



UNITED NATIONS
UNIVERSITY

GEOHERMAL TRAINING PROGRAMME
Orkustofnun, Grensasvegur 9,
IS-108 Reykjavik, Iceland

Reports 2011
Number 27

APPENDICES TO THE REPORT:
**JOINT 1D INVERSION OF MT AND TEM DATA FROM
EBURRU, KENYA, AND PROCESSING OF GRAVITY DATA
FROM THEISTAREYKIR, NE-ICELAND**

by

Anna Wairimu Mwangi

Kenya Electricity Generating Company - KenGen

P.O. Box 785

Naivasha

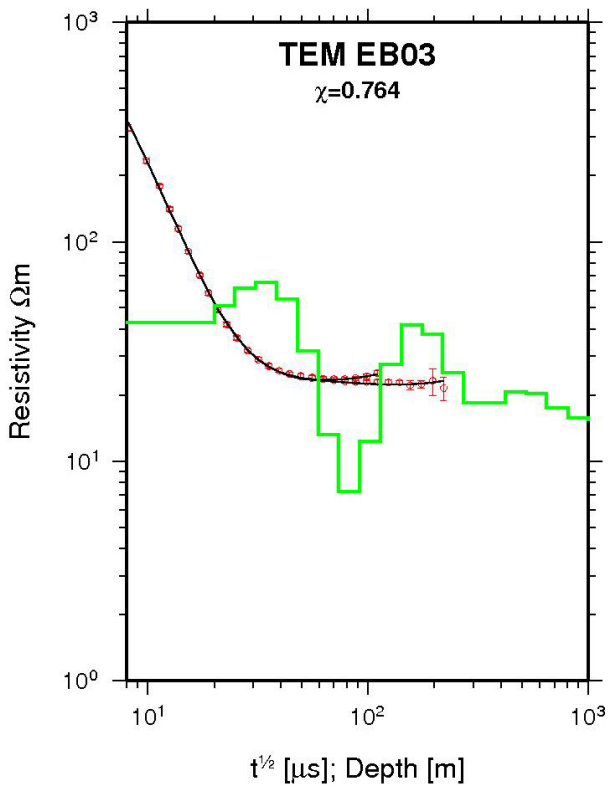
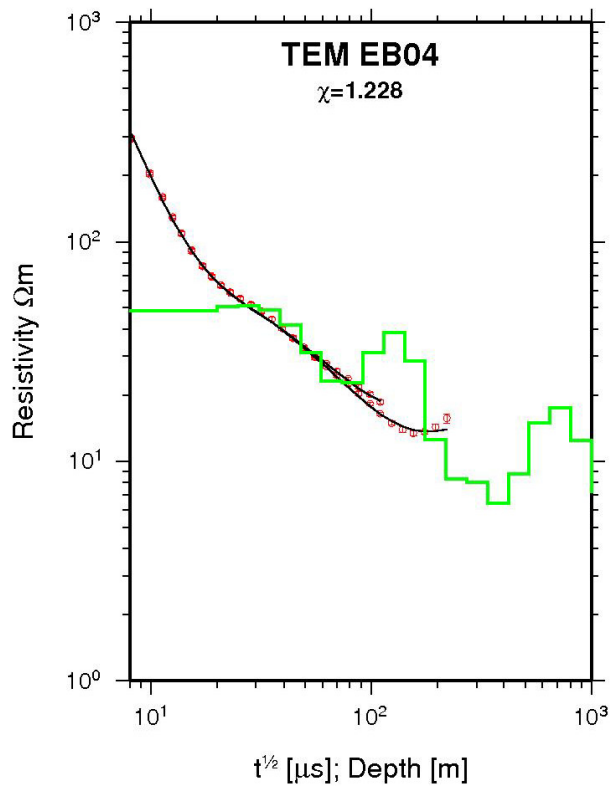
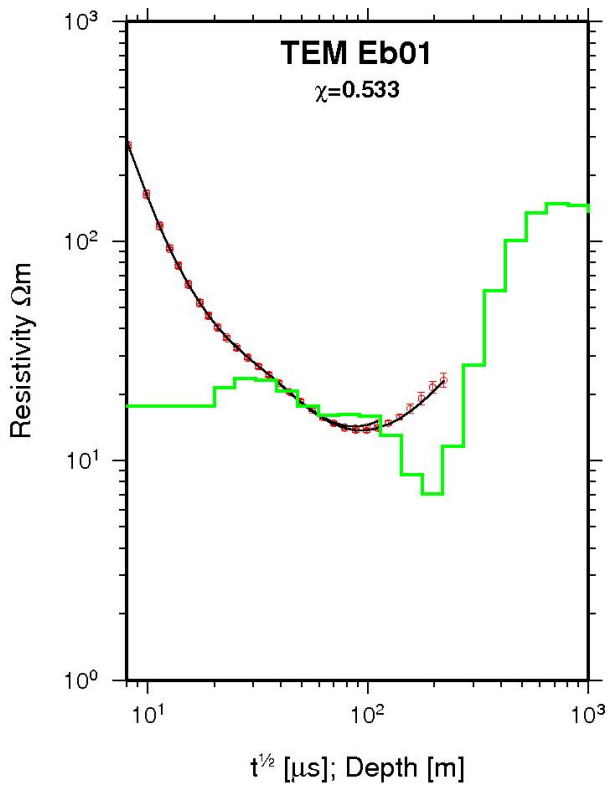
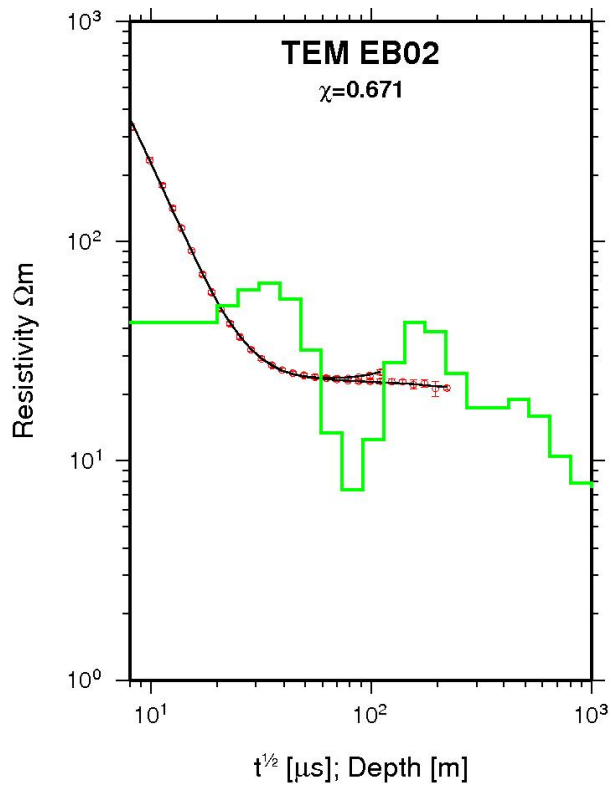
KENYA

