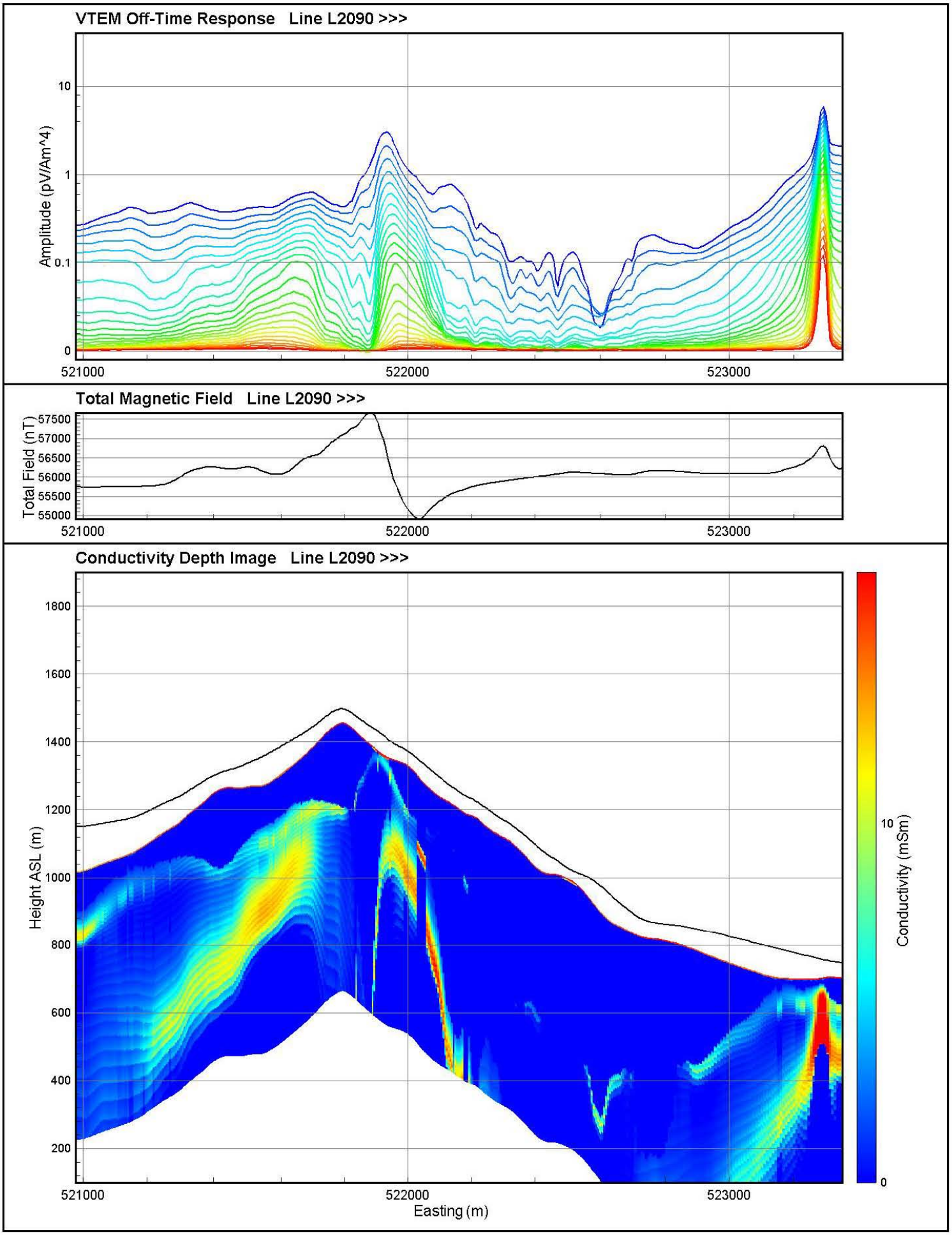
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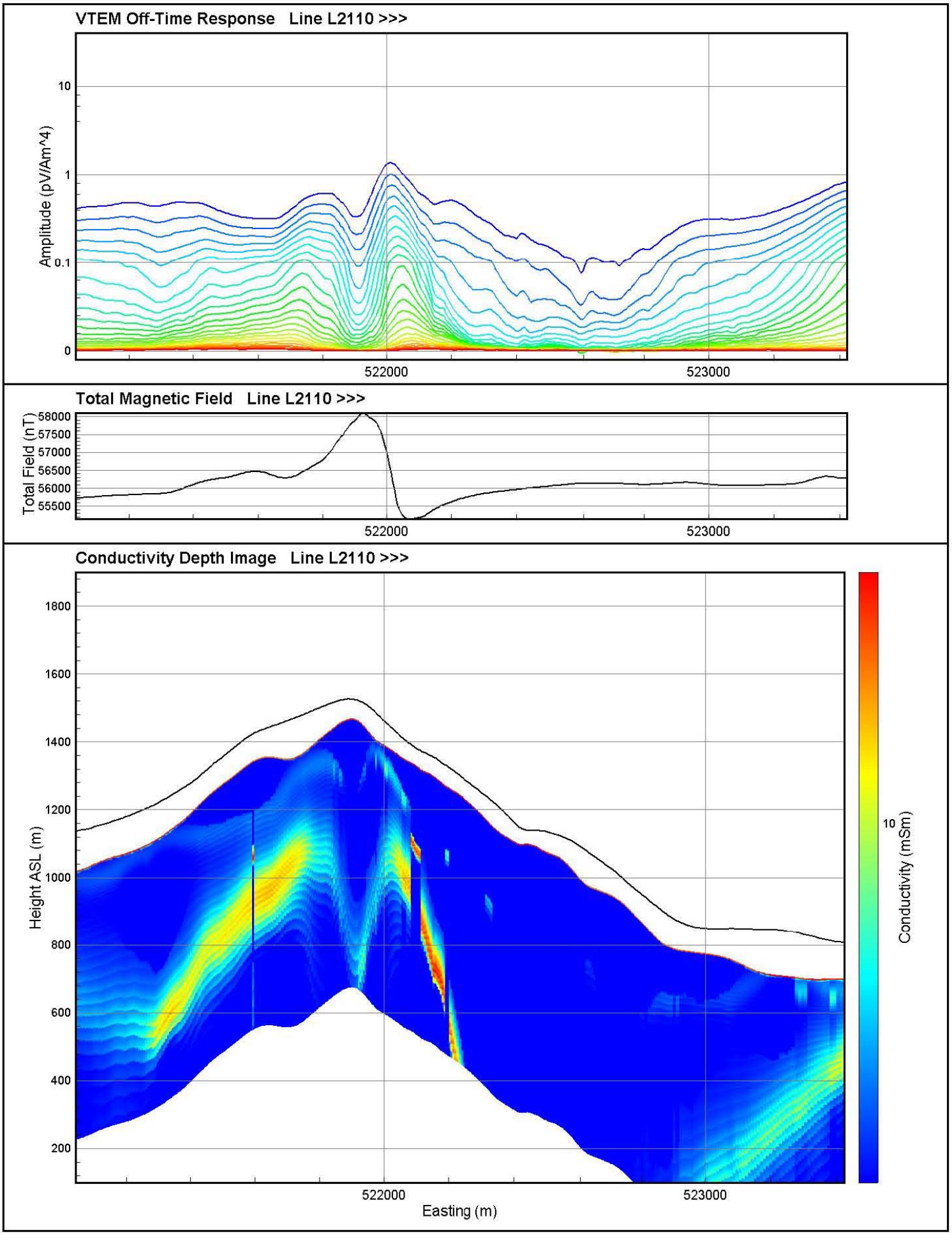
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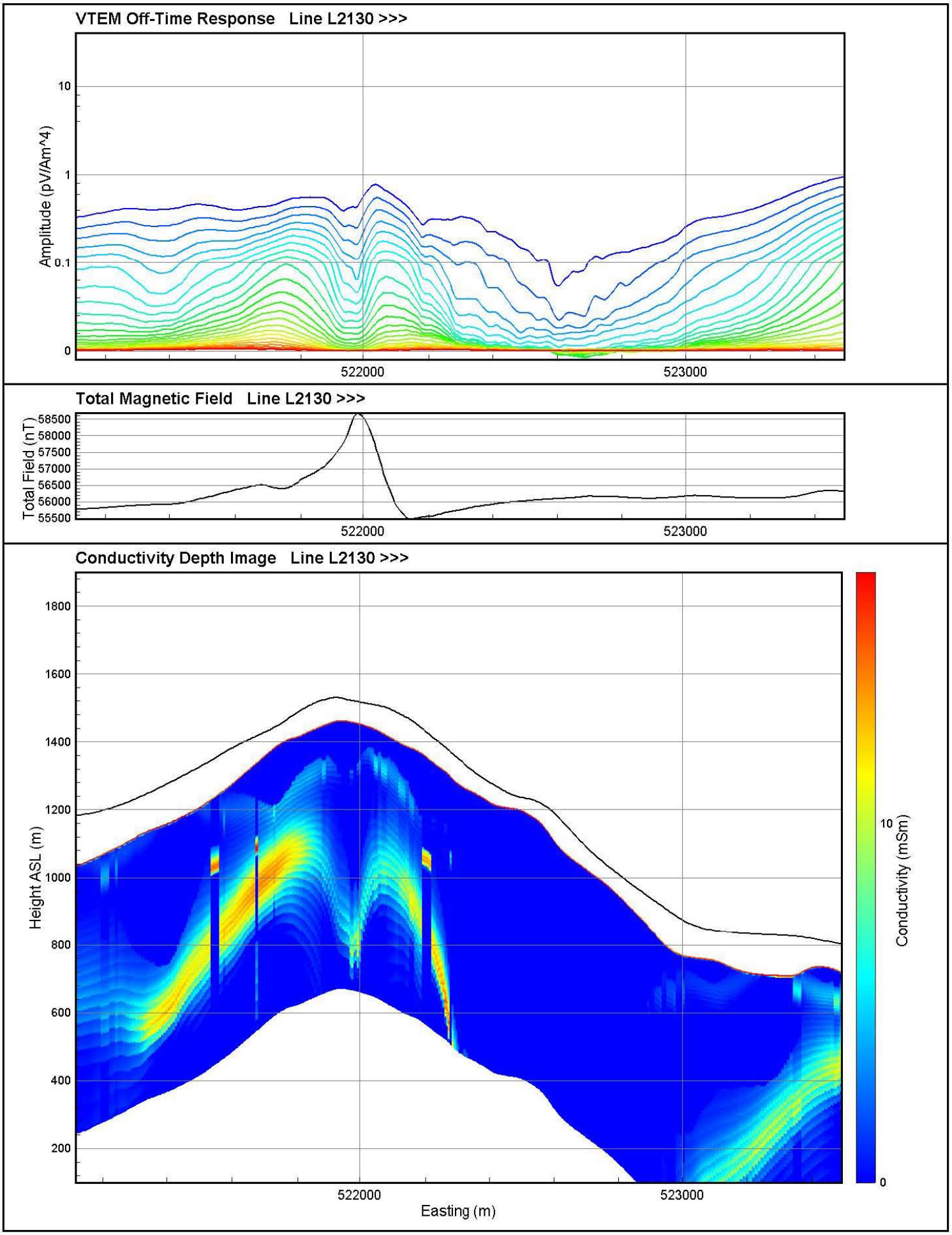
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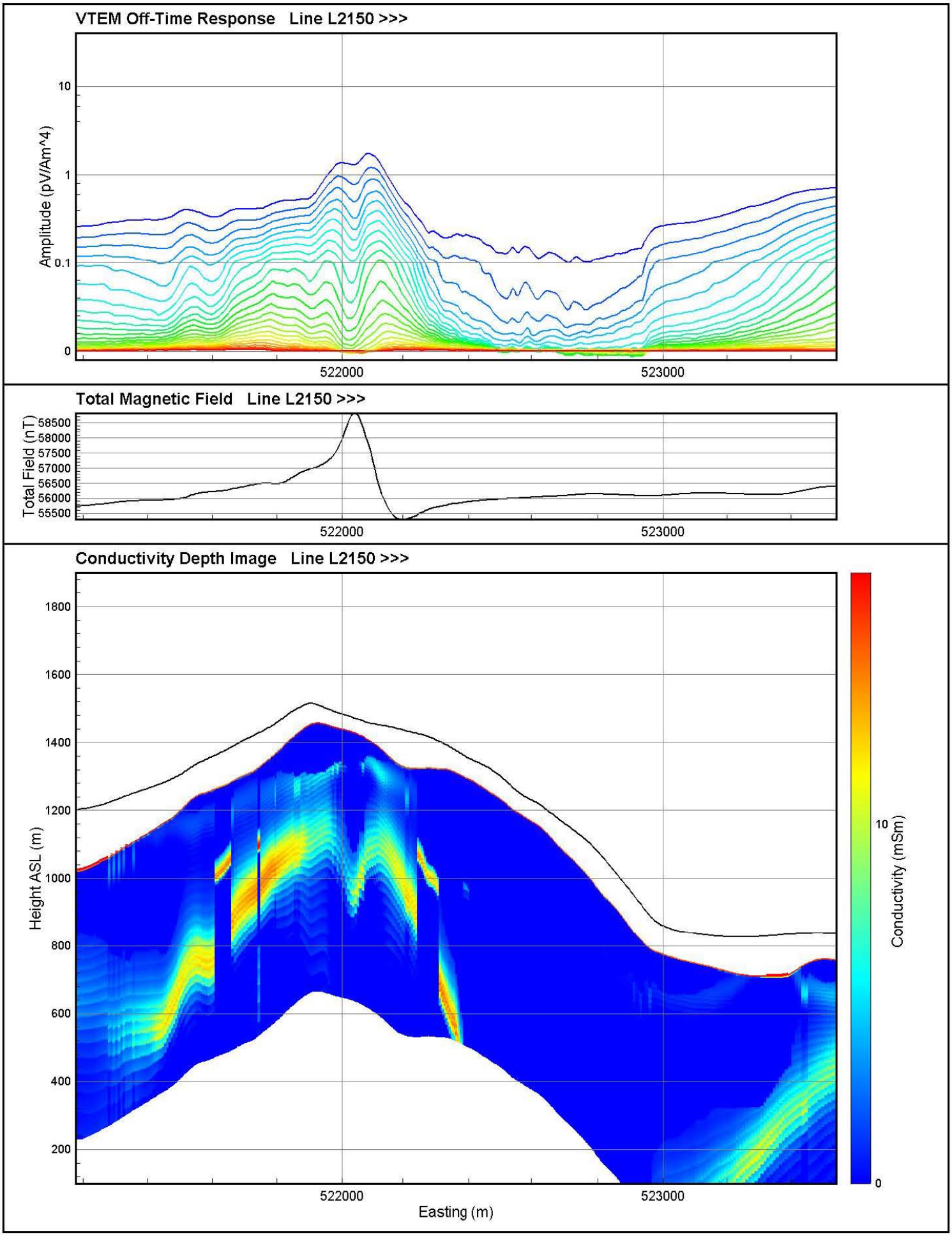
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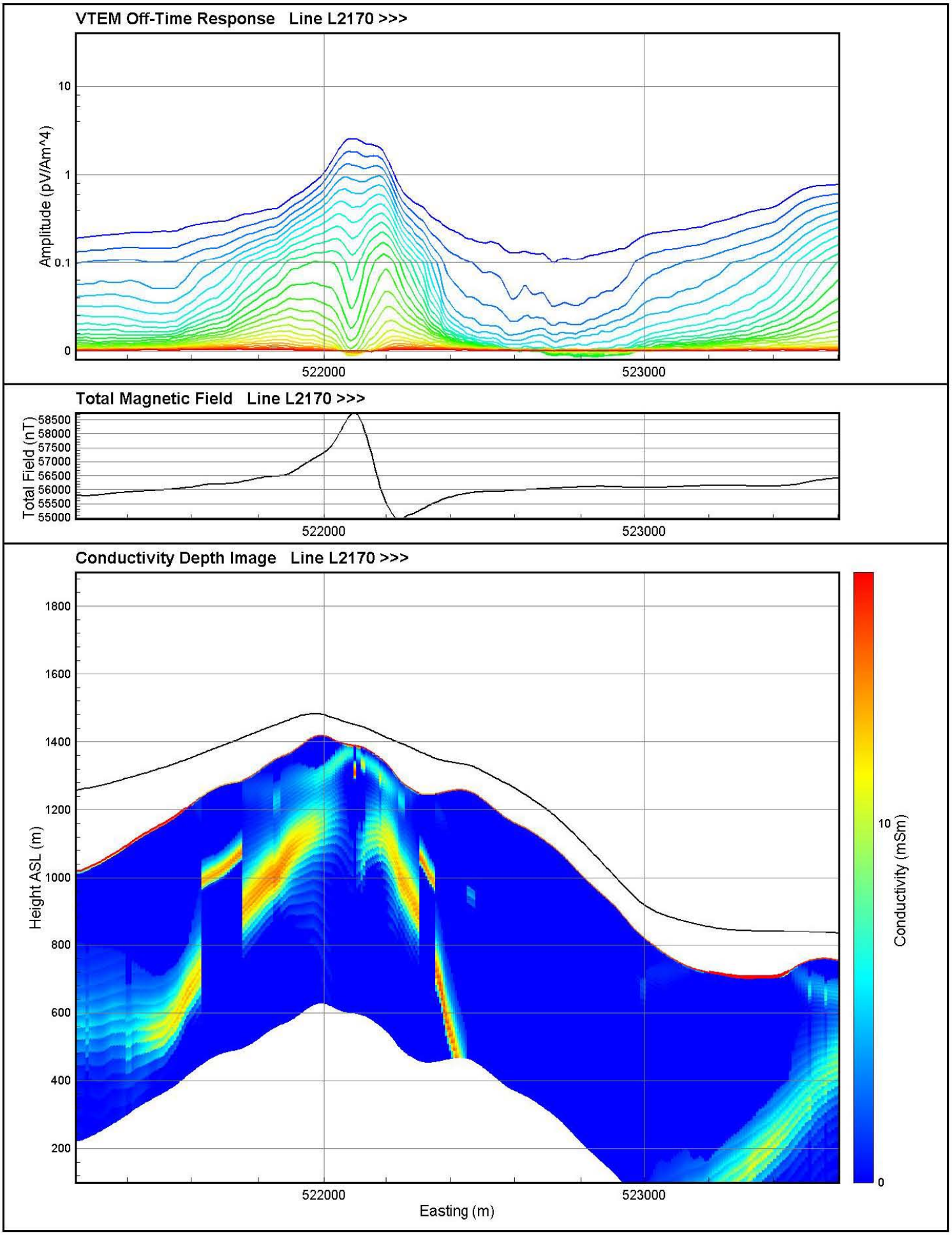
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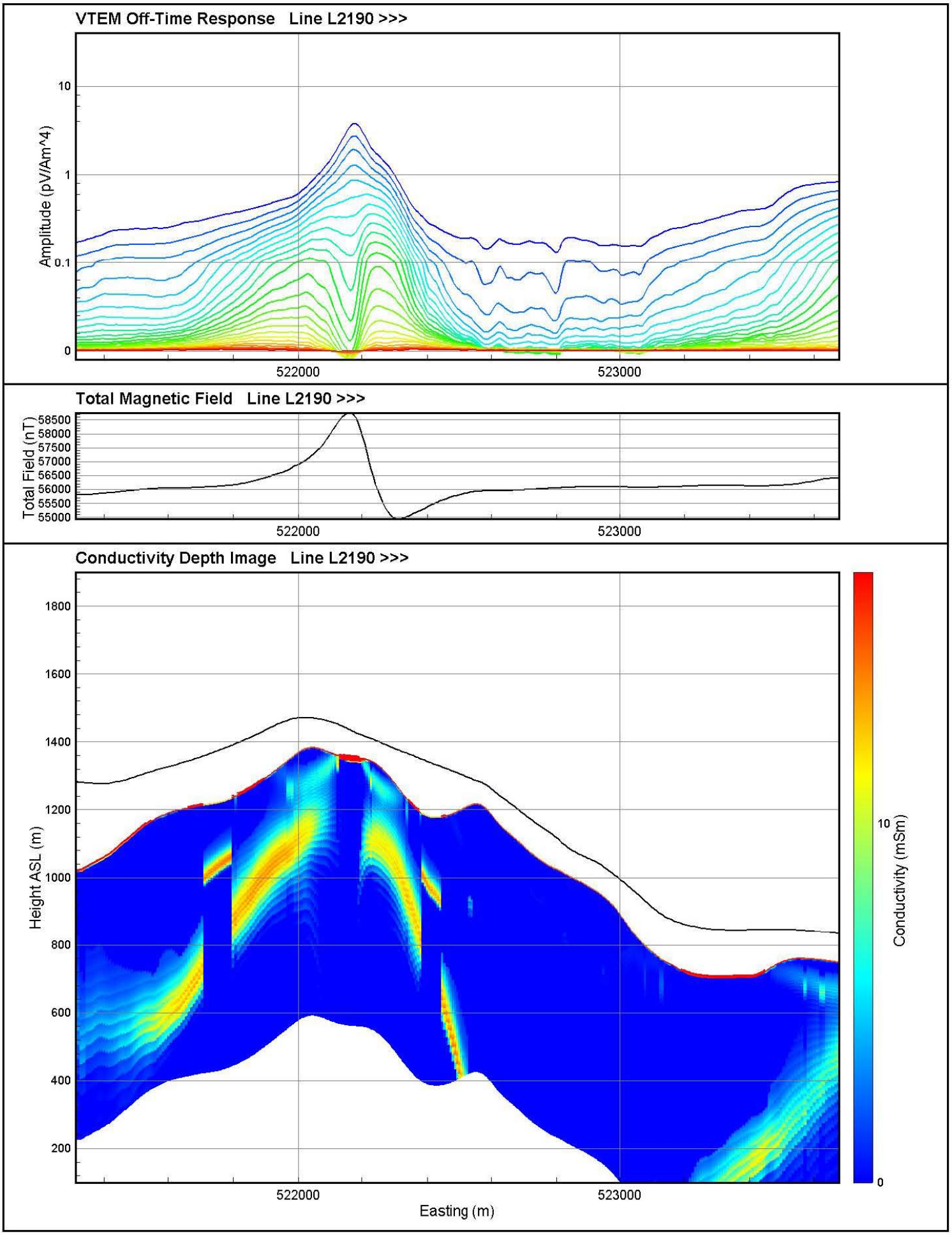
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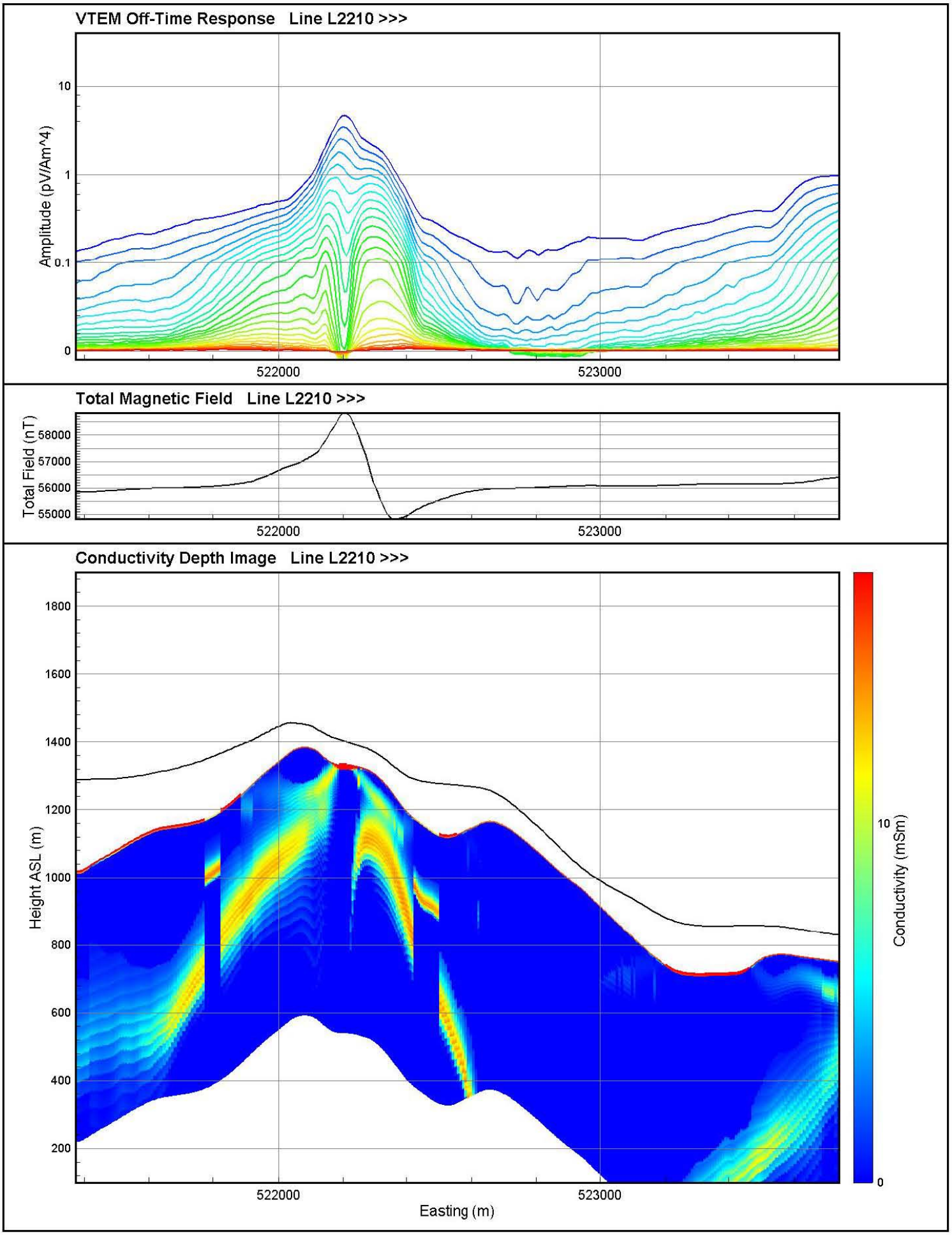
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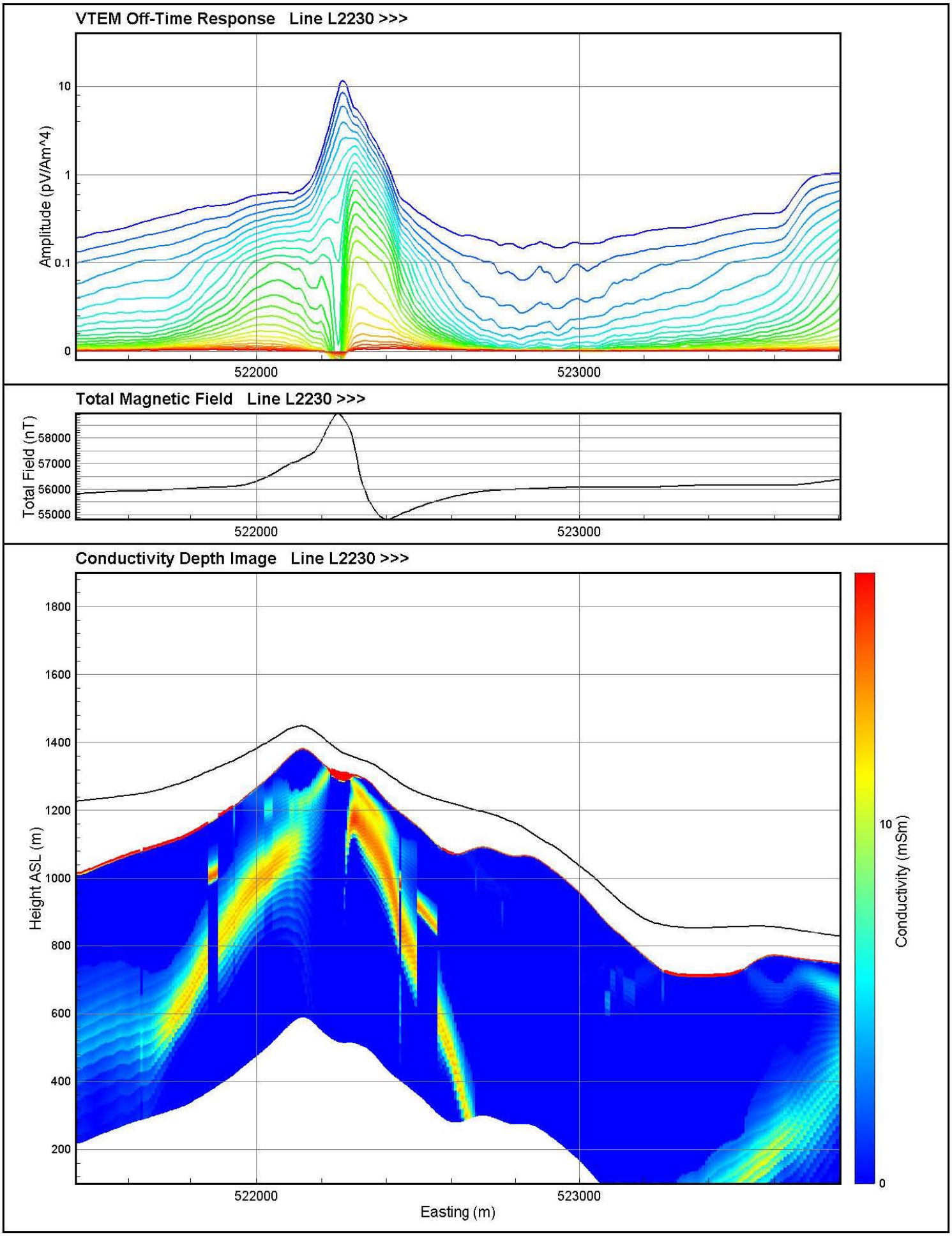
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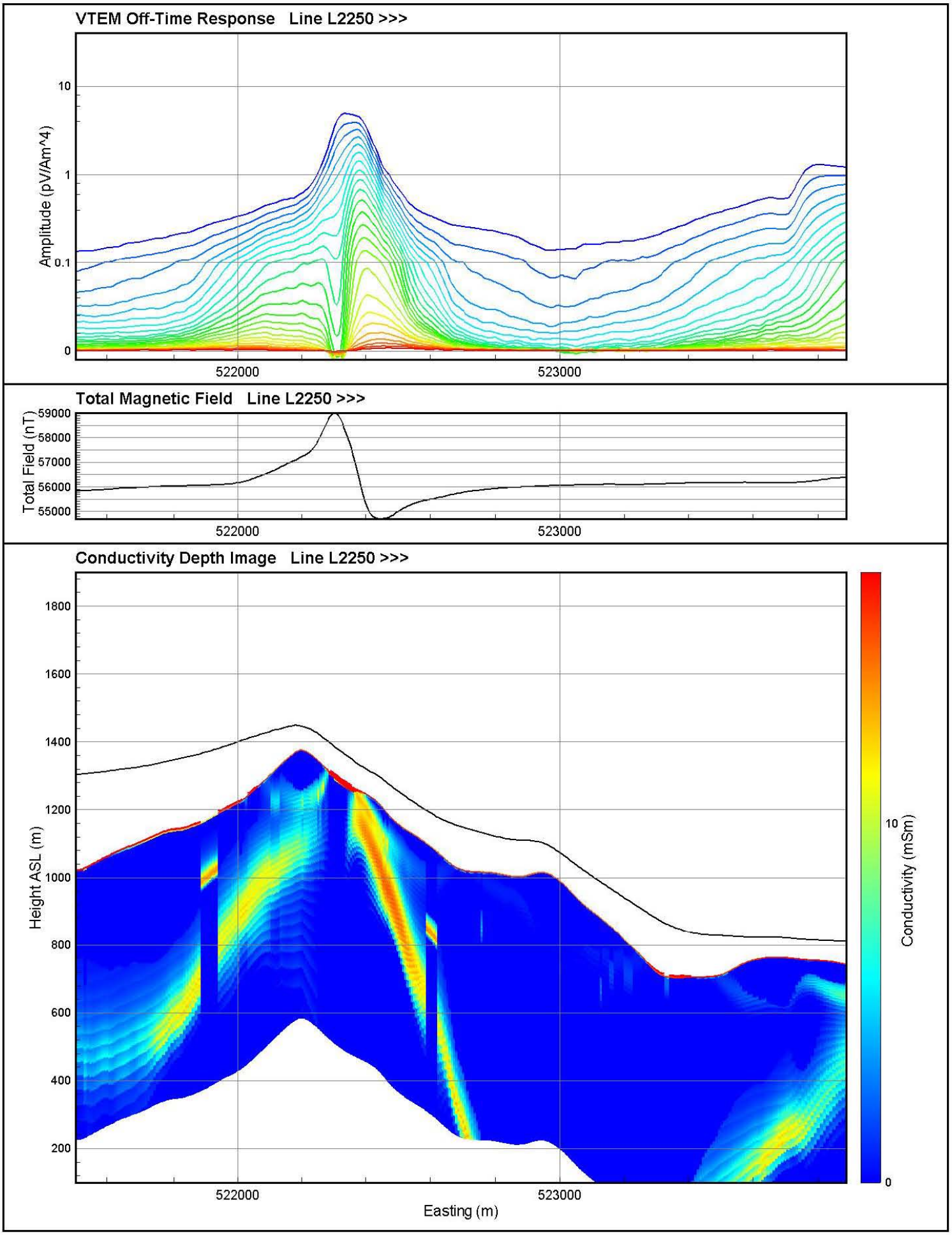
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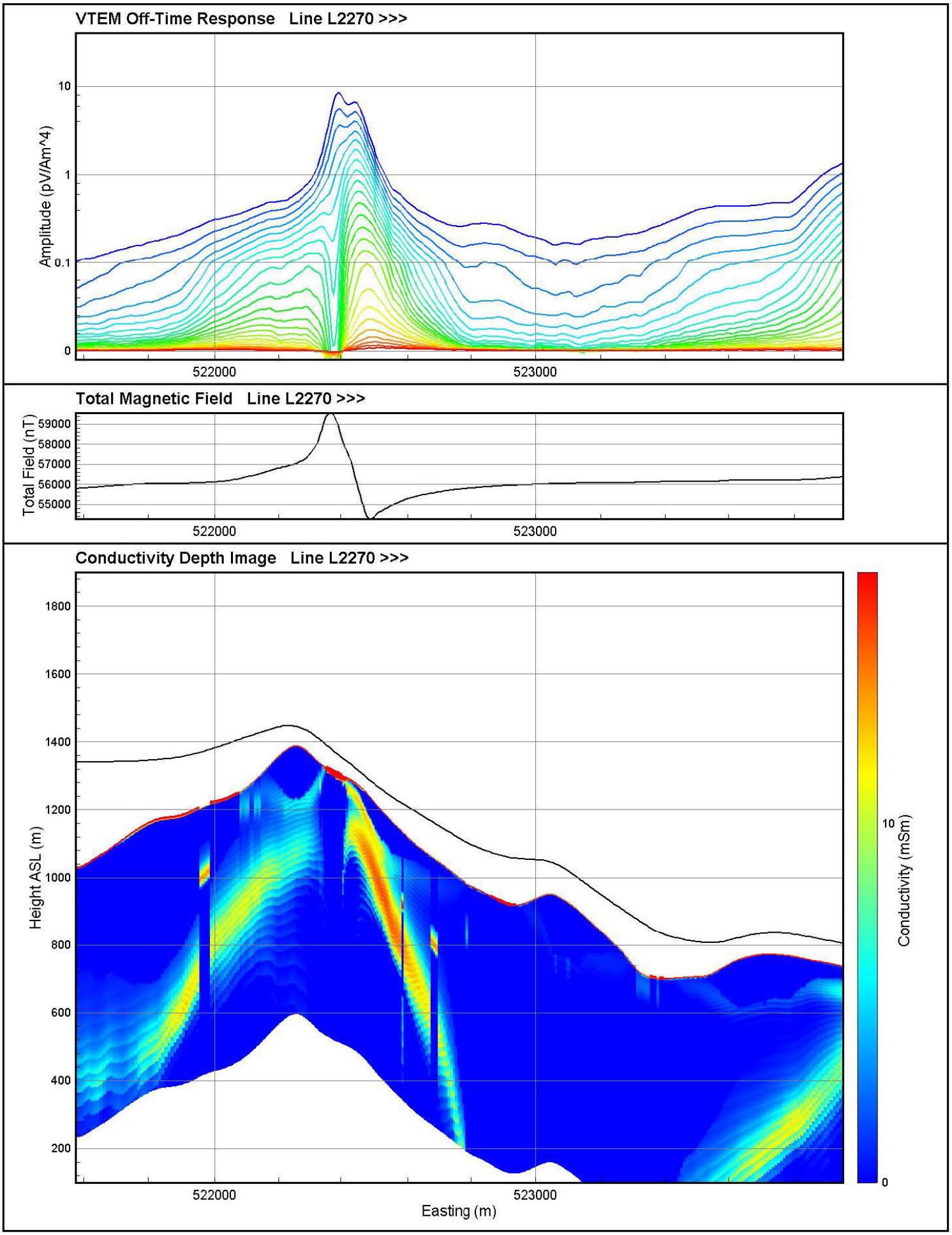
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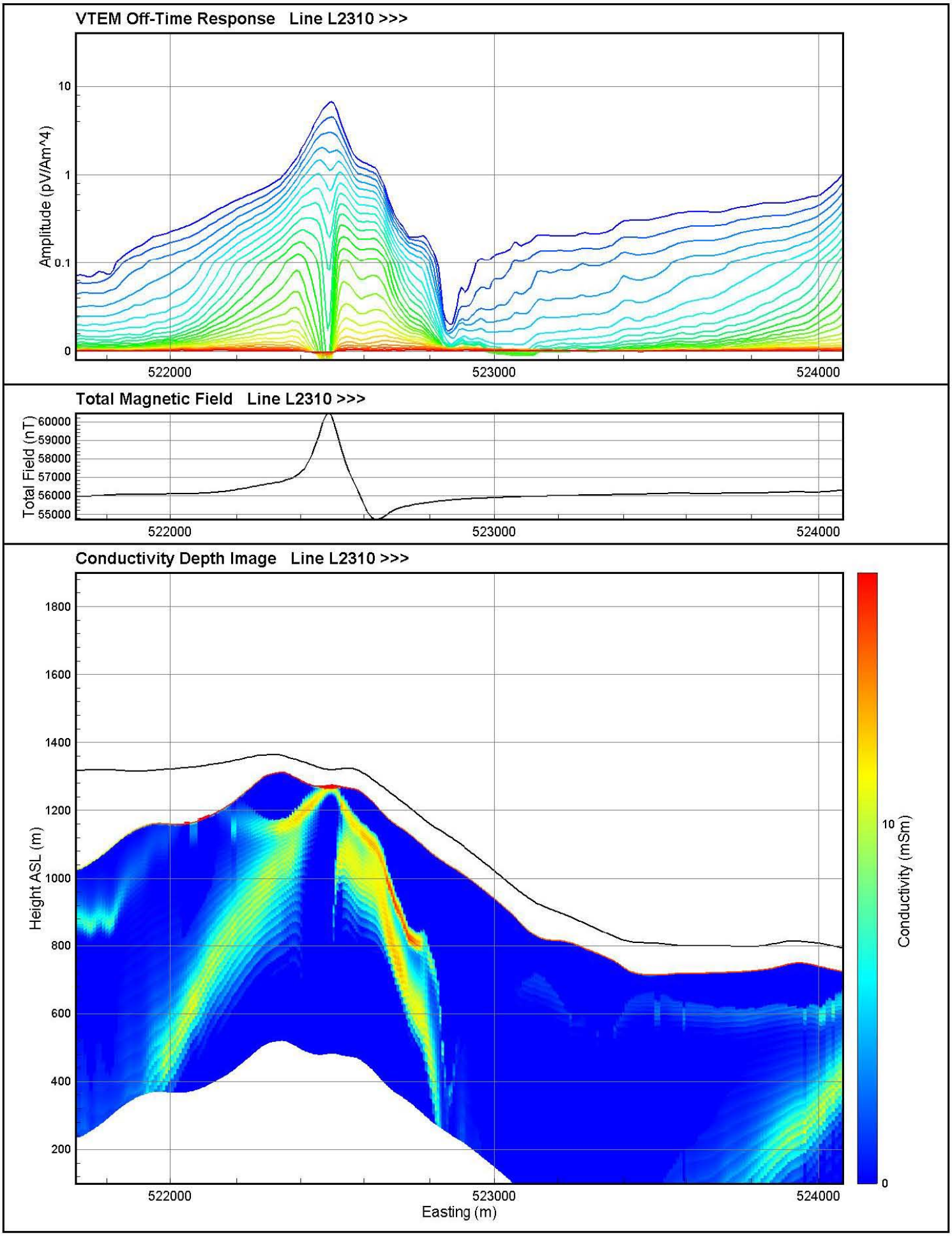
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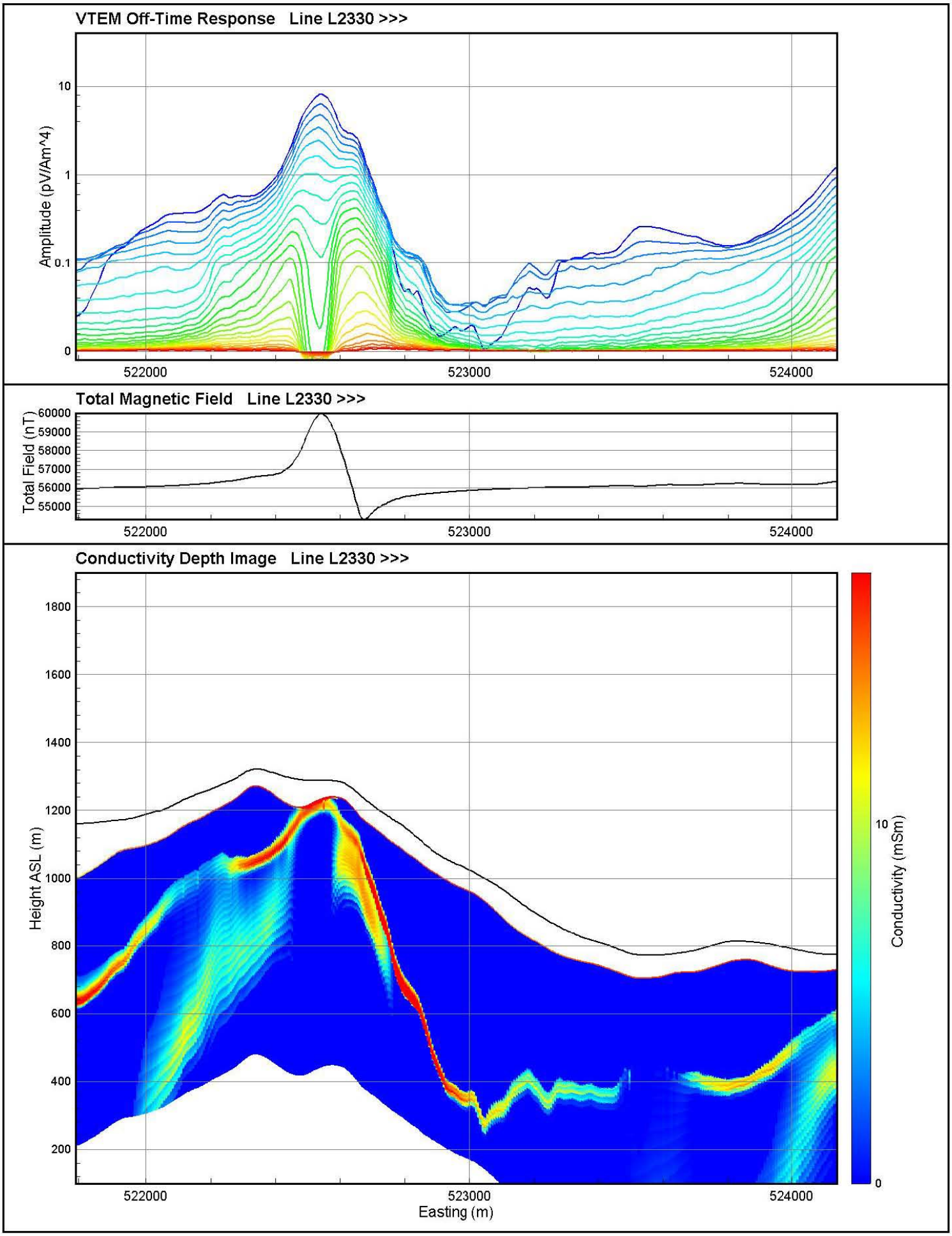
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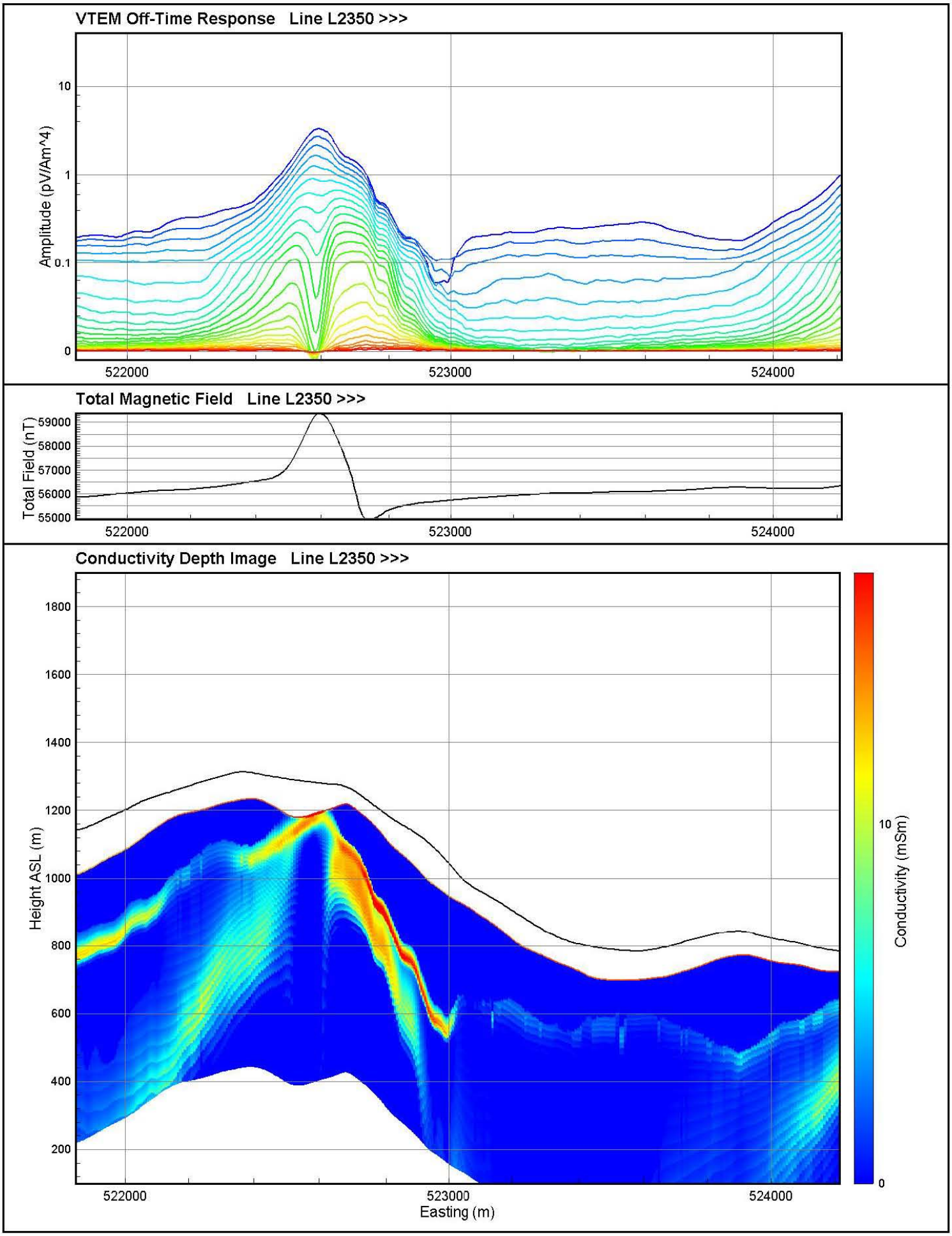
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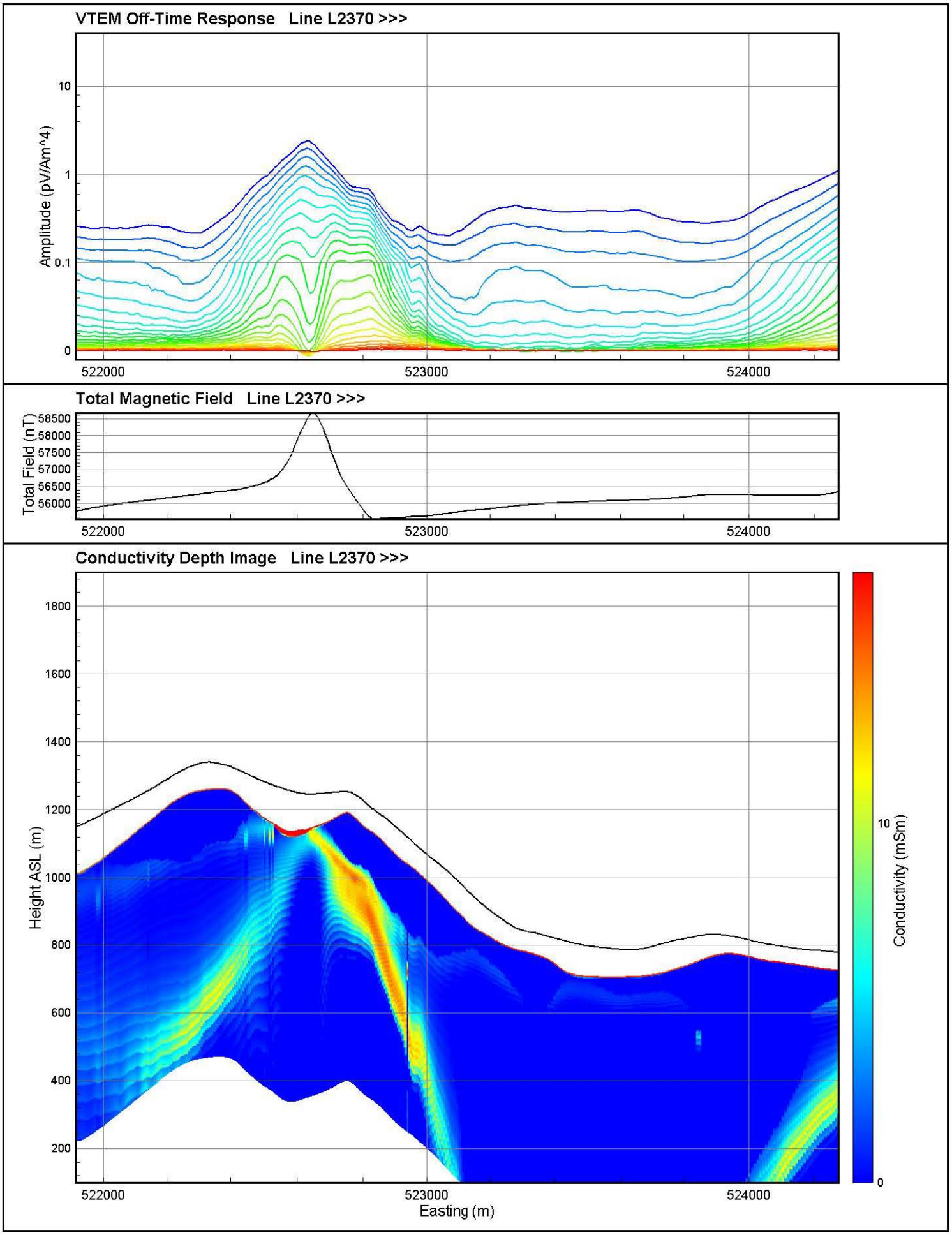
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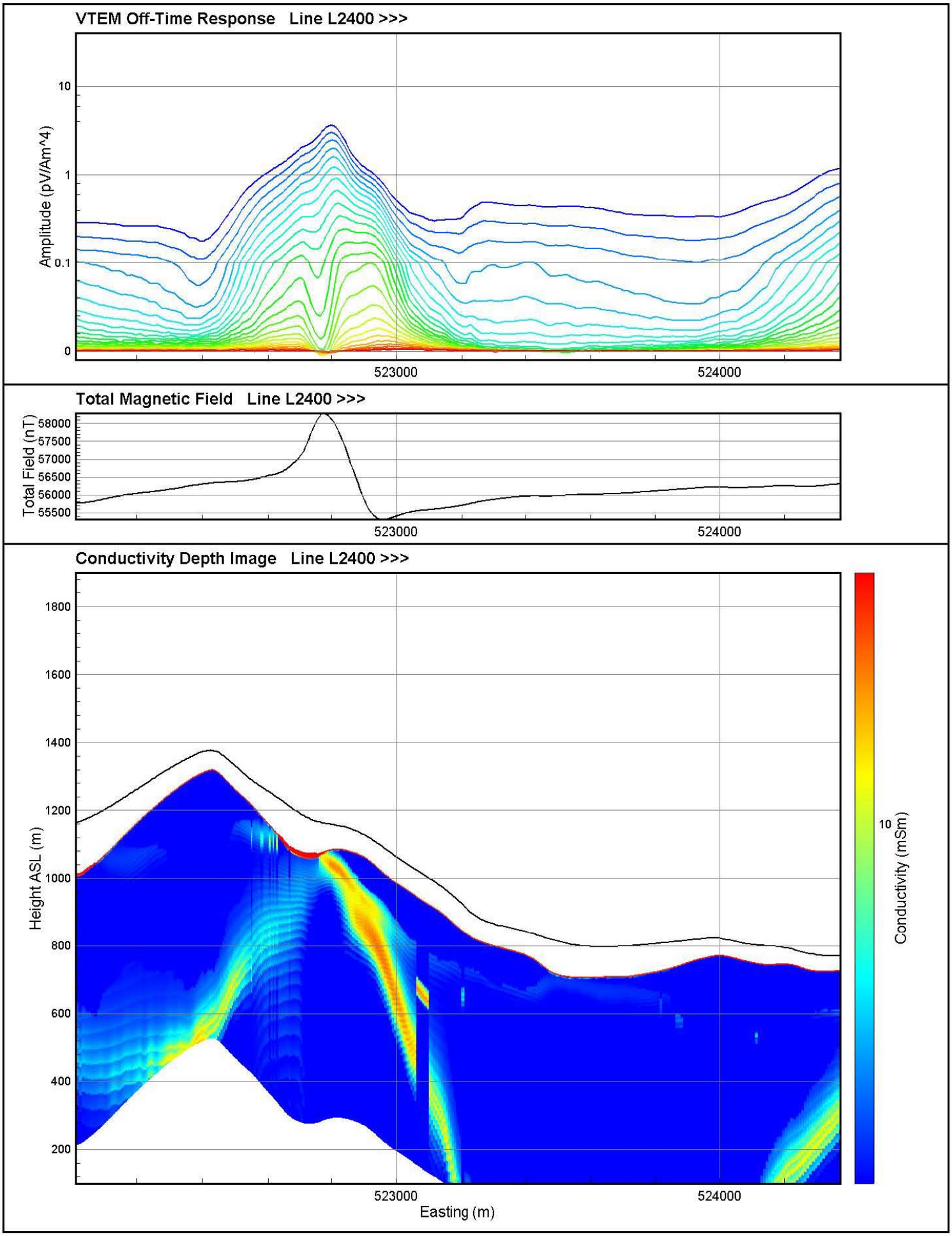
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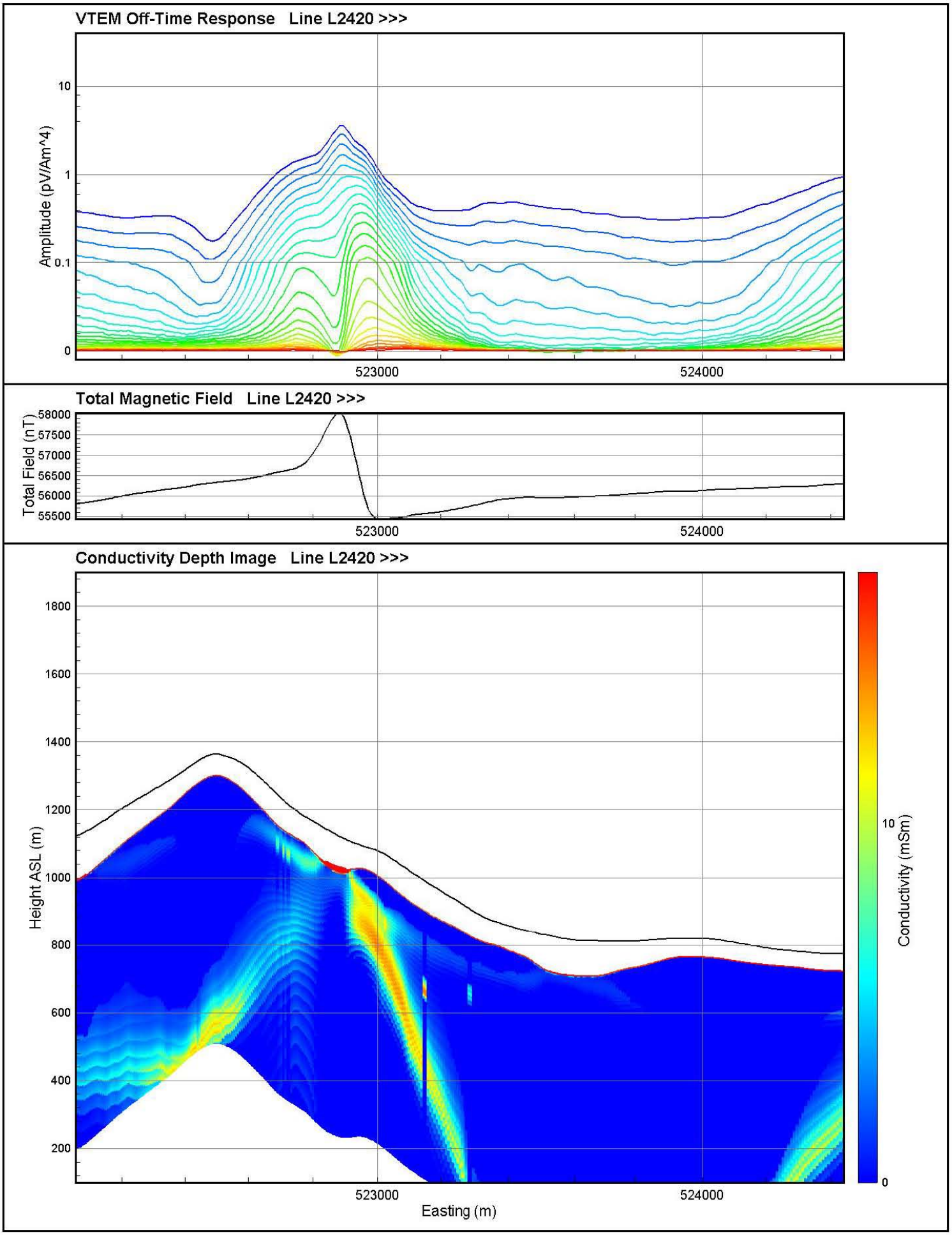
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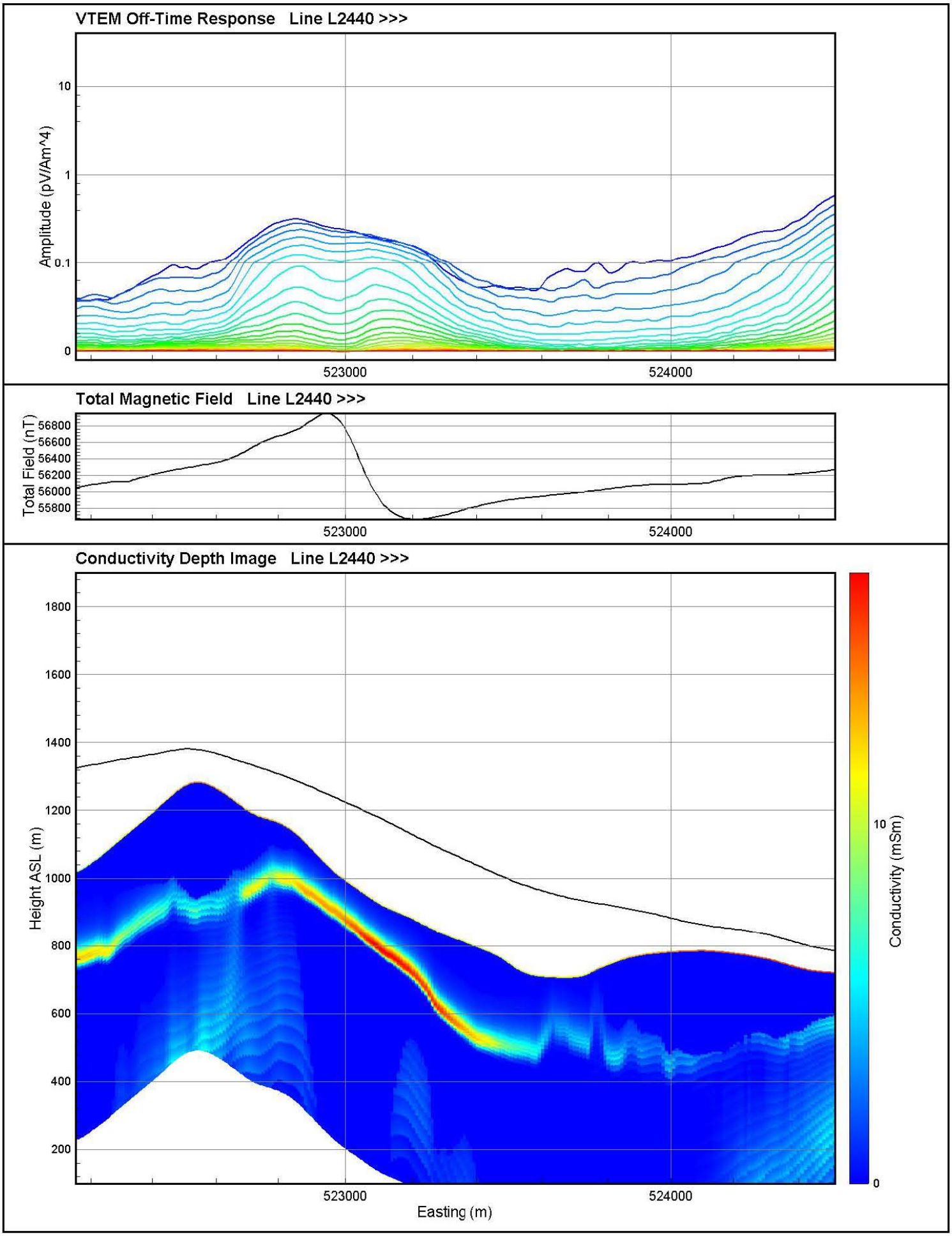
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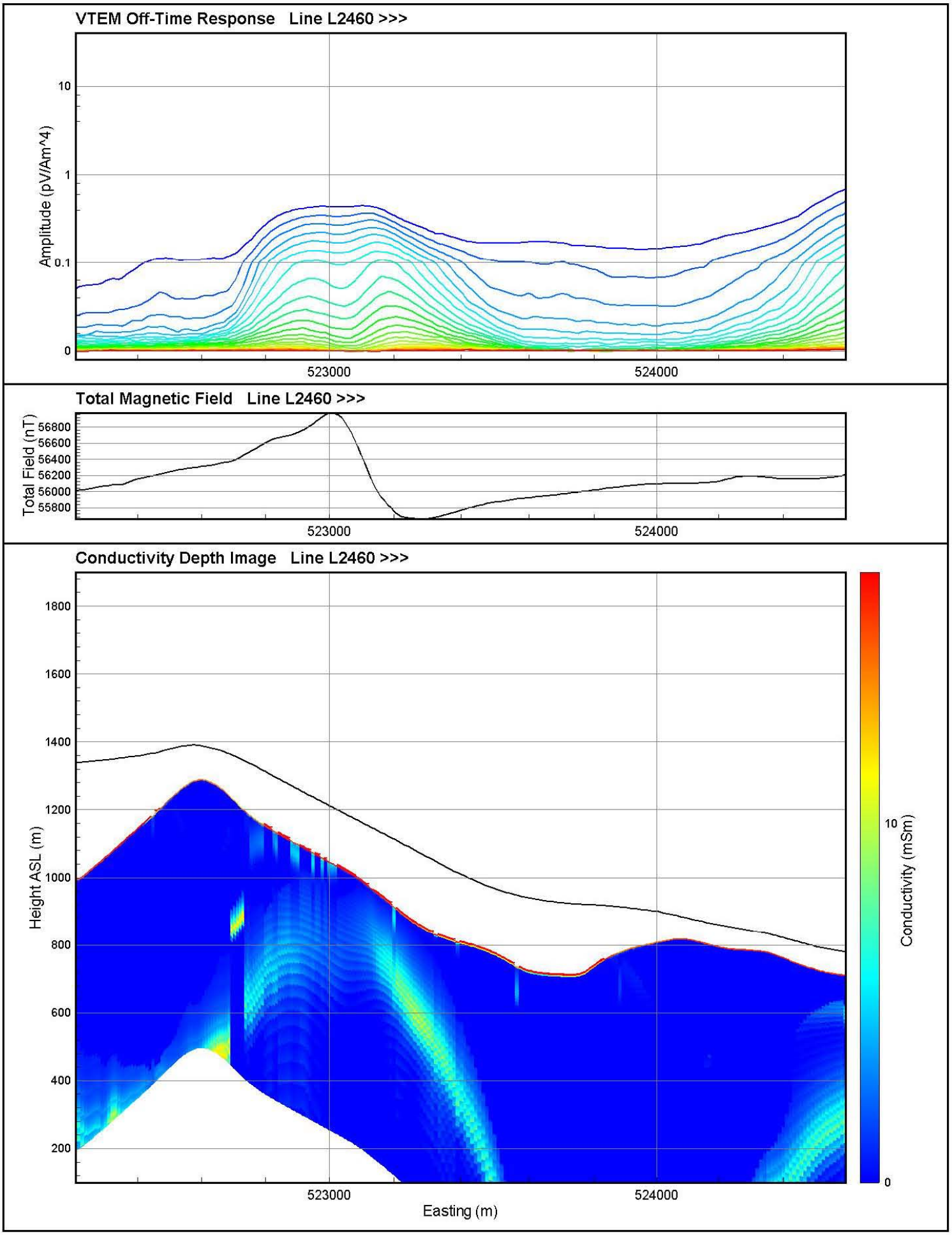
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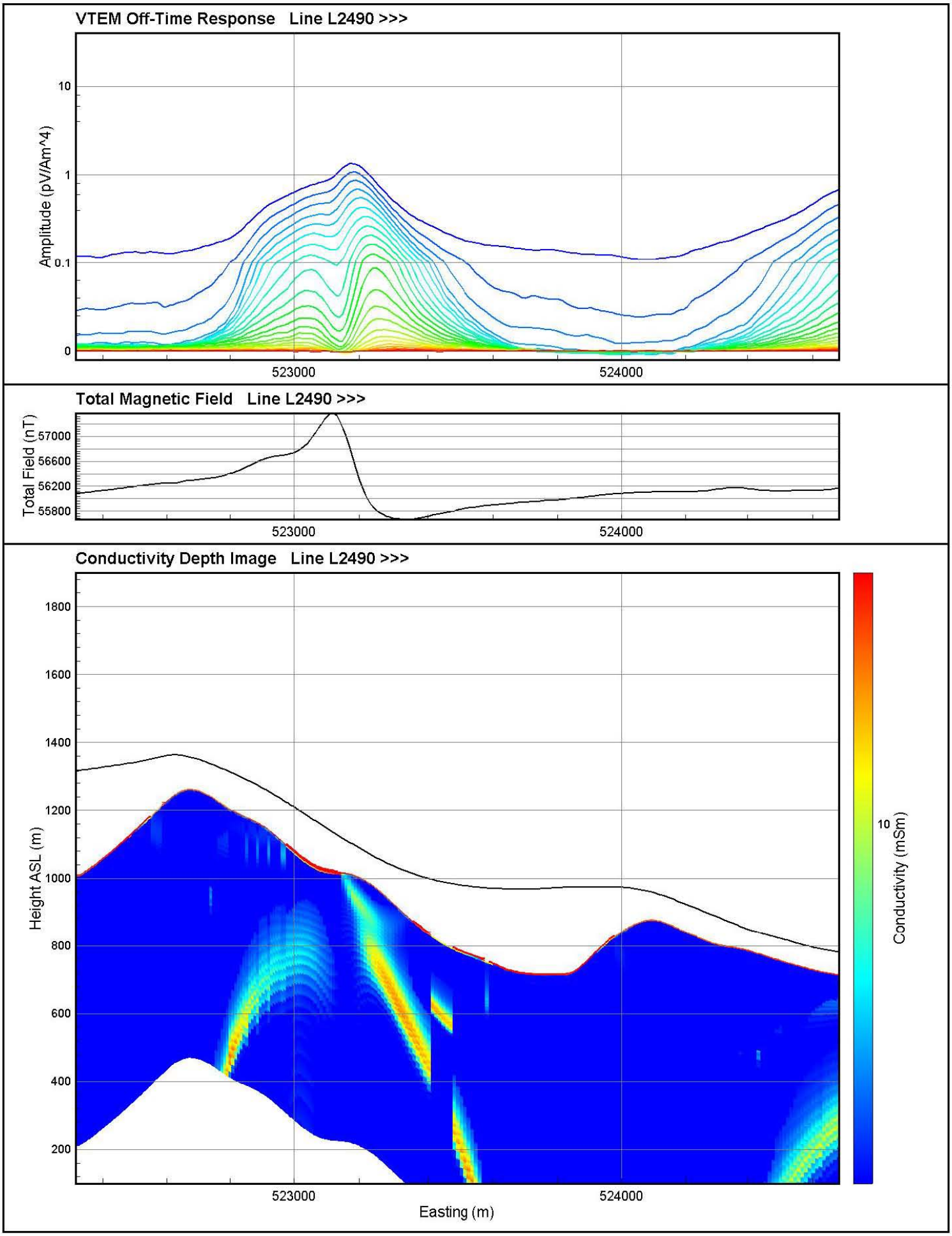
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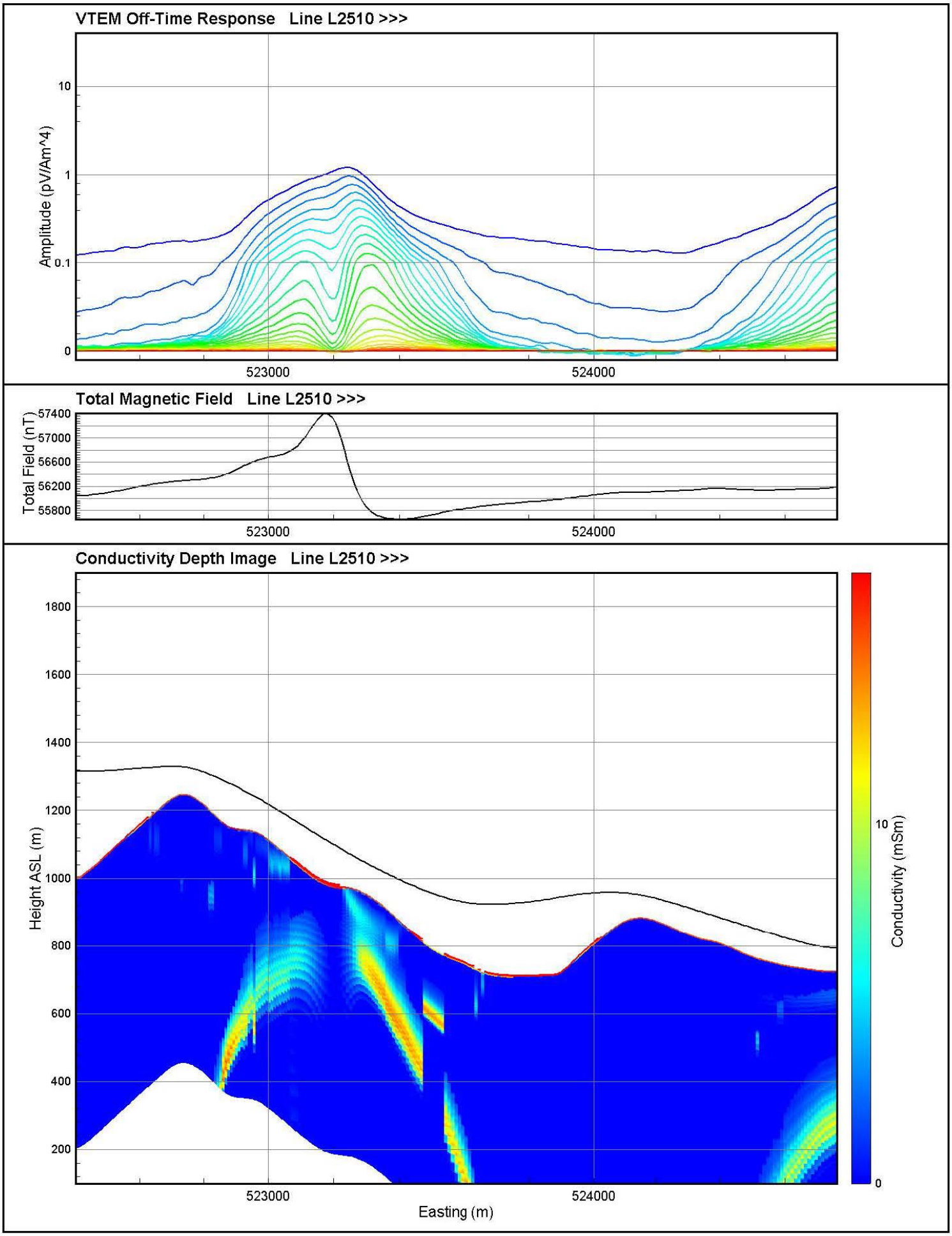
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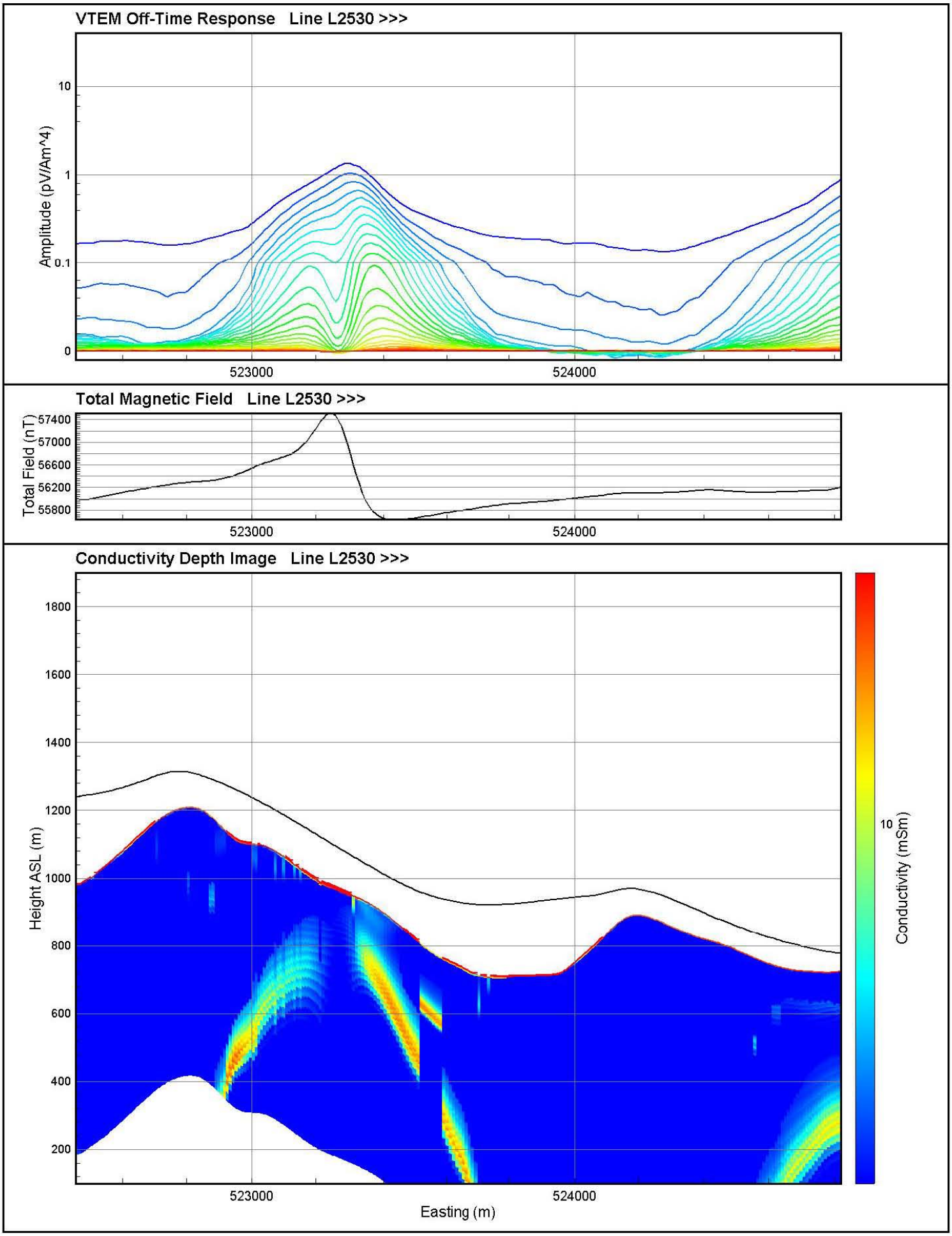
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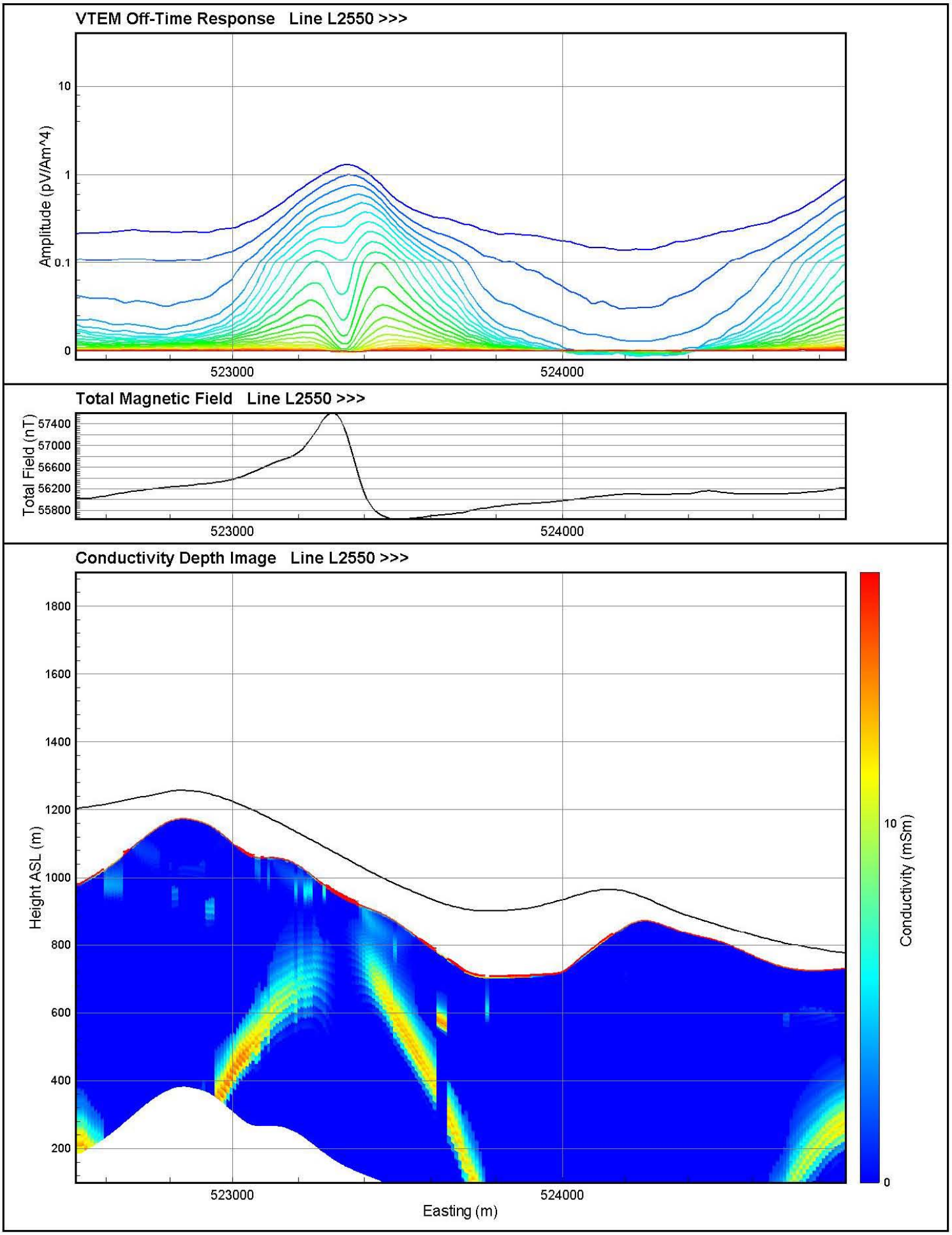
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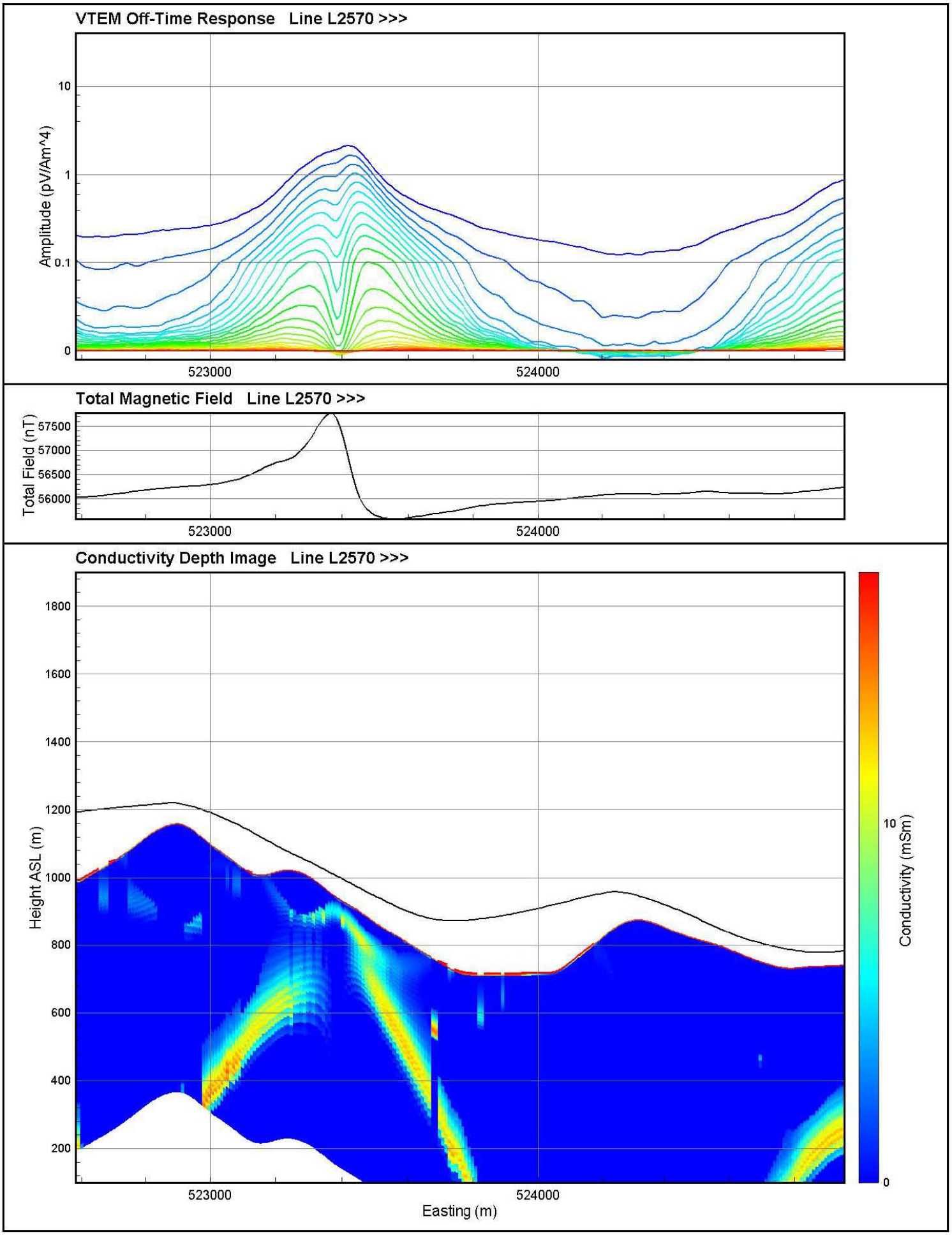
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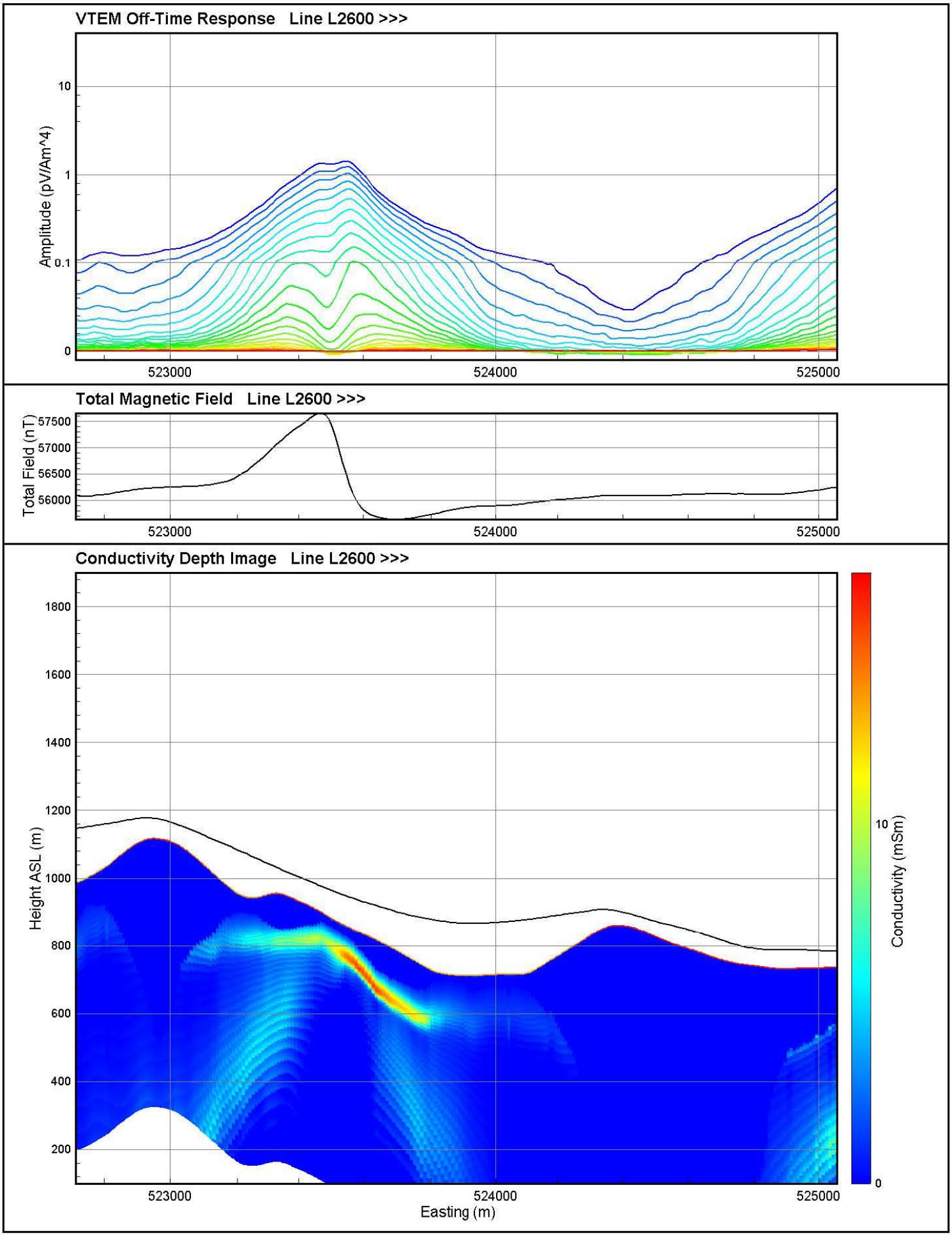
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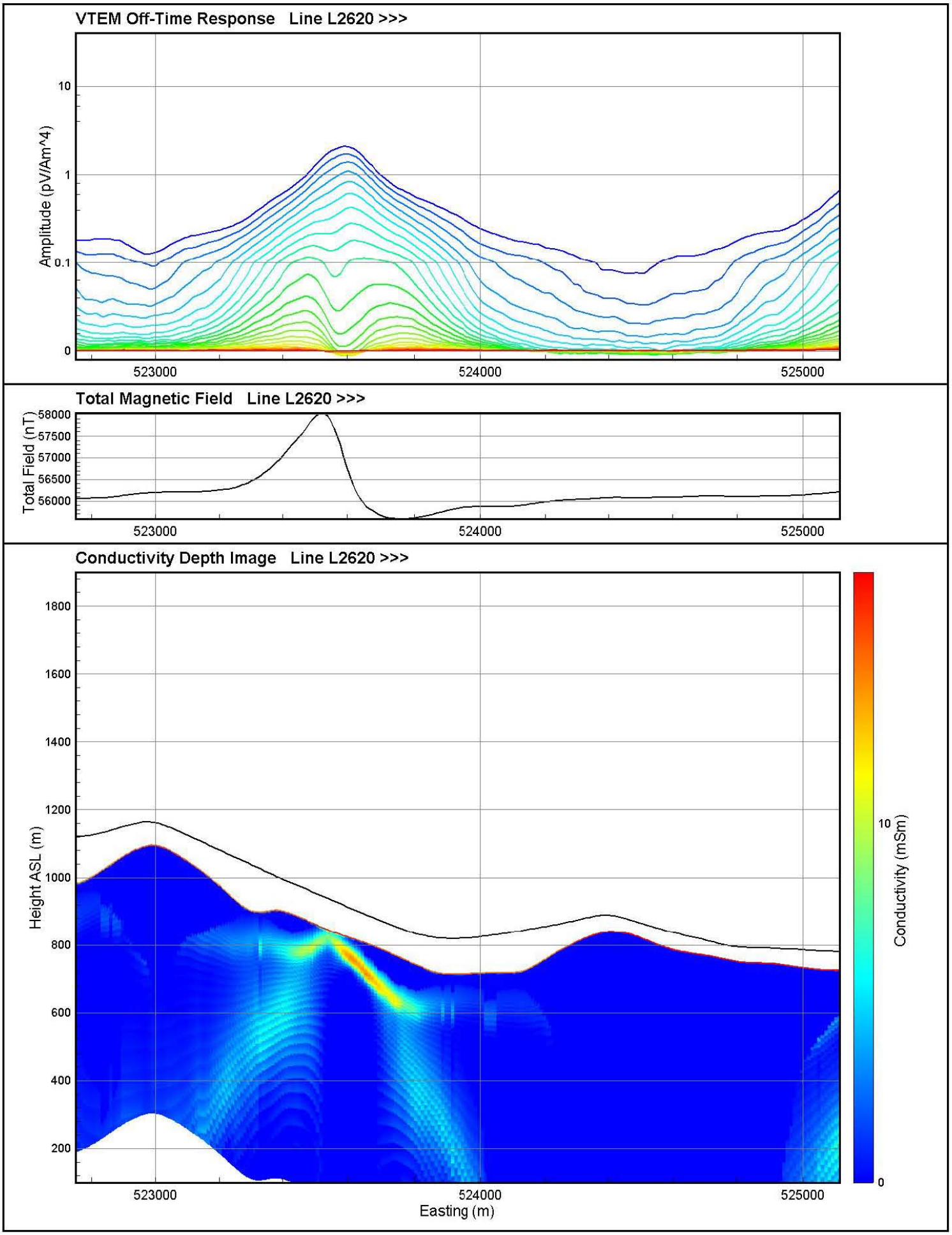
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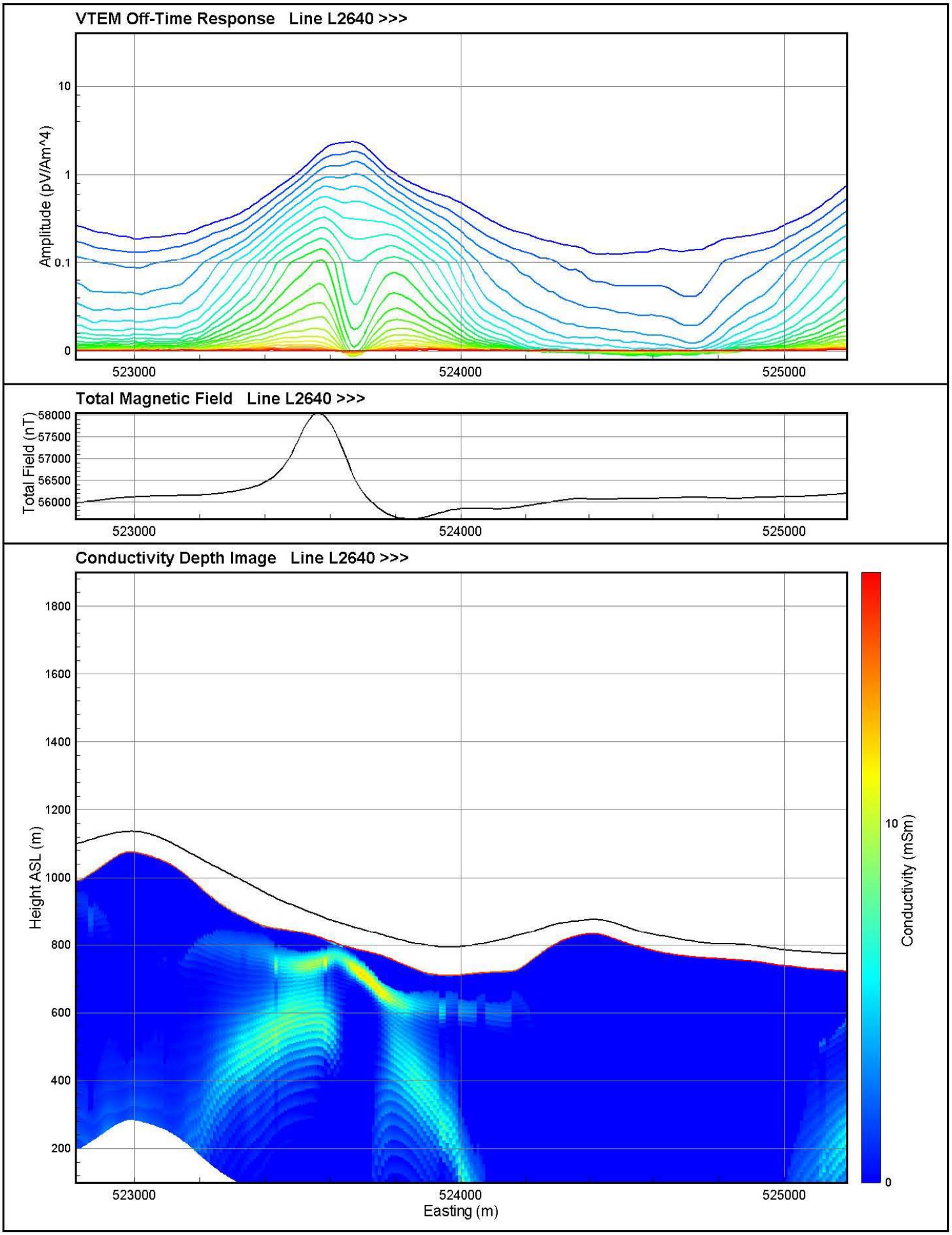
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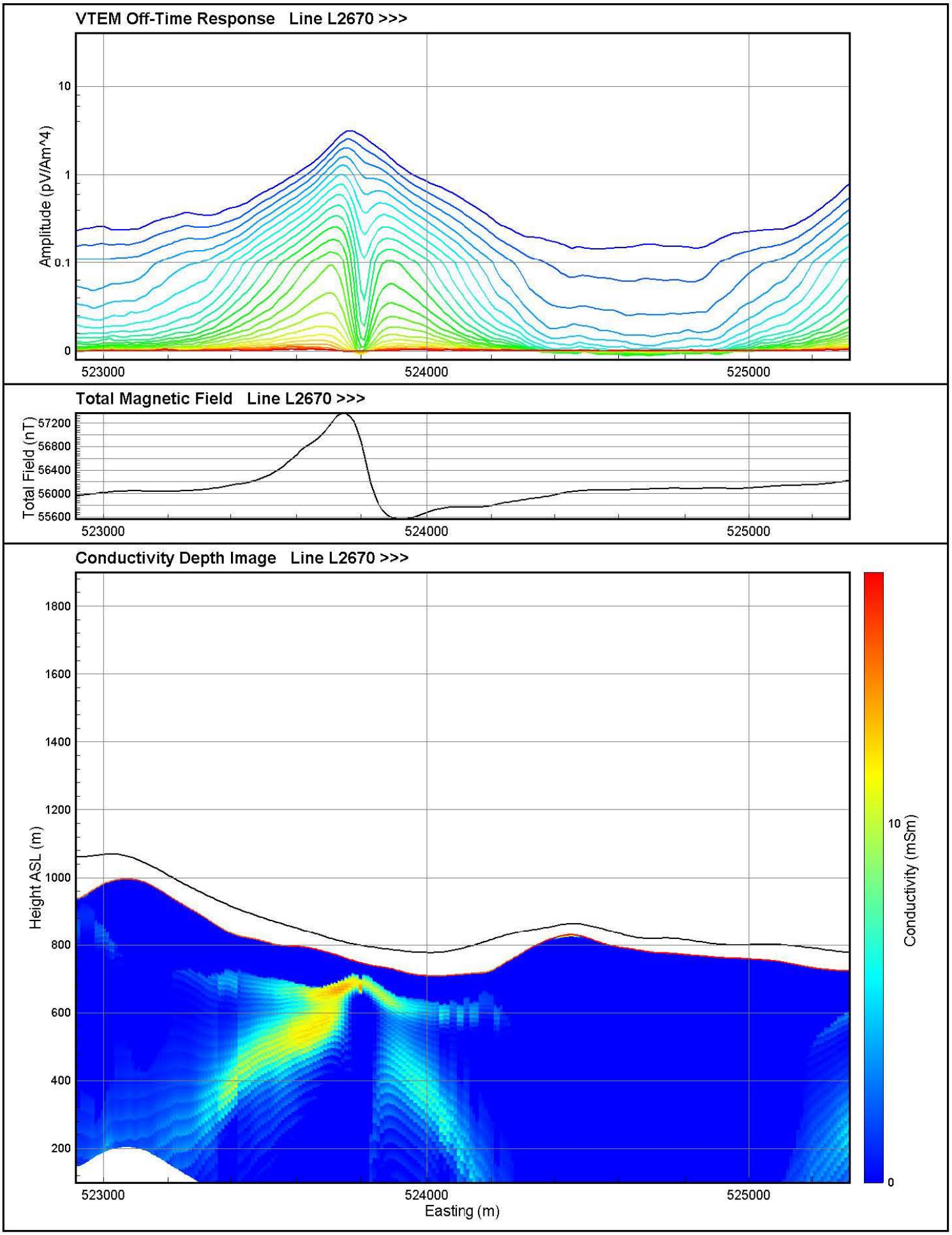
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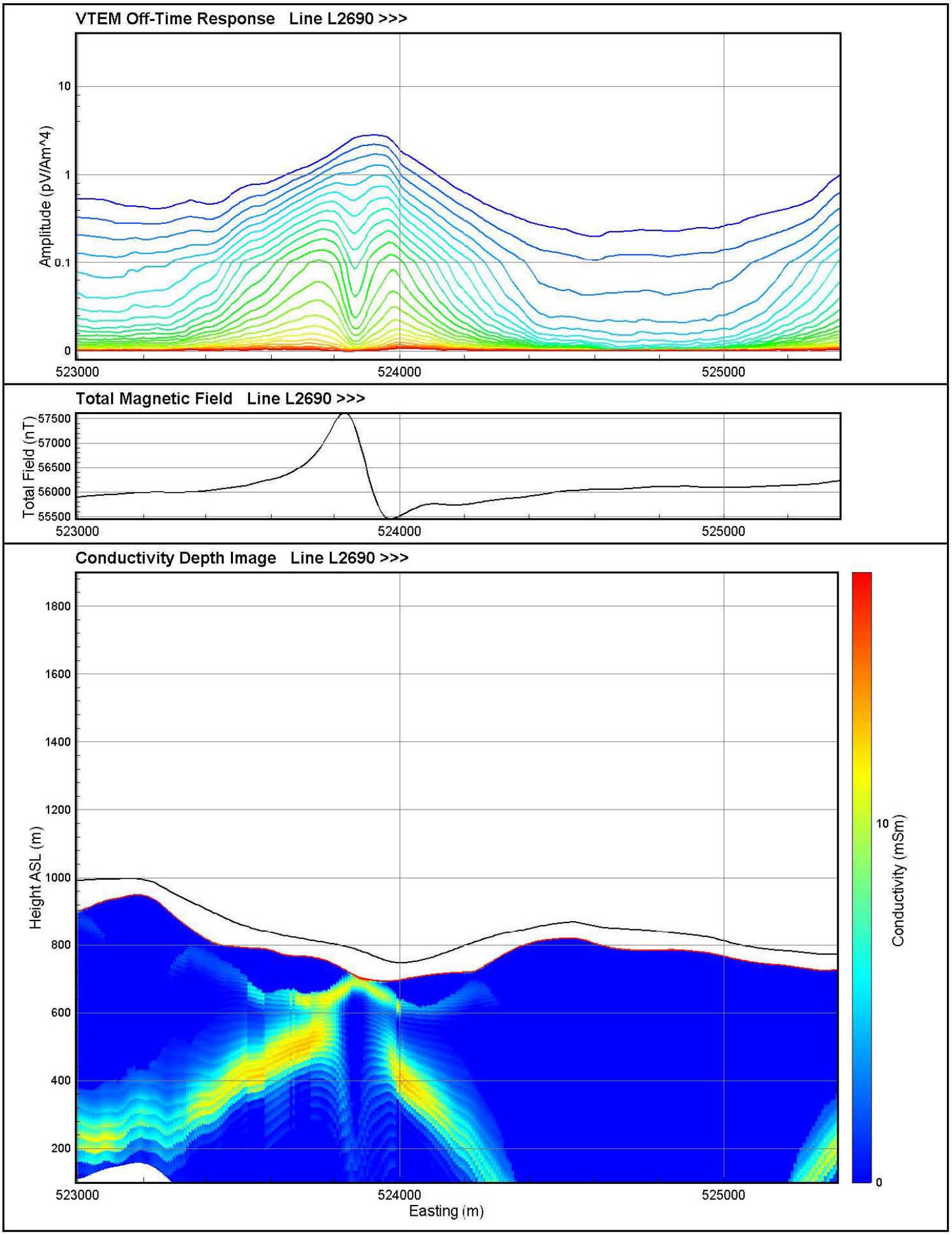
GNME - Yukon VTEM Survey
Block B