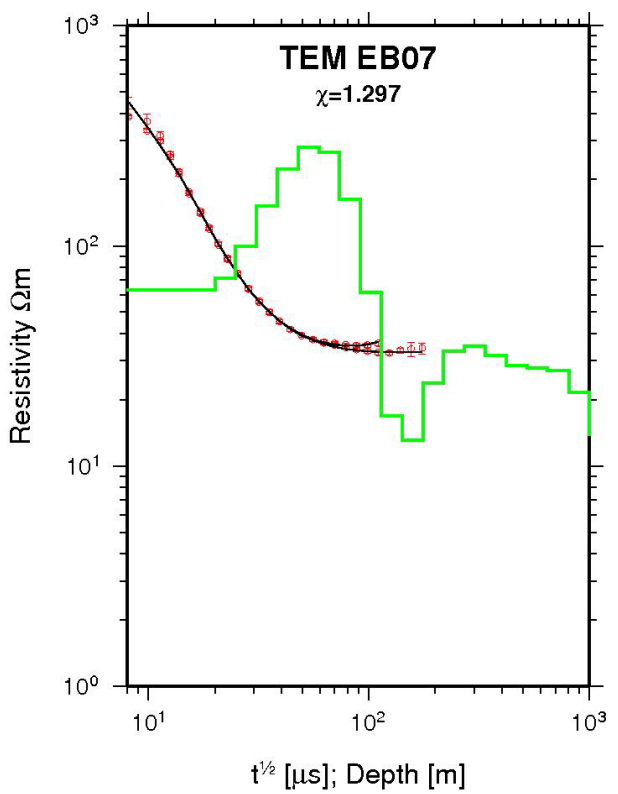
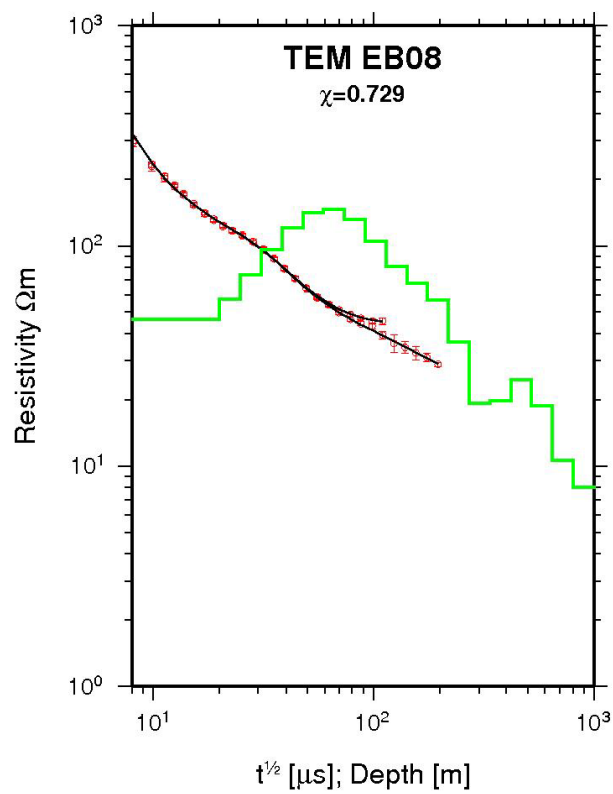
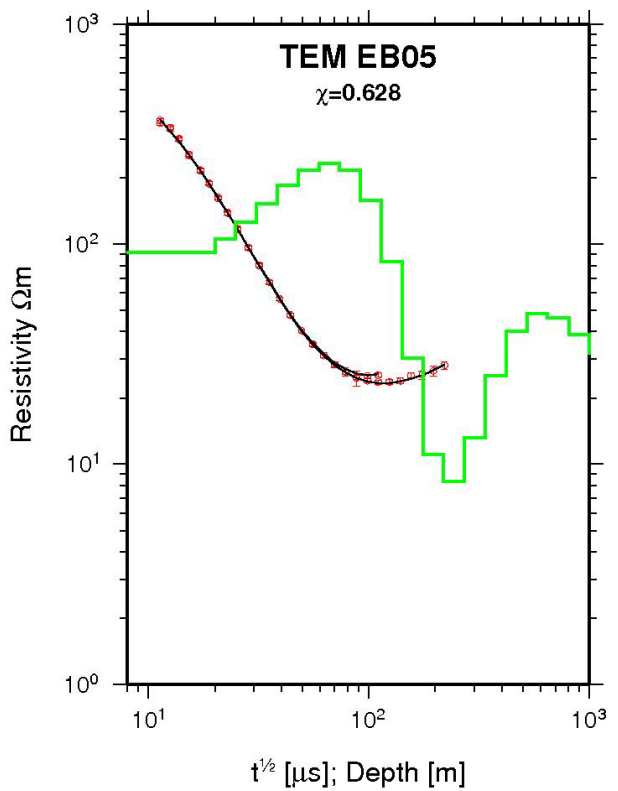
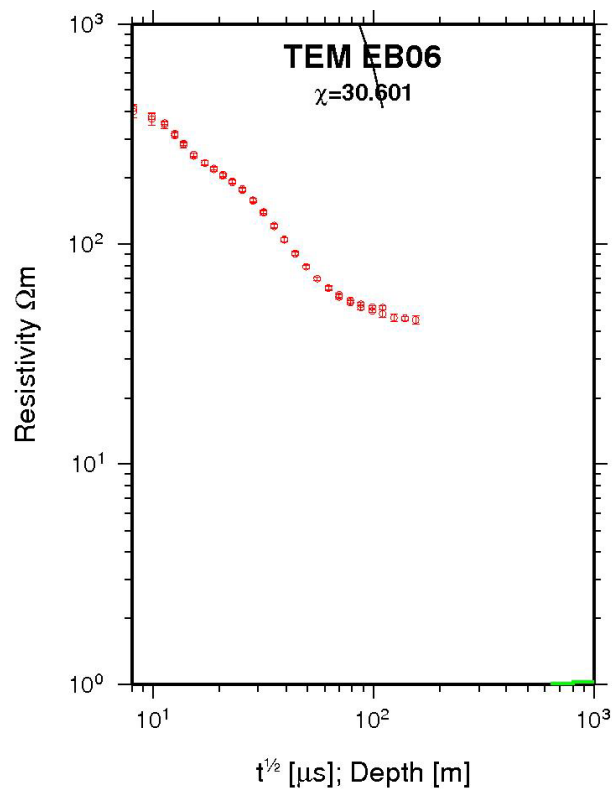
awmwangi@kengen.co.ke