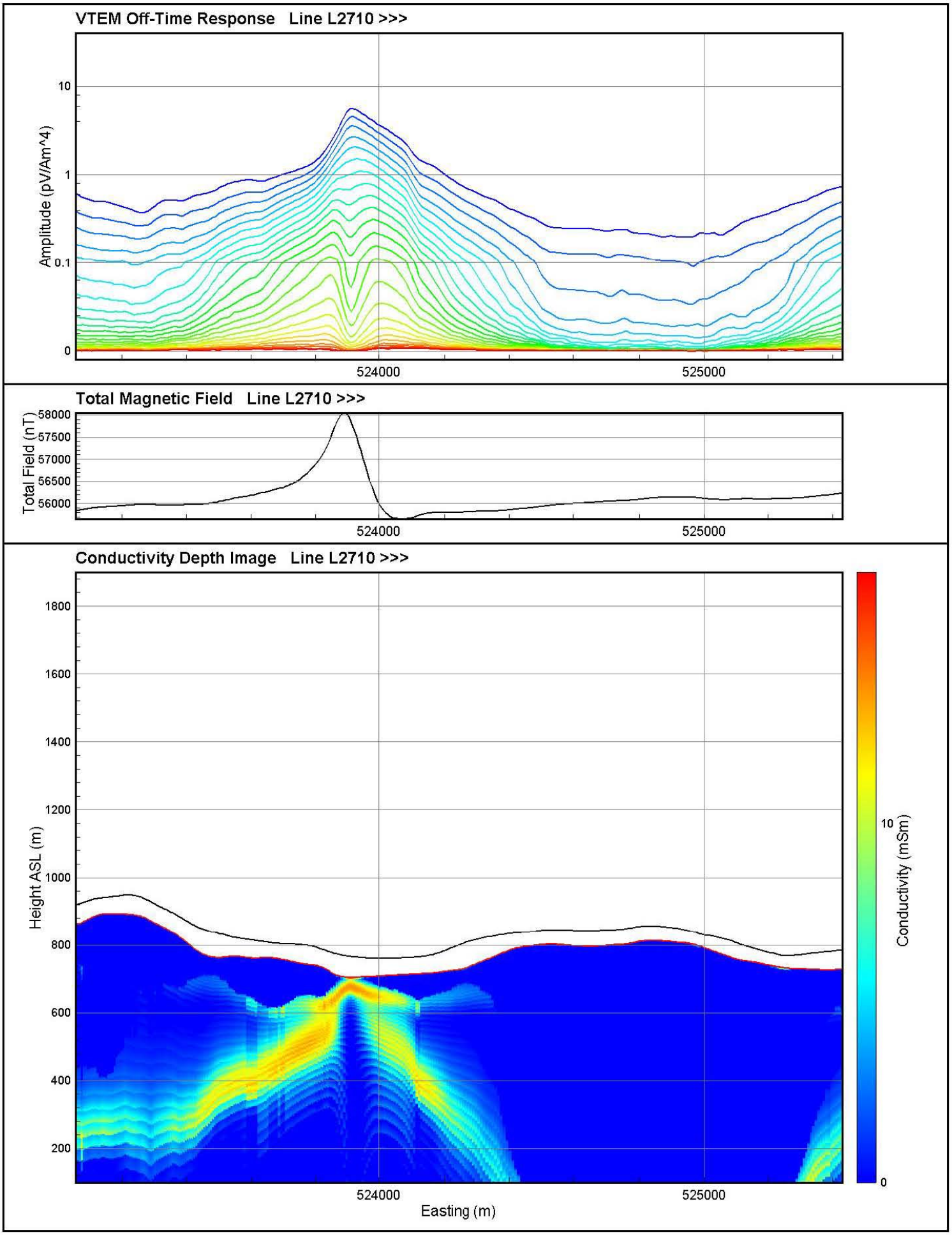
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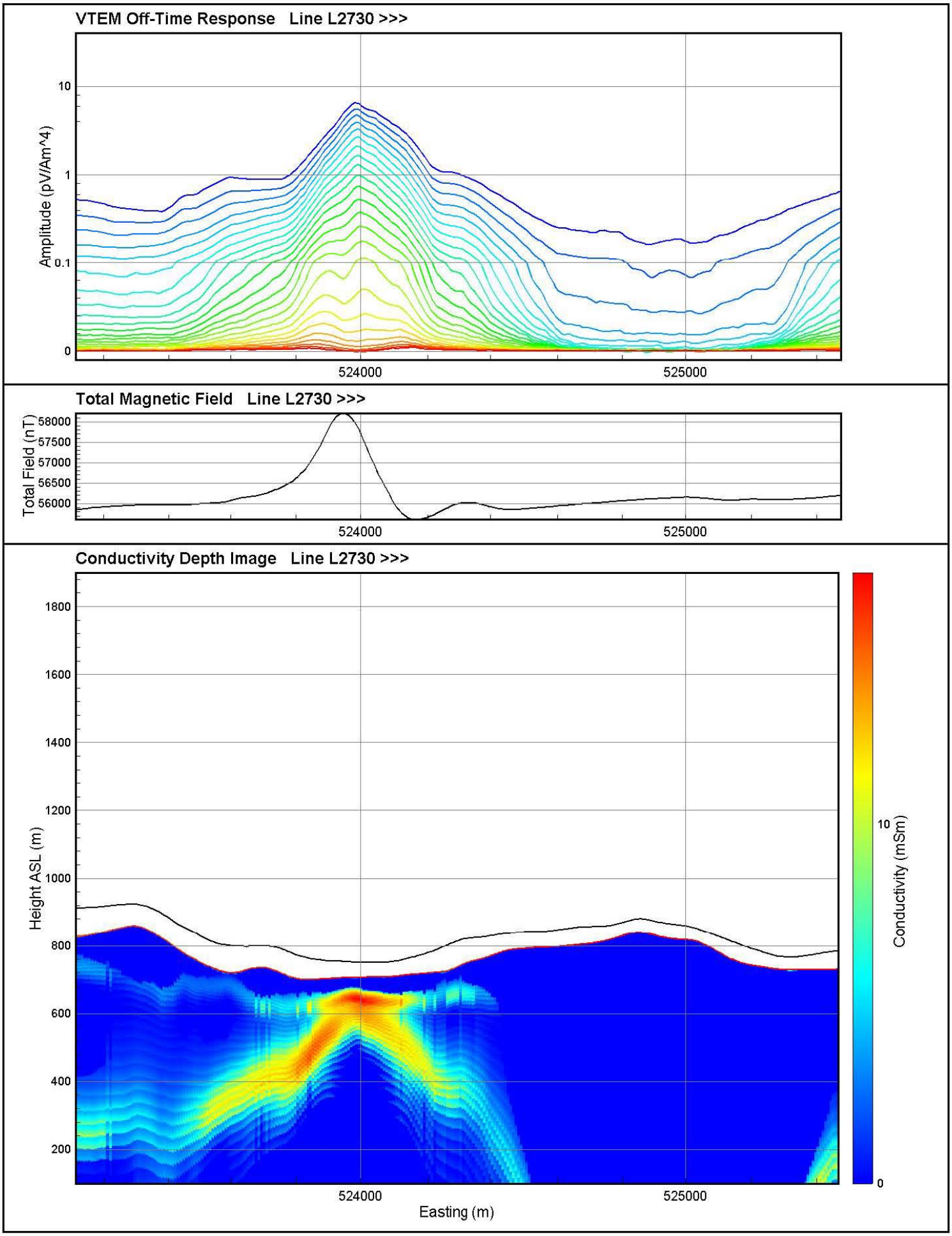
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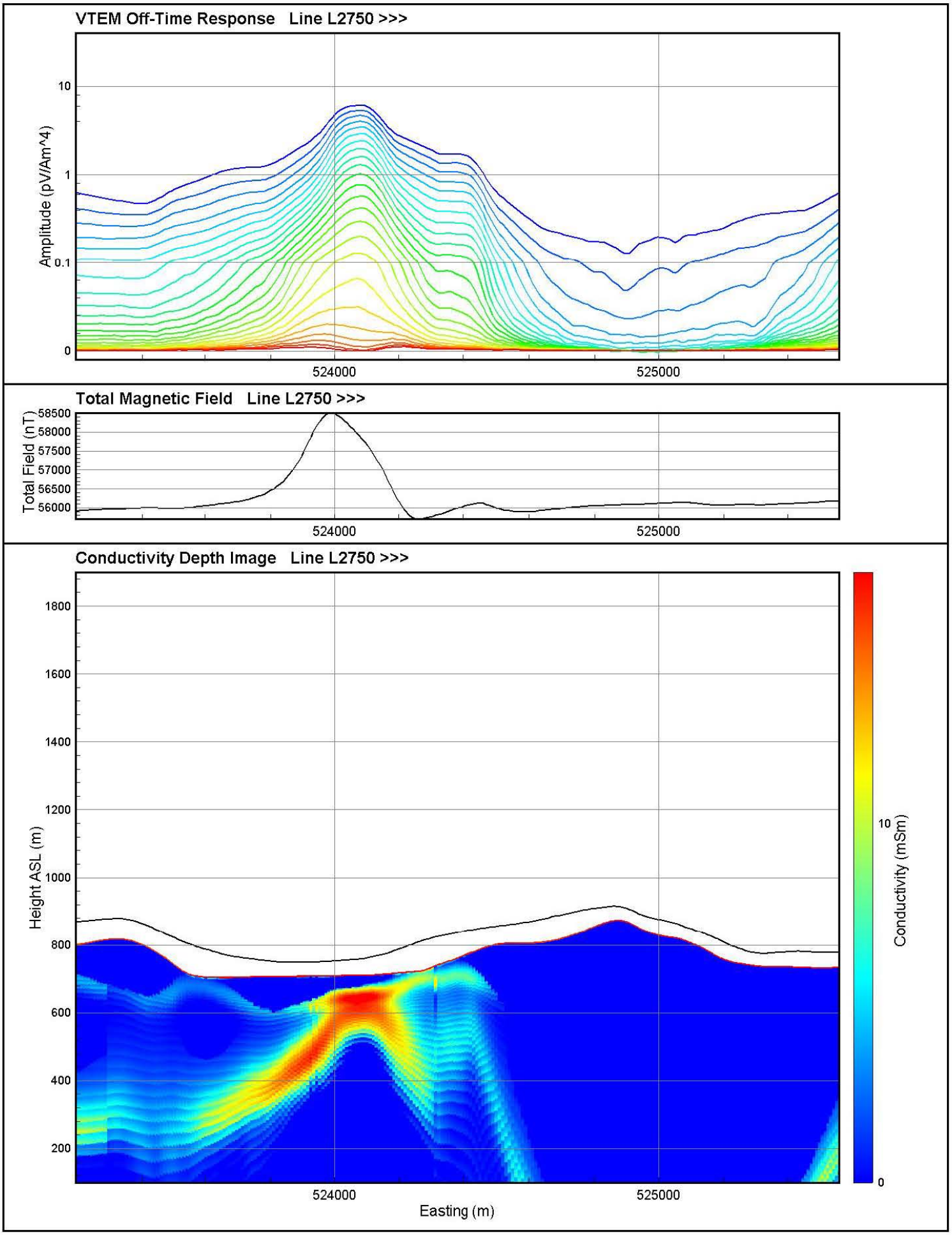
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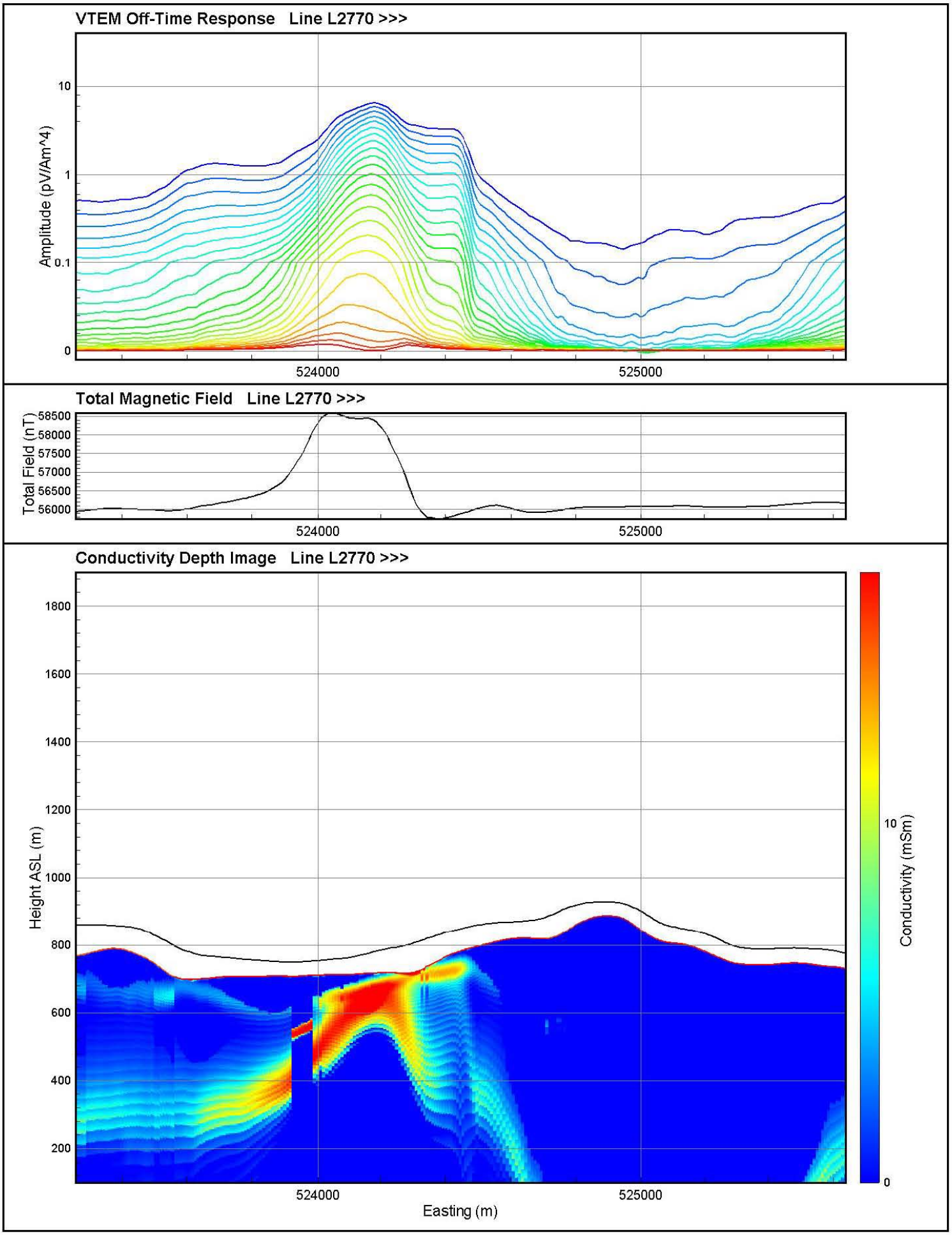
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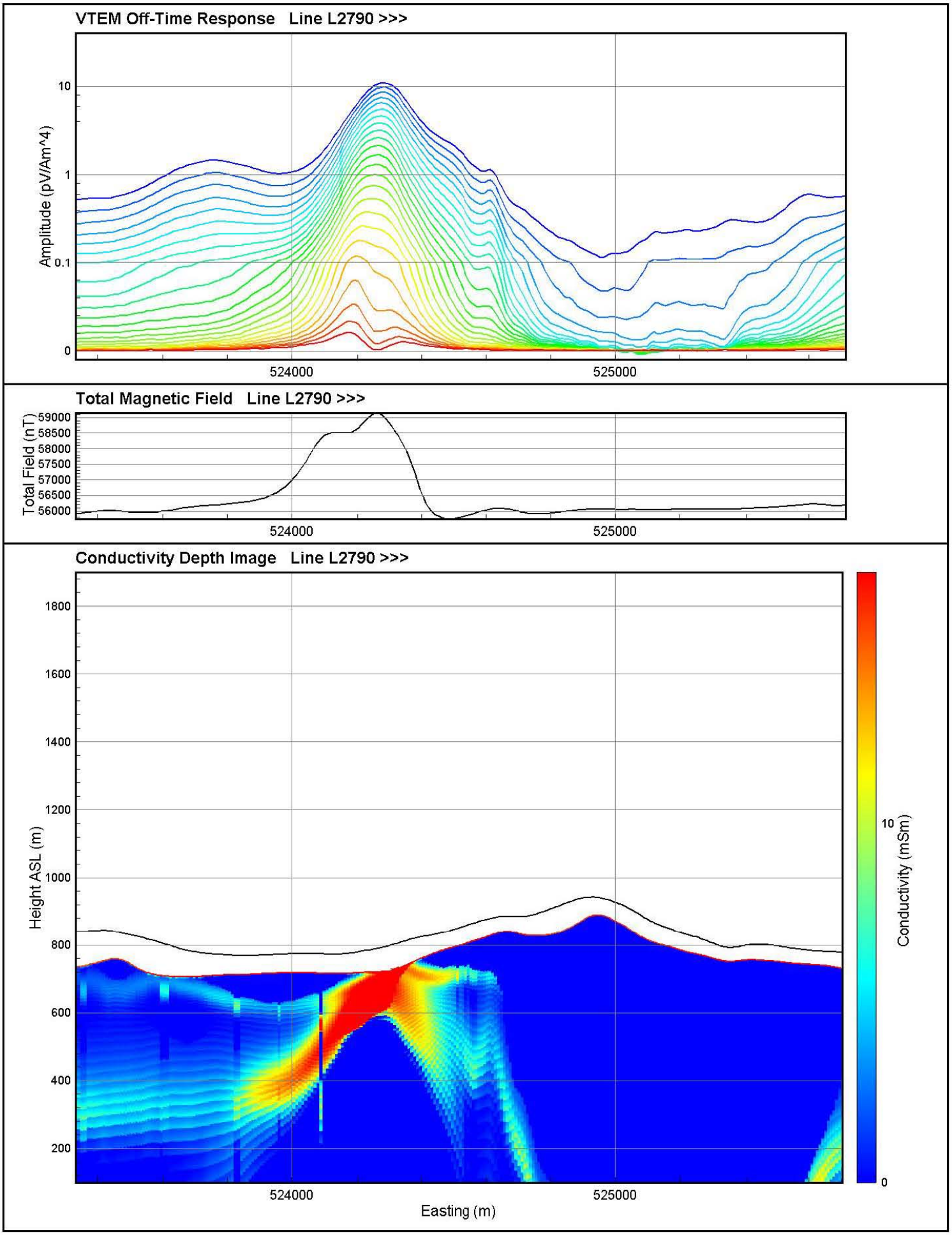
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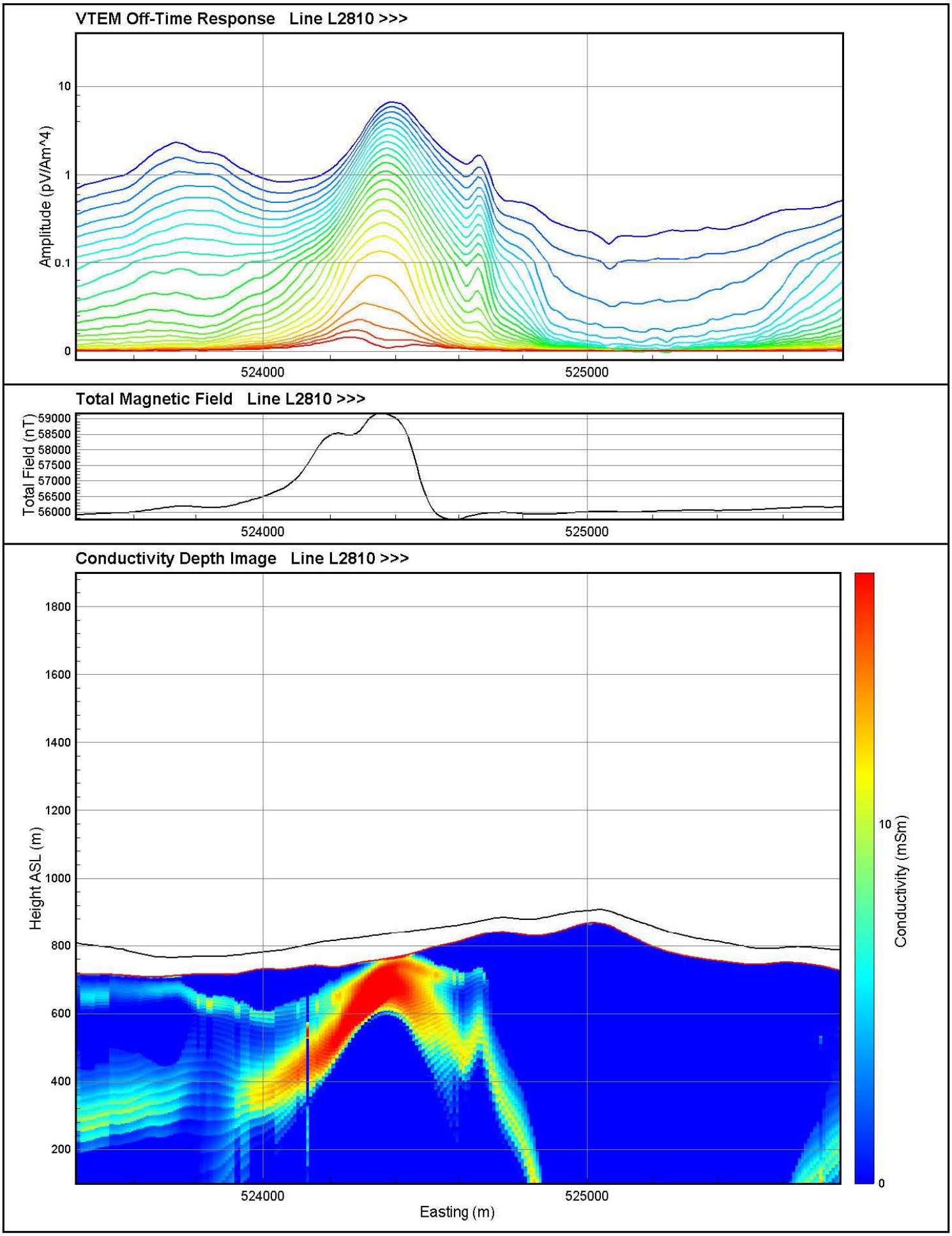
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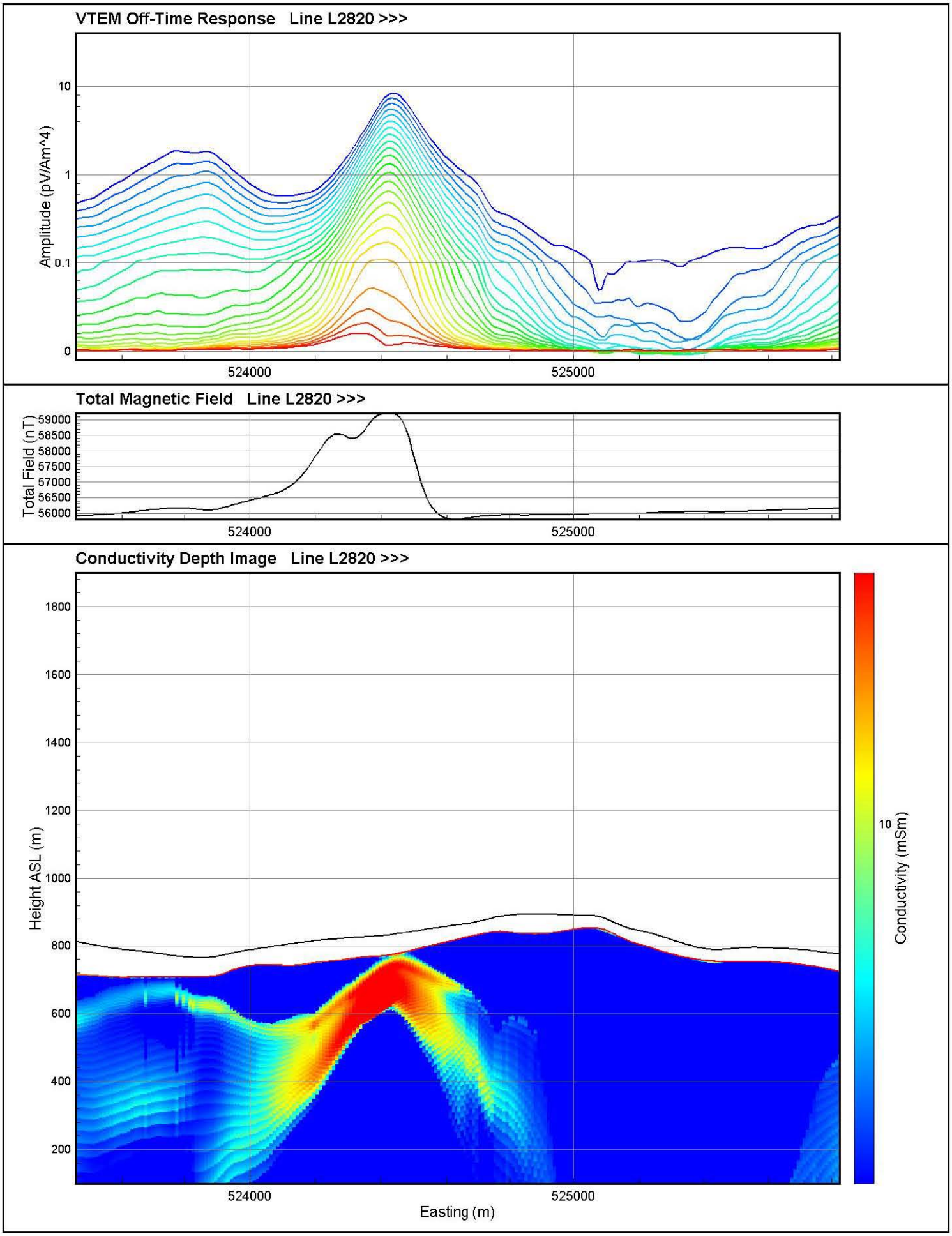
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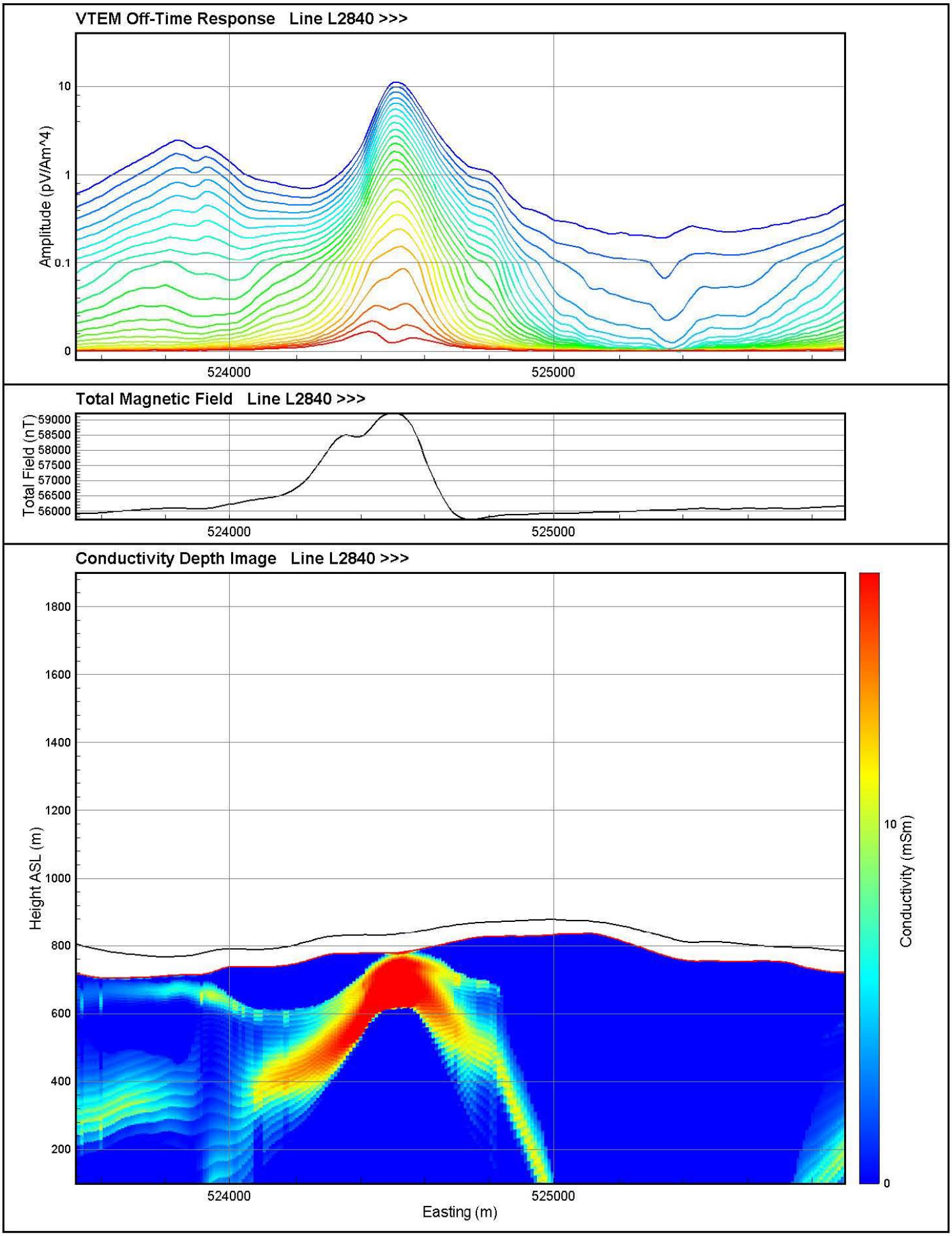
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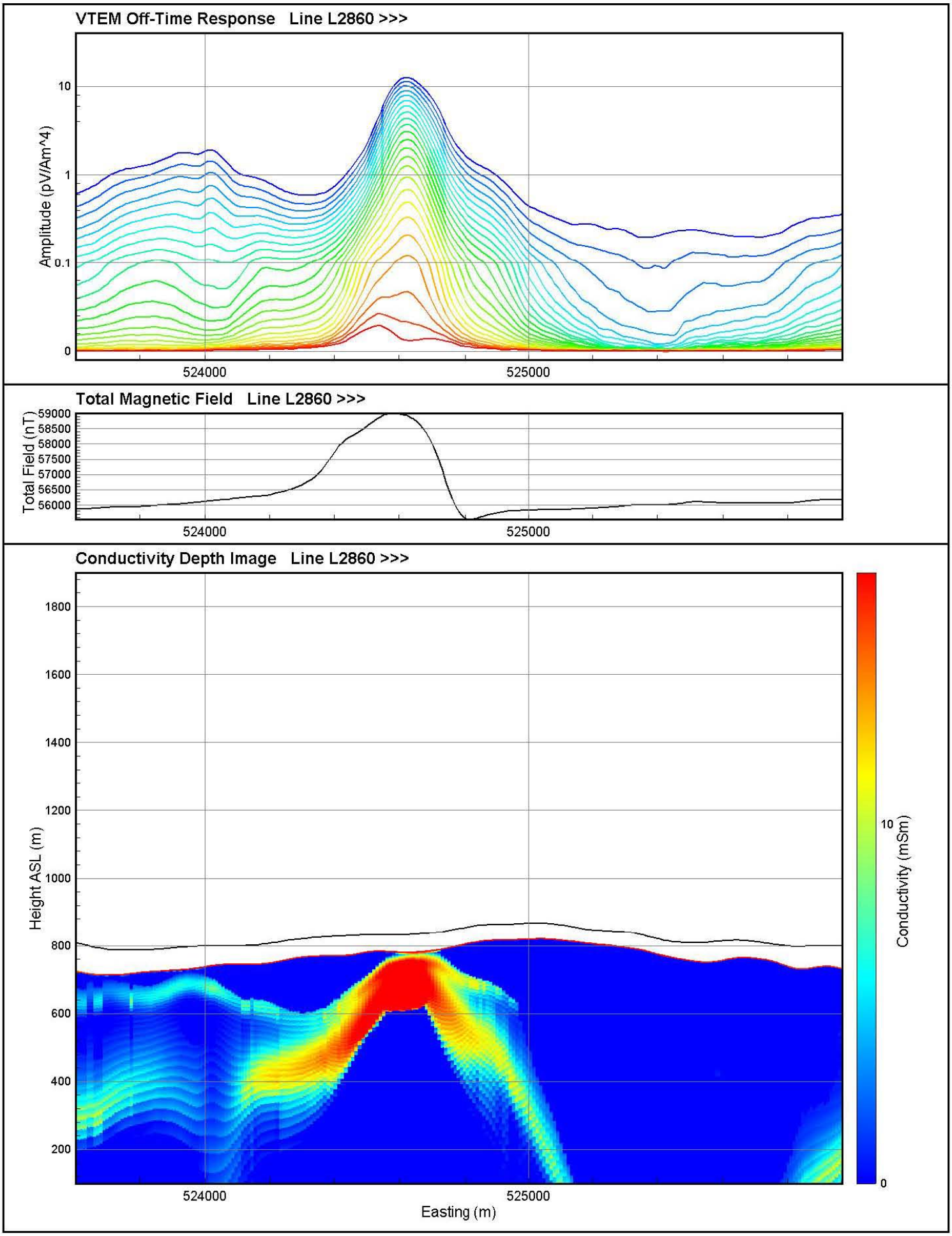
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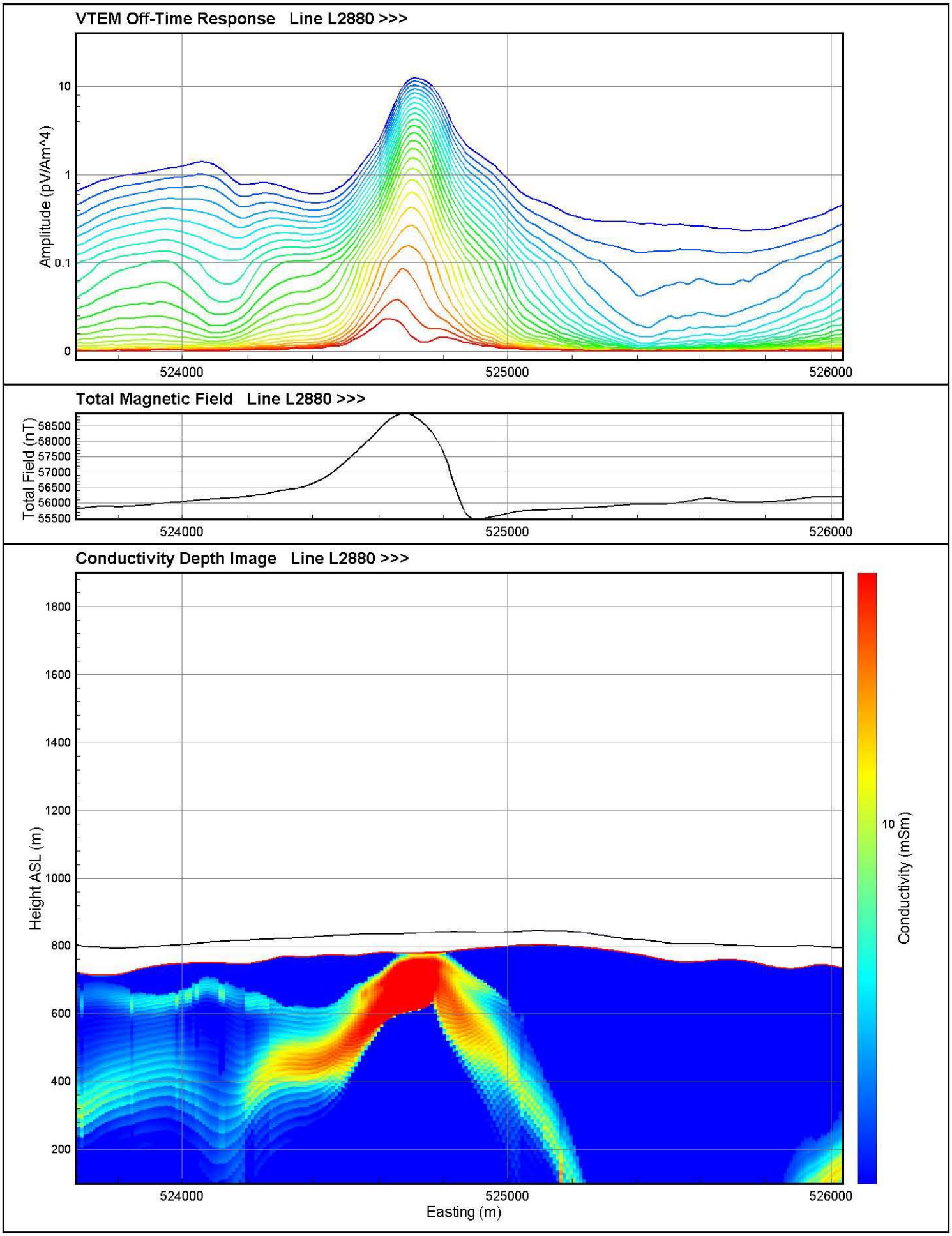
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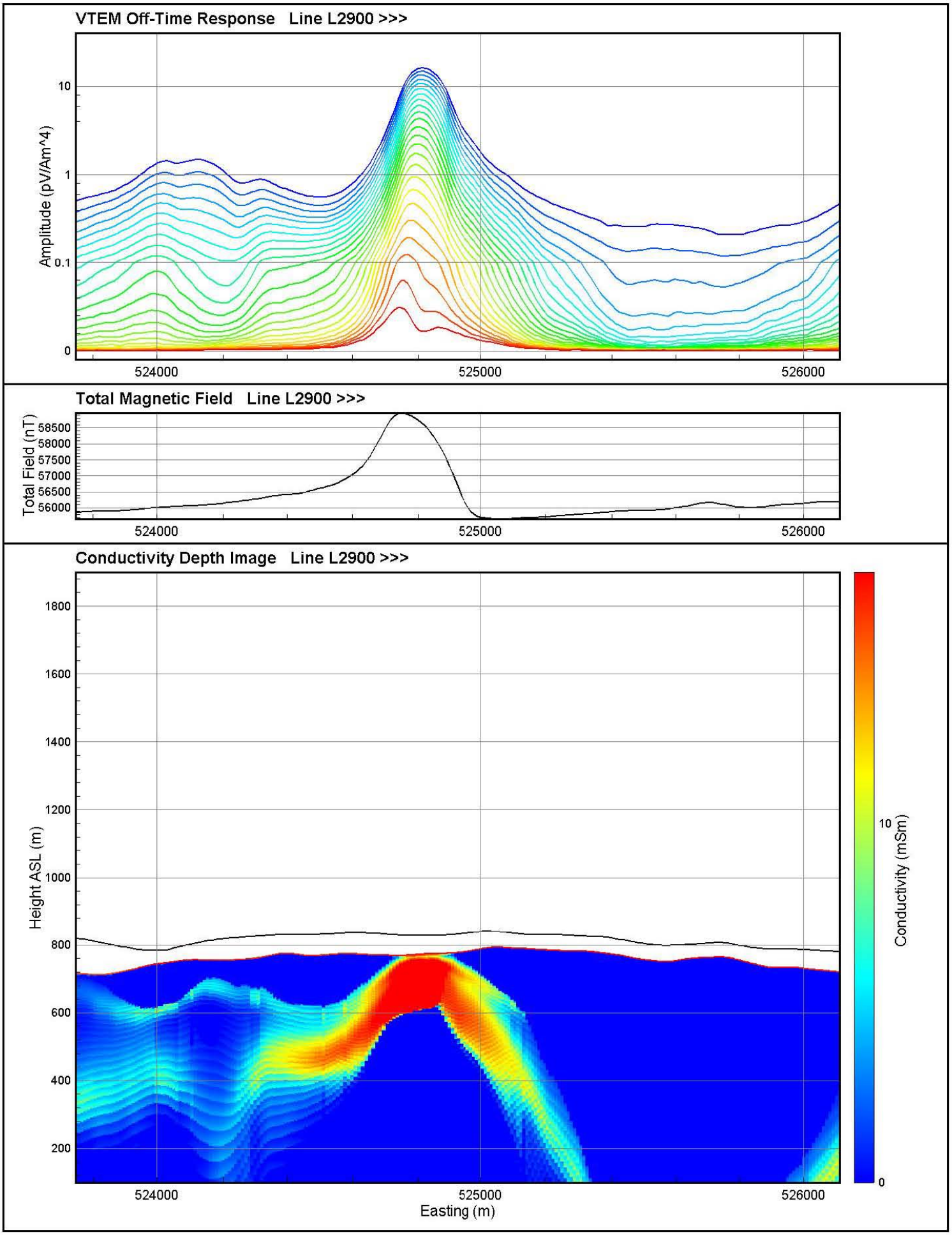
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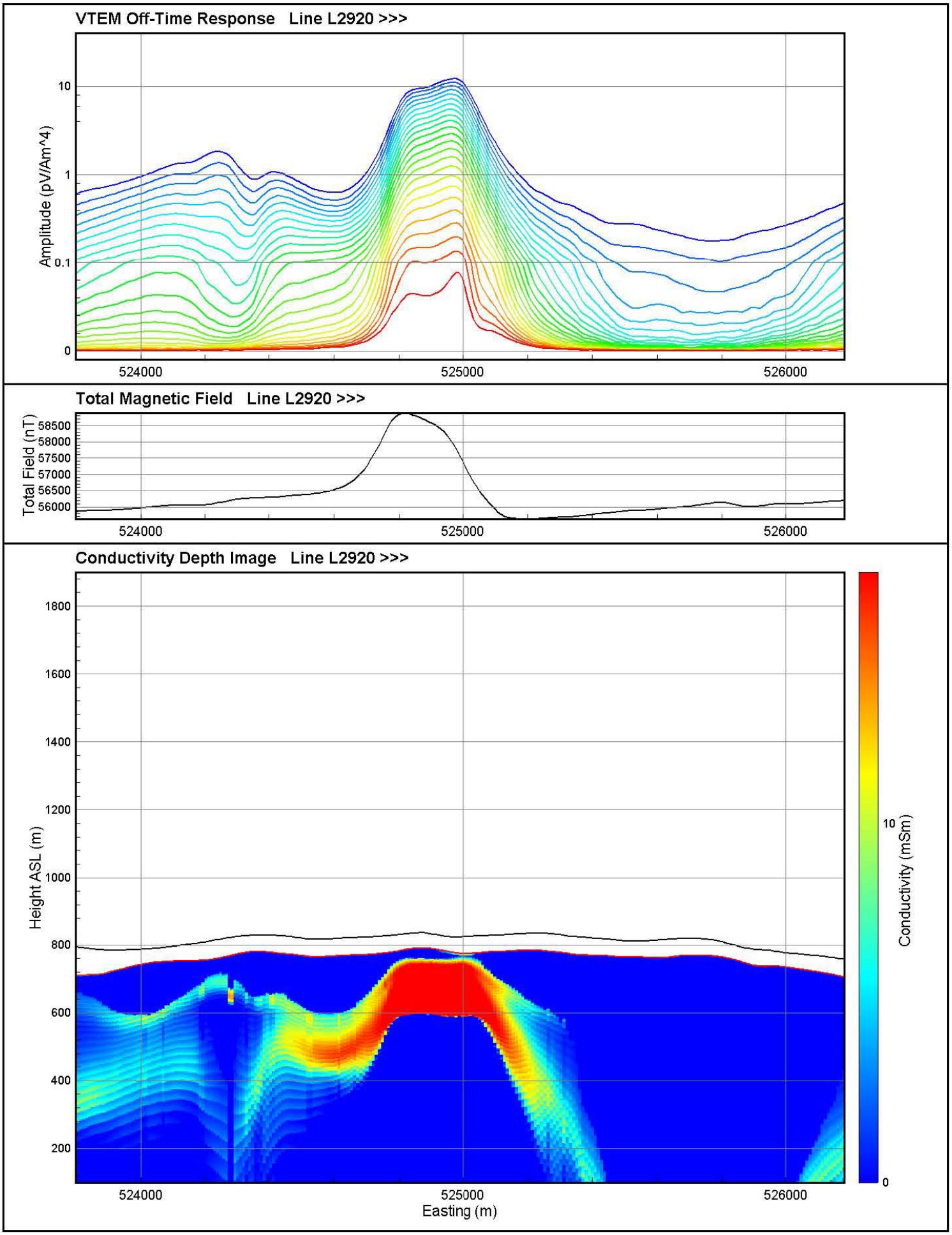
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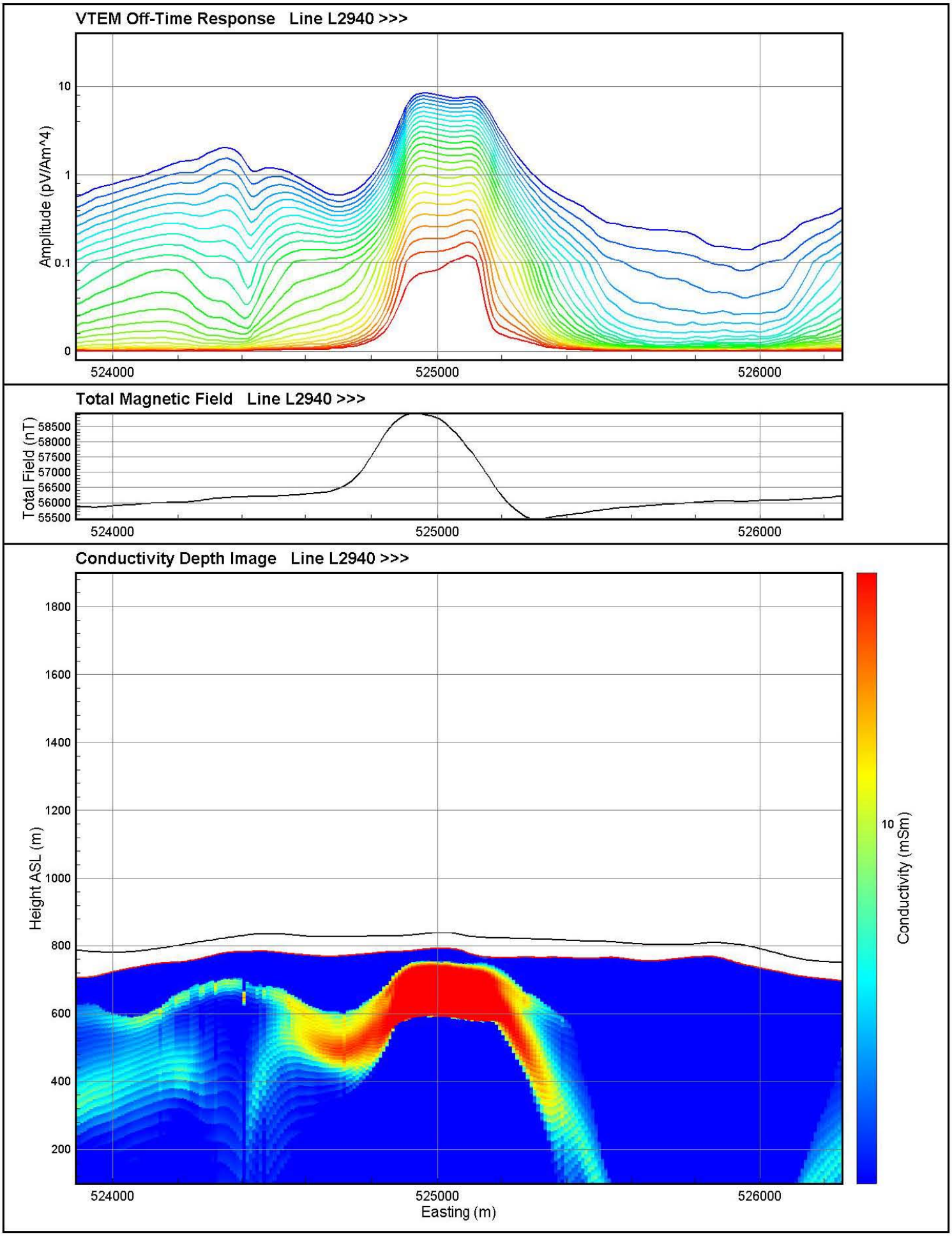
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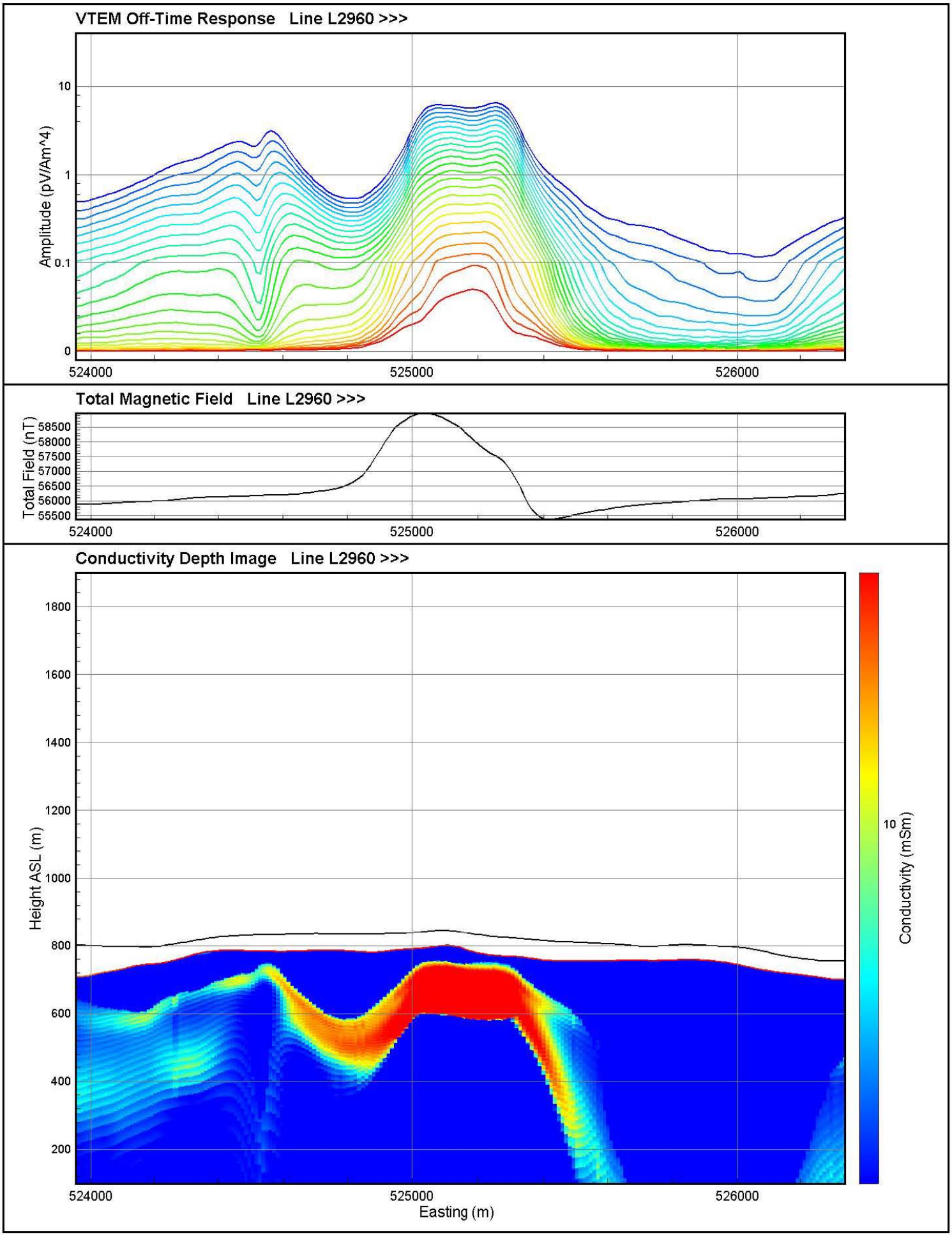
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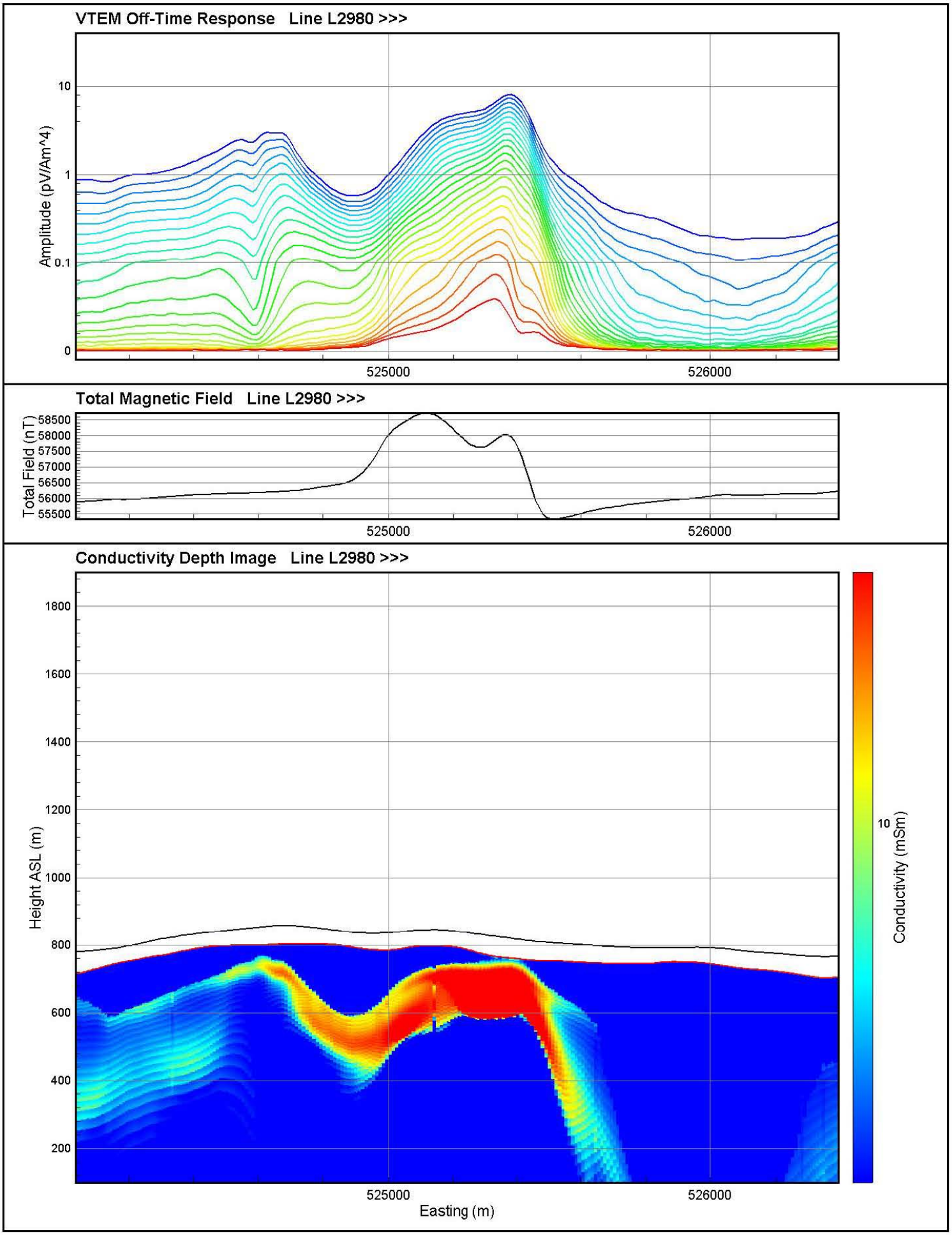
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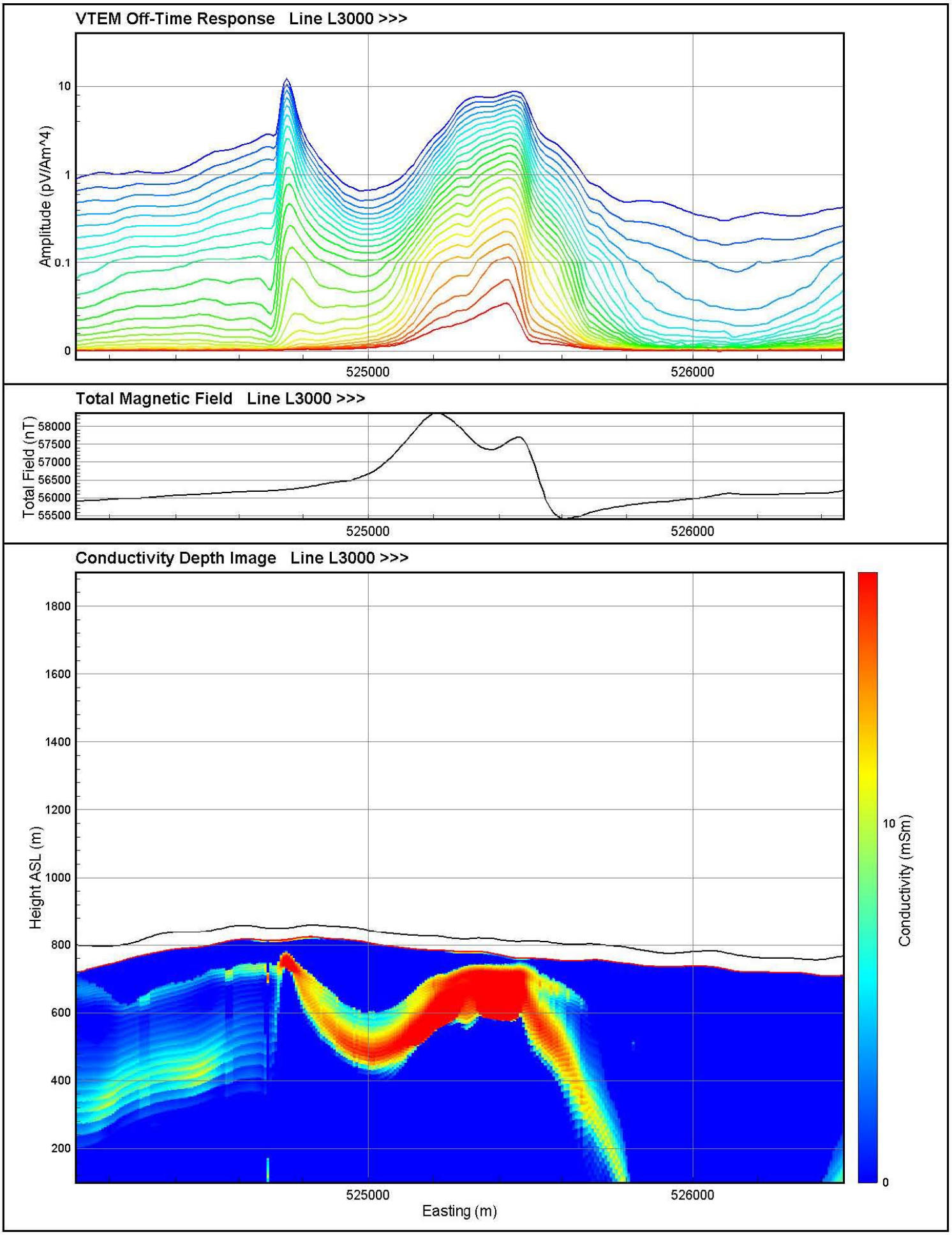
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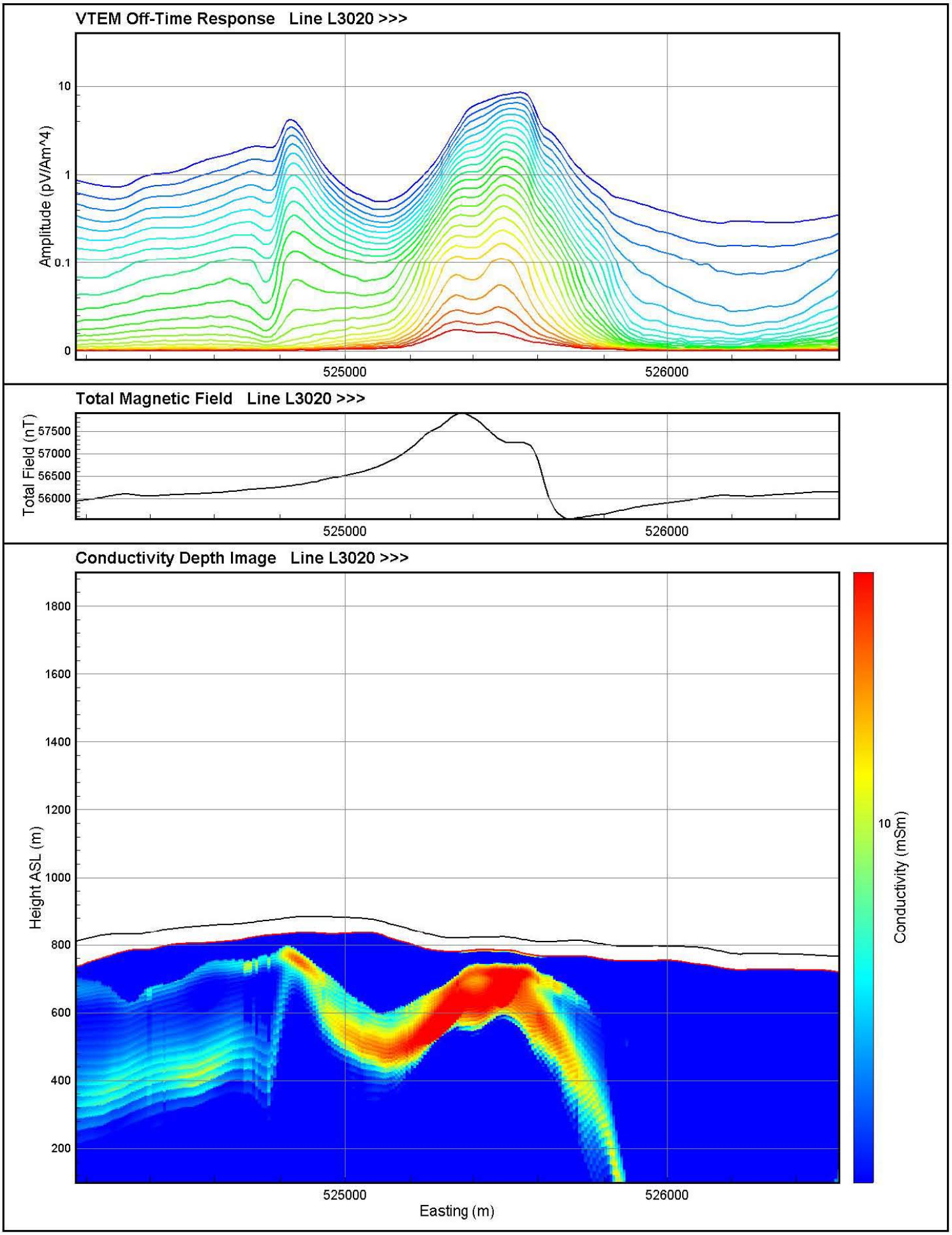
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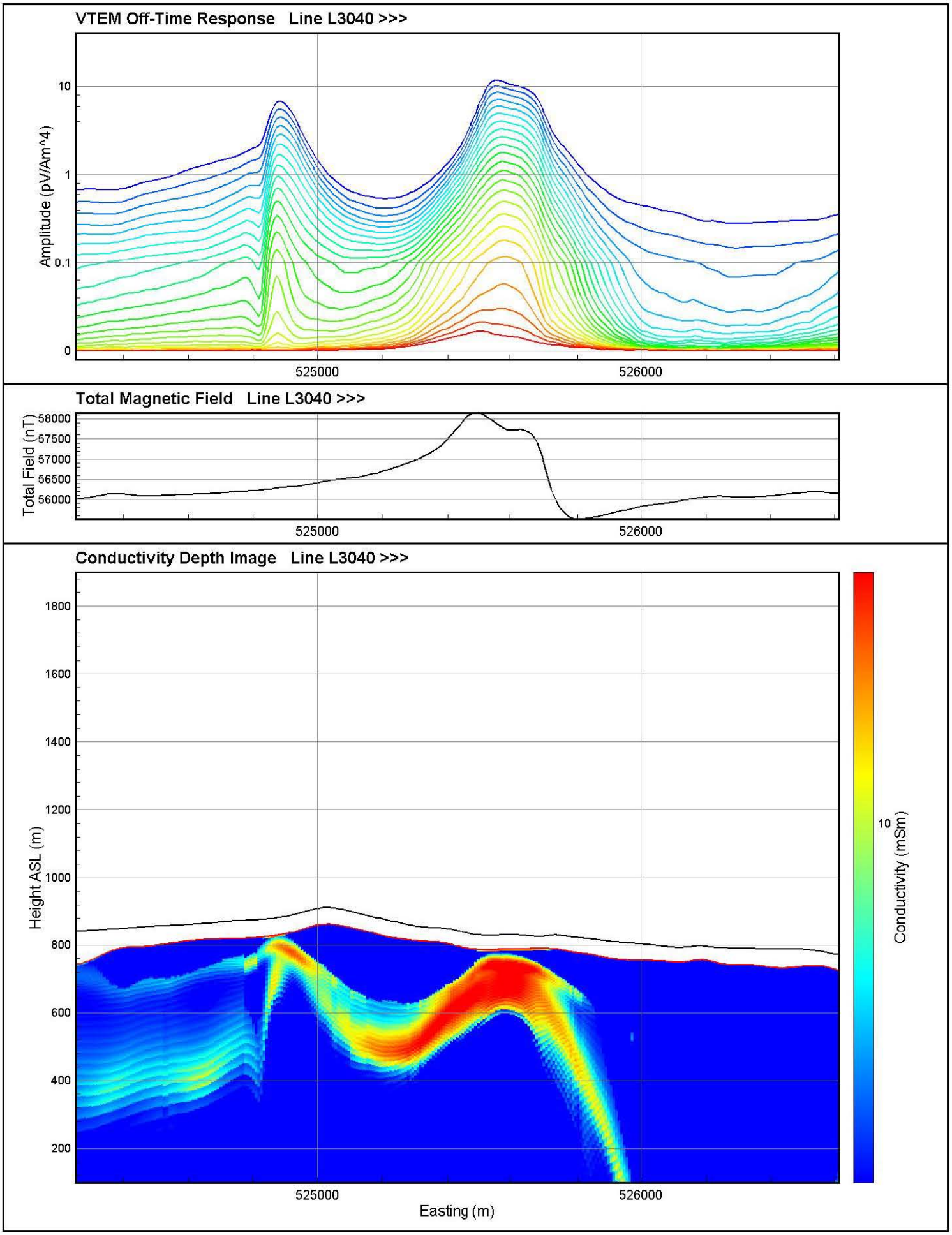
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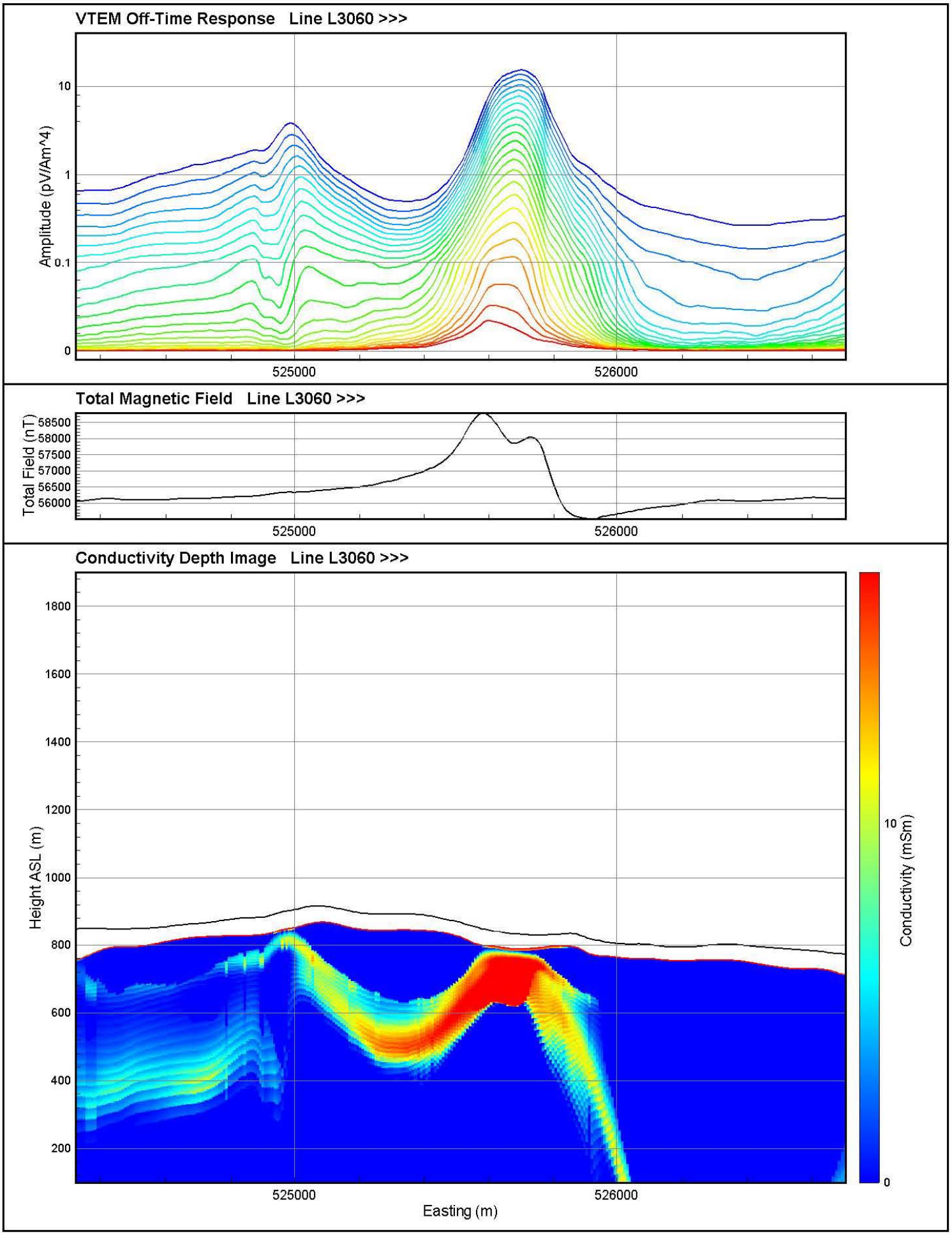
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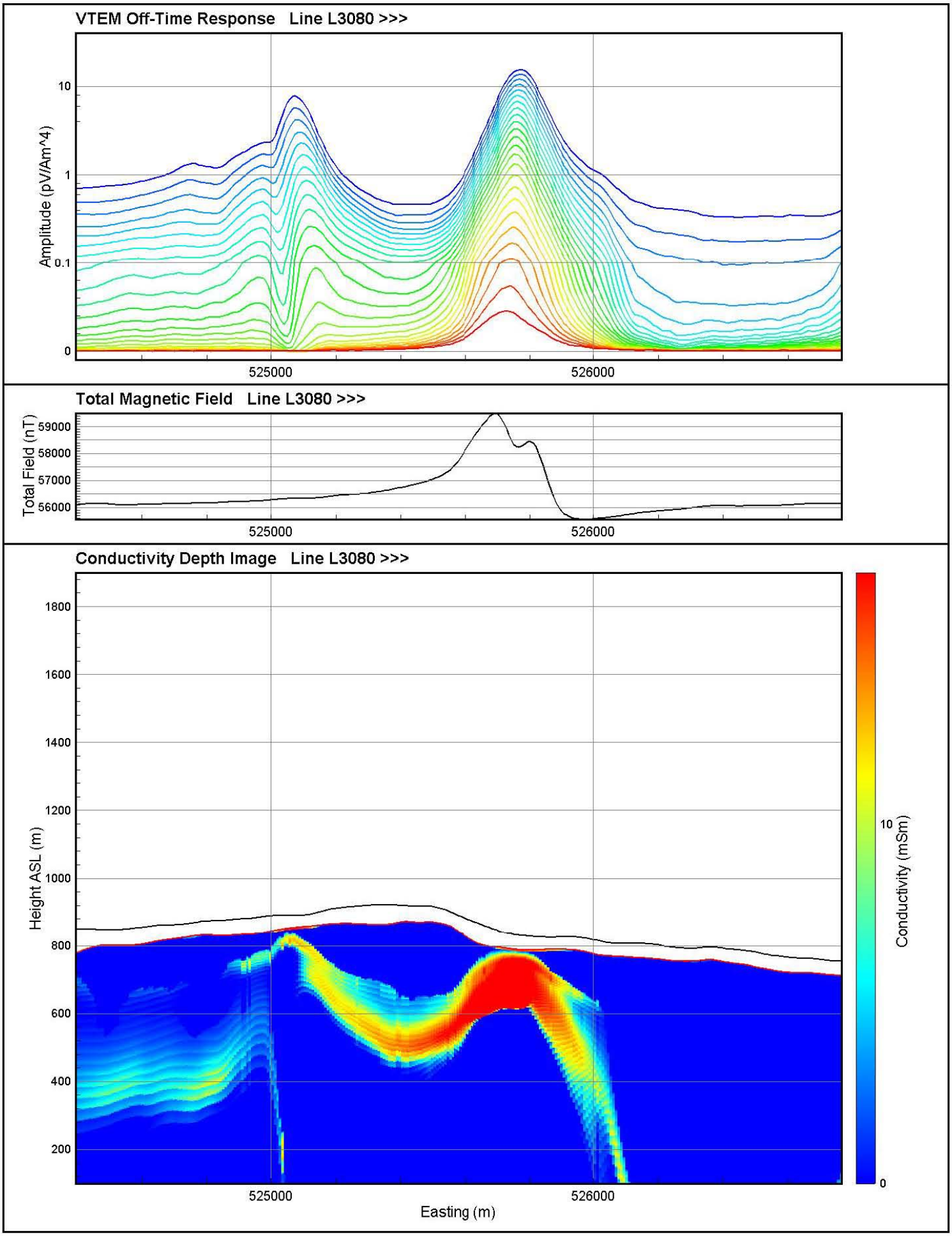
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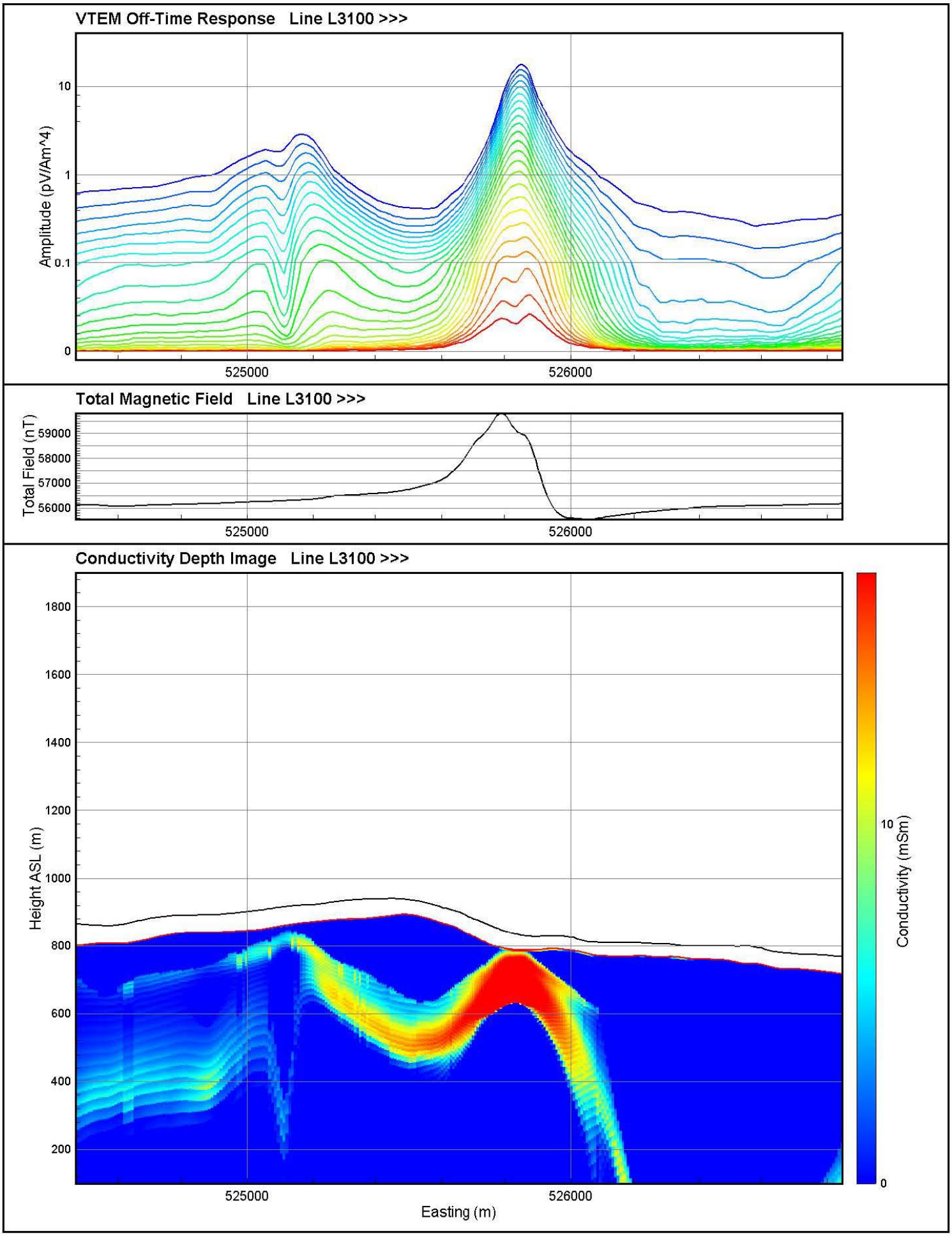
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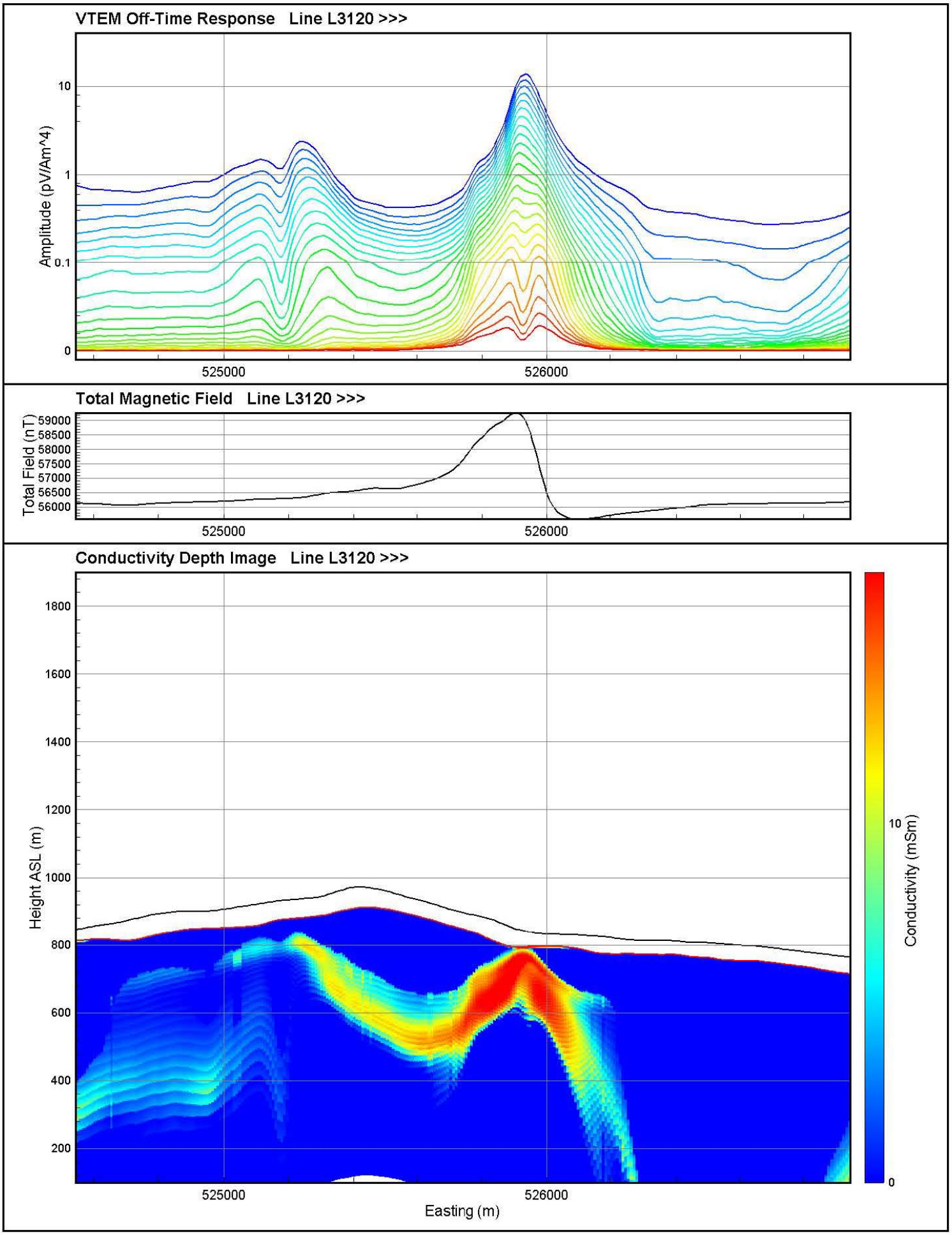
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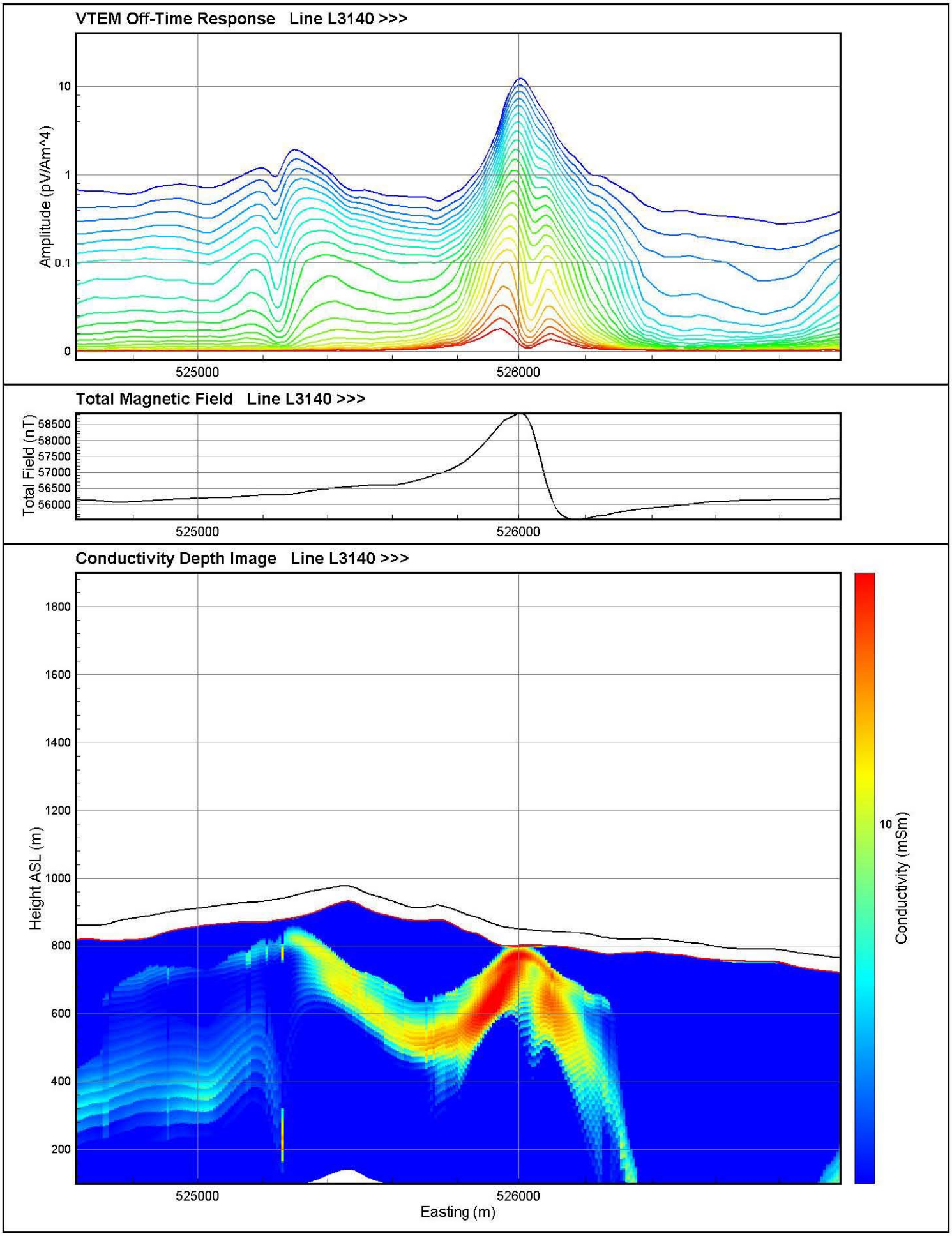
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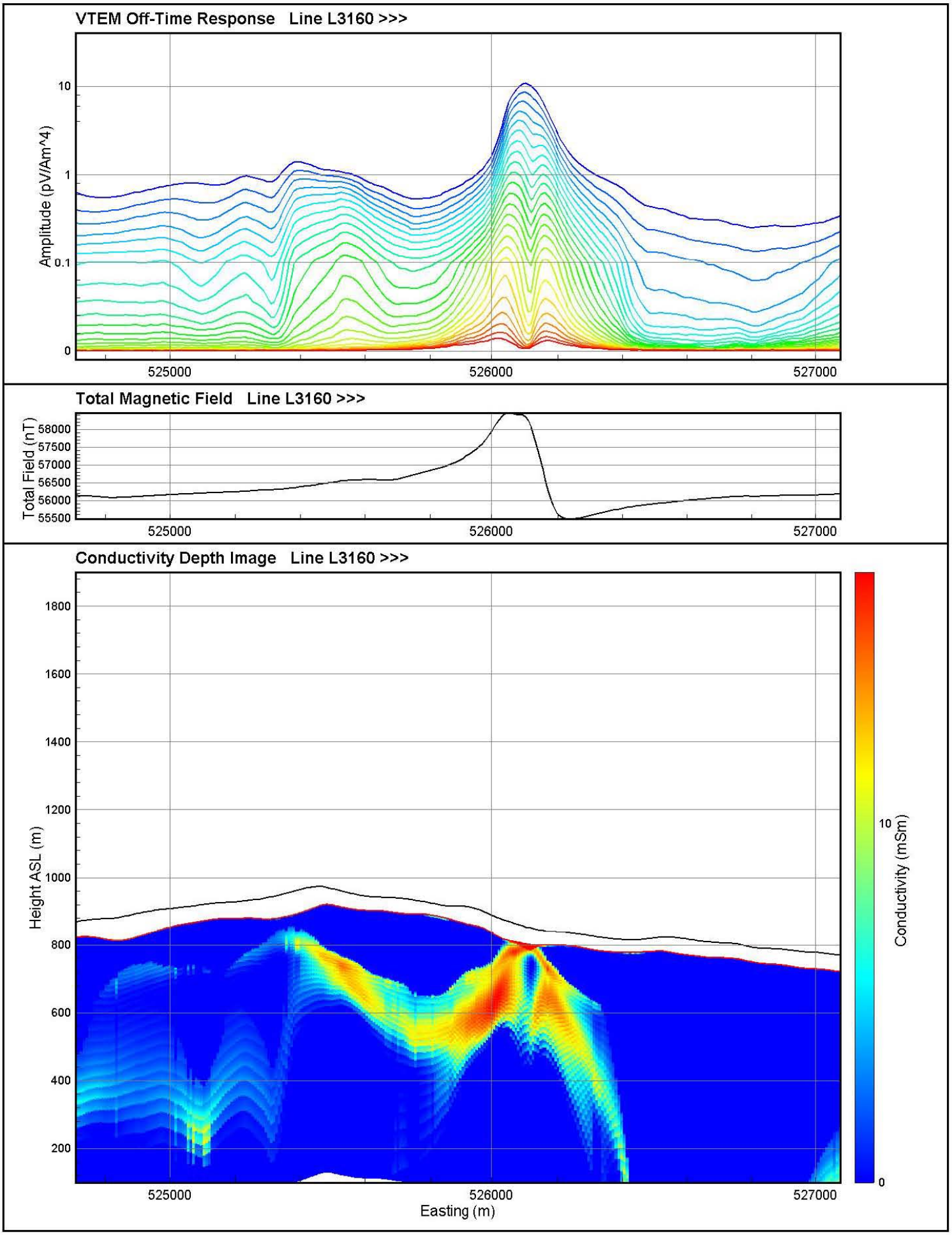
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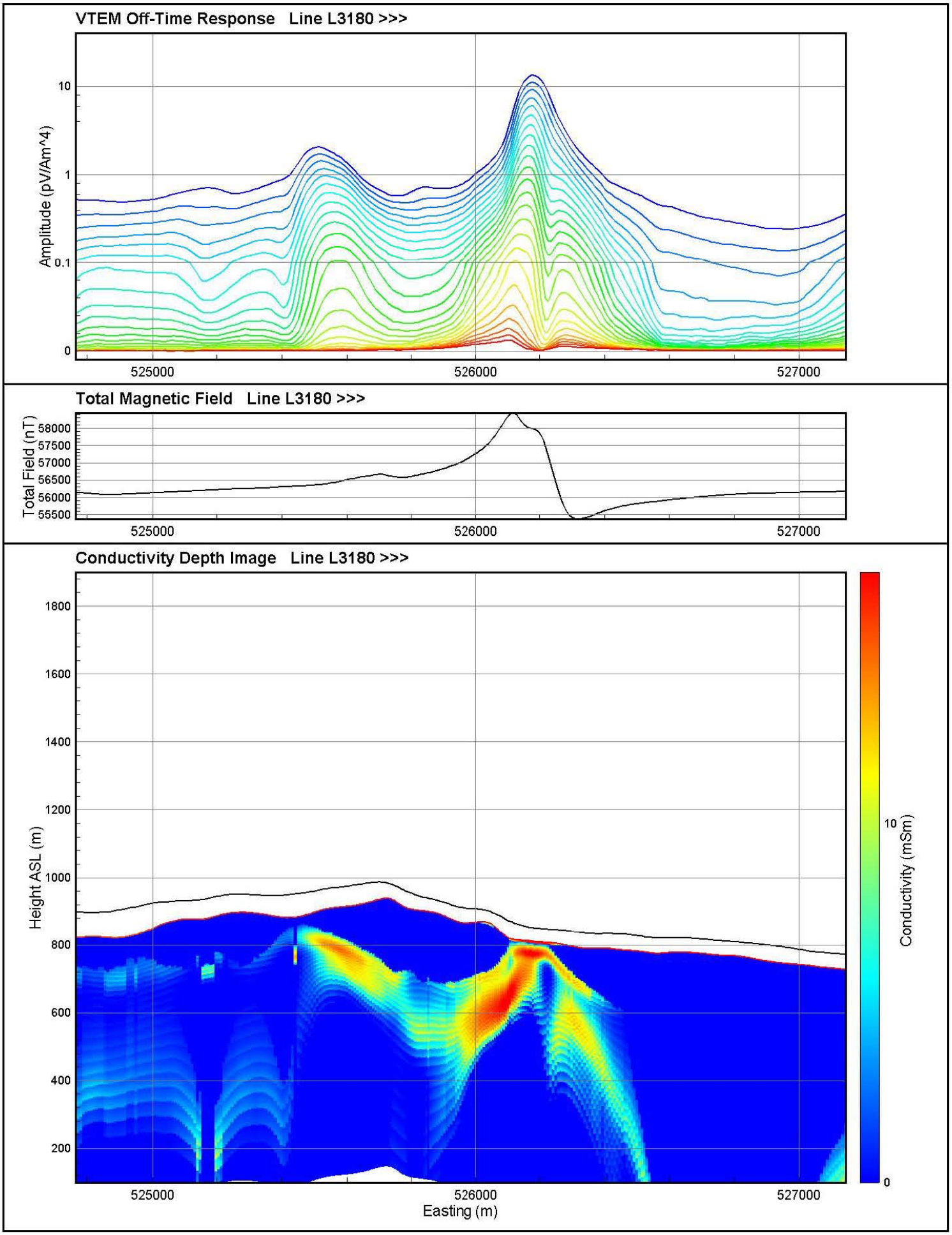
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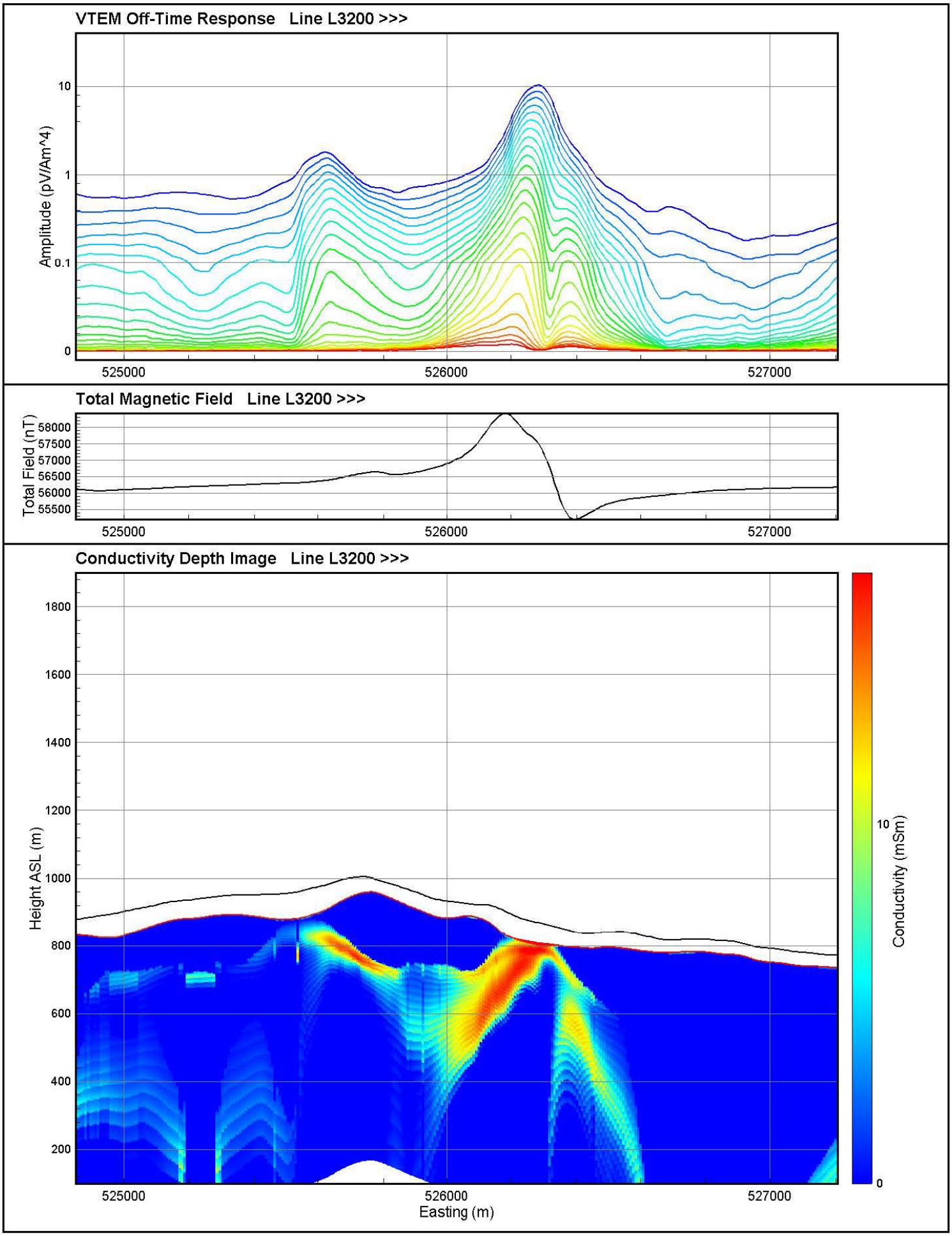
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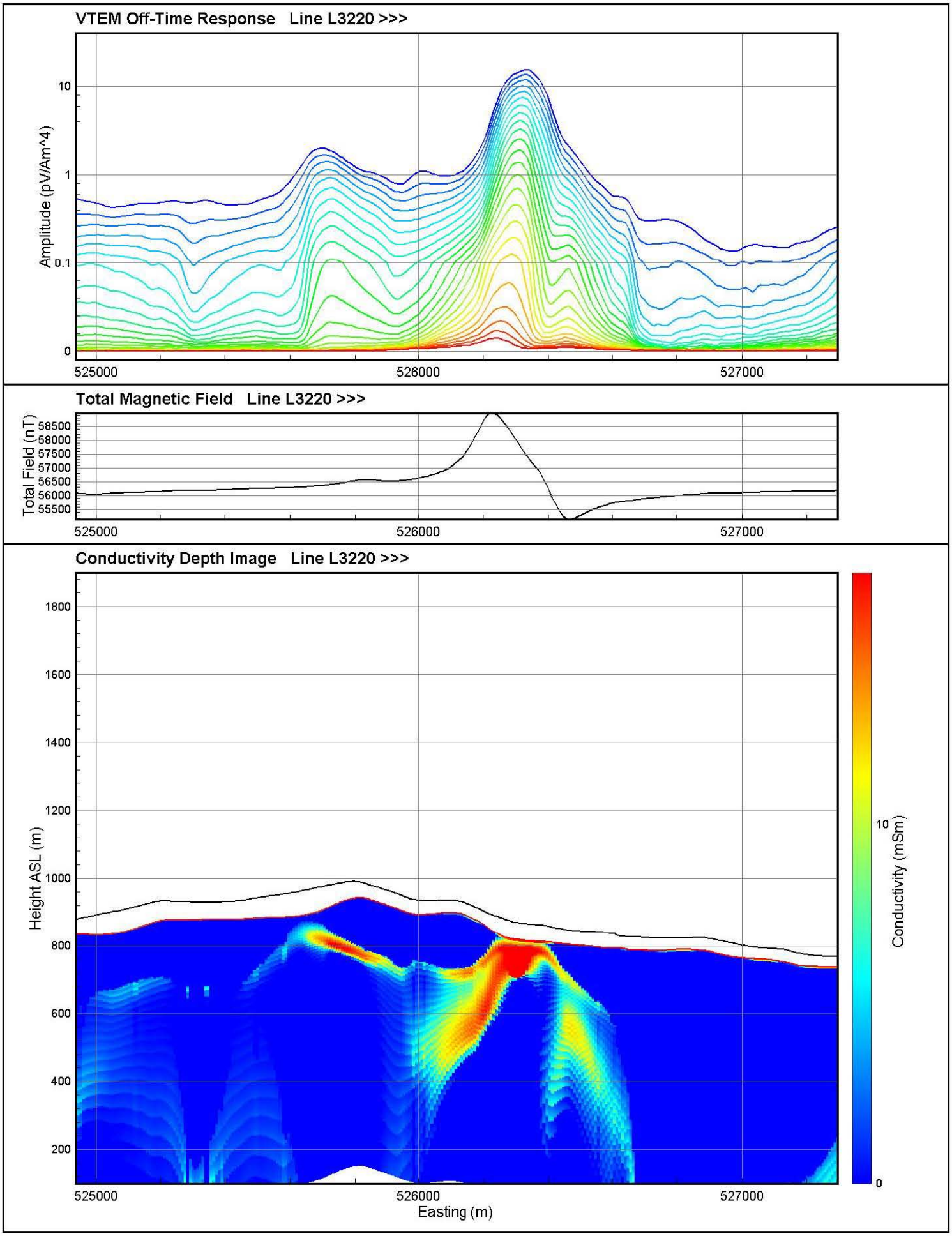
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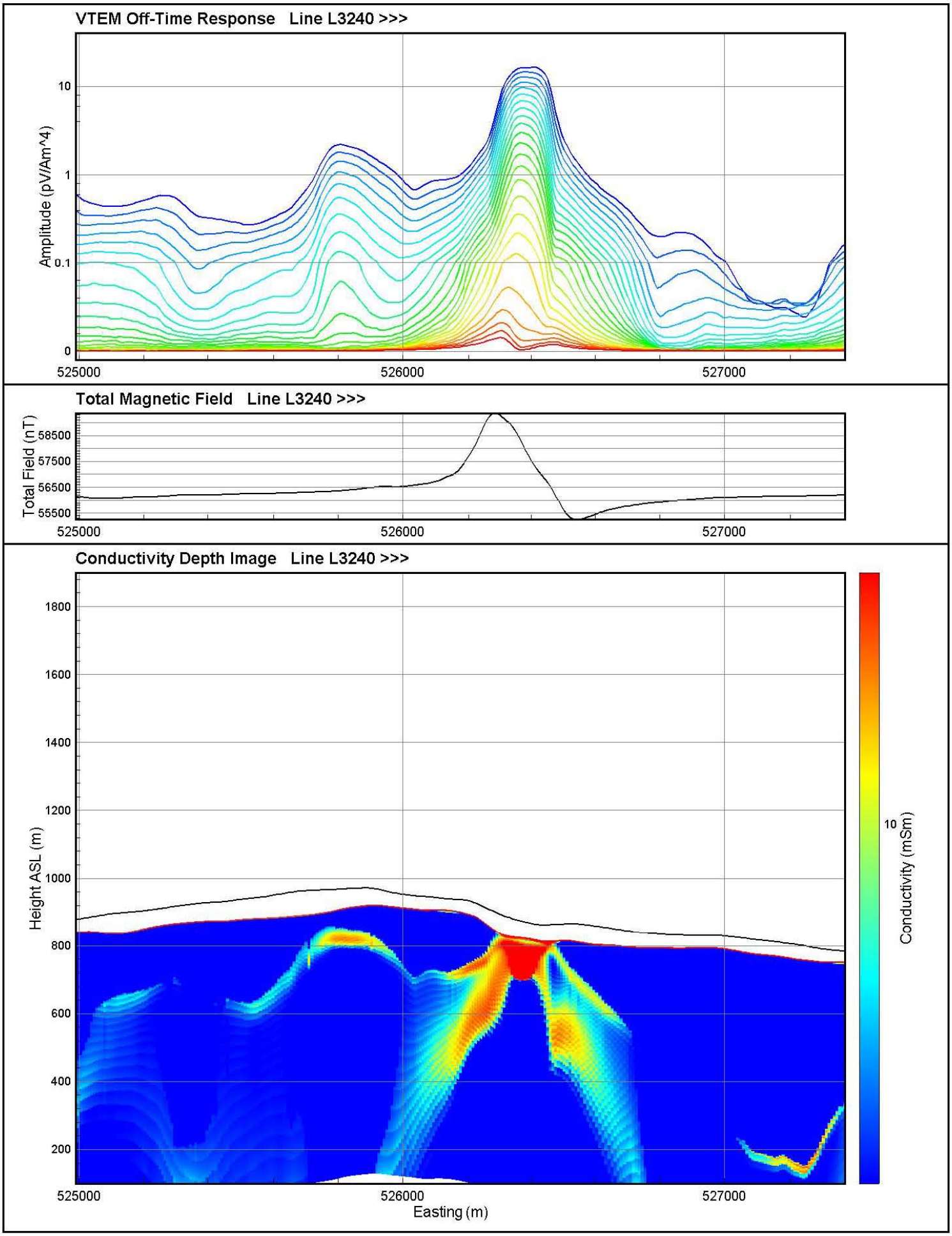
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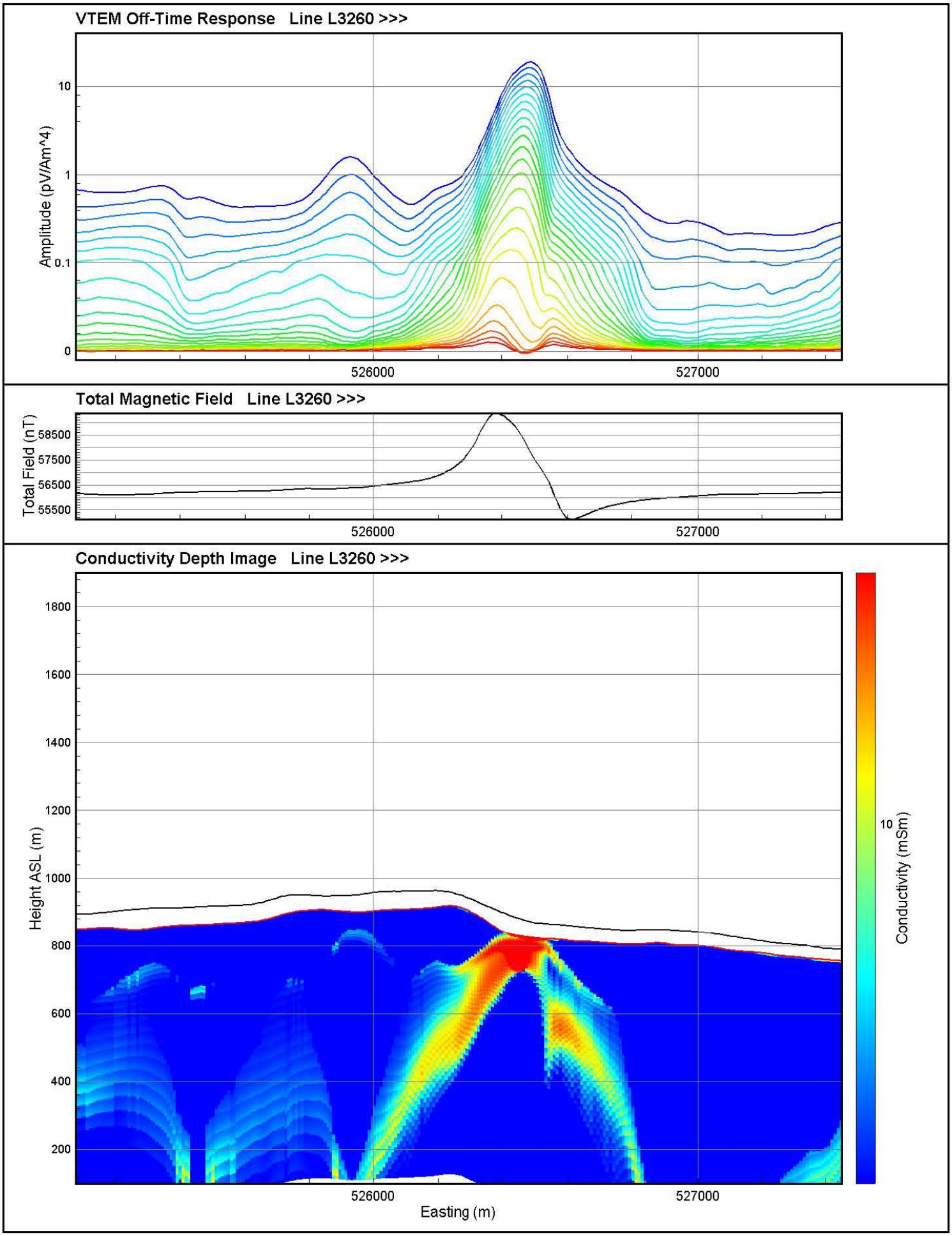
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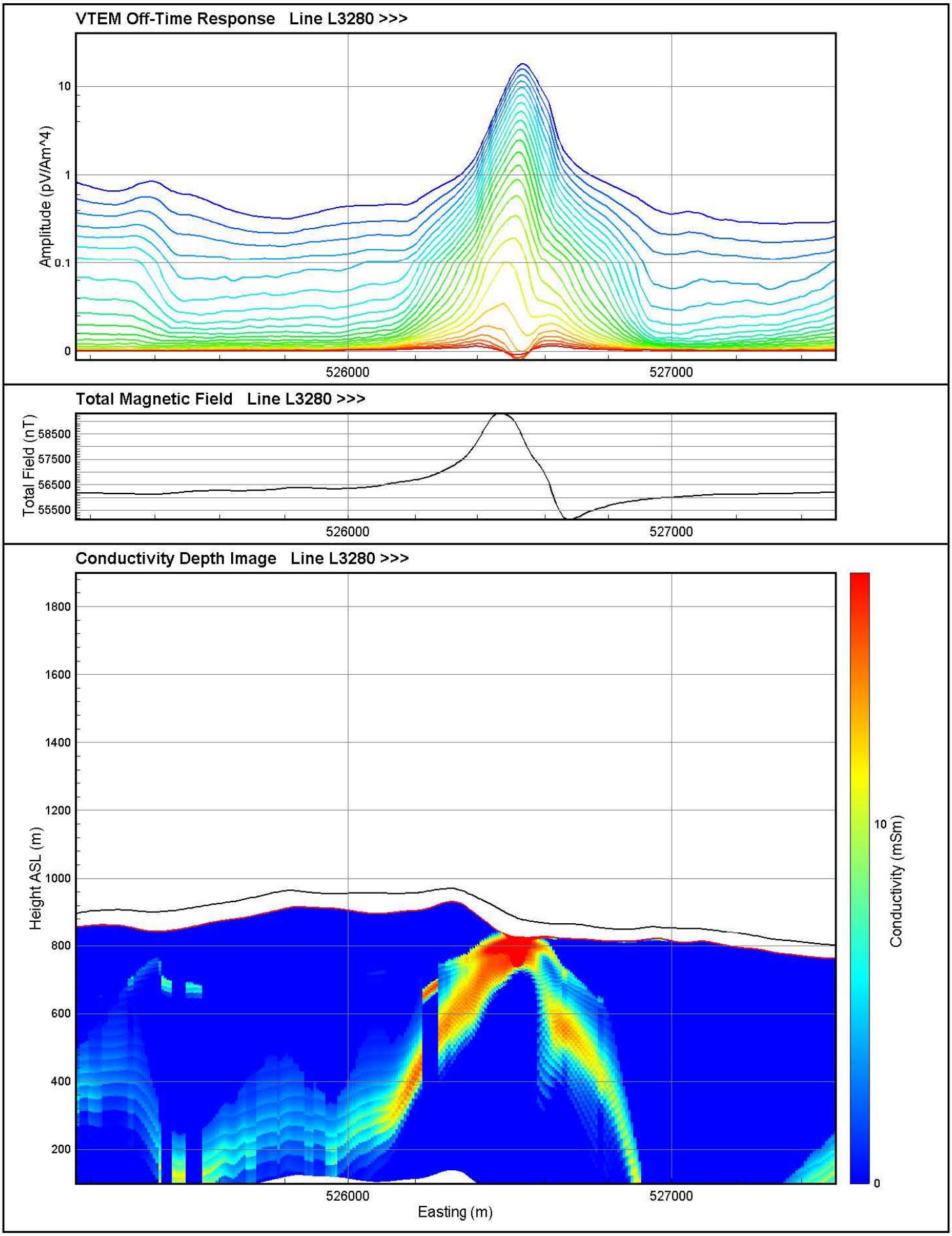
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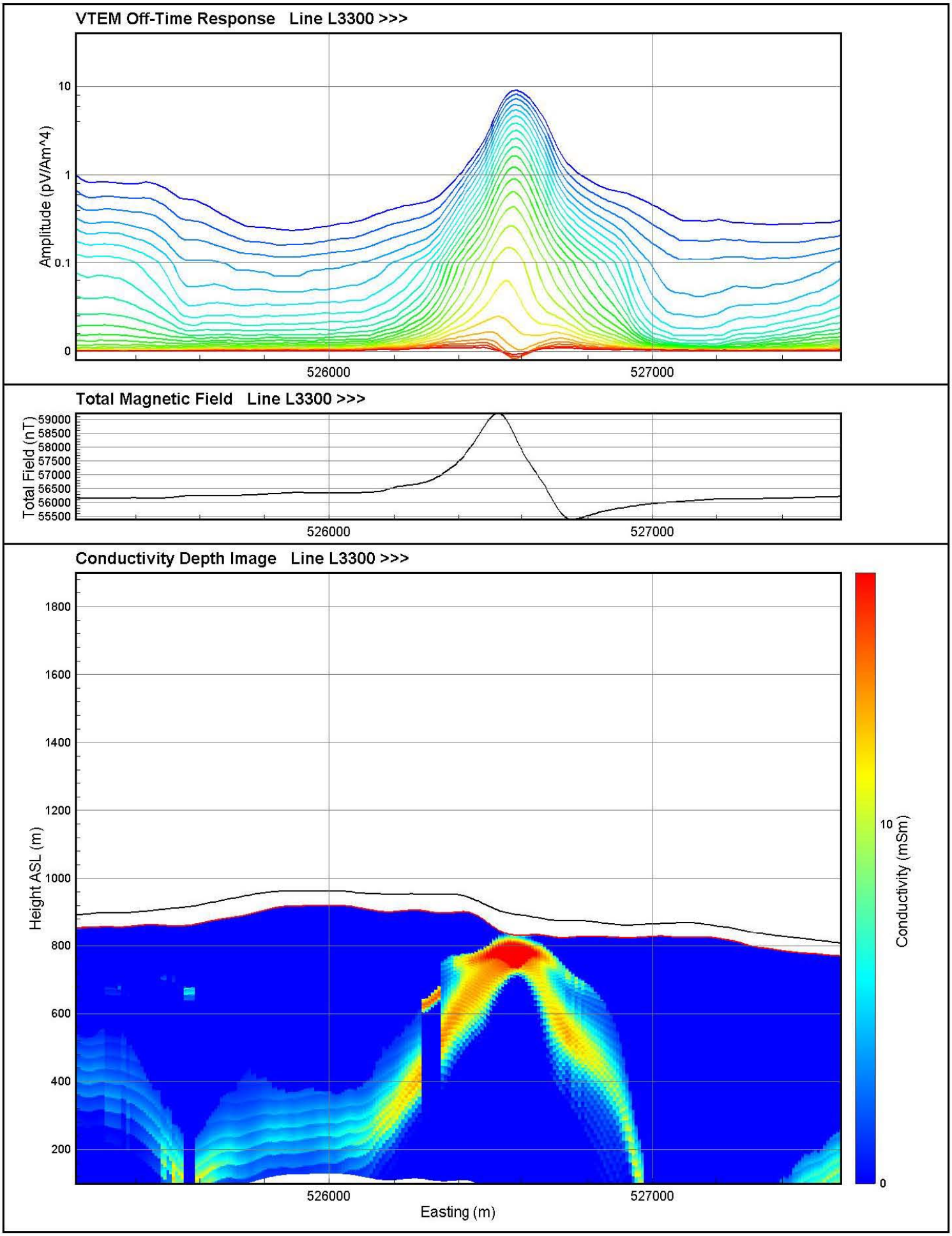
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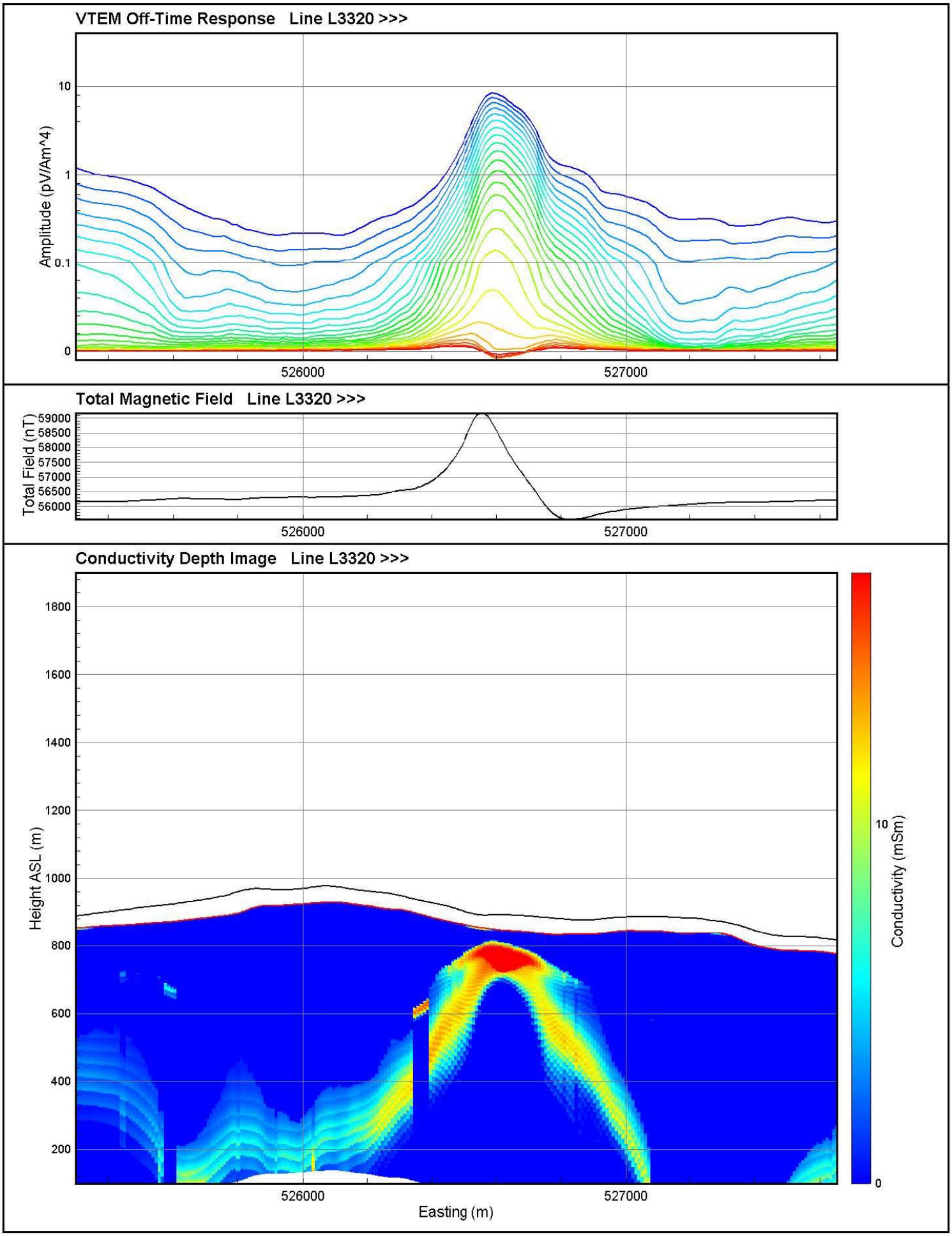
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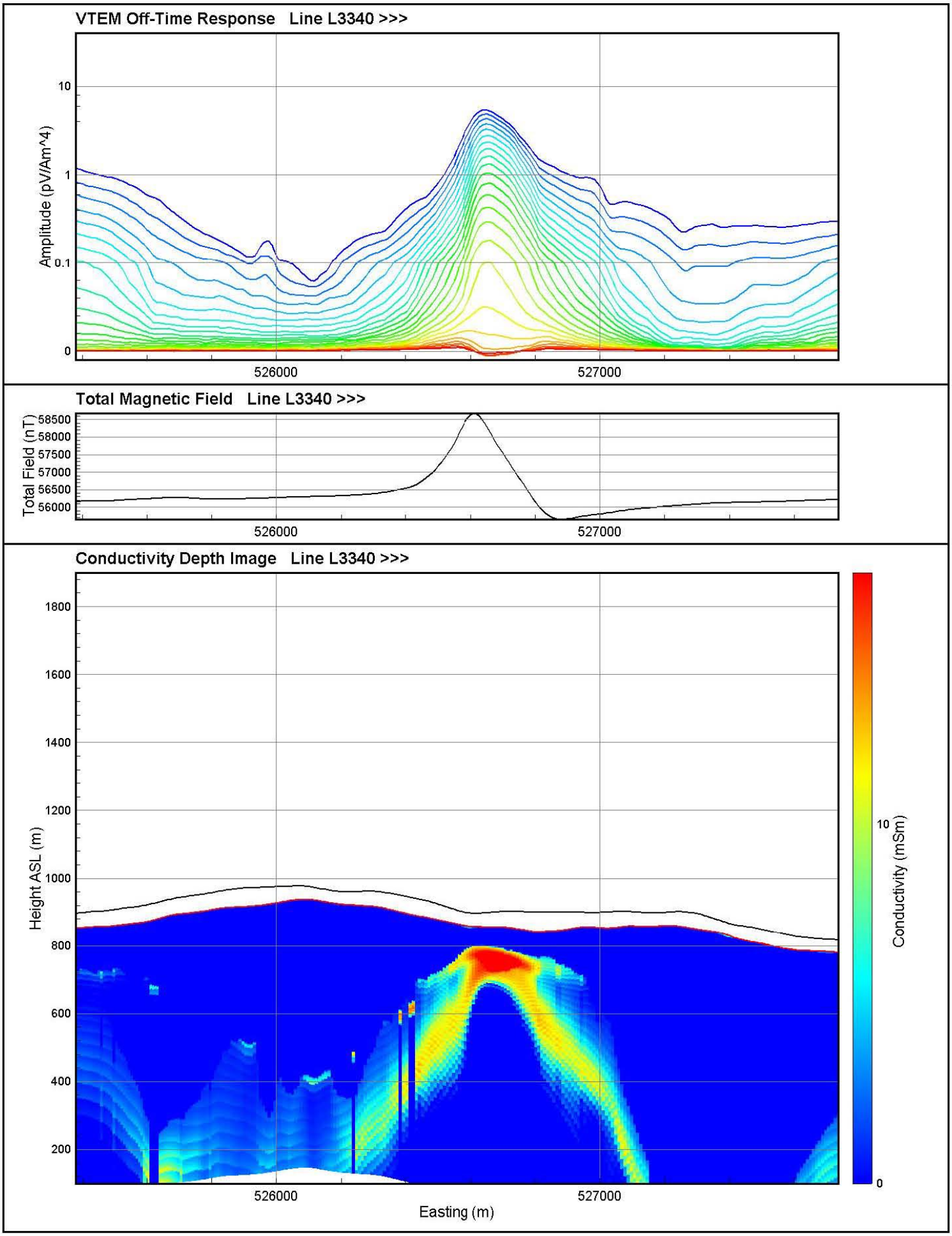
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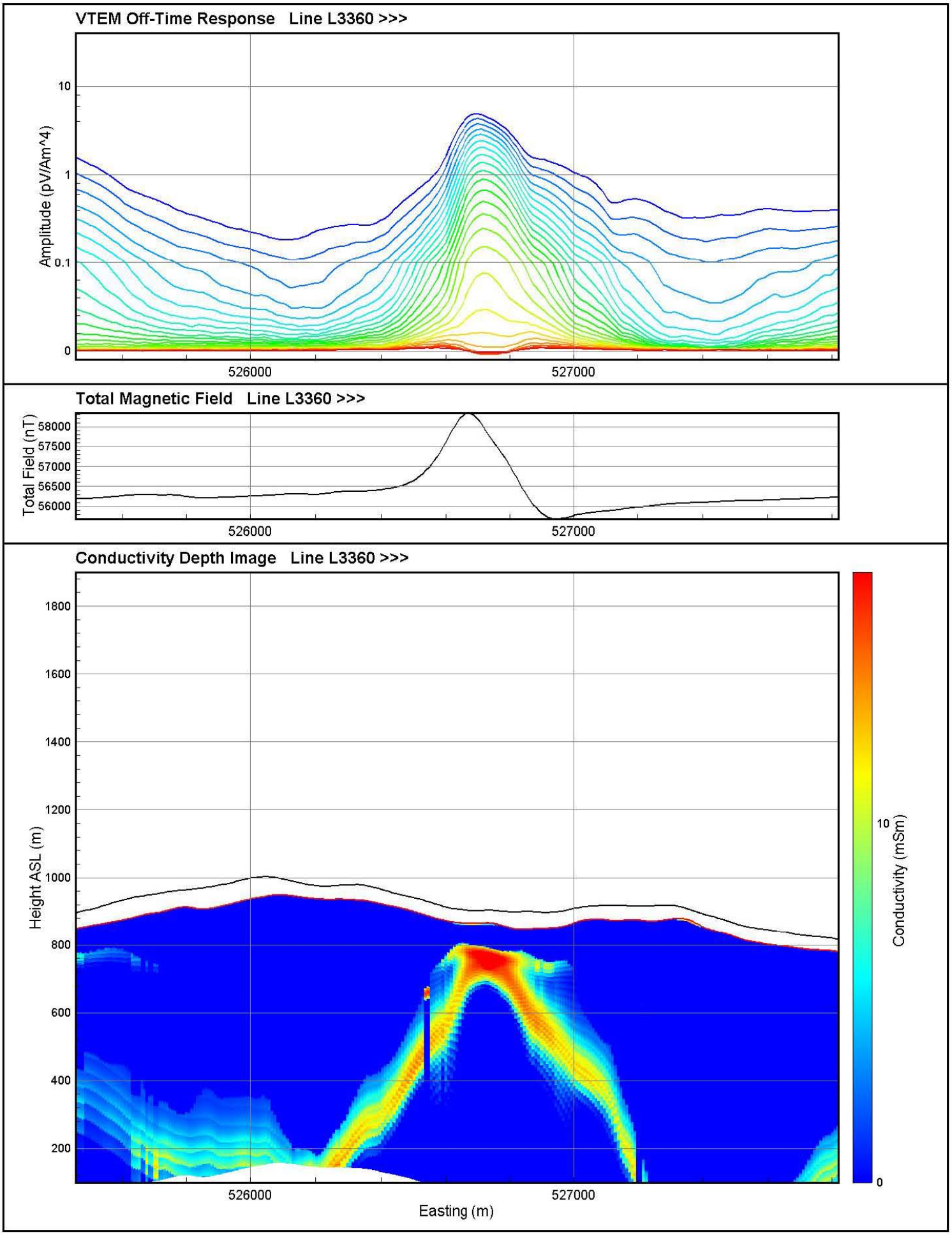
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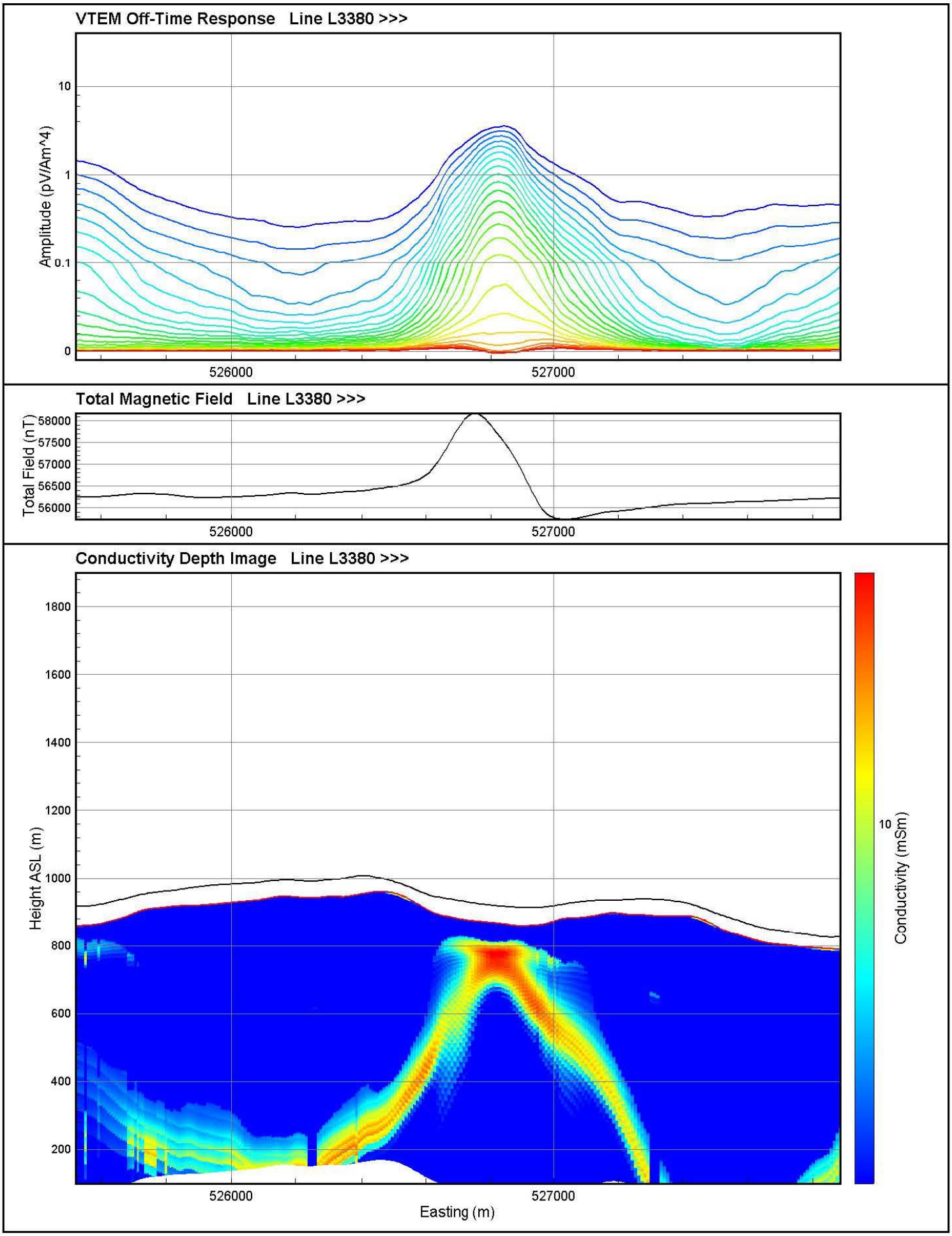
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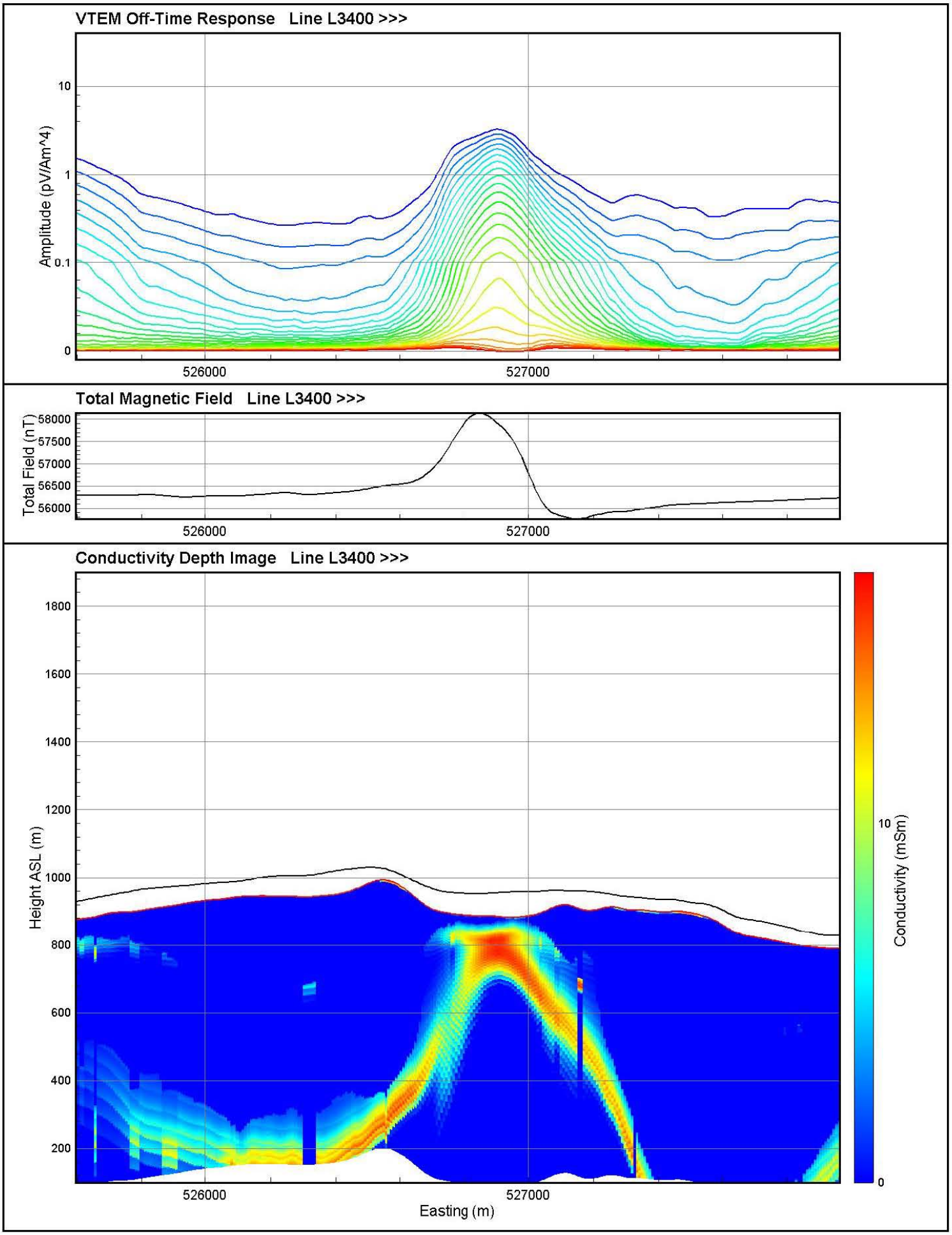
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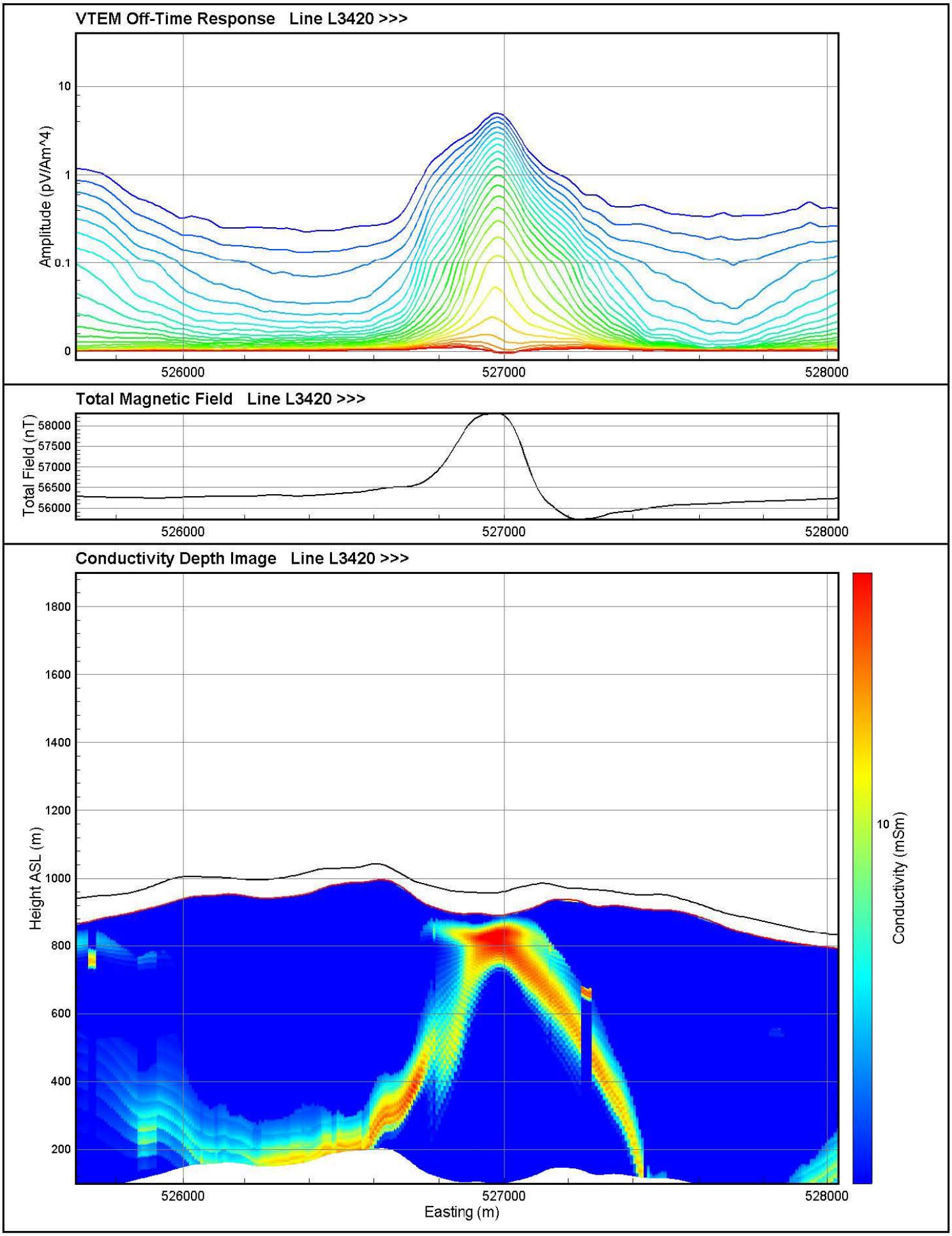
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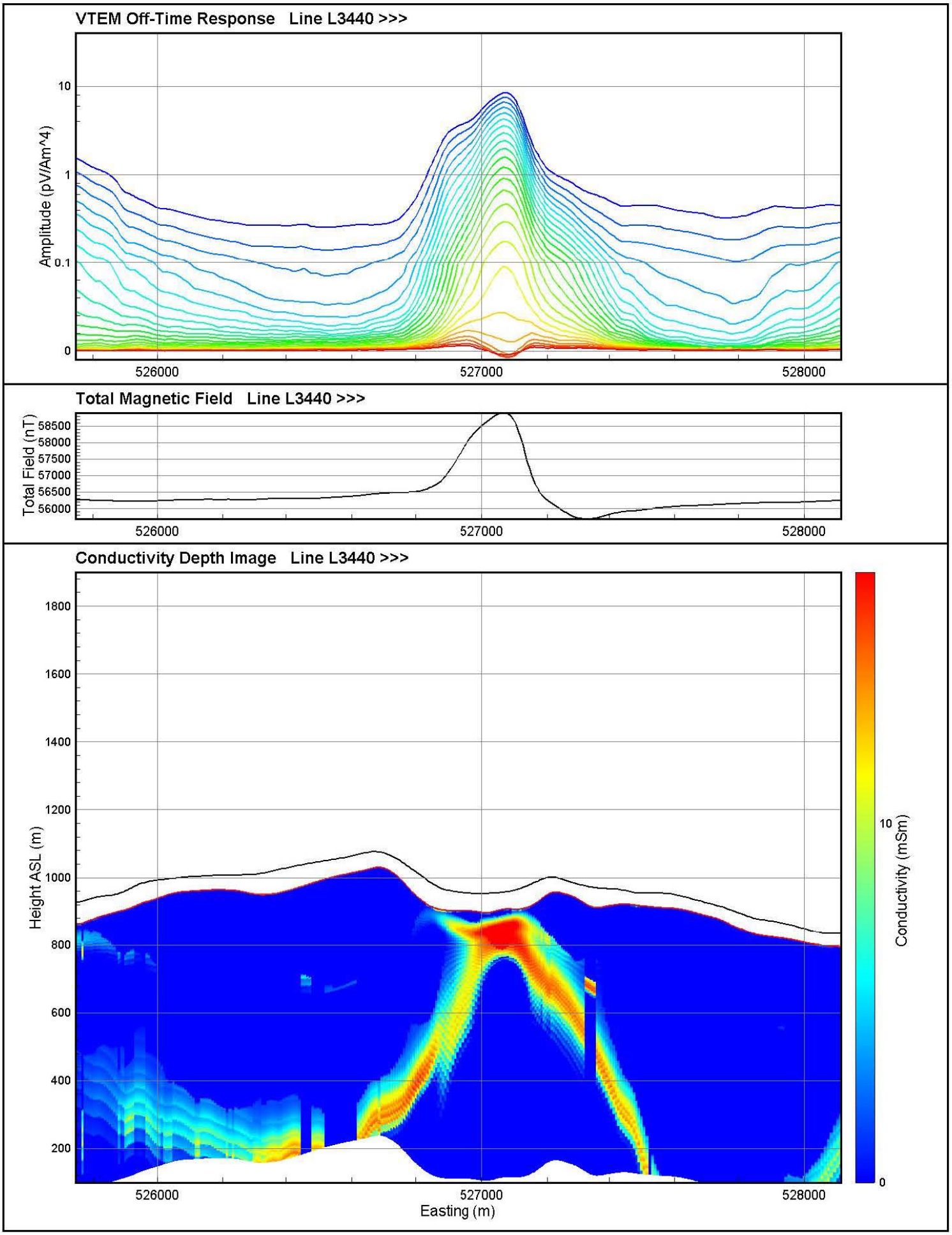
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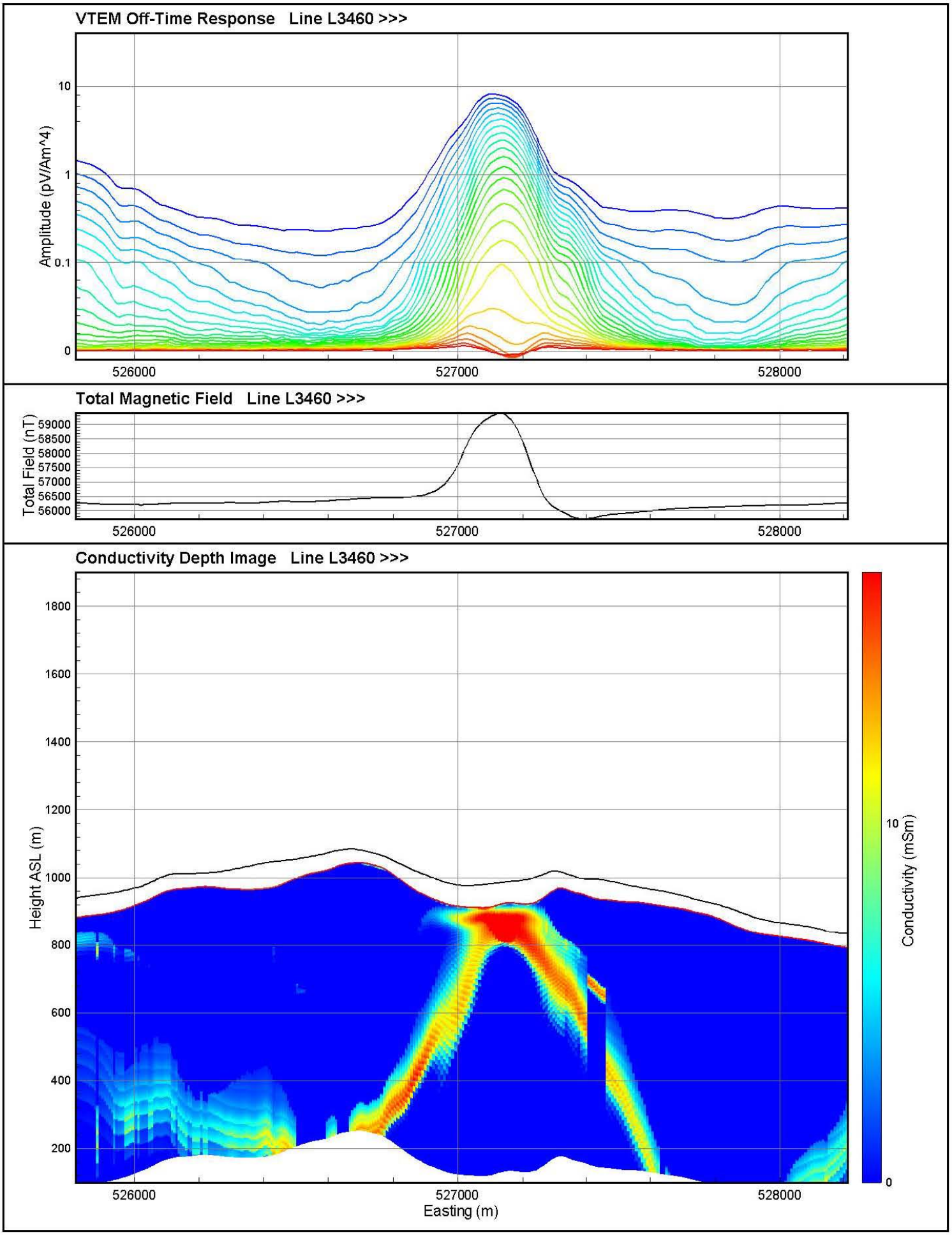
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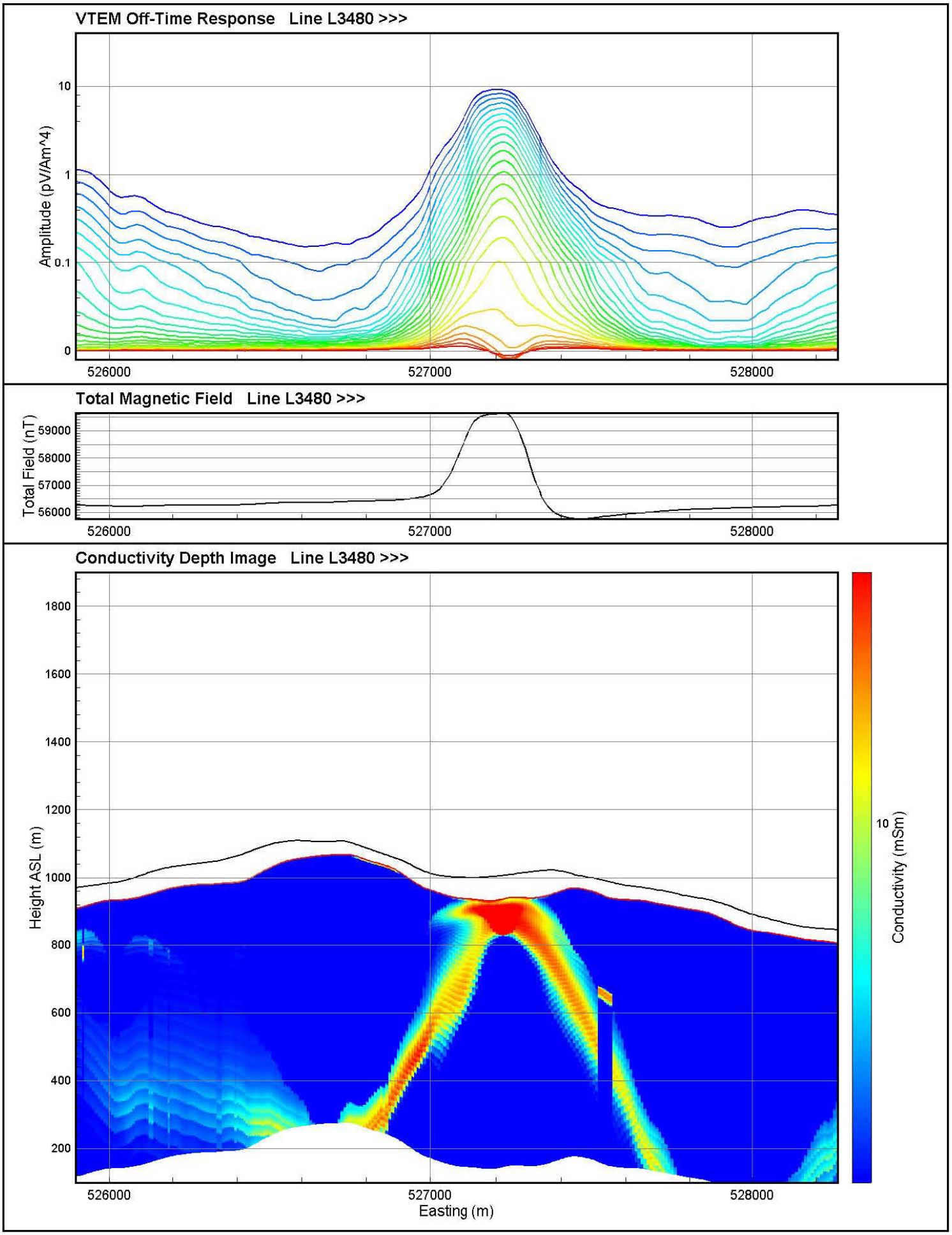
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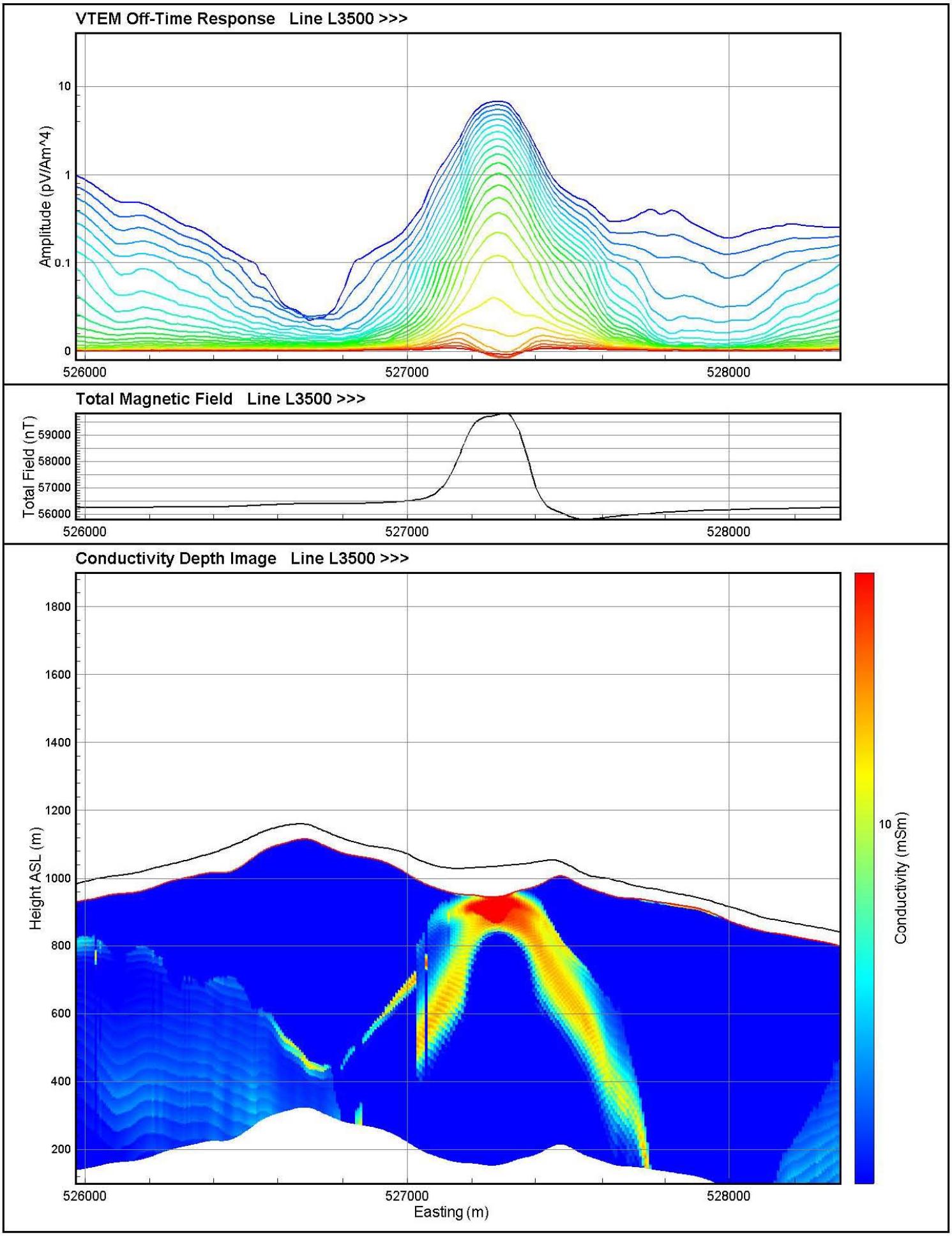
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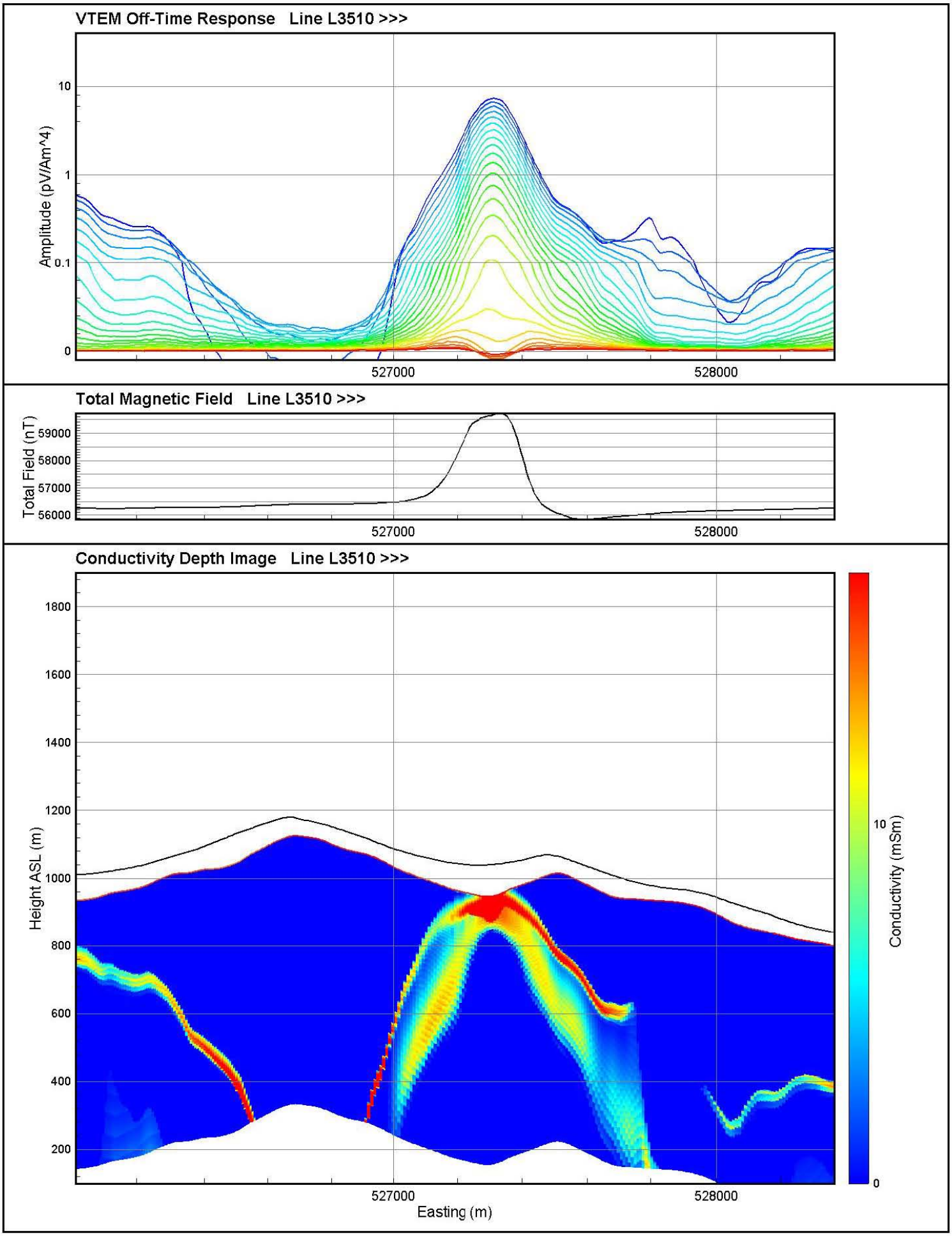
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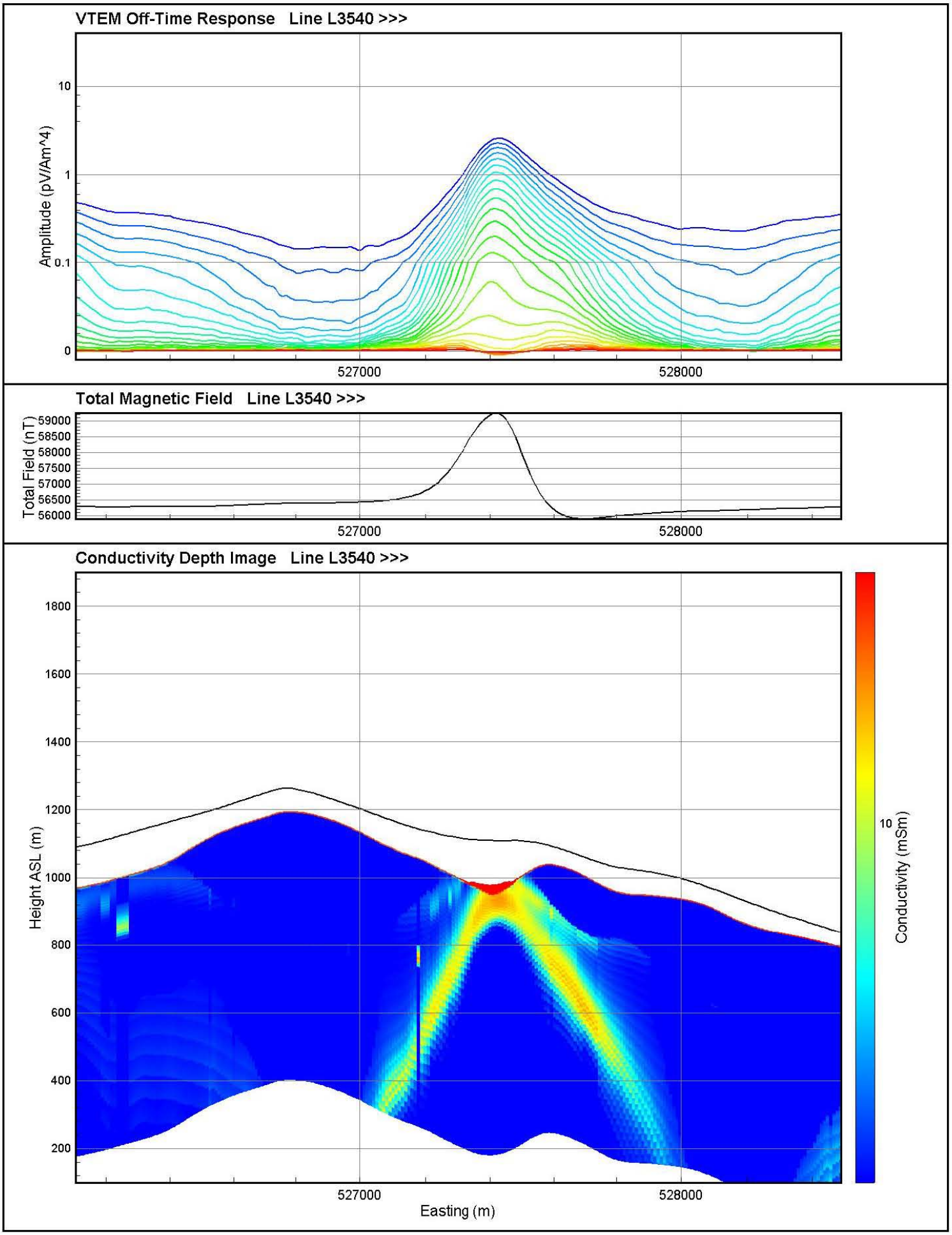
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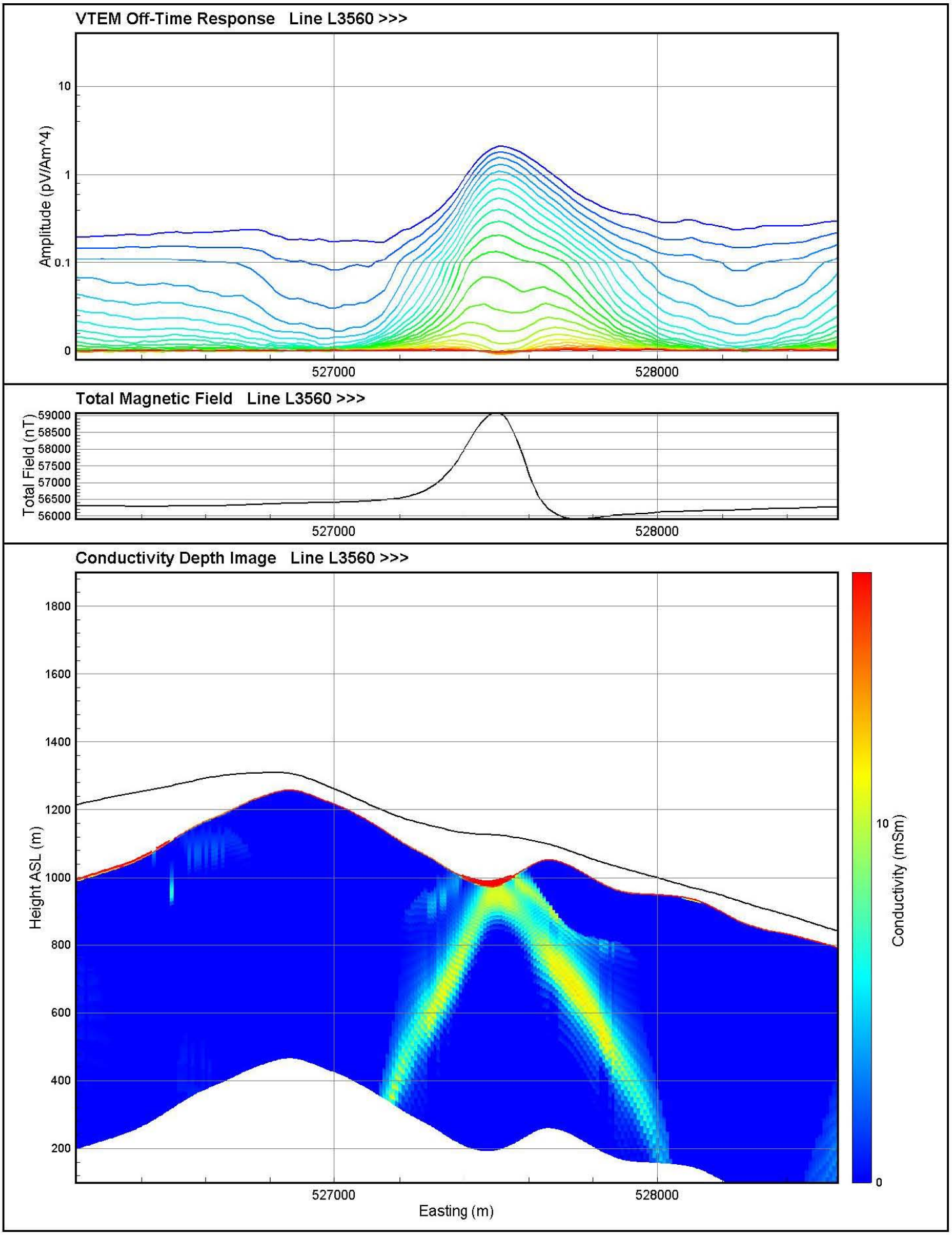
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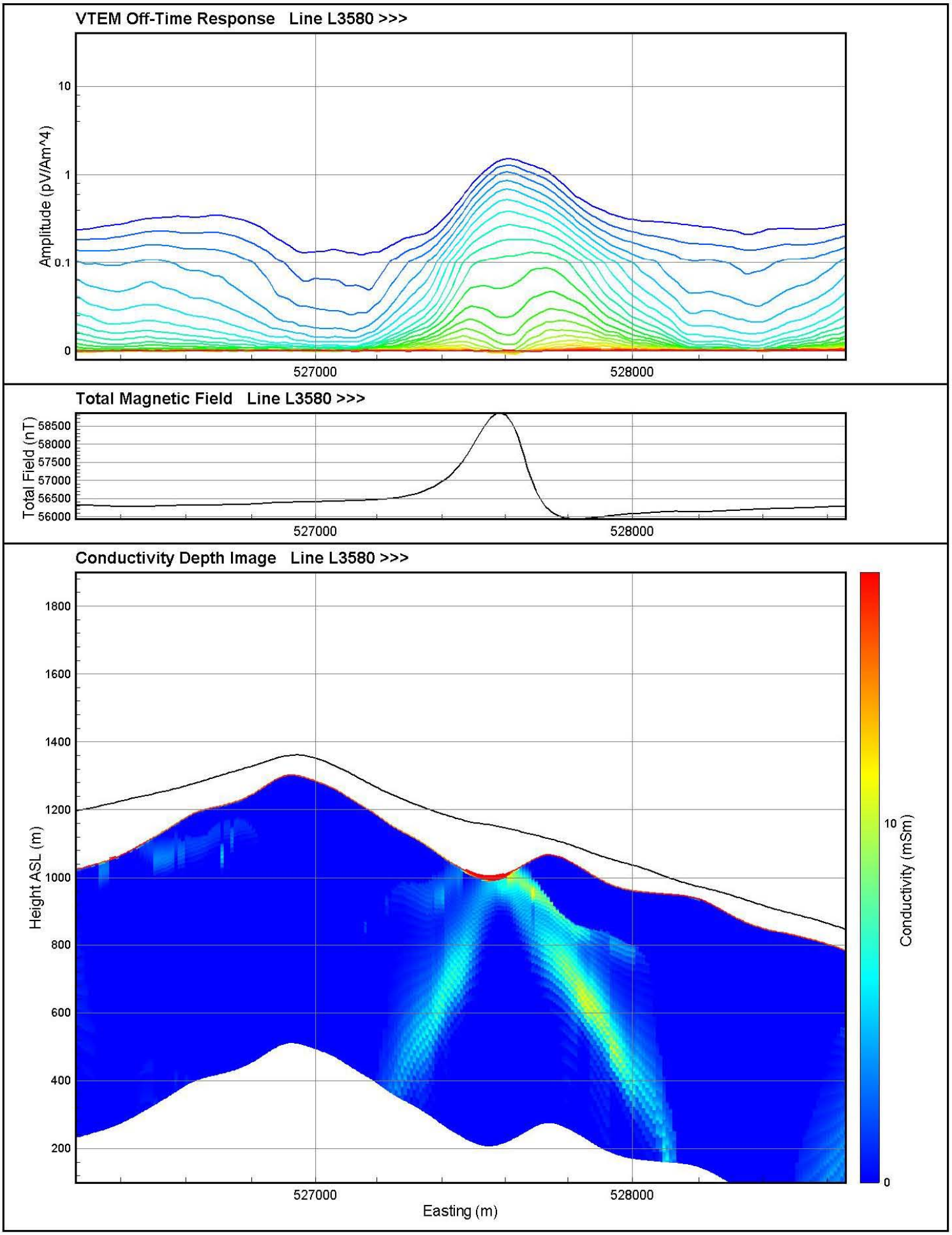
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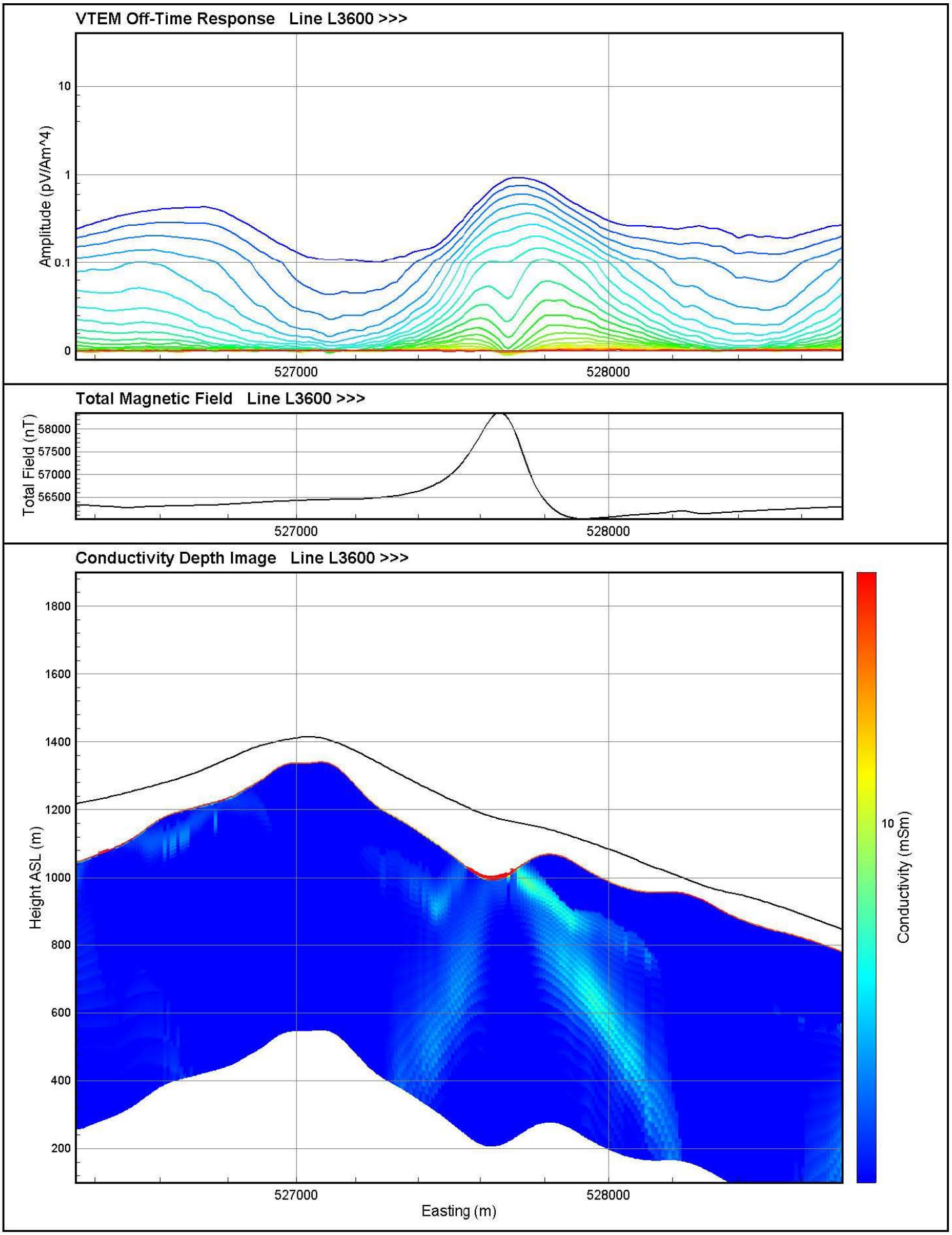
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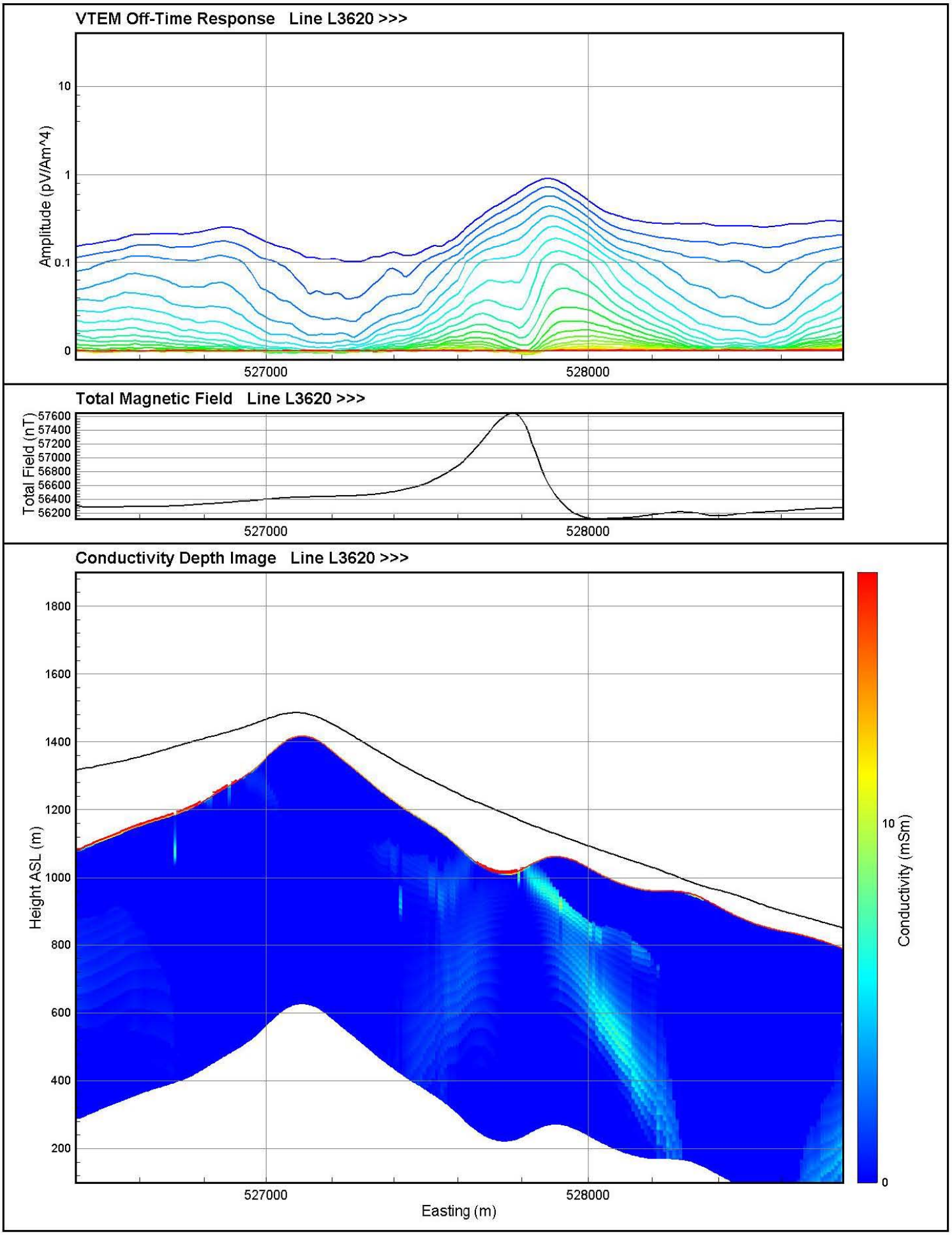
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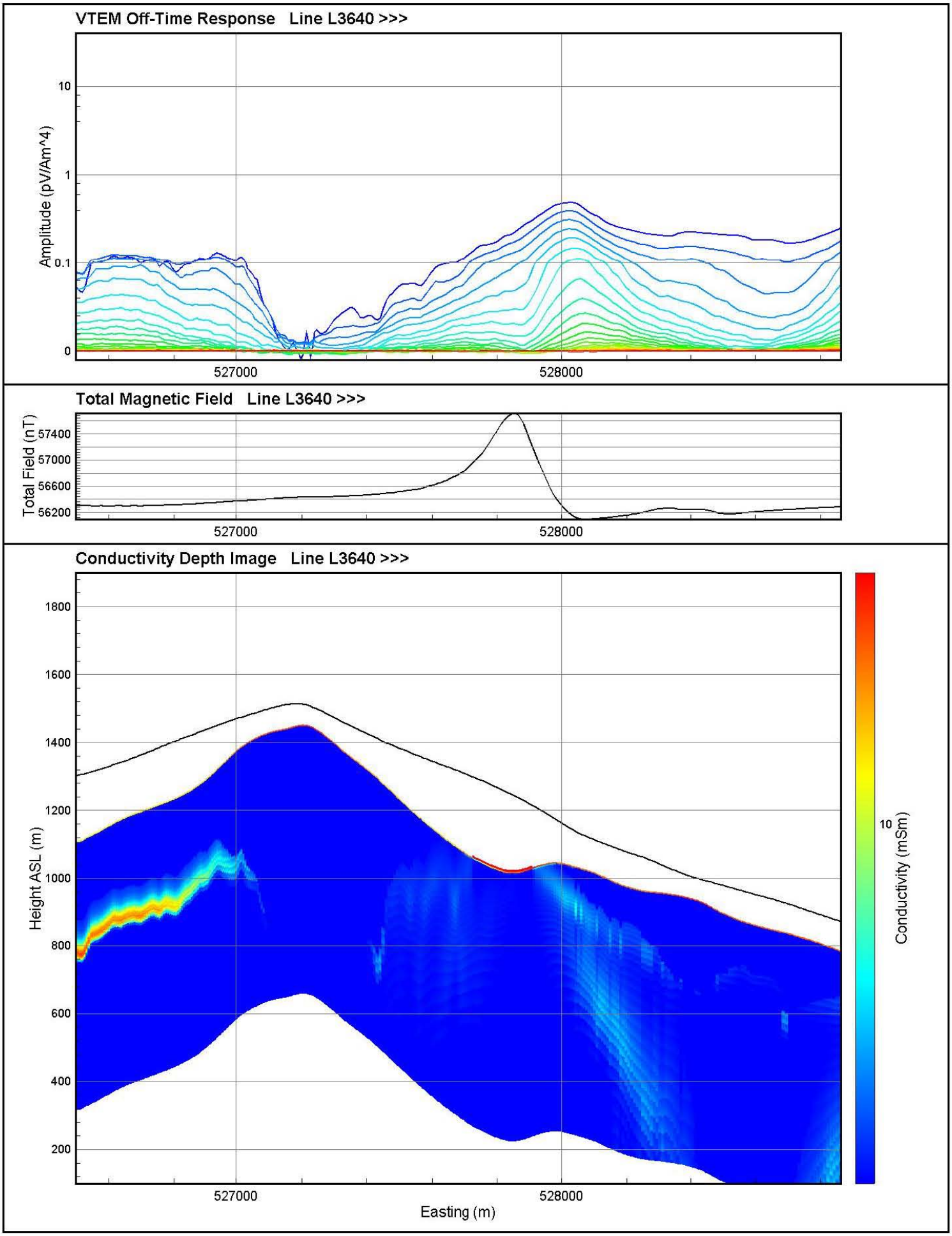
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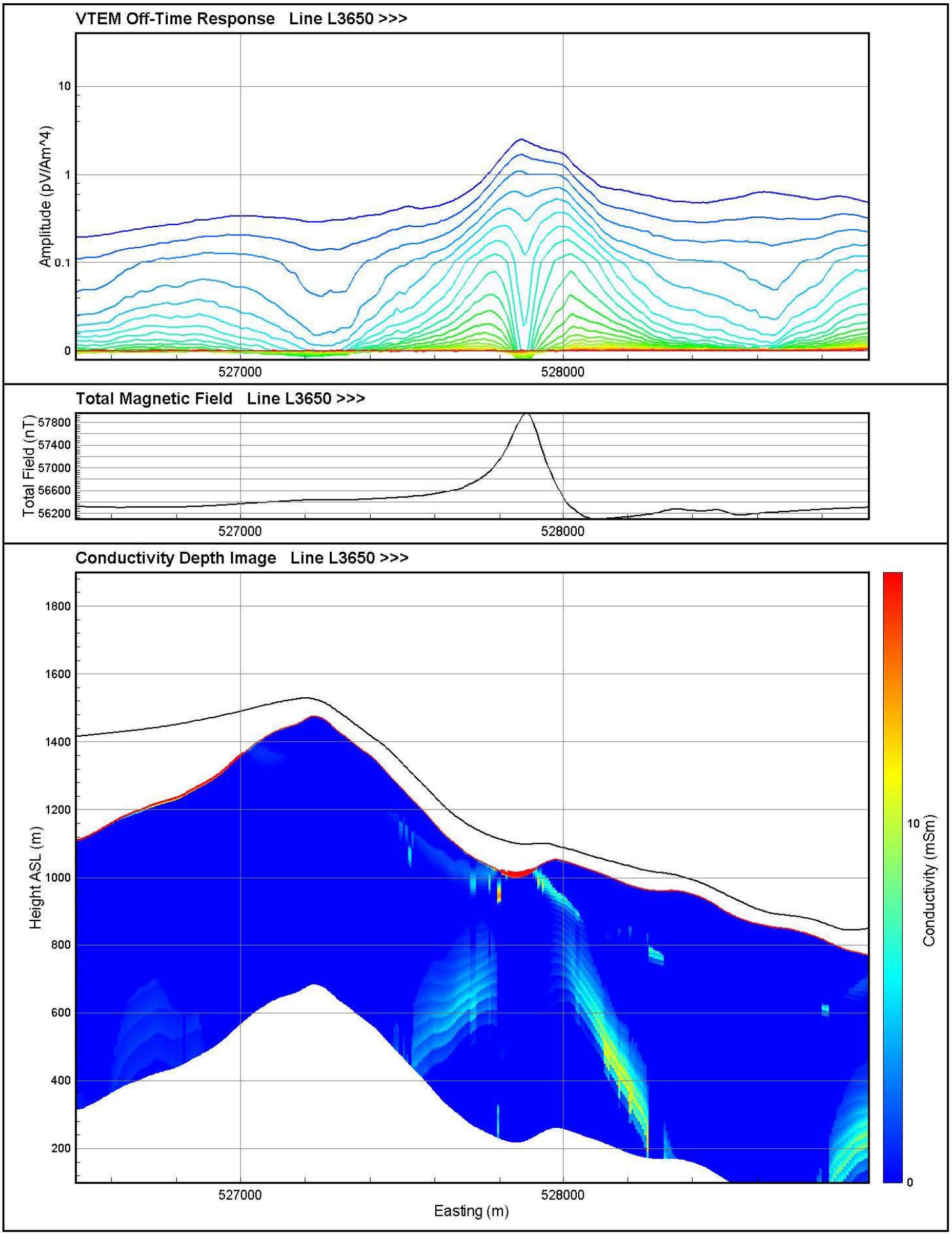
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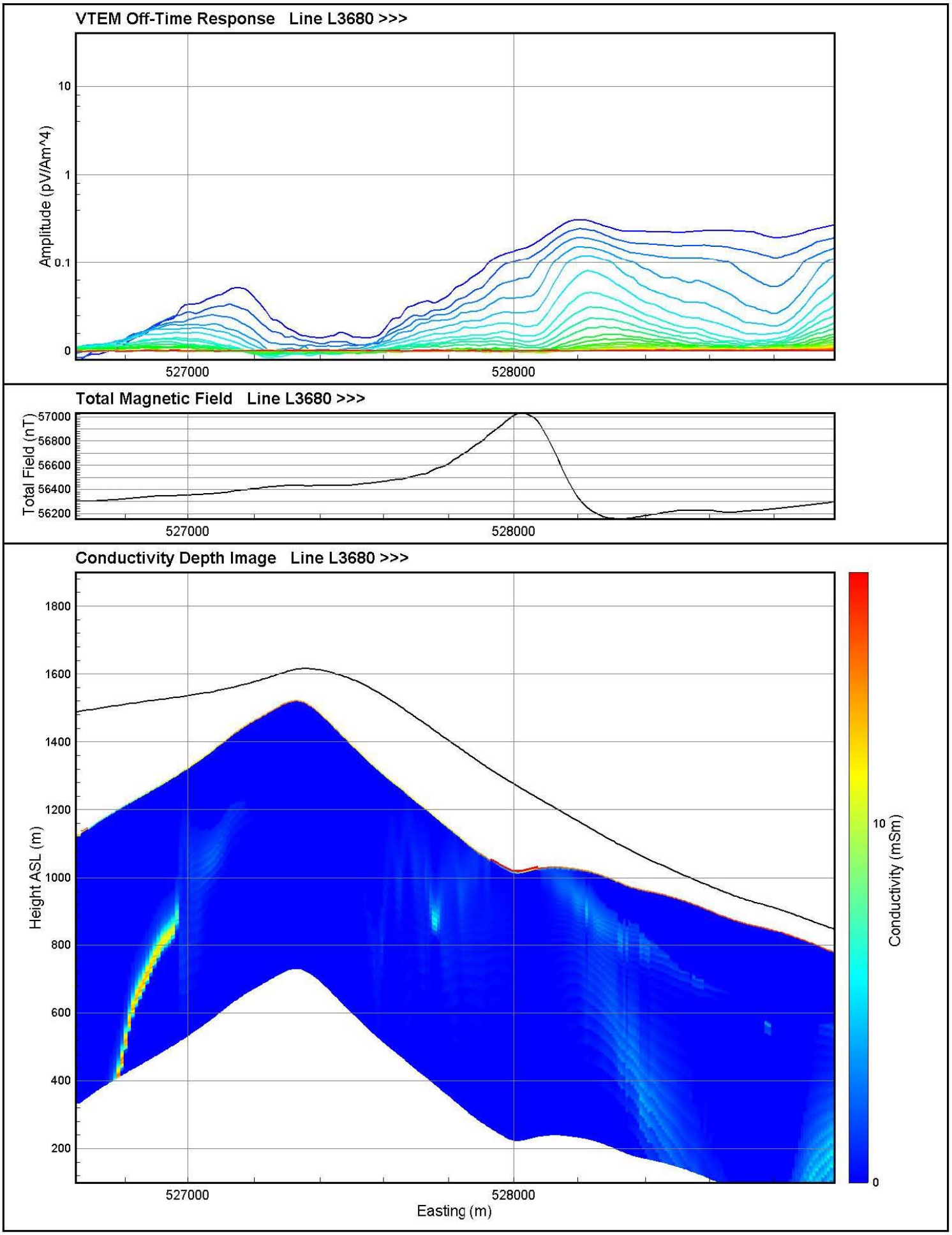
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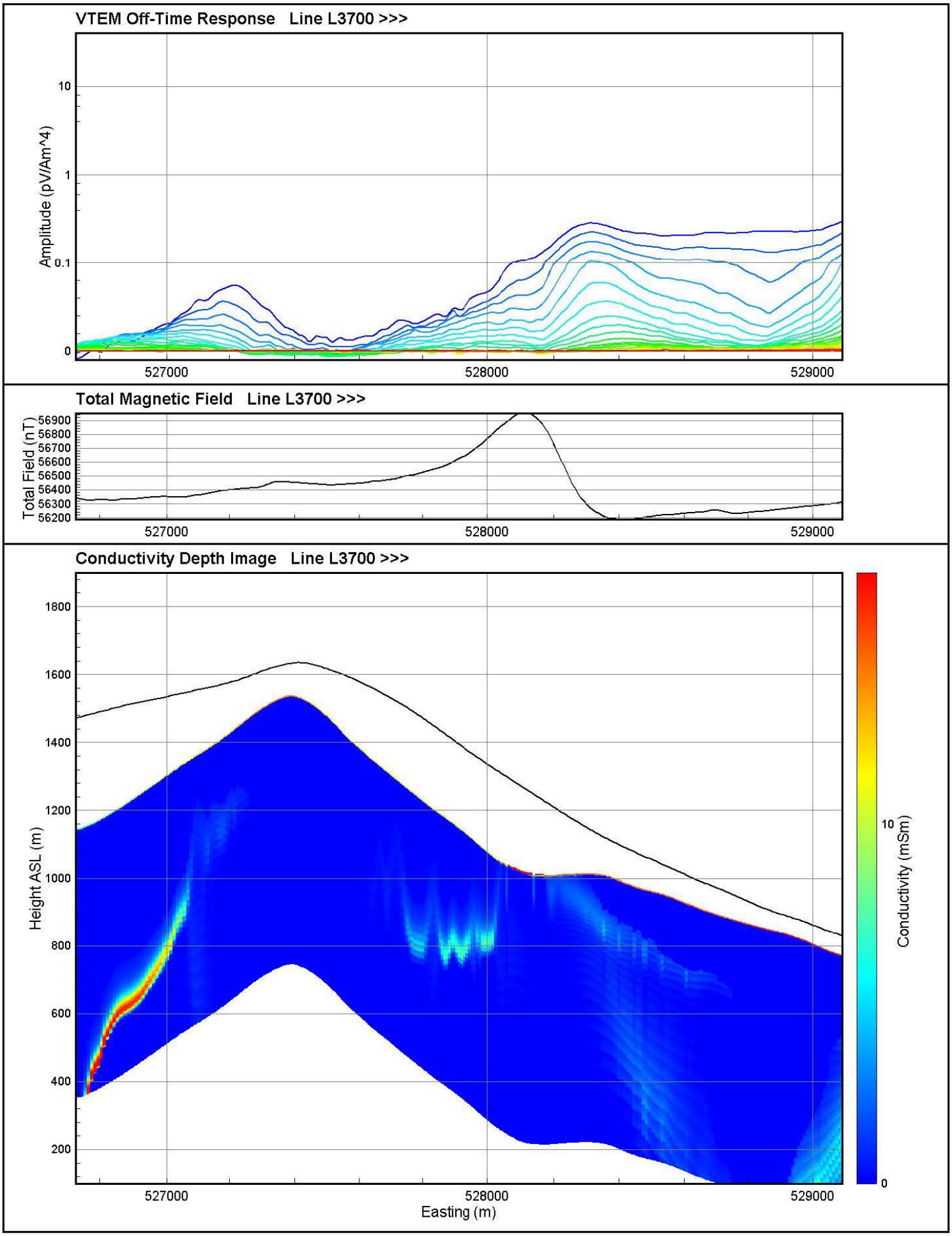
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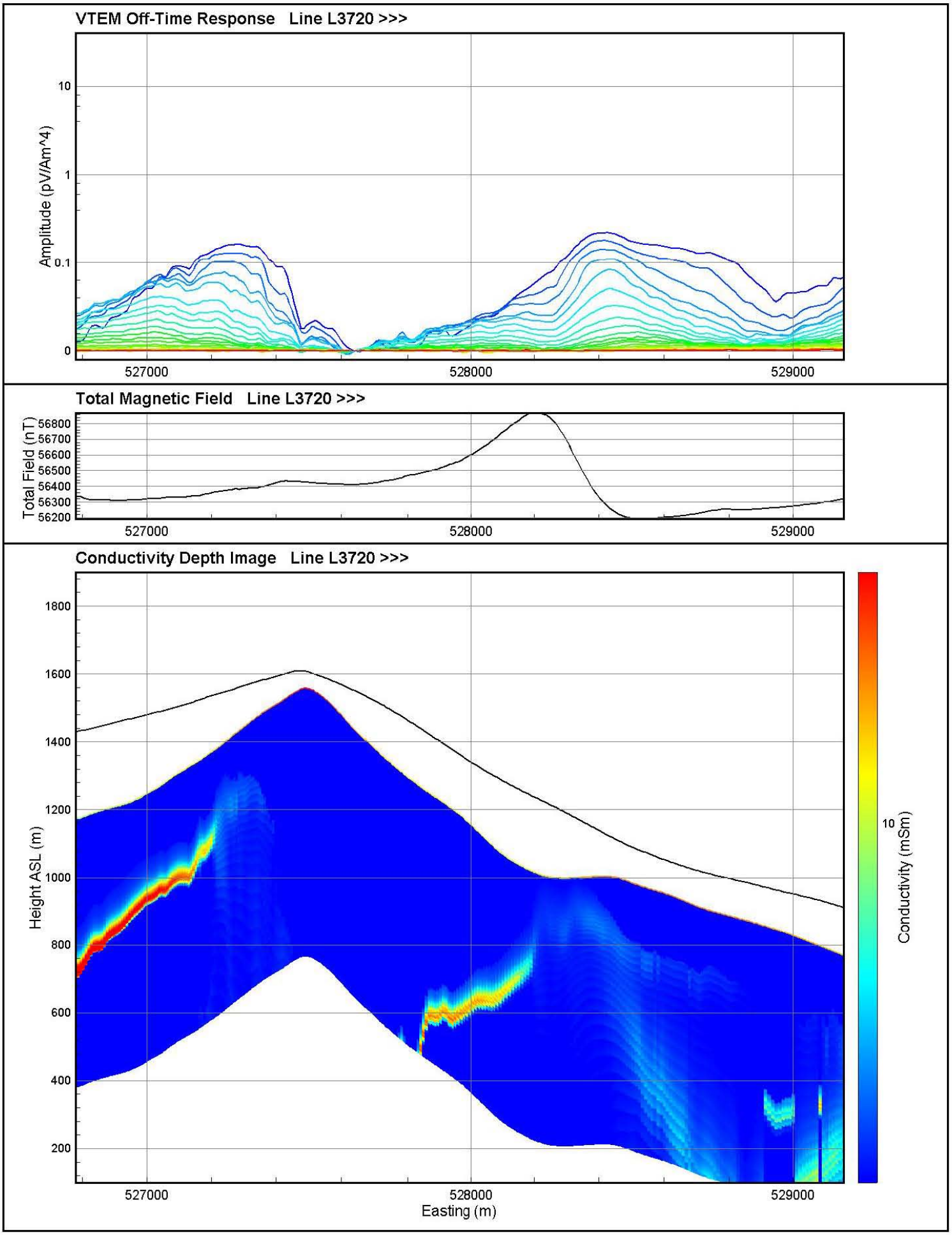
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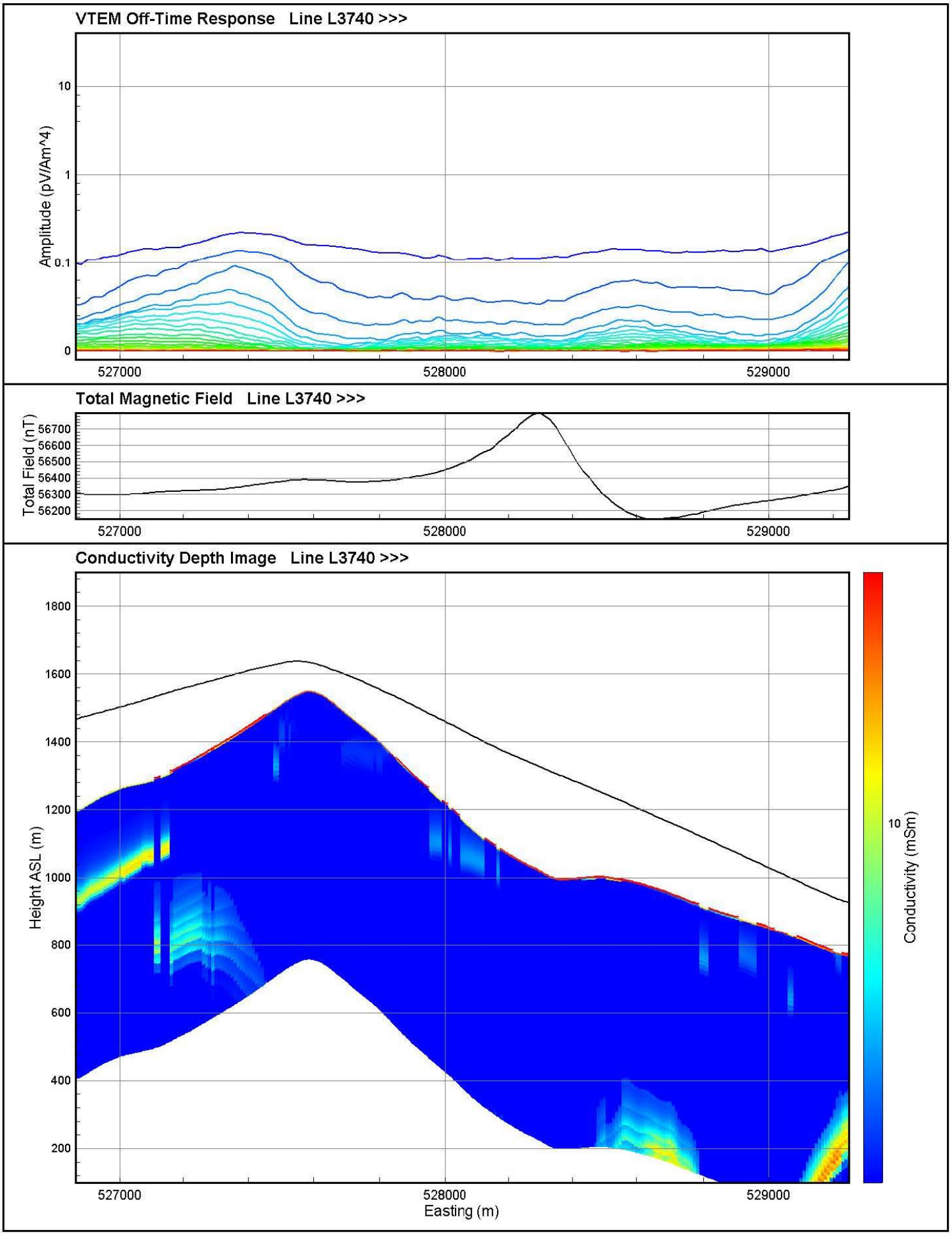
GNME - Yukon VTEM Survey
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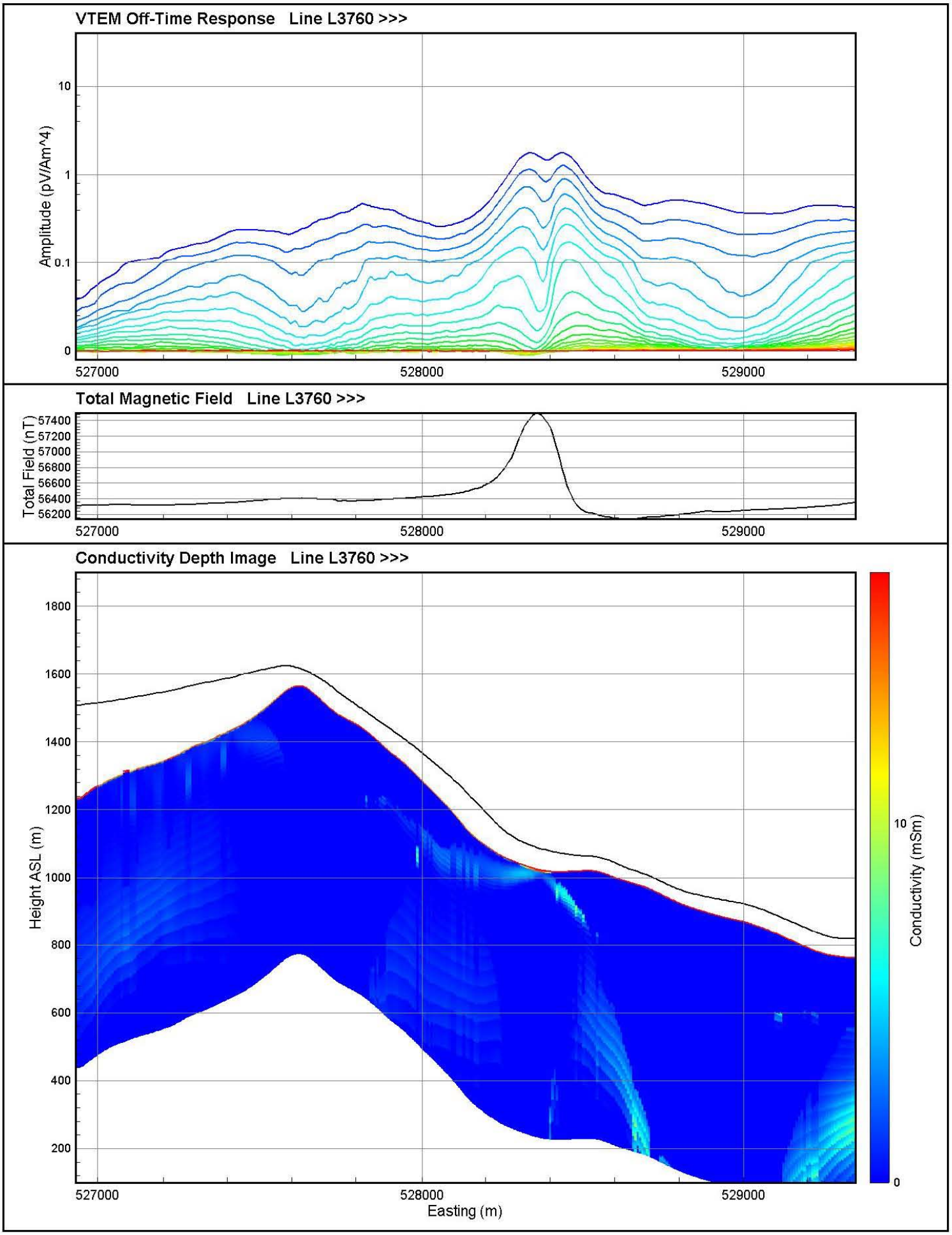
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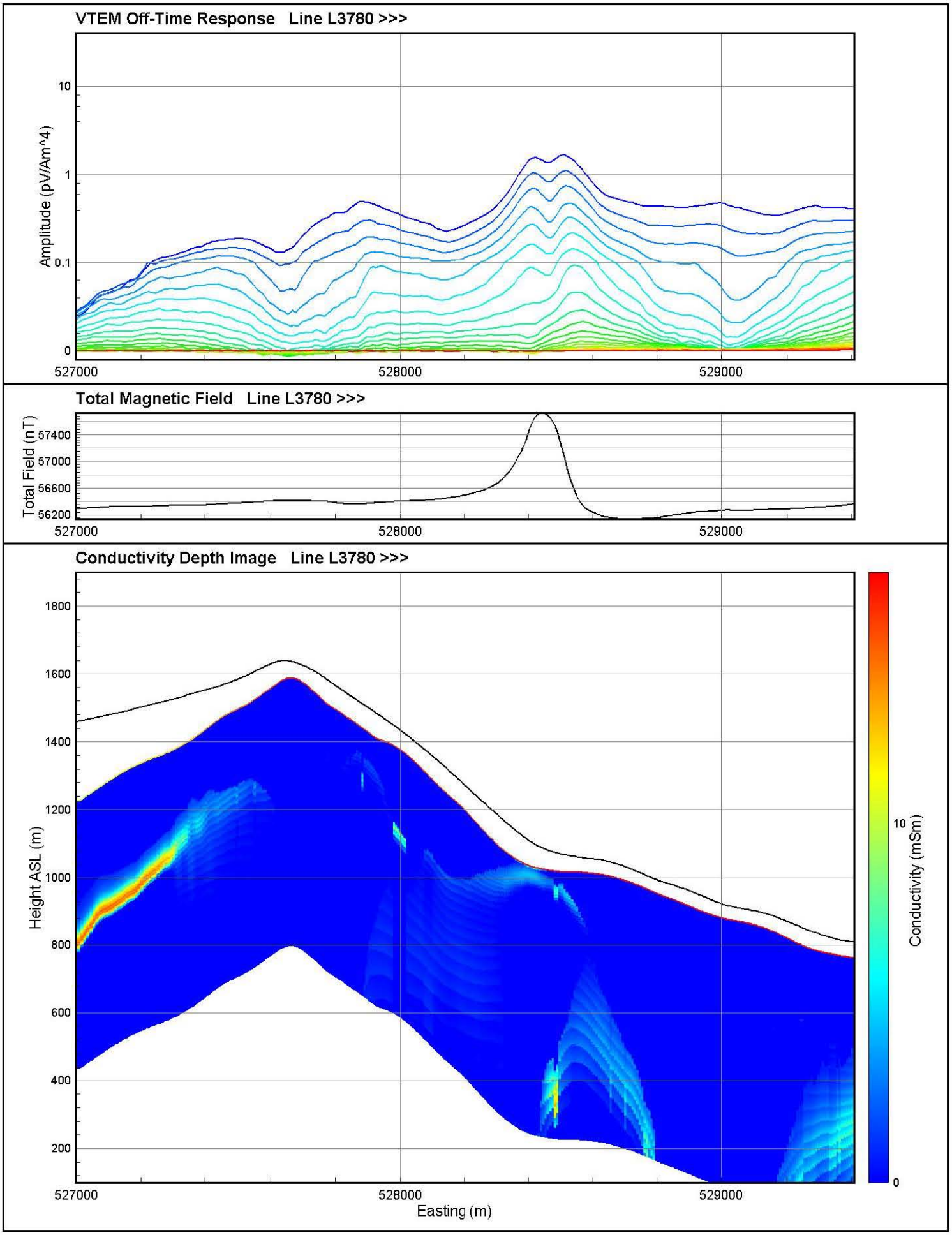
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GNME - Yukon VTEM Survey
Block B

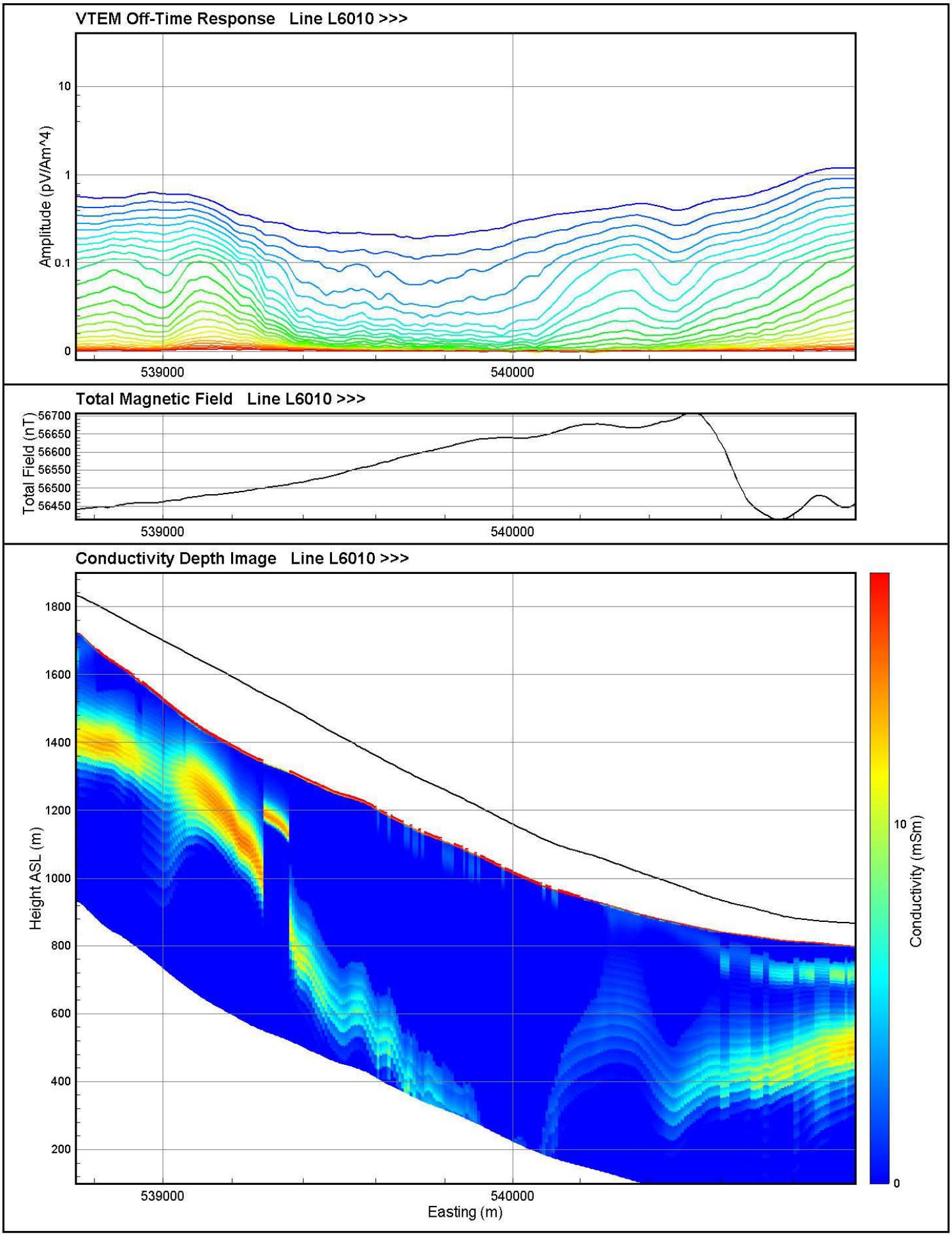


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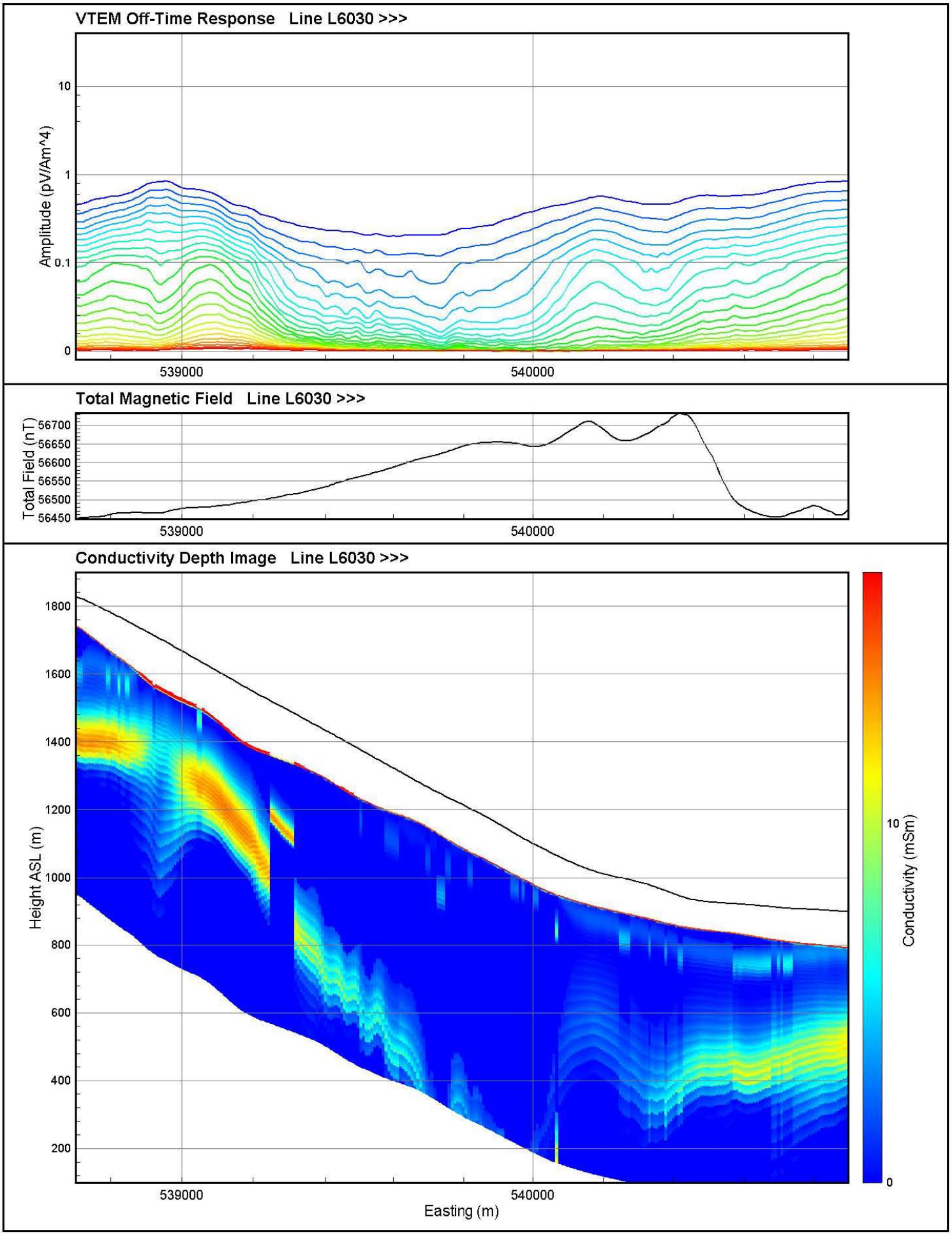