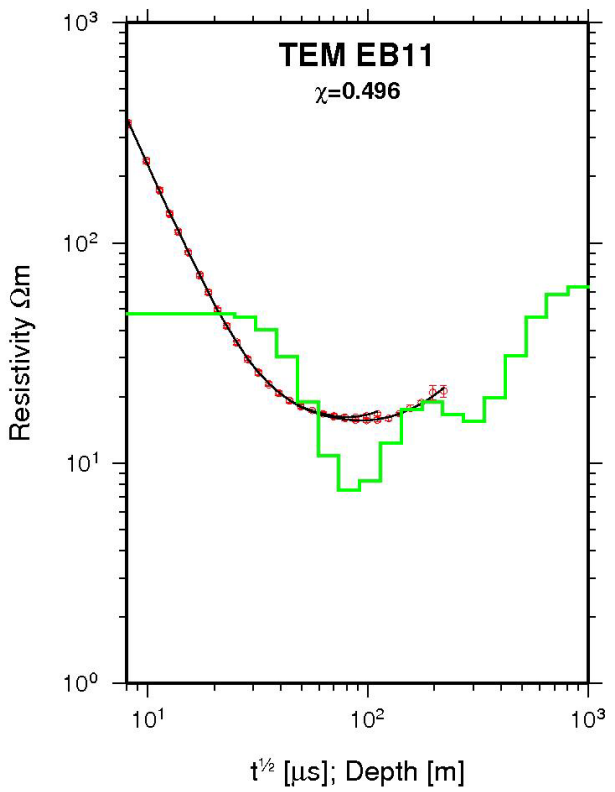
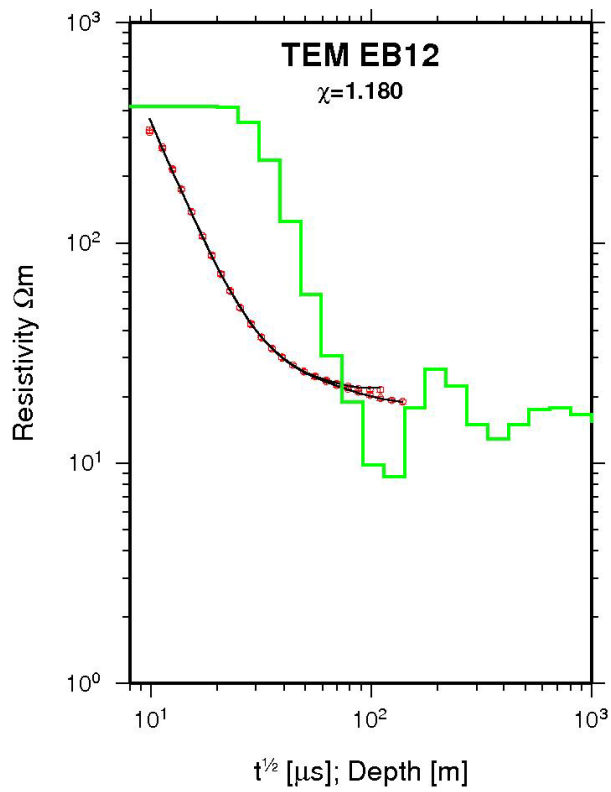
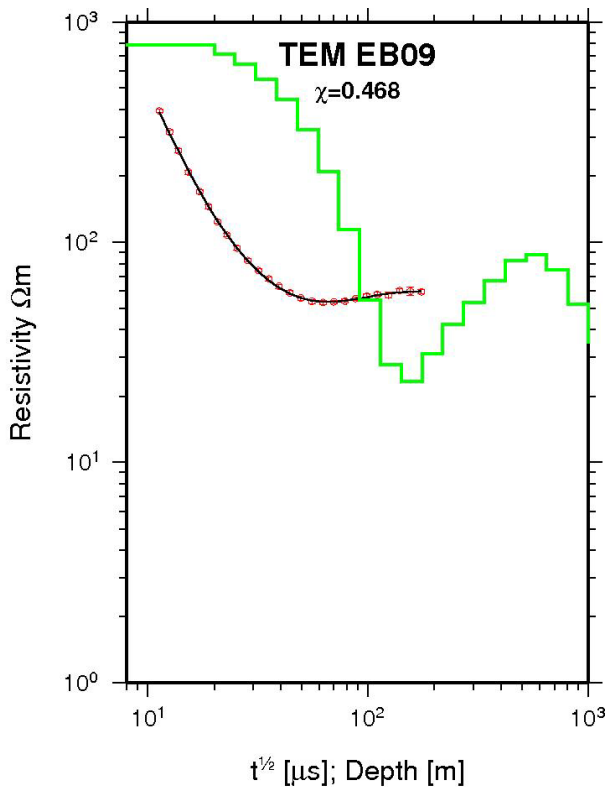
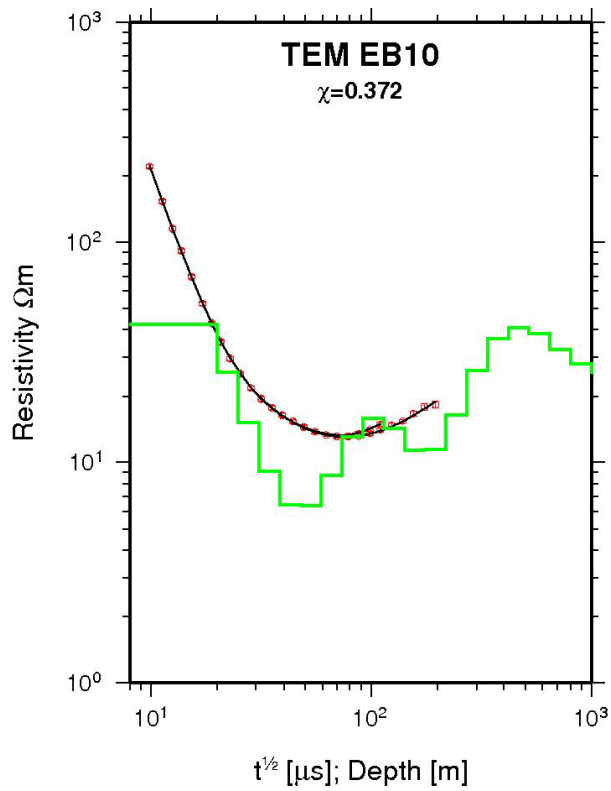
United Nations University
Geothermal Training Programme
Reykjavík, Iceland
Published in 2011

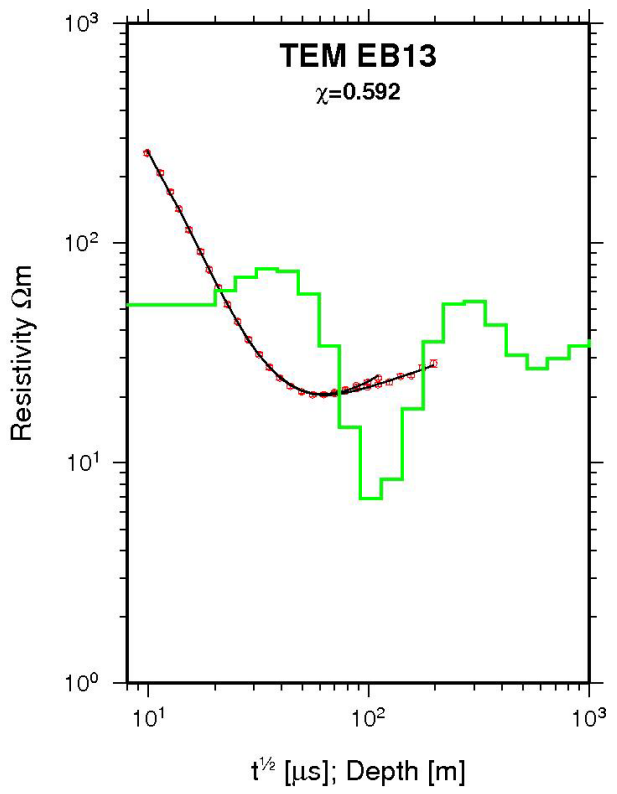
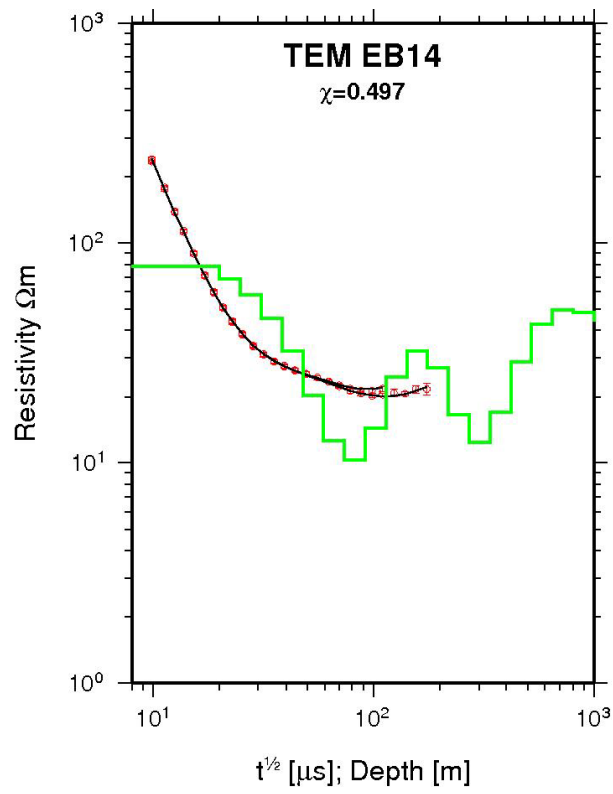
These are appendices to the report “ Joint 1D inversion of MT And TEM data from Eburru, Kenya, and processing of gravity data from Theistareykir, NE-Iceland” by Anna W. Mwangi at the UNU Geothermal Training Programme in 2011. Appendix I shows the TEM data from the Eburru prospect and Occam inversion of the data. Appendix II shows processed data for all the MT soundings with various MT parameters extracted from the EDI files. Appendix III shows the TEM and MT joint inverted resistivity data from the Eburru prospect and 1-D joint inversion and the corresponding model curves. Appendix IV contains additional iso-resistivity maps from the Eburru prospect to ones shown in the main report. Appendix V shows an additional resistivity cross-section from the Eburru prospect. Appendix VI shows gravity data of Theistareykir area.