Appendix H: Block C Downhill CDI Sections

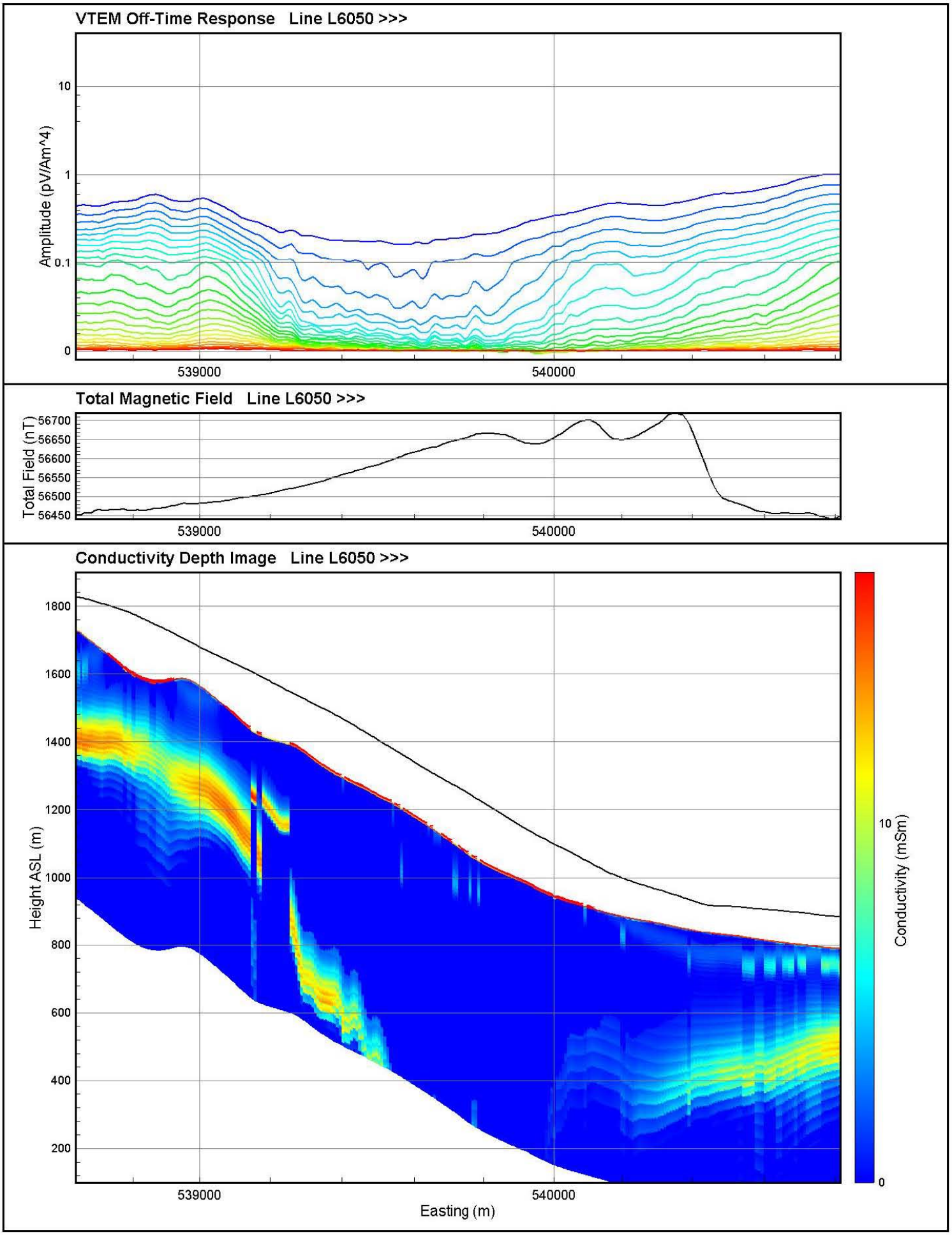
GNME - Yukon VTEM Survey
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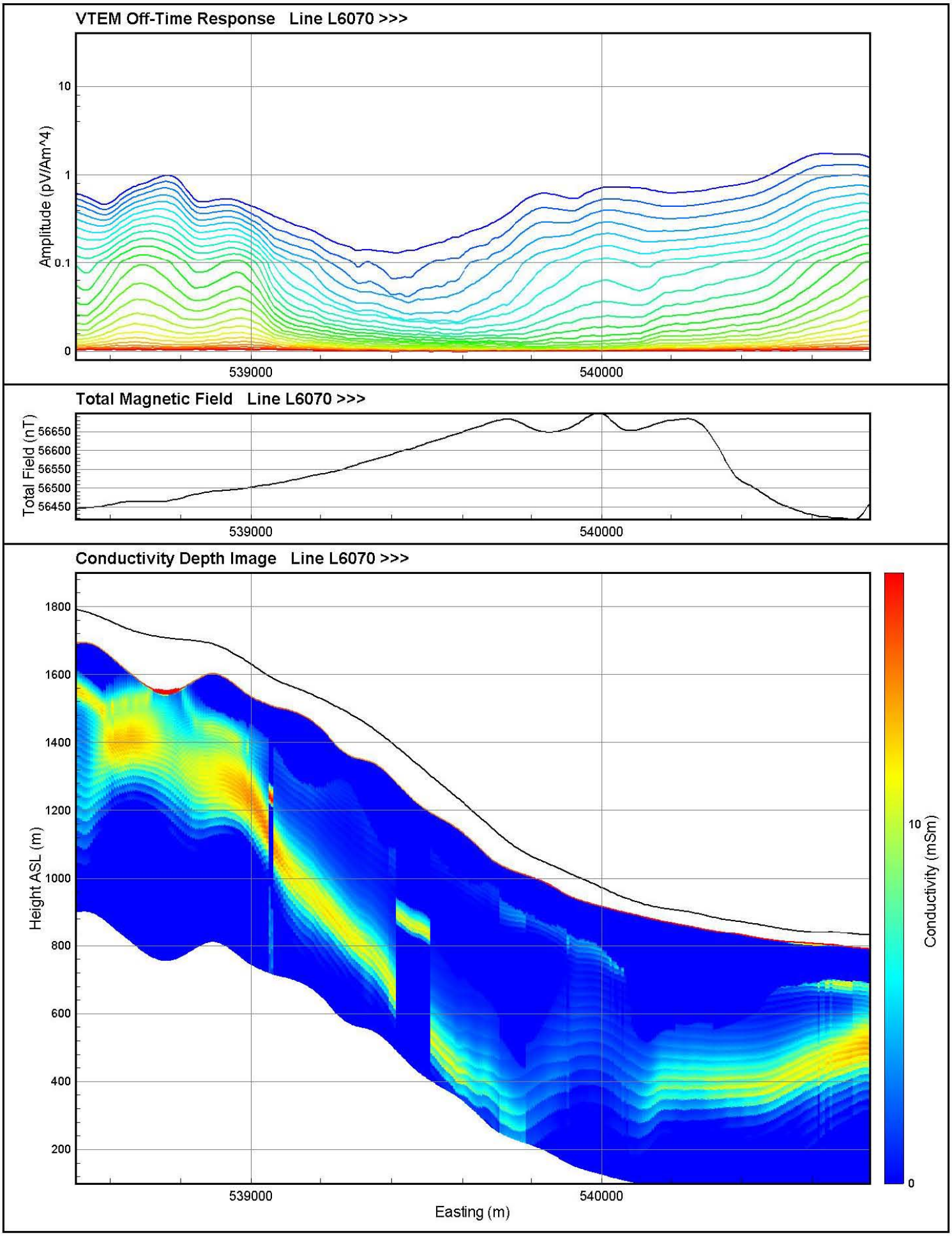
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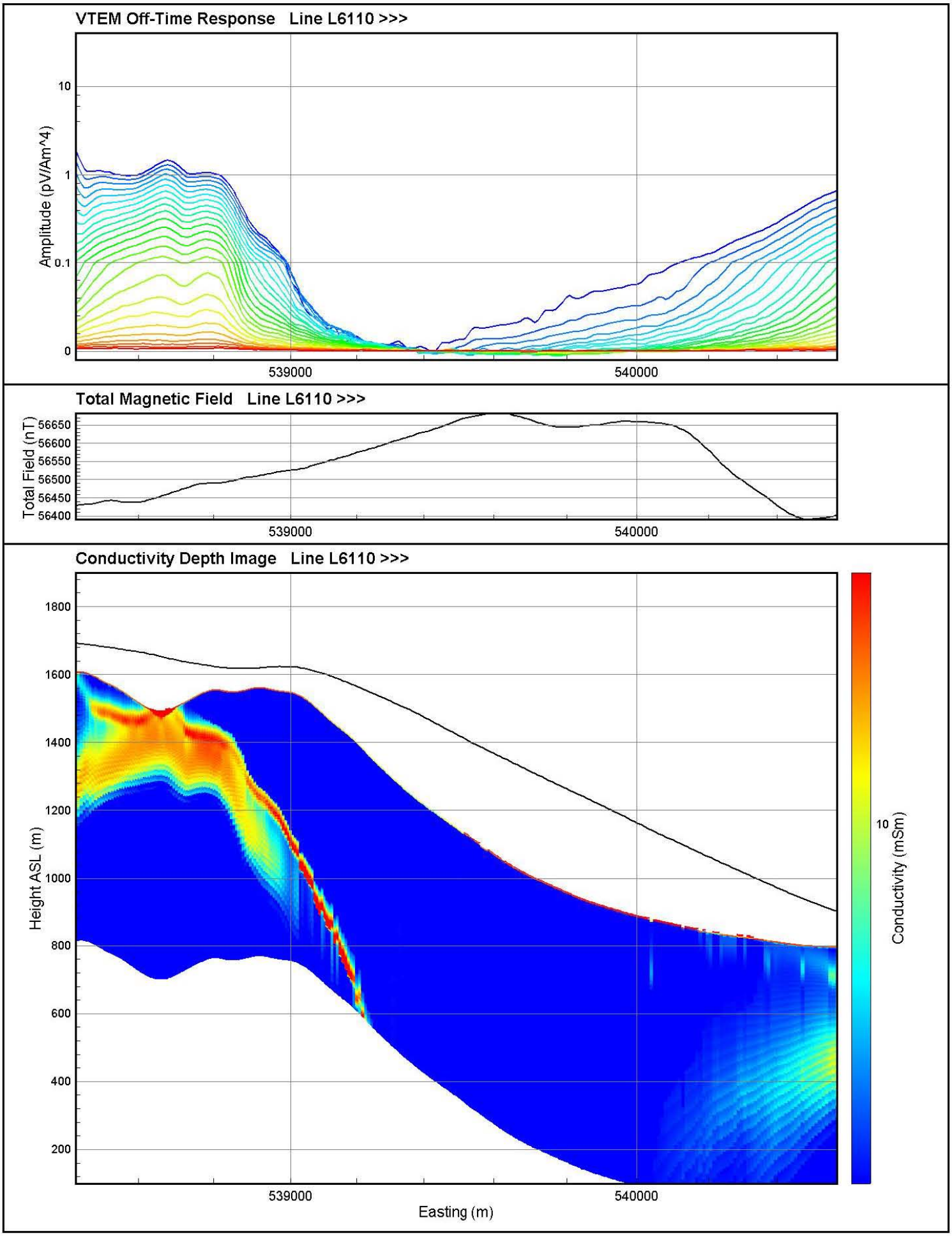
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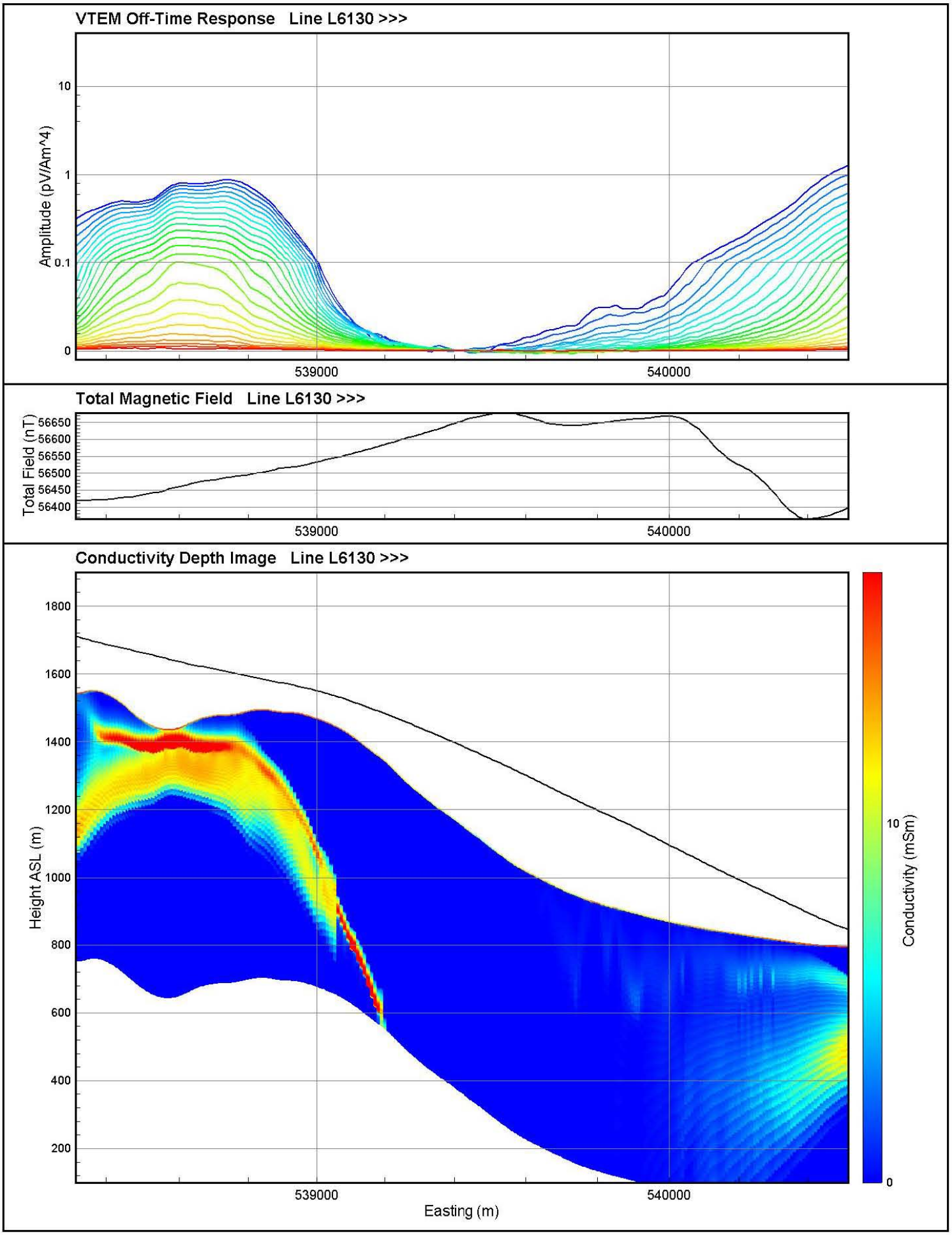
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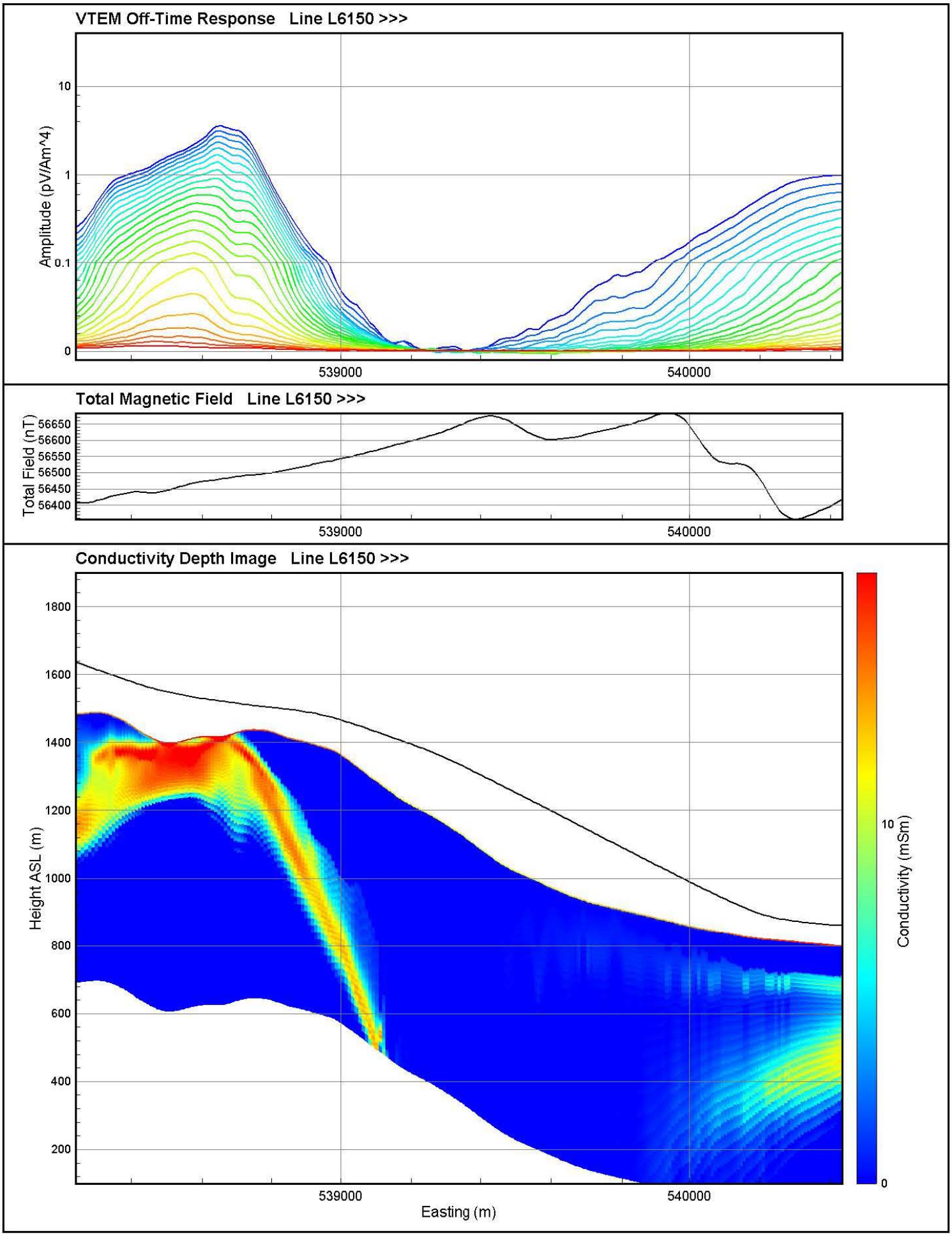
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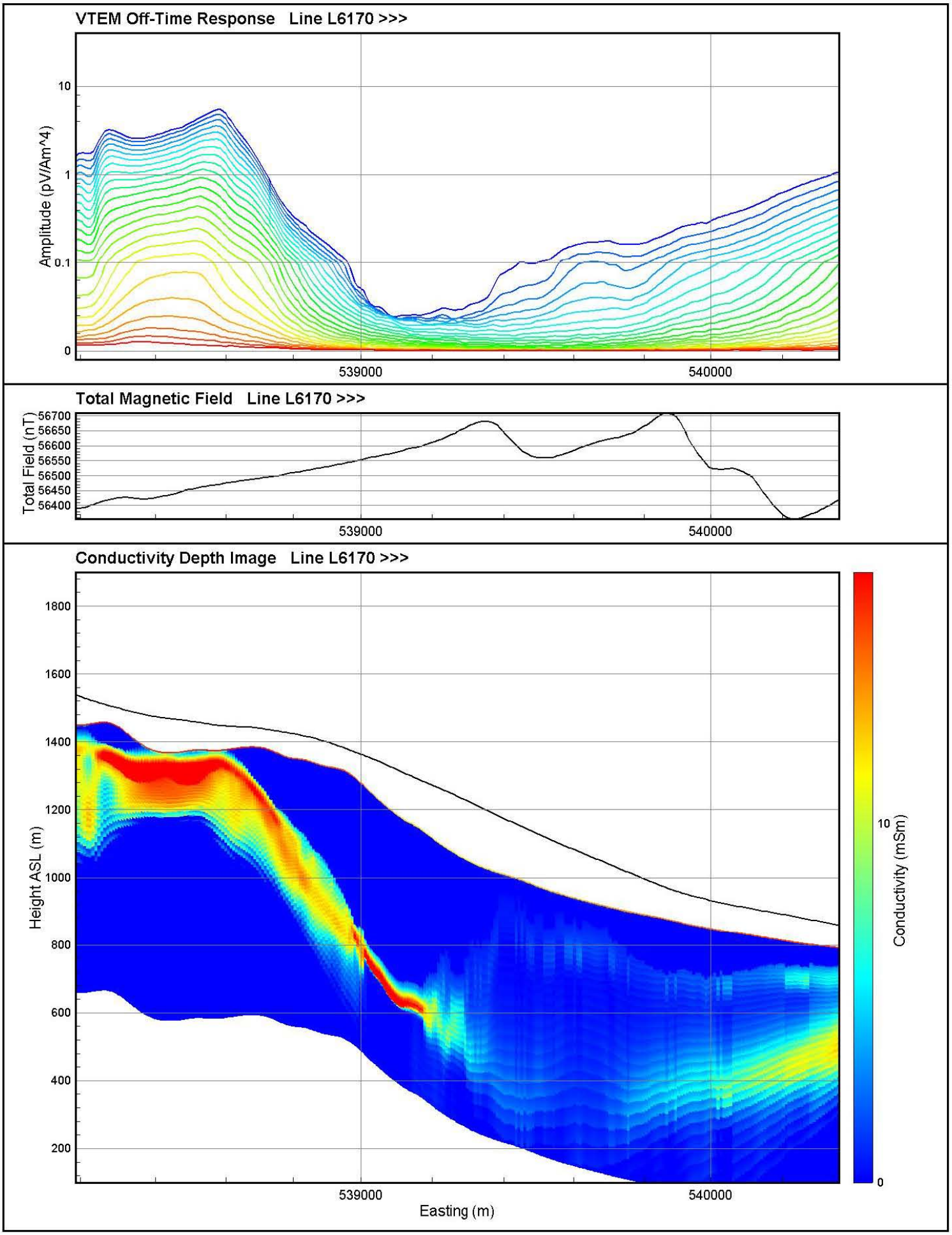
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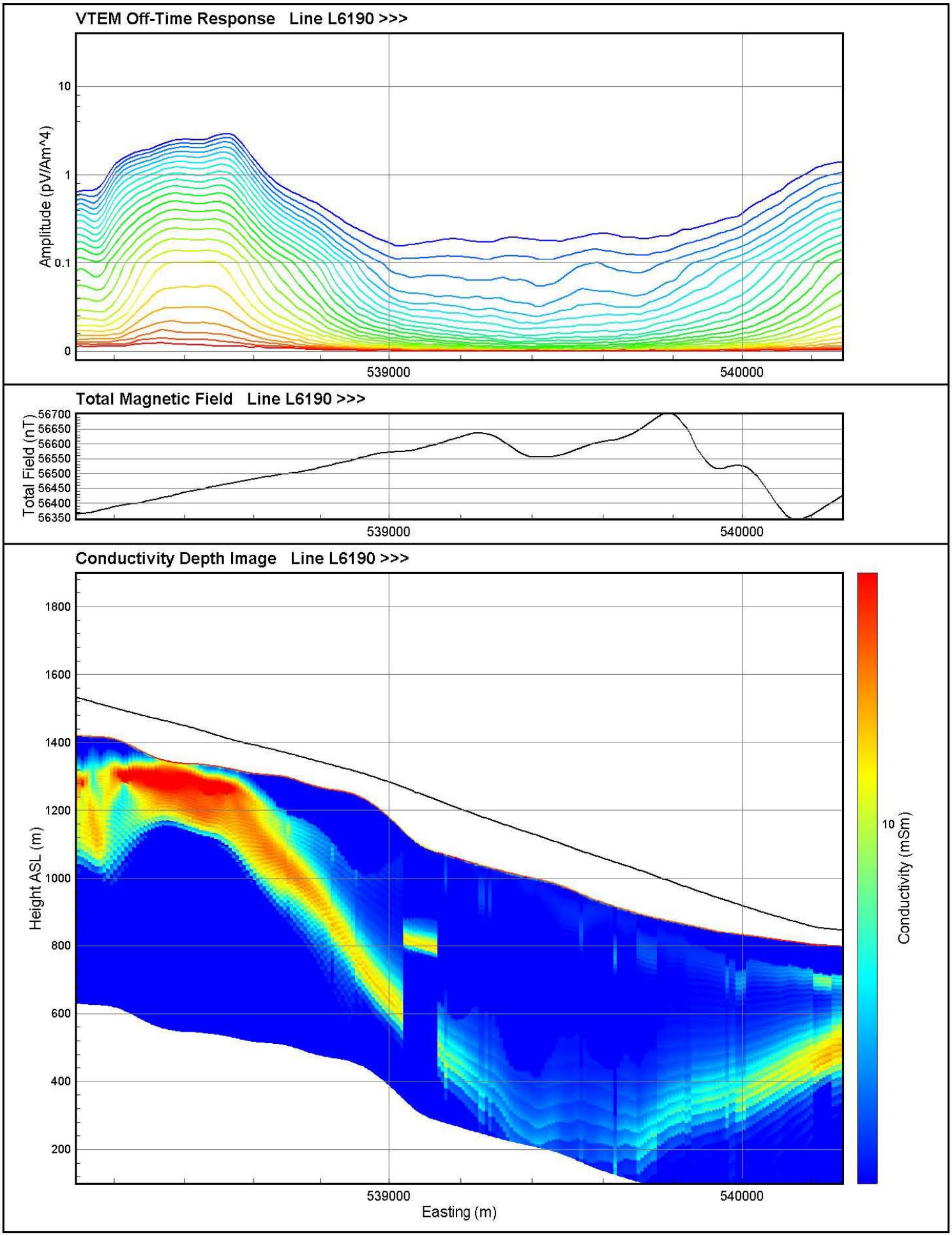
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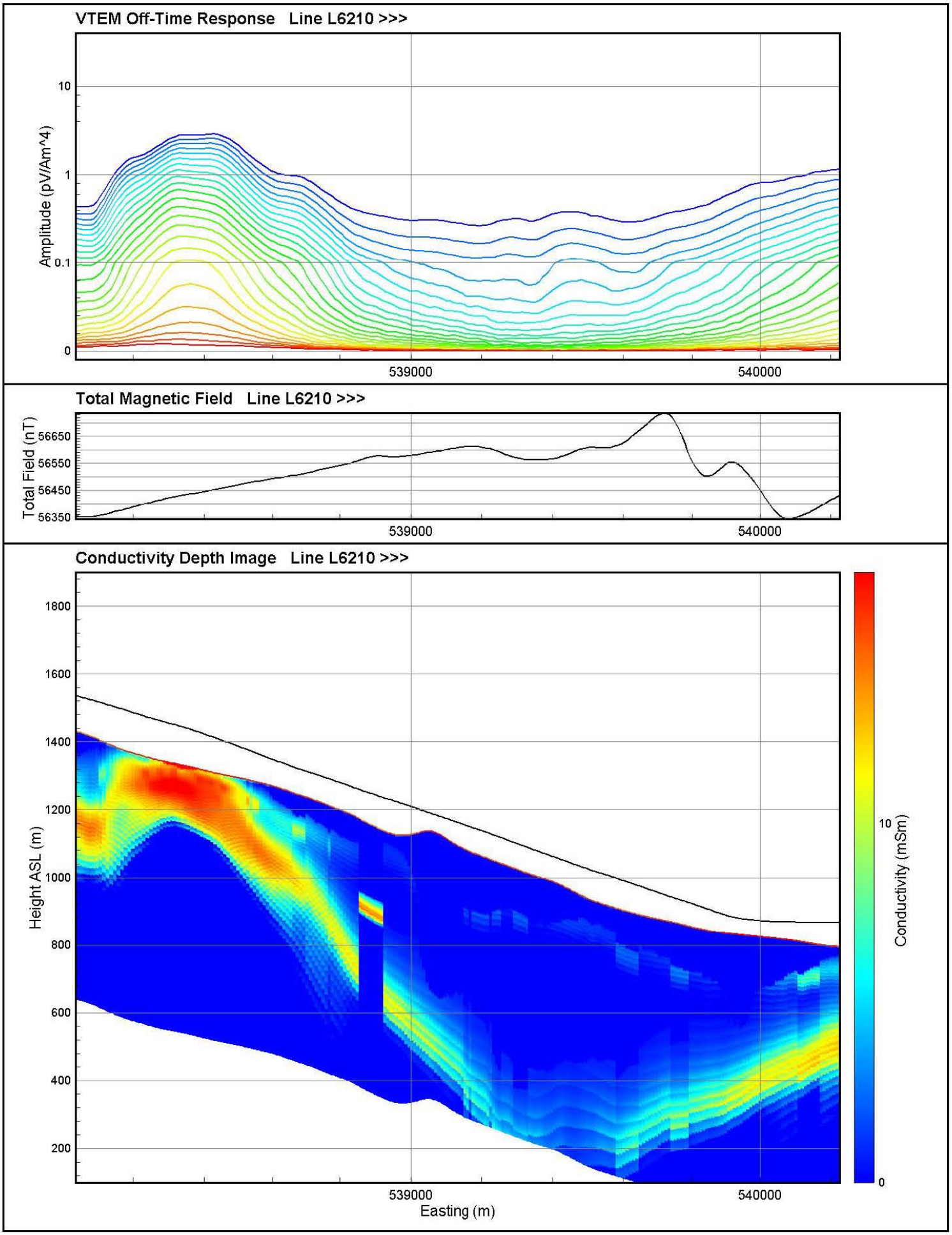
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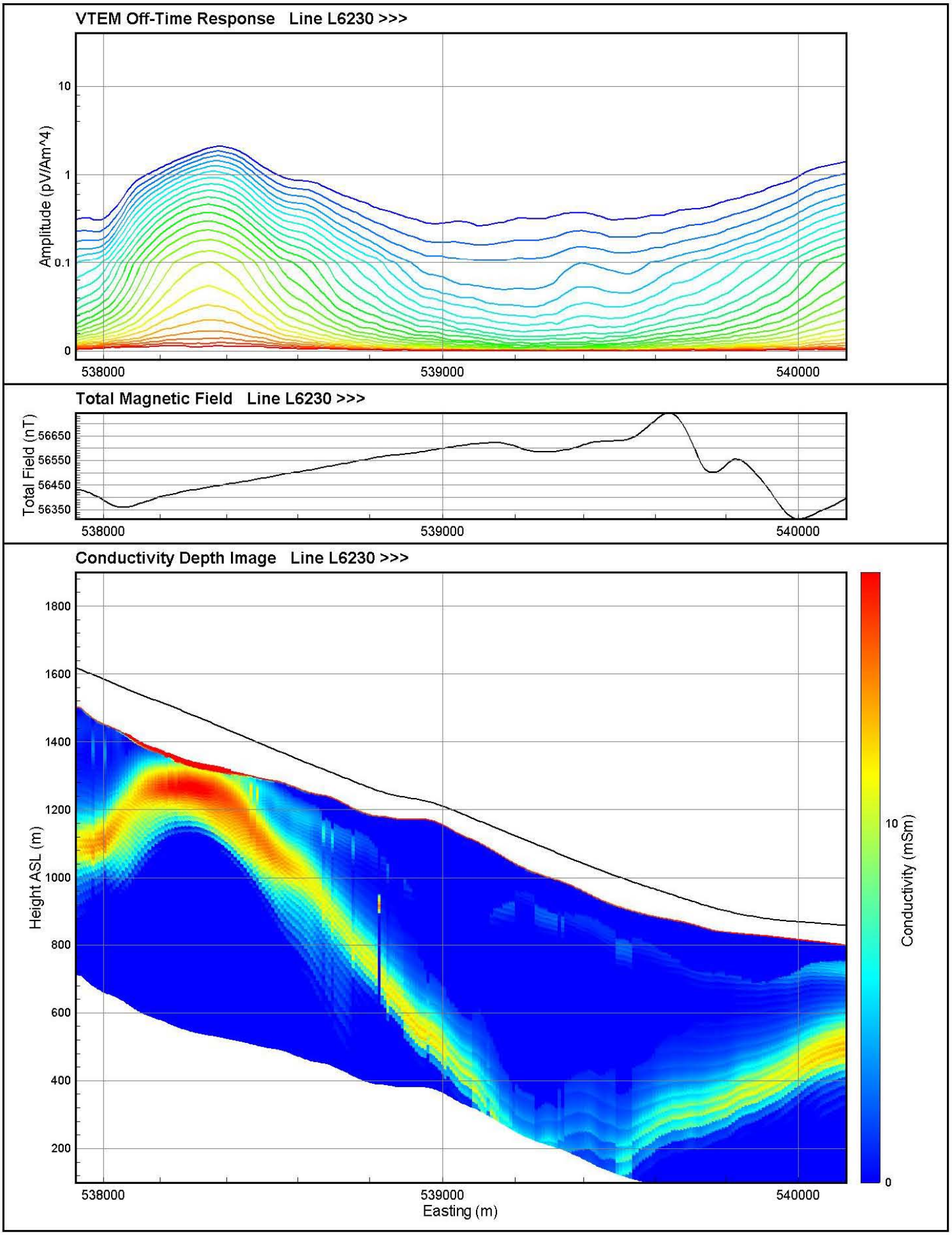
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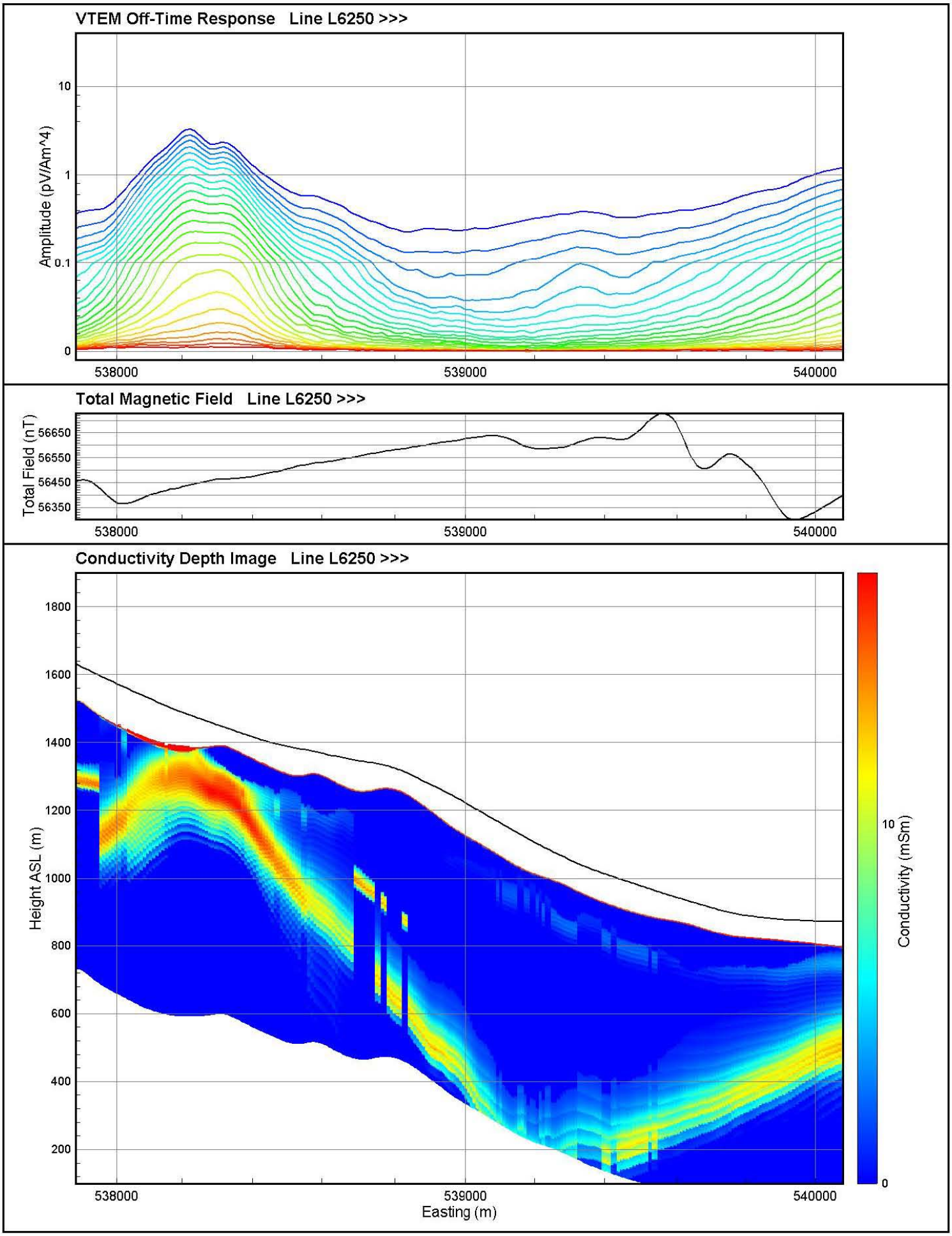
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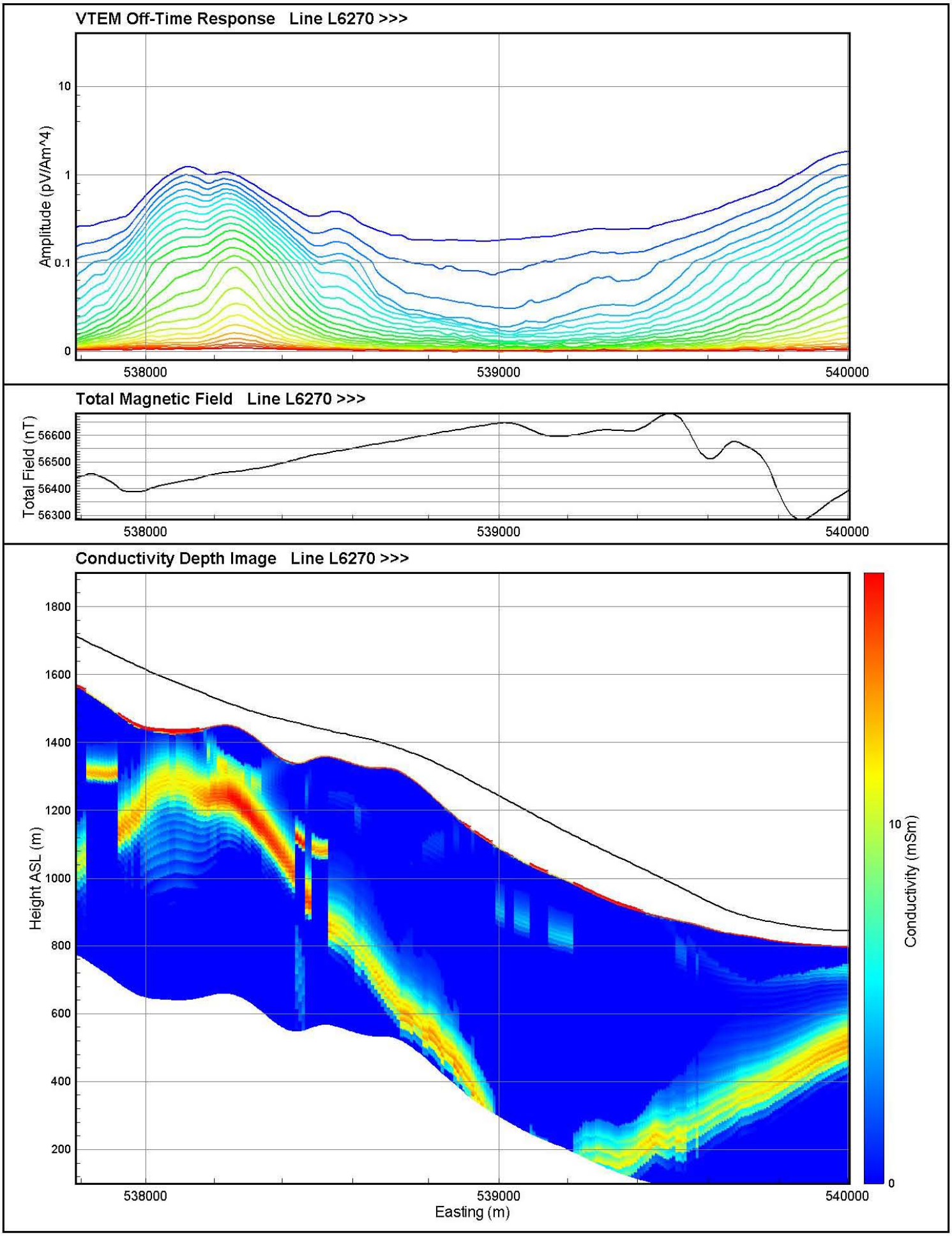
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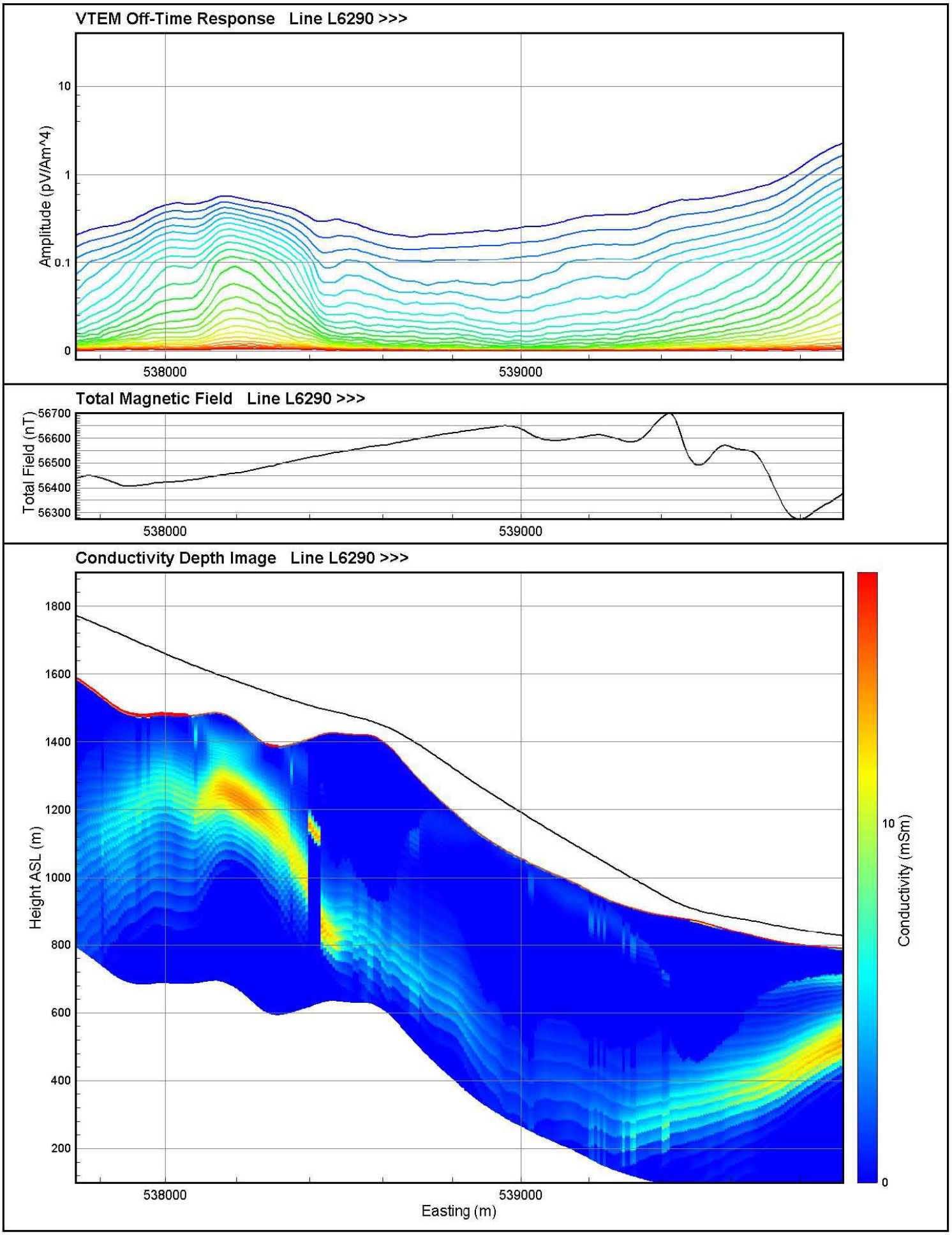
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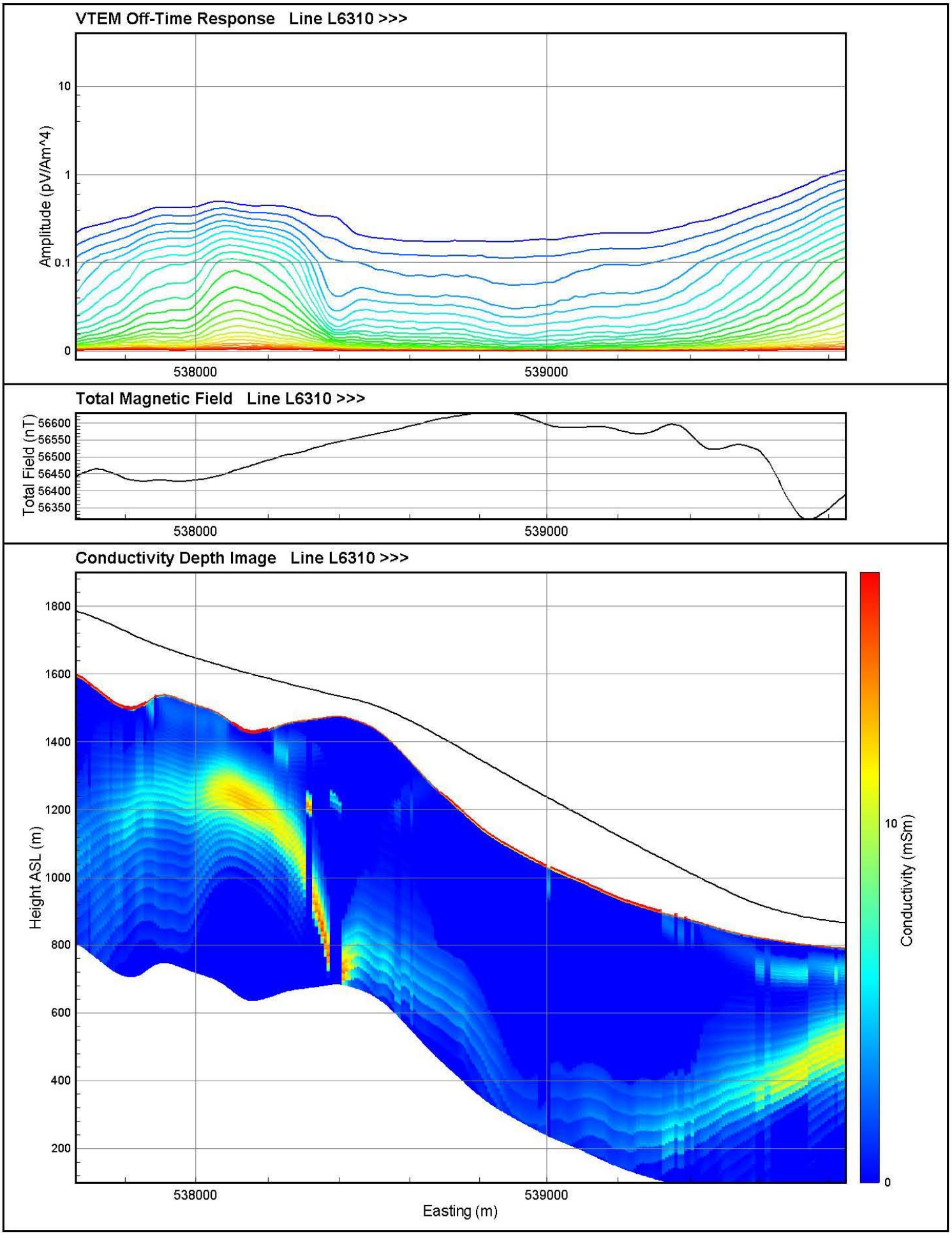
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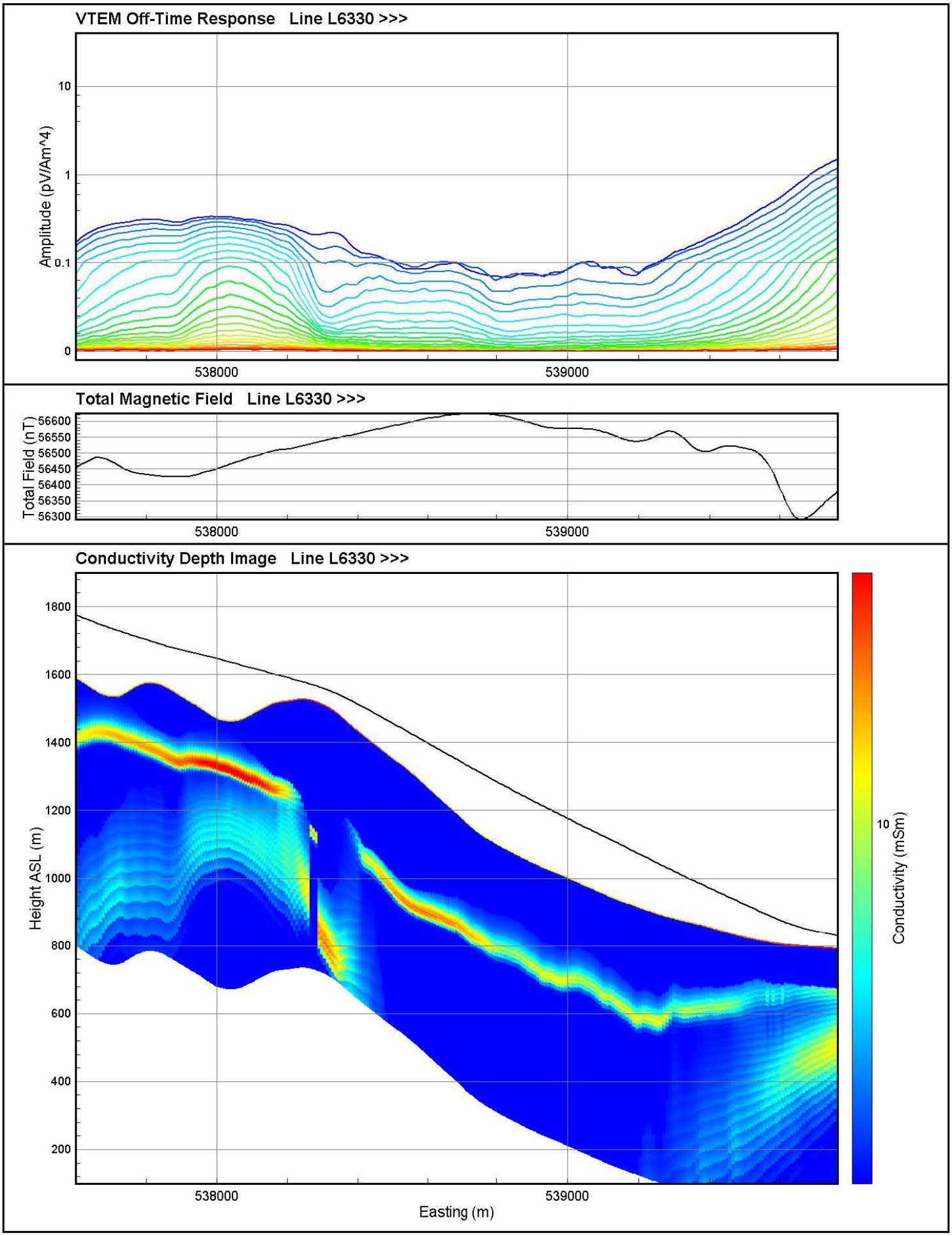
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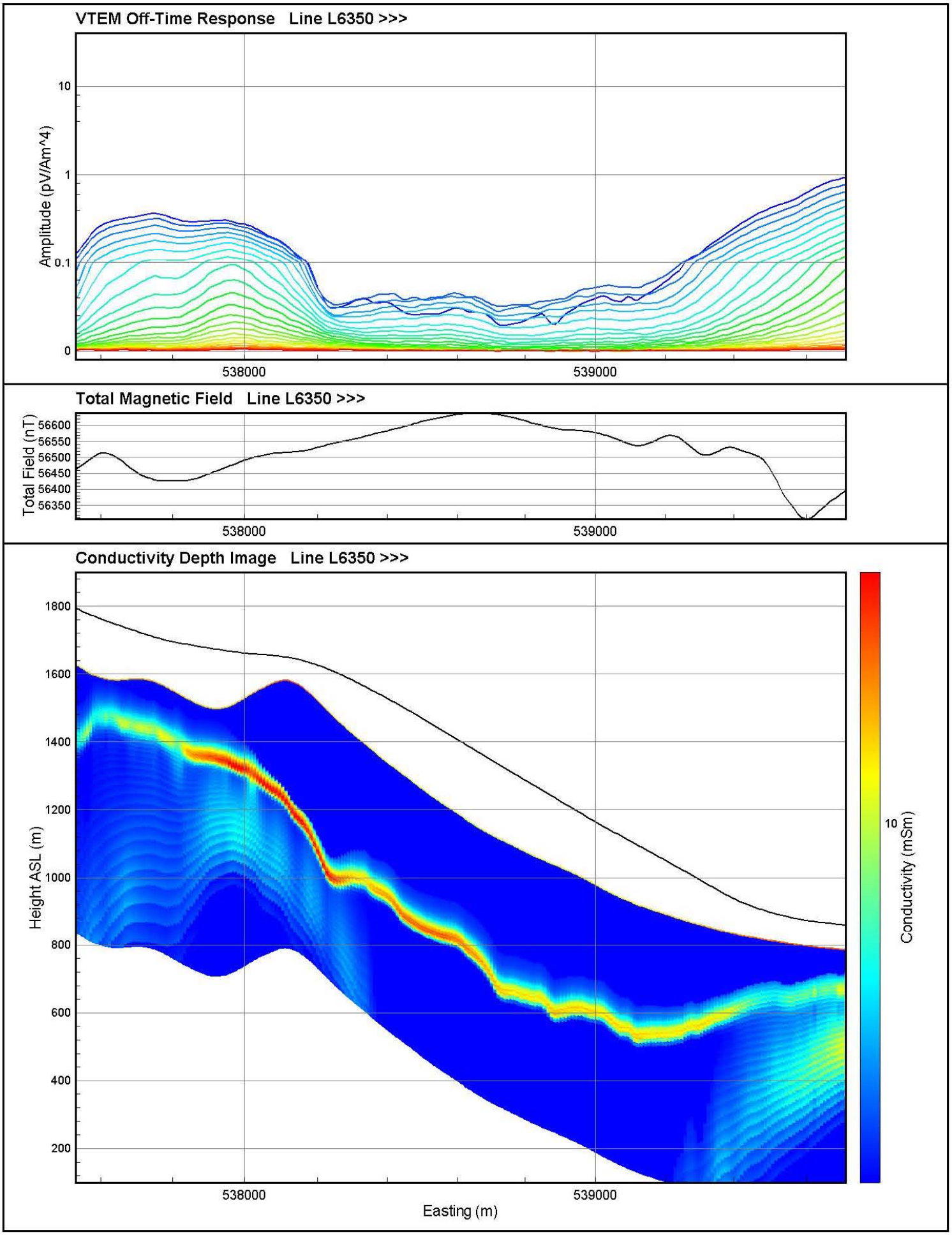
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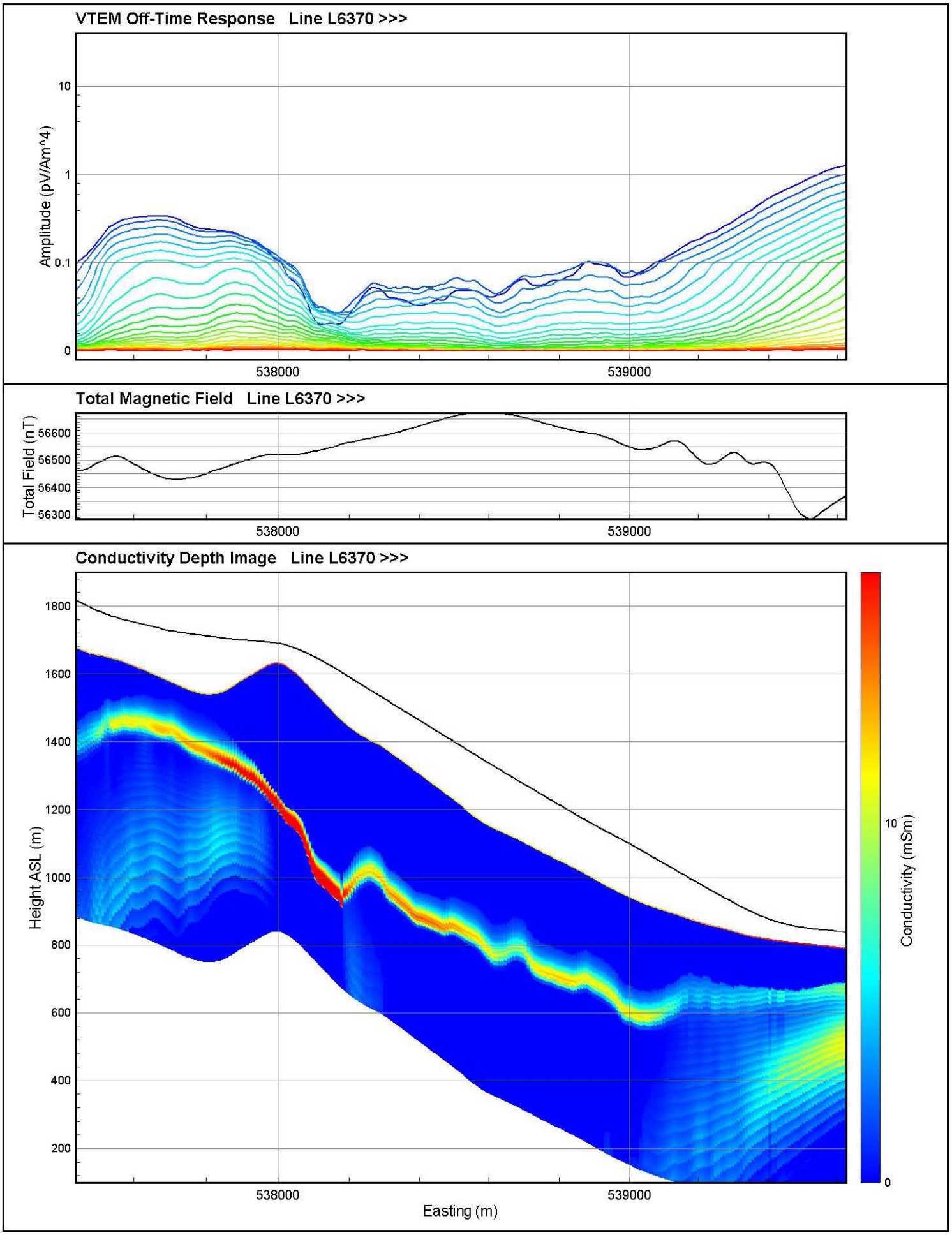
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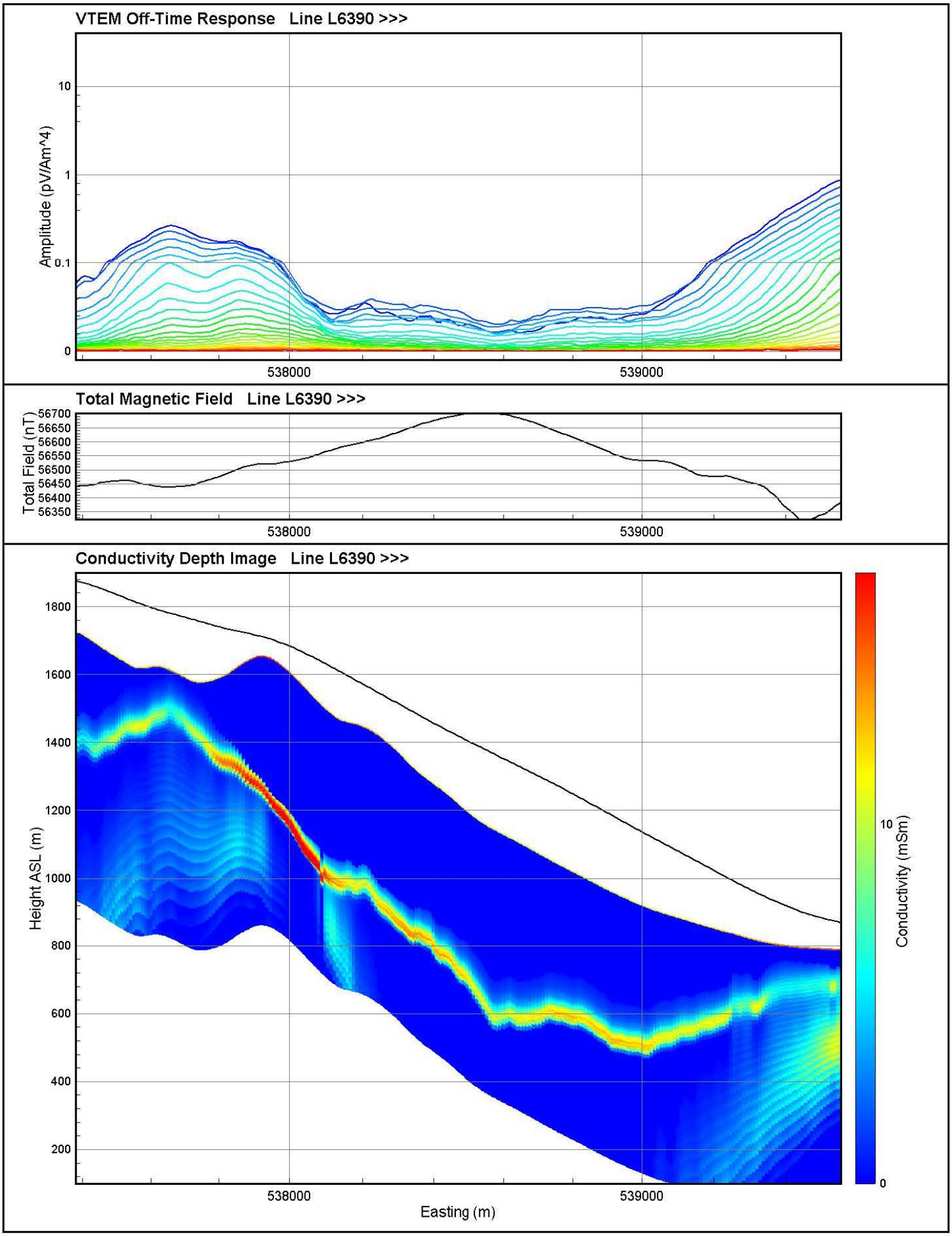
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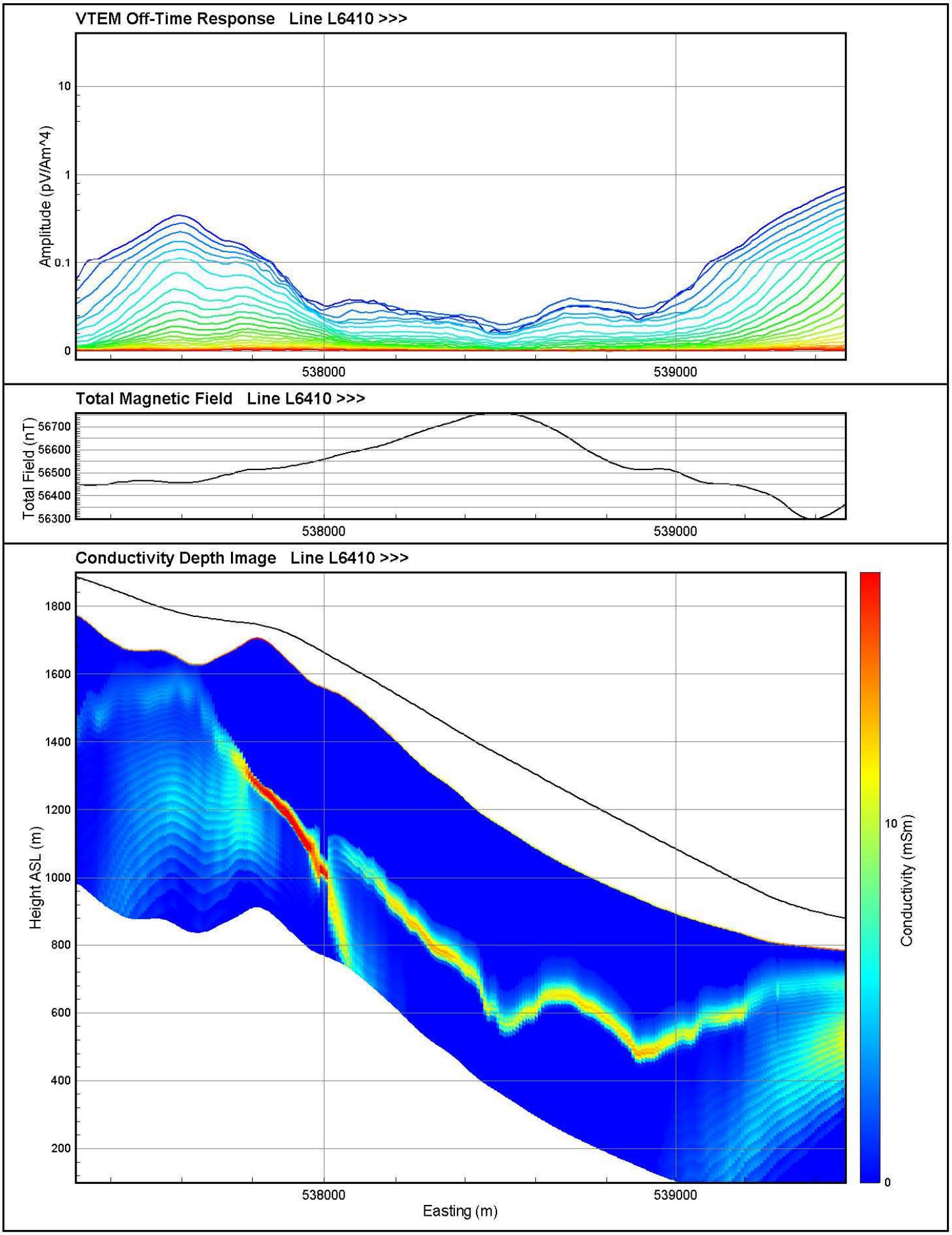
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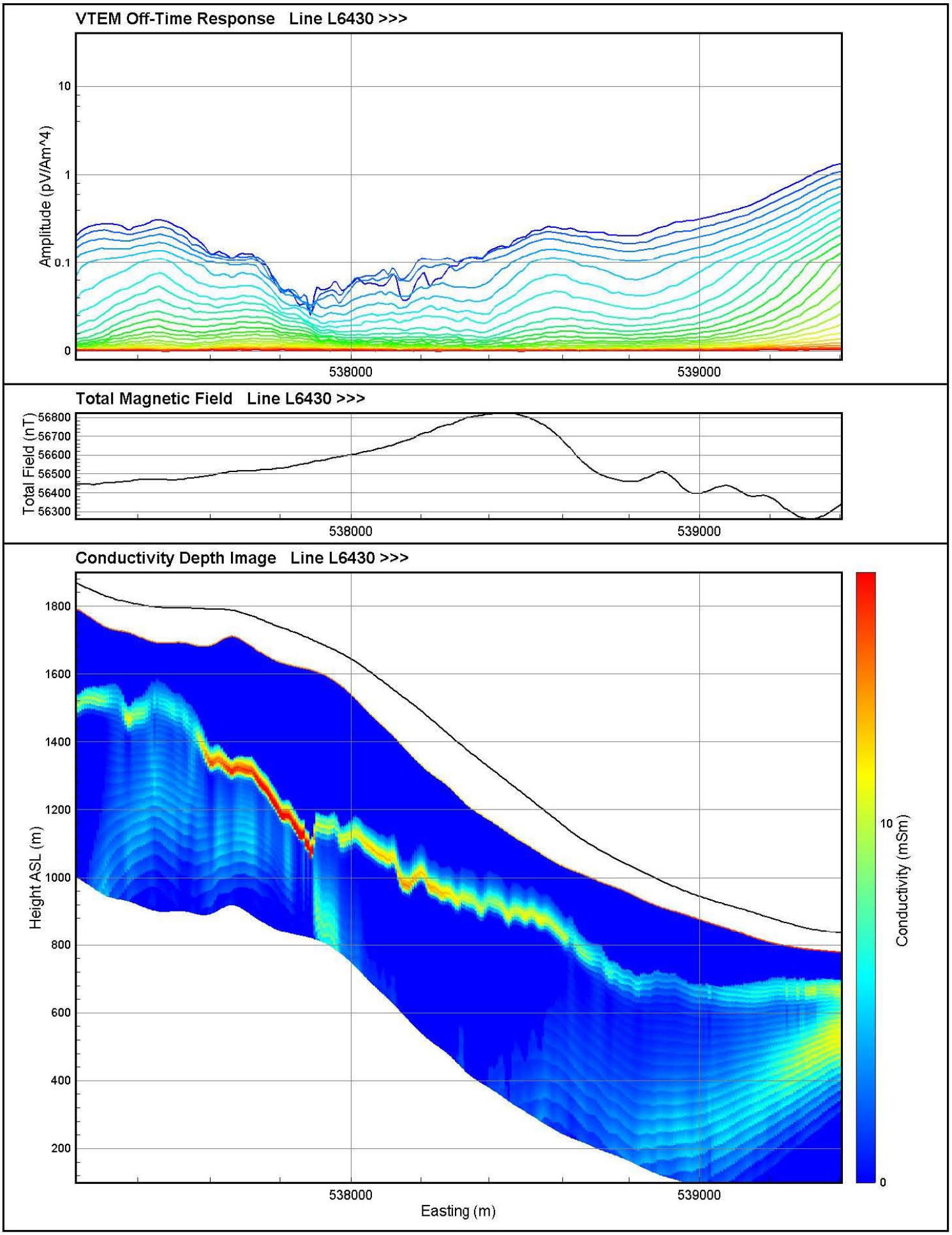
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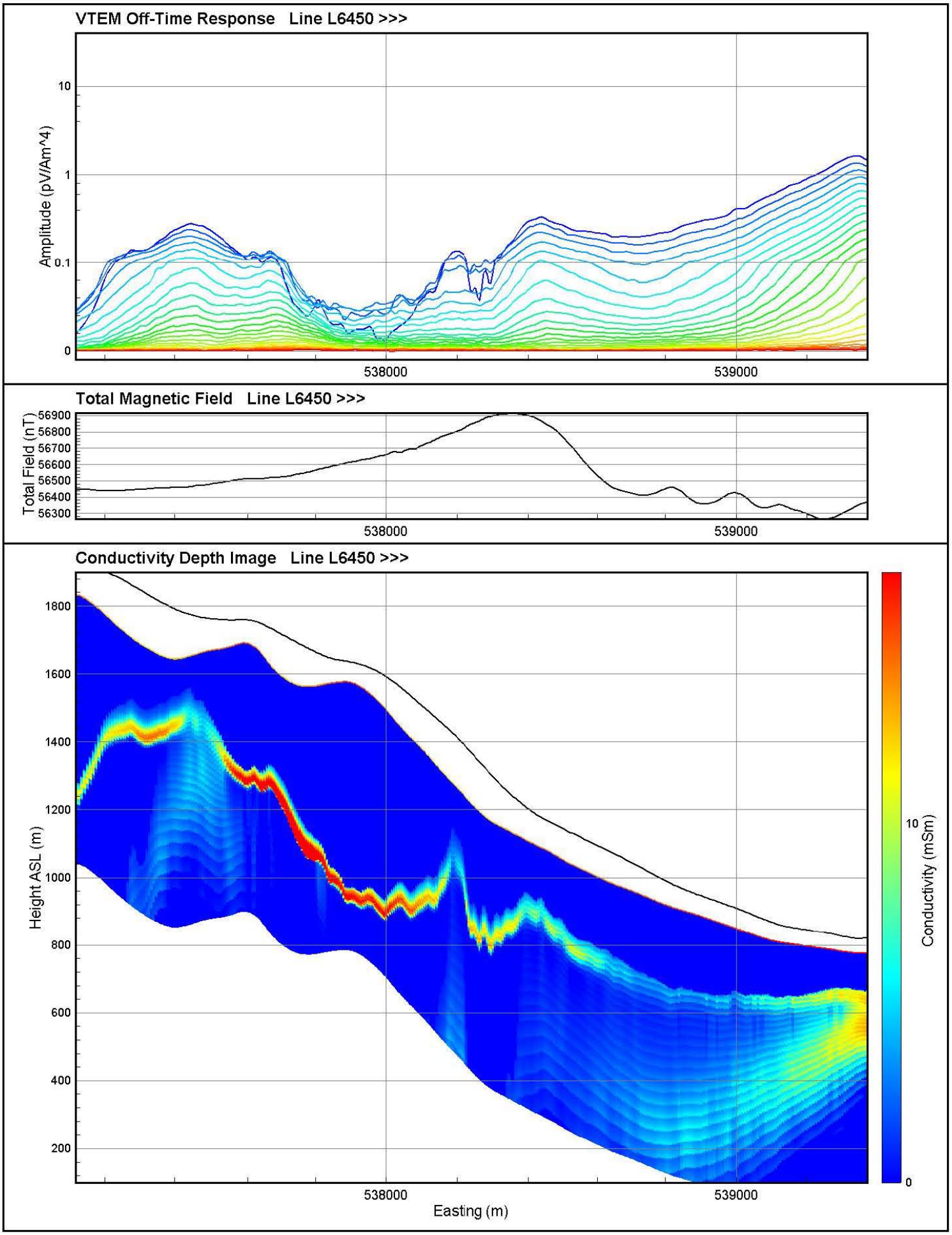
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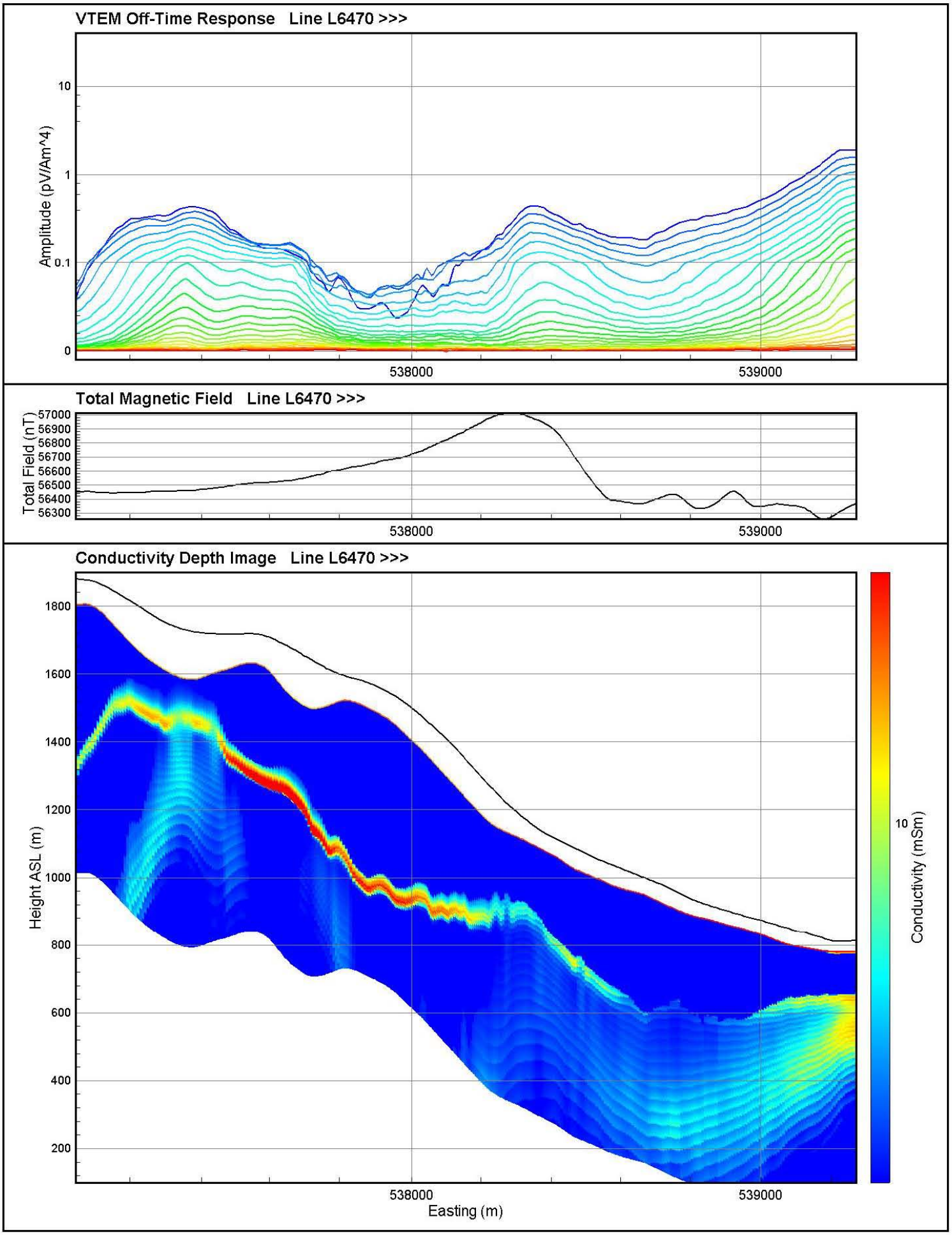
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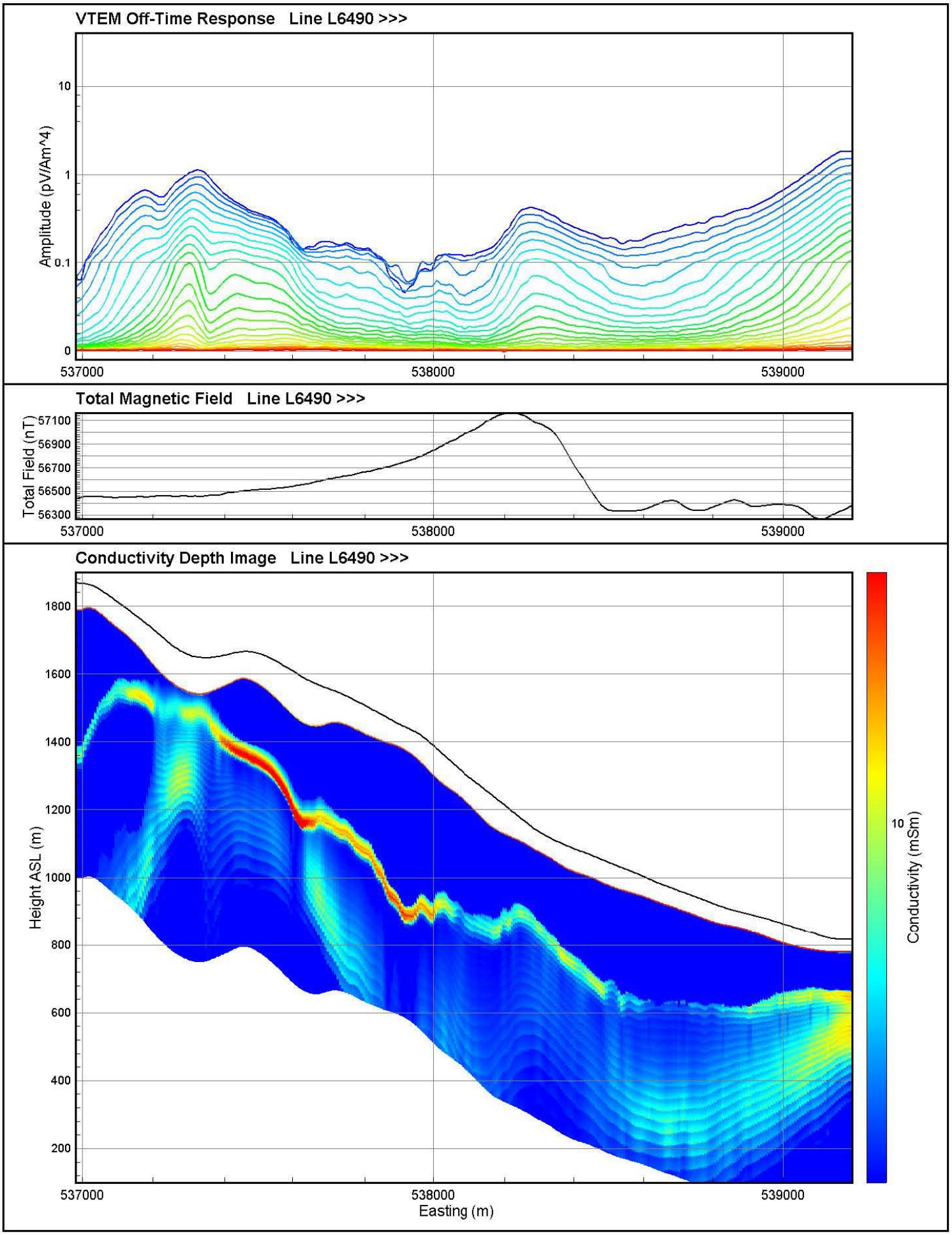
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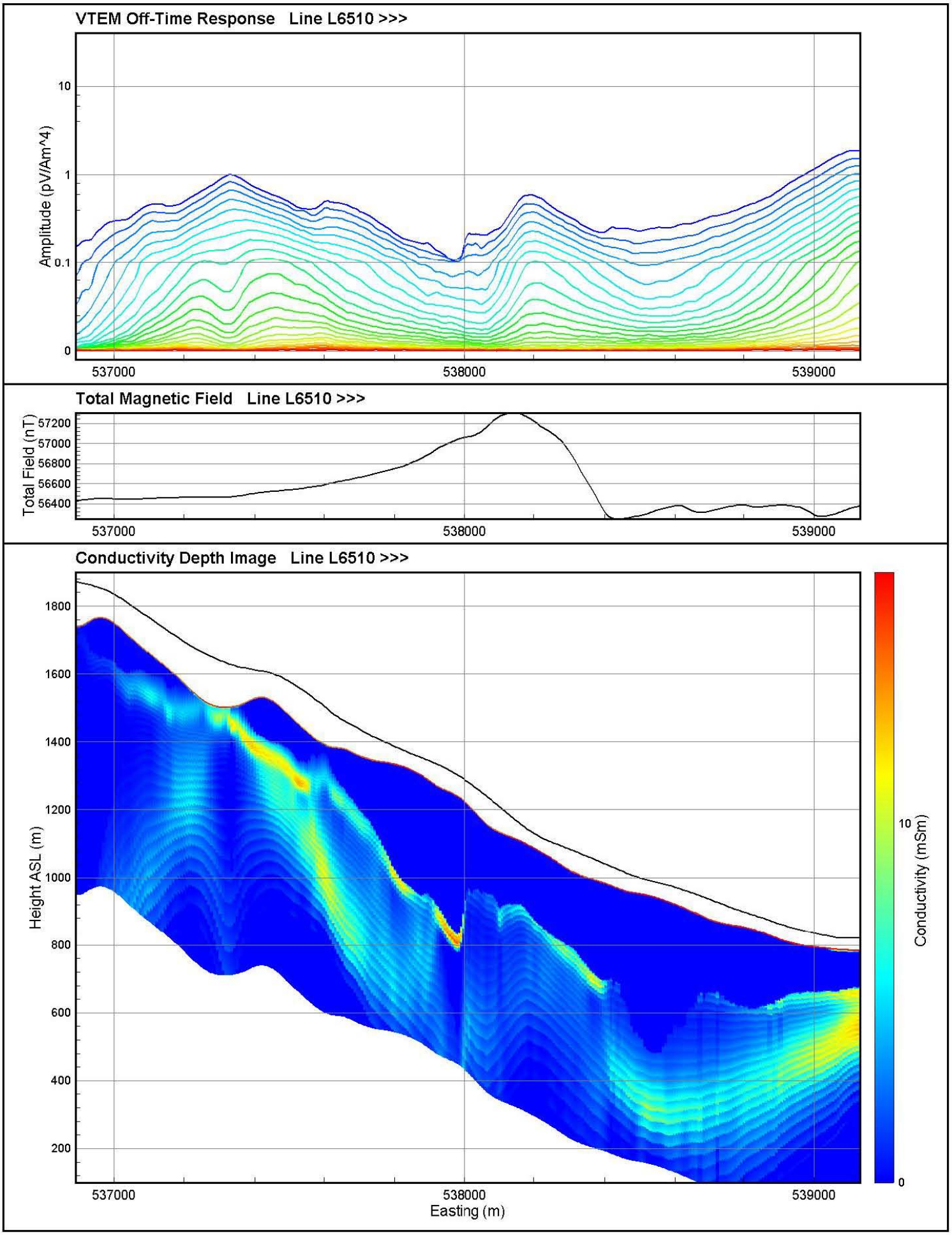
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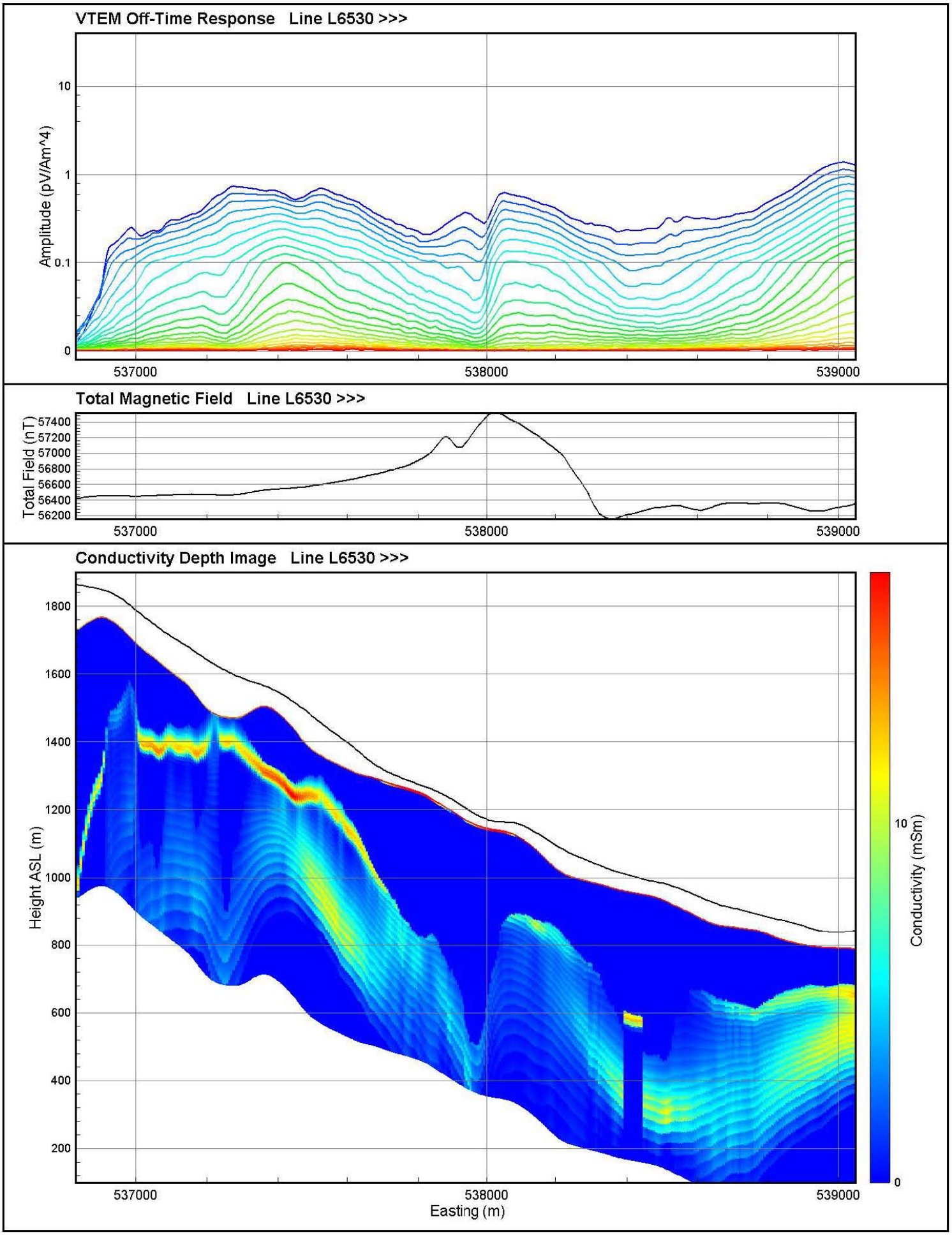
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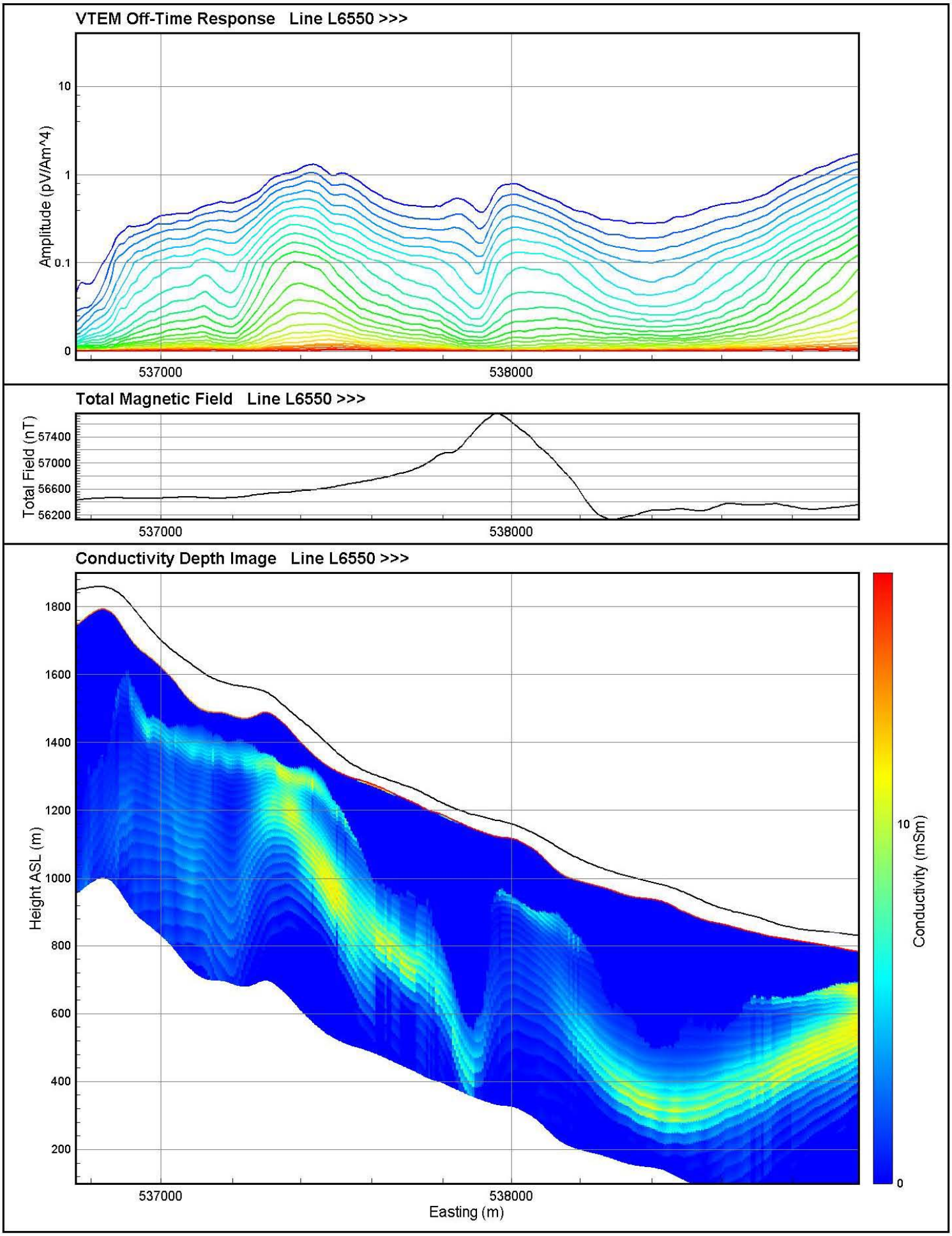
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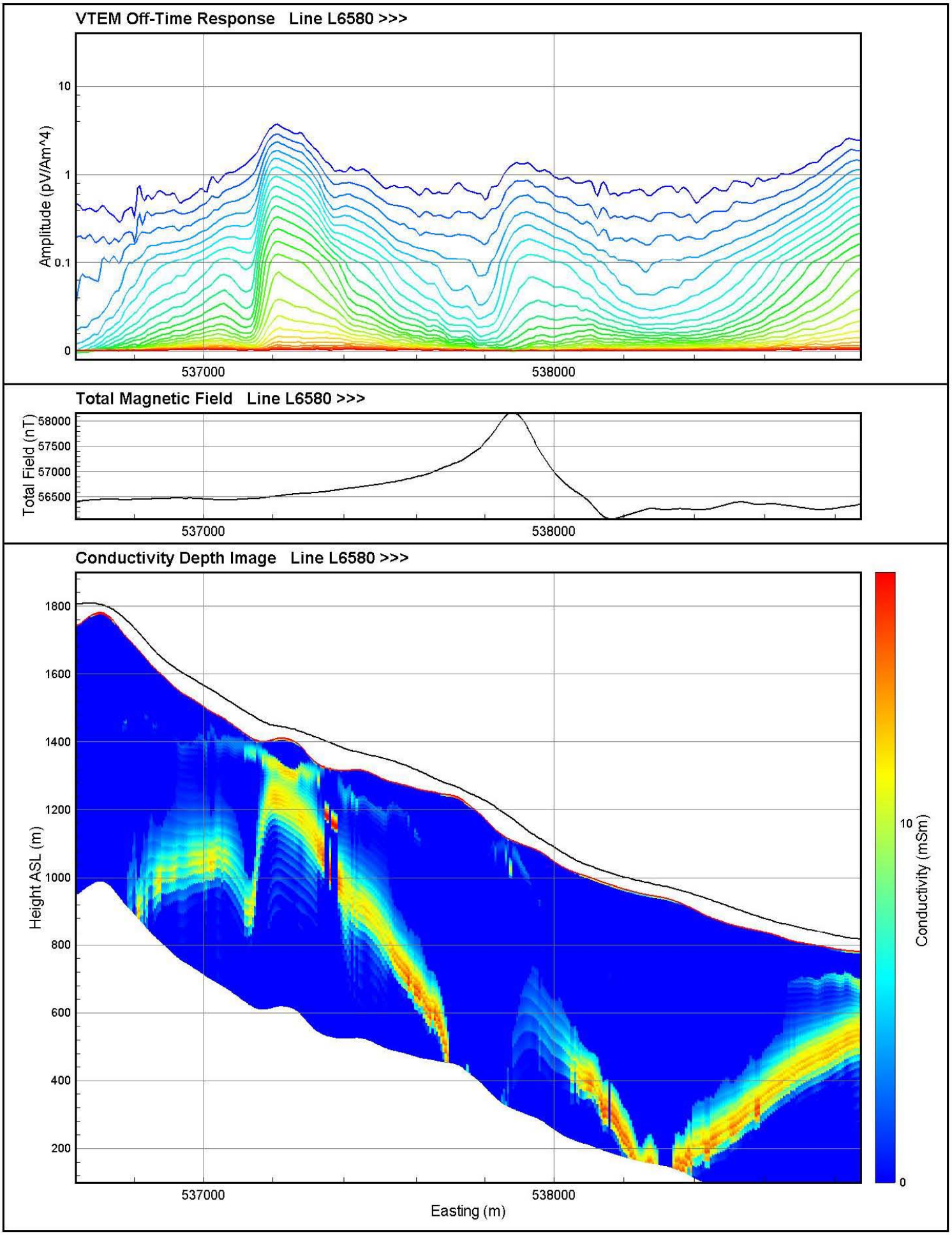
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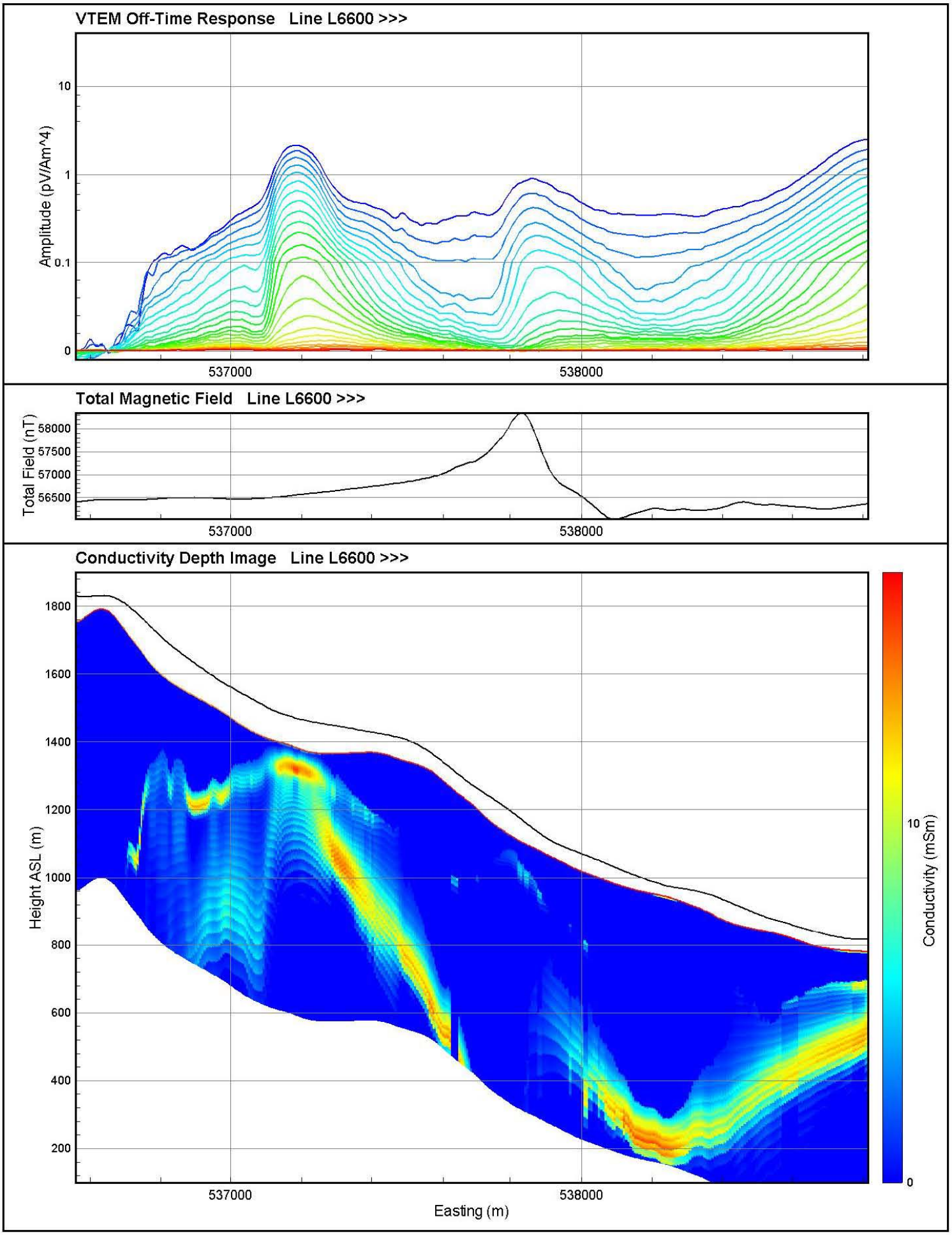
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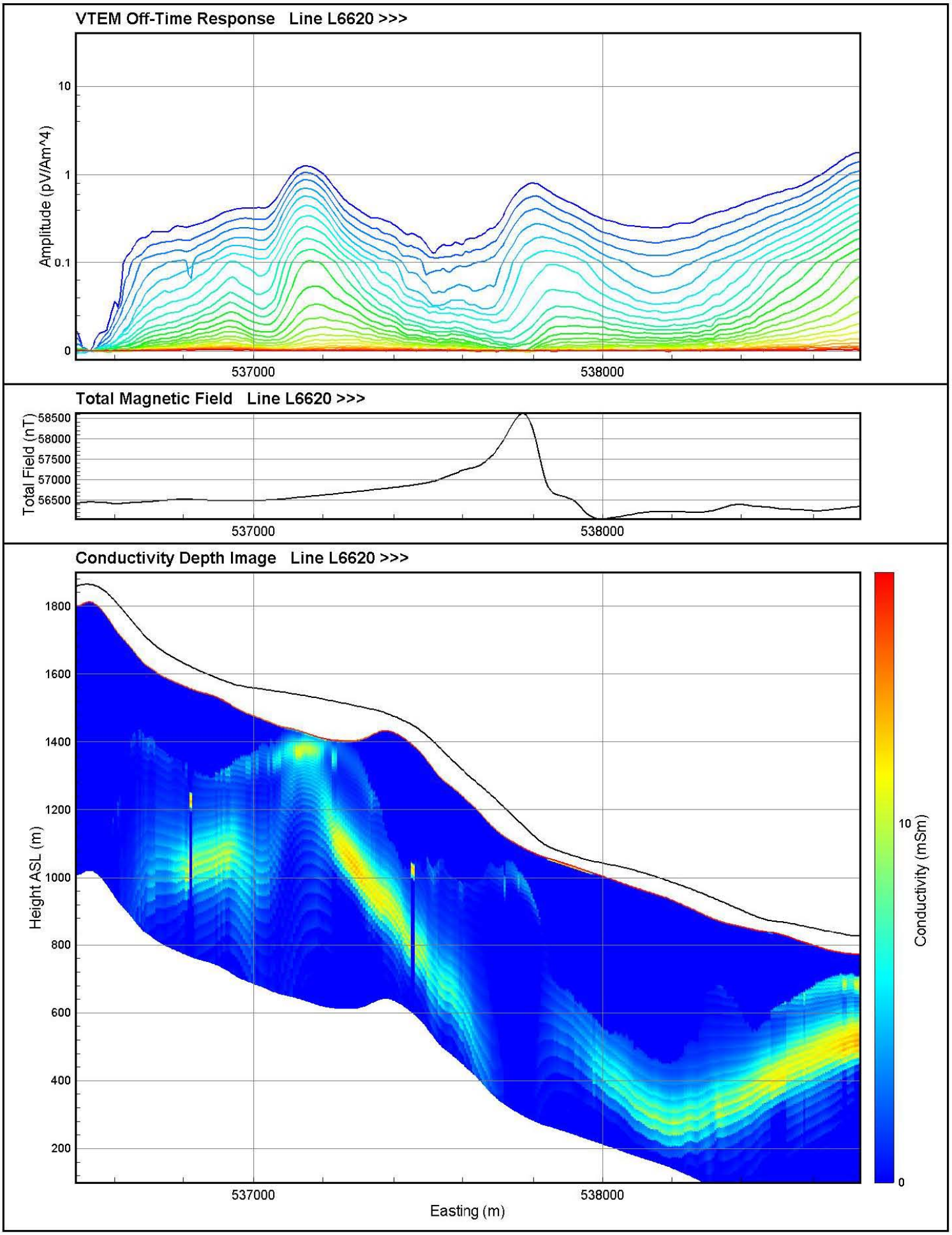
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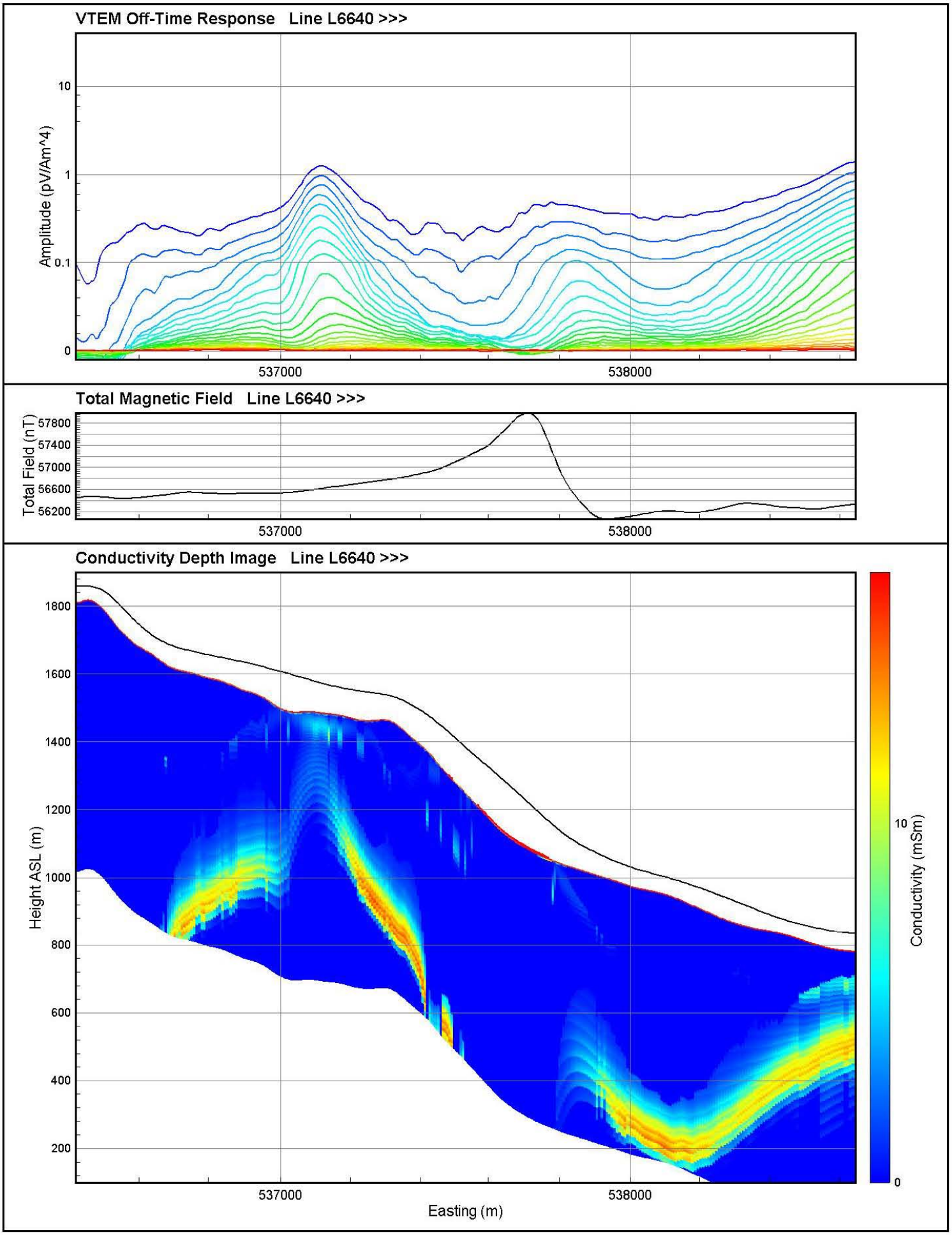
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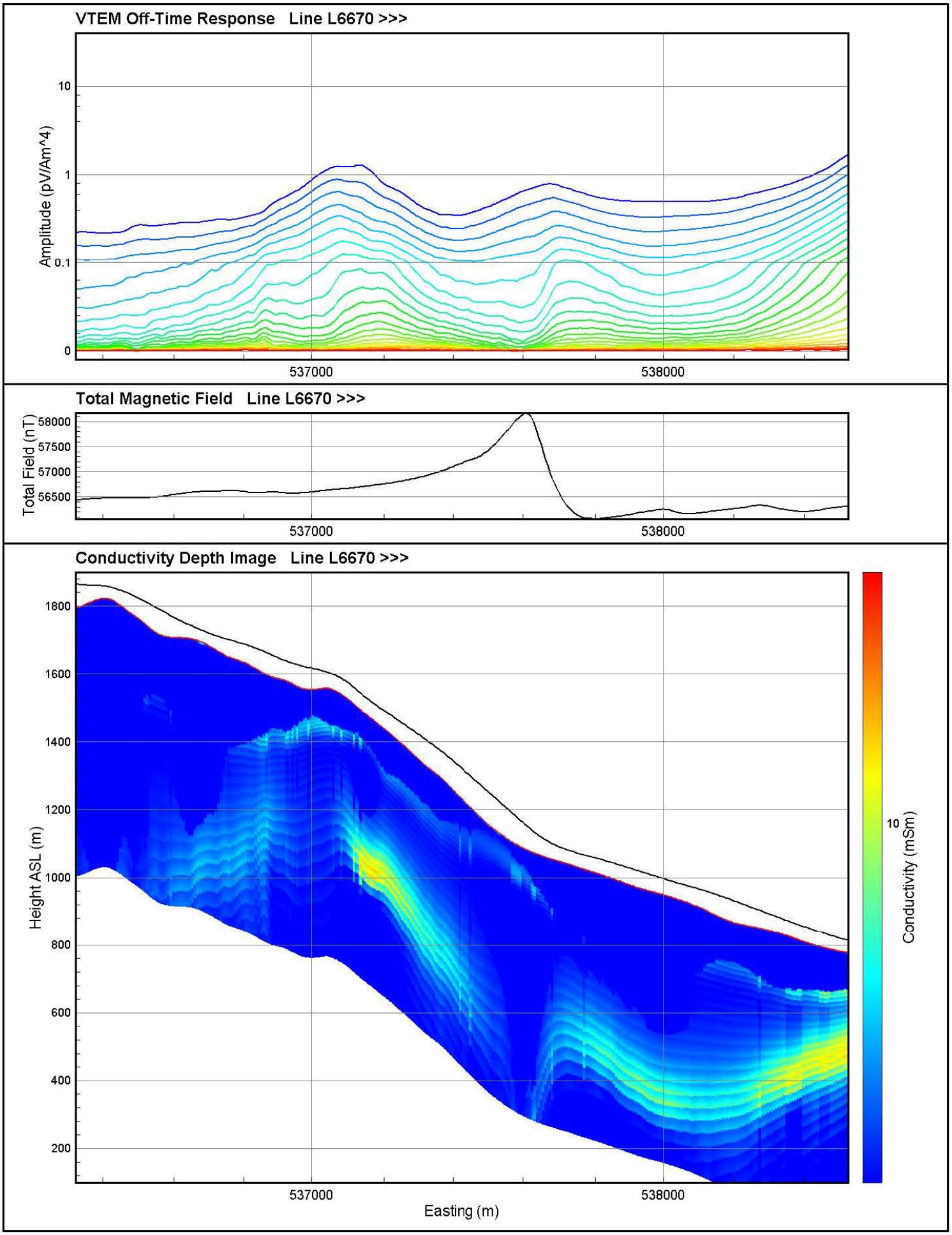
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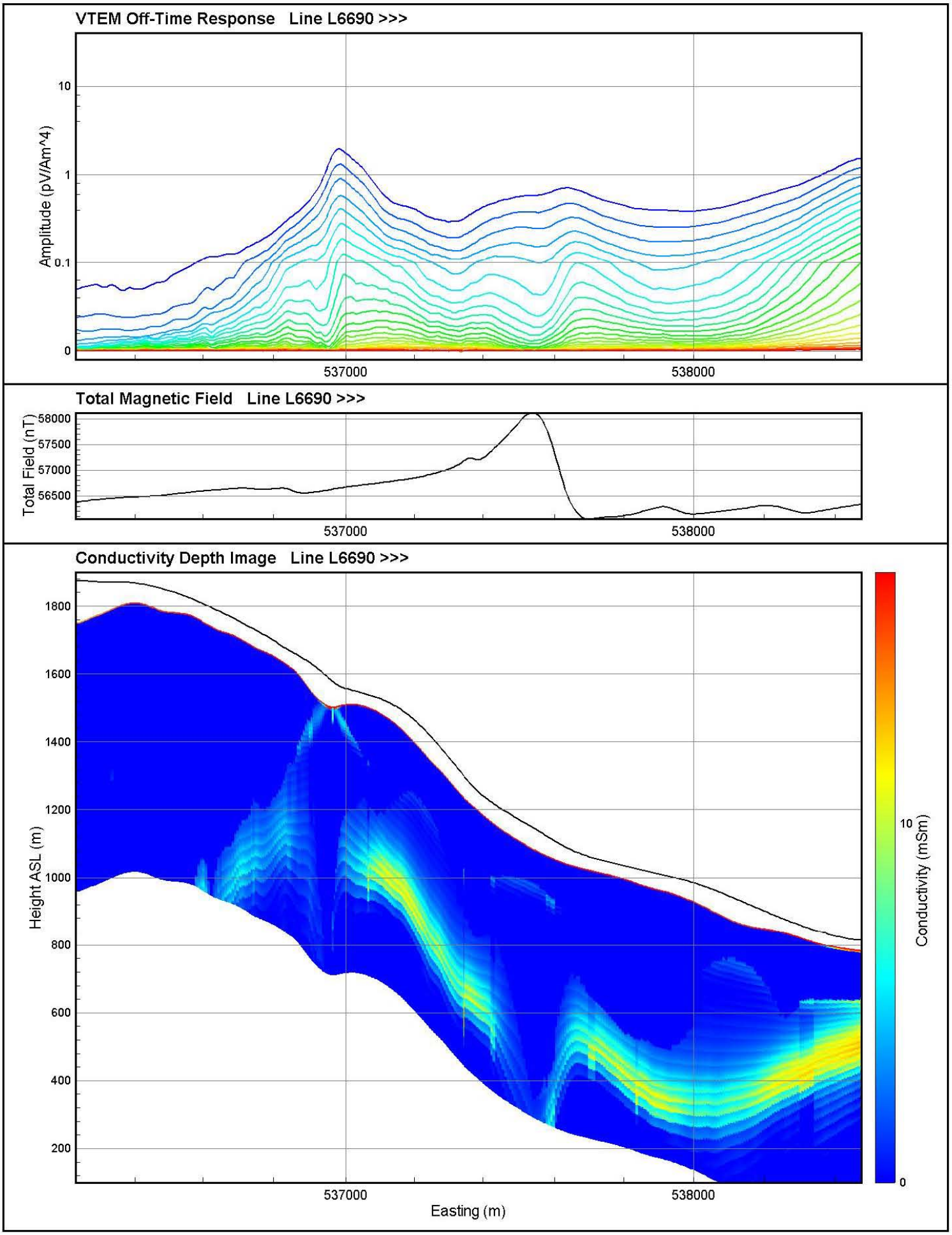
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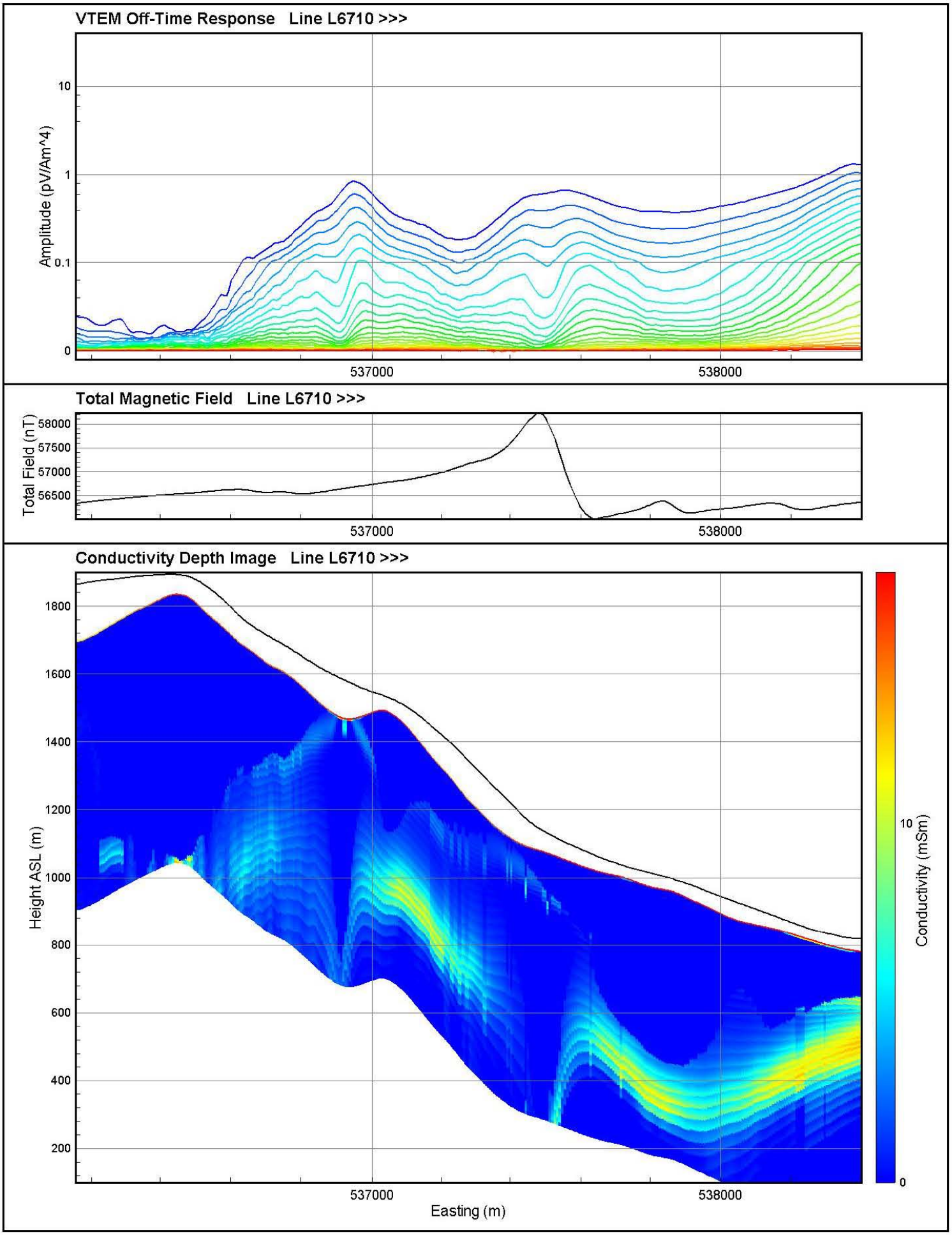
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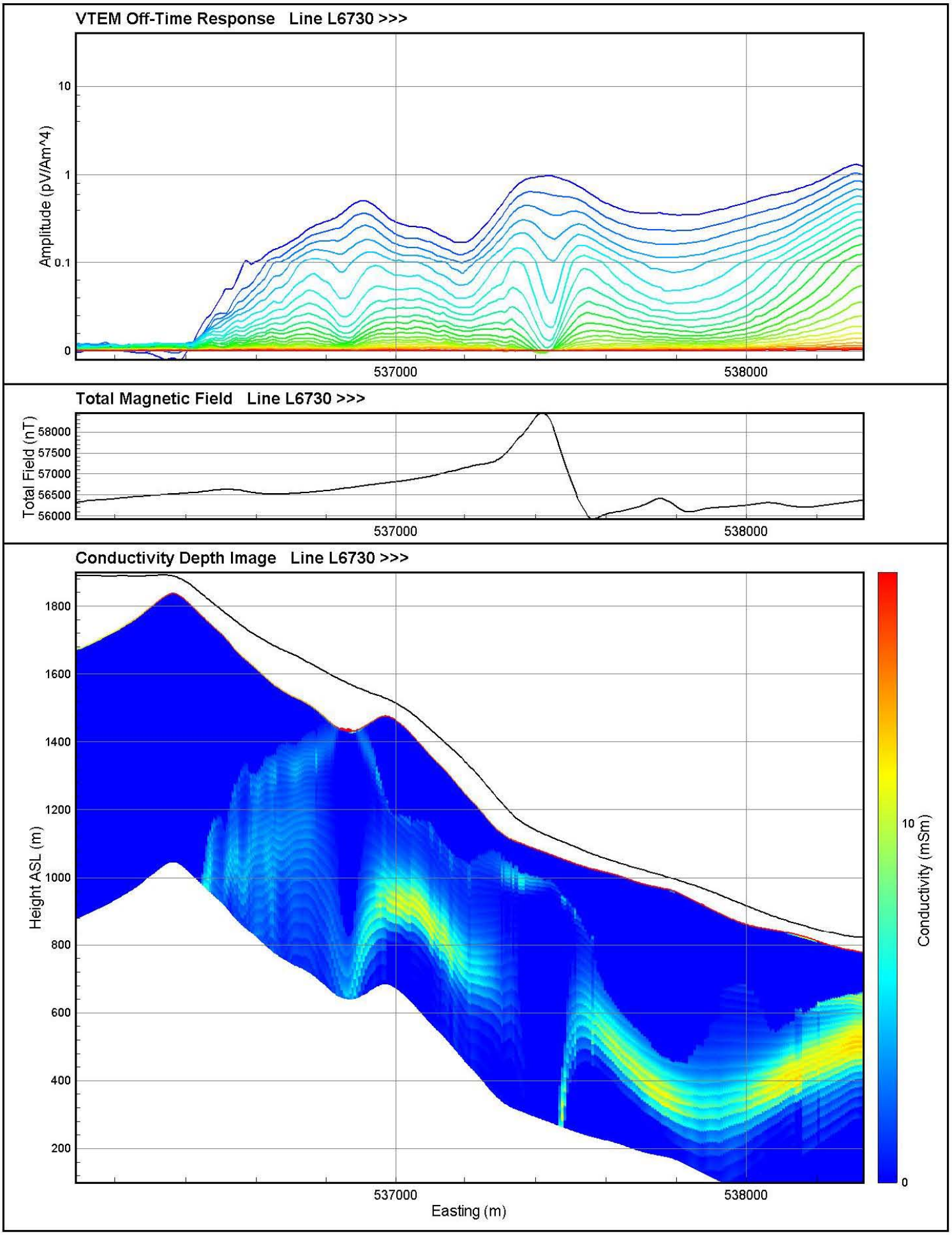
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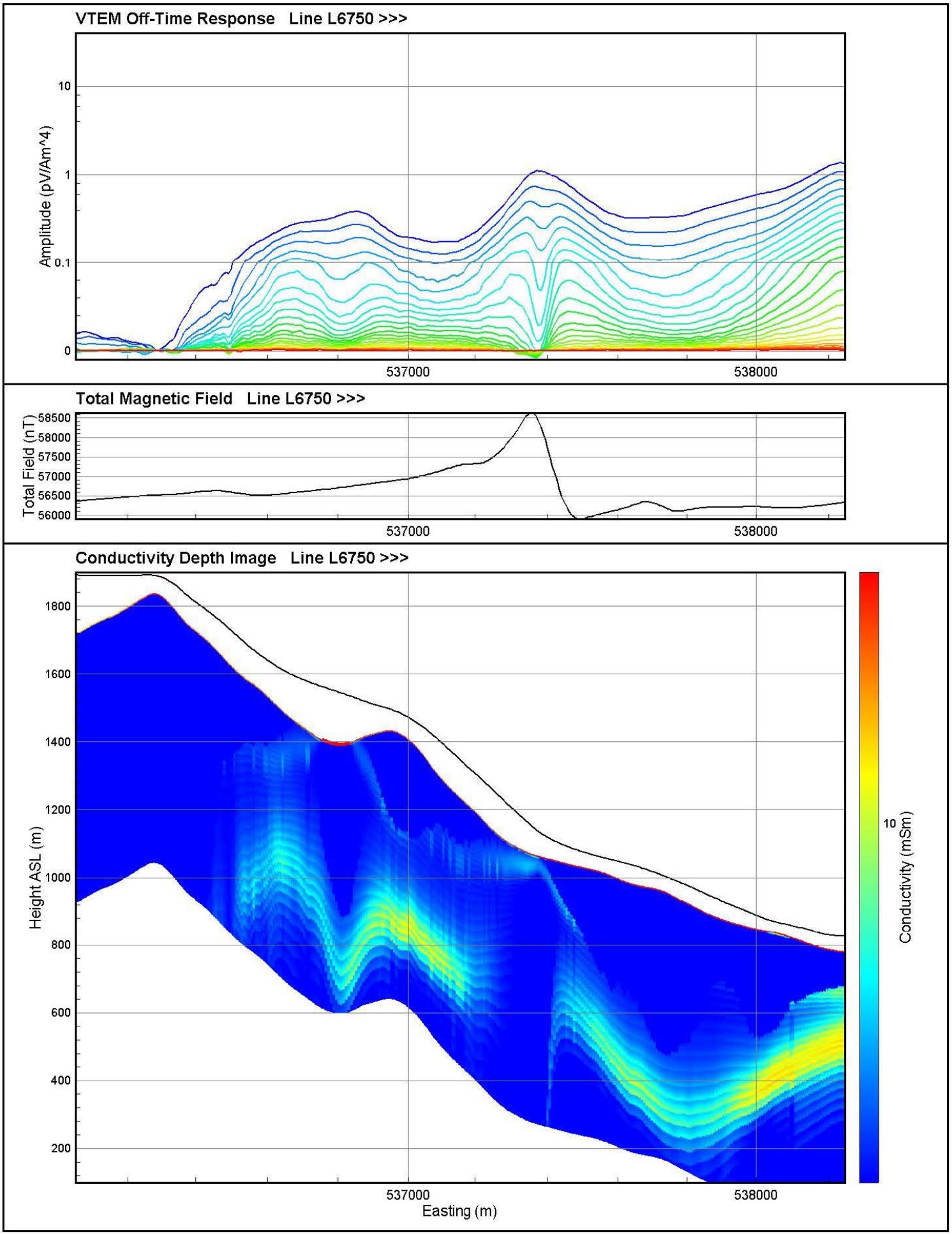
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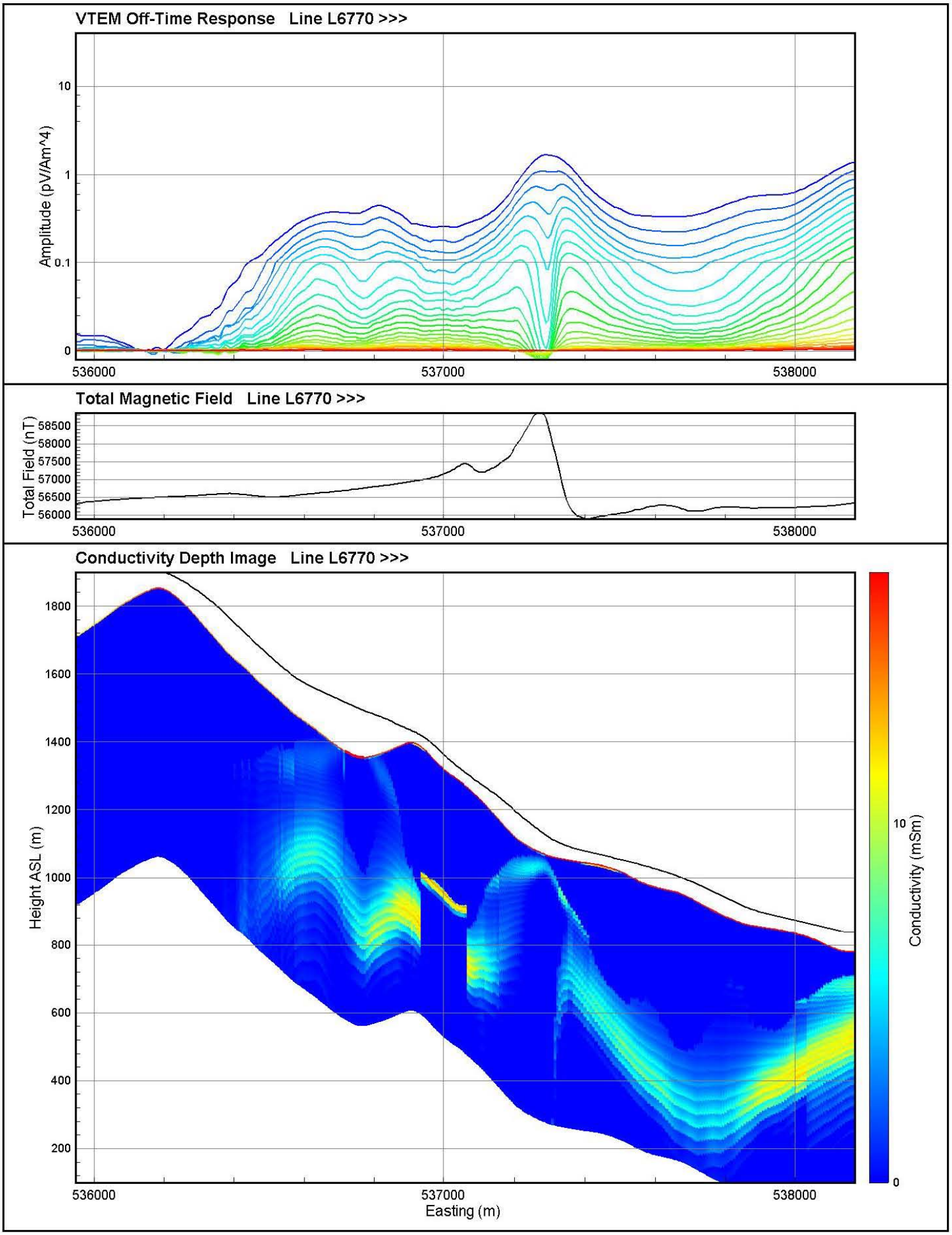
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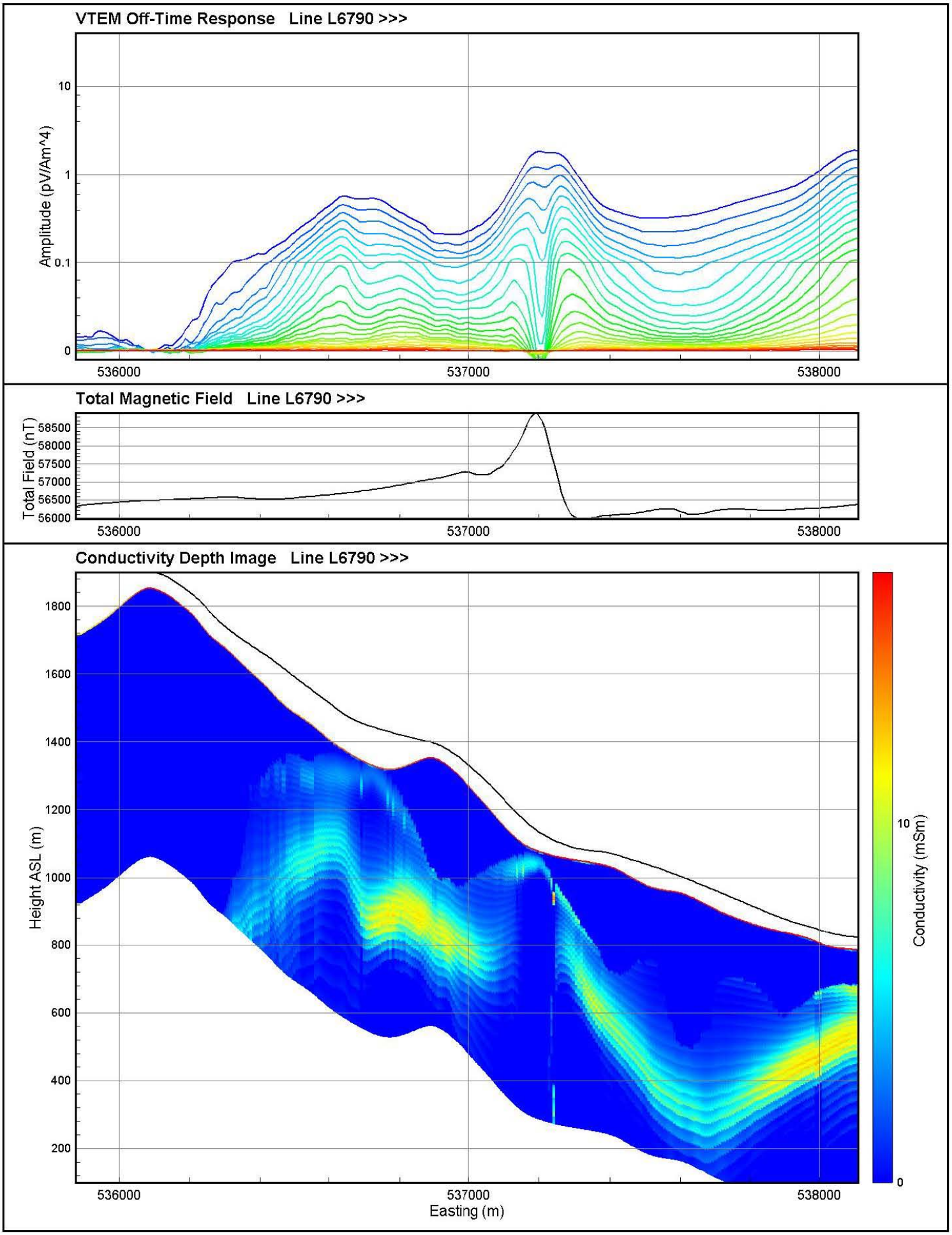
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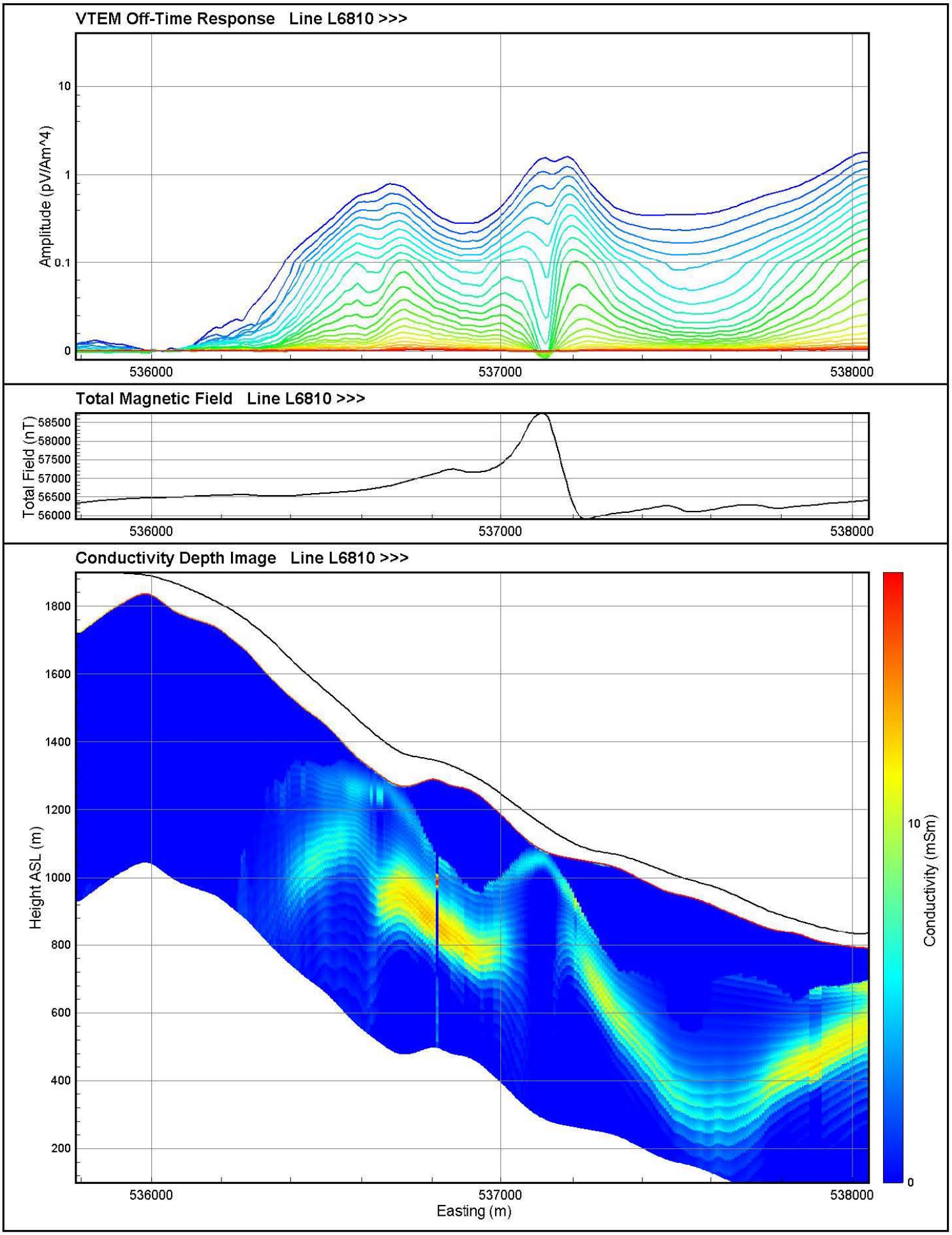
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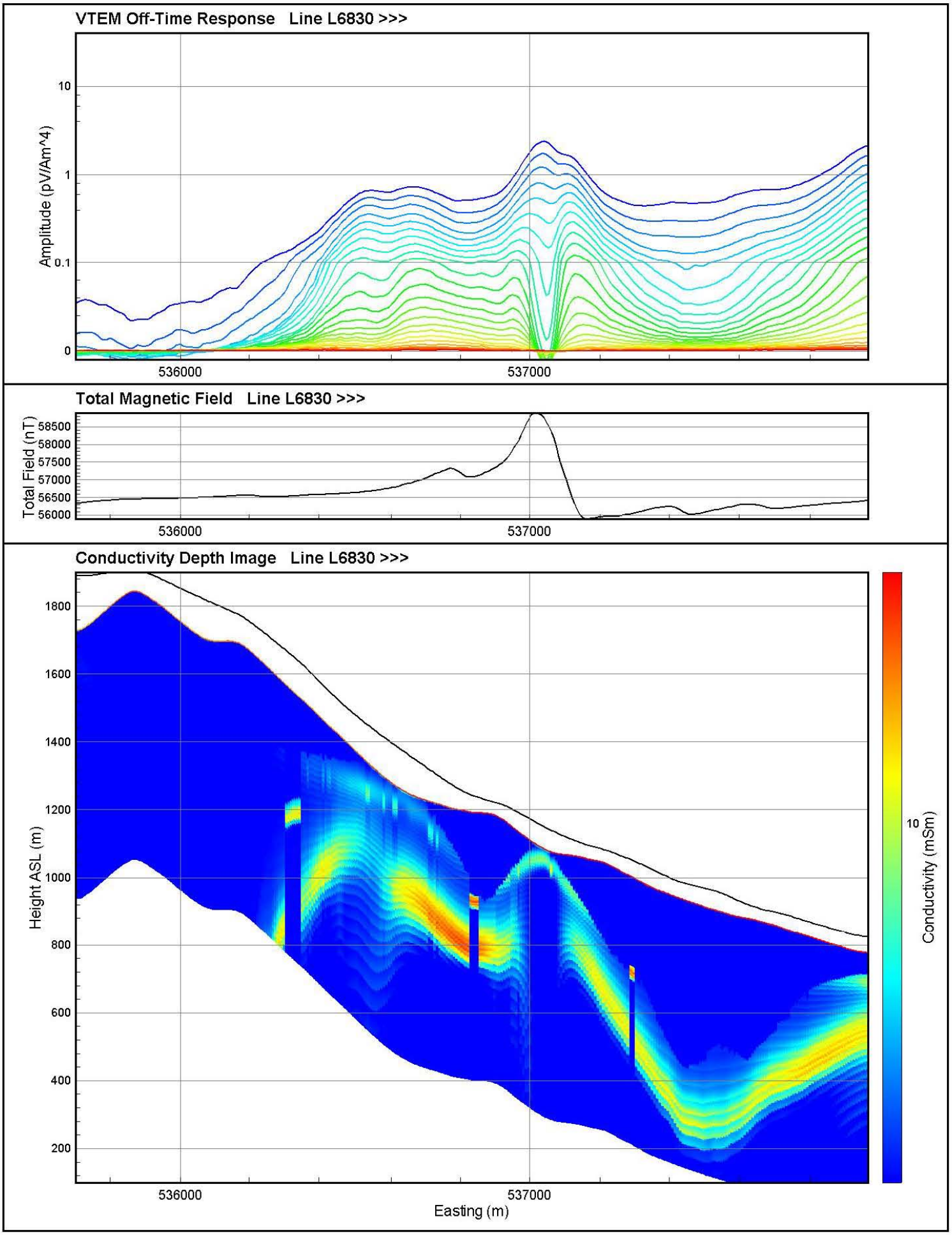
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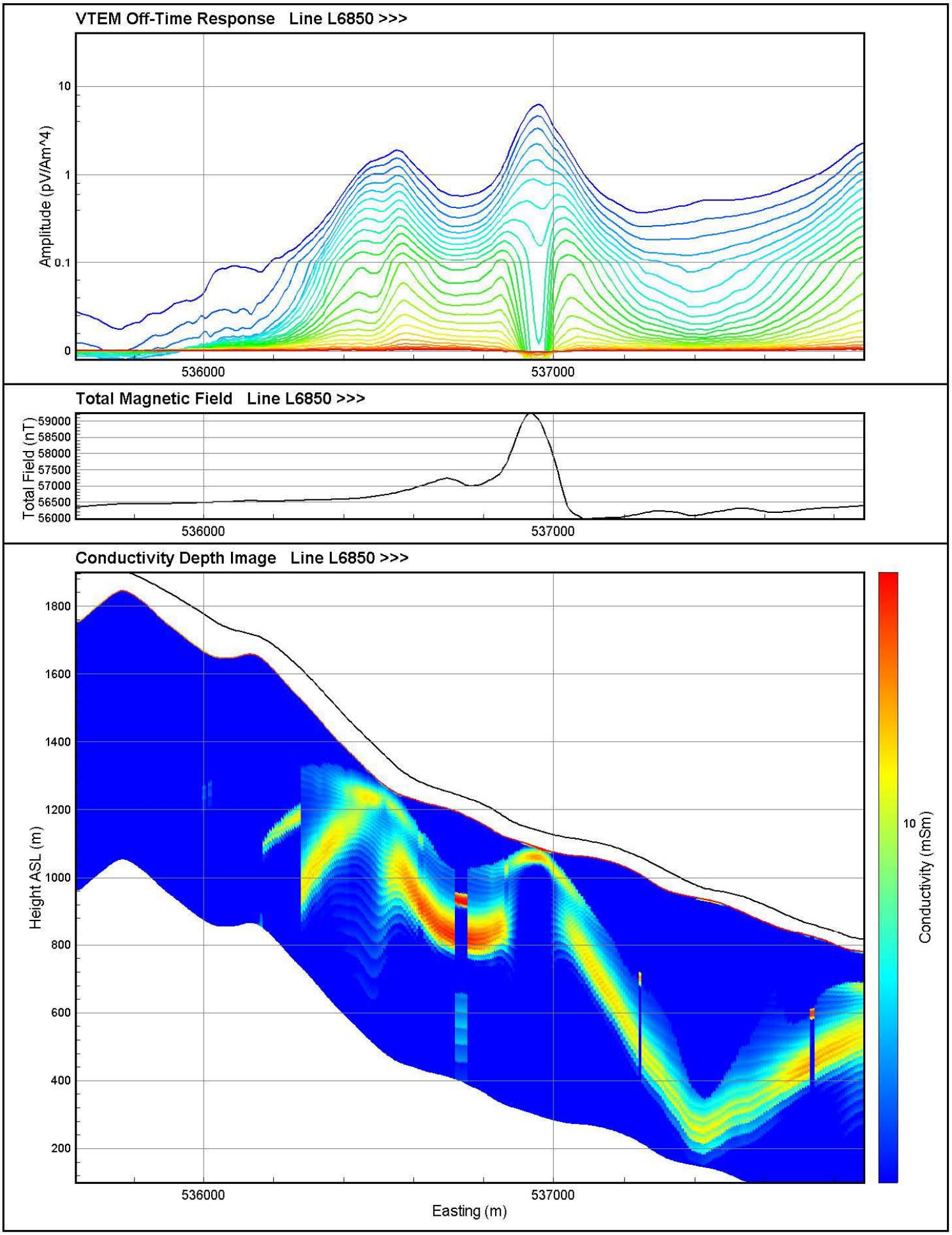
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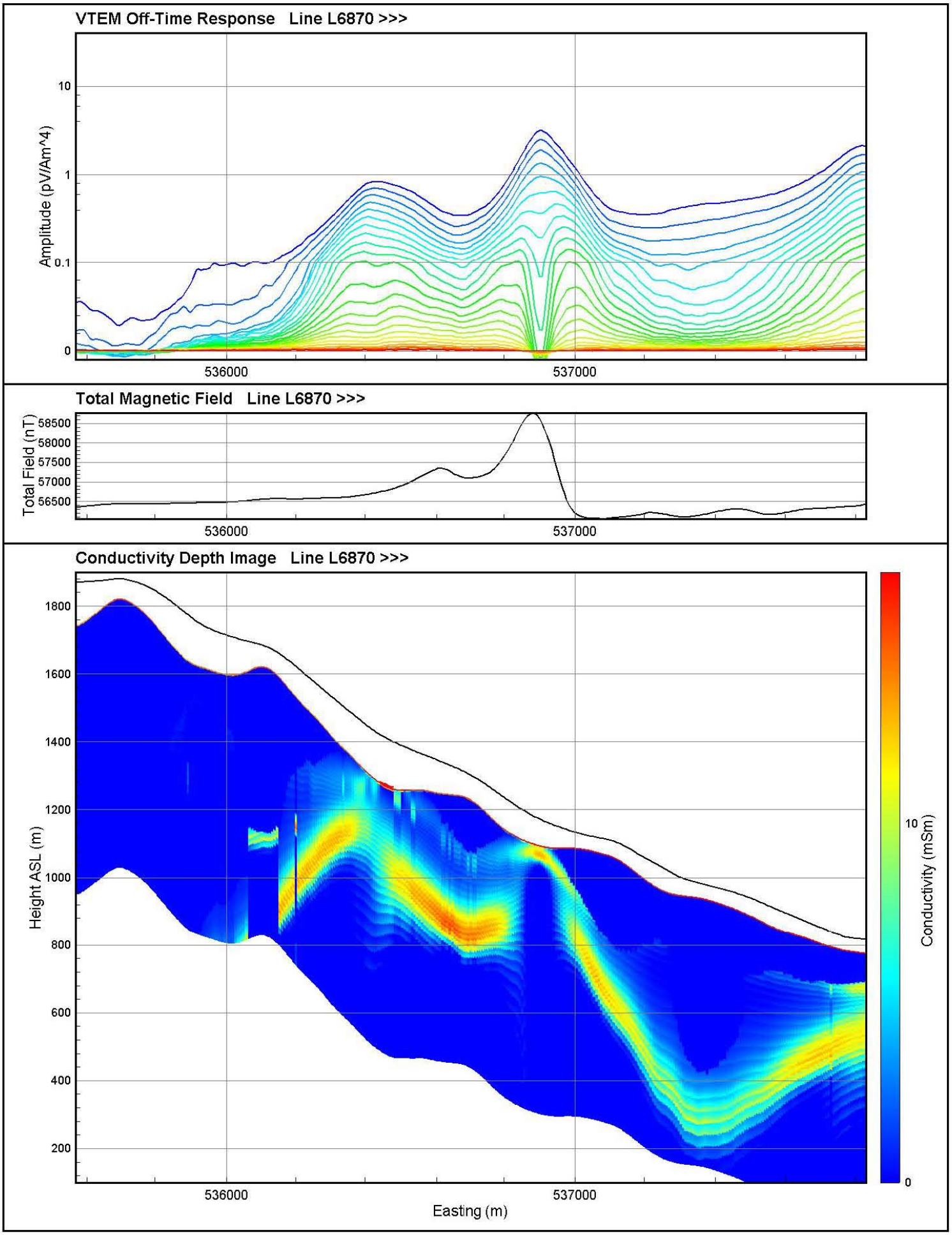
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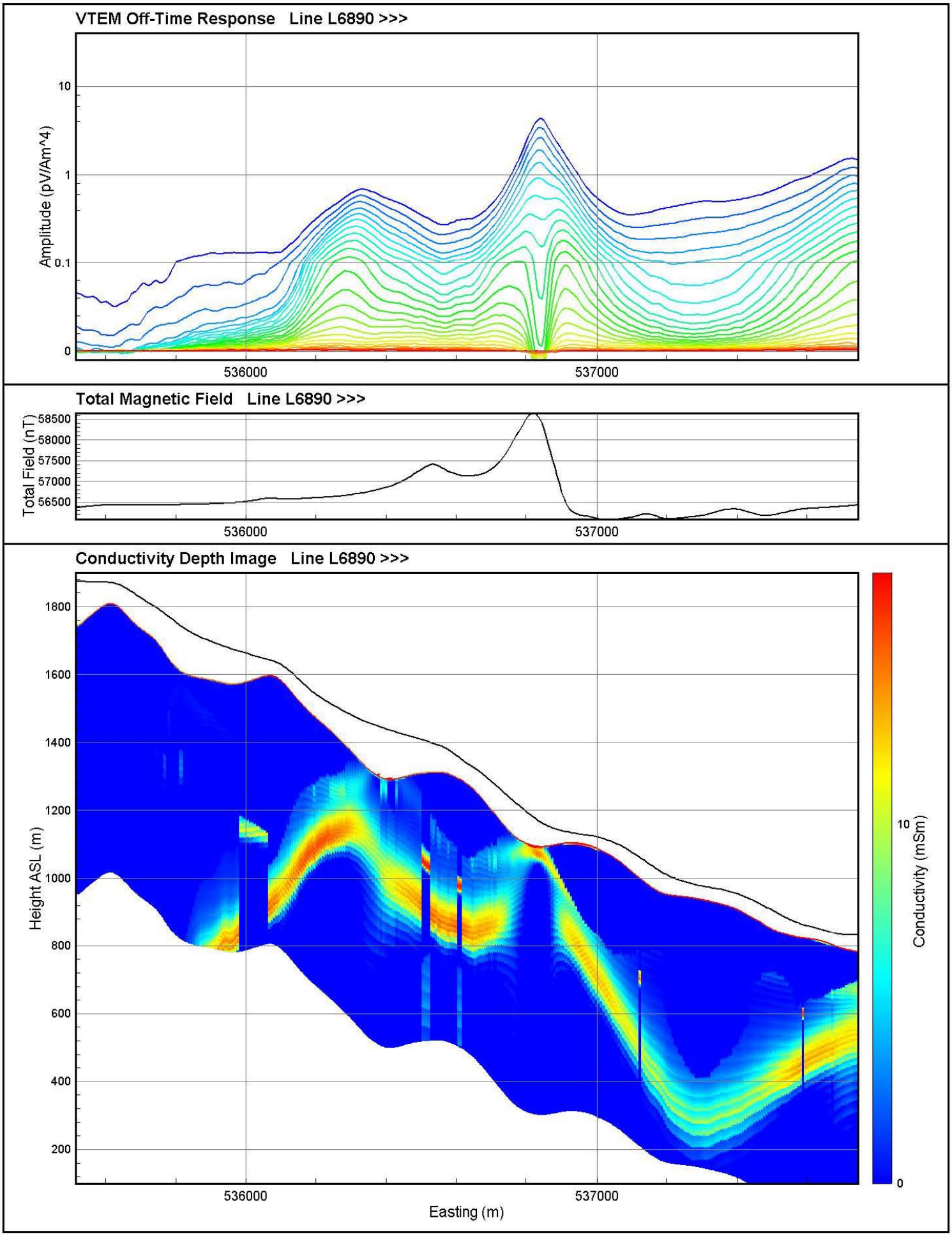
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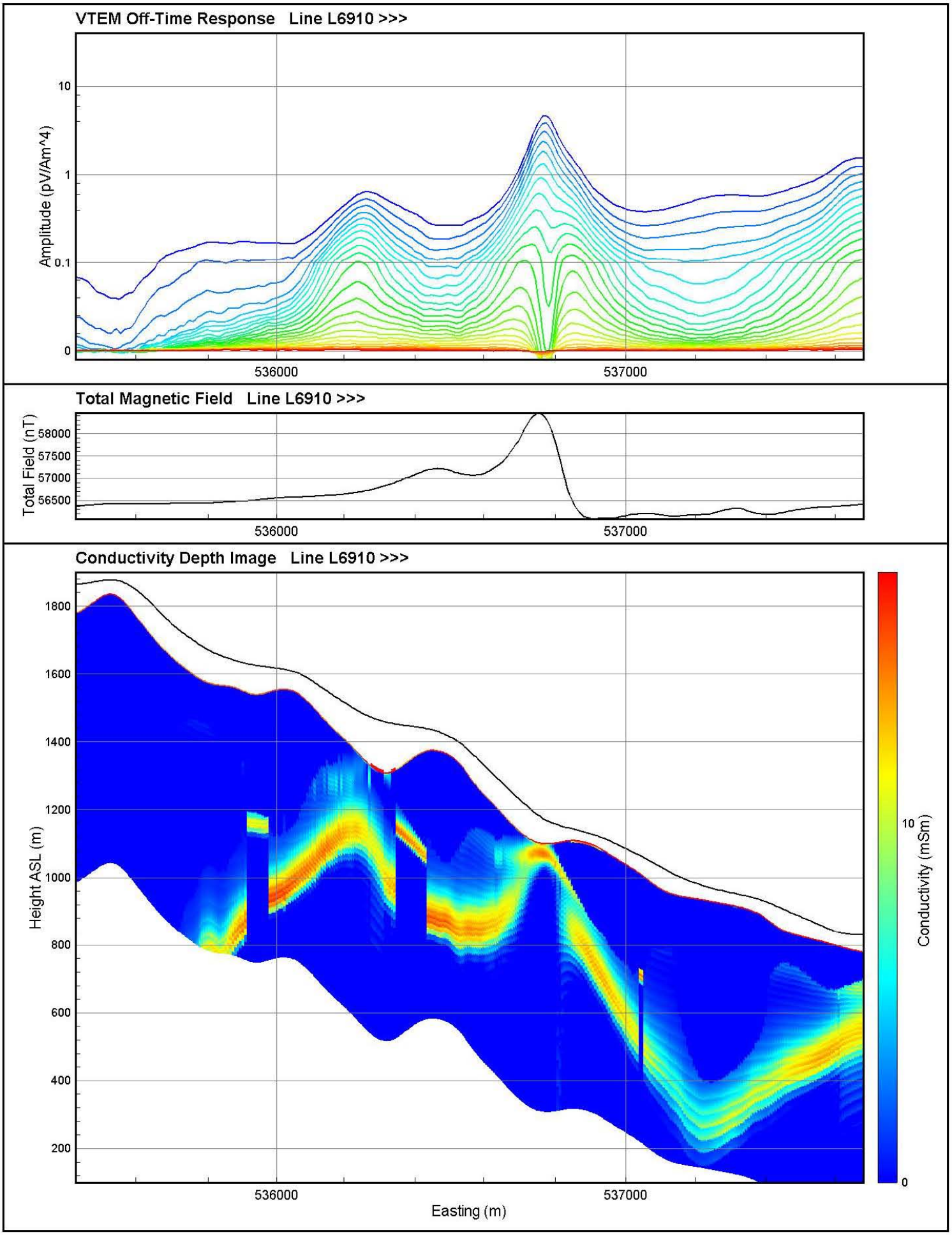
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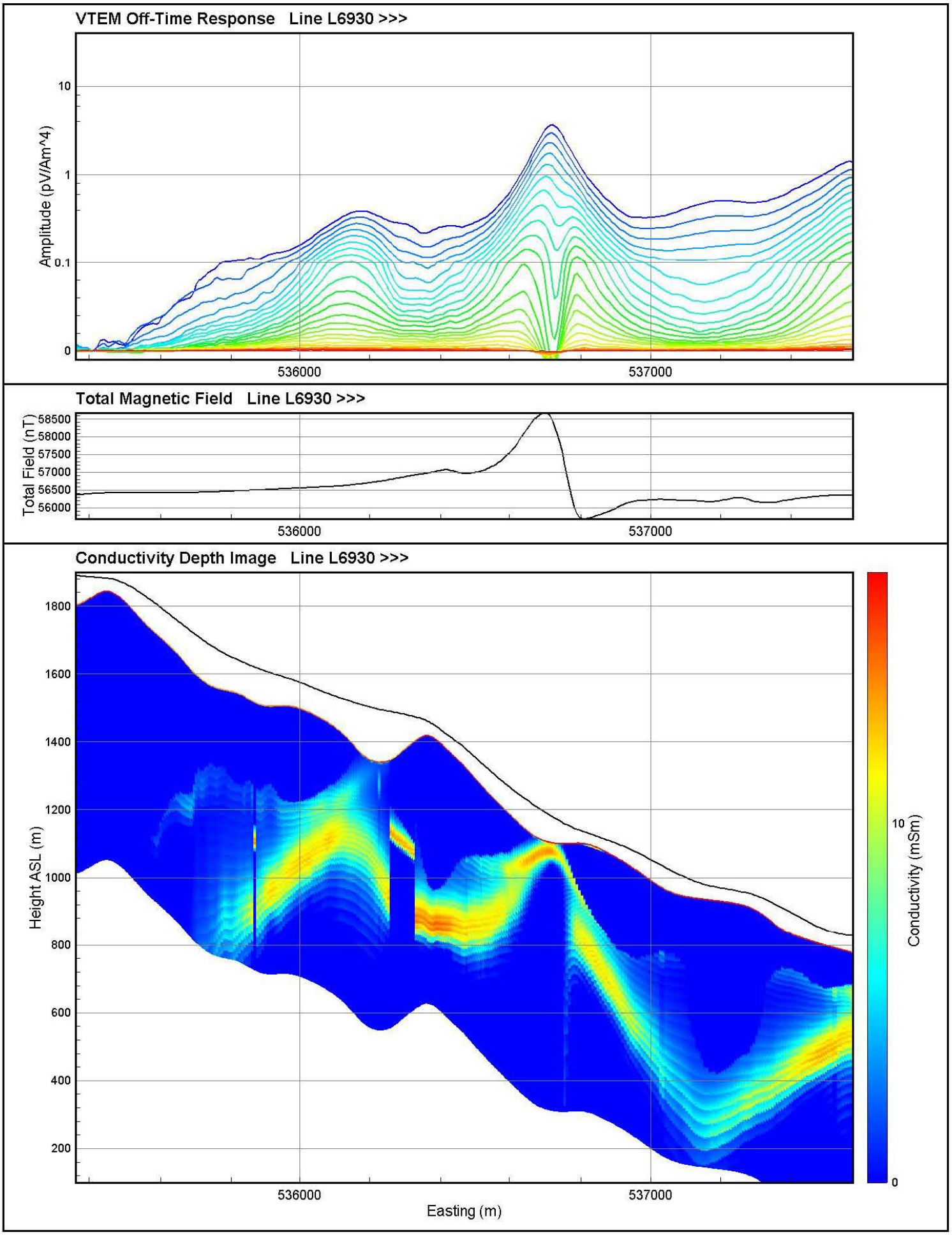
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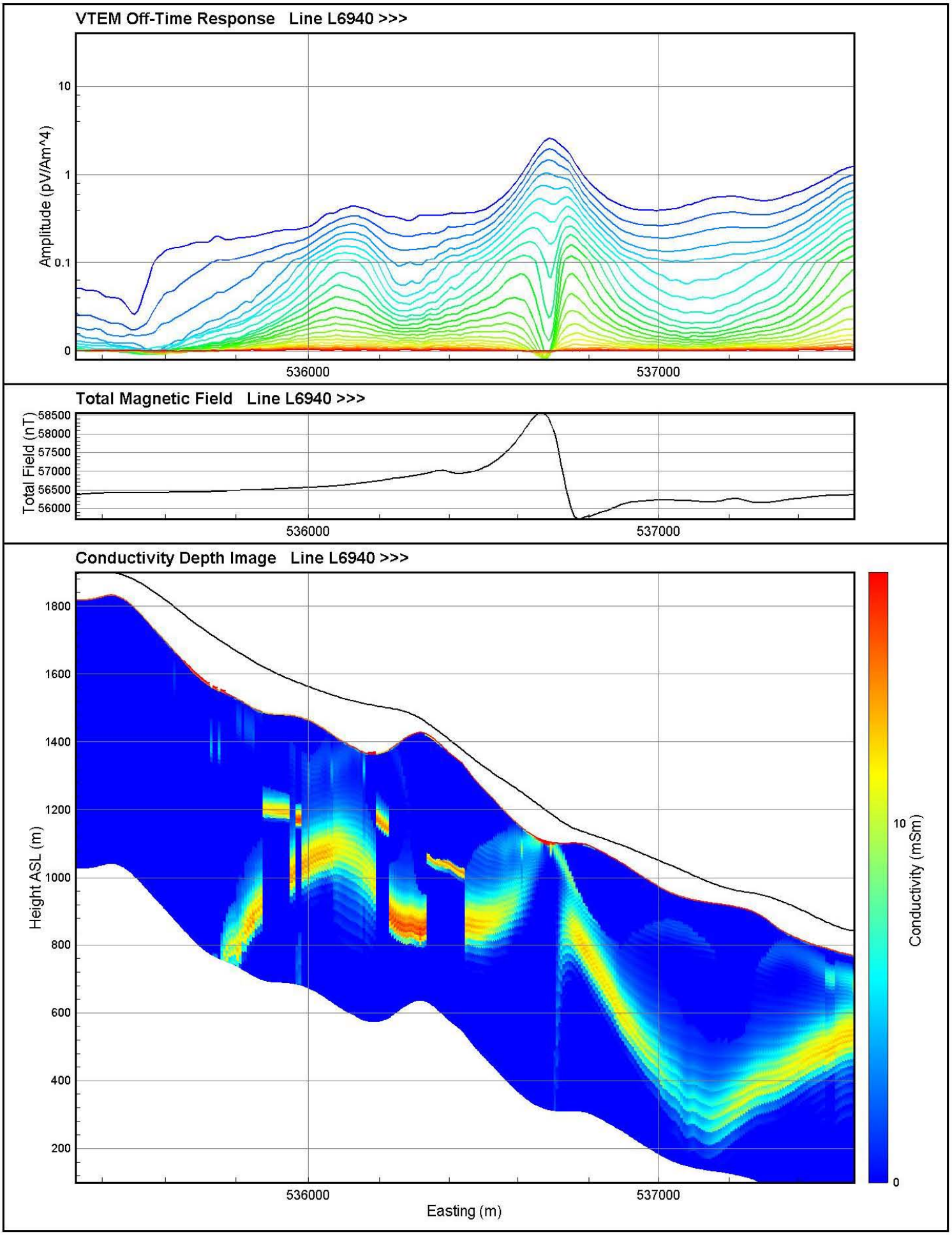
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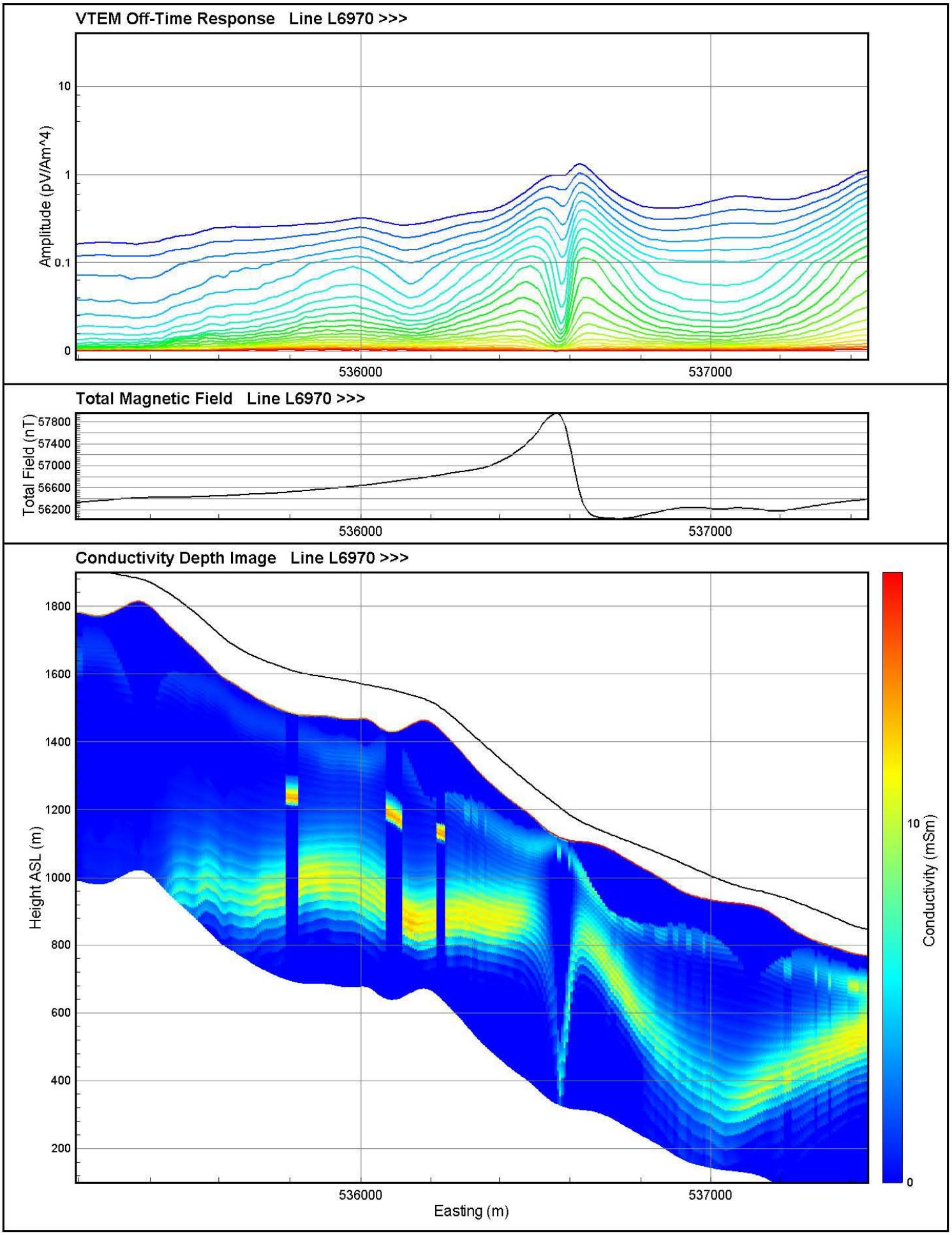
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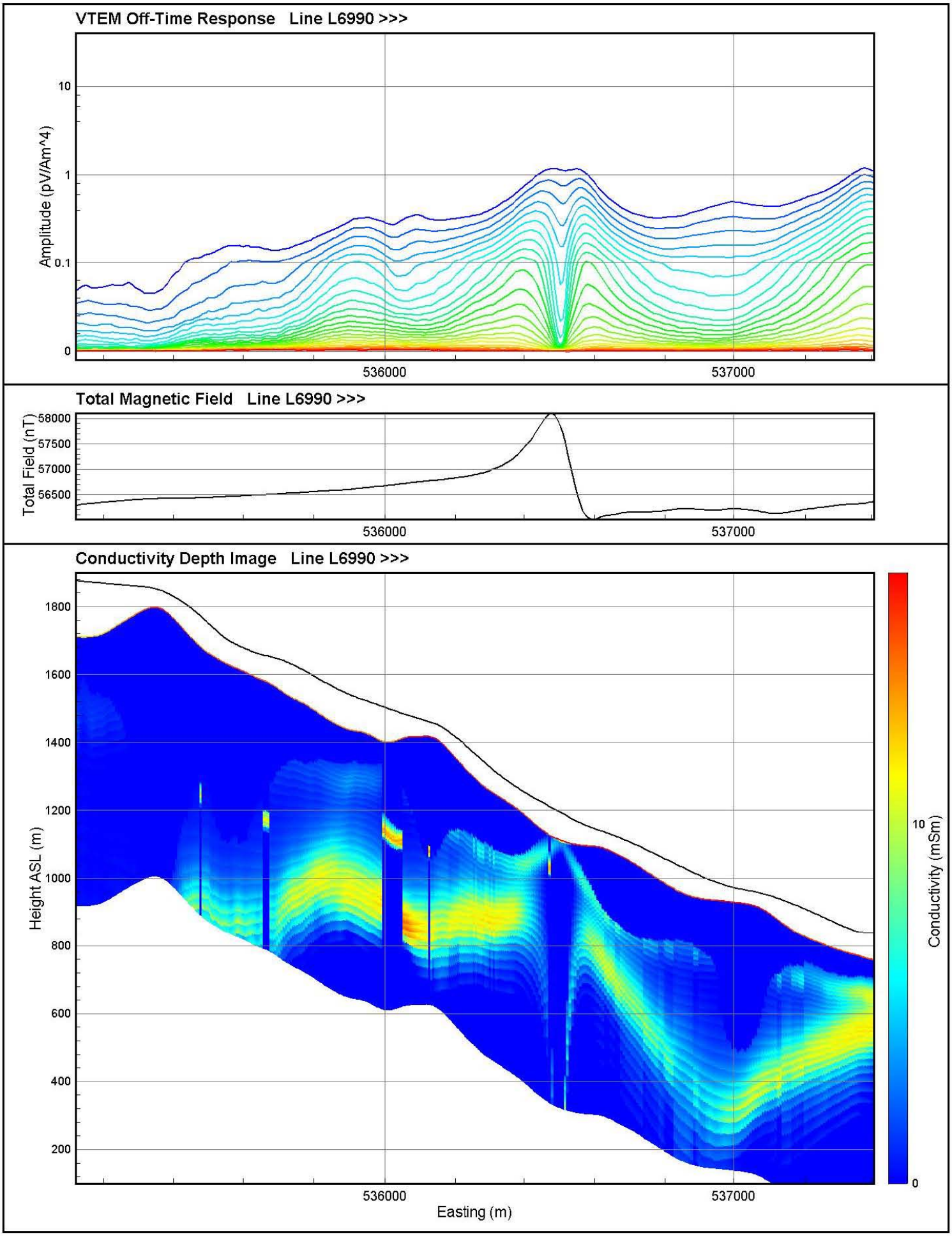
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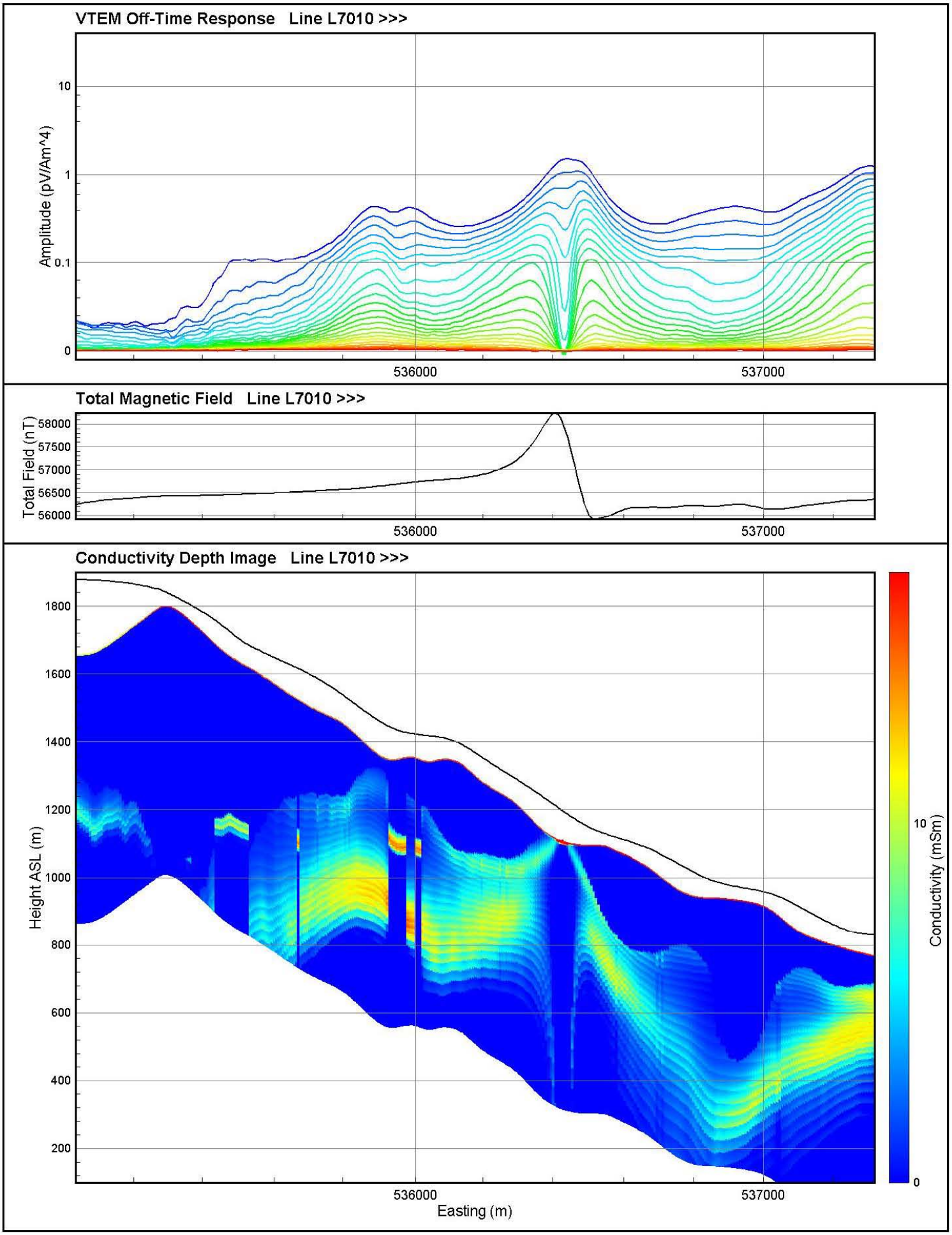
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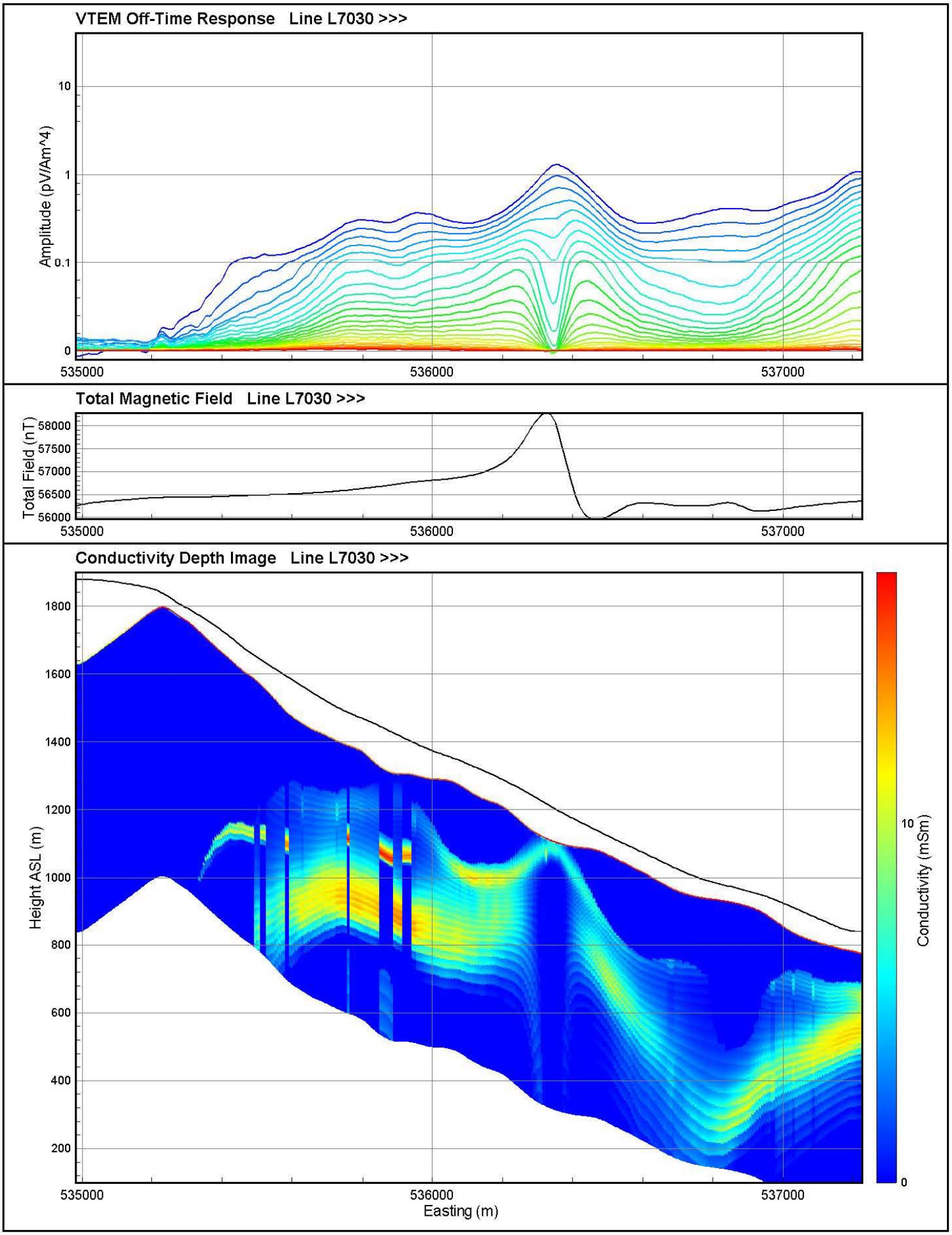
GNME - Yukon VTEM Survey
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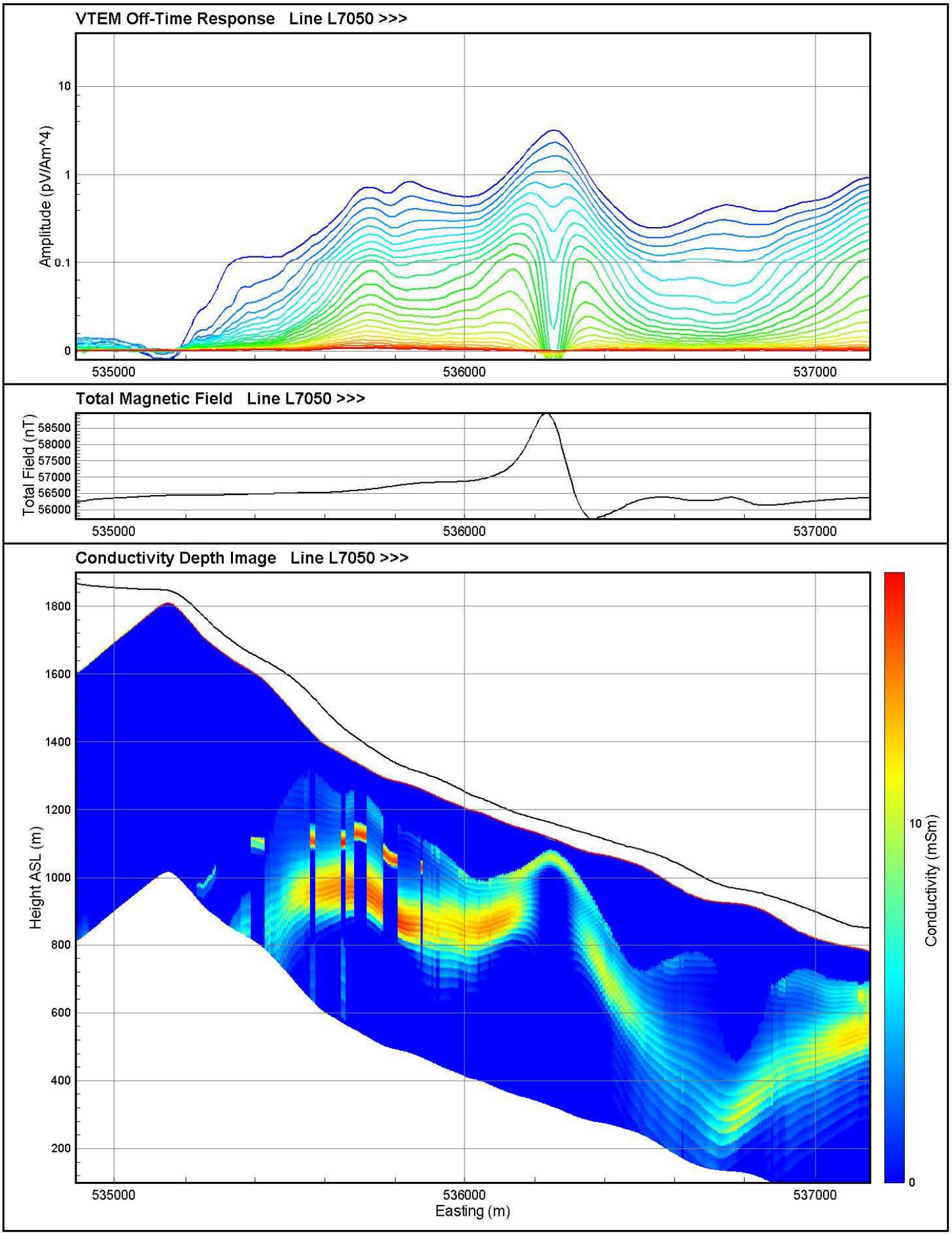
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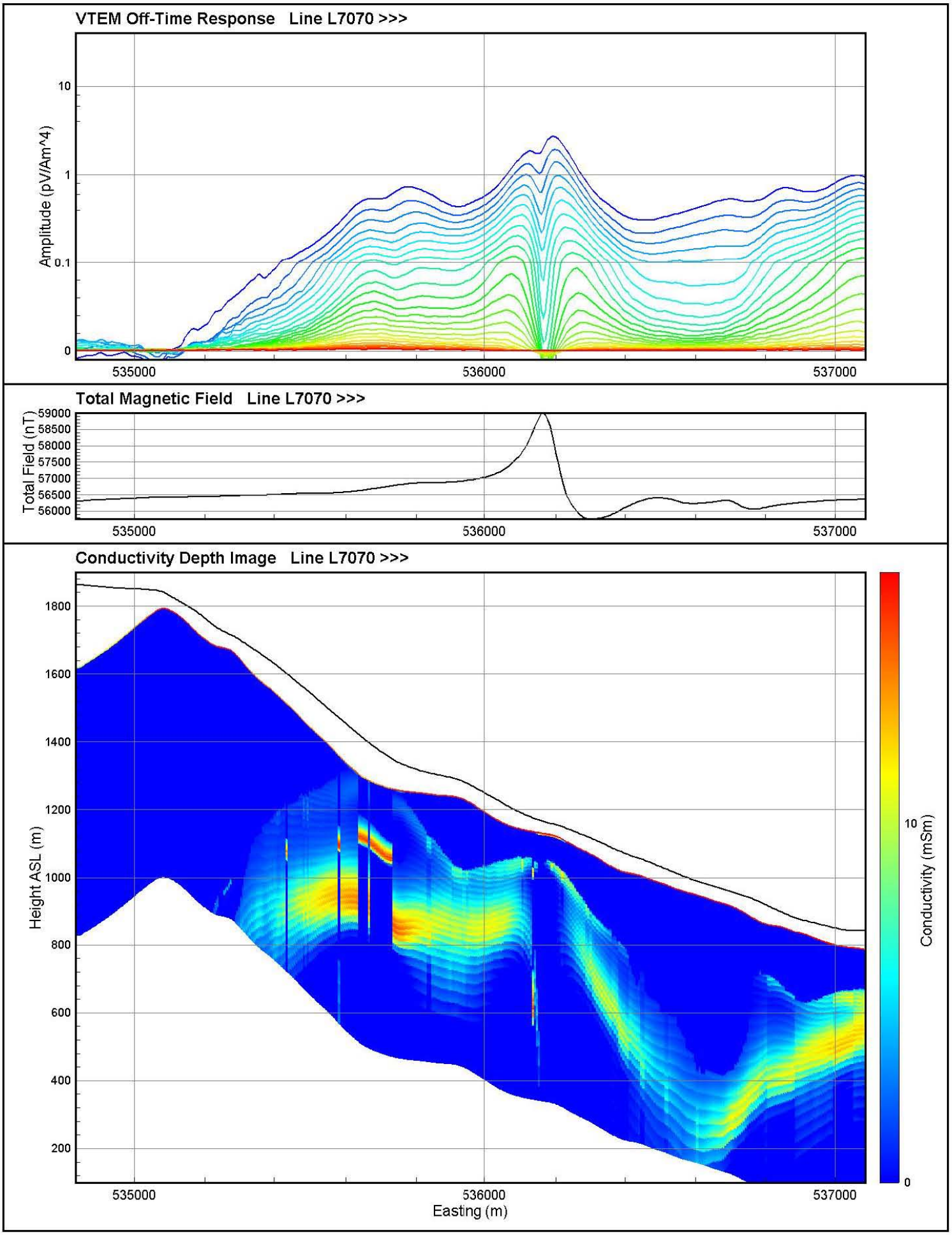
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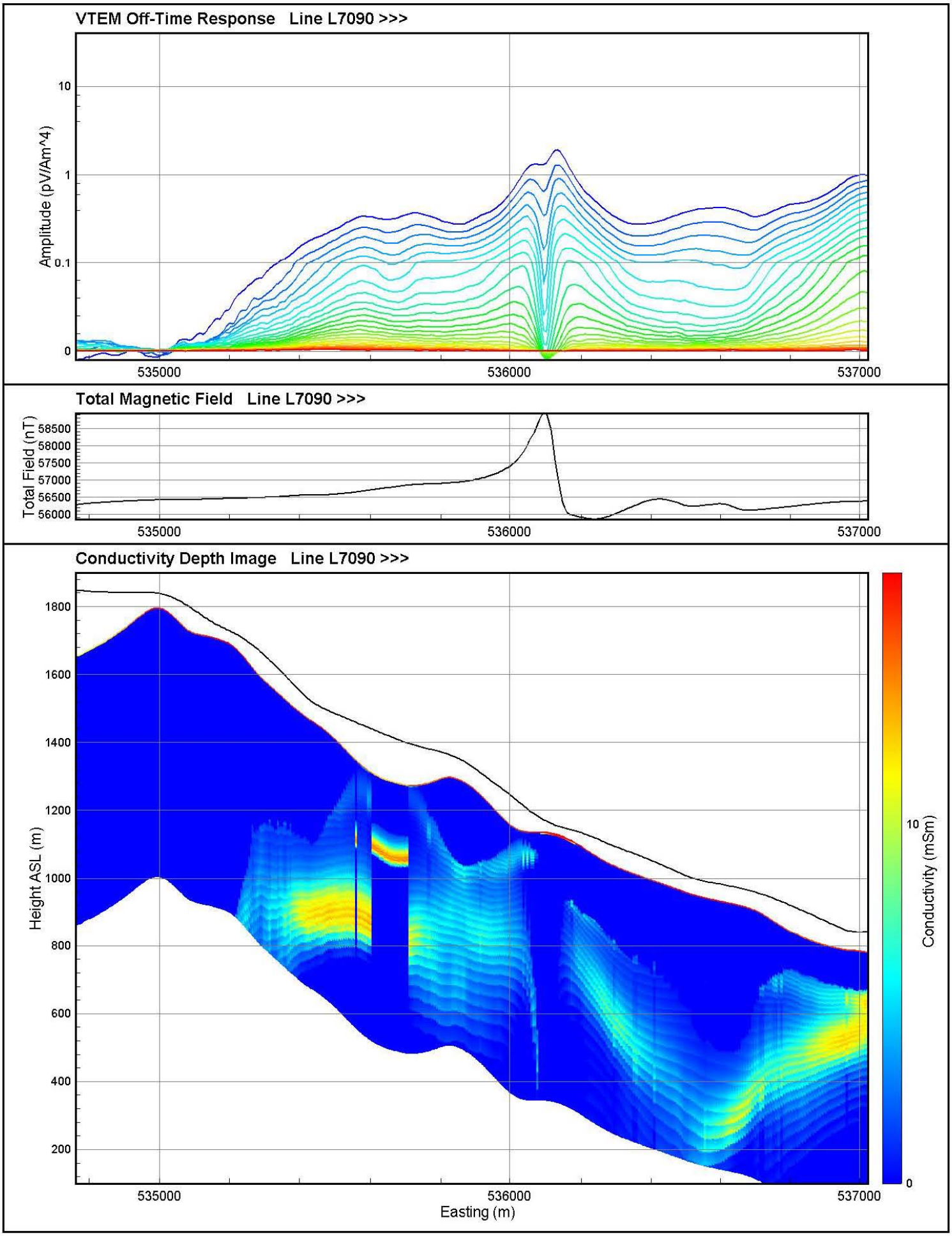
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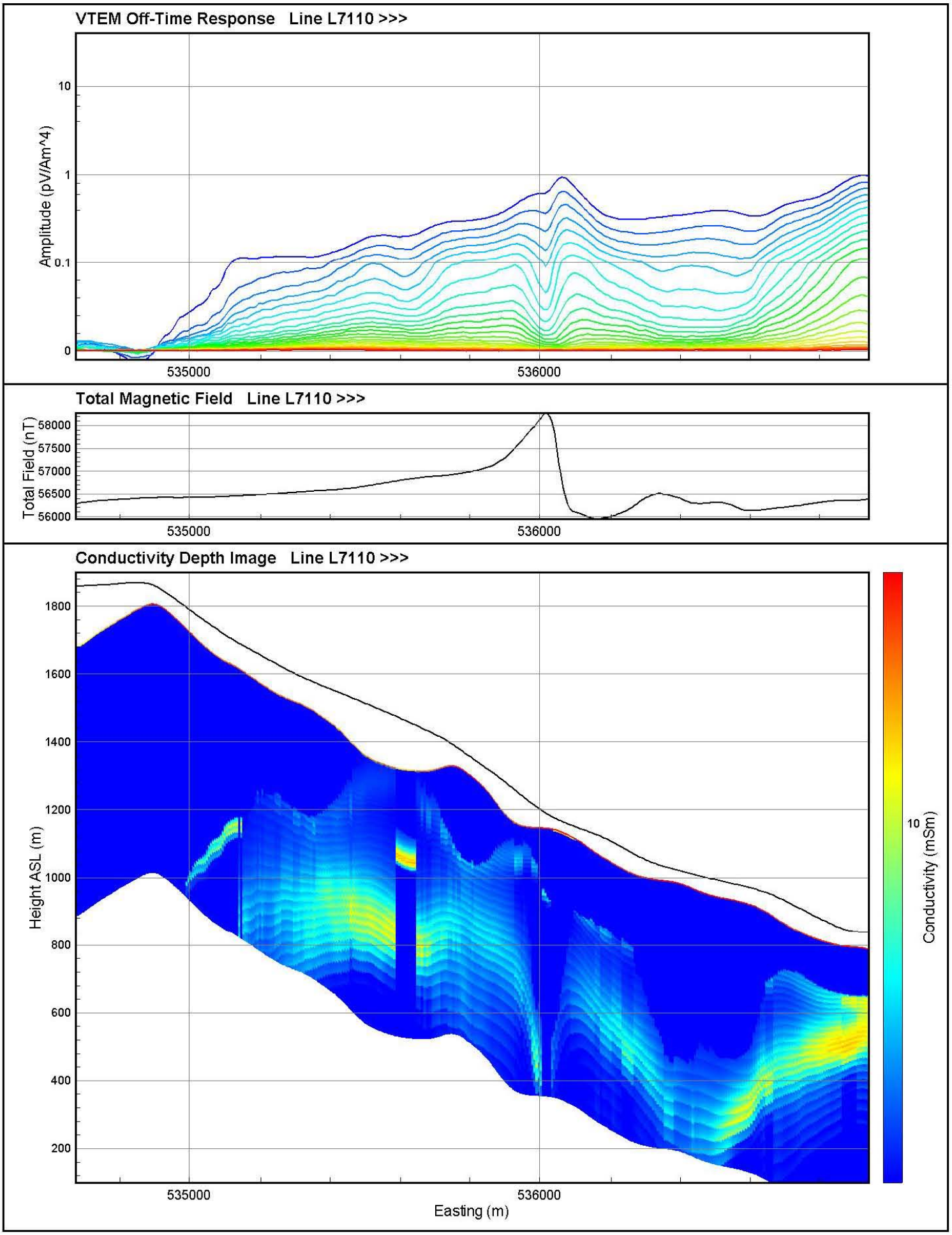
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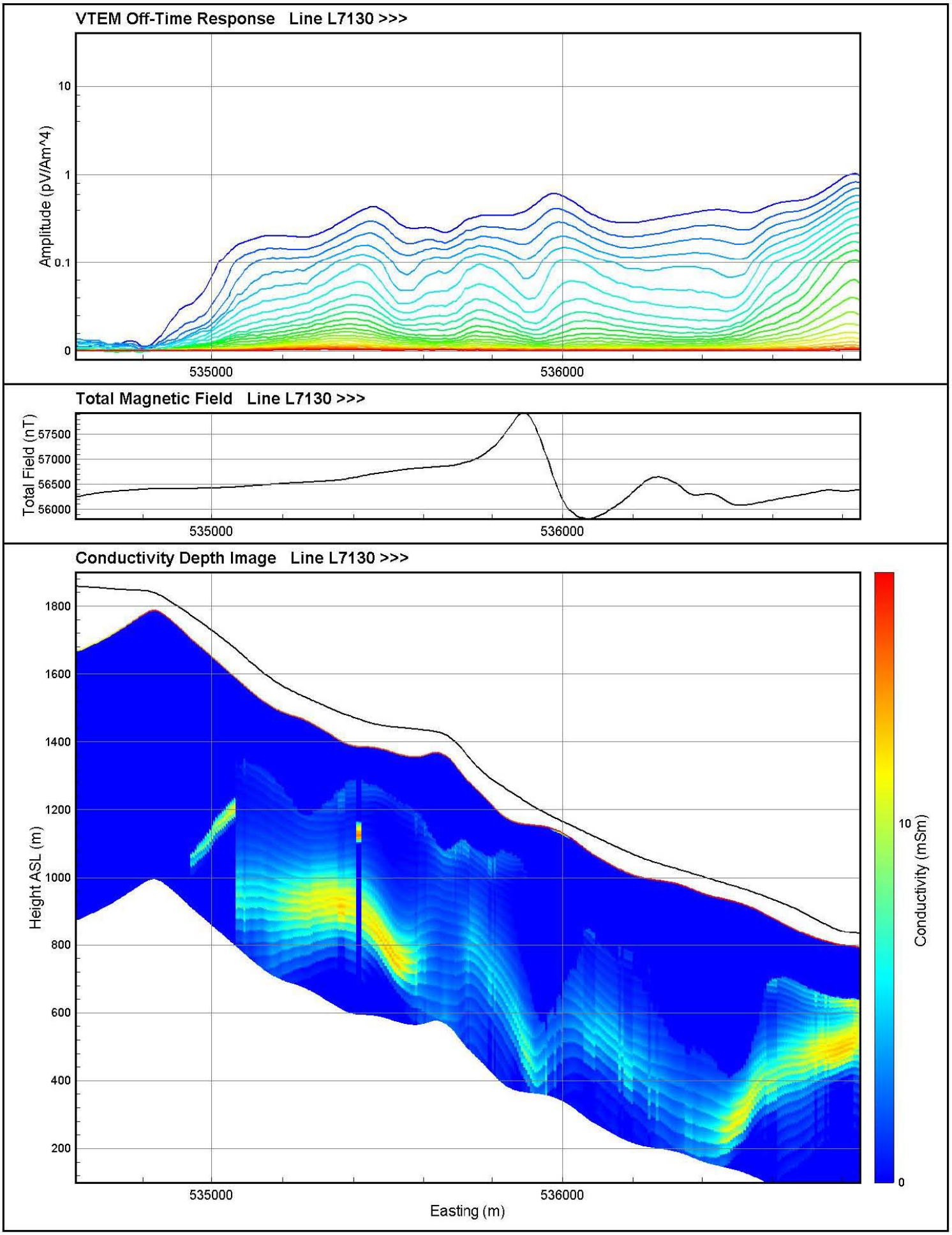
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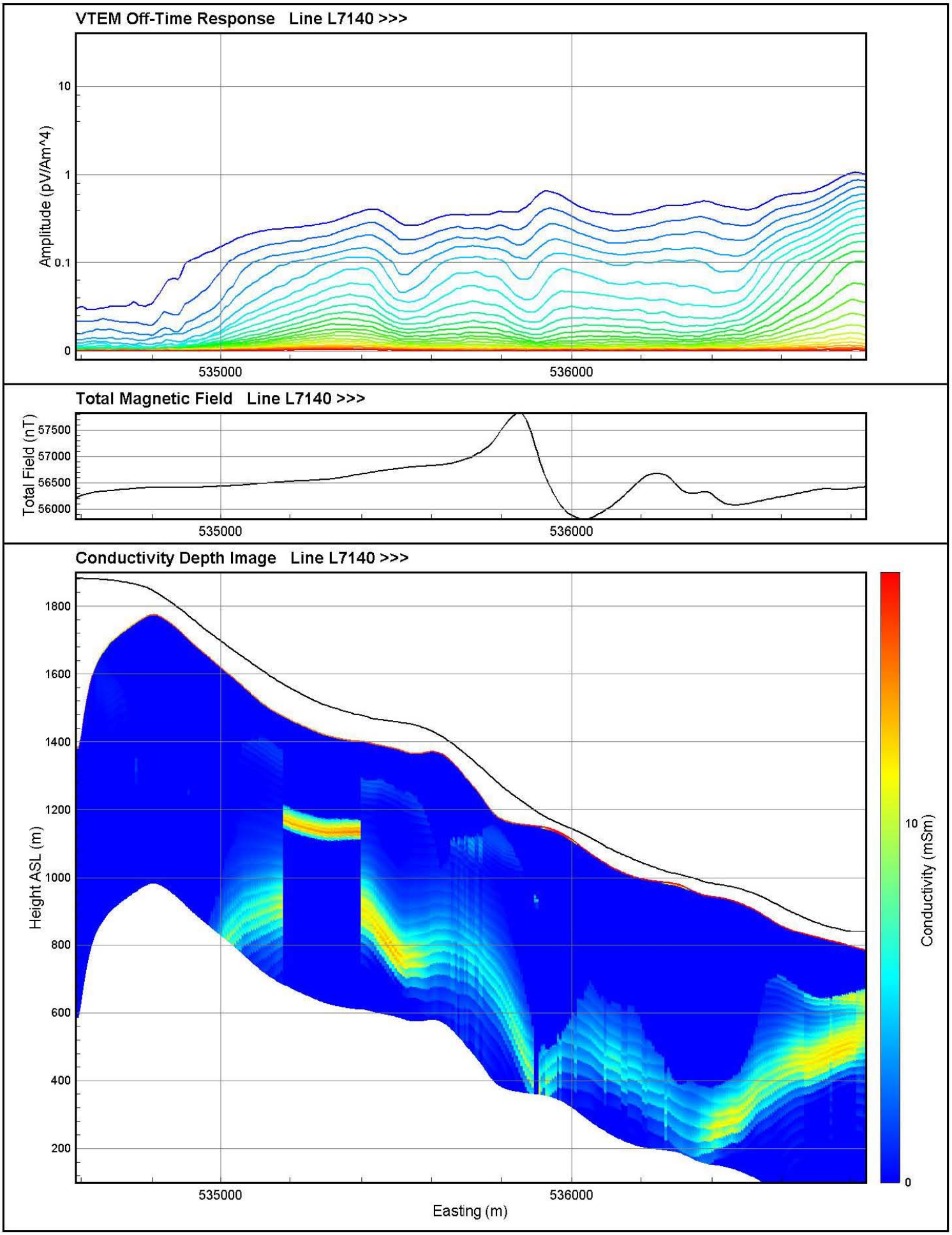
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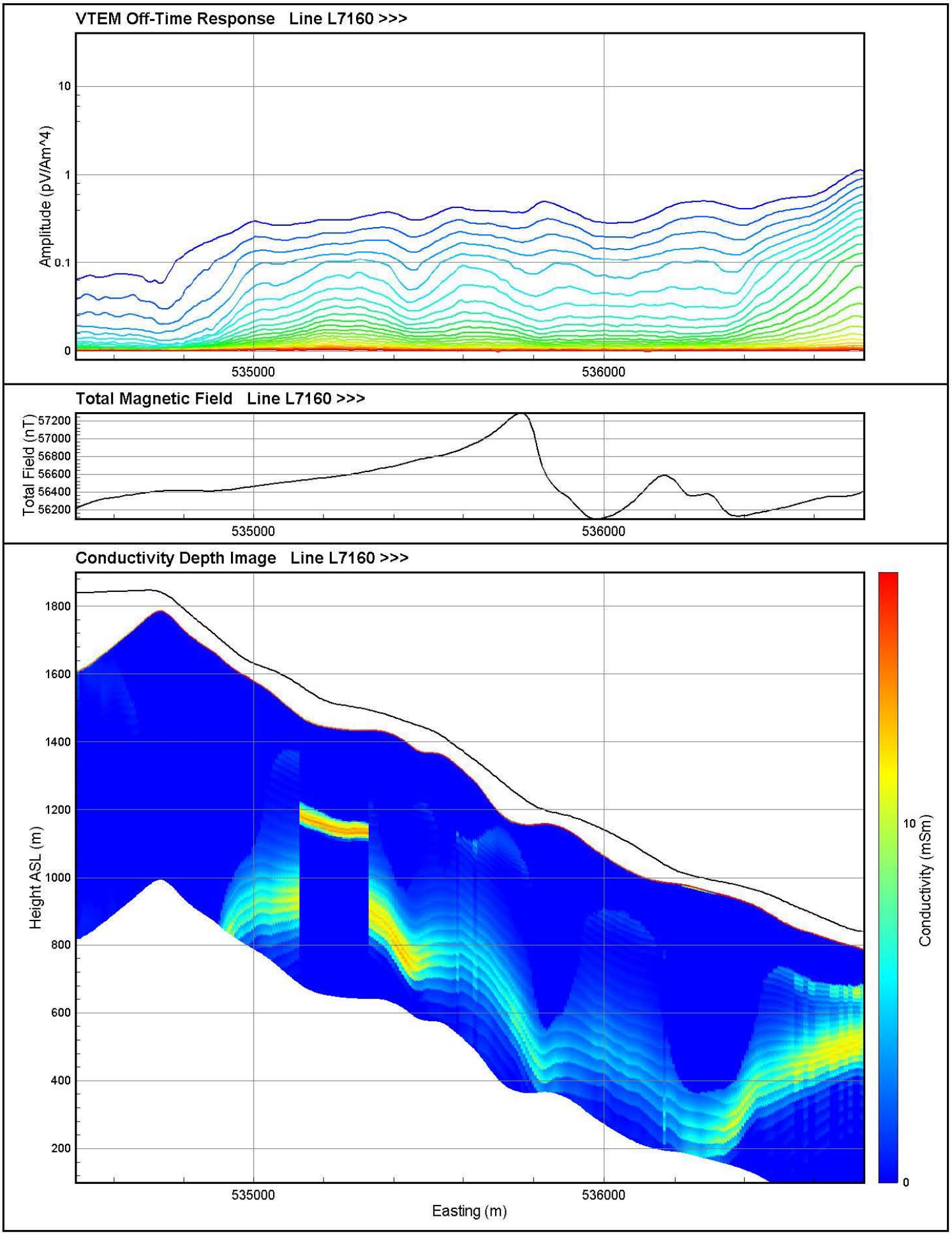
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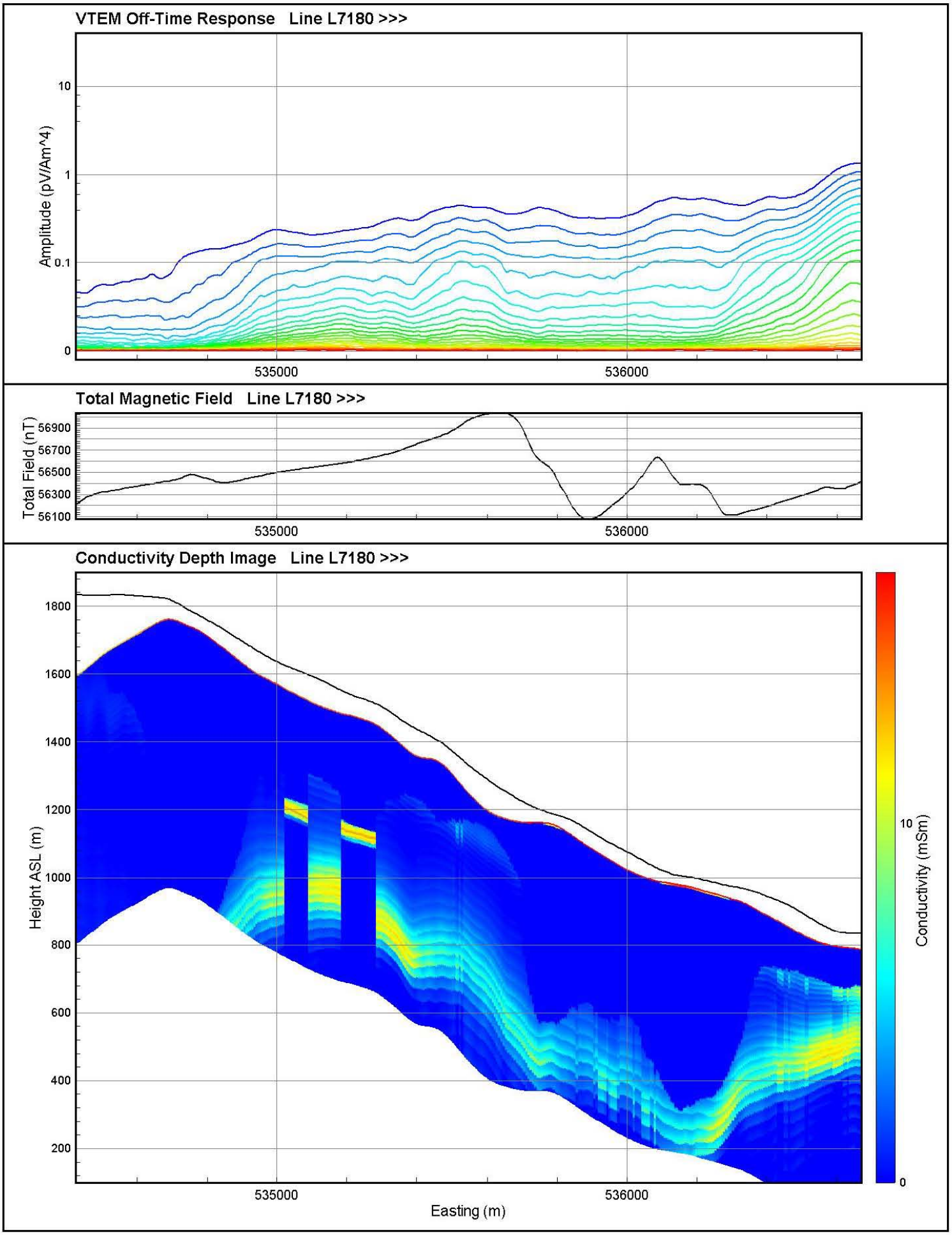
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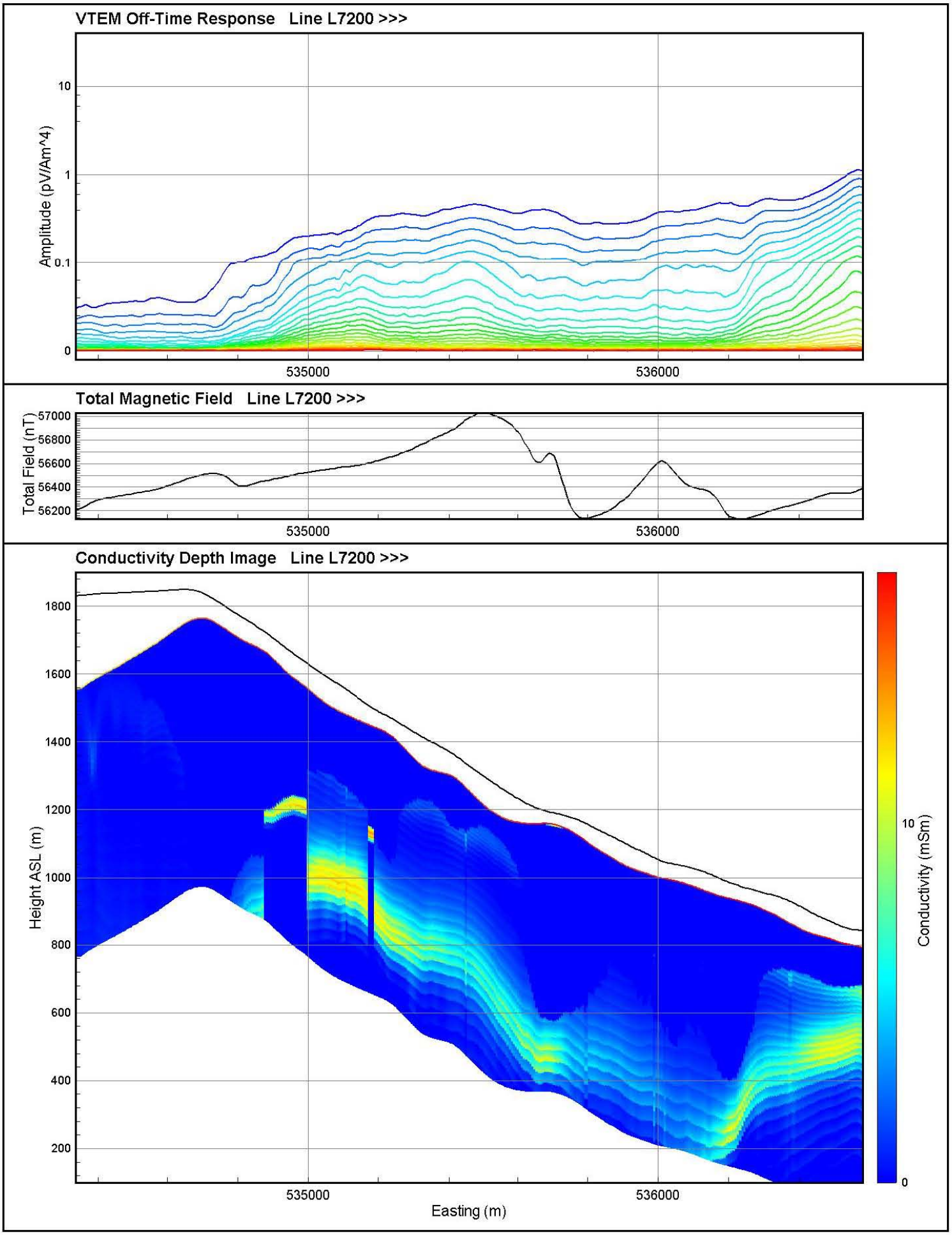
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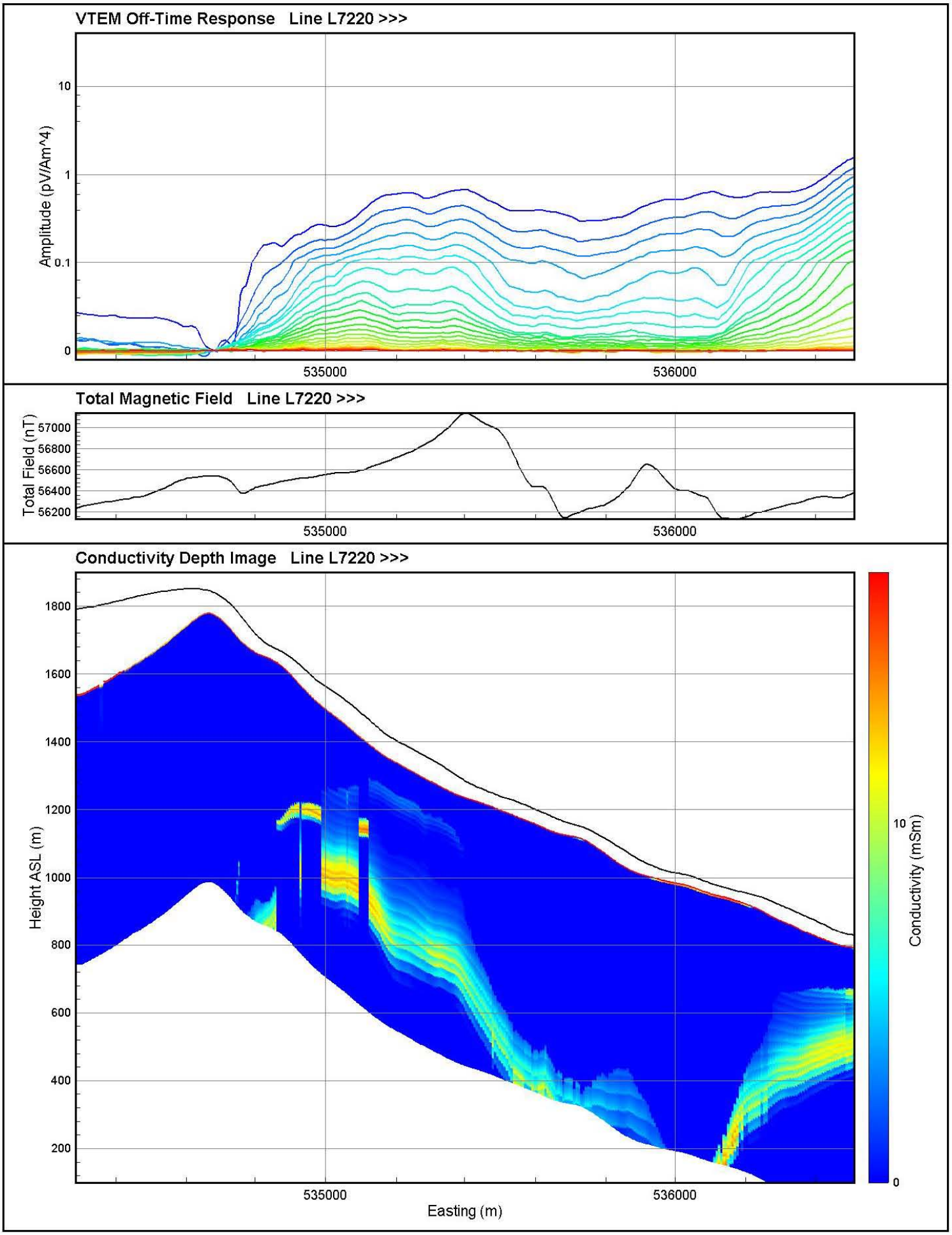
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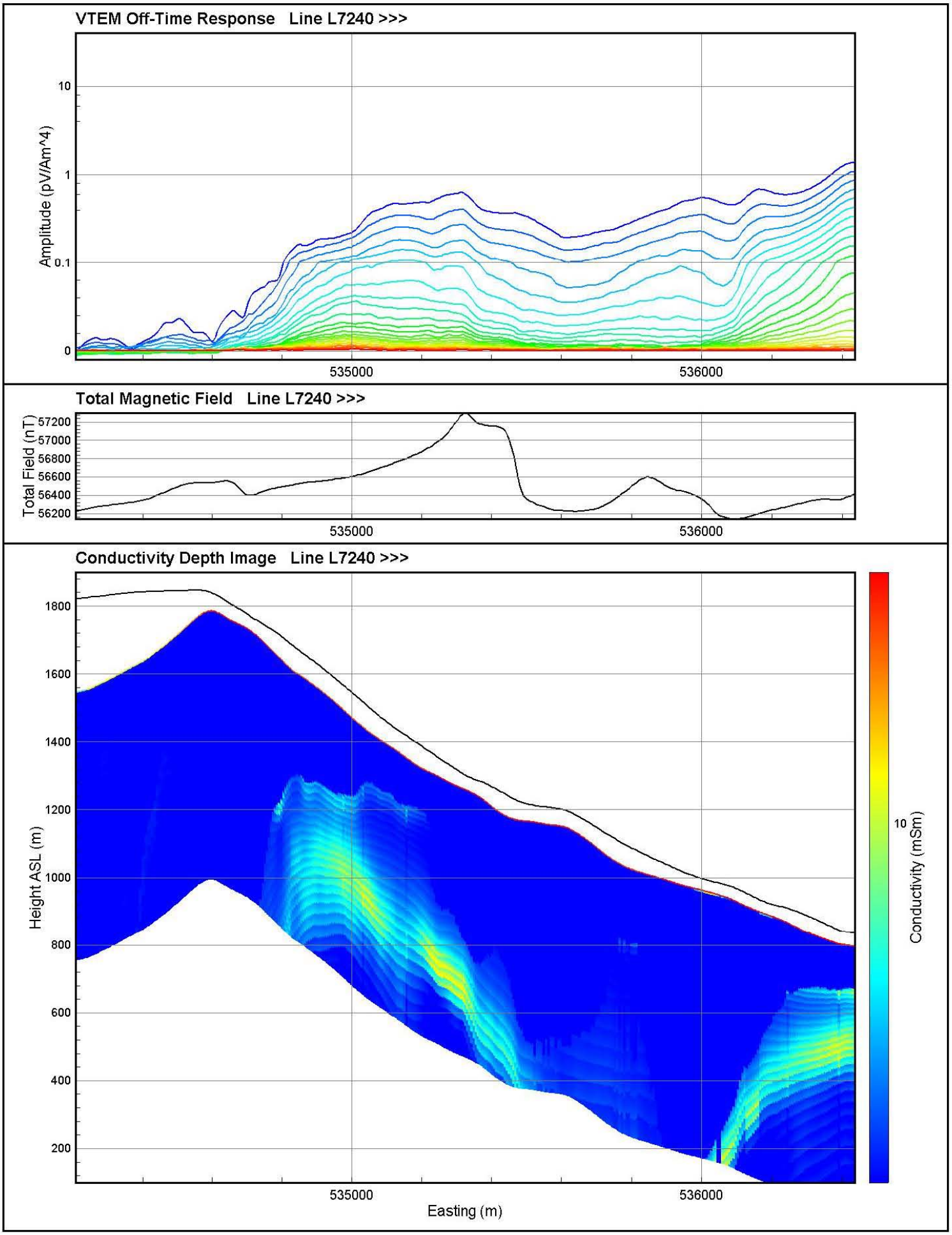
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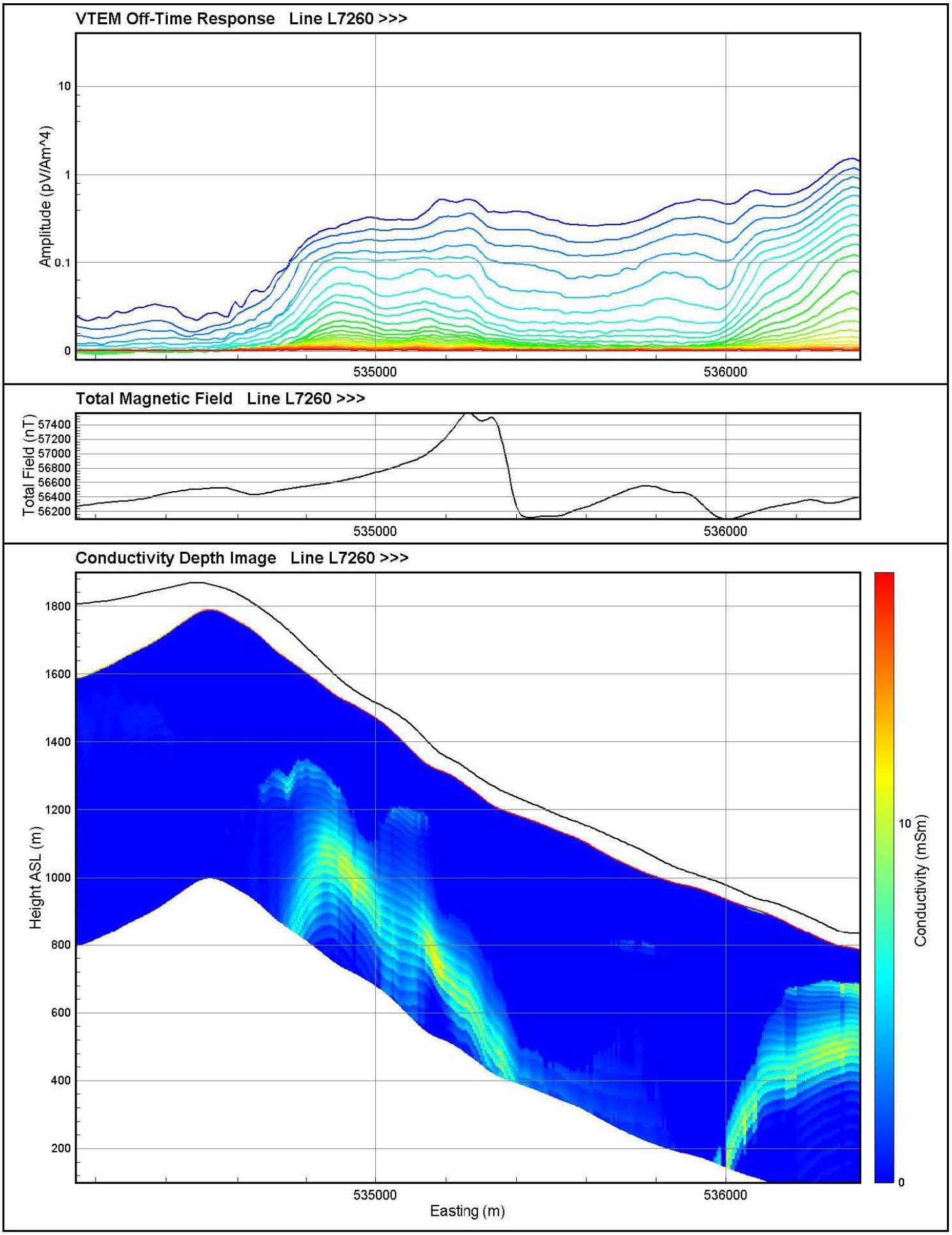
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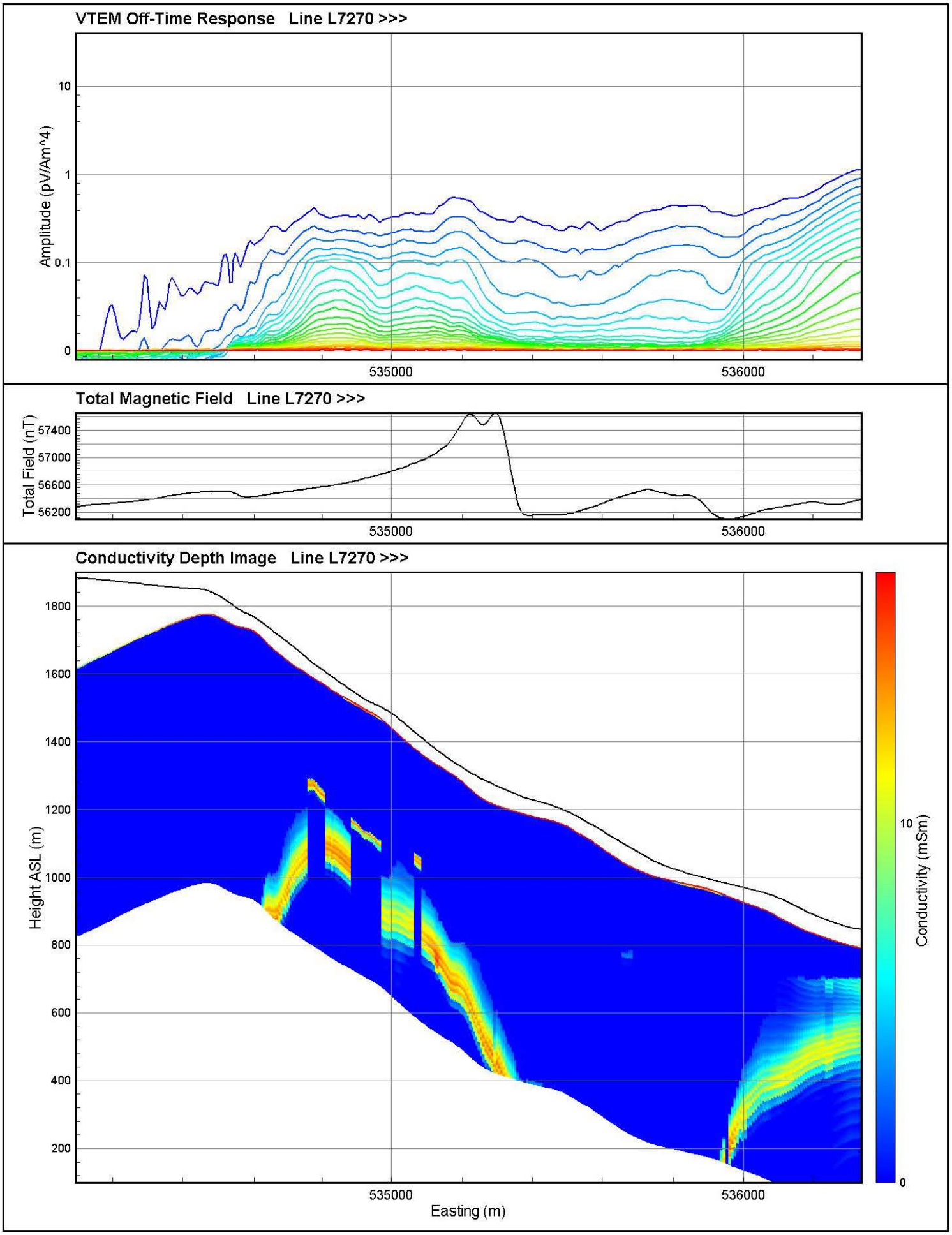
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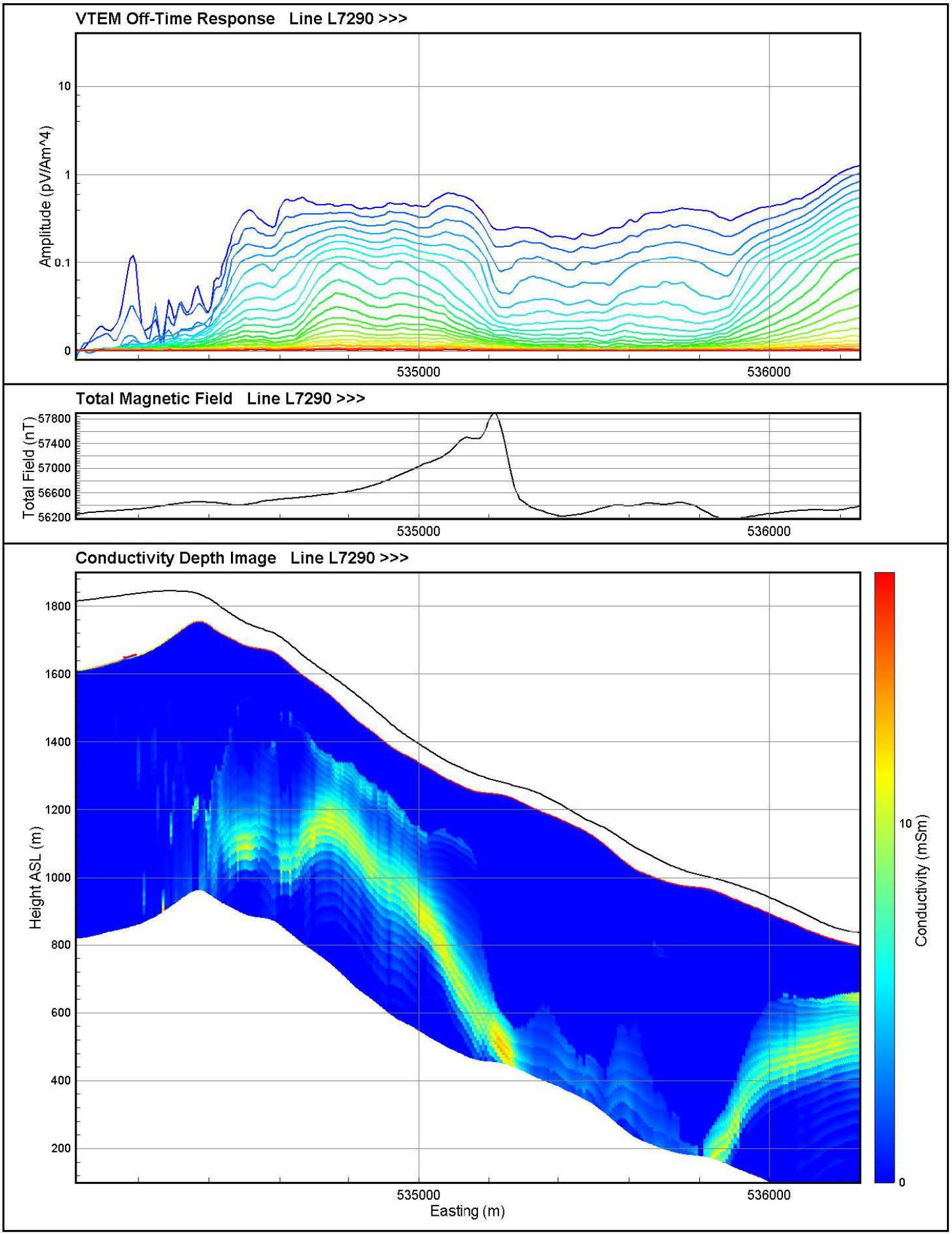
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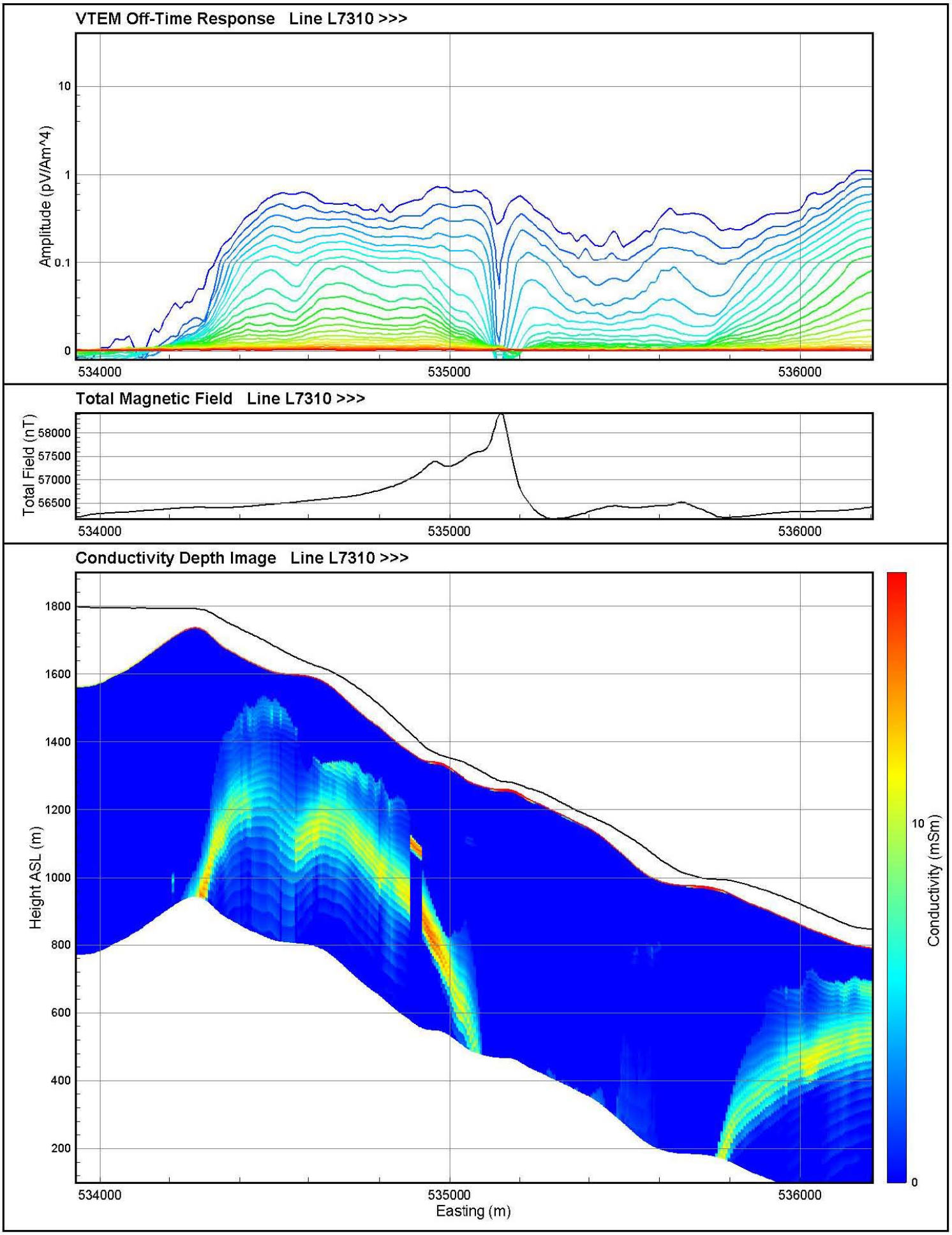
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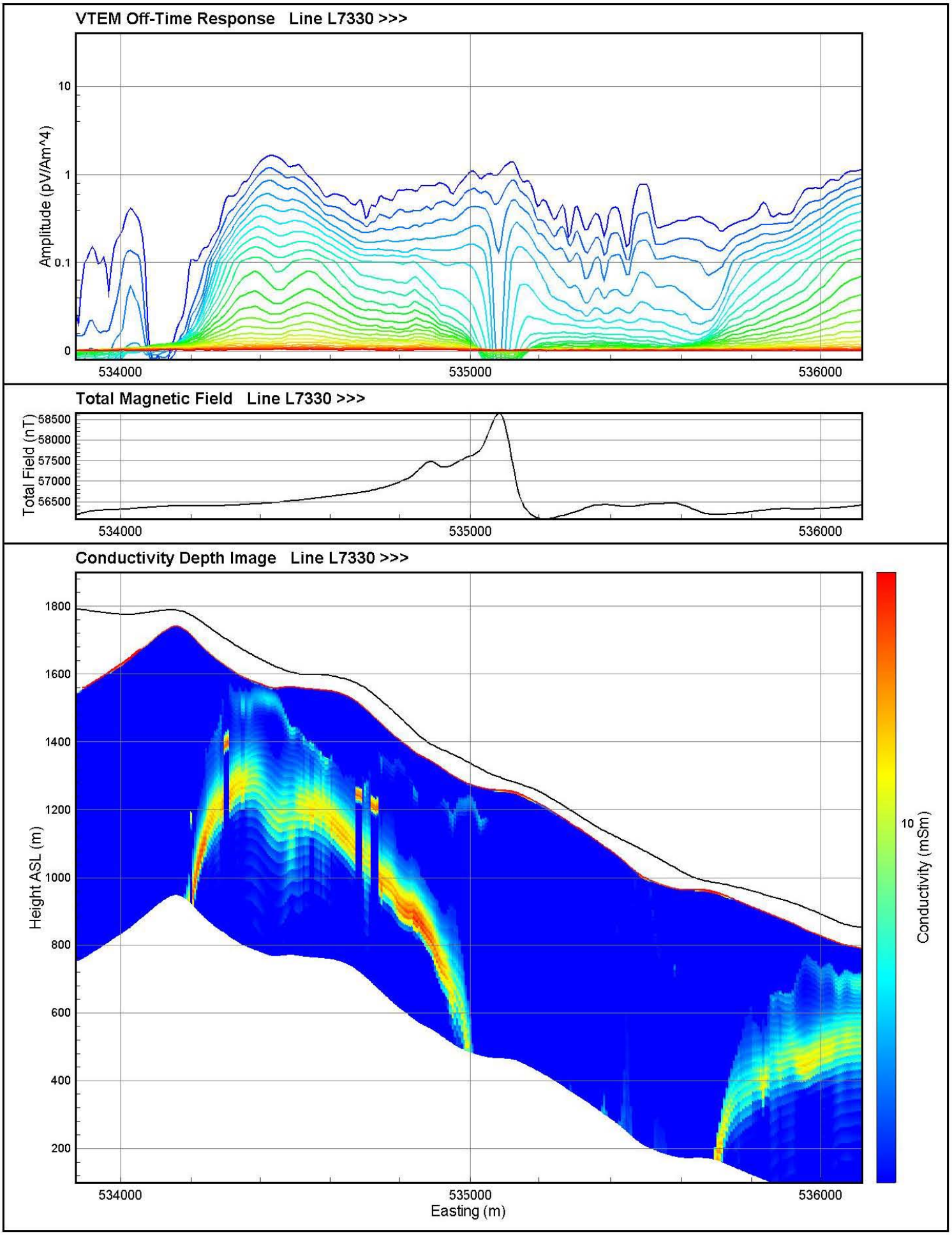
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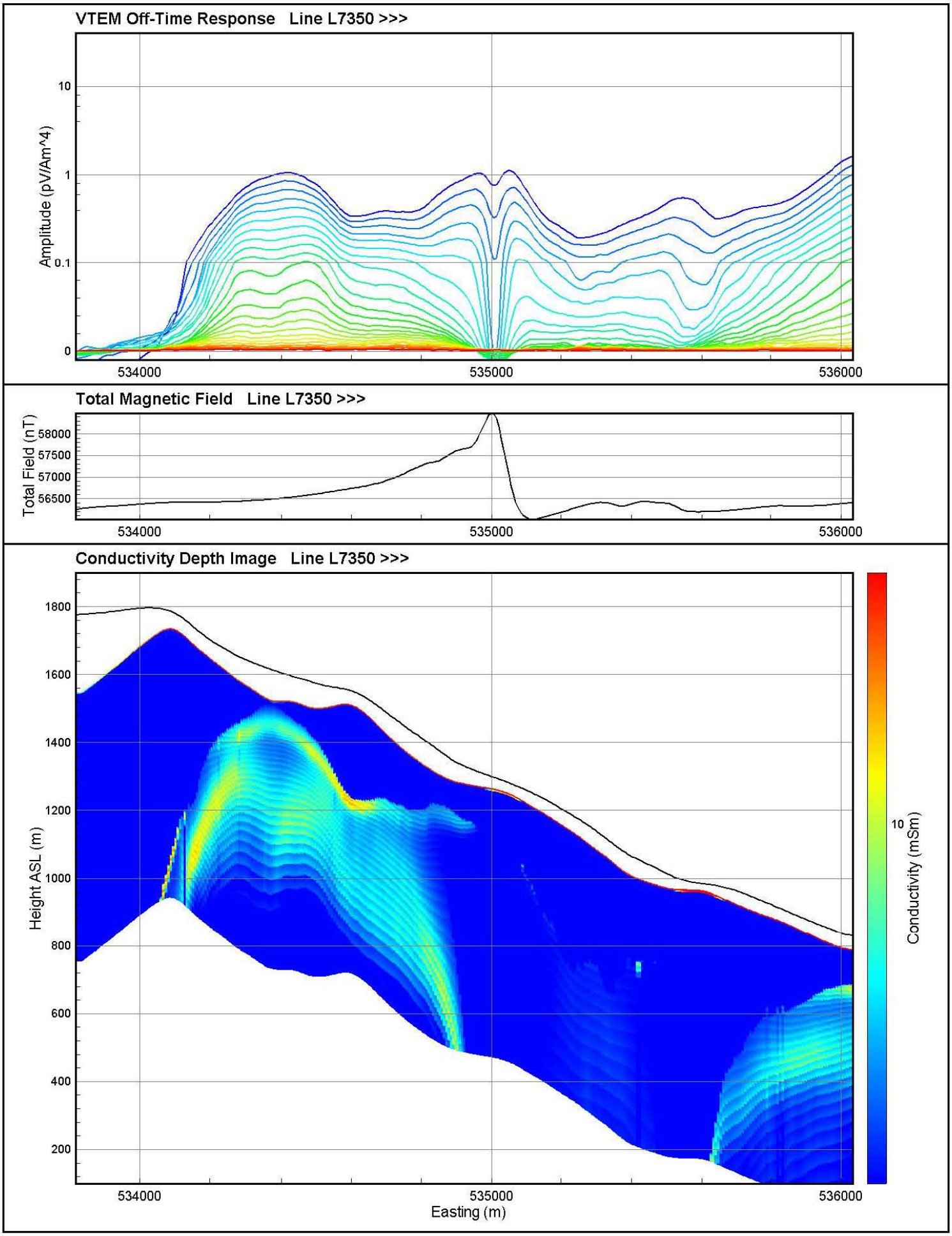
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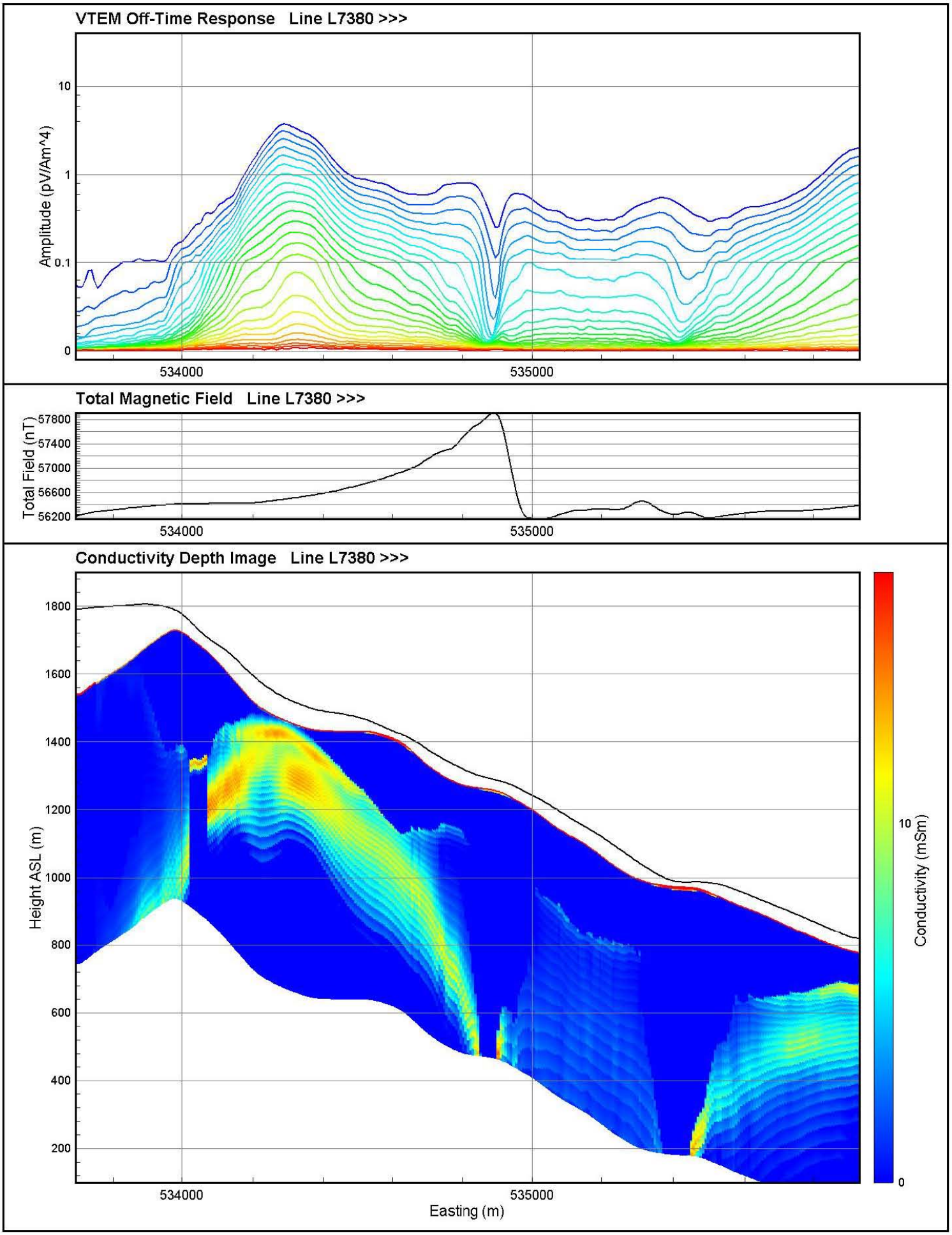
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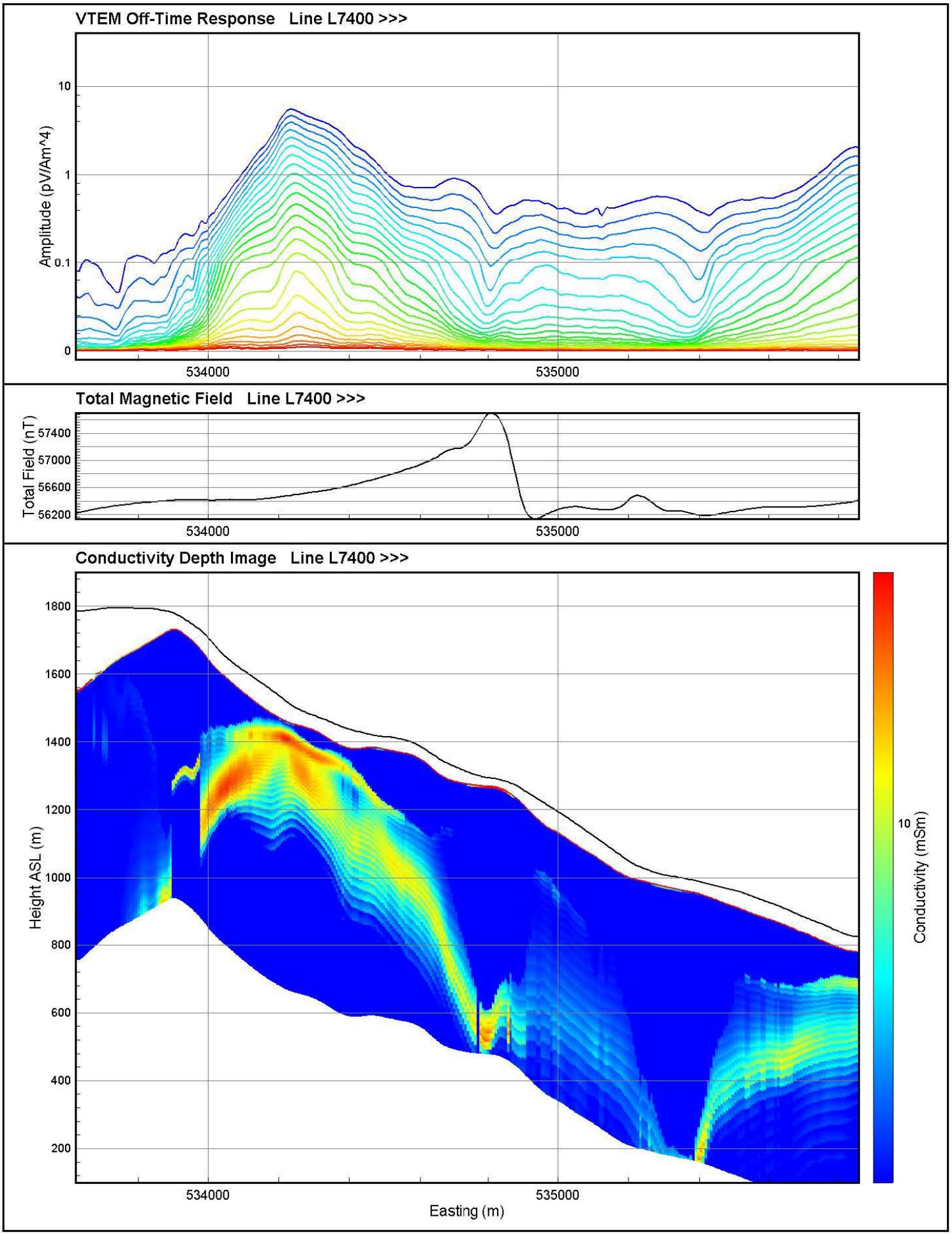
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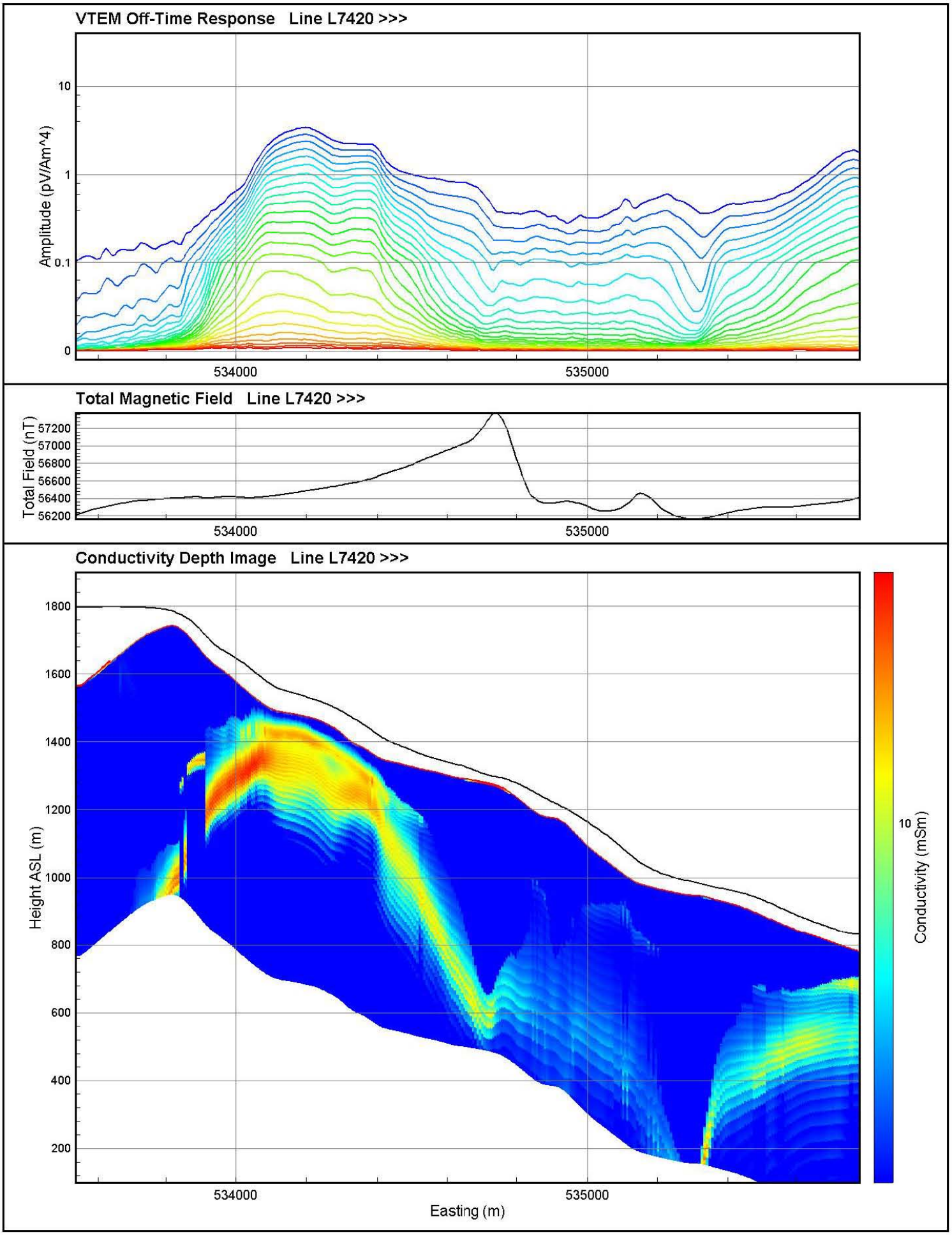
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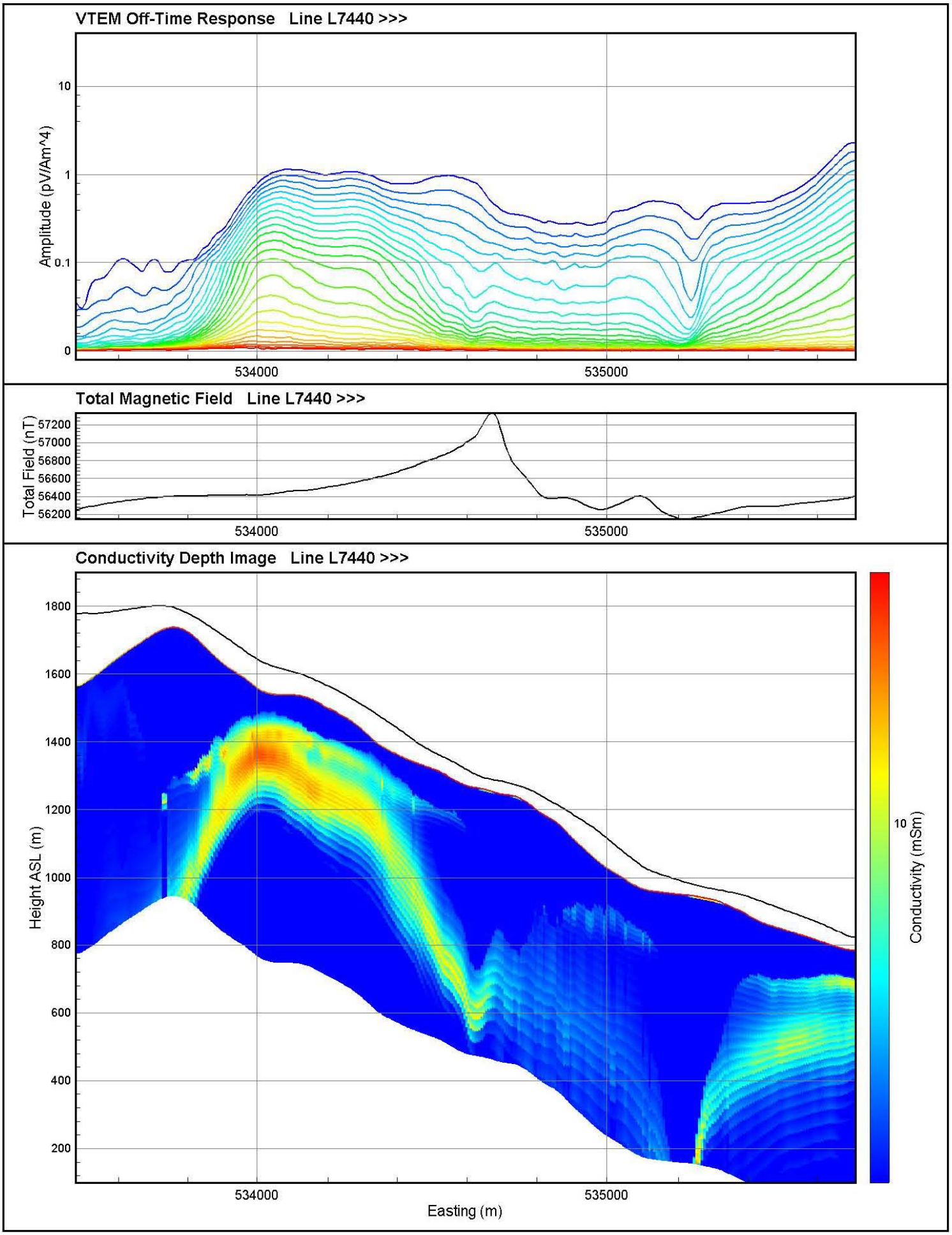
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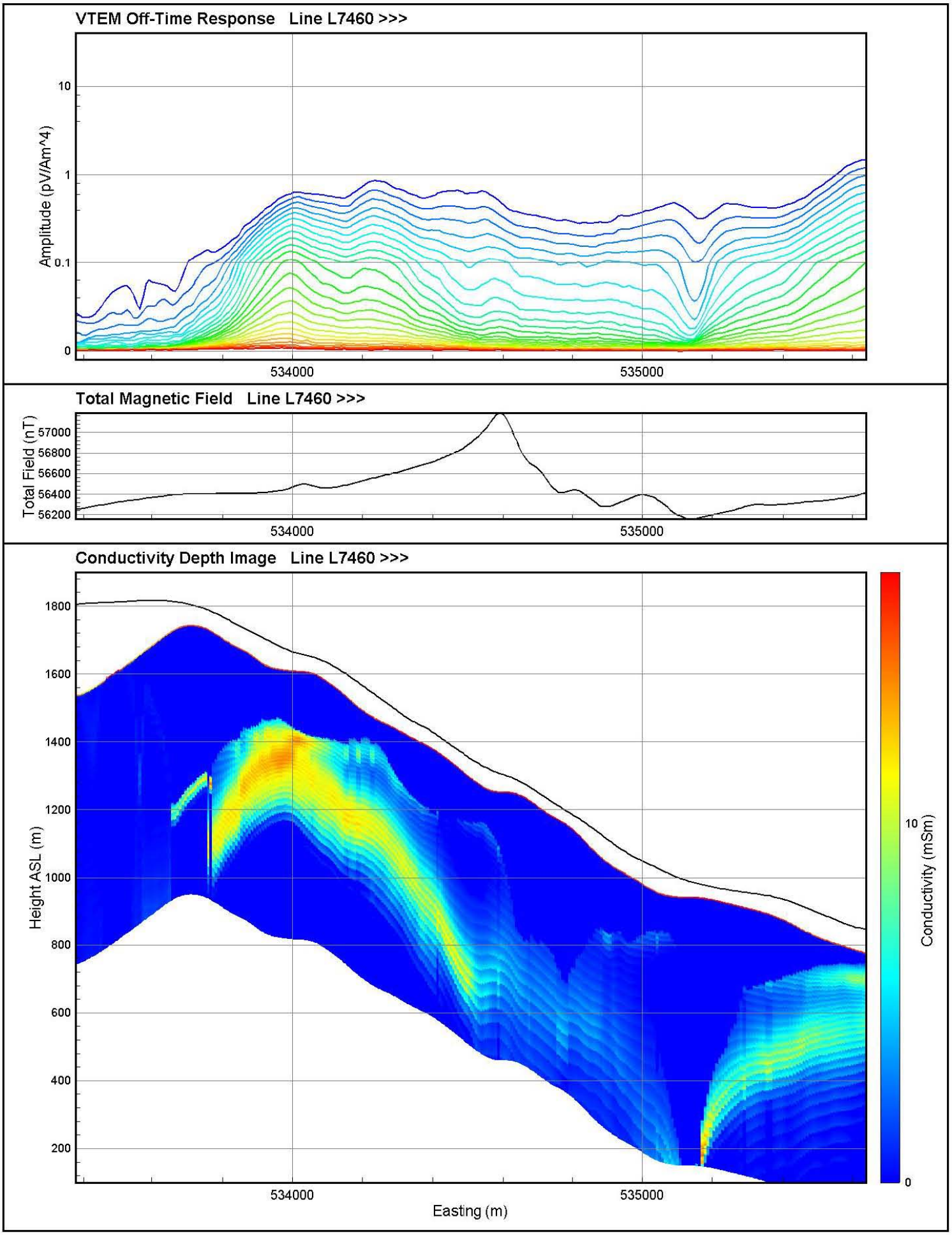
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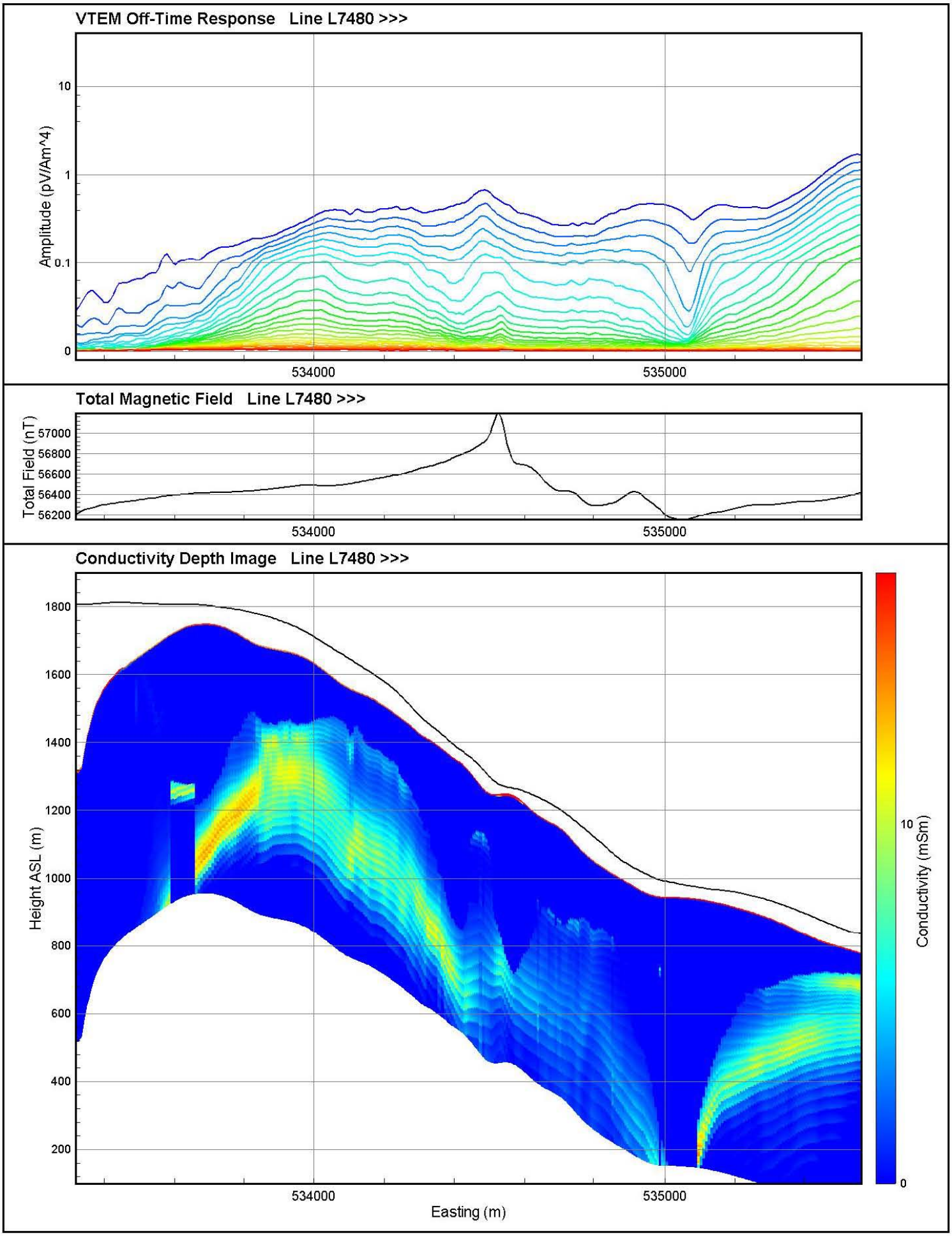
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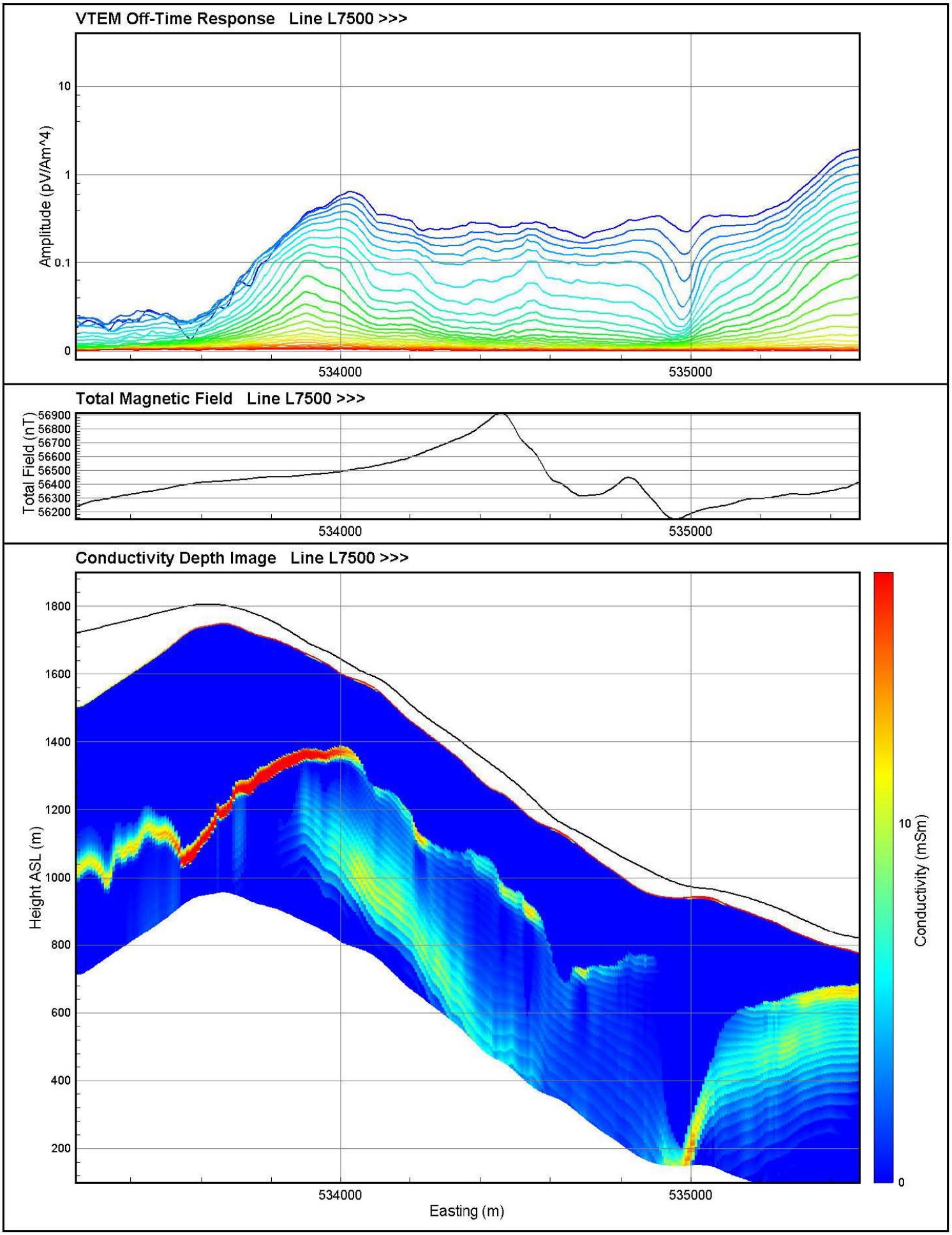
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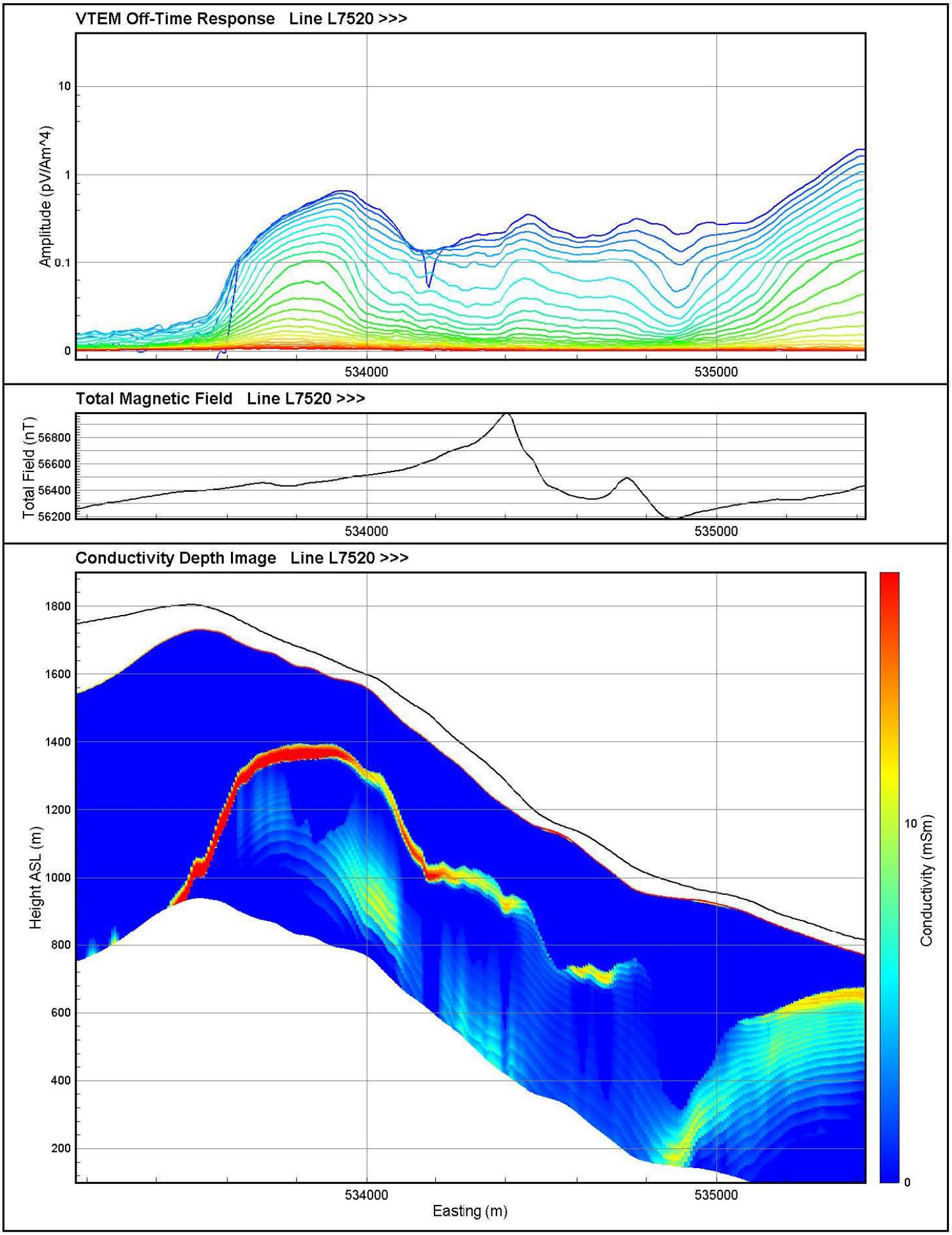
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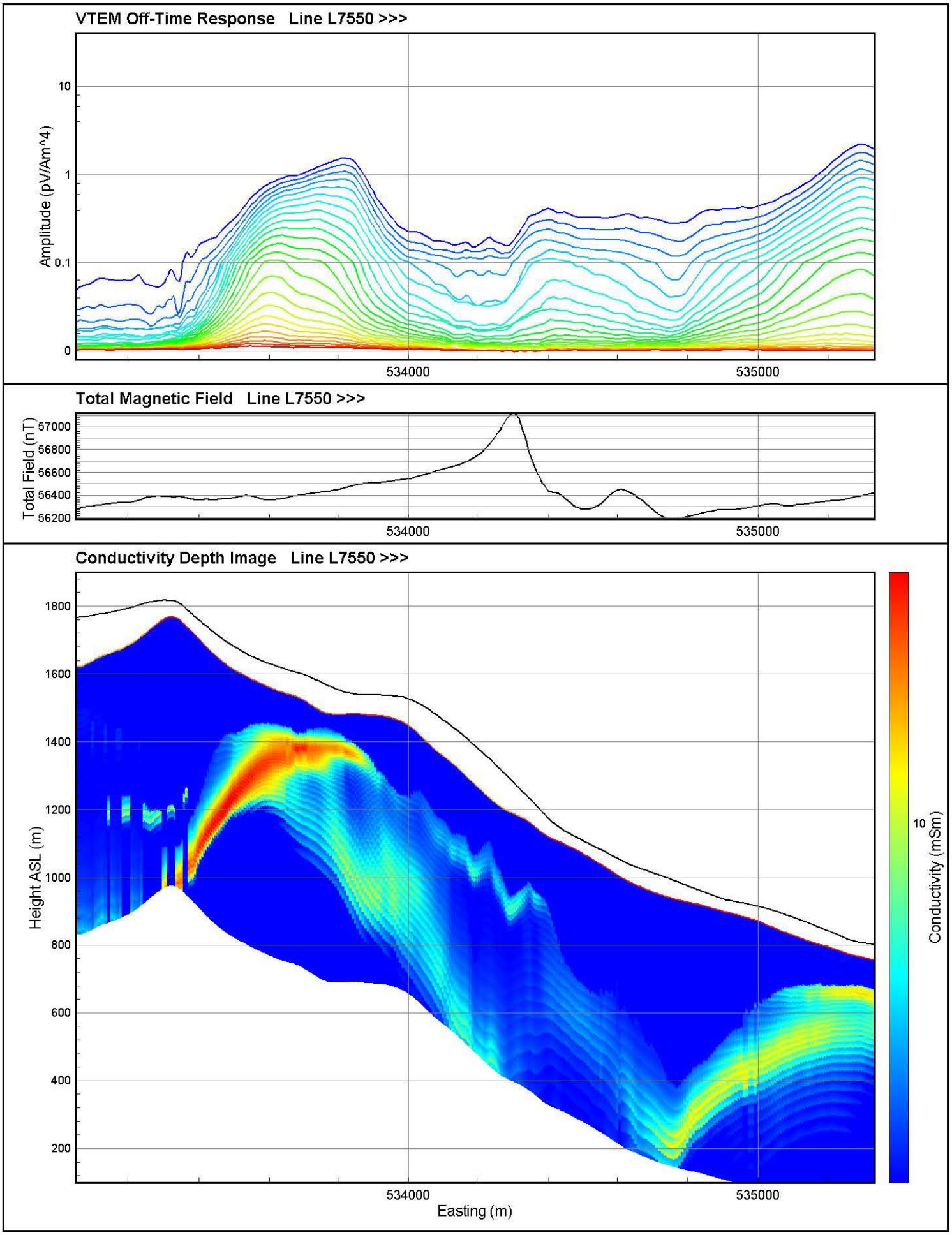