APPENDIX I: TEM data from the Eburru prospect and Occam inversion of the data

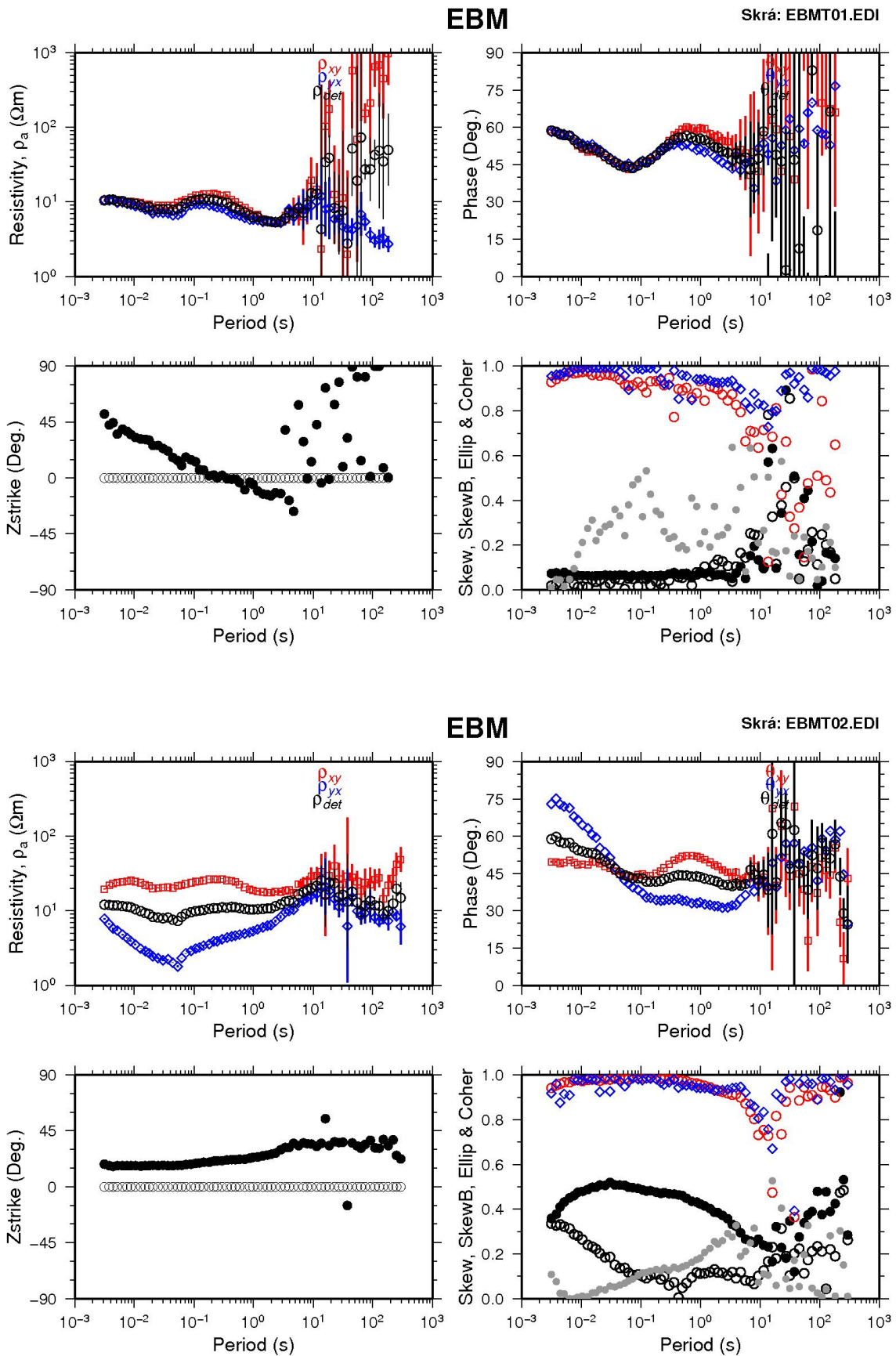






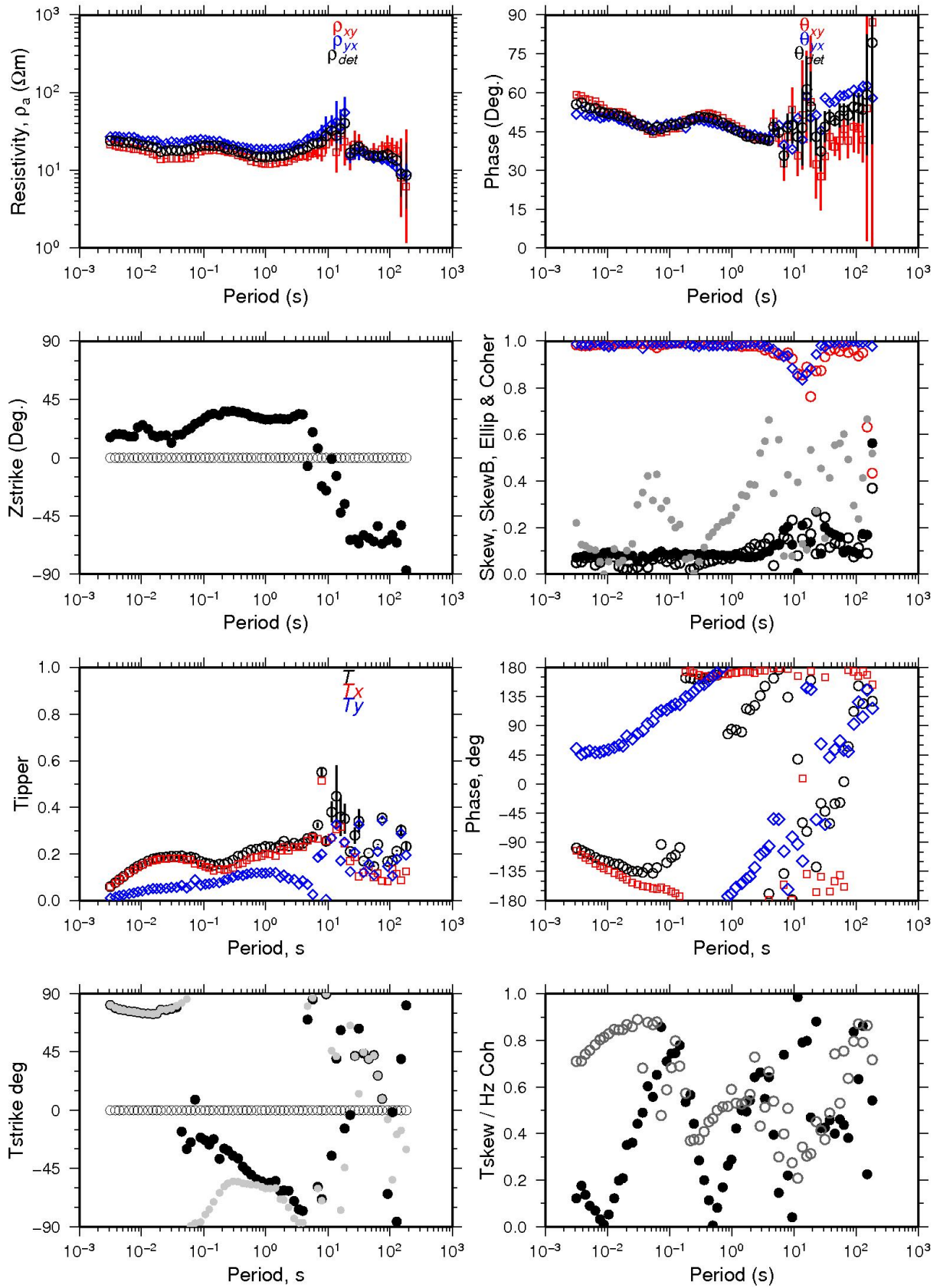


APPENDIX II: Processed data for all the Eburru MT soundings with various MT parameters extracted from the EDI files