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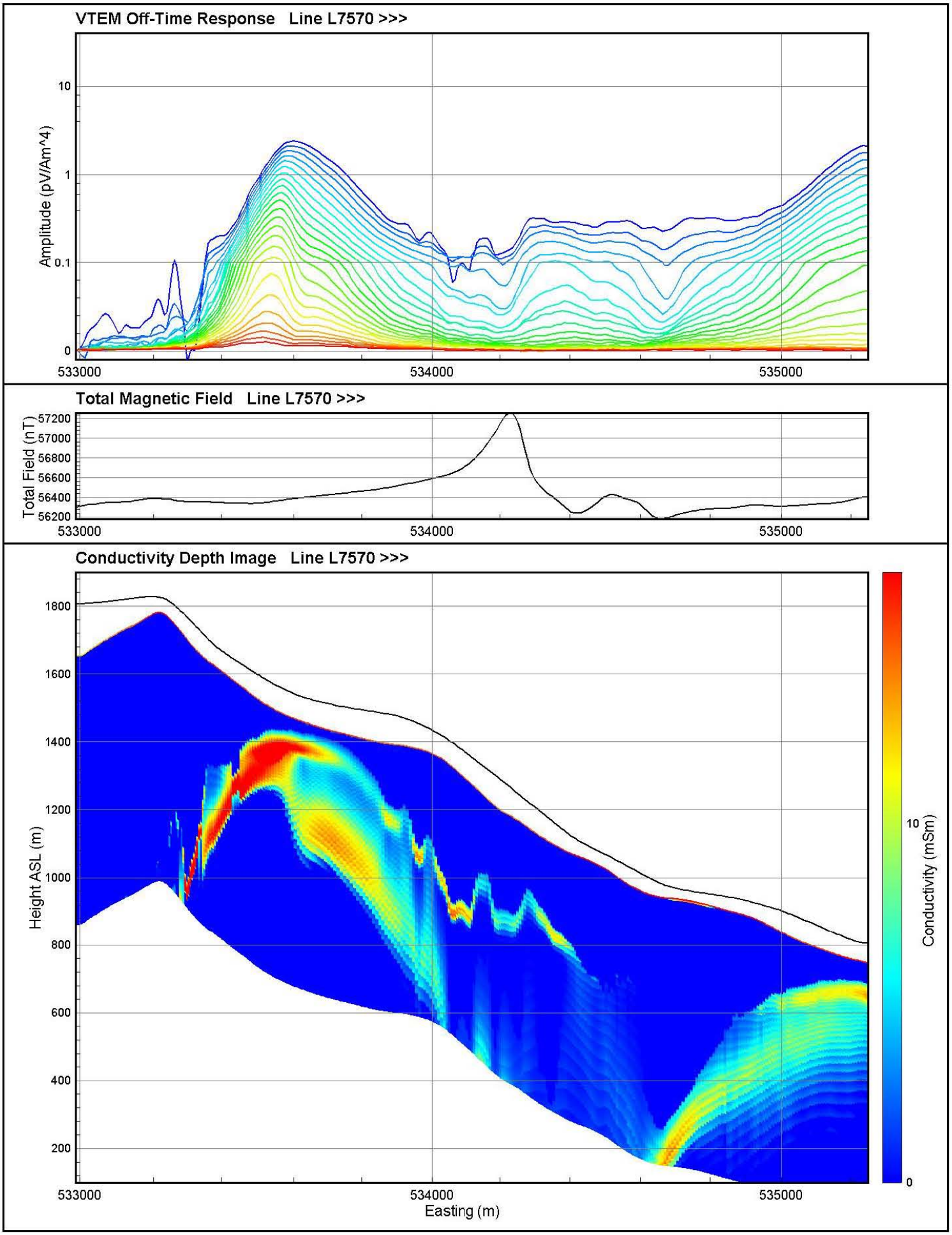
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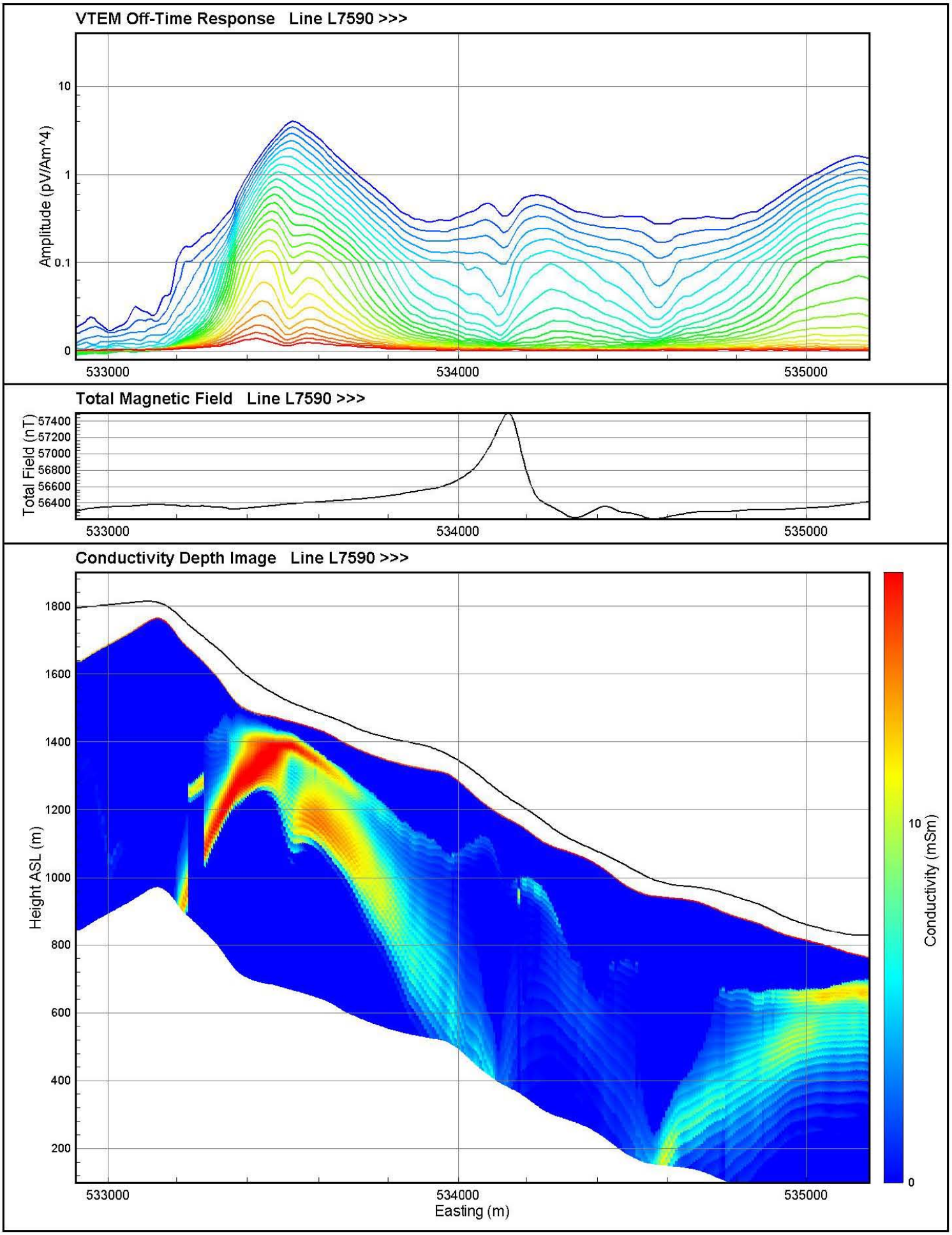
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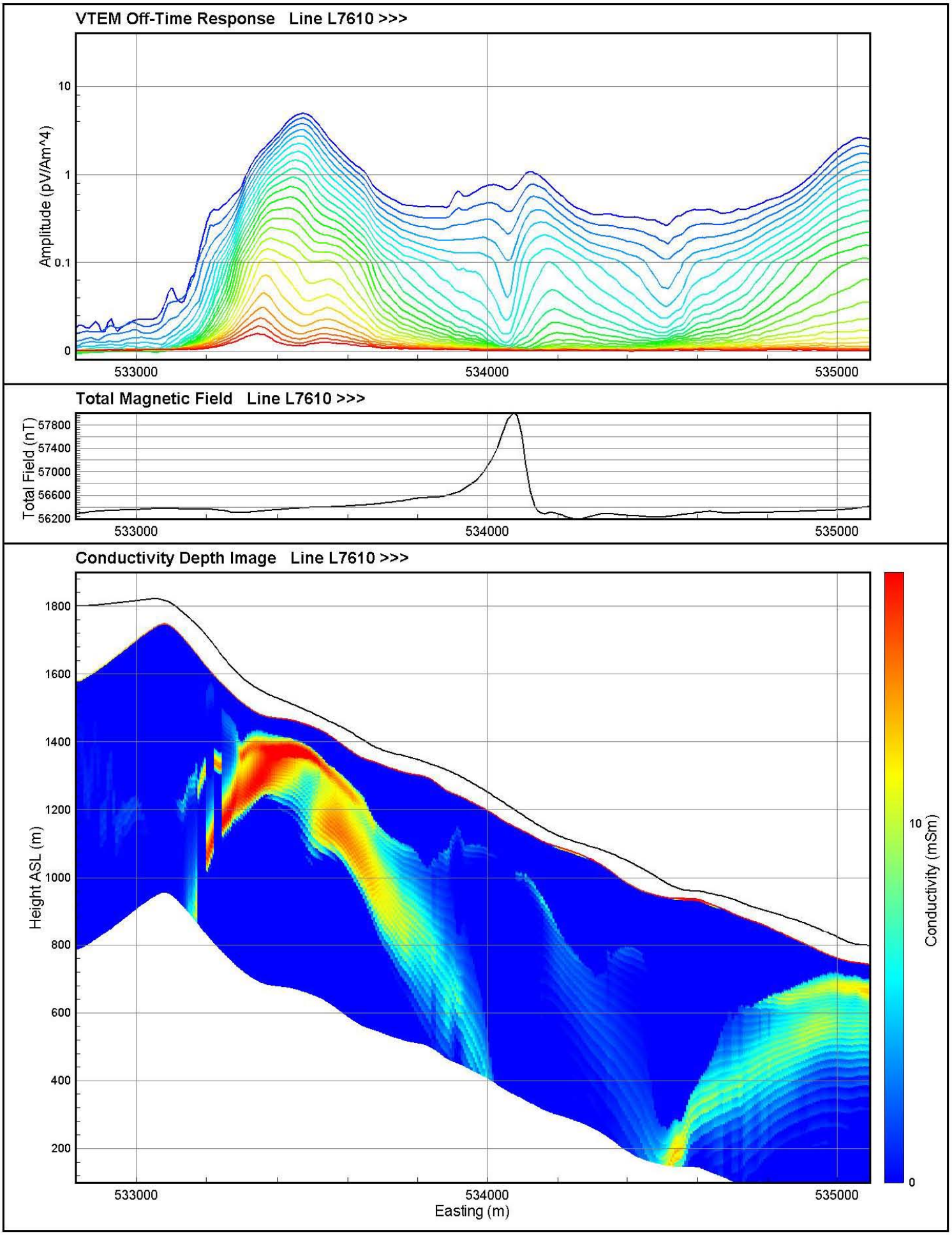
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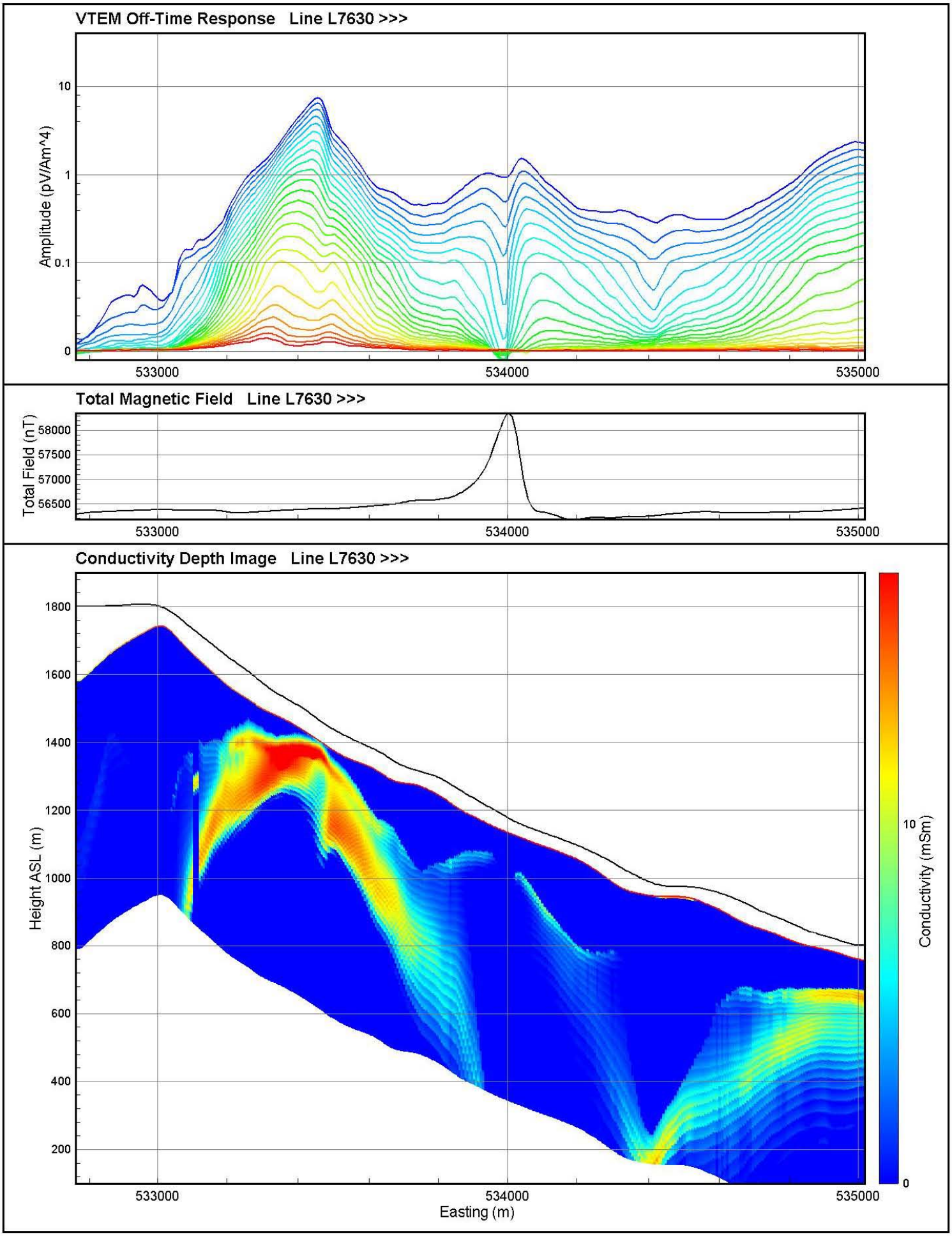
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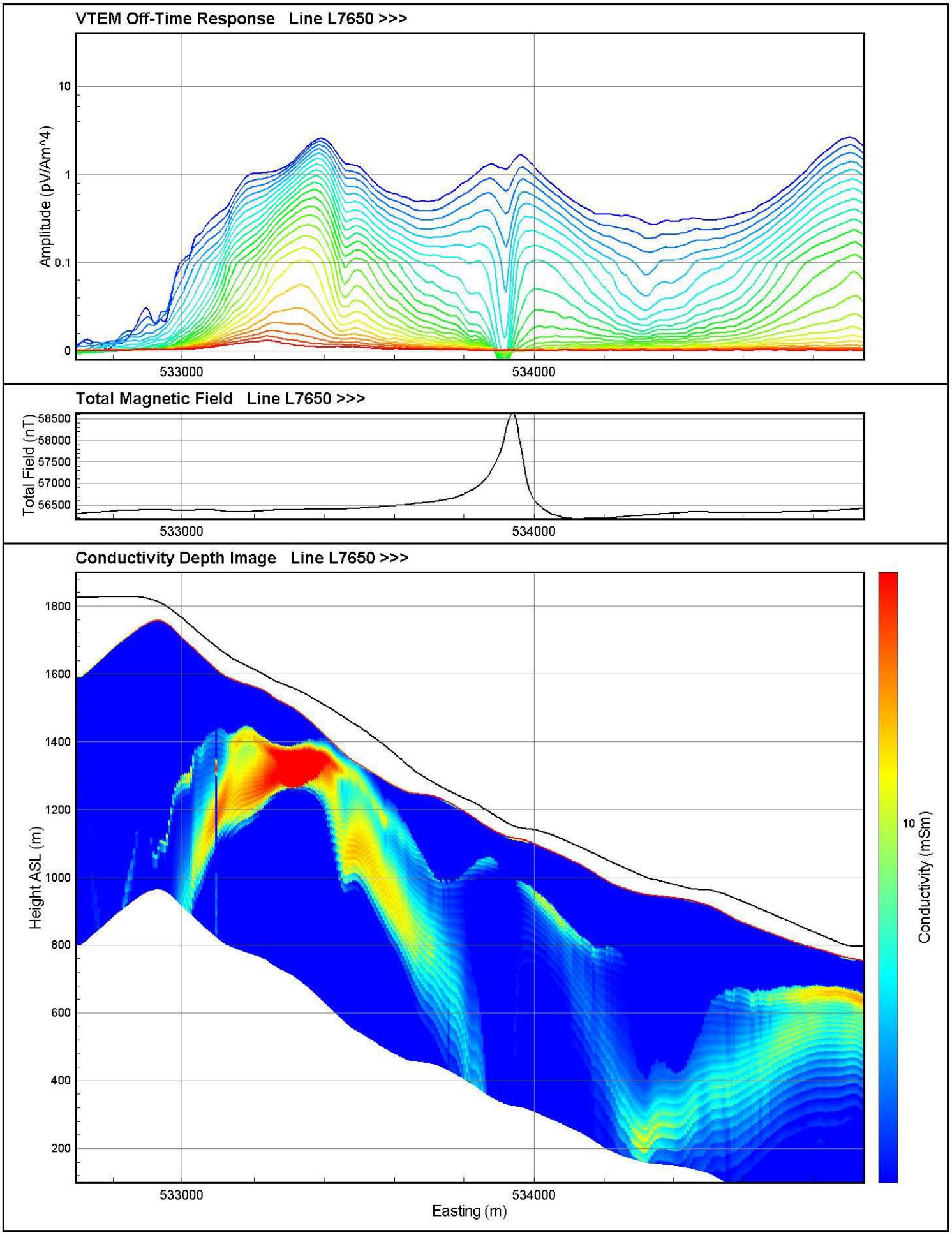
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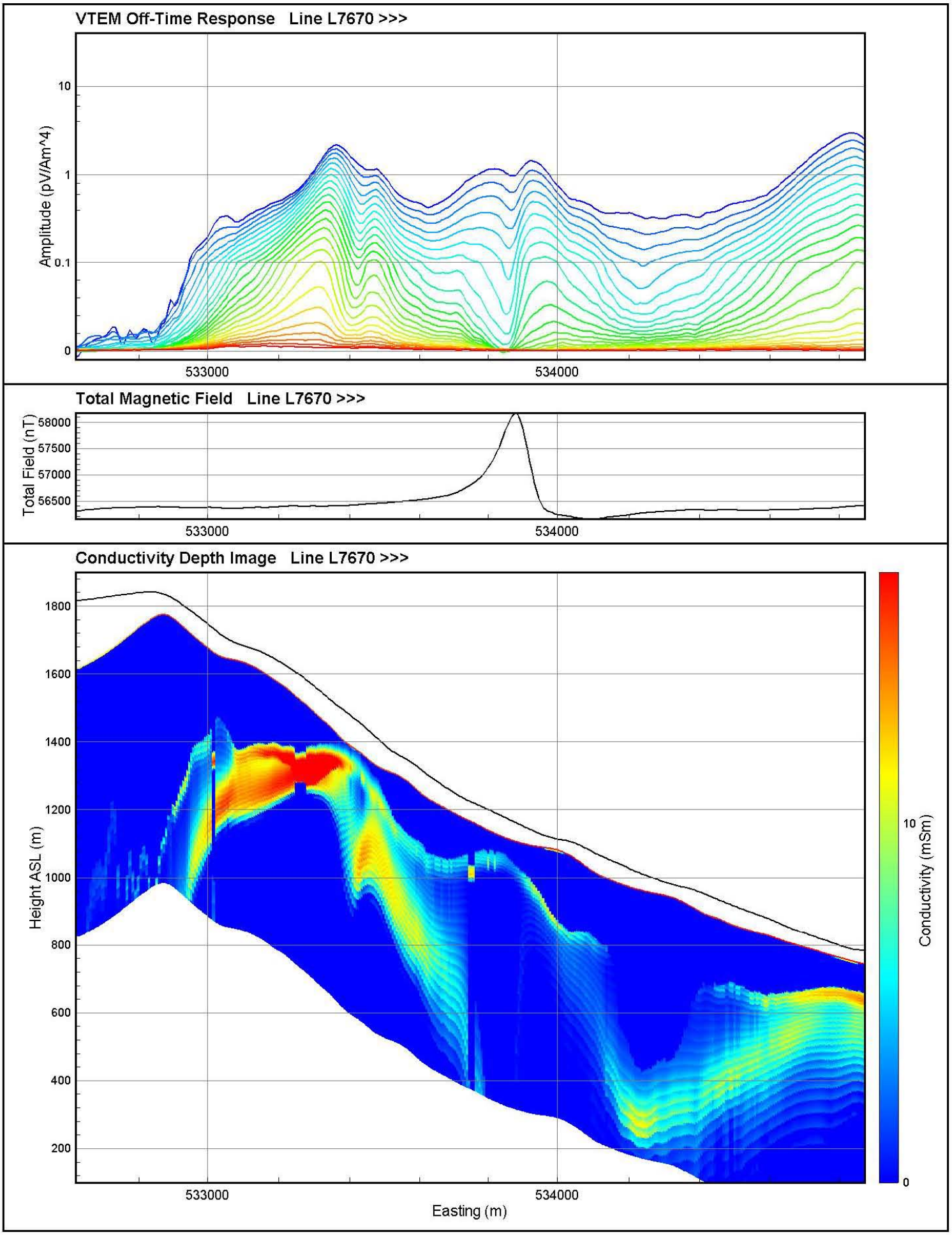
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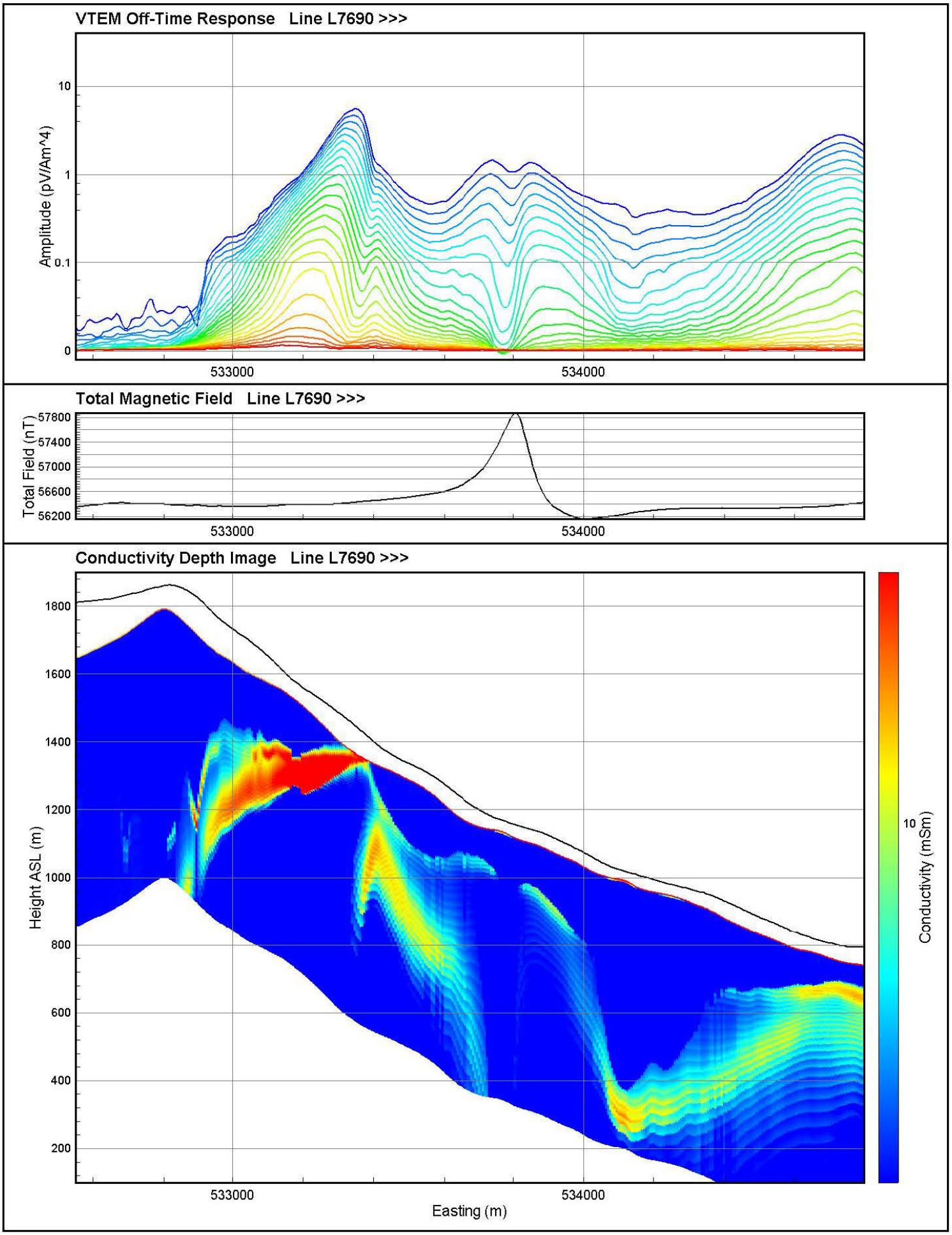
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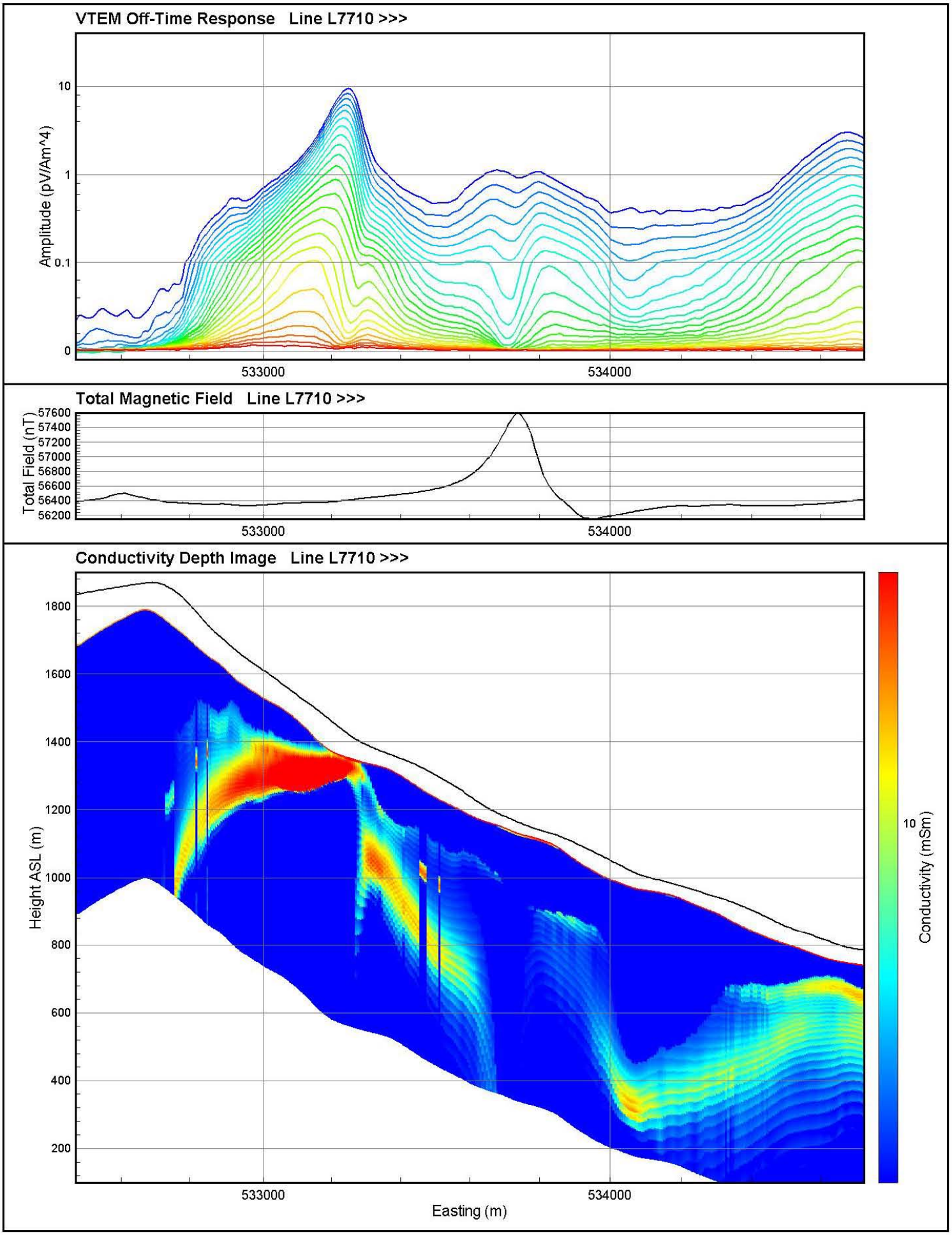
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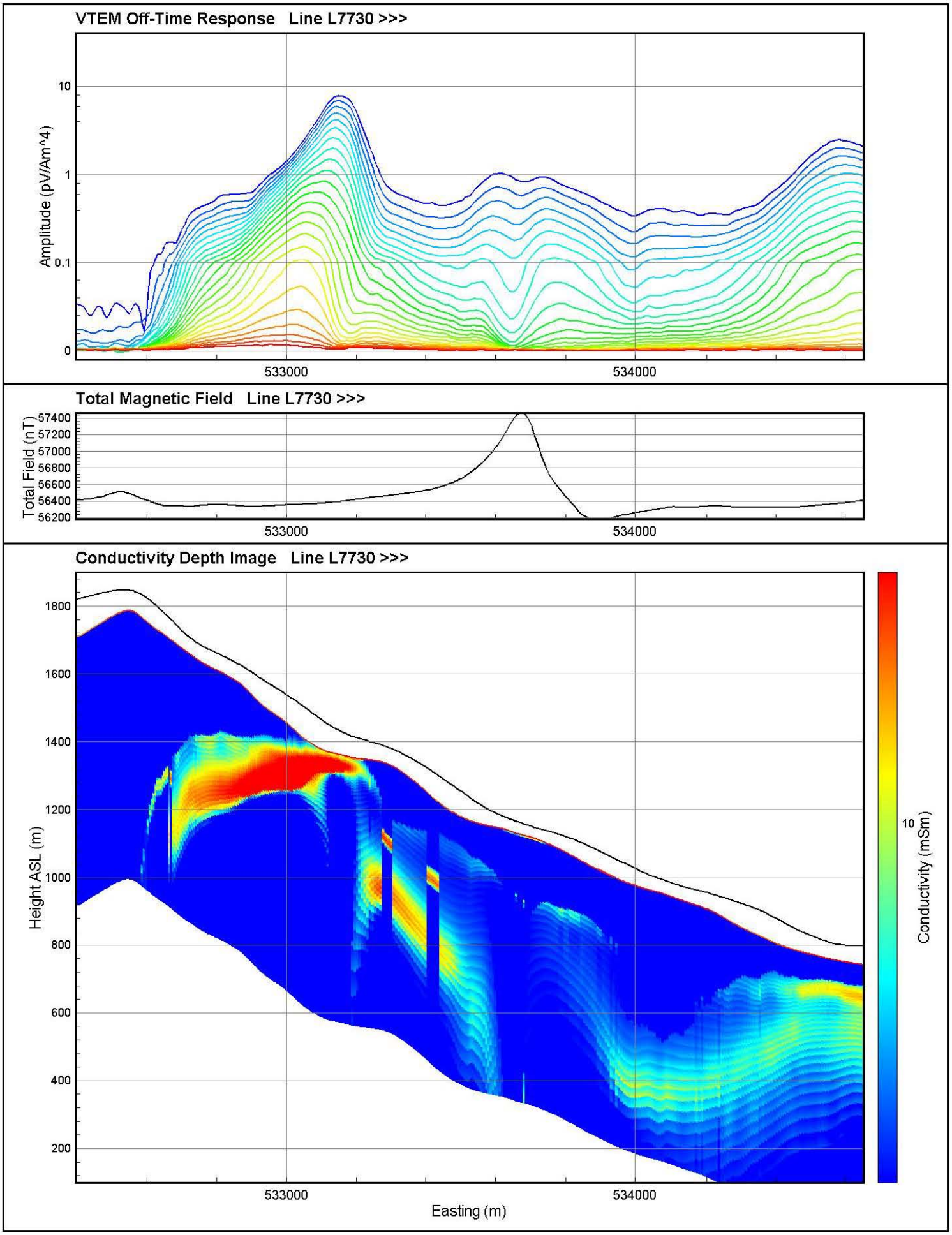
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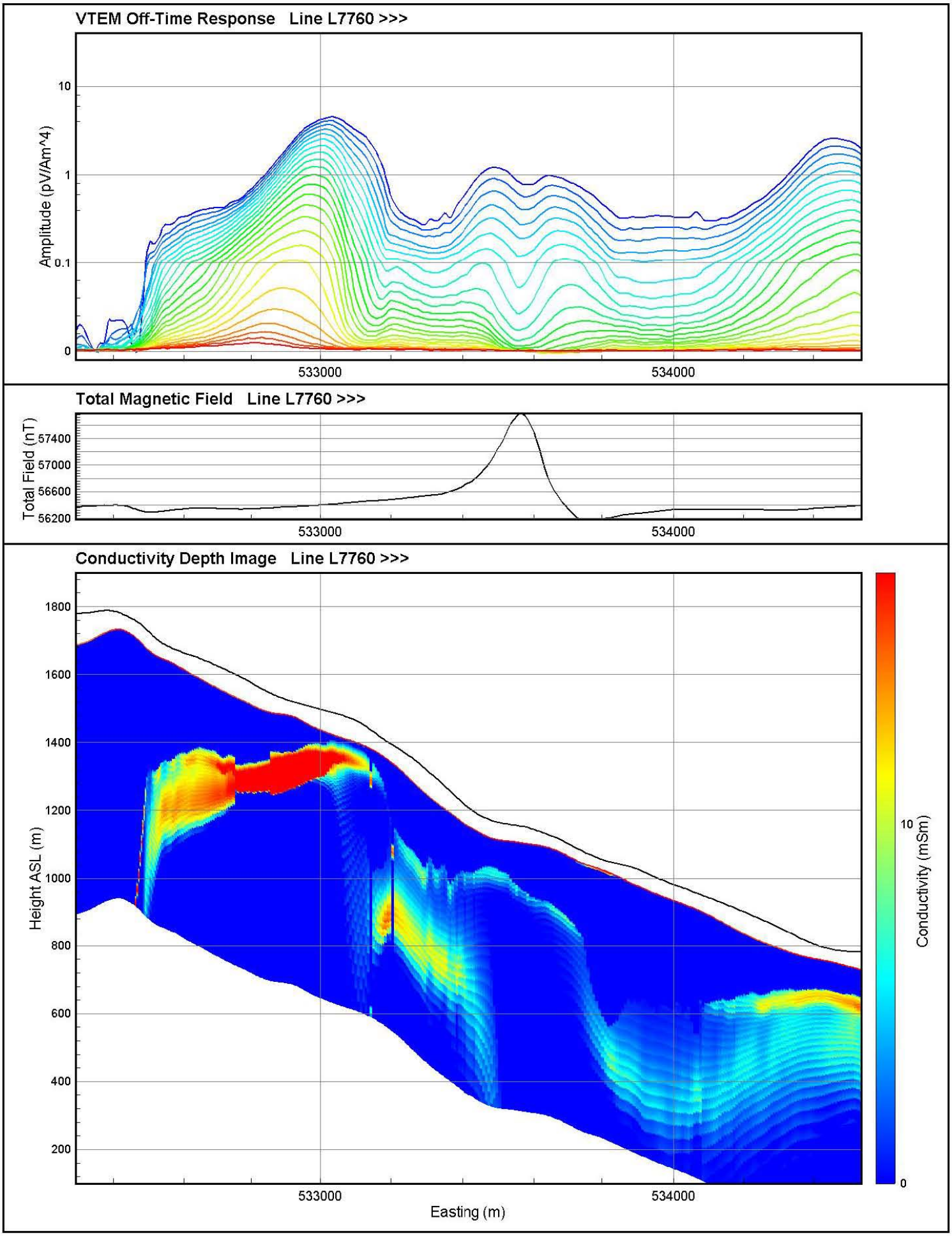
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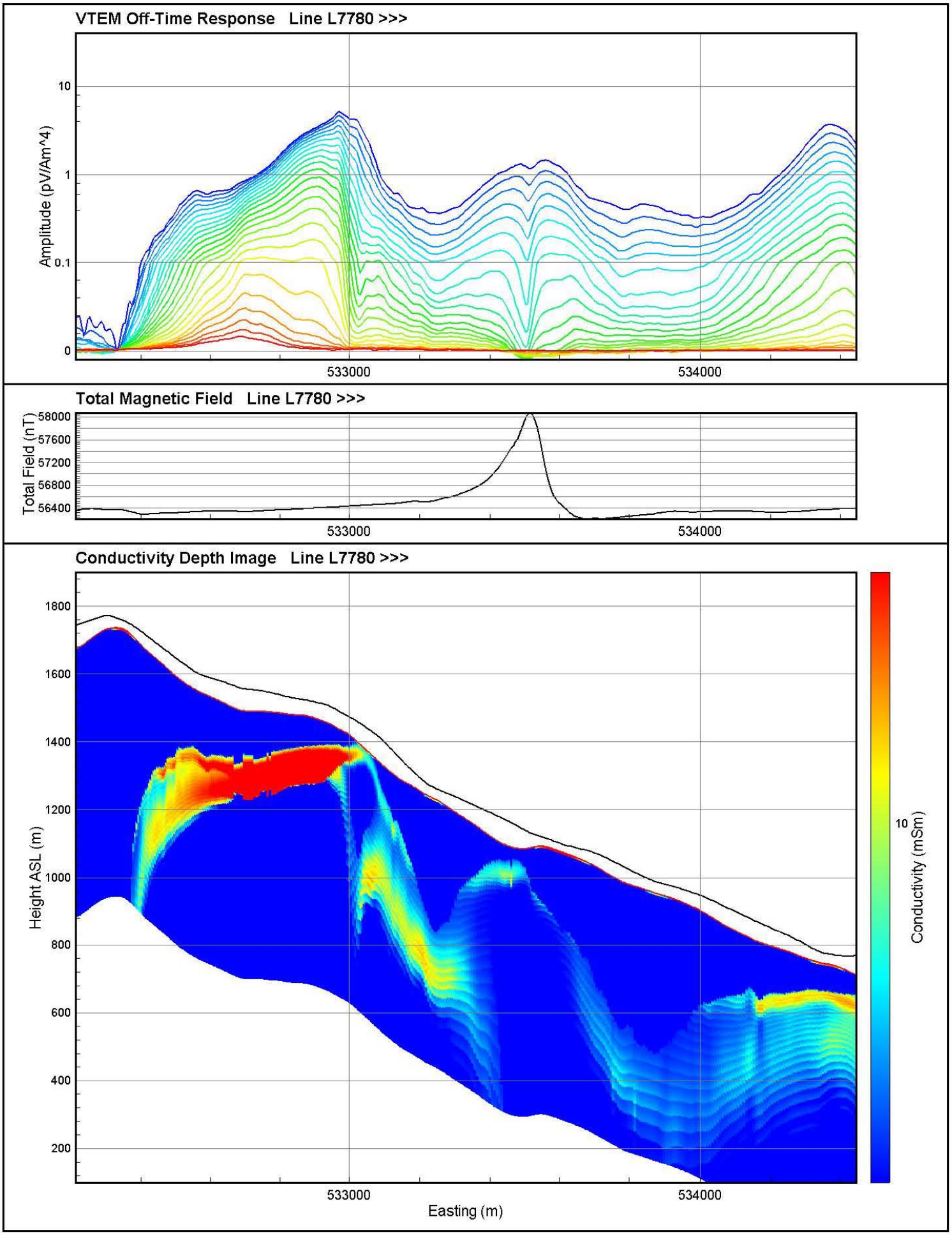
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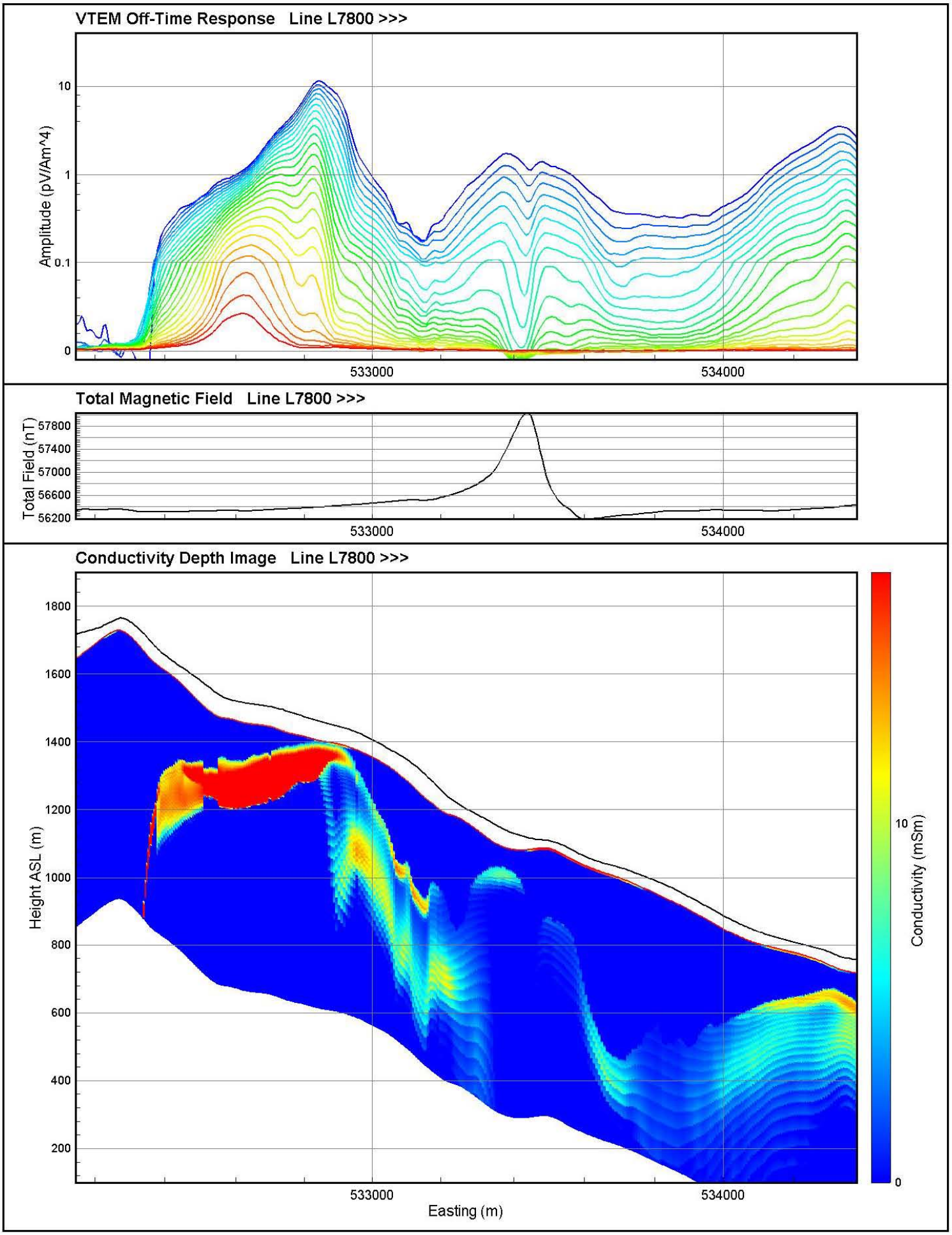
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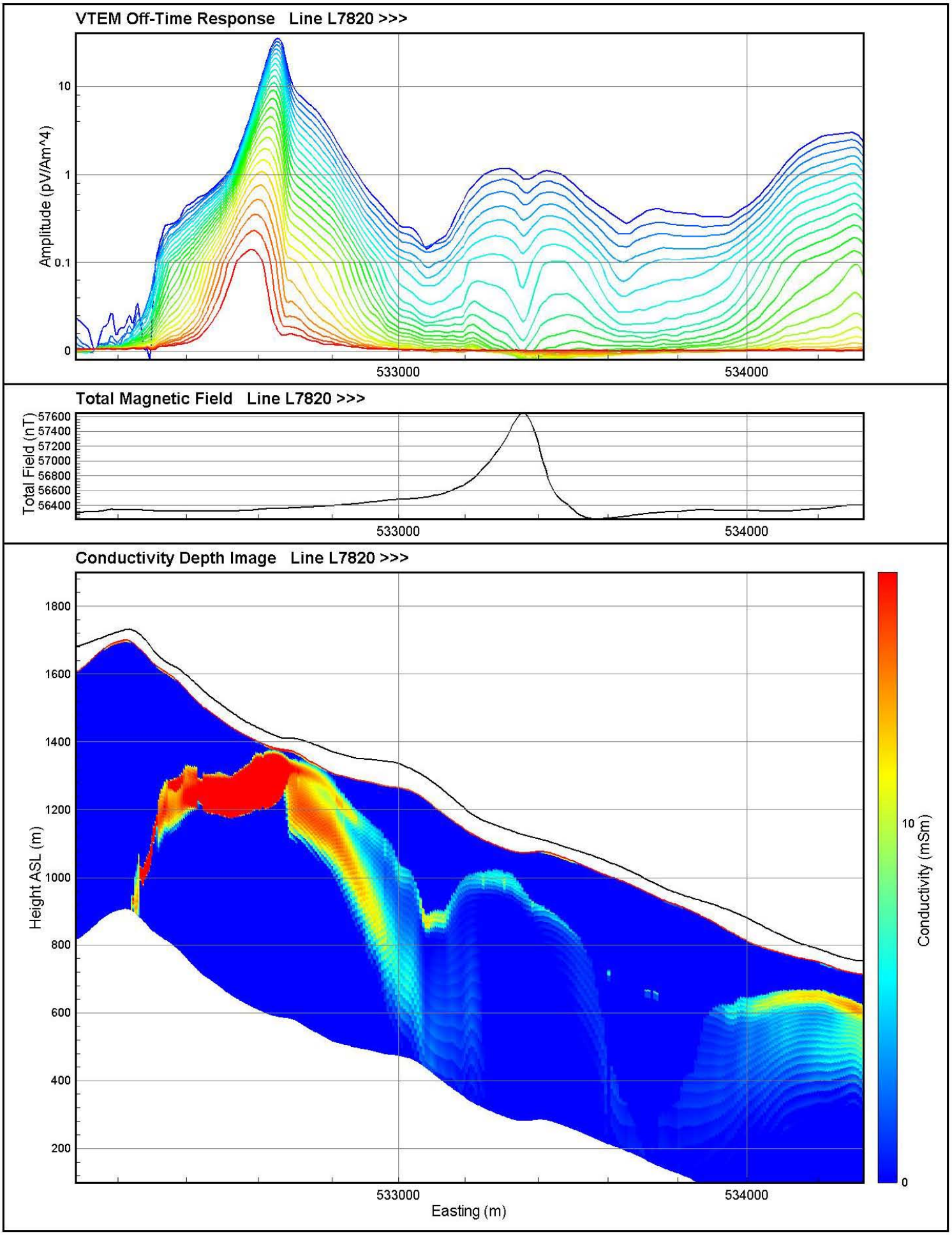
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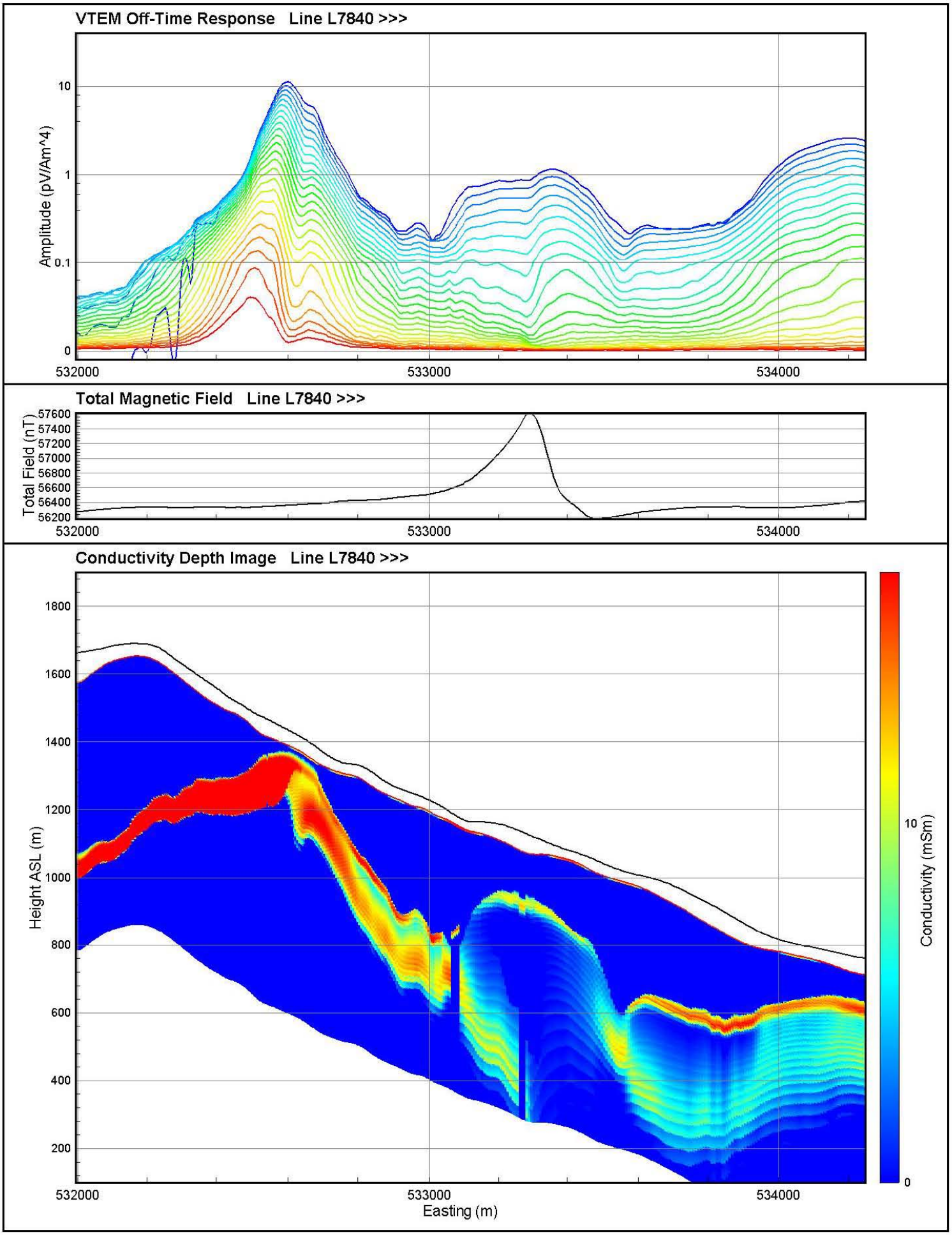
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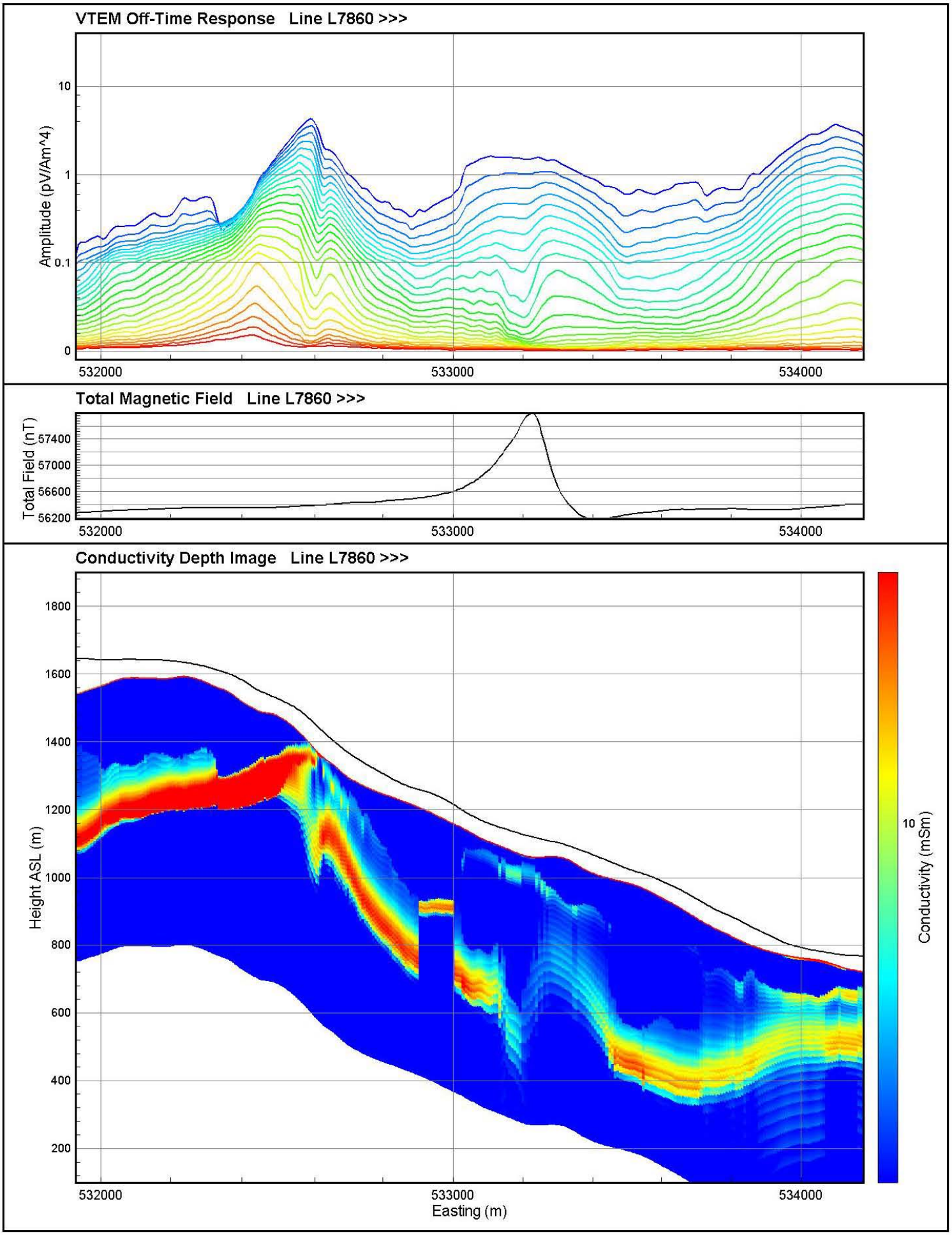
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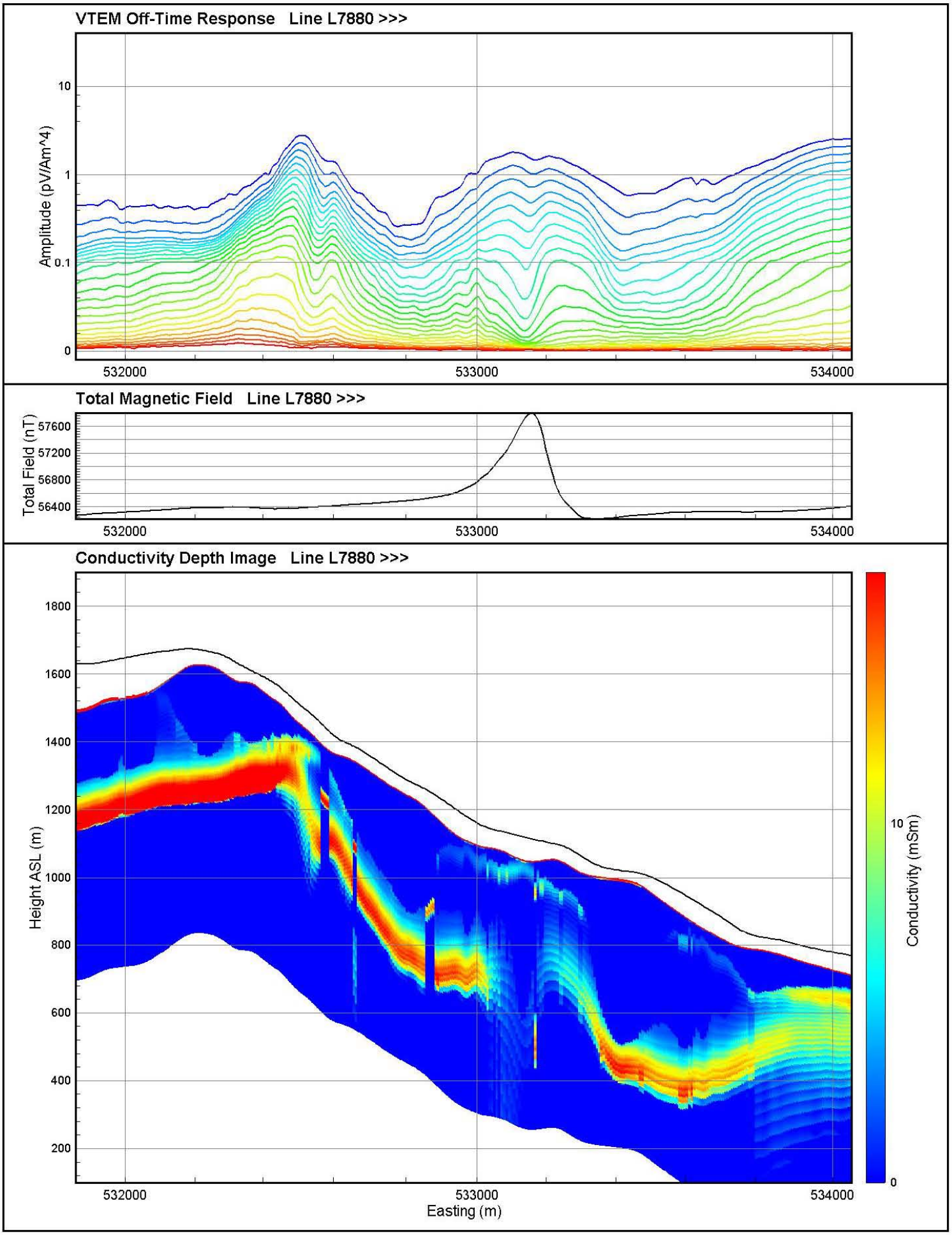
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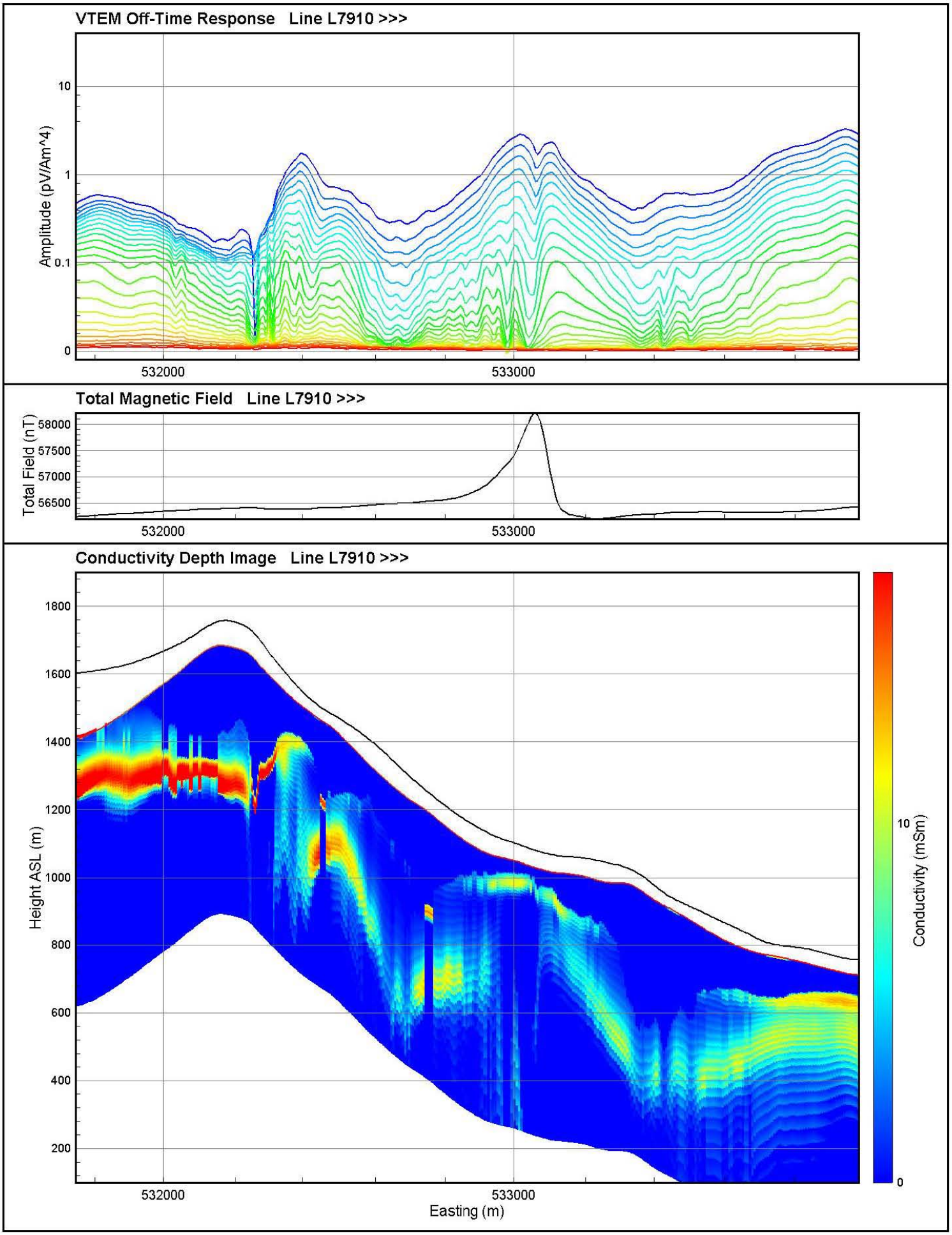
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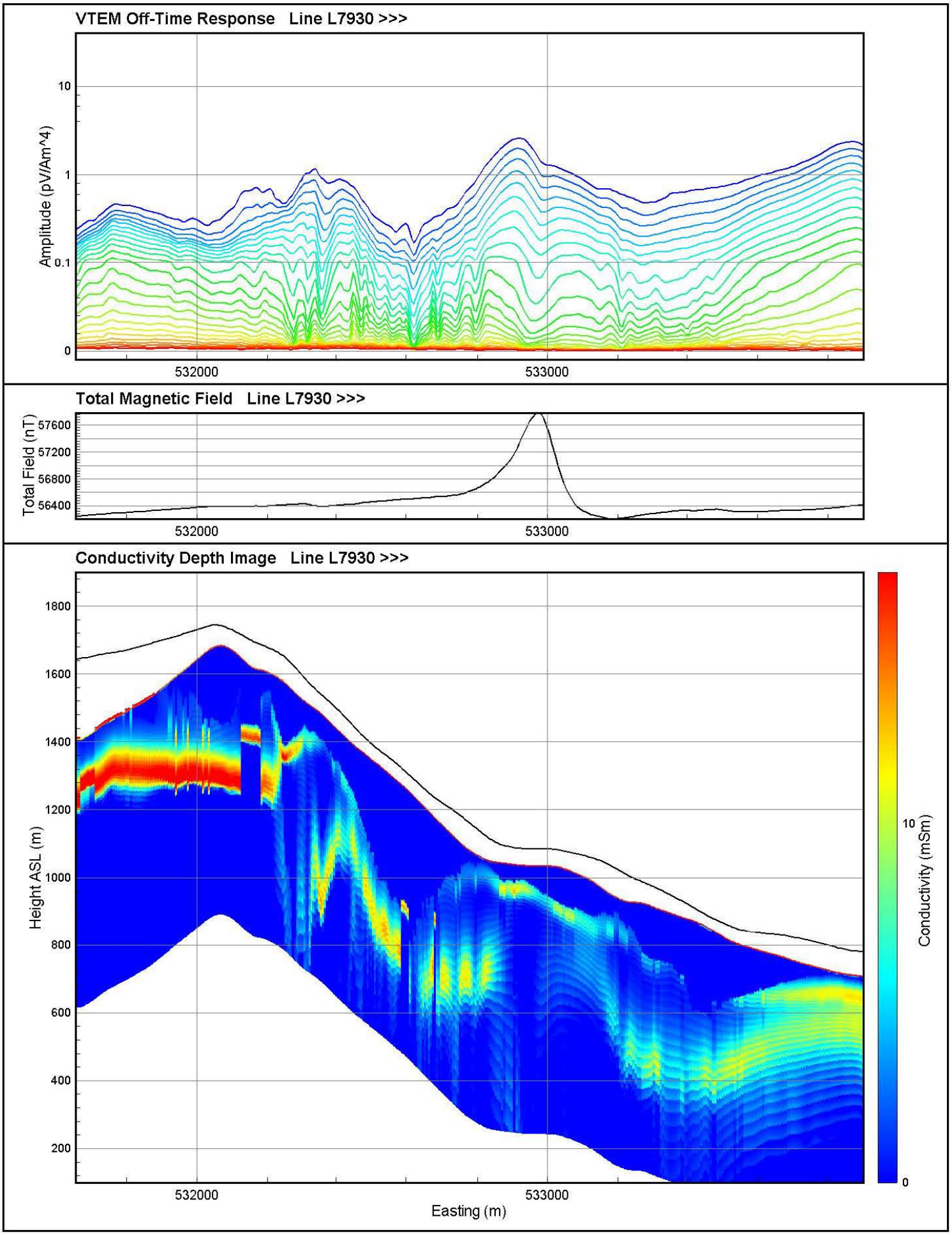
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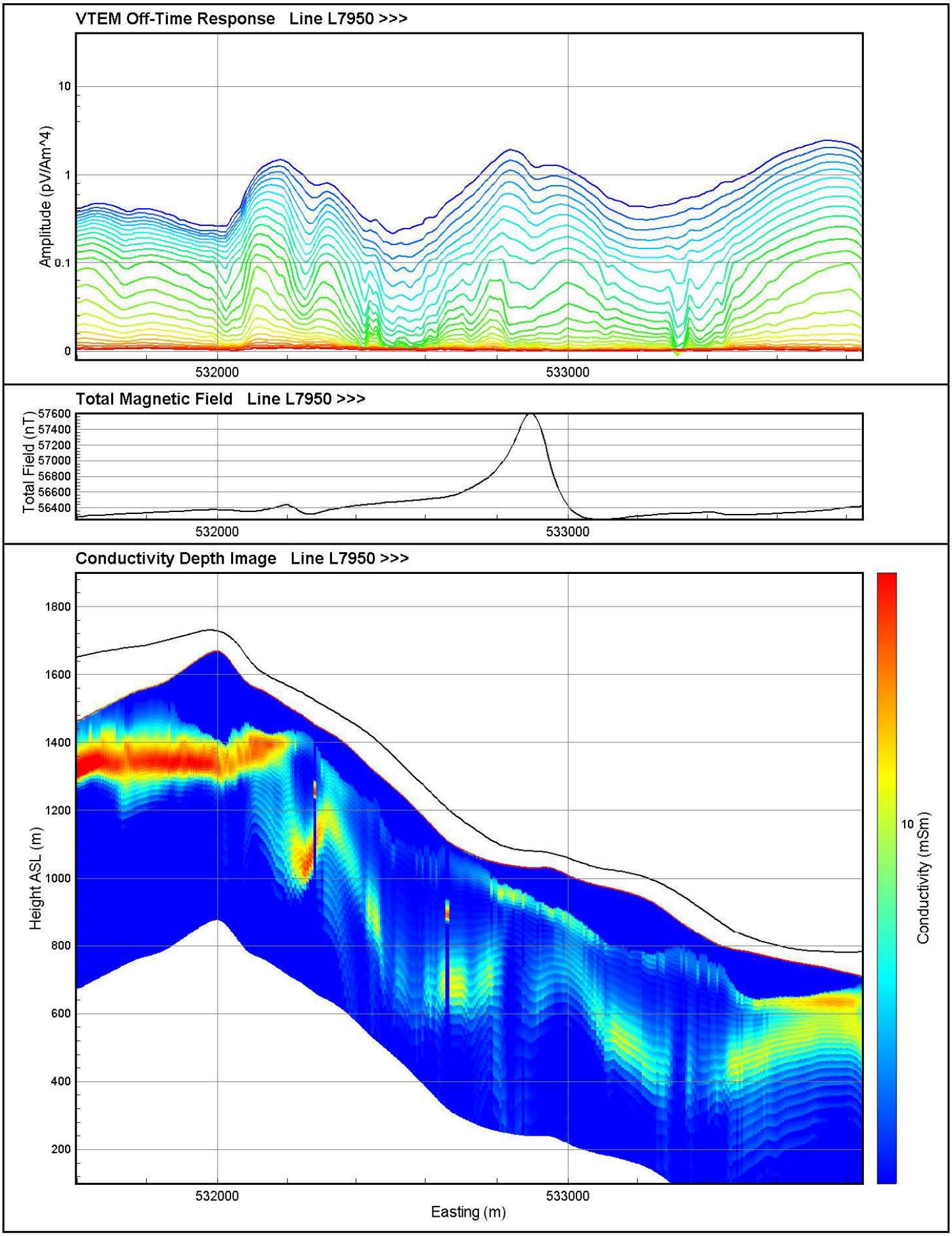
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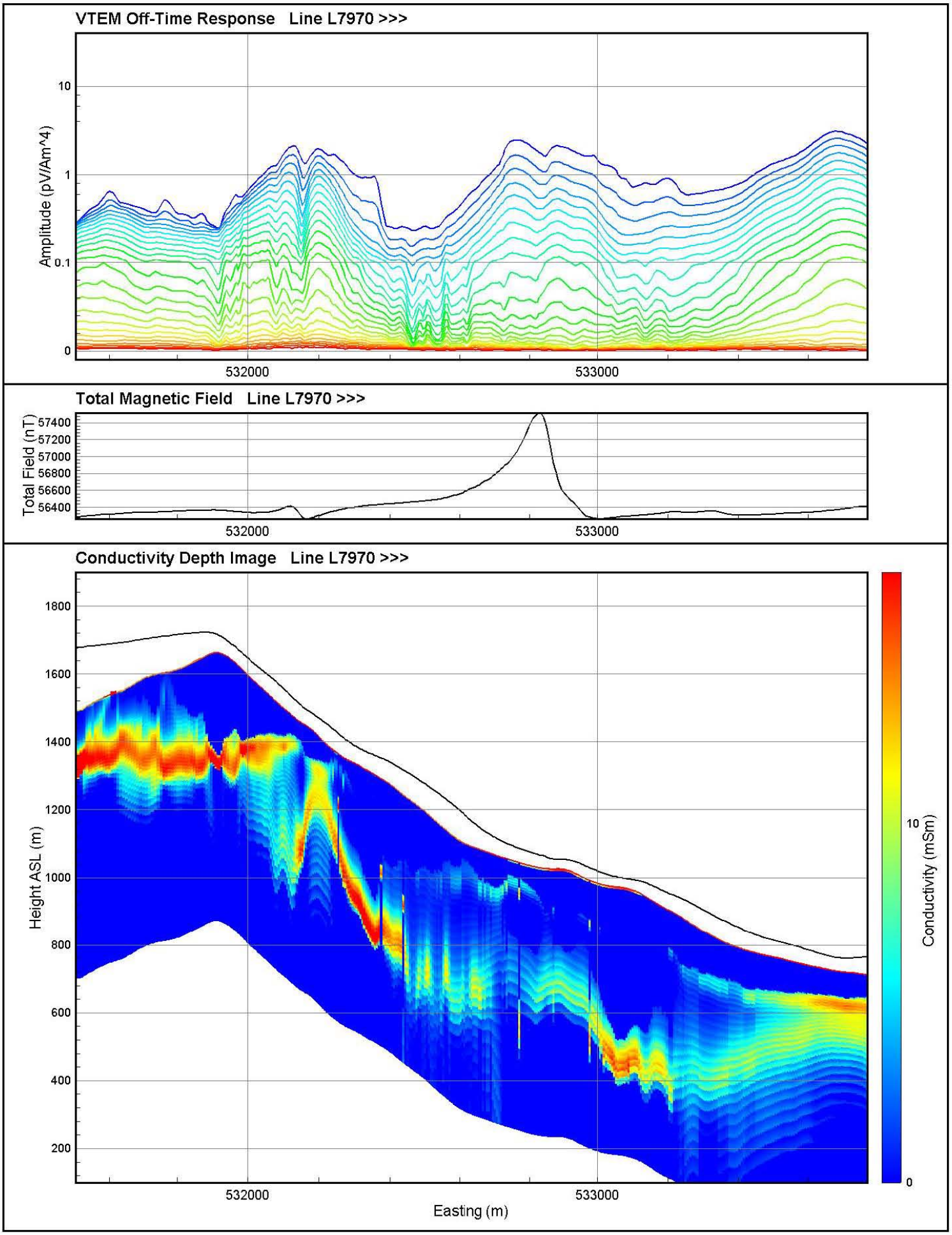
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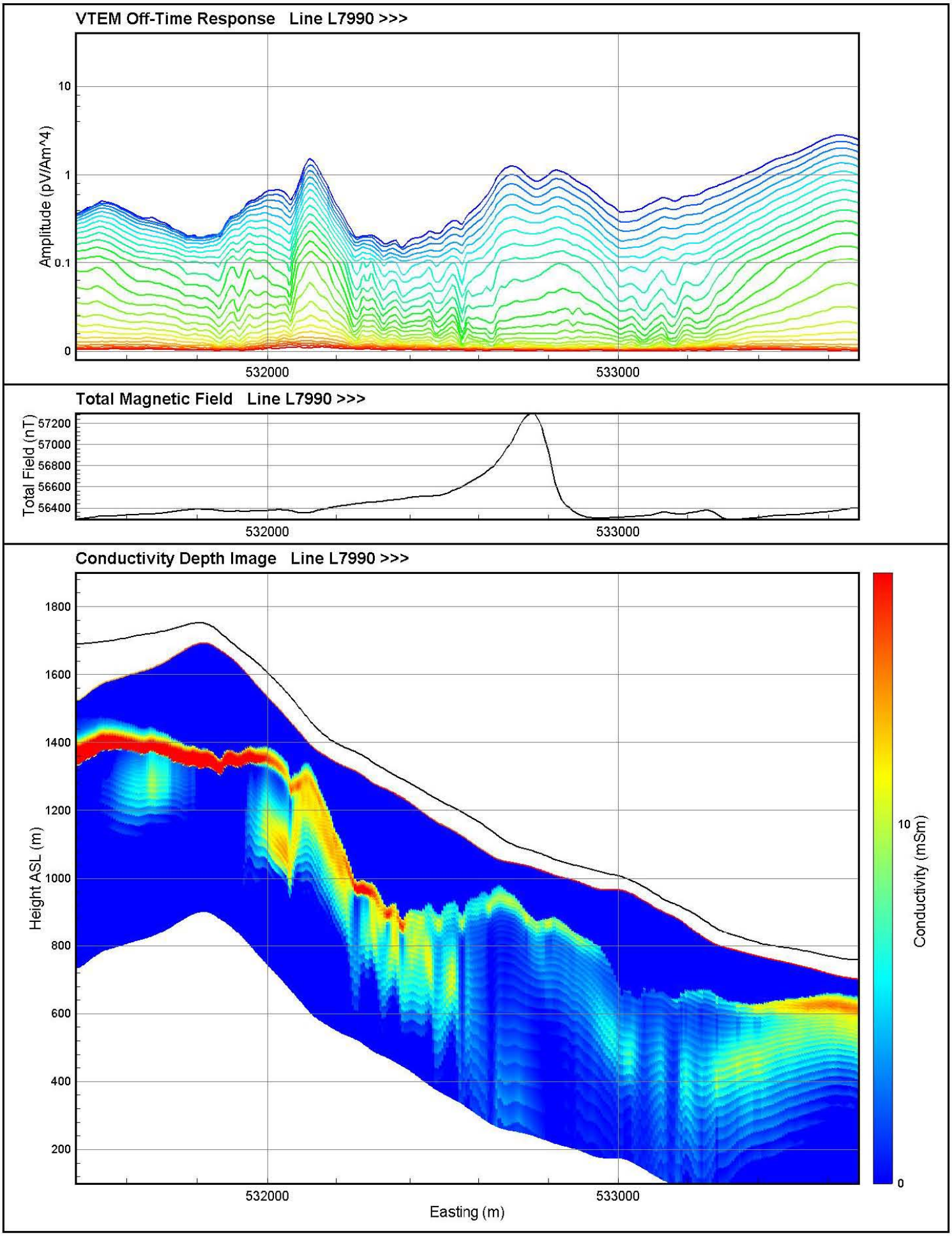
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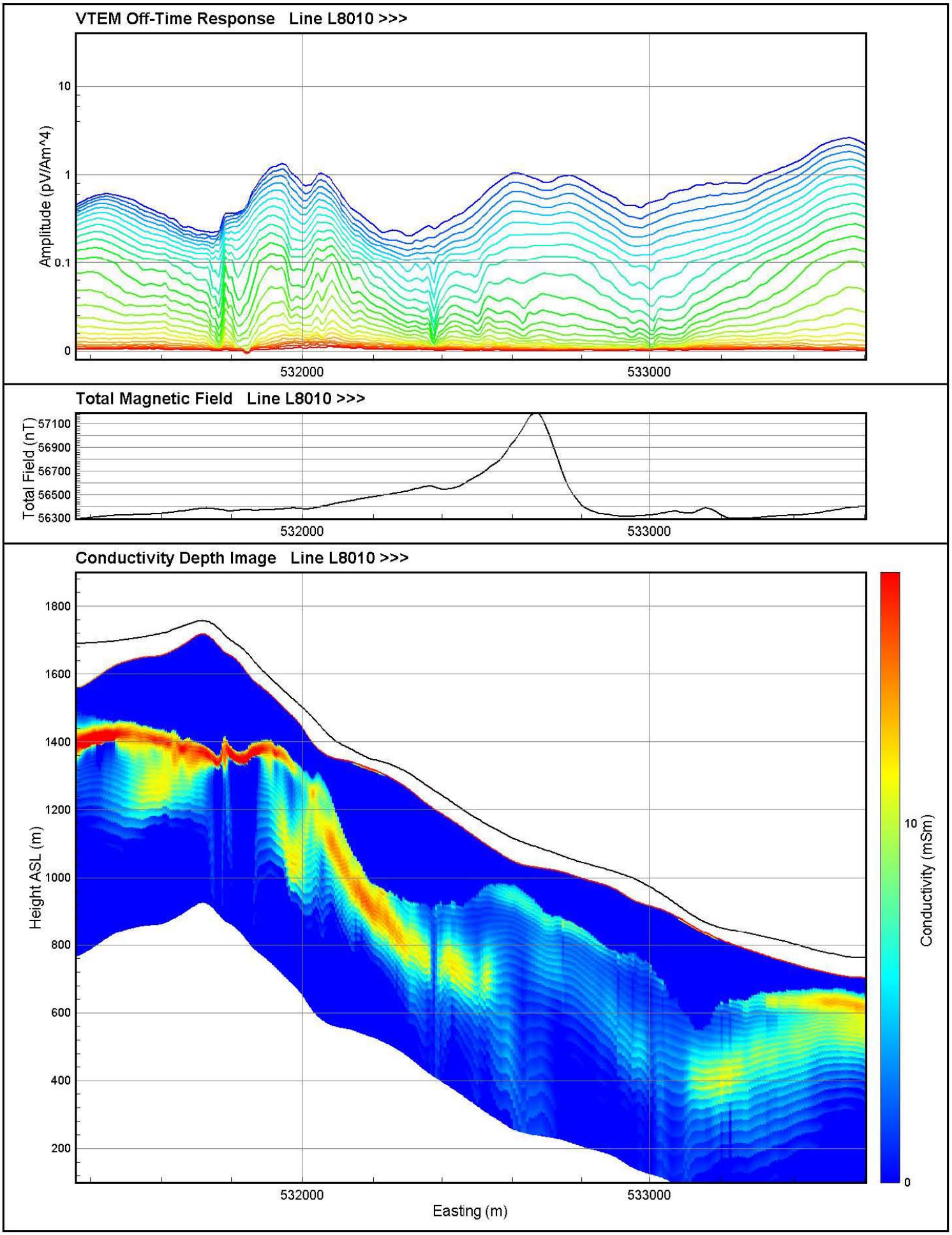
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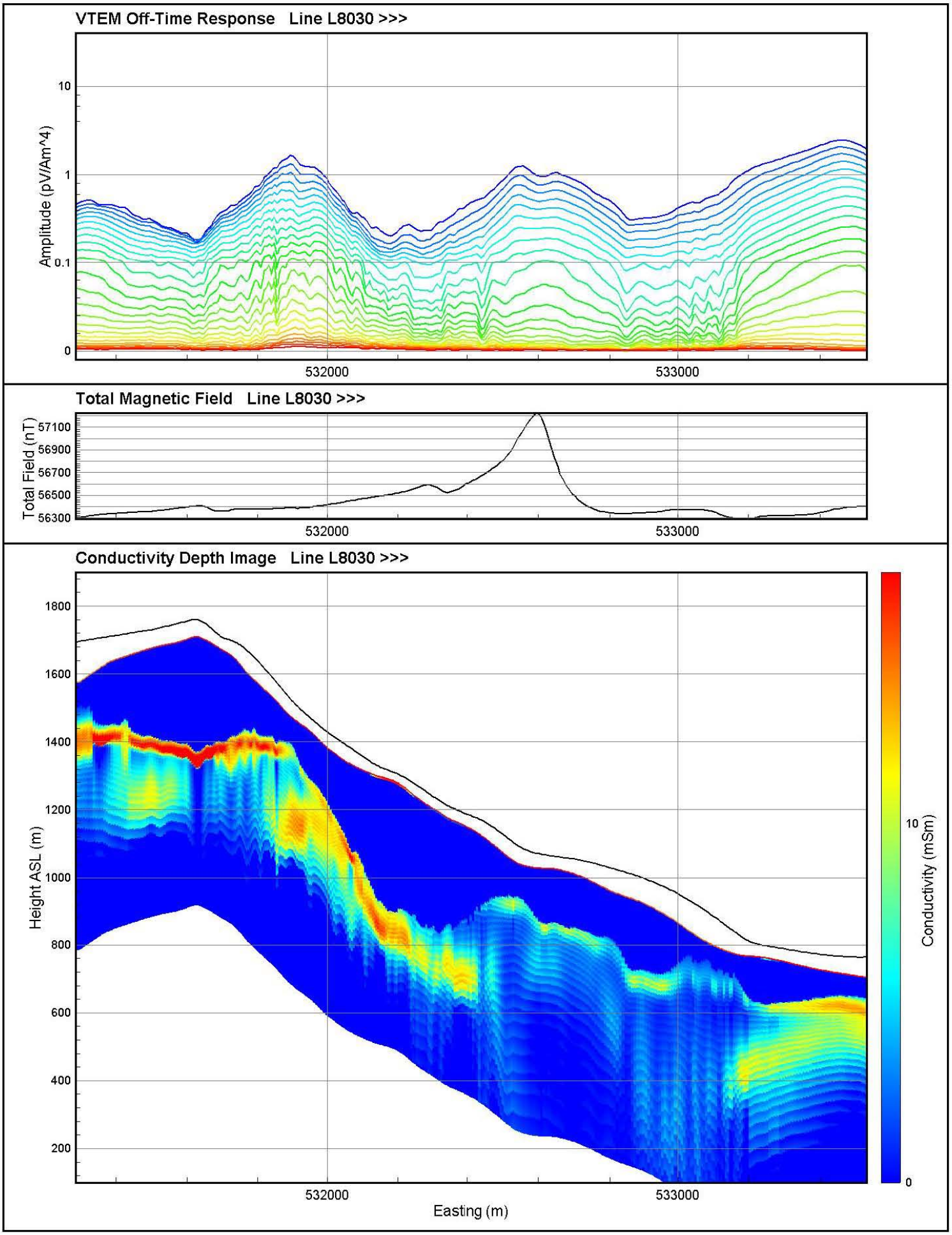
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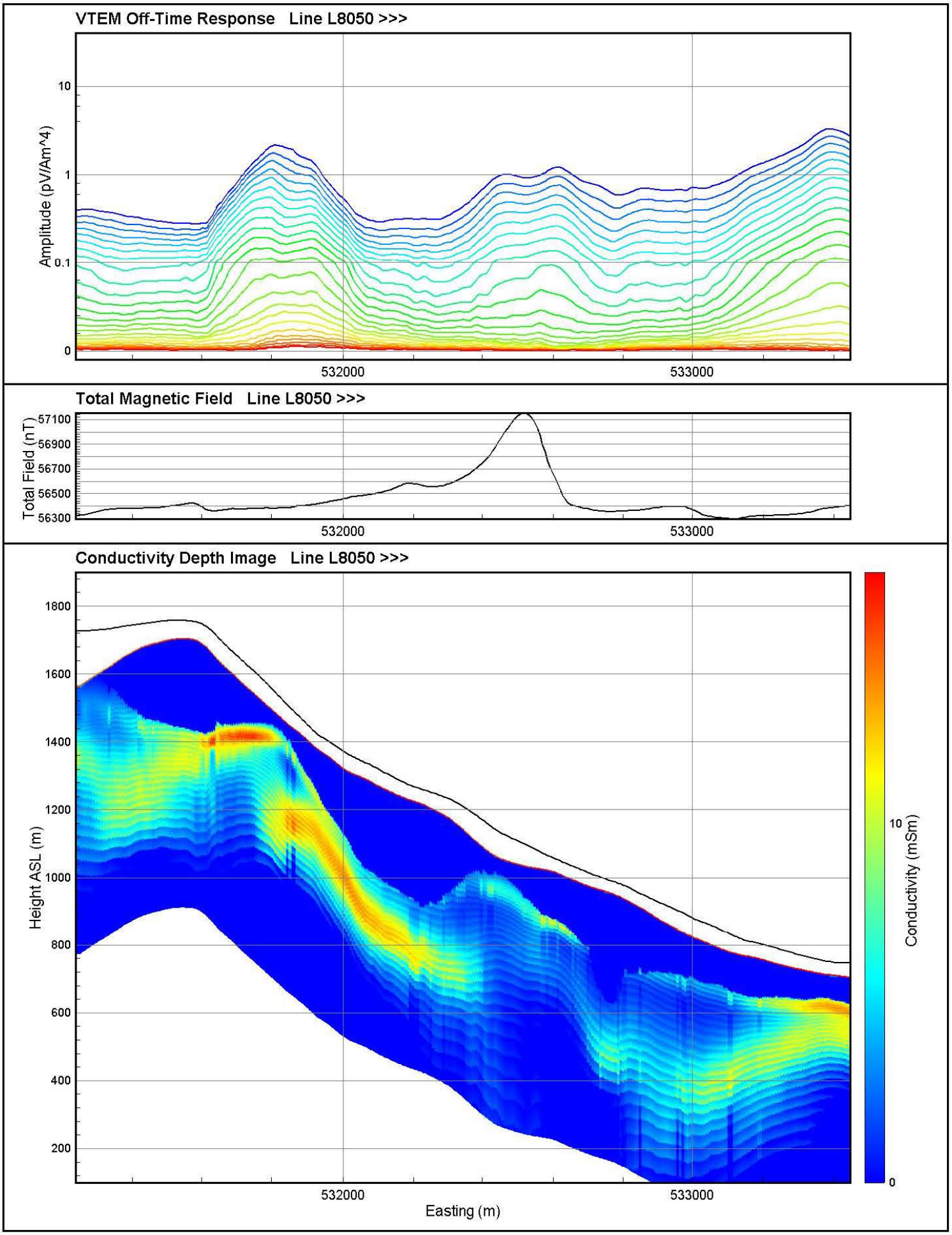
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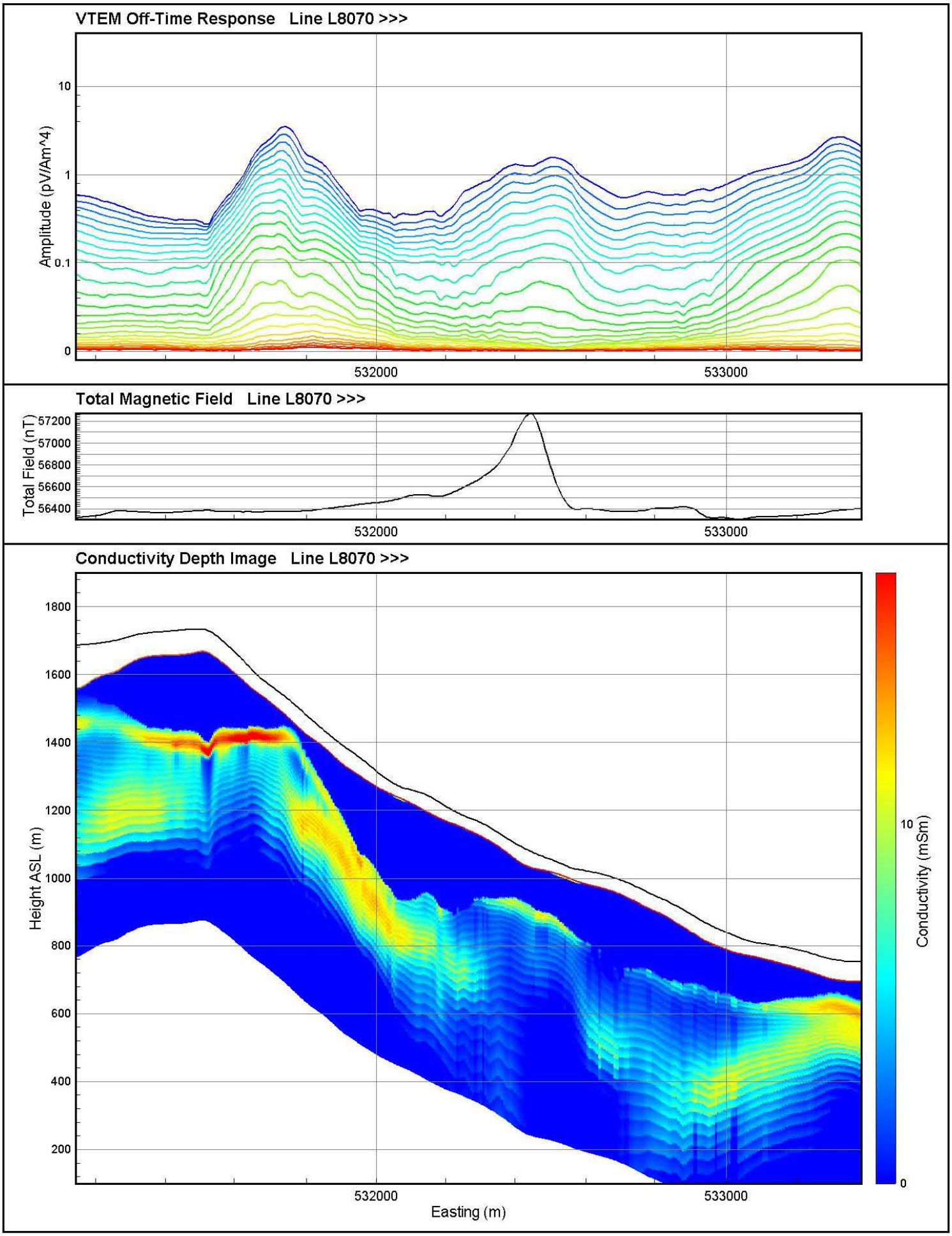
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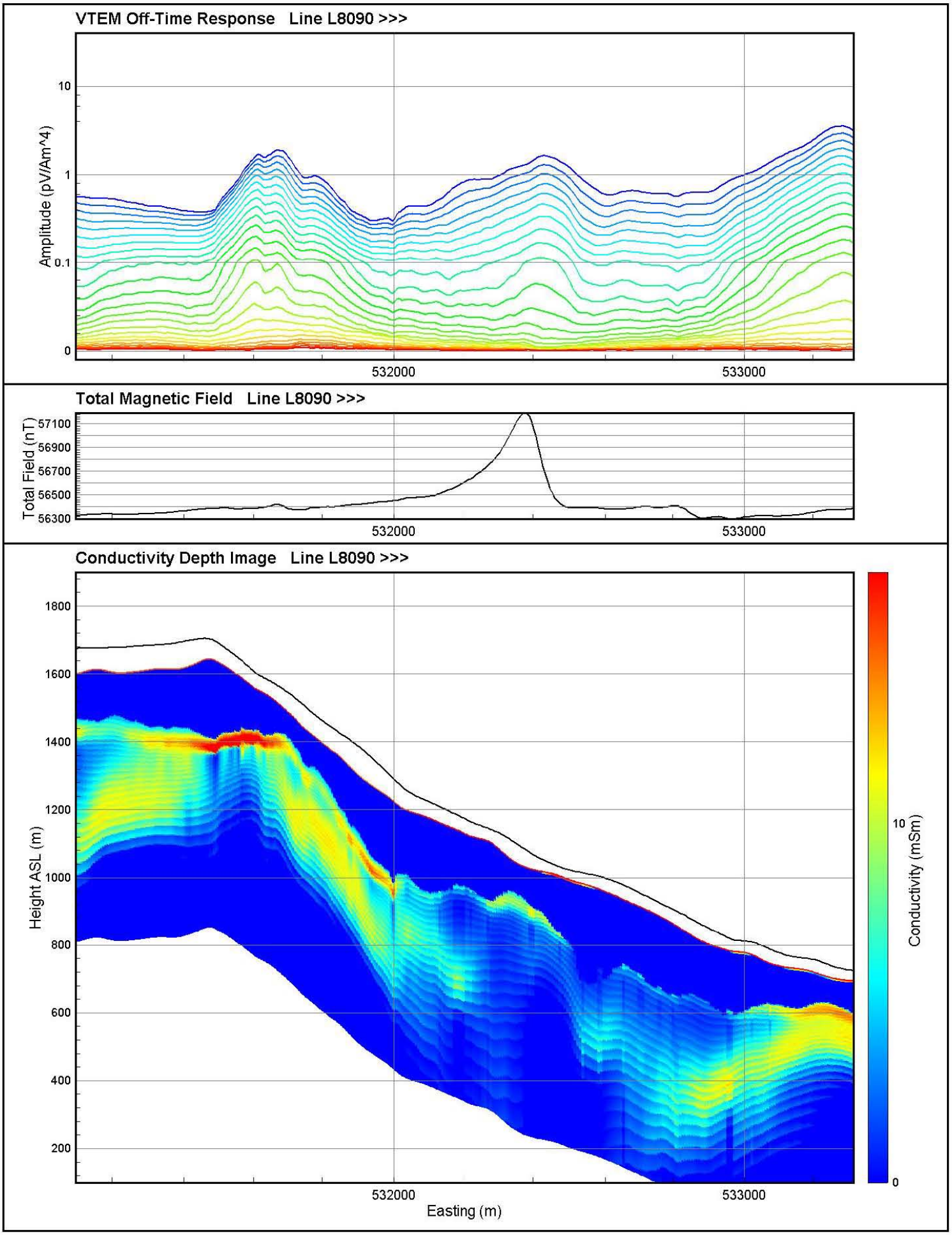
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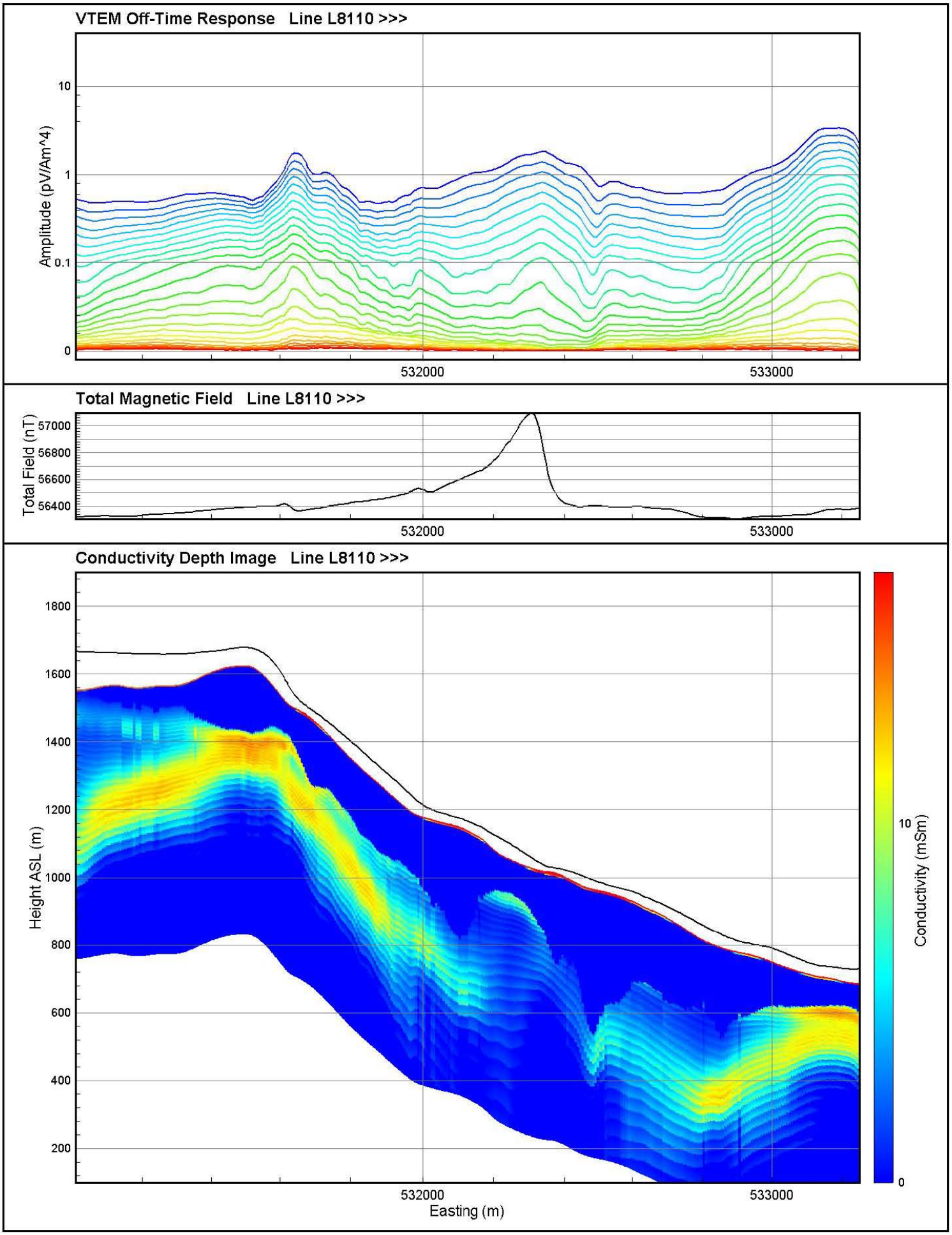
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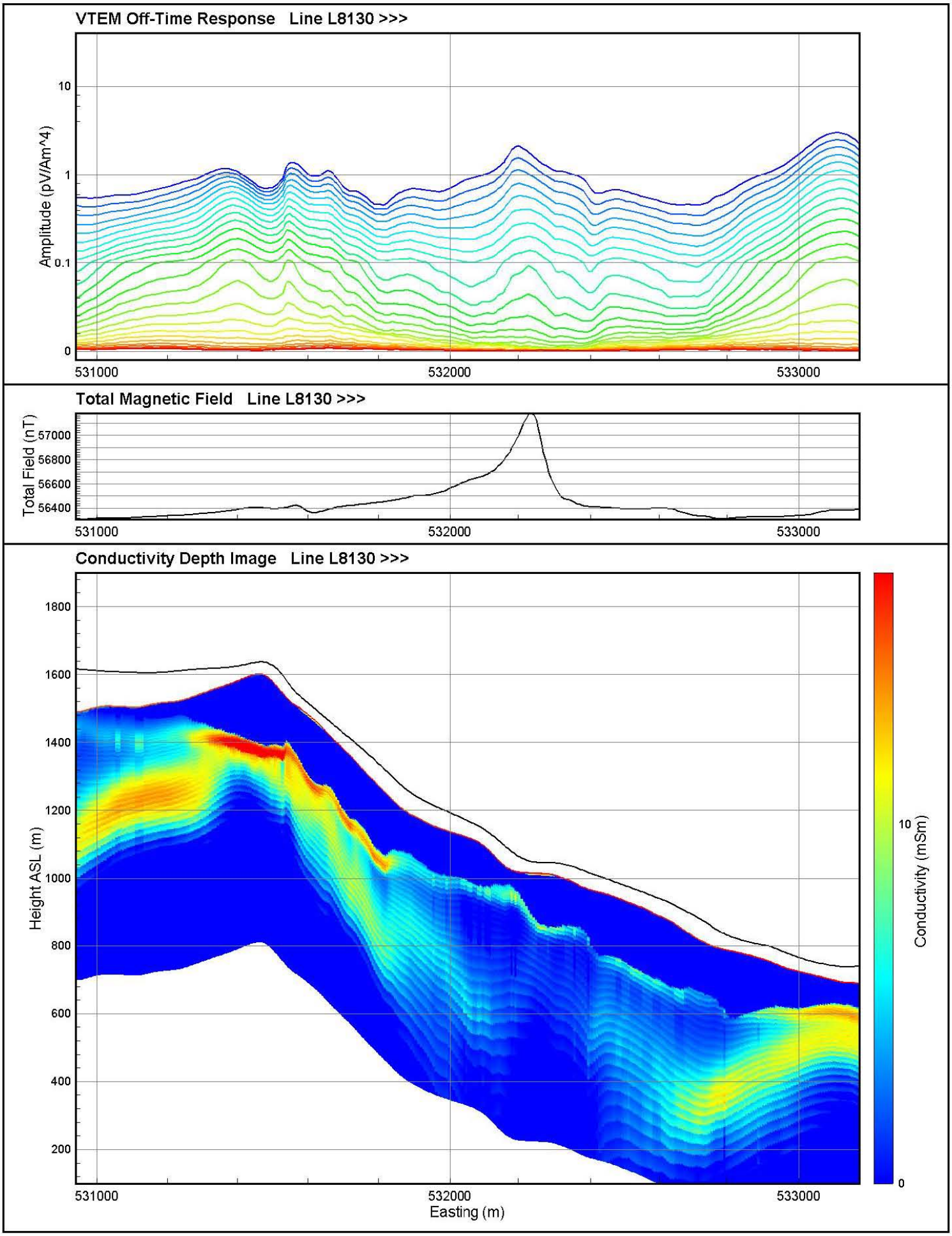
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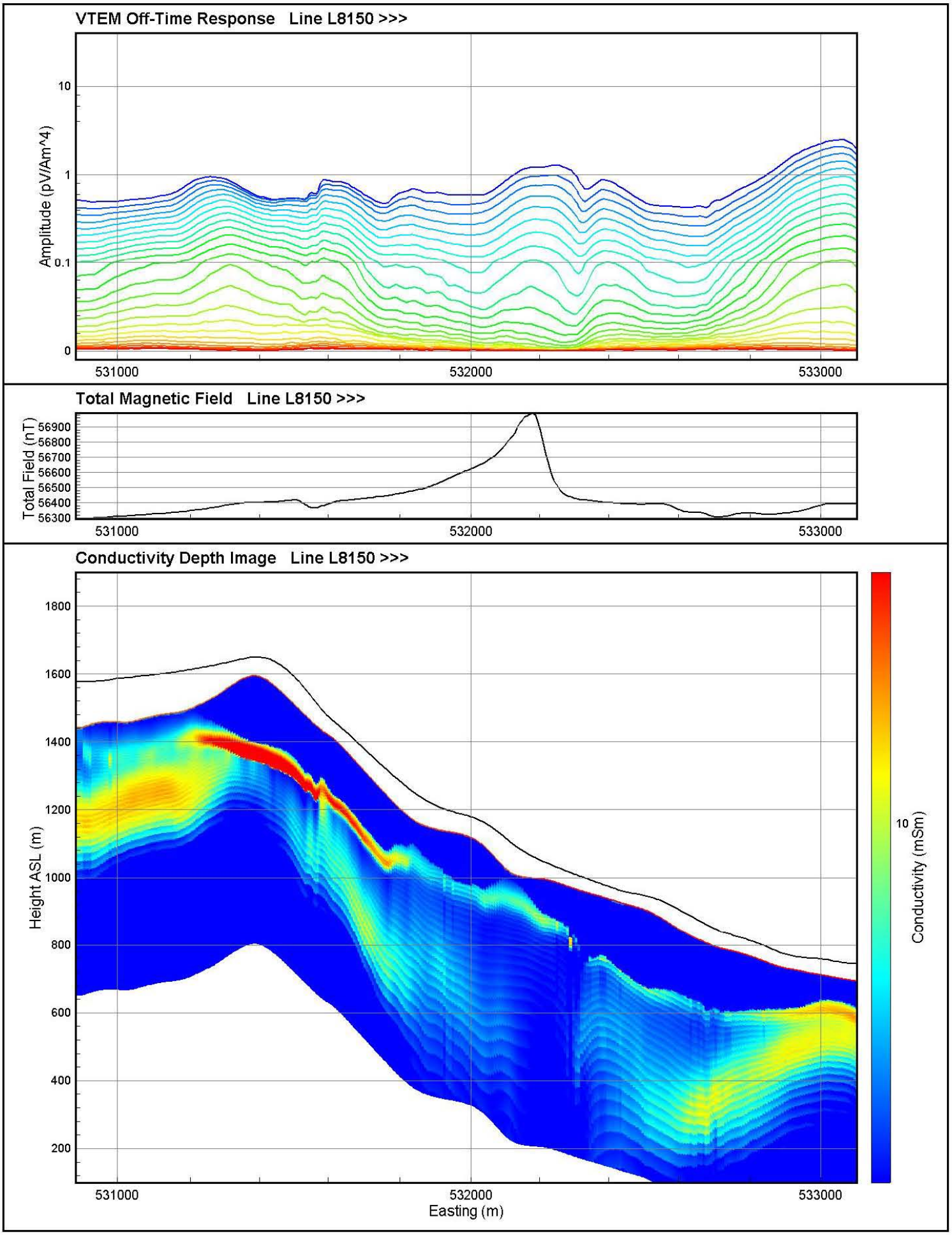
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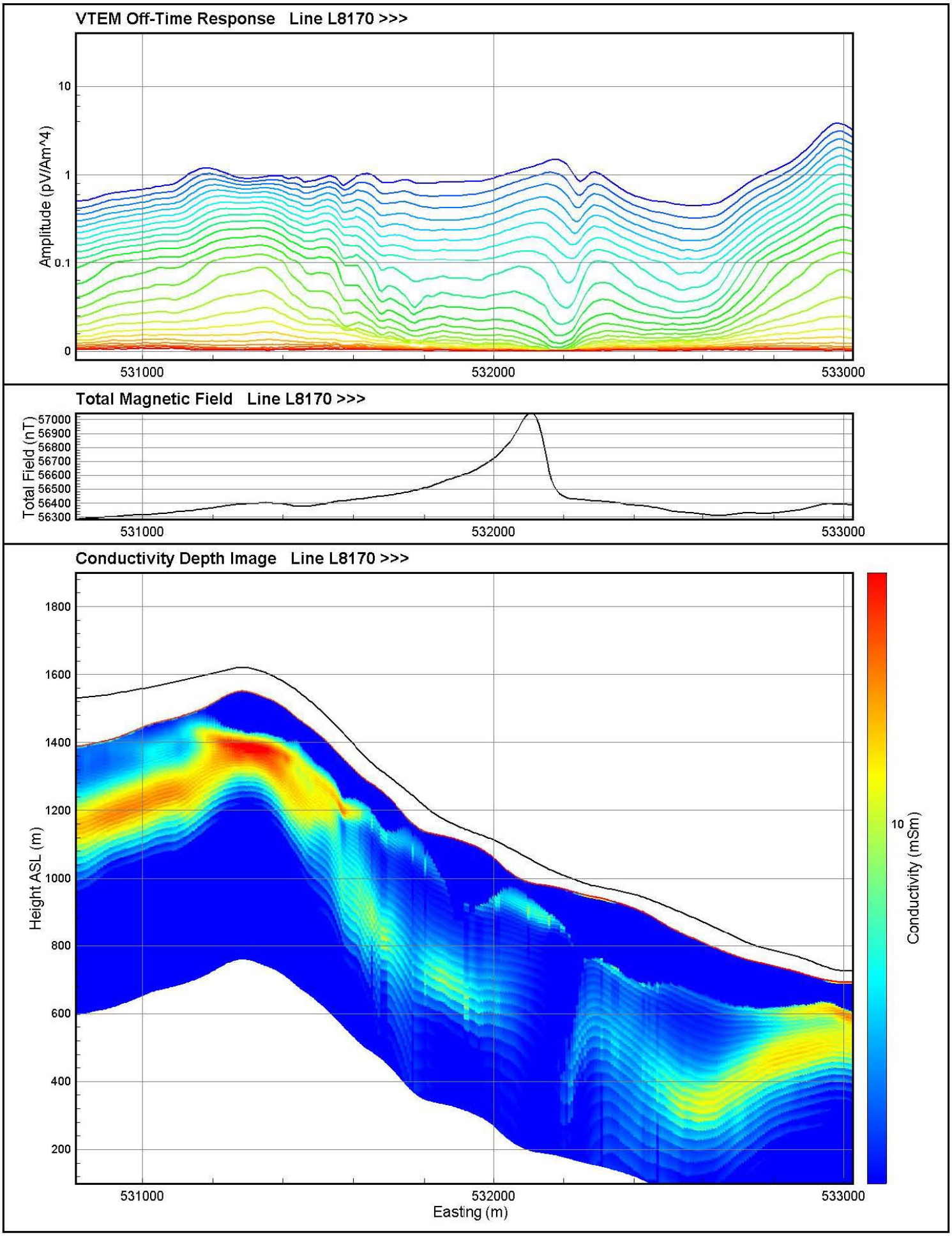
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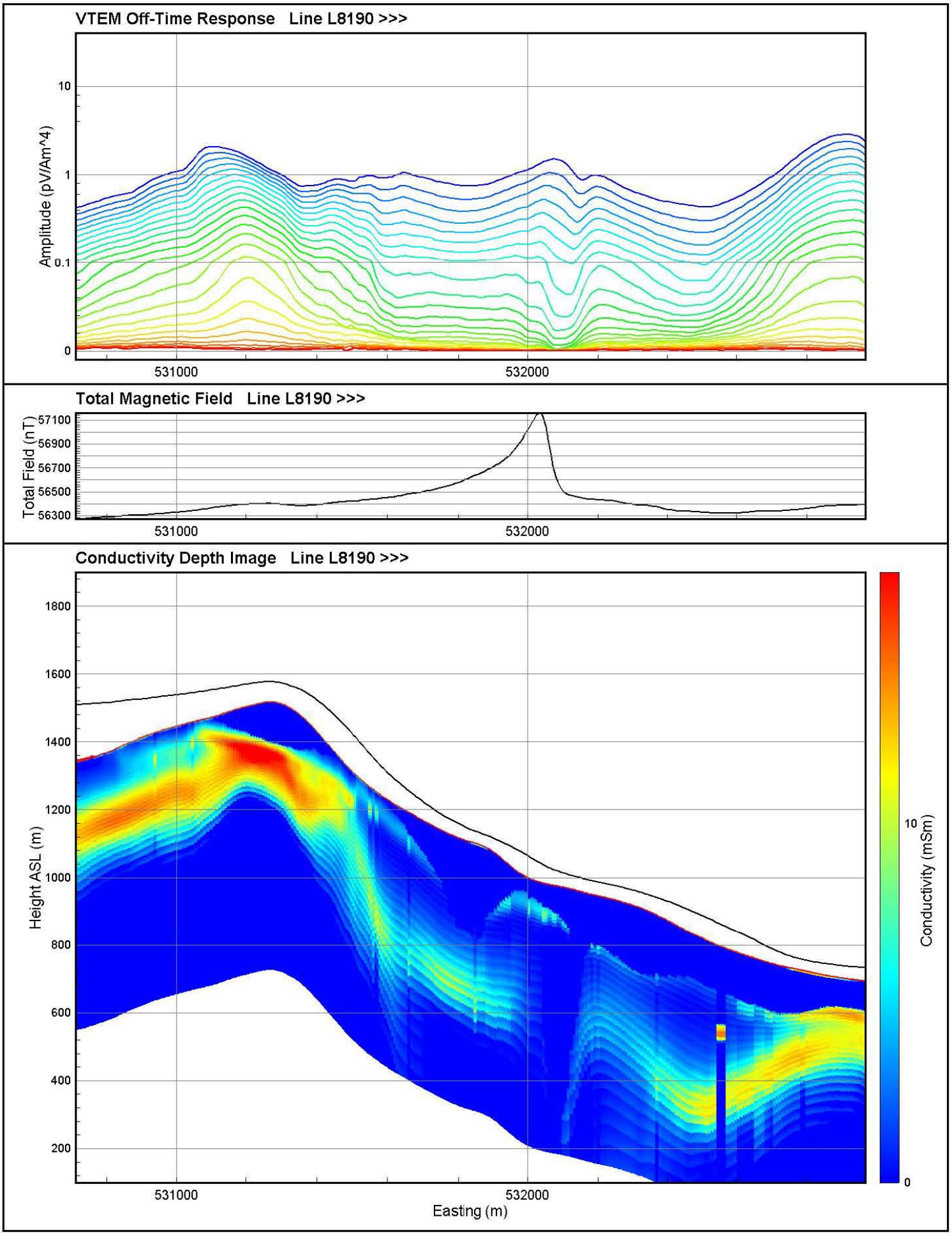
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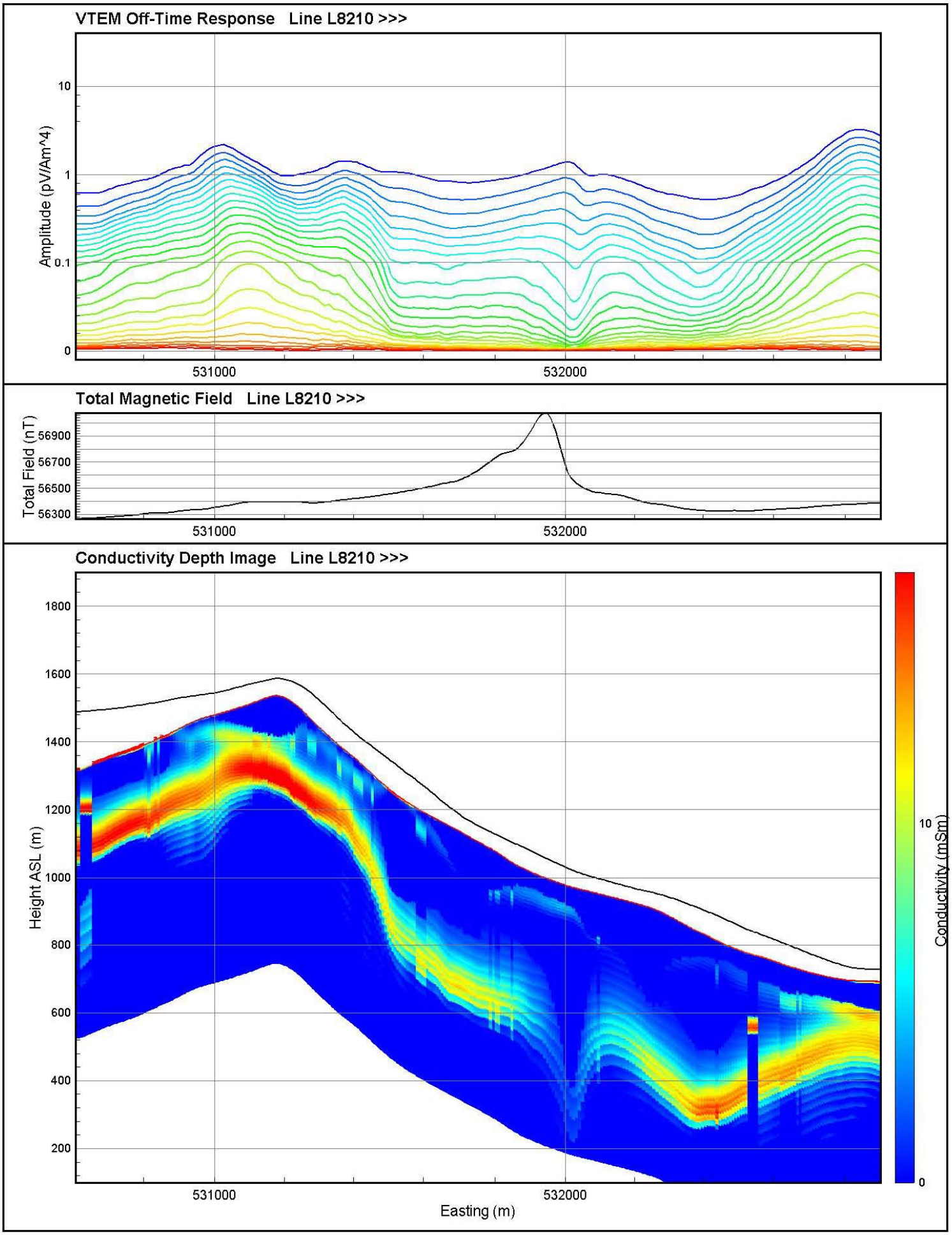
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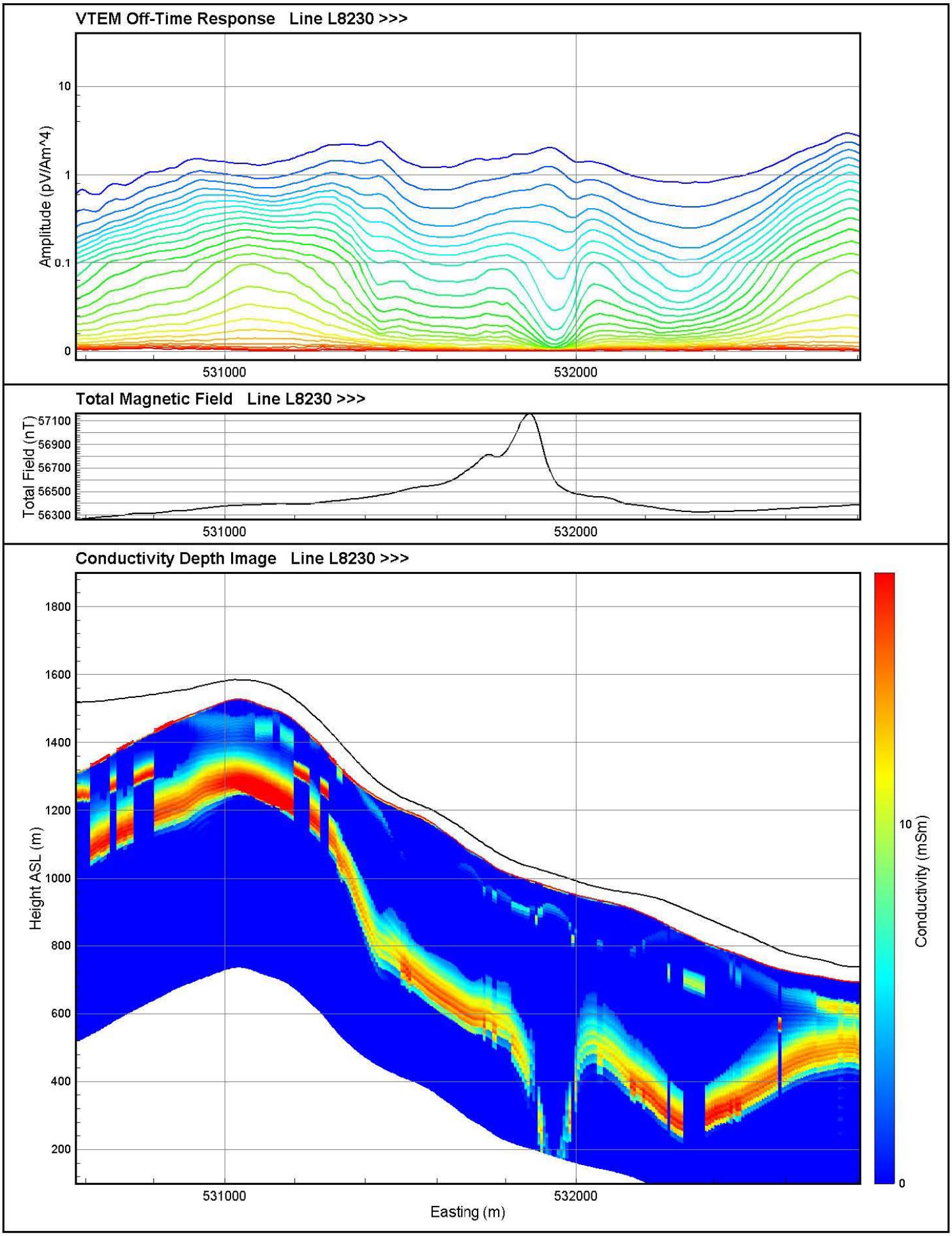
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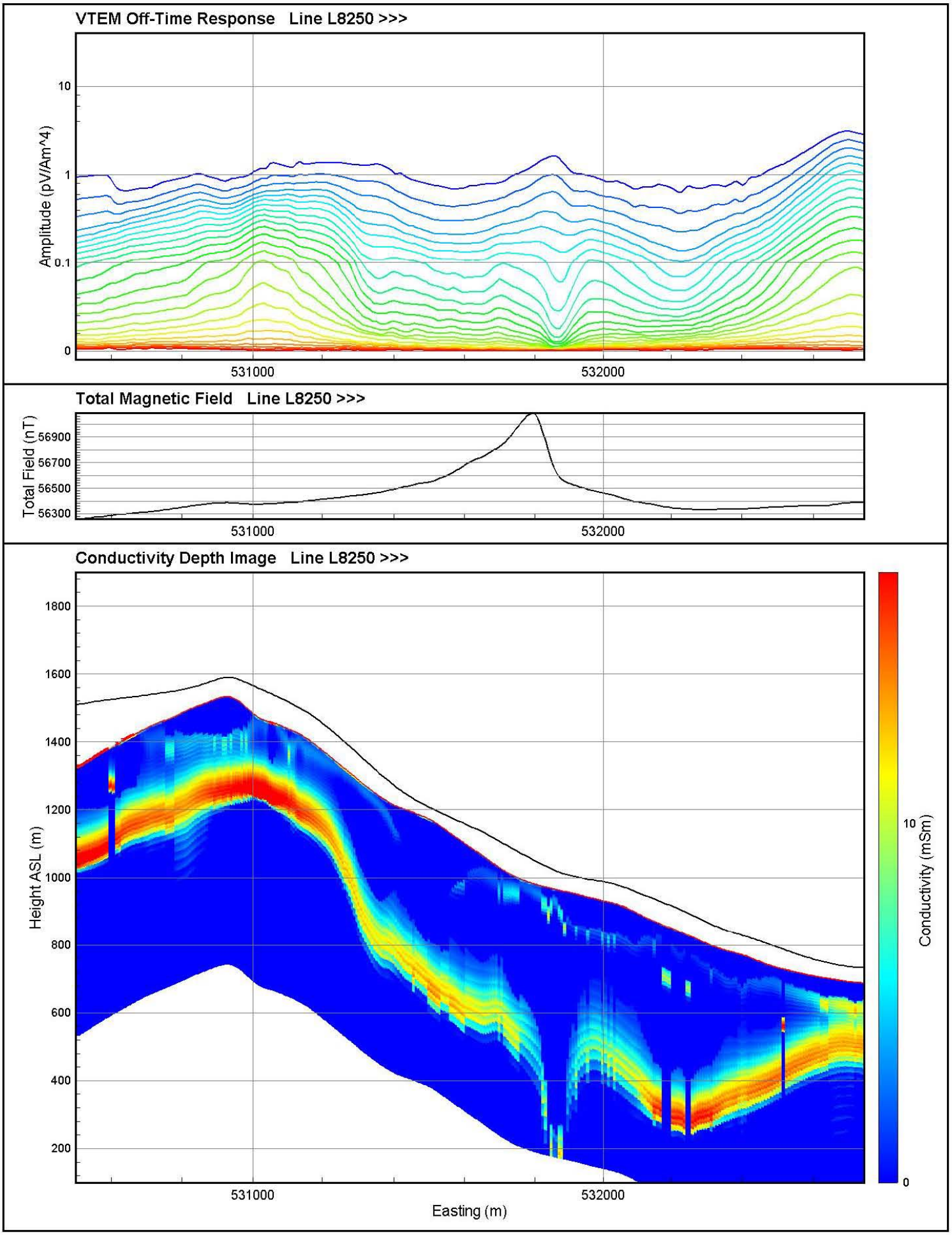
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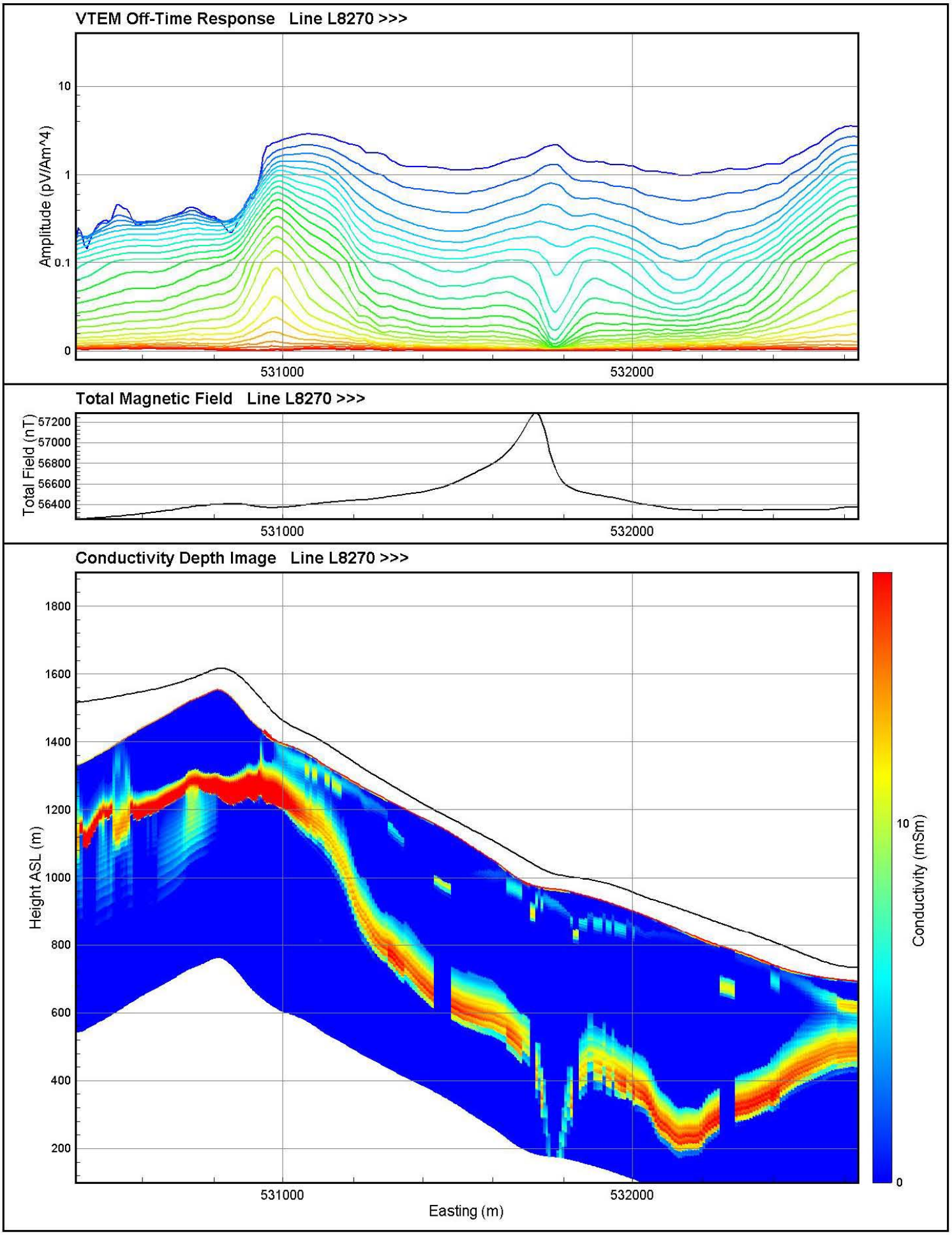
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Appendix I: Scott Hogg and Associates Ltd Interpretation Report of the VTEM Database