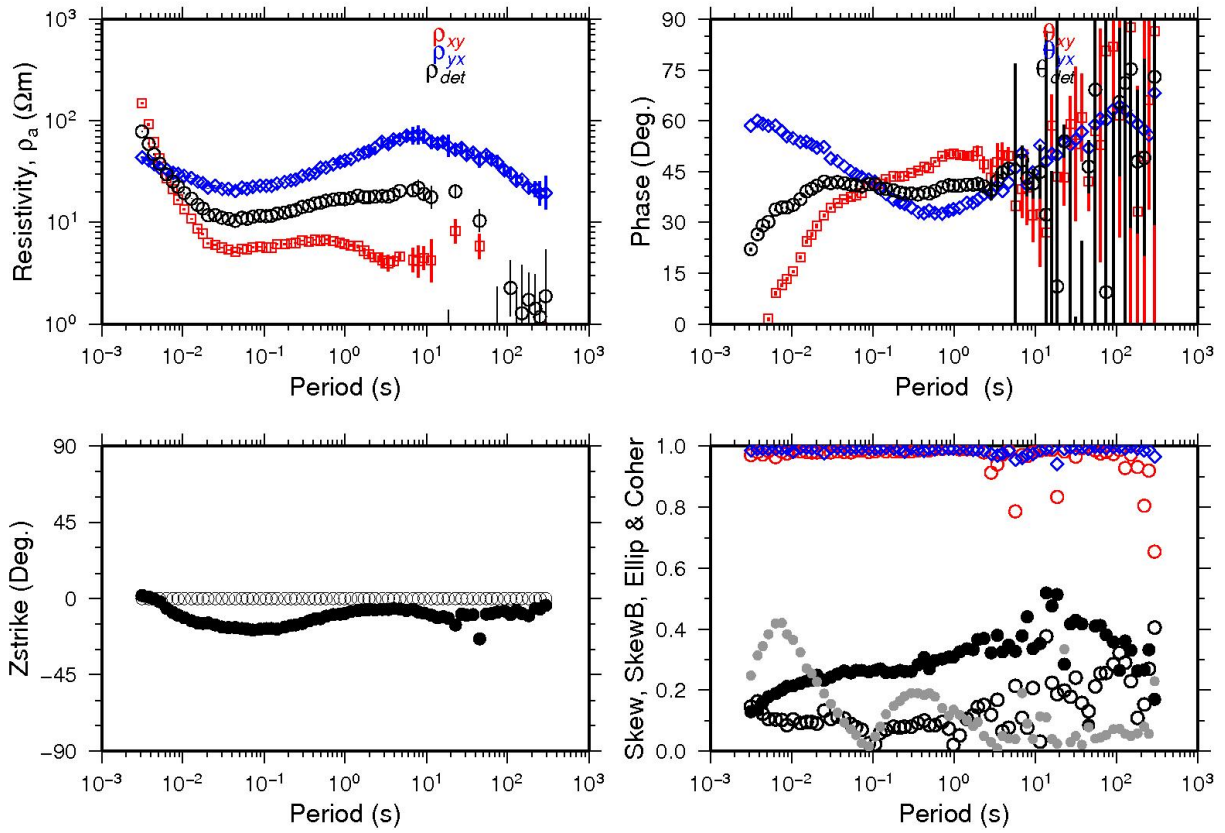
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Skrá: EBMT03.EDI



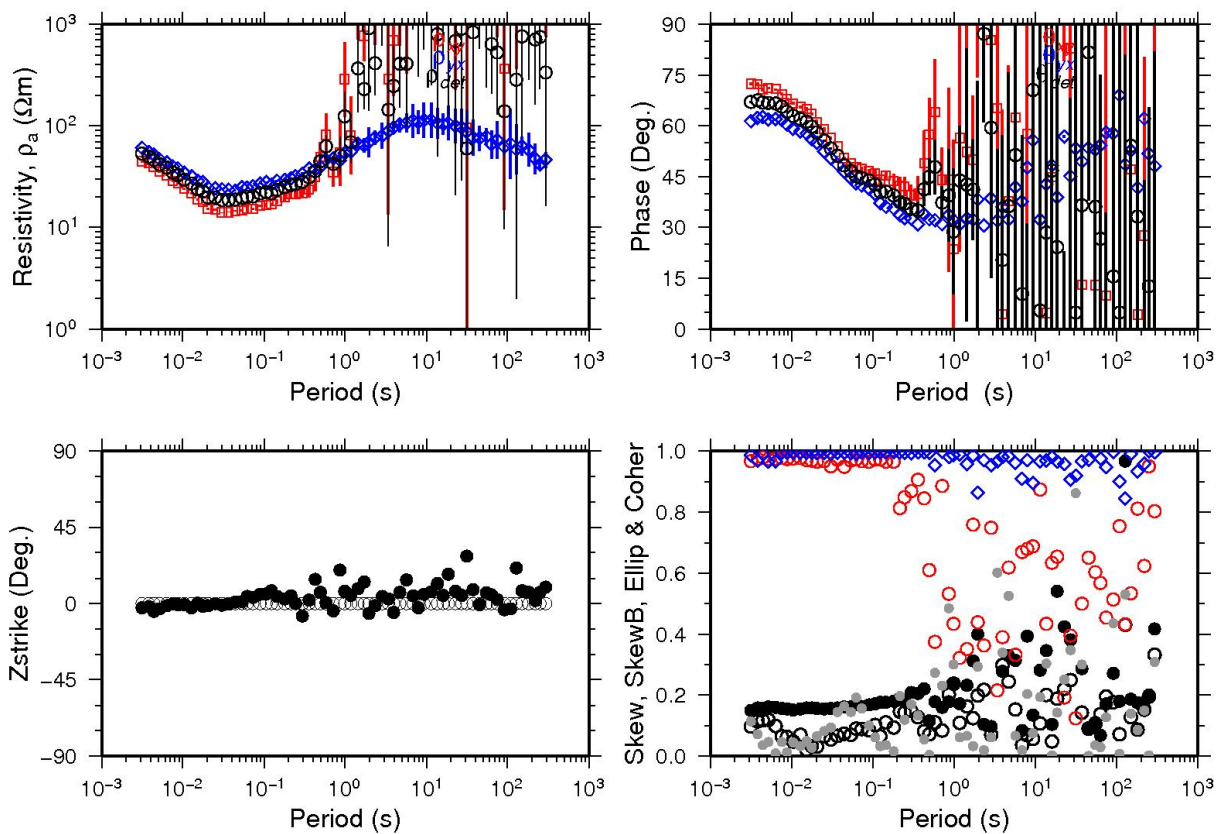
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Skrá: EBMT04.EDI