Interpretation Report

for the

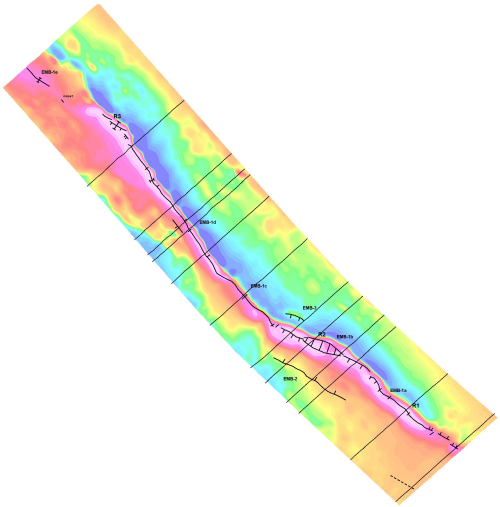
Geotech
VTEM and Magnetic
Helicopter Geophysical Survey

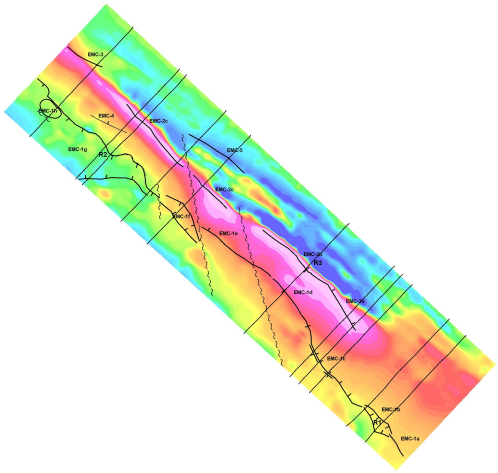
of

Burwash Area B and C
Yukon, Canada

on behalf of

Umbono Capital Partners LLC





SCOTT HOGG & ASSOCIATES LTD

October 2007

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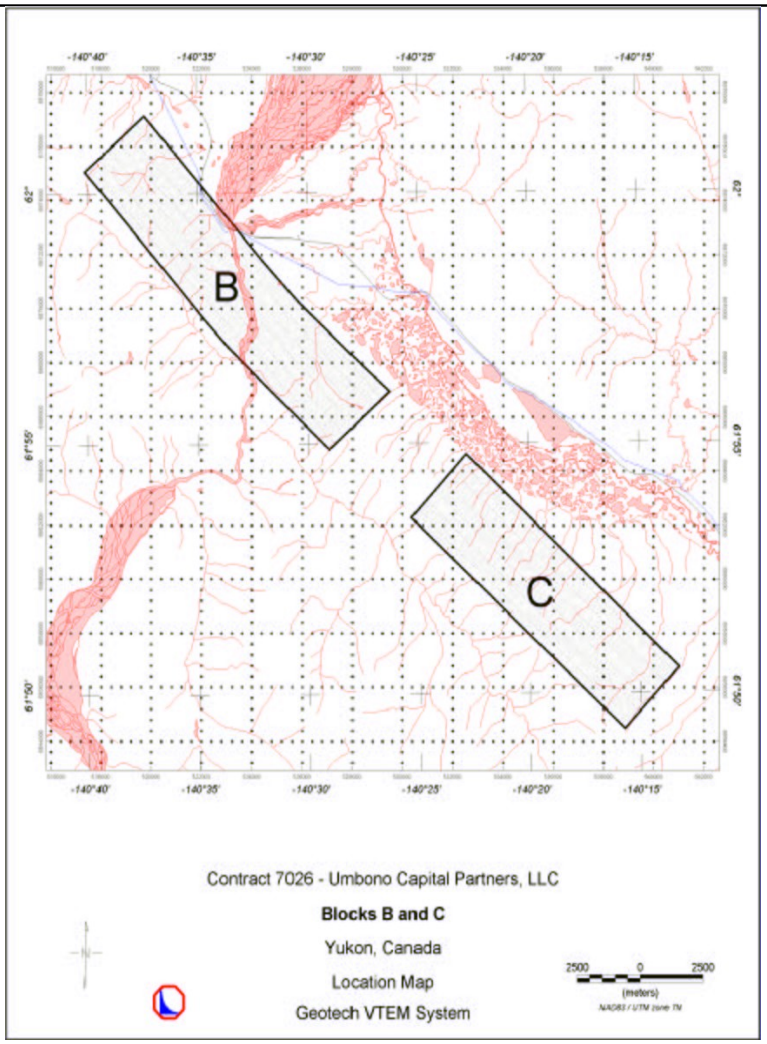
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1 INTRODUCTION

Great Northern Mining and Exploration Inc, GNME, carried out a helicopter electromagnetic and magnetic survey over their Burwash Area B and C properties in the Yukon, Canada. The survey was flown by Geotech, using the VTEM transient electromagnetic system, during June and July, 2007. The survey results were provided to Scott Hogg & Associates Ltd. for analysis. The objective of this interpretation is the identification of conductivity anomalies that may be associated with massive sulphide mineralization. The interpretation process and ensuing recommendations are included in this report.

2 SURVEY AREA

The survey consists of two survey blocks, designated Area B and Area C. The map below 1 illustrates the survey outlines with their respective designations.



3 AIRBORNE SURVEY DATA

The survey was carried out be Geotech. The helicopter towed geophyical system included electromagnetic and magnetic instrumentation as follows:

3.1 VTEM Electromagnetic System

The VTEM system uses a superimposed dipole configuration with the receiver located within the transmitter loop. The transmitter axis is vertical (Z). The receiver has a single vertical axis. The transmitter current waveform is a triangular ramp, repeated with reversing polarity, a base frequency of 30 Hz. The receiver measures the secondary field at intervals after the termination of the transmitter current pulse. The system was towed 42 metres below the helicopter at a nominal terrain clearance of 40 metres.



Transmitter Radius: 13 m.
Number of Turns: 4
Peak Current: 180 A
Tx Dipole Moment 382,300 Amps*m^2 (nIA)

Receiver Radius 0.6 m.
Number of Turns 100
Receiver gain 95 nA

Signal Scale Factor 43,233,532 Amps*m^4 (nIA^2)

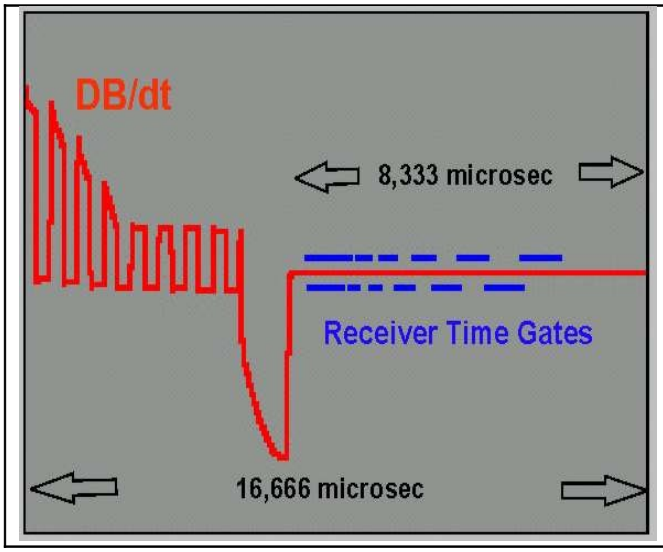


Figure 1: VTEM System: The derivative of the transmitted waveform, or dBp/dt, is illustrated as red line. This positive pulse is followed by one with reverse polarity, for a repetition rate of 30 Hz.

The location of the Off-time measurement channels is shown in blue.

The irregular, toothed nature of the waveform represents an actual measurement by the receiver.

VTEM Decay Sampling scheme				
Array Index	Microseconds			
	Middle	Start	End	Width
10	120	110	131	21
11	141	131	154	24
12	167	154	183	29
13	198	183	216	34
14	234	216	258	42
15	281	258	310	53
16	339	310	373	63
17	406	373	445	73
18	484	445	529	84
19	573	529	628	99
20	682	628	750	123
21	818	750	896	146
22	974	896	1063	167
23	1151	1063	1261	198
24	1370	1261	1506	245
25	1641	1506	1797	292
26	1953	1797	2130	333
27	2307	2130	2526	396
28	2745	2526	3016	490
29	3286	3016	3599	583
30	3911	3599	4266	667
31	4620	4266	5058	792
32	5495	5058	6037	979
33	6578	6037	7203	1167

The system configuration details for the survey were as follows:

Transmitter
- Radius: 13 m.
- Number of Turns: 4
- Peak Current: 180 A

Receiver
- Radius 0.6 m.
- Number of Turns 100

The units of measurement for electromagnetic systems must be scaled to the primary field. The method adopted by Geotech for the VTEM system conveniently provides for changes in hardware for both the transmitter and receiver. The strength of the primary field, as generated by the transmitter, is accommodated by transmitted dipole moment which is the product of the number of coil turns, the current and the coil area.

Tx Dipole Moment = 382,300 Amps*m^2 (nIA)

The effectiveness or natural gain of the receiver is a function of its area and number of turns.

Receiver gain = 113 m^2 (nA)

The scaling factor for the system is the product of these two terms

System Scale Factor = 43,233,532 Amps*m^4 (nIA^2)

The units of the secondary field recorded by the system are defined relative to this system scale factor in units of picoVolts / Ampers*m^4. By this means the VTEM units of measurement are made independent of transmitter current as well as the size and number of turns of both the transmitter and receiver antennae.

3.2 Magnetometer

An optically pumped cesium sensor recorded the total magnetic field. The sensor was towed 15 metres below the helicopter at a nominal terrain clearance of 67 metres. Diurnal corrections were carried out by Geotech. Grids of total magnetic field and calculated vertical gradient were provided.

4 BACKGROUND AND PROCEDURES

4.1 VTEM System Geometry and Response Shape

The system geometry, as defined by the relative orientation and position of the transmitter and receiver, influences the shape of response for a given geologic conductor or target. This response shape is sensitive to the form of the target but is largely independent of the conductivity of the target. The figure below presents the response shape for a thin sheet conductor in various orientations for a generalized superimposed dipole system. In the case of the VTEM system only the Tz-Rz combination is relevant.

The Tz-Rz configuration is minimum coupled with a vertical thin sheet when the system is directly overhead. This results in an "M" shaped response. As the horizontal thickness of the conductor increases, induced currents can flow across the sheet and the central null is reduced. When the width is of the same order as the other dimensions, like a sphere, the null disappears completely and a simple broad peak over the conductor results. As the dip of the sheet decreases an asymmetry of the side lobes becomes evident with the greater amplitude on the down dip side. This asymmetry is most notable between about 60 and 30 degrees. With shallower dip the smaller lobe is relatively very weak response and a slightly asymmetric single peak is the dominant signature. In the case of near horizontal conducting layers the response amplitude stabilizes within the unit but if the edges are sharply defined, edge effects will be noted.

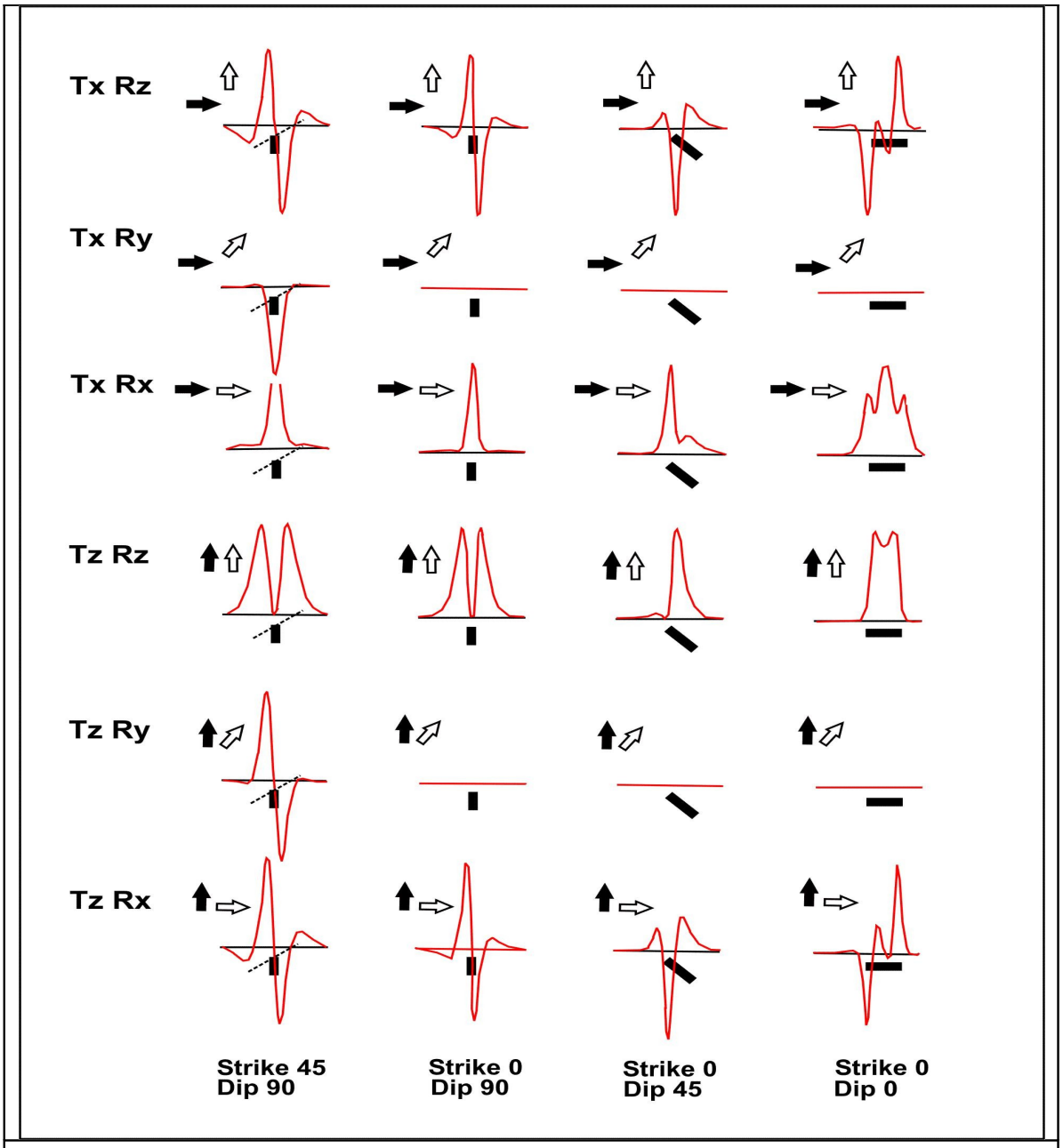


Figure 2: Response shapes for a superimposed dipole electromagnetic system. A thin rectangular plate, 300 m in strike extent, 150 m in depth extent, 50 m below sensor with a conductance of 60 S was modelled with the University of Toronto Plate program. Strike and dip are indicated as are the axis of the transmitter and receiver antennae dipoles. The response amplitude has been normalized. **Only TzRz applies to the VTEM system**

4.2 IP Effect

A phenomenon that occasionally affects transient airborne systems is an IP effect that produces a reverse polarity decay. Studies have attributed this reversed signal to a chargeable ground in which capacitance rather than inductance is the source of the secondary field. The IP anomaly can co-exist with a conductivity anomaly with the resulting response a combination of both. In areas of low conductivity the negative IP response is readily identified. In areas of moderate to significant conductivity it is not known whether the IP effect is present or not since its amplitude is offset by the positive conductivity response. No IP effect was noted in the survey data.

4.3 CDI Process

The CDI process used was developed by CRCAMET, the Collaborative Research Centre for Australian Mineral Exploration Technologies, and software implemented by Encom Technology Pty Ltd. A technical paper on the technique entitled *Conductivity-depth imaging of airborne electromagnetic step-response data*, by Dr. J. C. Macnae, is provided in an appendix to this report. A synopsis is presented here.

When the current I in the transmitter, and the associated primary field Bp, varies, current is induced in the underlying ground. This current initially flows at surface but with time diffuses downward and outward in a layered earth scenario. This current diffusion can be sensed by the EM system. If the underlying earth is assumed to consist of horizontal layers of infinite lateral extent, estimates of the depth and conductivity of the layers can be derived.

A practical consideration in implementing the CDI algorithm is accommodating the differences between various EM systems. System geometry considerations as well as transmitted waveforms are very significant and vary from system to system. The approach taken in the EM Flow process is to normalize the signal towards a step response in the Tau domain. Details are presented in a paper by Macnae, included in an appendix, titled *Evaluating EM waveforms by singular value decomposition of exponential basis functions*. An overview of the process with considerations specific to the VTEM data is discussed below.

The first item to be defined is the system geometry or the relative positions and orientations of the transmitter and receiver coils and their distance above the ground surface. The axis of the VTEM transmitter coil is vertical and thus the primary field is maximum coupled with horizontal conductive layers. The Z axis receiver is similarly aligned and maximum coupled with the secondary field returning from the horizontal layers. In the case of the VTEM, the transmitter and receiver are superimposed with zero vertical separation and the height above ground surface is recorded by the radar altimeter.

The second issue to be addressed by the process stems from the fact that there is no standard unit of measurement for EM systems. Usually the secondary field is defined as a fraction of the primary field sensed by the receiver. If the receiver is located at some distance from the transmitter, the sensed primary field will be less than if the receiver were close. If the actual strength of the secondary field was the same for both systems it might be reported as 100 ppm for the distant receiver and 1 ppm for a nearby receiver. This system difference can be accommodated when the system geometry and the basis for defining the secondary field measurement units are fully defined.

The transmitted waveform and the repetition rate also varies from system to system. As well, the bandwidth of a receiver and accompanying A/D converter is limited and the system senses a modified rather than true representation of the secondary field. The software algorithm calls for the transmitter waveform, as actually recorded by the receiver, to be provided. By so doing the bandwidth of the primary field is in effect modified to be consistent with actual bandwidth of the receiver.

In the case of the VTEM system such a primary field measurement was possible. The actual waveform recorded is illustrated in figure 1. During the survey the waveform measurement was repeated at intervals and no significant change was noted.

The shape and repetition rate of the primary field waveform, theoretical or as recorded, is significant to the process. An infinite step response has an infinite bandwidth; however, any finite width current pulse that does not terminate instantaneously has a limited bandwidth. The spectral signature of the primary field has a direct influence on how the underlying ground is energized. The longer the pulse length the greater the influence will be on large conductive, long time-constant bodies. The sharper the pulse termination the greater the influence on the smaller, less conductive, short time-constant bodies. Knowing the relative transmitted power as a function of frequency or time-constant Tau, allows the gain of the secondary field to be adjusted to match the step function norm over some practical range.

In the EM Flow system the chosen measurement domain is the Tau space. A time domain system records the amplitude of the secondary field in successive time gates. The function thus recorded can be approximated by a sum of exponential functions of various amplitudes for a series of time constants Tau. The EM Flow deconvolution process used a SVD (singular value decomposition) algorithm to determine the amplitude, associated with each Tau, that would most closely match the observed signal. When the secondary field is transformed into this Tau space the gain adjustments for waveform variations, as noted above, can be applied.

The measured secondary field, in the Tau domain, normalized to step response amplitude for a specified Tau bandwidth, has been made independent of the particular type of airborne system. This system independent response serves as the input to the CDI process.

4.4 CDI Profiles

The CDI information has been presented on profile form on a line by line basis. The vertical scale, as well as the colour range for conductivity was fixed from line to line and the ground surface has been presented as height above sea level. The depth to the conductive interfaces was presented relative to this topographic reference to more accurately reflect the dip and continuity of the strata. The horizontal scale was fixed and chosen to enable presentation of the sections on a page size format for ease of viewing and printing.

In addition to the CDI sections a total field magnetic profile as well as a log-linear presentation of the Z axis Off-time channels were displayed. The EM response profiles provide a visual reference to the signal amplitude and noise associated with the CDI calculation. The magnetic profile provided a convenient means for identifying correlations between magnetic and conductive anomalies.

The CDI calculation is one-dimensional. The response at a single observation point is analyzed to identify the vertical variation in conductivity that would explain the measured signal. The conductive strata is assumed to be horizontal and infinite in extent. Although the presentation of CDI solutions along a flight line suggests a two dimensional solution it is only valid for very limited circumstances.The assessment of the CDI solution is intrinsically linked to the profile shape that is not considered in the calculation.

In figure 3 below, the dipolar magnetic field emitted by the transmitter is illustrated in red. On the left, conductive sheets are presented in locations and orientations that do not couple with the primary field. No matter how conductive, they will not be energized and thus produce no signal. This leads to the characteristic null when the system is directly above a thin, vertical dipping conductor. On the right, conductive sheets are presented in locations and orientations that provide optimal coupling with the primary field. A horizontal layer, directly beneath the system is maximum coupled.

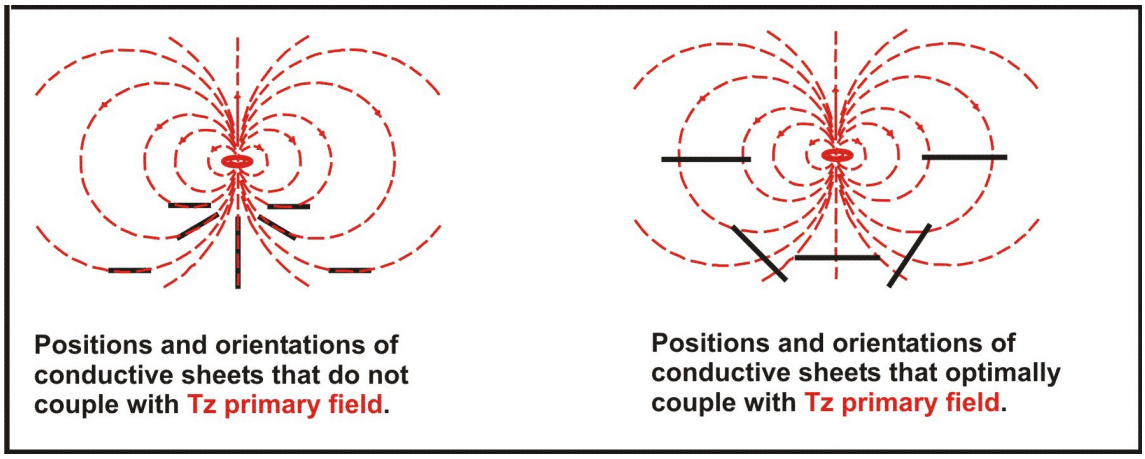


Figure 3: Transmitter/Target coupling

If the transmitted primary field interacts with the conductor in the ground, induced currents will flow. In the case of a sheet like conductor, these currents are restricted to the sheet and will generate a dipolar field whose primary axis is normal to the sheet. If the target were a sphere, the orientation of the currents is unrestricted and the axis of the secondary field dipole would be simply opposite to the primary field direction entering the sphere. In figure 4, the primary field is illustrated in red and the secondary field in blue. In the examples presented, the primary and secondary fields are maximum or minimum coupled at the same time.

This transmitter-target-receiver interaction is the basis of the profile shaped illustrated in figure 2 and is not considered by the CDI process.

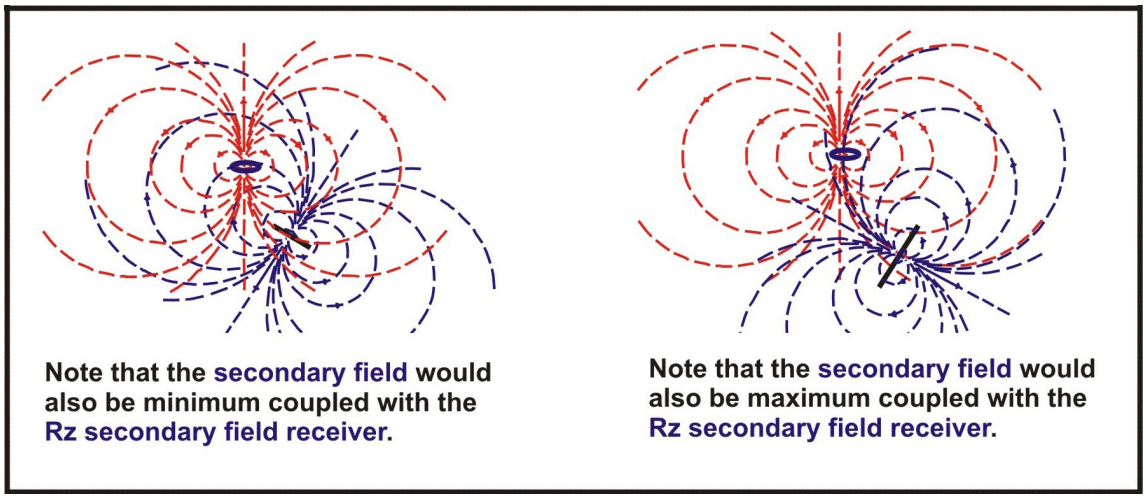


Figure 4: Receiver/Target coupling

If a conductive horizon is continuous with a slow variation in depth and conductivity the CDI presentation can be accurate. If the dip of the layers exceed about 10 degrees or the layer terminates the basic assumptions of an infinite horizontal layer source become increasingly invalid. The departure of of the actual geology from the calculation assumptions needs to be taken into account in the interpretation of the CDI presentation. In figure 5 the system, with primary field in red, is directly over a conductive layer and the CDI solution is valid. As the system moves beyond the the layer B, with the primary field in blue, the signal is weaker due to the increased distance from the layer and the CDI analysis attributes this to an underlying source at greater depth B2. Since the CDI process cannot recognize that the source is at some lateral distance it simply increases the depth to the layer as the system moves beyond the edge. This edge effect can extend for a significant horizontal distance.

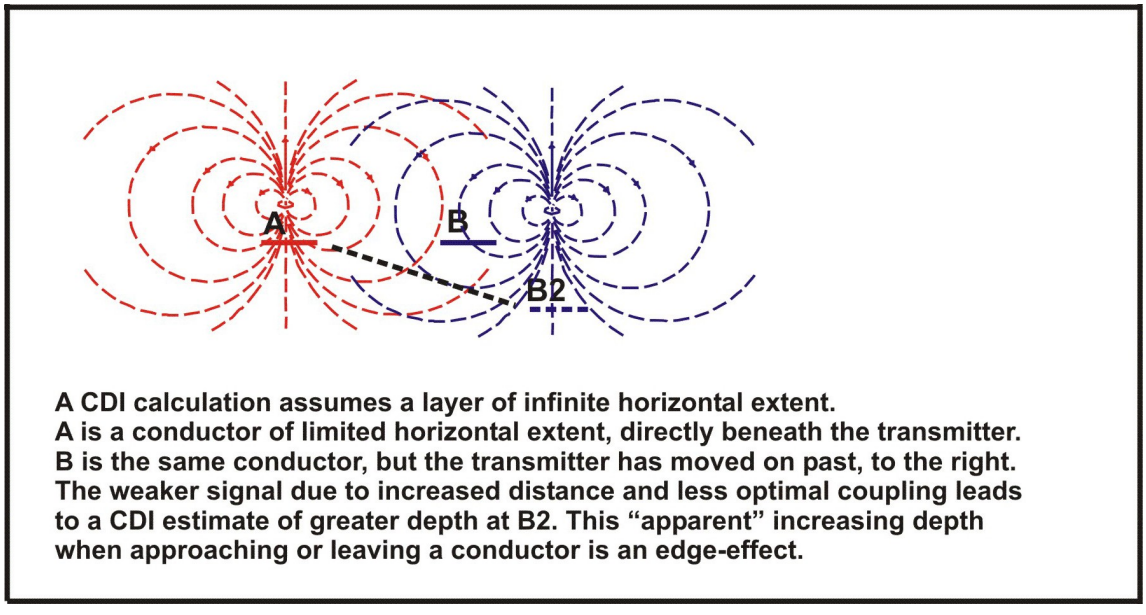


Figure 5: CDI edge effect for horizontal layer

If a conductor is steeply dipping, say 20 degrees or more, the profile shape may begin to reflect the profile shape and asymmetry illustrated in figure 2. The change in transmitter-target-receiver coupling relative to that expected for a horizontal layer will be attributed to depth variation by the CDI process. In the case of a thin, vertical dipping source the CDI solution for the null, directly over the body may be no solution or one at great depth. The peak amplitudes of the side lobes will be assigned the shallowest depth and moving further away from the source the attenuating response will be attributed to increasing depth.

In light of the fact that the CDI section does not take geometry into account it must be interpreted with reference to the EM profile shape that does provide some information about the conductor form. The variation in conductivity and thickness, as presented by the CDI may not be correct in absolute terms; however, even with incorrect assumptions about source geometry it can correctly indicate relative variations in these parameters.

5 ELECTROMAGNETIC INTERPRETATION

The CDI profiles were reviewed individually in conjunction with the EM profile database, and profile maps. In both areas C and D, the terrain clearance of the system was much greater when the helicopter was climbing as opposed to descending. For this reason the interpretation has focused on the the lines flown downhill.

The location of interpreted conductors has been indicated on the interpretation map and a discussion of their significance is presented by reference to a selection of CDI sections that reflect their nature.

5.1 Area C

Conductor **EMC-1** extends the length of area C. It enters the southeastern corner of the area with a profile shape that suggests a steeply dipping source at **EMC-1a**. On line 6170 the CDI section suggests a broad horizontal zone high conductivity near surface. This zone extends over several lines and has been labelled **EMC-1b**. The conductivity and thickness of this localized zone is considered noteworthy and the site **R1** is recommended for follow-up investigation.

Continuing to the northwest towards **EMC-1c** this conductor begins to reflect a northeast dip with relatively high conductivity at the southwestern end but becoming less conductive to the northeast. This conductive layer or interface persists across the entire area and it is not certain whether it reflects a geologic horizon in the bedrock or the interface between bedrock and the overlying scree. Such an interface may host conductive clays that would give rise to a conductivity anomaly. On many lines a shallower weaker conductive horizon is also evident but is less continuous along line. Along the northeastern margin of the survey block there is an increase in the EM response indicating an approach to a more conductive zone. The shape of this anomaly along the survey margin is never fully defined and thus the nature of the source is unknown. It is possible that the valley floor hosts conductive clay sediments that could be the source.

In the vicinity of **EMC-1c** the response shape is more complex and in addition to the northeast dipping unit a second conductor with a southwest, possibly steep dip, has been noted. At **EMC-1d** the possibility of a steeply dipping source or the apex of conductive layer is evident. In the vicinity of **EMC-1e** the CDI solutions are less distinct but tend to infer a conductive layer with northeastern dip.

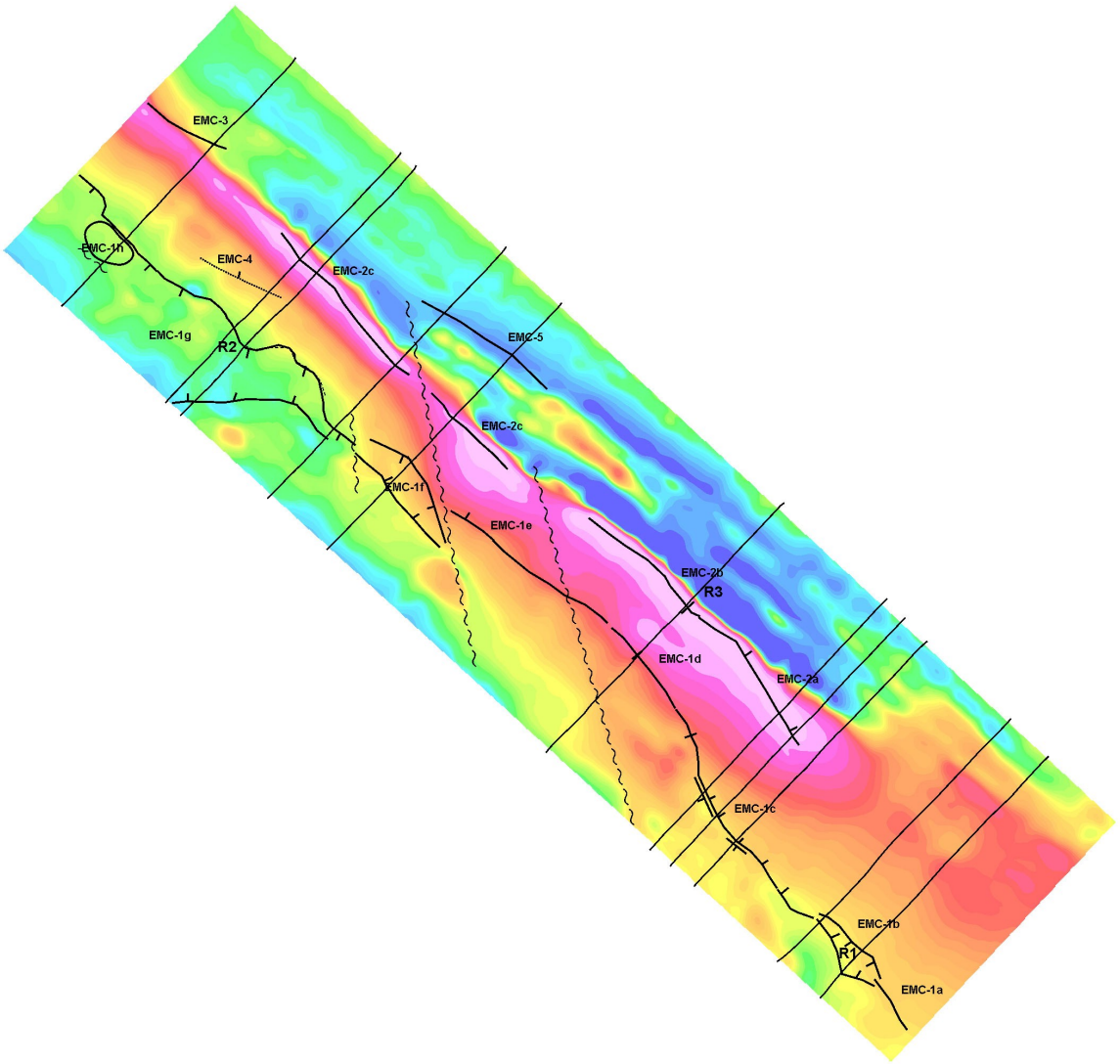
At **EMC-1f** the margins of the conductor are more sharply defined and there is the suggestion of two conductive layers. The interpretation is not clear but it is suspected that a shallow bedrock interface conductor overlies a deeper conductor with limited horizontal extent, dipping to the northeast.