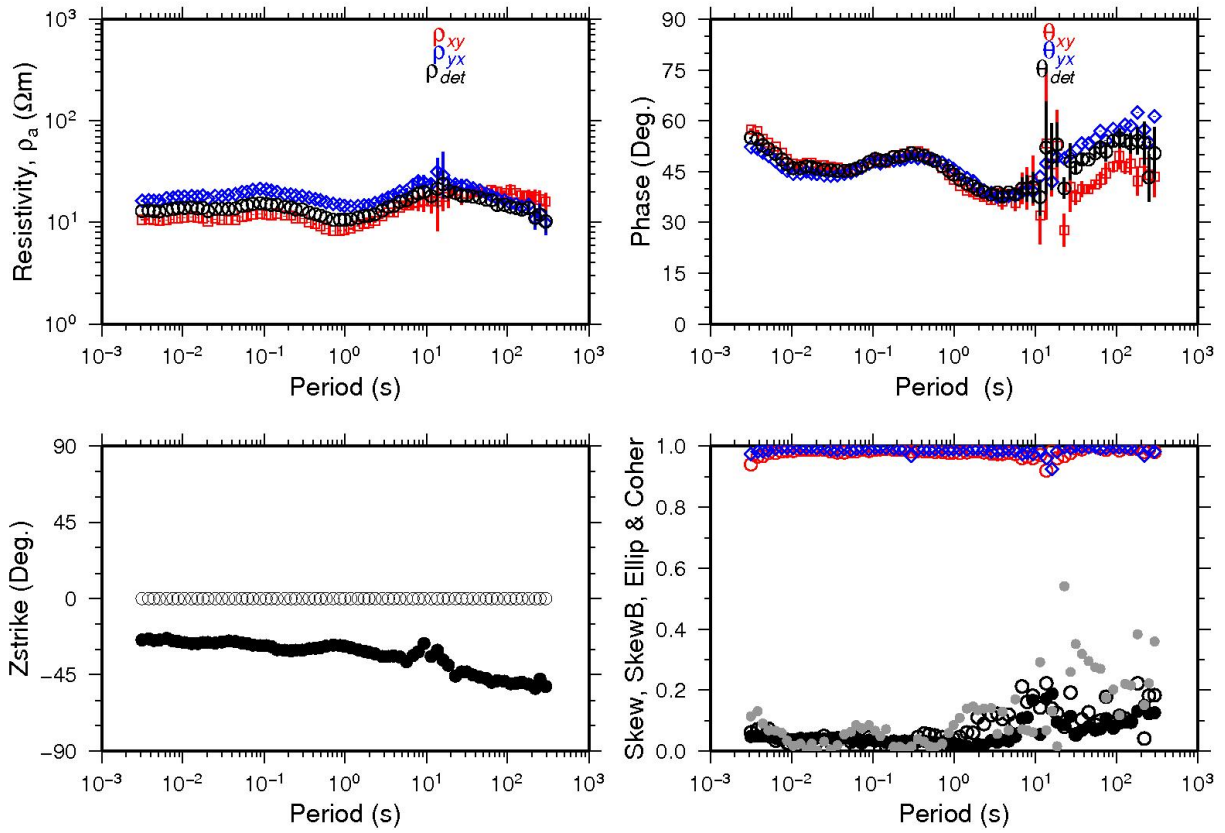
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Skrá: EBMT05.EDI



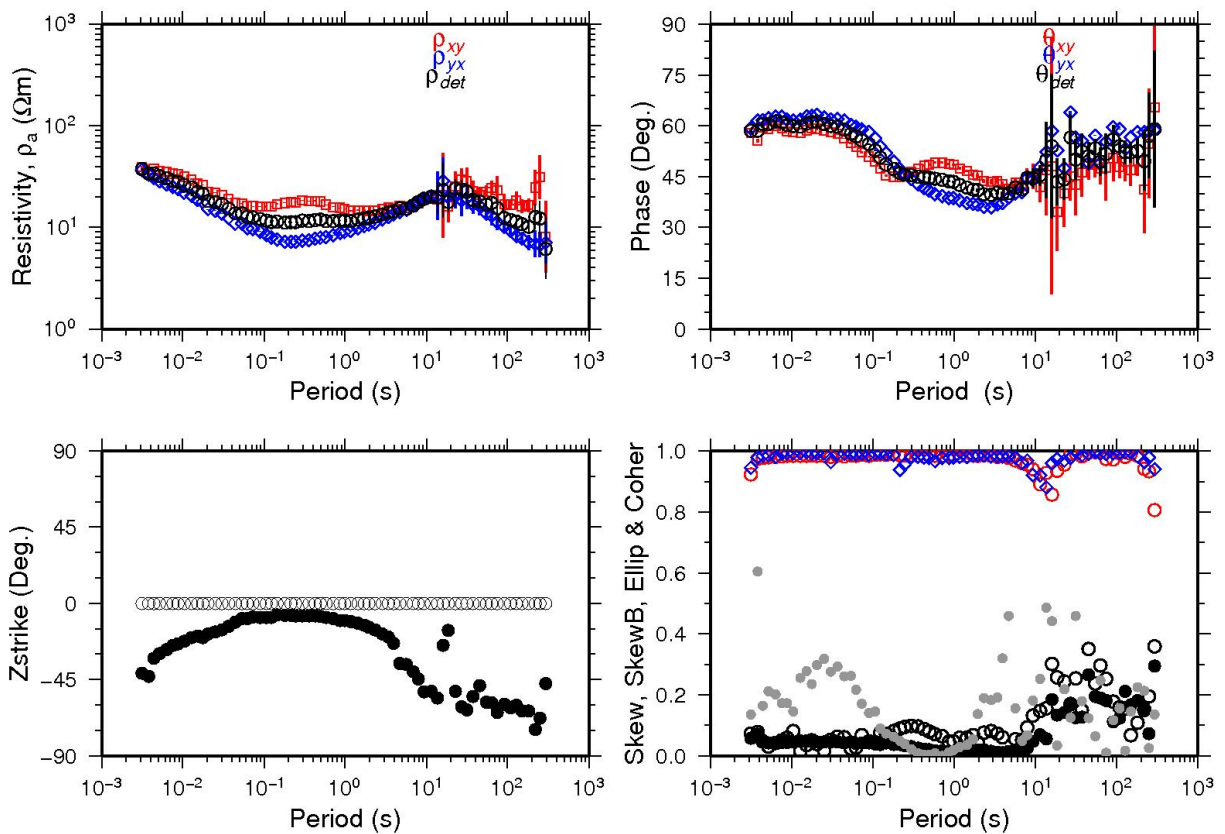
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Skrá: EBMT07.EDI