The zone **EMC-1g** reflects an high conductivity, near flay-lying source. The zone broadens to the northwest. On line 7820 the profile response is maximum and the shape and associated CDI representation are consistent with a broad, flat-lying, highly conductive zone. The CDI section indicates considerable thickness but it is possible that the thickness is even greater than indicated. Follow up investigation is recommended near **R2** where the response is greatest and outcrop is possible.

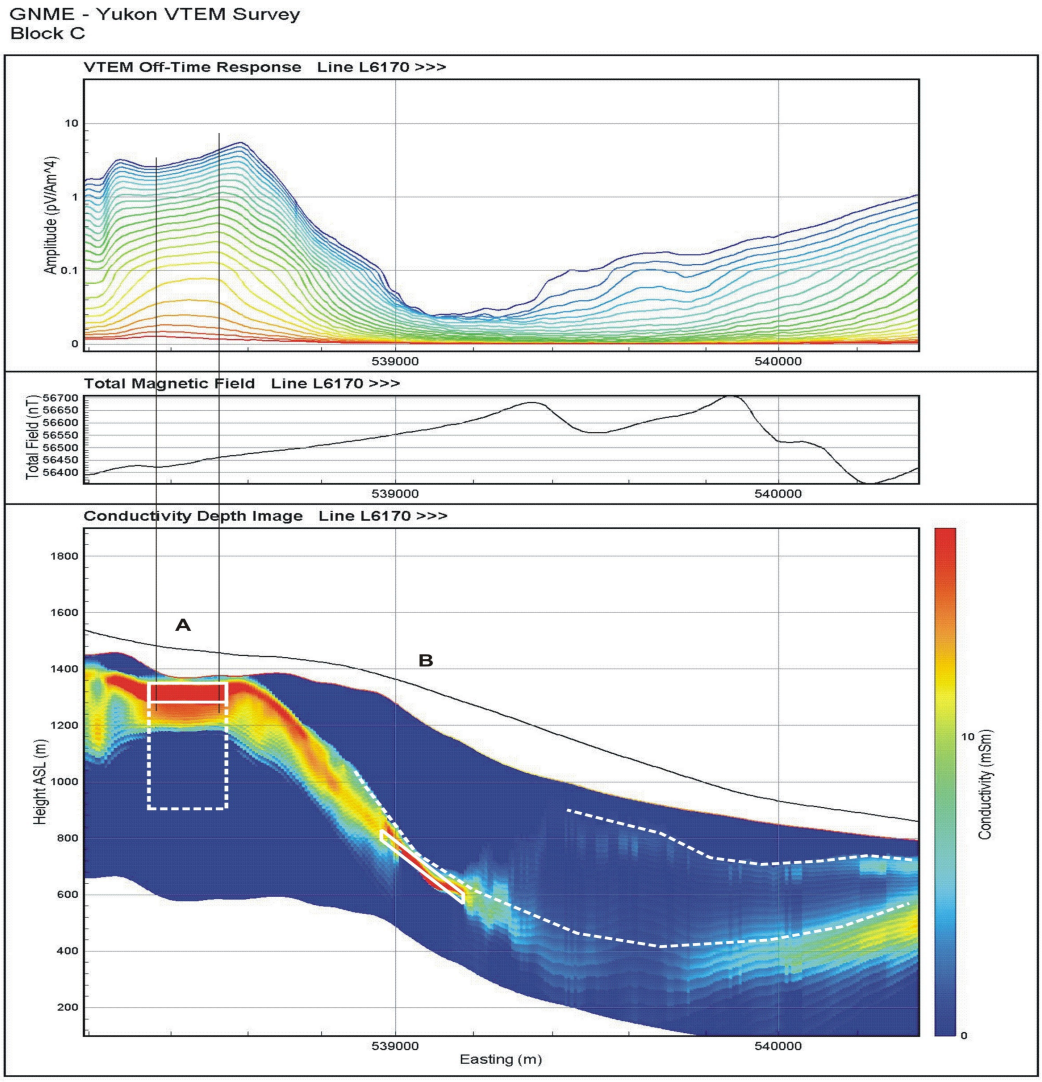
EMC-2 is coincident with a magnetic linear that reflects a dyke or steeply inclined geologic horizon. The profile shape of the southern section **EMC-2a** suggests a northeastern dip and the associated conductivity is low. In the vicinity of **EMC-2b** the response amplitude and conductivity increase and the profile shape suggests a near vertical dip. Although the general conductivity of the conductor is low to moderate follow up investigation may be warranted. The vicinity of **R3** is suggested. To the northwest the axis continues as a null type profile response, **EMC-2c**, but the associated conductivity usually appears to be too low to create a corresponding CDI response. **EMC-3**, like **EMC-2c**, is evident as a null type profile response but it does not follow the magnetic axis. It is very possible that the null response at **EMC-2c** and **EMC-3** is not associated with a conductor but a resistive rock that interrupts the continuity of the deeper conductive layer.

EMC-4 is a tentative delineation of the southwestern edge of a deeper magnetic layer as depicted on the CDI section for line 7860.

EMC-5 is the axis of a profile null that may reflect a resistive break between adjacent conductive zones as depicted on the CDI section for line 7440.

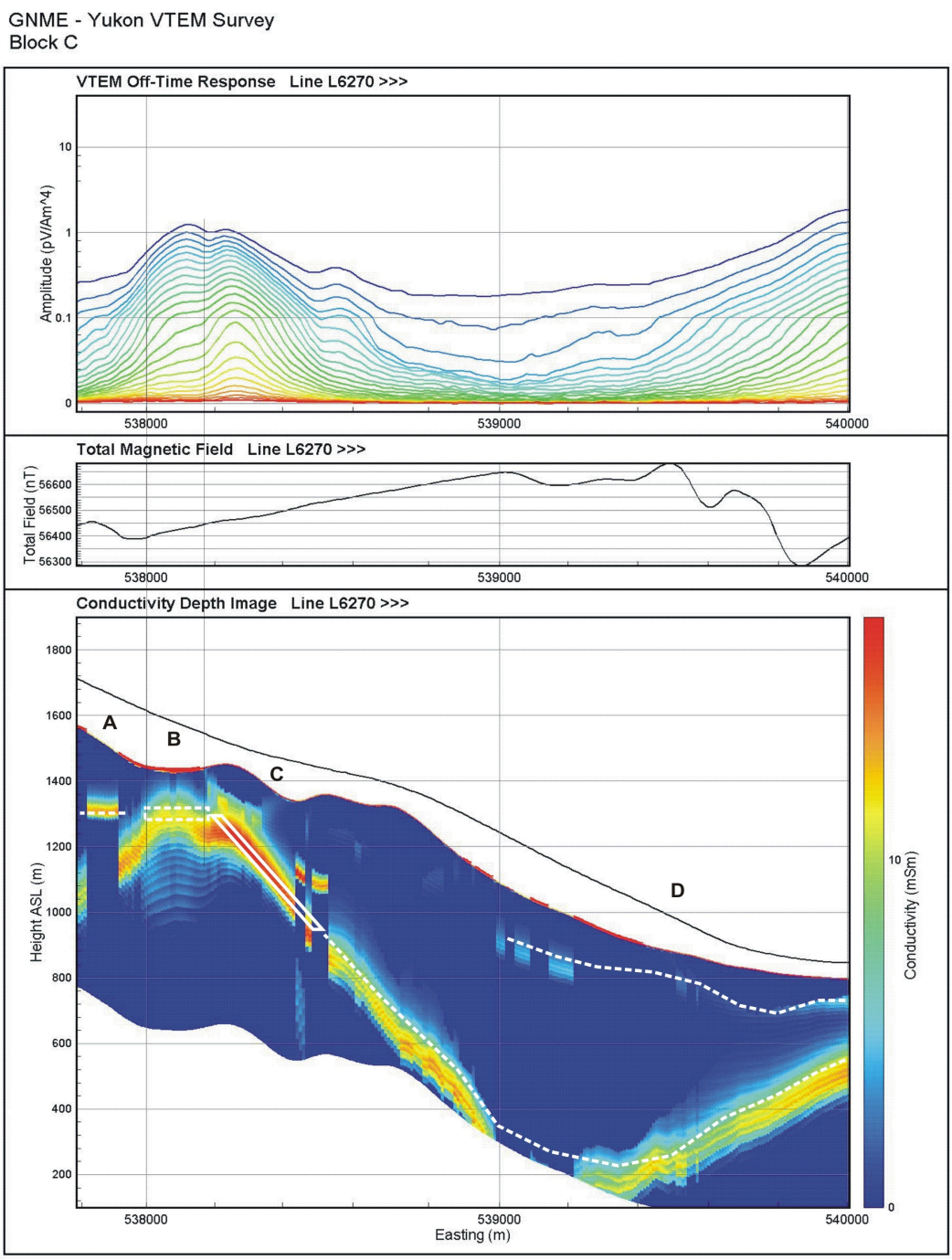


Block C magnetic map with interpretation overlay



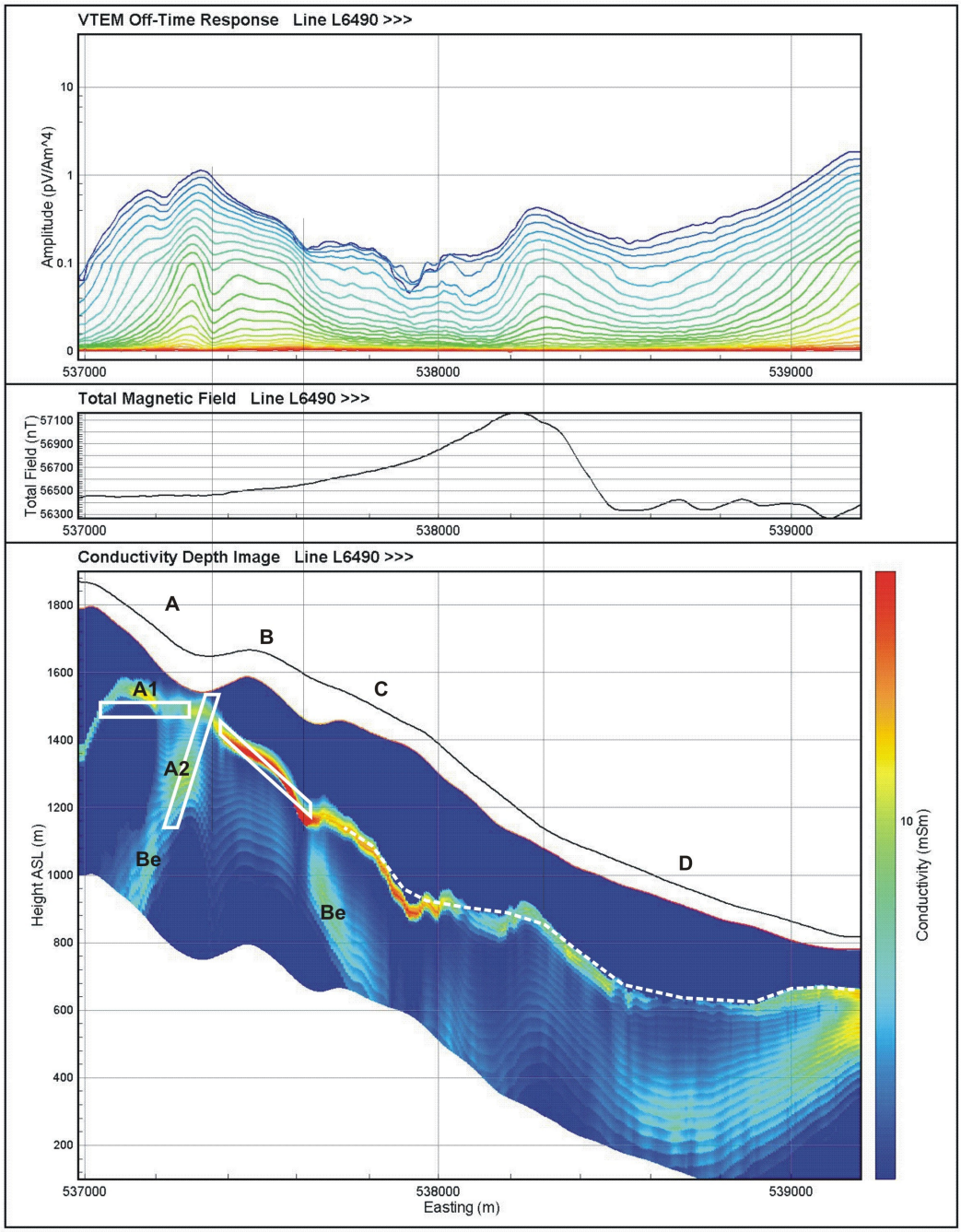
At **A** there is a clear indication of a shallow layer of significant conductivity. To the southeast of this line the profile response shape is more suggestive of steep dip and it is possible that the source of **A** is a wide body of significant depth extent. At **B** there is an indication of a conductive layer at depth dipping to the northeast. It appears that there may be a conductive layer along the entire line that might reflect a mineralized horizon or the interface between bedrock and the overlying scree and reflect conductive clays. A second shallower interface is noted to the northeast.

Follow up investigation is recommended for the target at **A**. The dipping conductive horizon **B** may be a continuation of the same horizon and also reflect mineralization. A decision to investigate **B** would be influenced by findings at **A**.



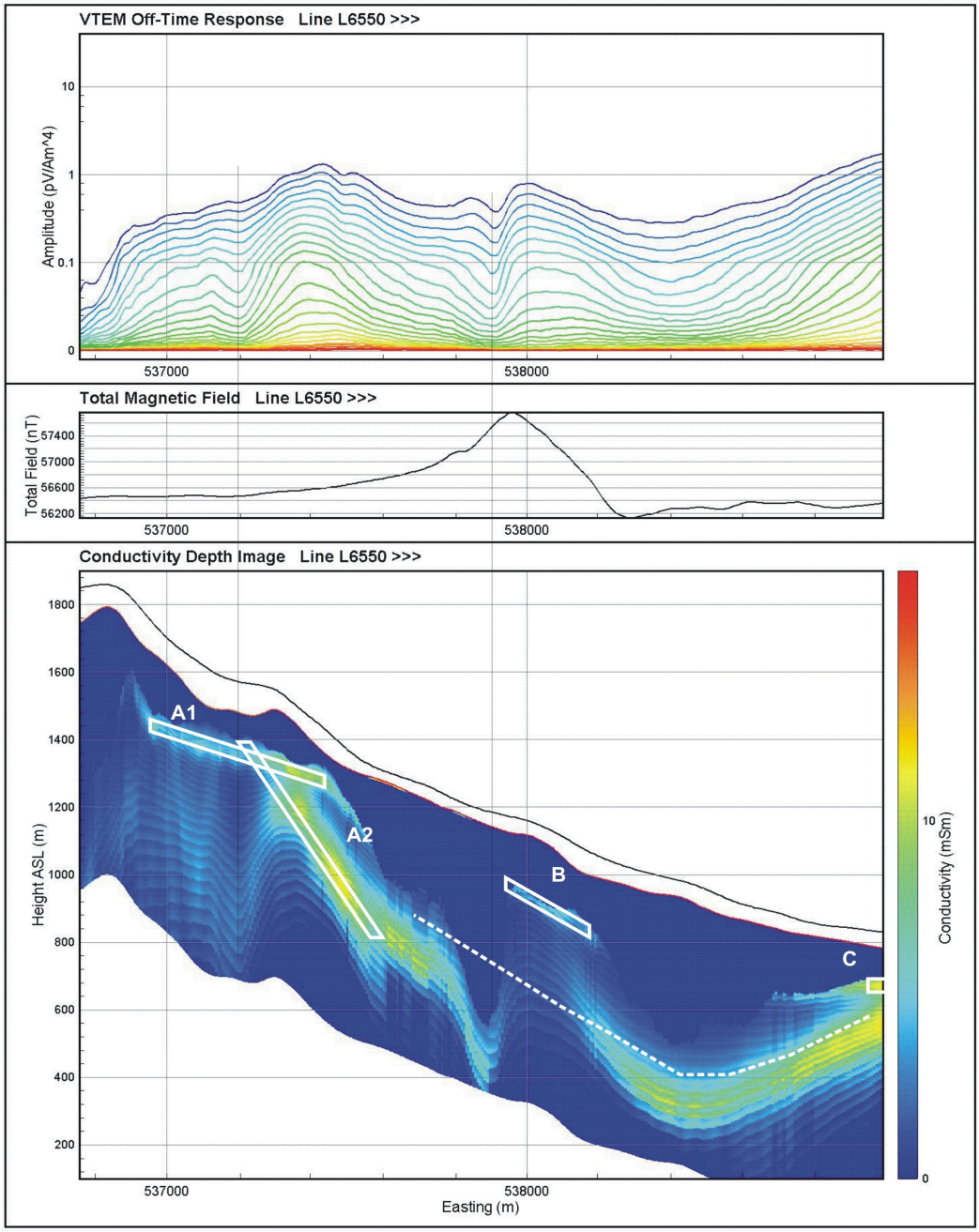
The conductivity of the layer at **B** is decreasing; however the northeast dipping layer at **C** continues. At **A** the instability of the CDI solution is evident by the instant change from a shallow to deep layer.

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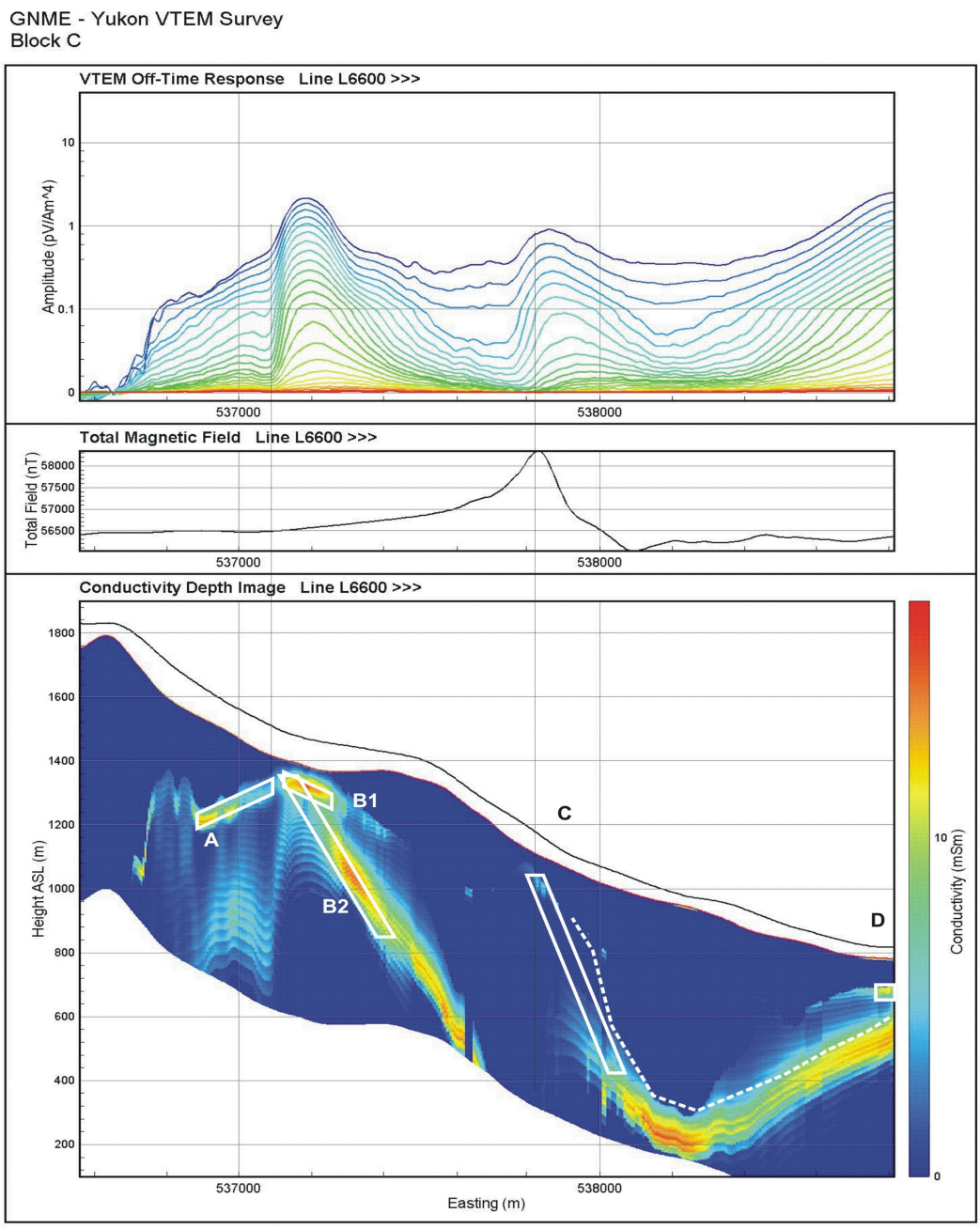


At **A** the profile shape suggests a layer dipping to the southeast as indicated by **A1** or **A2**. At **B** the CDI solution indicates a conductive layer for which the steeply dipping sections **Be** may simply be edge effects. The less conductive layers **C** and **D**, continue to the northeast.

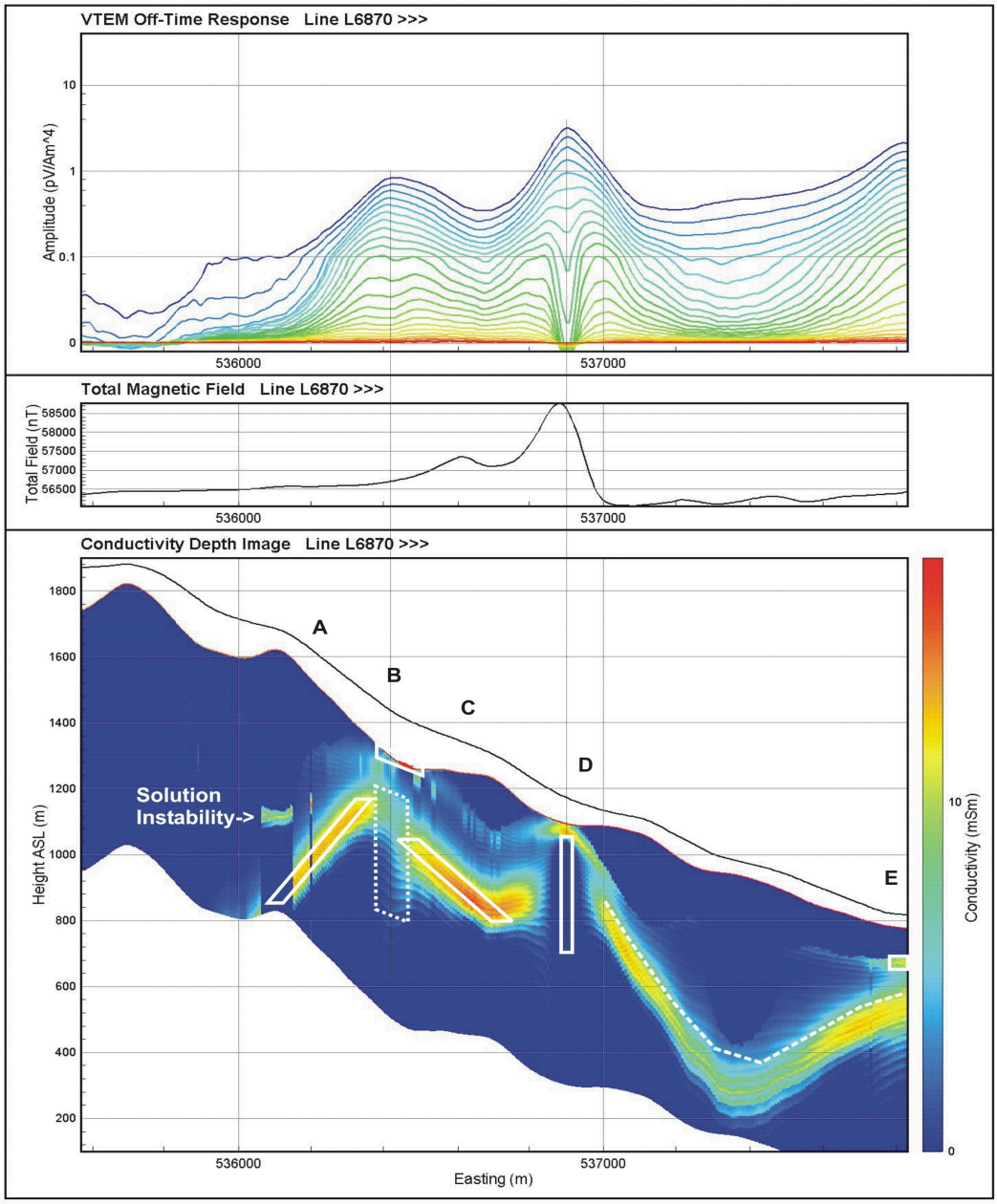
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A1 and **A2** indicate less conductive continuations of the formations noted on line 6490 to the southeast.

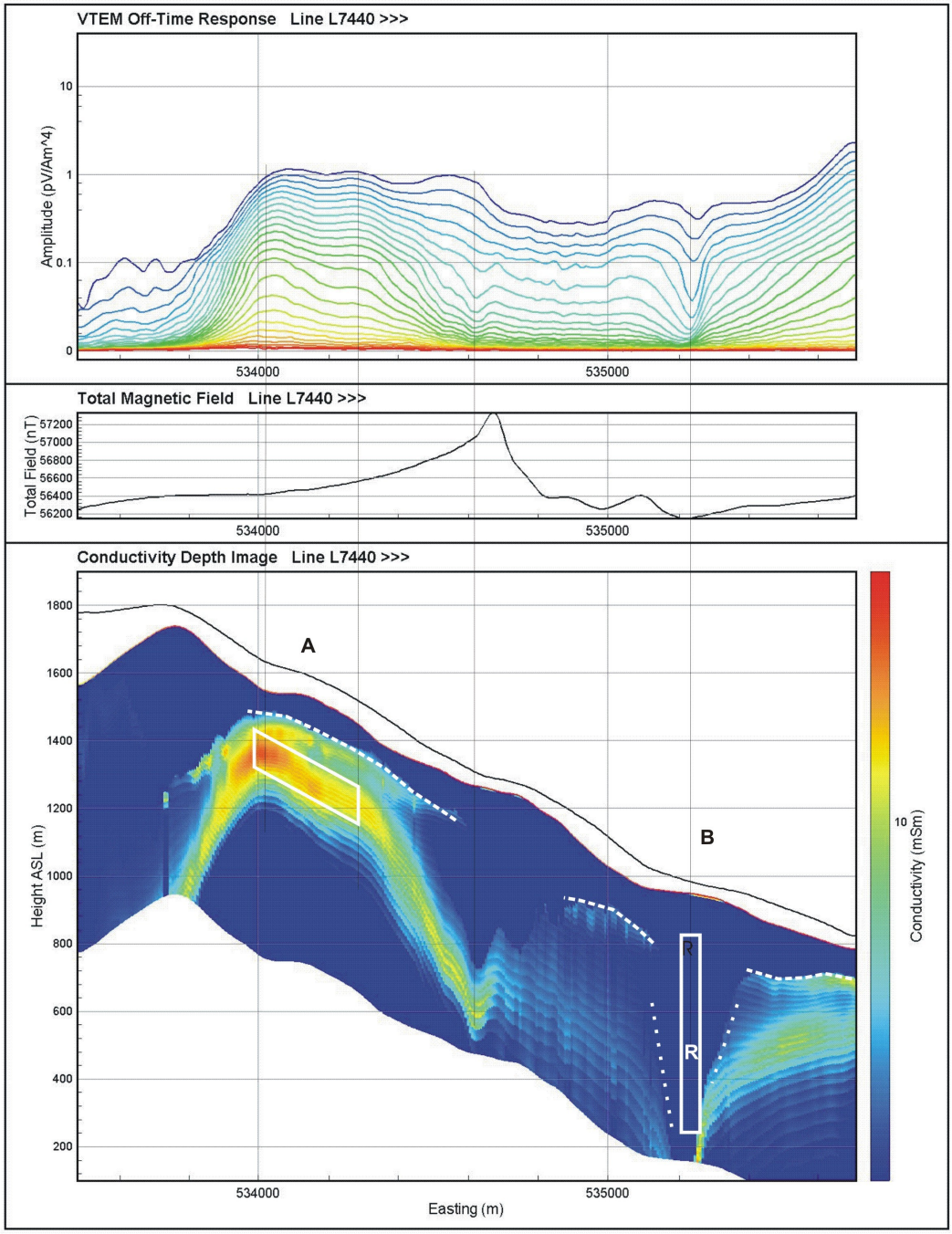


At the southewestern end of the line, the profile shape suggests a source dipping to the northeast such as **B1** or **B2**. The conductor **A** is reflected by a decreasing signal in the profile. A northeast dipping layer is supported by the profile shape at **C** and the low conductivity indicated is consistent with the weak late-time response. It is possible that a conductor **D** is present at the northeastern end of the line.



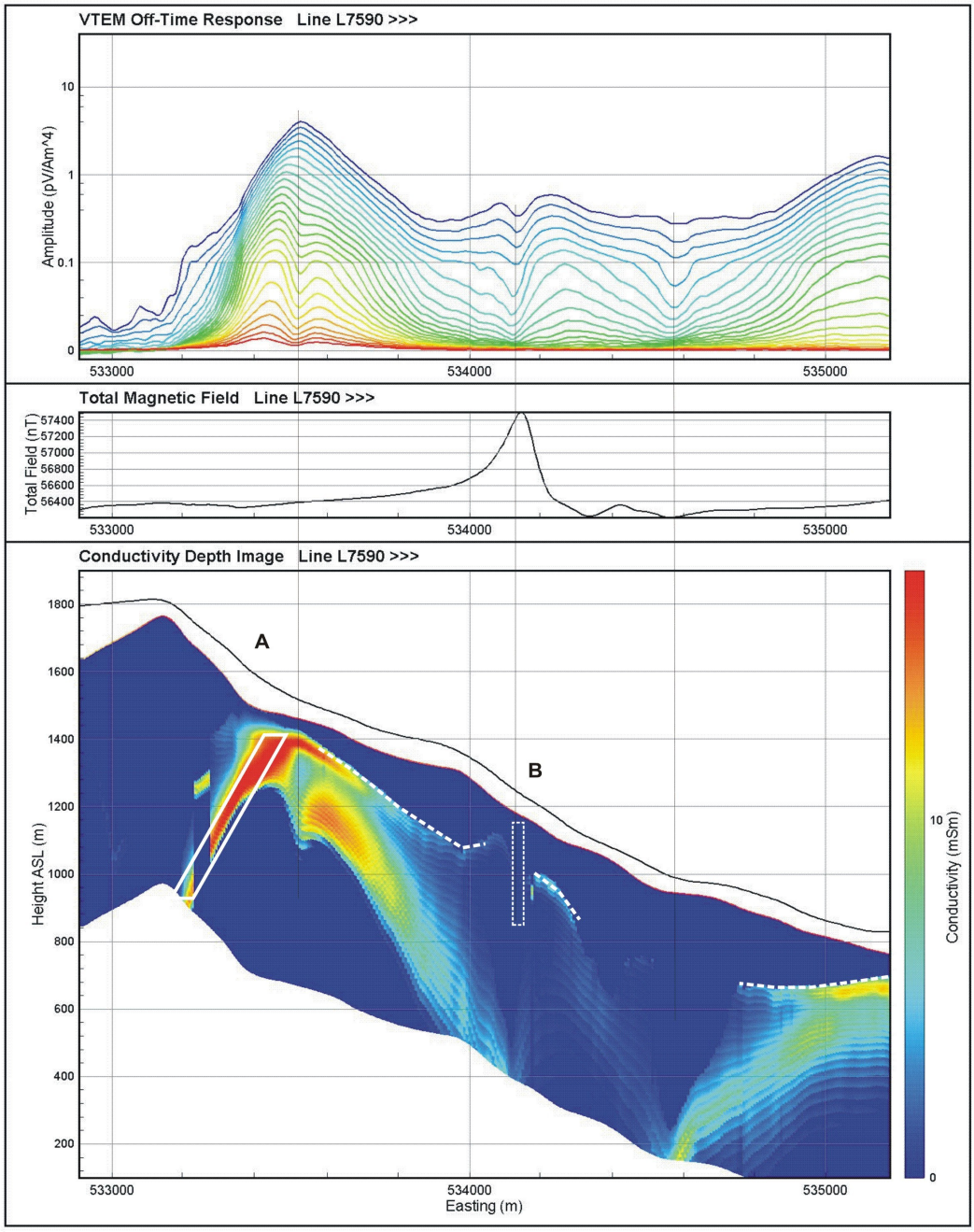
At **B** the broad early-time peak is reflected by zone of high surface conductivity. The late-time channels indicate the beginnings of a central null that would be characteristic of an underlying steeply dipping source for which the responses at **A** and **C** would be edge effects. This interpretation is uncertain and the dipping layers at **A** and **C** may be the correct representation. At **D** a thin steeply dipping source is clearly reflected by the mid-time channels.

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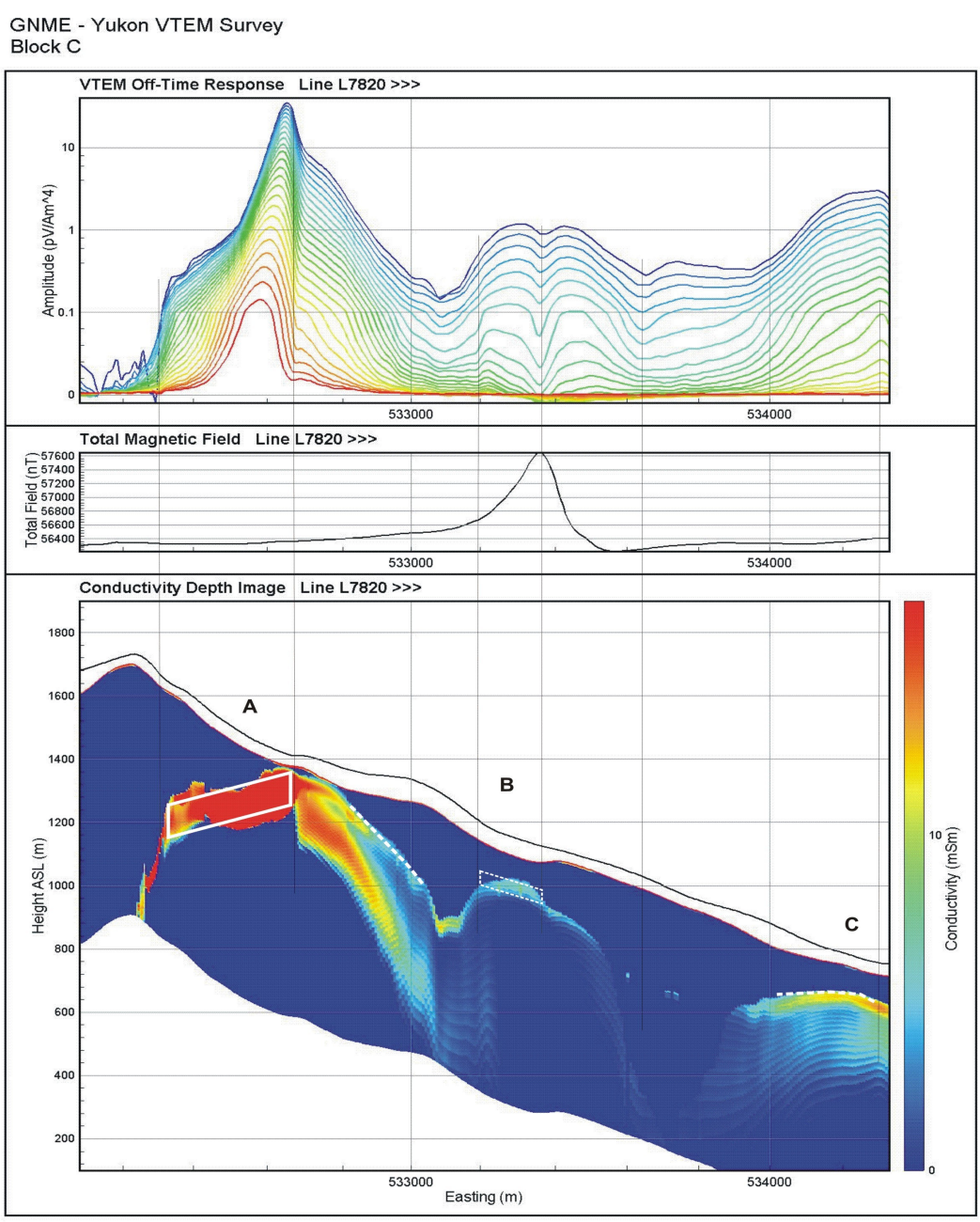


At **A** there is a clear indication of a conductive layer beneath a shallower, less conductive interface. This upper interface continues to the northeast, interrupted at locations where the amplitude of the signal has locally dropped. At **B** there is a null type profile response that could reflect a steeply dipping conductor. The associated CDI section indicates increasing depth on the approach to the null which would suggest that the null is associated with a resistor, not a conductor. The increasing depth of the CDI section at **B** would be the edge effect from the termination of the conductive layers to either side.

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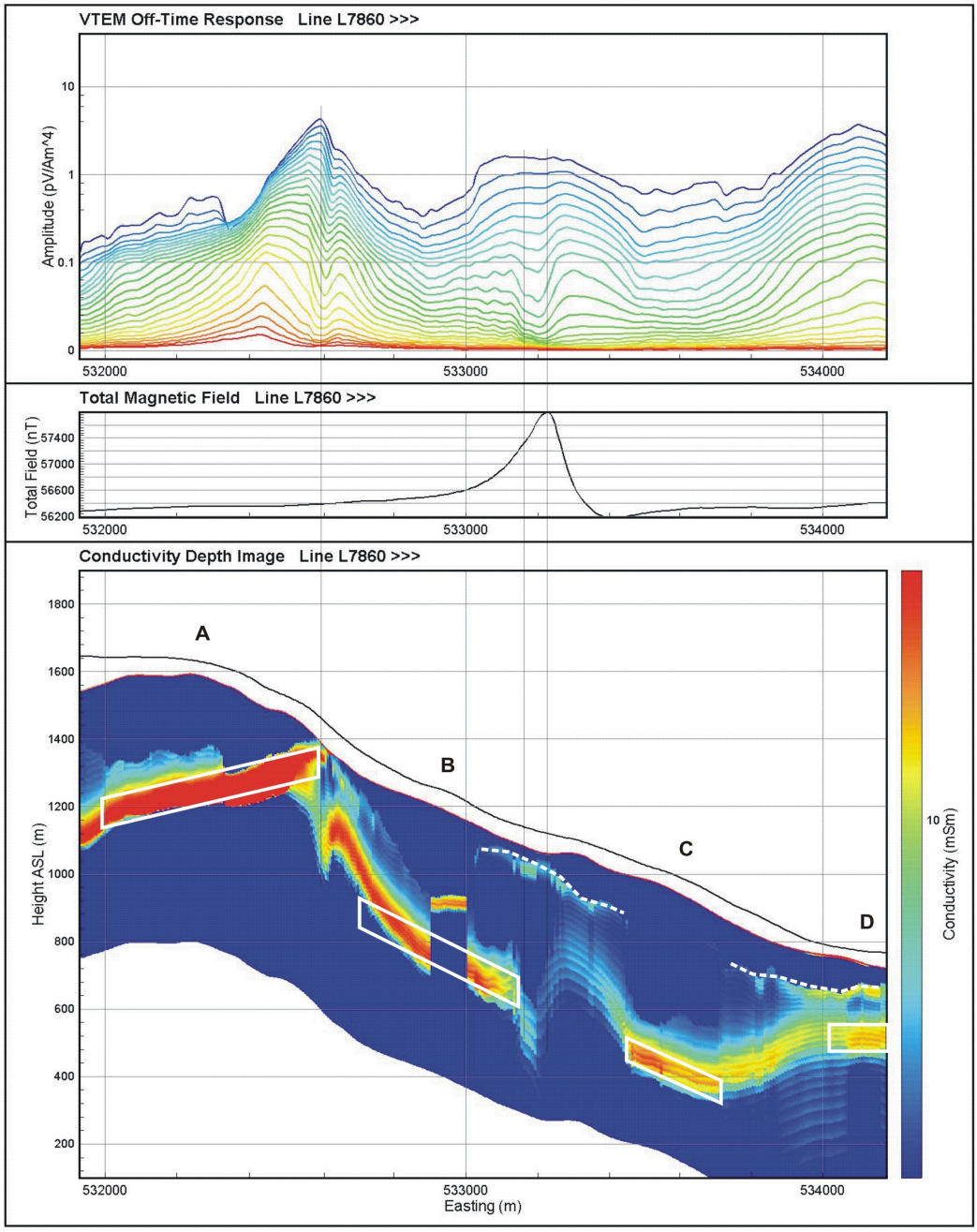
At A a southwesterly dipping conductor is supported by both the profile shape and the CDI section. It is suspected that northeasterly dipping CDI response between A and B is largeley edge effect. At B a steeply dipping, low conductivity source is interpreted.



The response profile and CDI section present a broad, very conductive zone at **A**. The adjacent zone dipping to the northeast may simply edge effect. The profile shape at **B** suggests a thin, steeply dipping source that is difficult to rationalize with the CDI indication of a near horizontal layer. Another conductive zone is developing at **C** but the profile is incomplete. It is possible that this is a more conductive section beneath the scree and might reflect a water table in the valley.

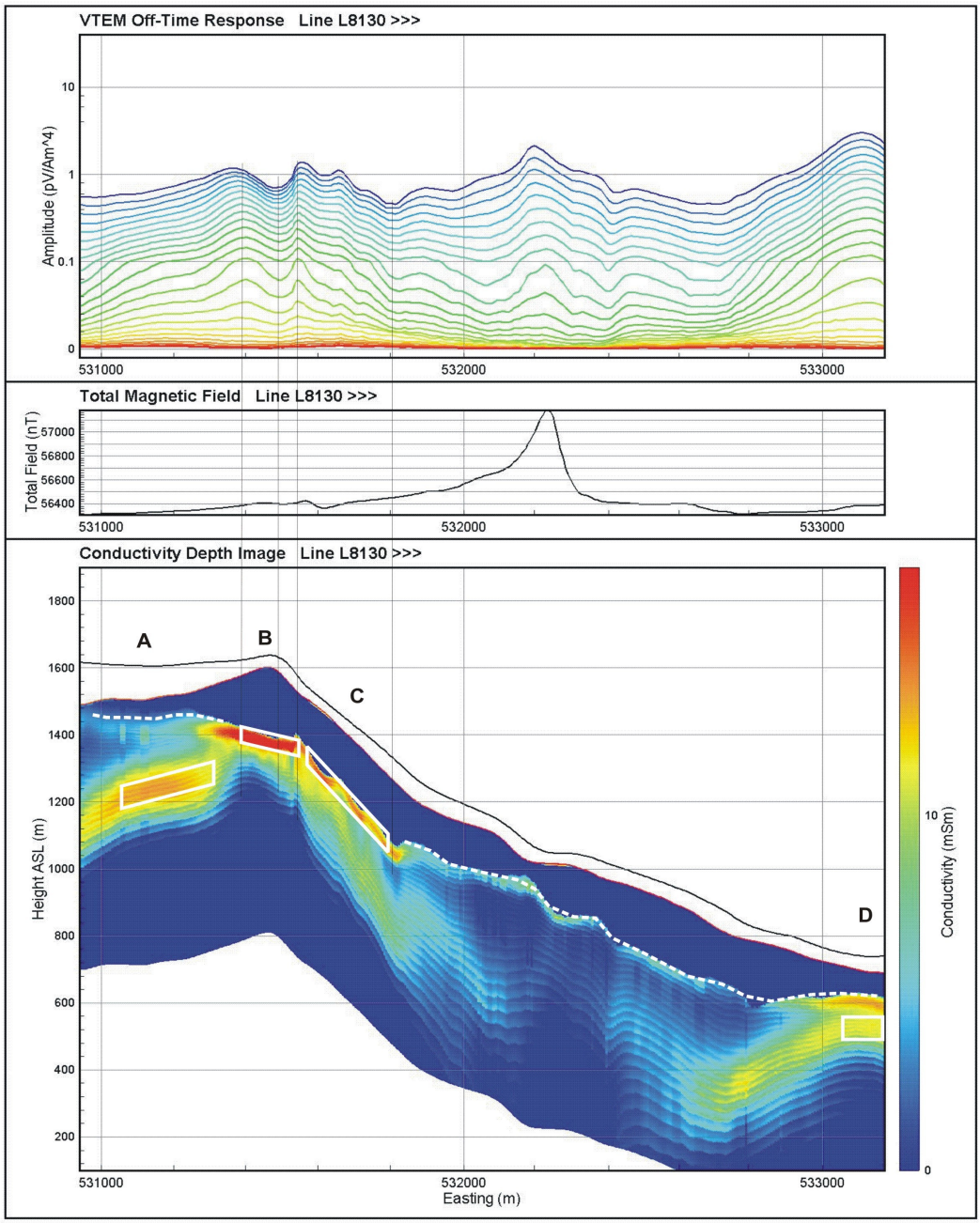
The conductor at **A** warrants follow-up investigation.

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The shallow dipping conductive layer at A, reflected in both the profile shape and CDI section, extends southwest, almost to the end of the line. An edge effect is followed by another deeper conductive layer at B and C. The continuity between B and C is interrupted at a location that coincides with a magnetic anomaly. Ground investigation is recommended at this site.

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The vertical displacement between zones A and B may reflect a fault displacement. faulting higher conductivity zone a B

5.2 Area B

The conductor **EMB-1** extends from the southeastern margin of the area to almost the northwest margin. It is coincident with a linear magnetic unit over its full length.

EMB-1a is the southeastern section of the anomaly with the general characteristic of a thin steeply dipping source. In the vicinity of **R1** very high conductivity is noted as well as indications of significant width. Investigation is recommended and there is a possibility of outcrop.

In section **EMB-1b** the conductor tends to a southwestern dip and may connect to **EMB-2** at depth forming a single synclinal form. In the central section the width and conductivity increase significantly and there are some indications of multiple conductive and magnetic layers. Investigation is recommended in the vicinity of **R2.**

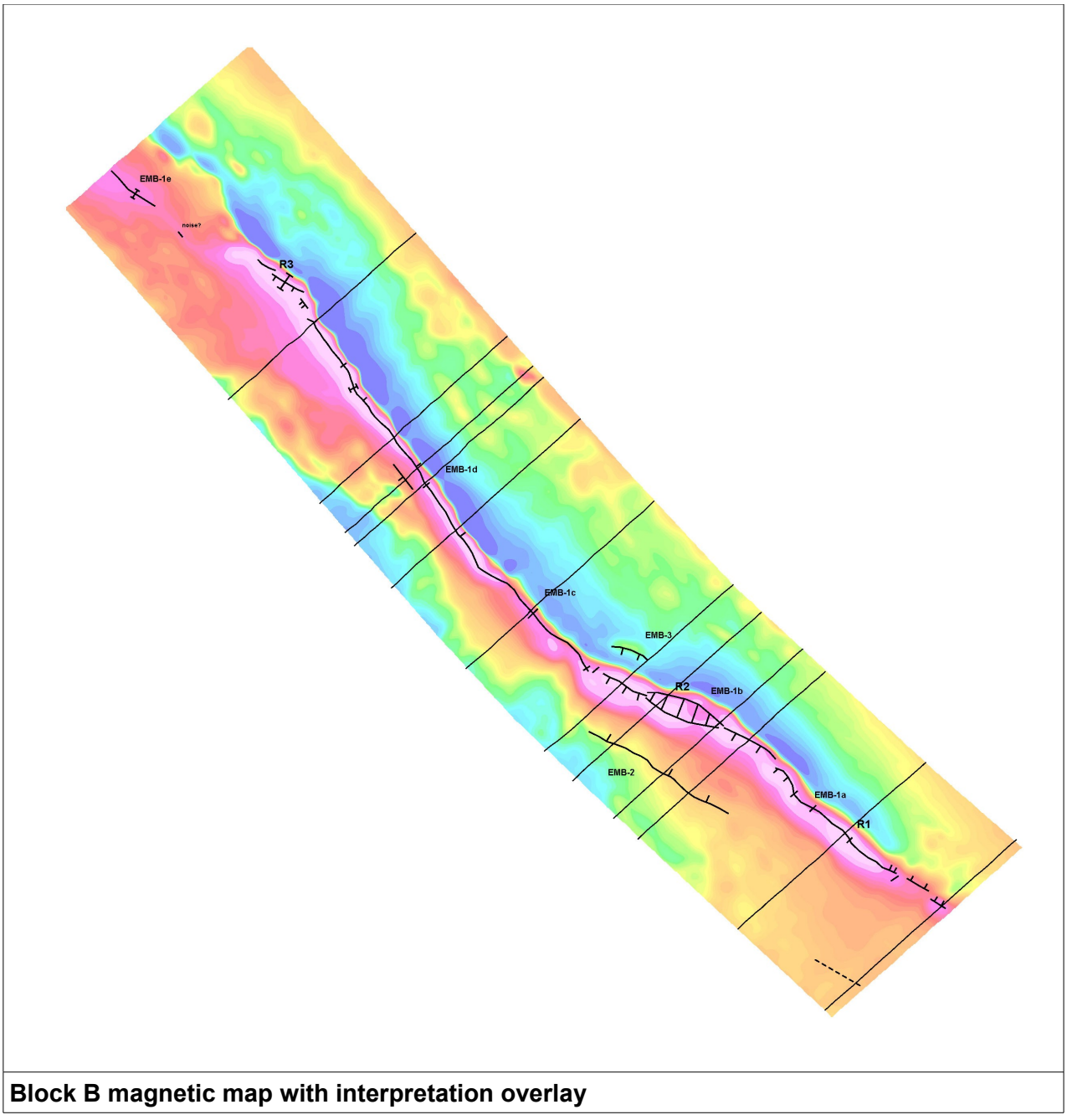
EMB-3 is the northeastern flank of a shallow flat-lying conductor that in this vicinity extends out from **EMB-1b**. It could be associated with the base of the overburden but is somewhat more conductive than typical for the area.

The central section **EMB-1c** generally reflects a thin steeply dipping source; however, in the vicinity of line 2250 and continuing to the northwest, the anomaly axis **EMB-1d** reflects the possibility of 2 steeply dipping, near parallel zones. The associated conductivity is moderate and highest near the northwest end.

Site **R3,** associated with line 1410, indicates a zone of shallow high conductivity where the parallel zones have connected near surface and/or melded into a wider conductor and investigation is recommended.

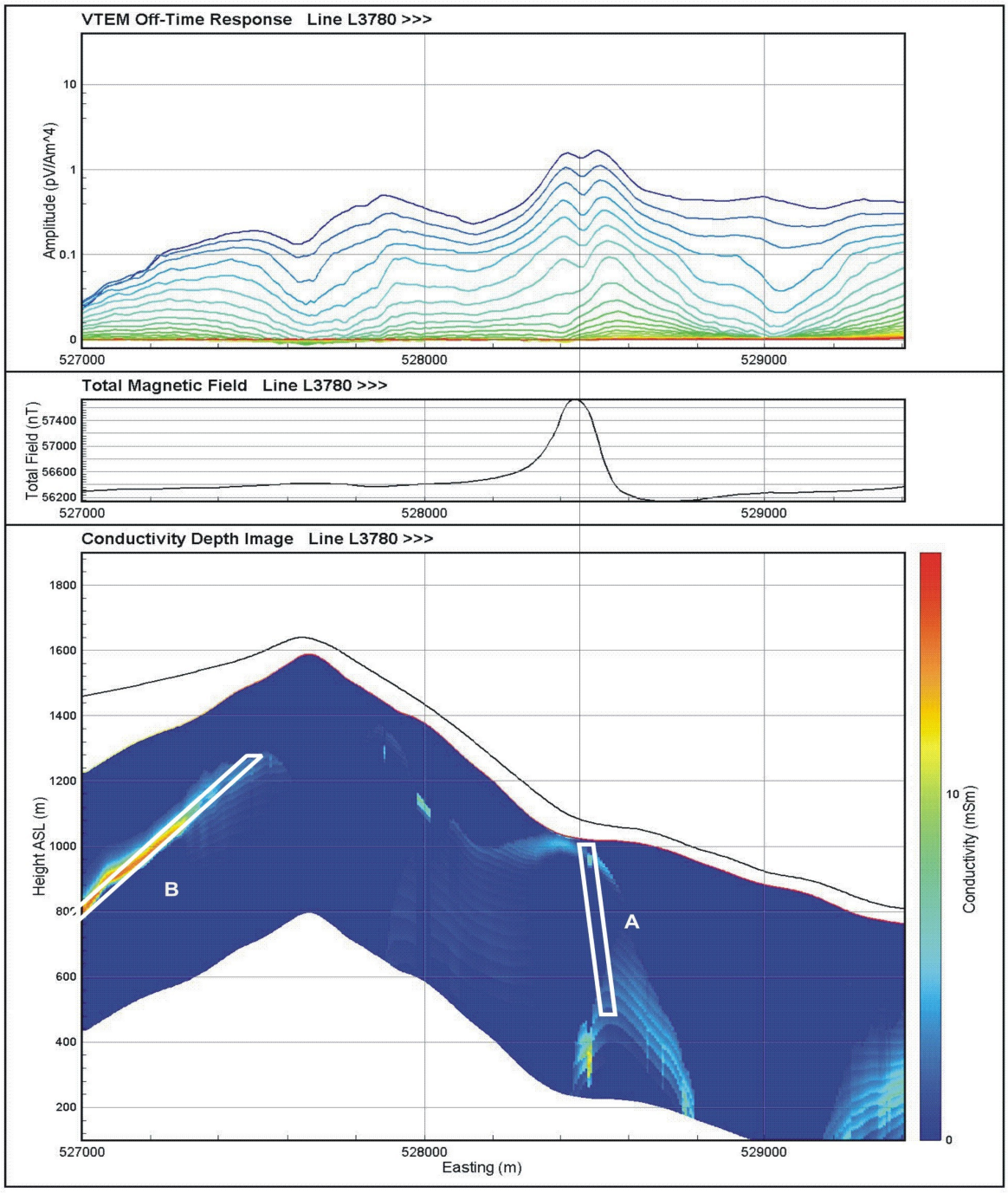
EMB-1e appears to be a continuation at depth of the interpreted dual conductor structure. The magnetic axis and the associated conductor are offset to the southwest relative to **EMB-1d** but a related structural axis or fault is not obvious.

In many of the CDI sections presented below, particularly in the northwest an anticline form is suggested. An anticline structure implies that the electromagnetic anomaly is associated with a folded conductive bed. This is at odds with the appearance of the associated magnetic anomaly that reflects a steeply dipping intrusive. An alternative explanation for the electromagnetic anomaly is possible that is more in keeping with steeply dipping conductors that could be related to a steeply dipping magnetic intrusive. A single vertical sheet conductor has a null response directly above and as the system moves off to either side the sheet is energized and an anomaly develops. The increasing lateral displacement of the system from the conductor is attributed to depth by the CDI process and the image of the vertical conductor appears as an inverted “V” in the CDI. As the dip of the conductor decreases the apparent plunge of the CDI flank will approach the true dip, but until the dip reaches about 10 degrees it will be overestimated by the CDI representation. With this in mind, the flanks of the anticline form, mentioned above may be significantly steeper than inferred by the CDI presenation and could therefore be separate, near parallel, steeply dipping conducors. If the dips were slightly divergent a broader null zone would occur between the two conductors. This would introduce the geological possibility of conductors within or flanking a steeply dipping magnetic intrusive. At **EMB-1d** the two flanks are electrically separated. At **R3** the two condutors have electrically joined, at least at surface, and a conductive apex is created.



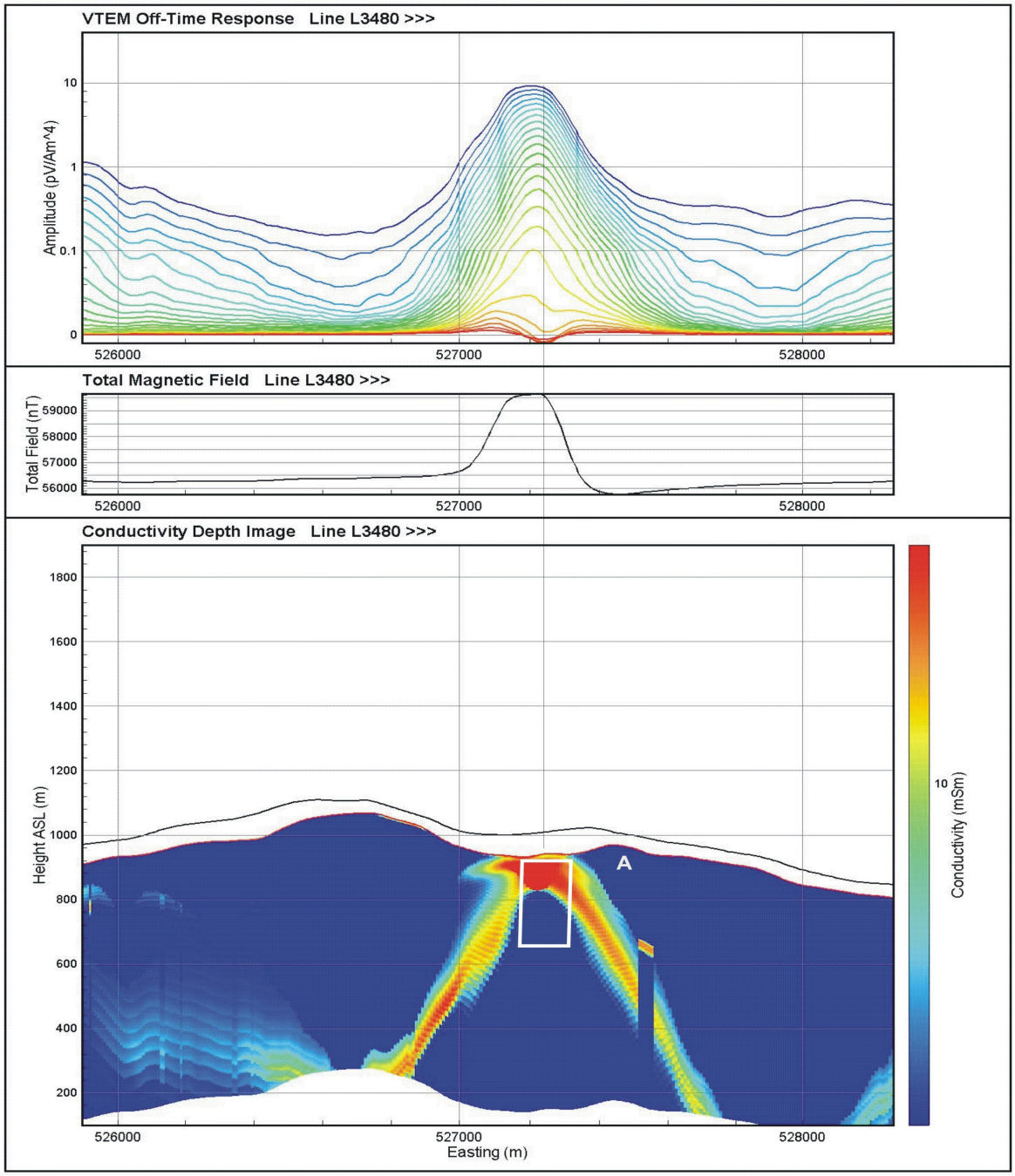
Block B magnetic map with interpretation overlay

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Block B



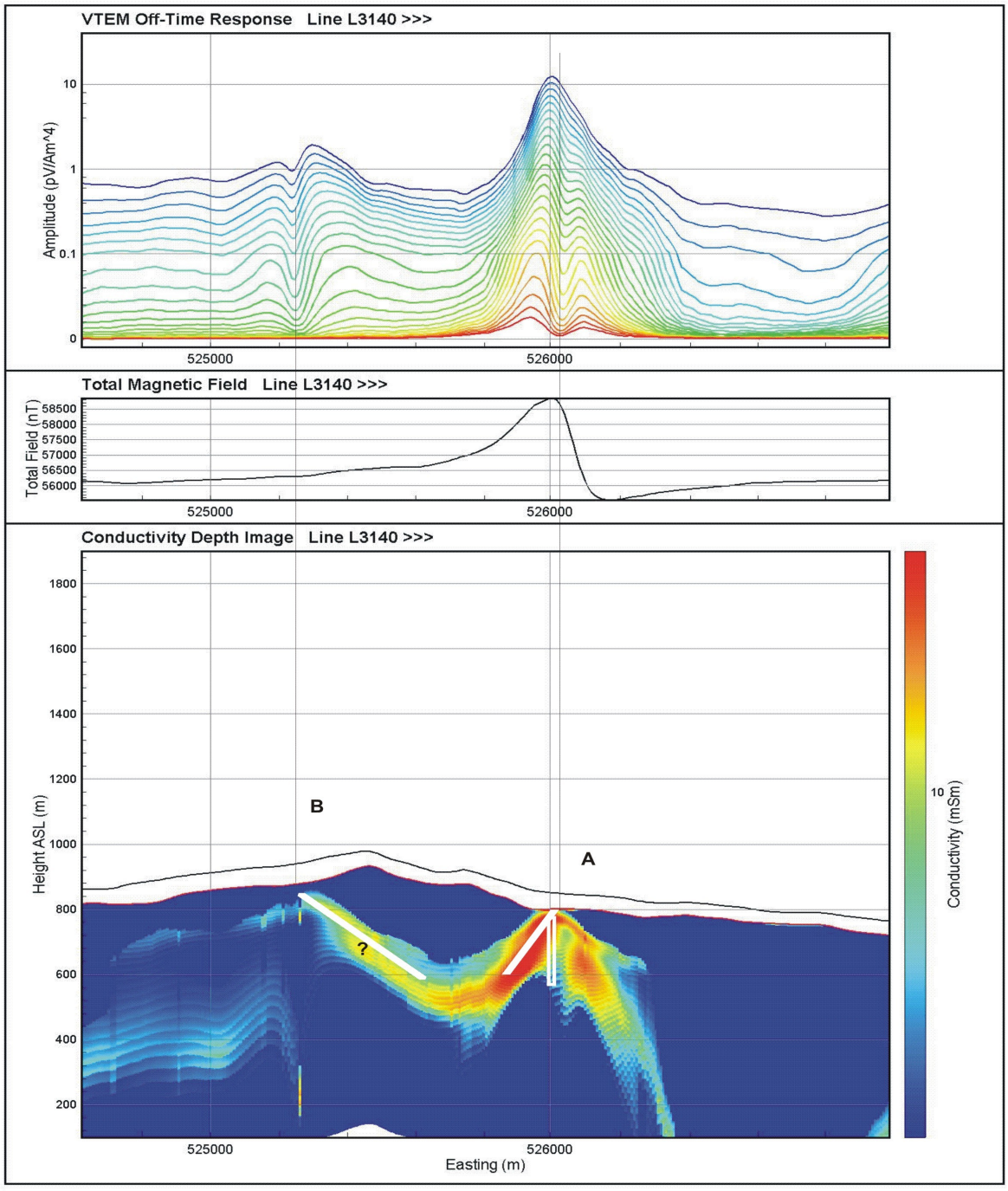
A suggestion of a southwest dipping conductor is indicated at **B.** This conductor sporadically appears on adjacent lines to the northwest. A conductor with steep northeastern dip is interpreted at **A**.

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Block B



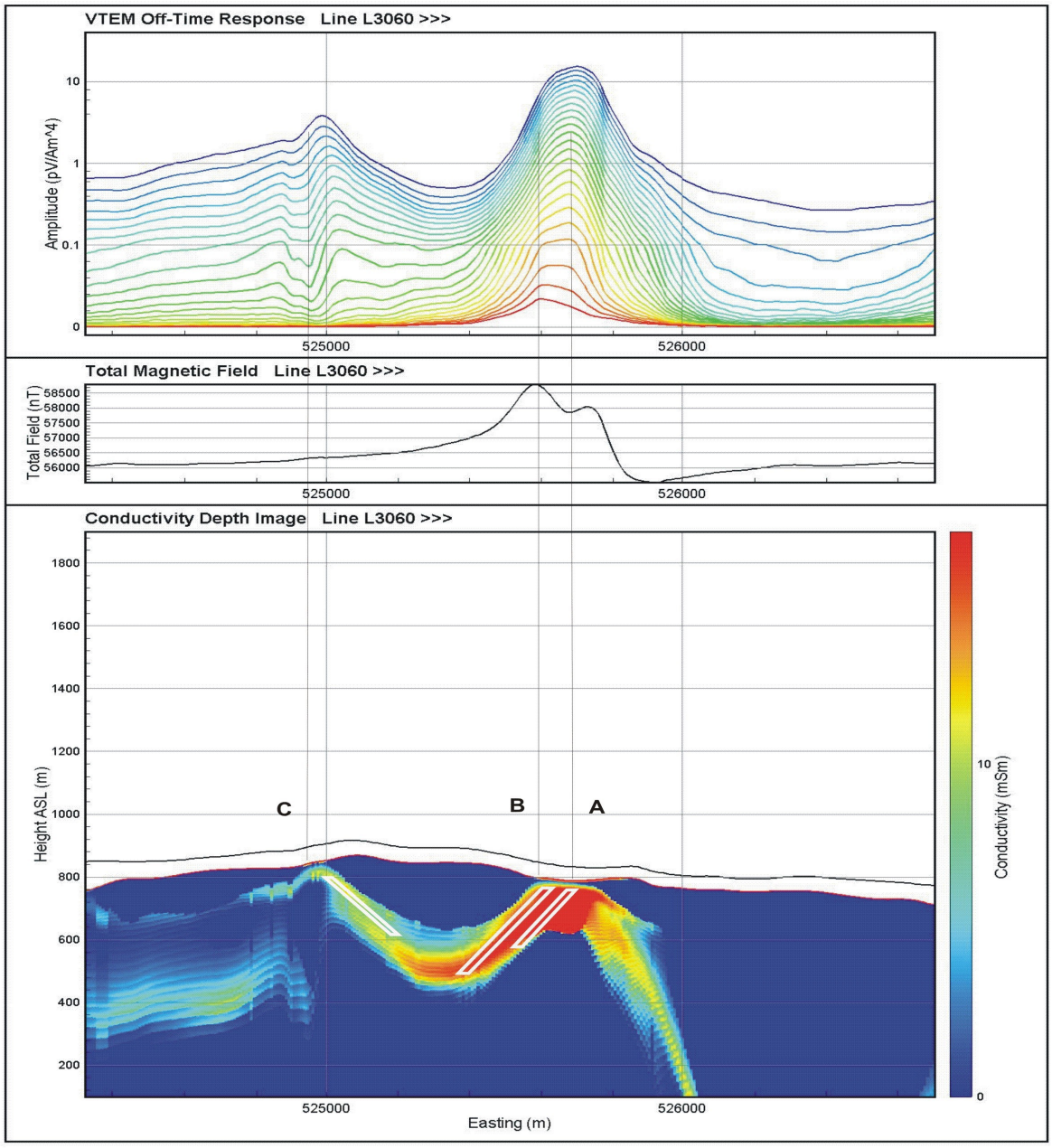
At **A** the early time channels indicate a broad response. The later time channels display a null that would suggest a this steeply dipping conductor. The interpretation illustrated shows a possible broad source with significant depth extent. This interpretation would be match the broad, steeply dipping form suggested by the coincident magnetic anomaly. This anomaly **R1** is recommended for follow up investigation.

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Block B



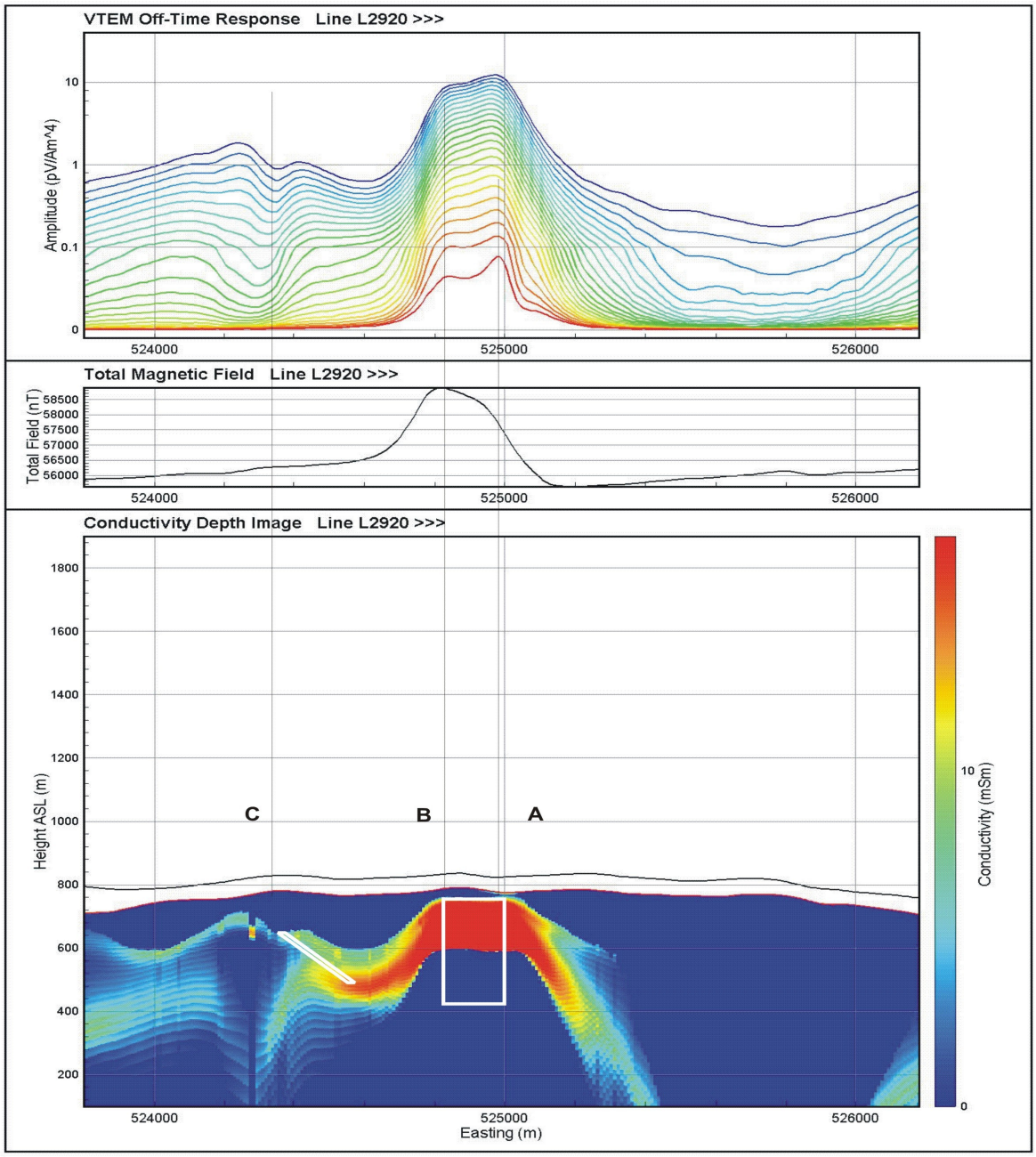
The profile shape at **A** suggest a slight southwestern dip and a range of possibility is indicated. The profile shape and CDI representation at **B** indicate a northeastern dip. It is possible that there is a connection between **A** and **B** as inferred by the CDI section.

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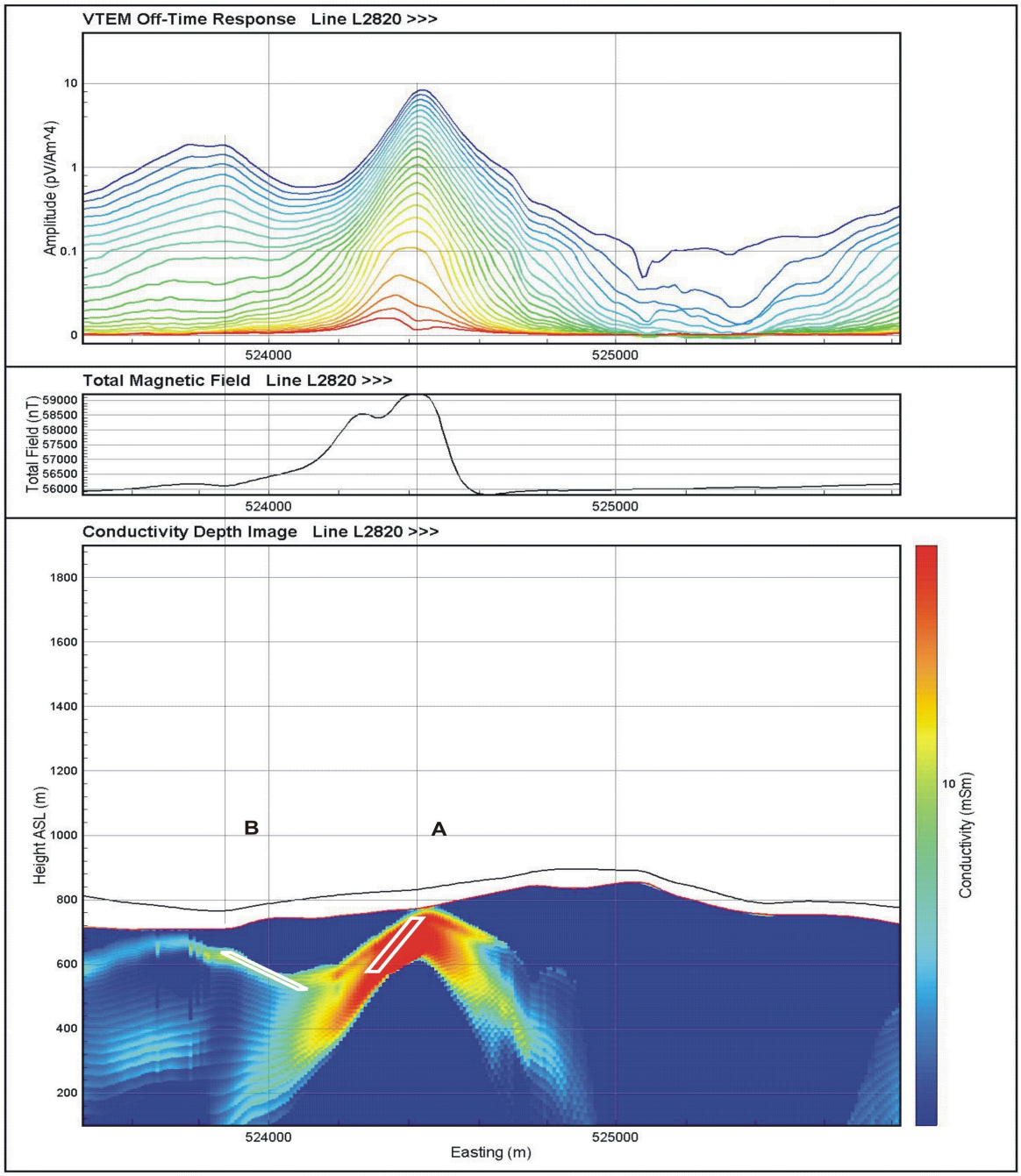
The response at **A-B** may reflect two conductors as illustrated or perhaps a wider zone dipping to the southwest. The double peak on the associated magnetic anomaly favours the interpretation of 2 conductive units. It is quite possible that **B** and **C** are related as indicated by the CDI illustration. The suggestion of a deeper conductive layer to the southwest of **C** is possible. It could be speculated that the null in the EM response at **C** reflects the interruption between conductive layers and that layer between **B-C** has been faulted downward to the southwest of **C**.

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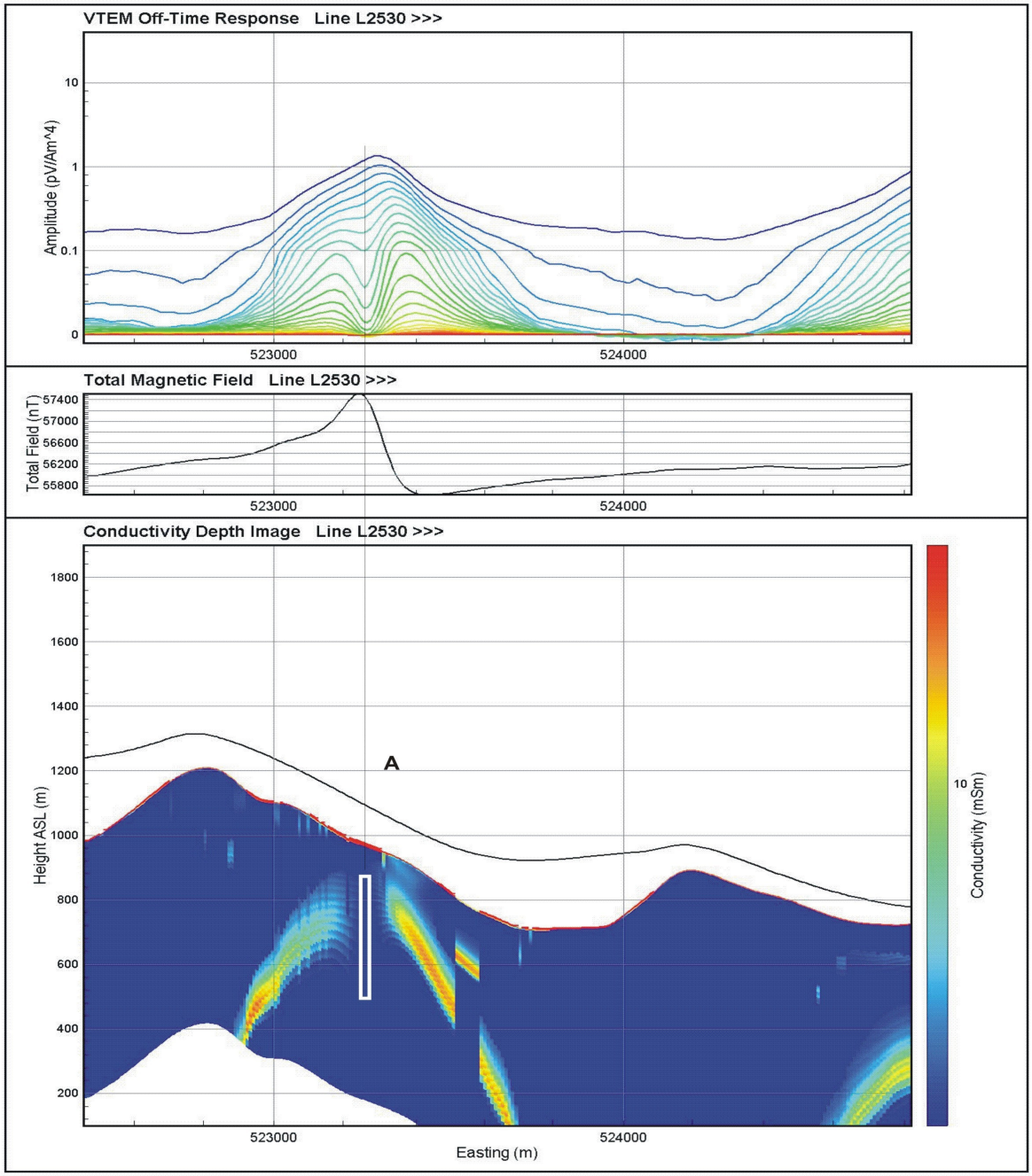
The response between **A-B** is indicative of a broad conductive zone with significant thickness. The width is also reflected in the magnetic profile. As on the prior lines to the southeast, it is probable that there is a connection between **C** and **B**. The conductor **A-B** is recommended for follow up investigation.

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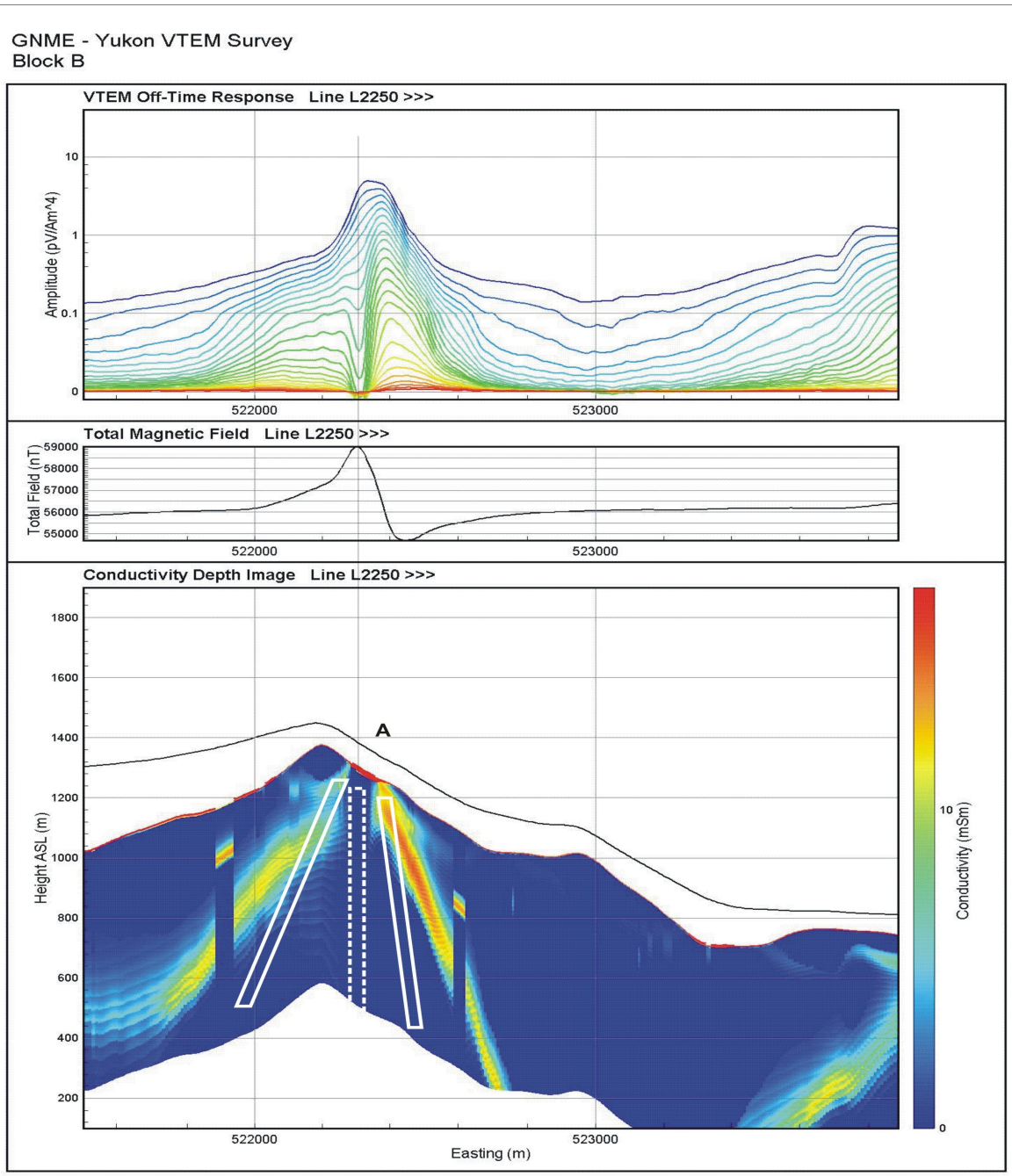


In early time the conductor **A** profile shows a broad, near symmetric response but in late time the asymmetry indicates a southwest dip. The lower conductivity layer at **B** may extend to **A** and, as the CDI implies, form a separate conductive layer above the higher conductivity unit **A**.

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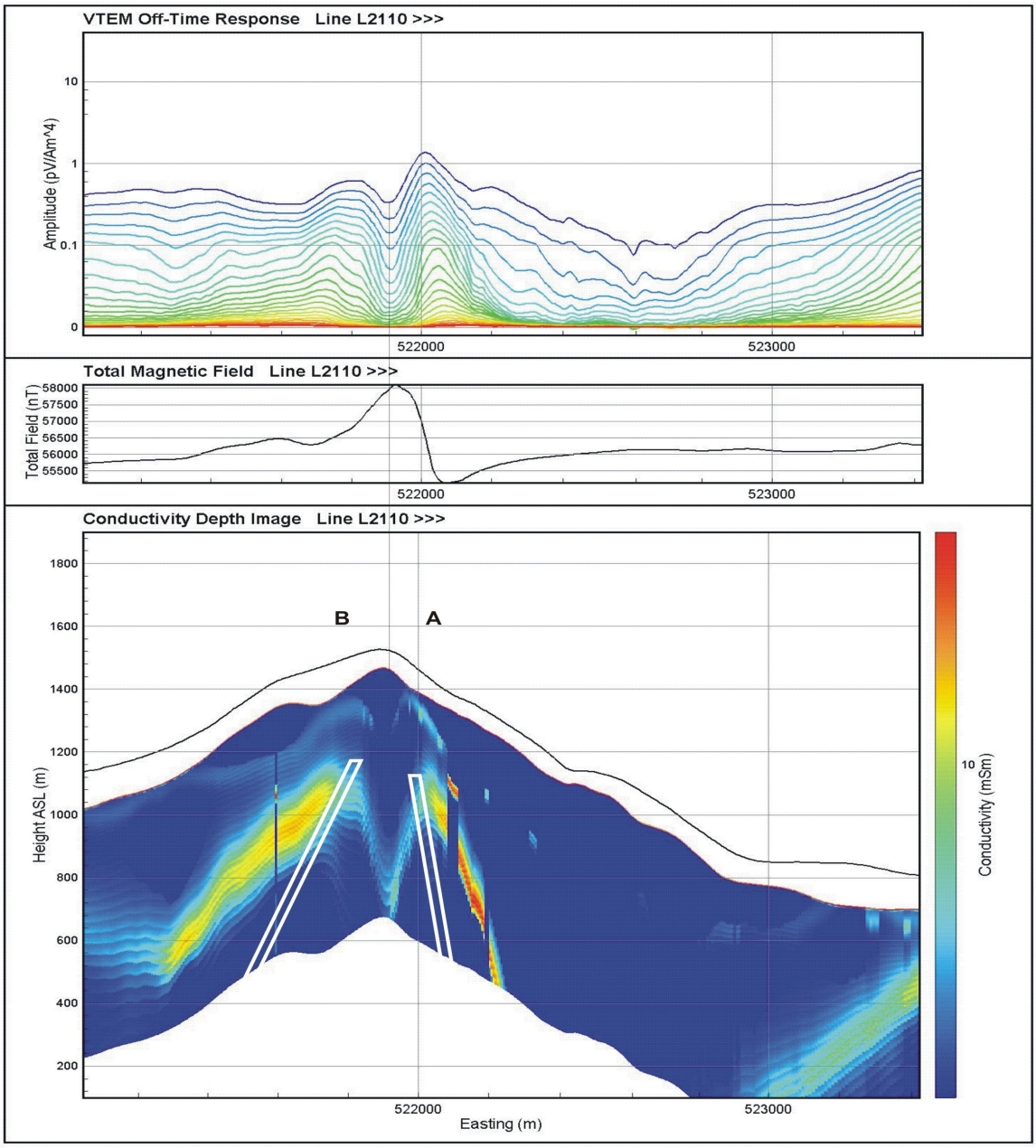


The shape of the early time channels at **A** reflect the surface conductivity. The shape of the late time channels suggest a thin steeply dipping source as illustrated.

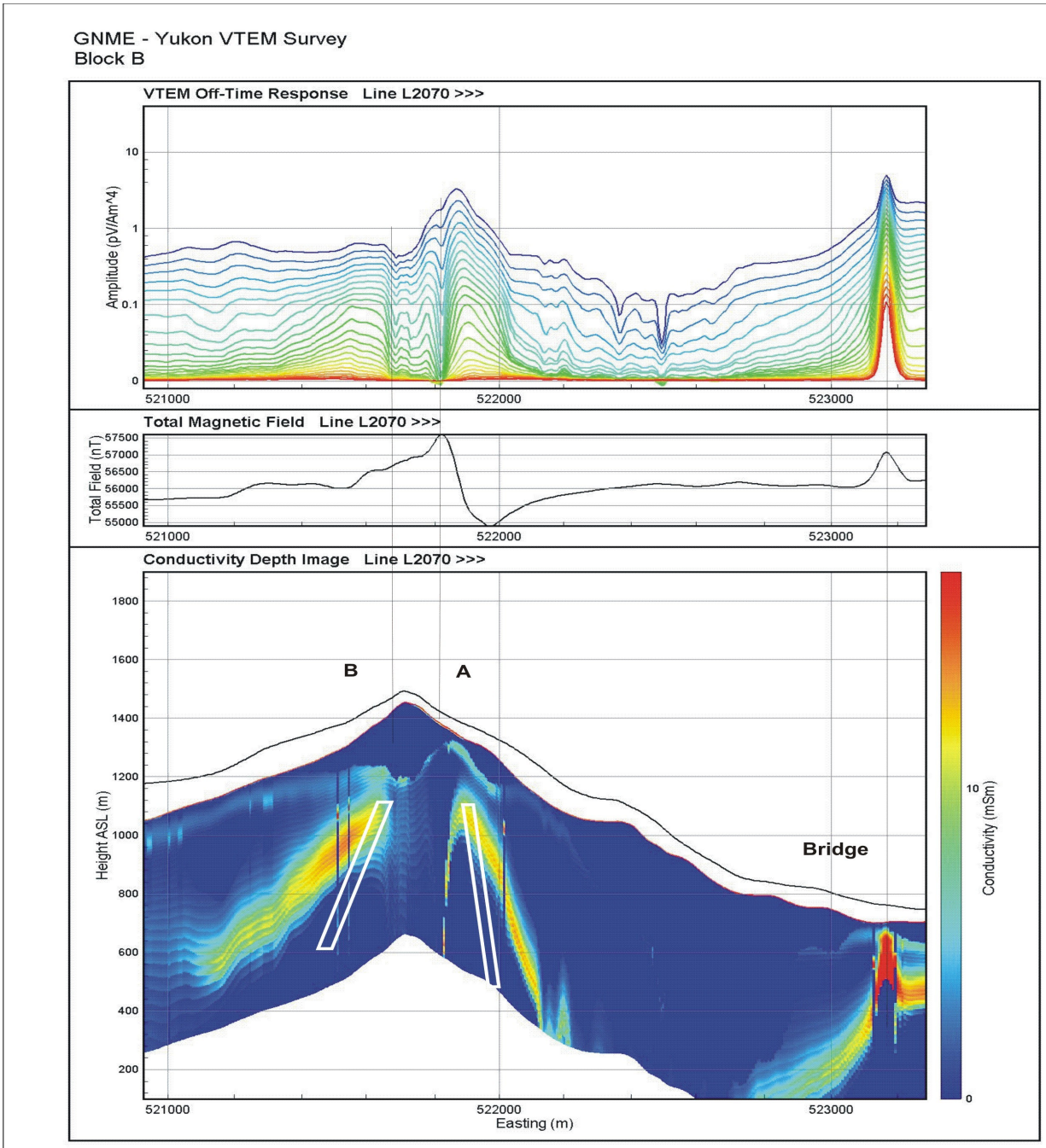


The profile shape at **A** is consistent with a thin steeply dipping conductor. On lines to the northwest the profile becomes more suggestive of two independent conductors or an anticline style structure.

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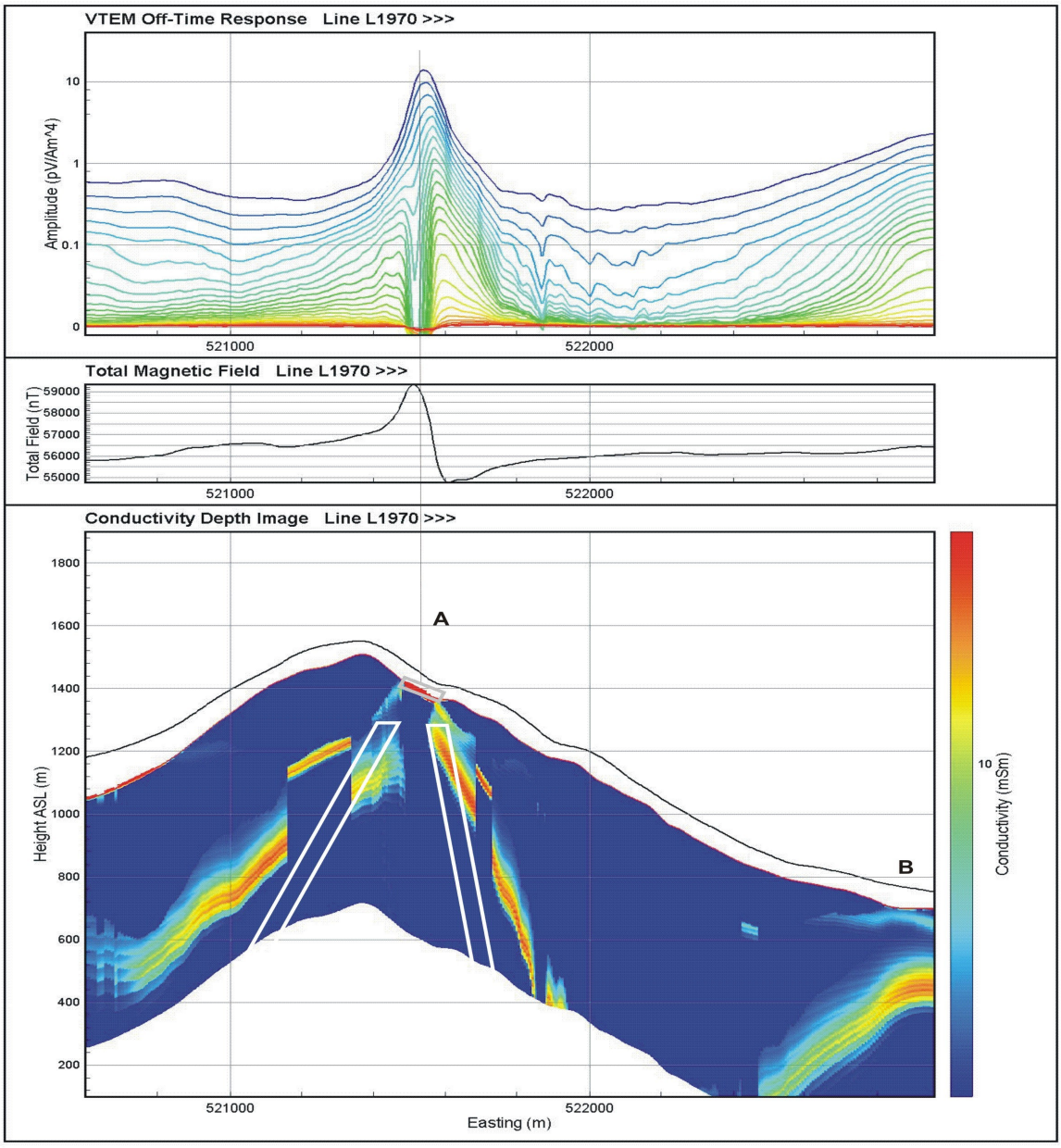


The profile null between **A** and **B** is broader than would normally be anticipated for a thin steeply dipping conductor and it is interpreted that **A** and **B** are separate conductors. An anticline form is suggested by the CDI but discontinuous at the apex. The conductors **A** and **B** as depicted could create the broad response null with true dips greater than this implied by the CDI. It is also possible that the two conductors dip more steeply than indicated, perhaps to the point of being near parallel.

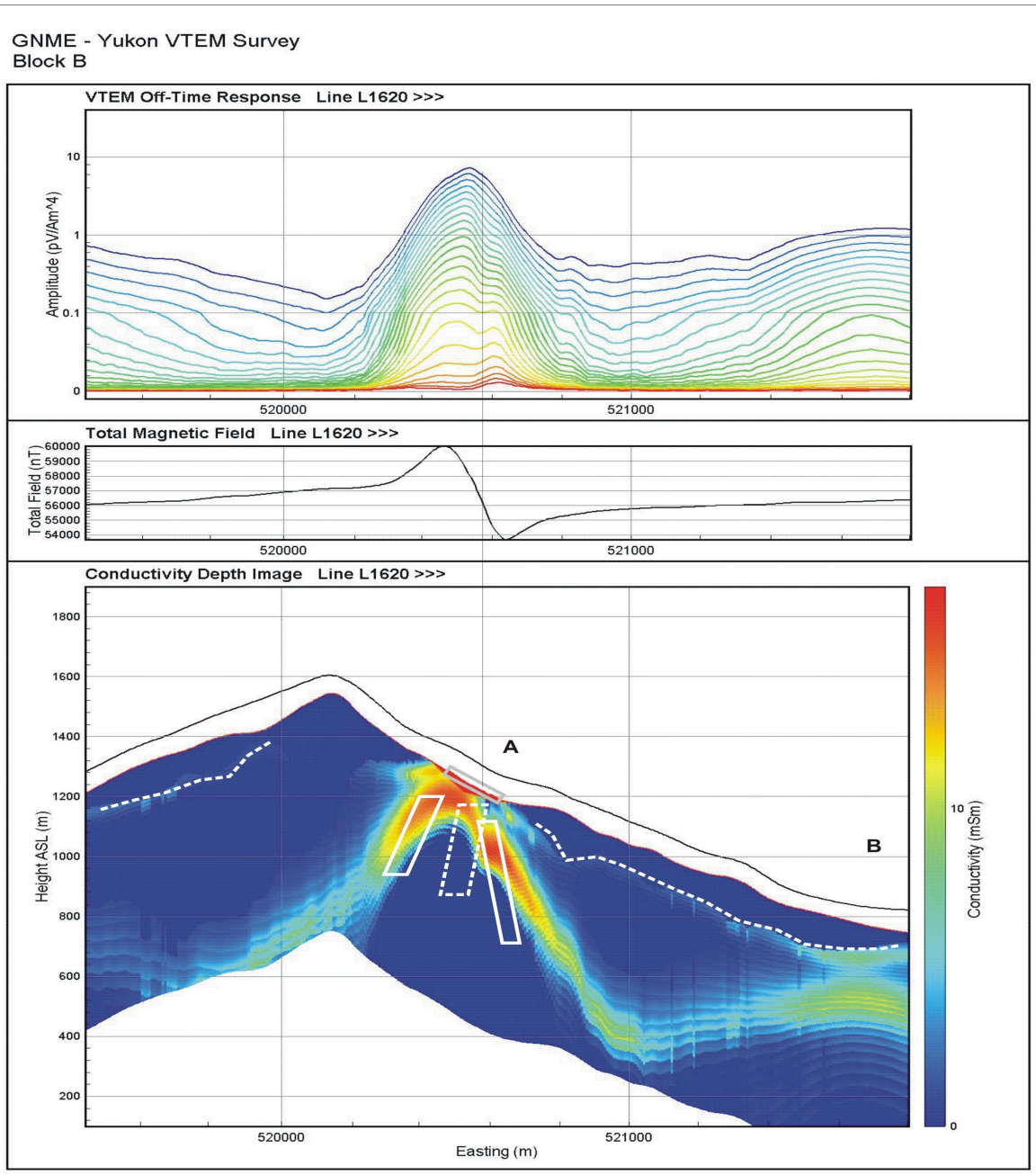


The profile null between **A** and **B** is much broader than that anticipated for a thin steeply dipping conductor and **A** and **B** are interpreted as separate conductors. An anticline form is suggested by the CDI with the conductors **A** and **B** separated at the apex. The conductors **A** and **B** as depicted could create the broad response null with true dips greater than this implied by the CDI. It is also possible that the two conductors dip more steeply than indicated, perhaps to the point of being near parallel. A strong conductive and magnetic anomaly is associated with a highway bridge.

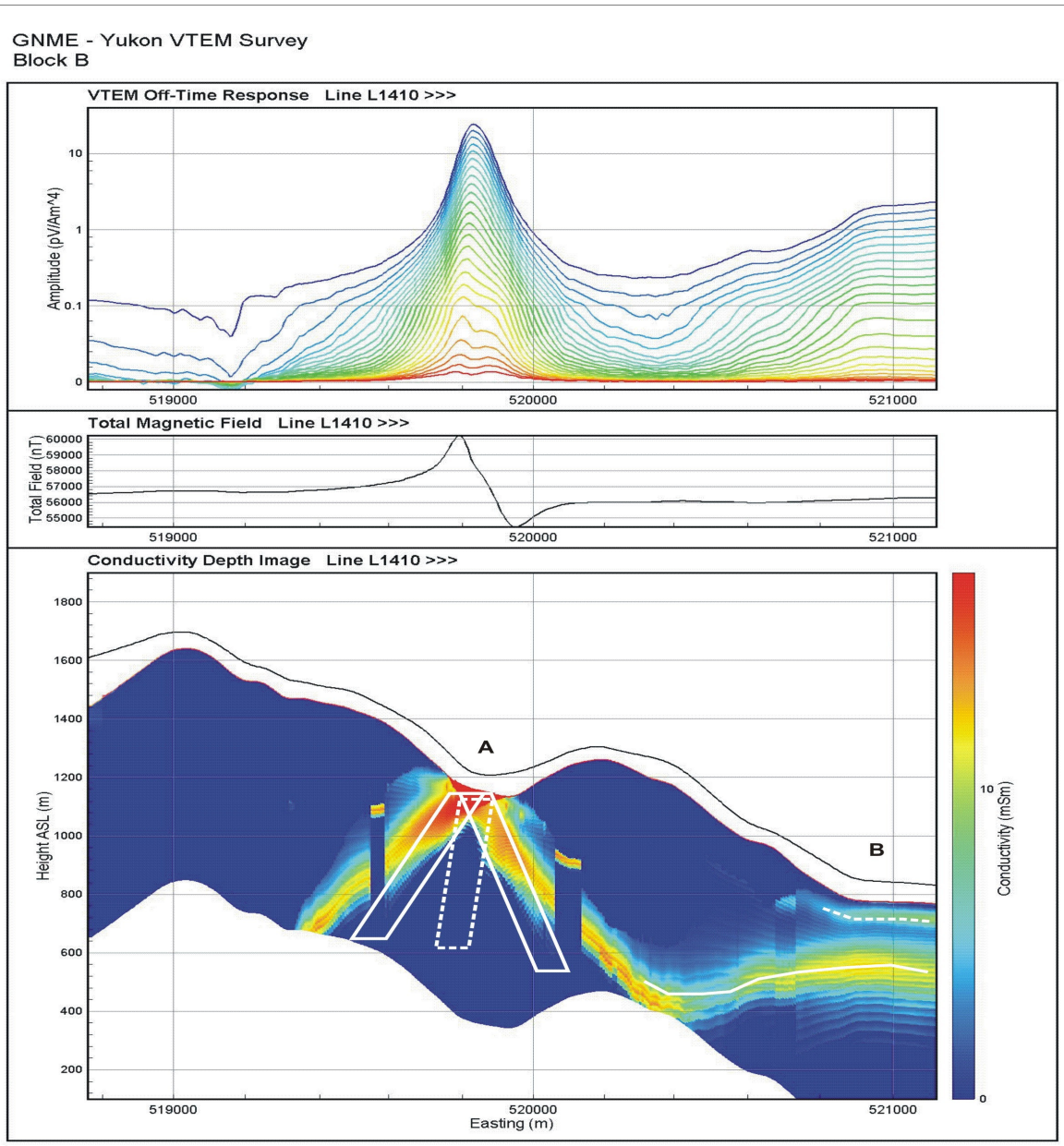
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The profile null between **A** and **B** is somewhat broader than would normally be anticipated for a thin steeply dipping conductor and it is likely that **A** and **B** are separate conductors. An anticline form is suggested by the CDI but discontinuous at the apex. The conductors **A** and **B** as depicted could create the broad response null with true dips greater than this implied by the CDI. It is also possible that the two conductors dip more steeply than indicated, perhaps to the point of being near parallel.A local zone of high surface conductivity occurs above the apex.



The profile shape at **A** suggests a dip to the southwest in early time and a dip to the northeast in late time. It is possible that the source is a single body with higher conductivity on the northeastern flank or near parallel steeply dipping zones, with the northeastern more conductive. A wide zone of high surface conductivity is indicated above the conductors and outcrop might be found. Apart from the conductor(s) at **A** a shalow weakly conductive interface can be seen along most of the line. This might reflect clays at the base of the scree. At **B** there is a deeper conductive layer that might be a continuation of **A**, as indicated by the CDI.



The profile shape at **A** suggests a steeply dipping broad conductive source with some southwest dip and/or higher conductivity on the southwest side. It is also very possible that the anomaly is due to two steeply dipping zones. This location is recommended for field investigation. The CDI suggests an anticlinal form with continuity between A and B but the link is considered doubtful. Apart from the conductor(s) at **A** a shalow weakly conductive interface can be seen at the northeastern end of the line. This might reflect clays at the base of the scree. At **B** there is a deeper conductive layer that is not believed to be a continuation of **A**, as indicated by the CDI.

6 RECOMMENDATIONS

Both areas B and C have high conductivity anomalies that warrant further investigation as potential locations of economic sulphide mineralization. Three sites have been identified in each area.

These sites or zones are recommended solely on the basis of very high conductivity and significant width as interpreted from their electromagnetic response.The anomalies appear to be relatively shallow and there is a possibility of outcrop in some cases. If the target sites have not already been drilled then drilling is recommended to identify the conductivity source.

Apart from these selected sites there are many other zones with conductivity levels that lower but still typical of sulphide mineralization, possibly of economic significance. Geological or geochemical information might provide justification for investigating other conductive zones in the area.

Respectfully submitted,

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Scott Hogg & Associates Ltd.
Toronto, Canada
October, 2007