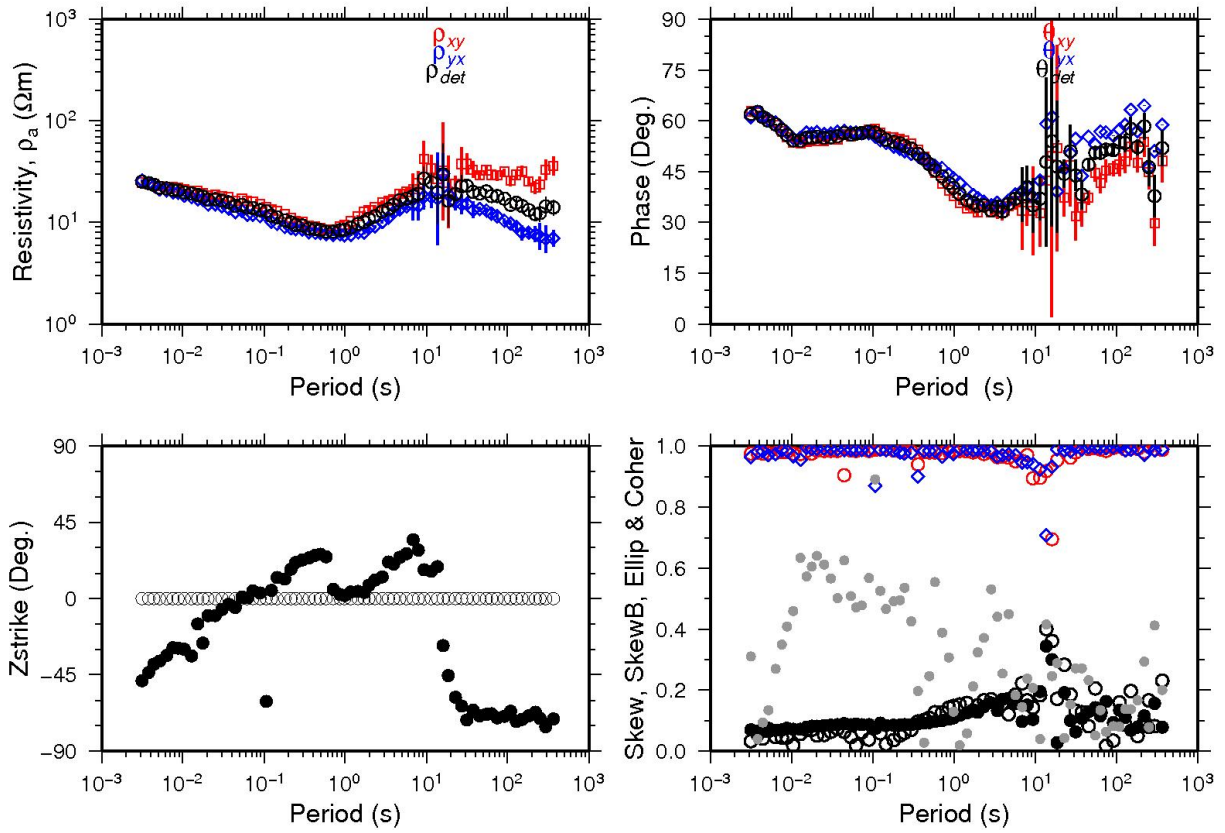
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Skrá: EBMT08.EDI



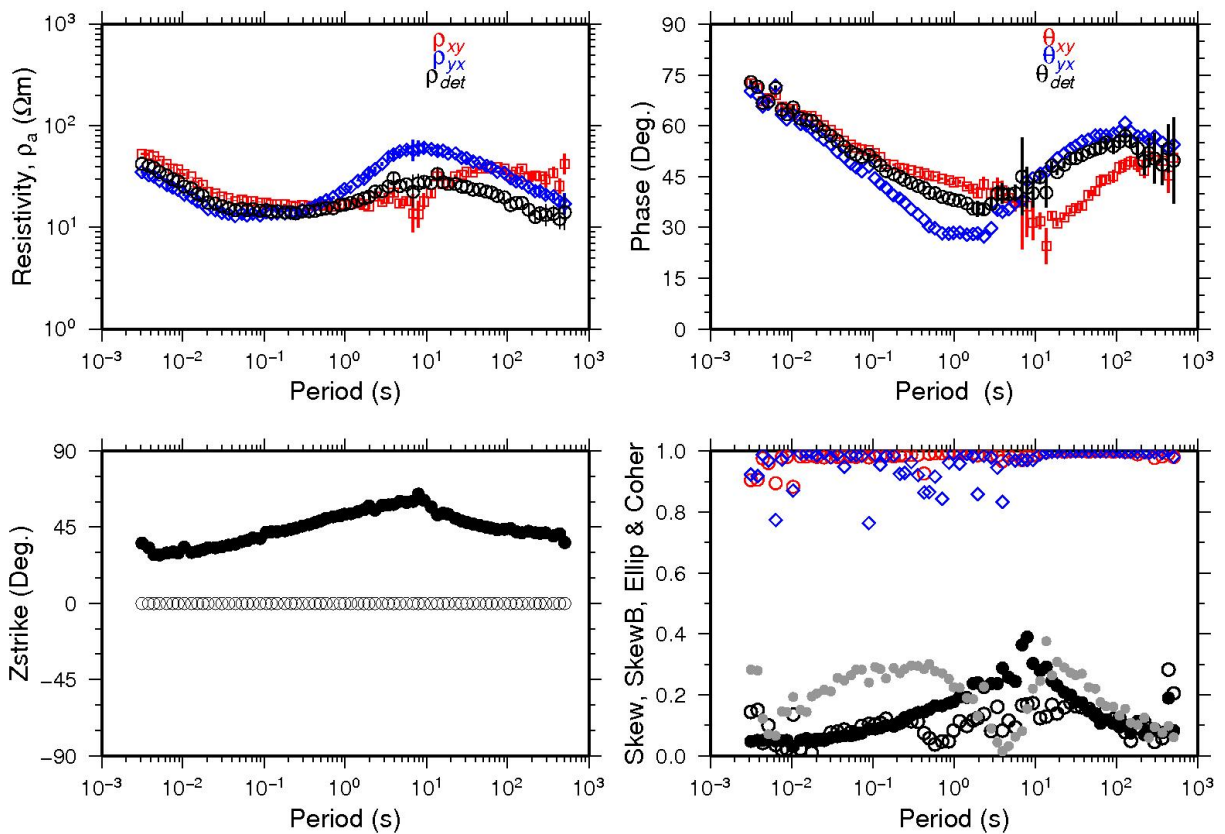
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Skrá: EBMT09.EDI



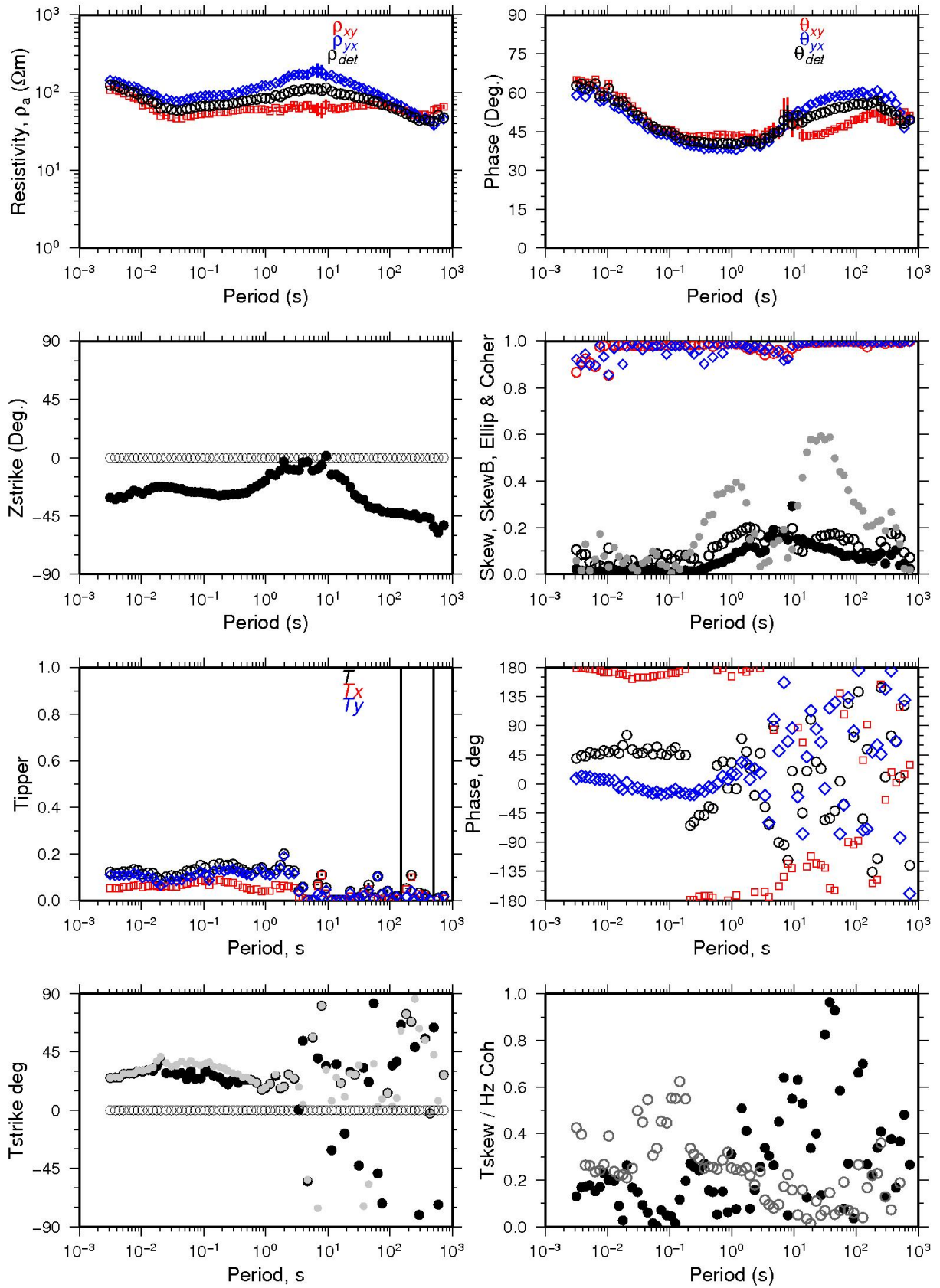
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Skrá: EBMT10.EDI



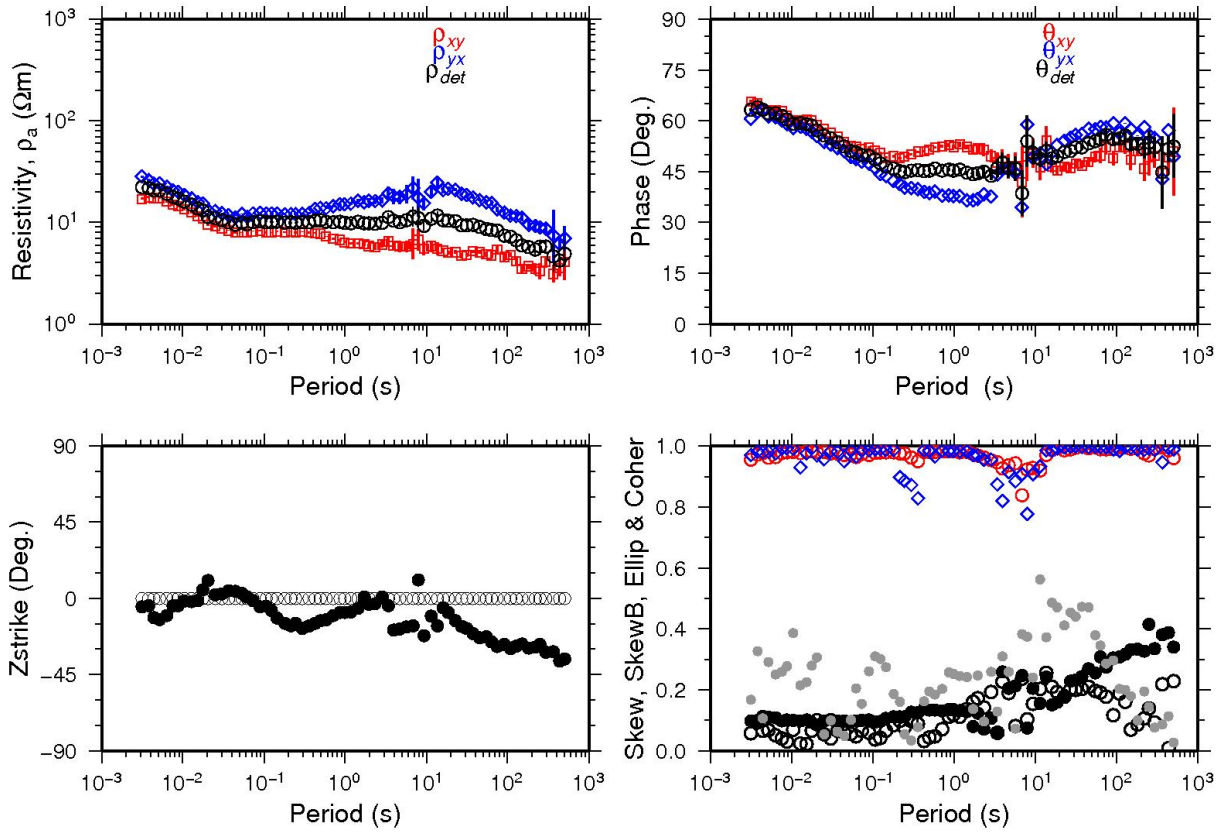
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Skrá: EBMT11.EDI



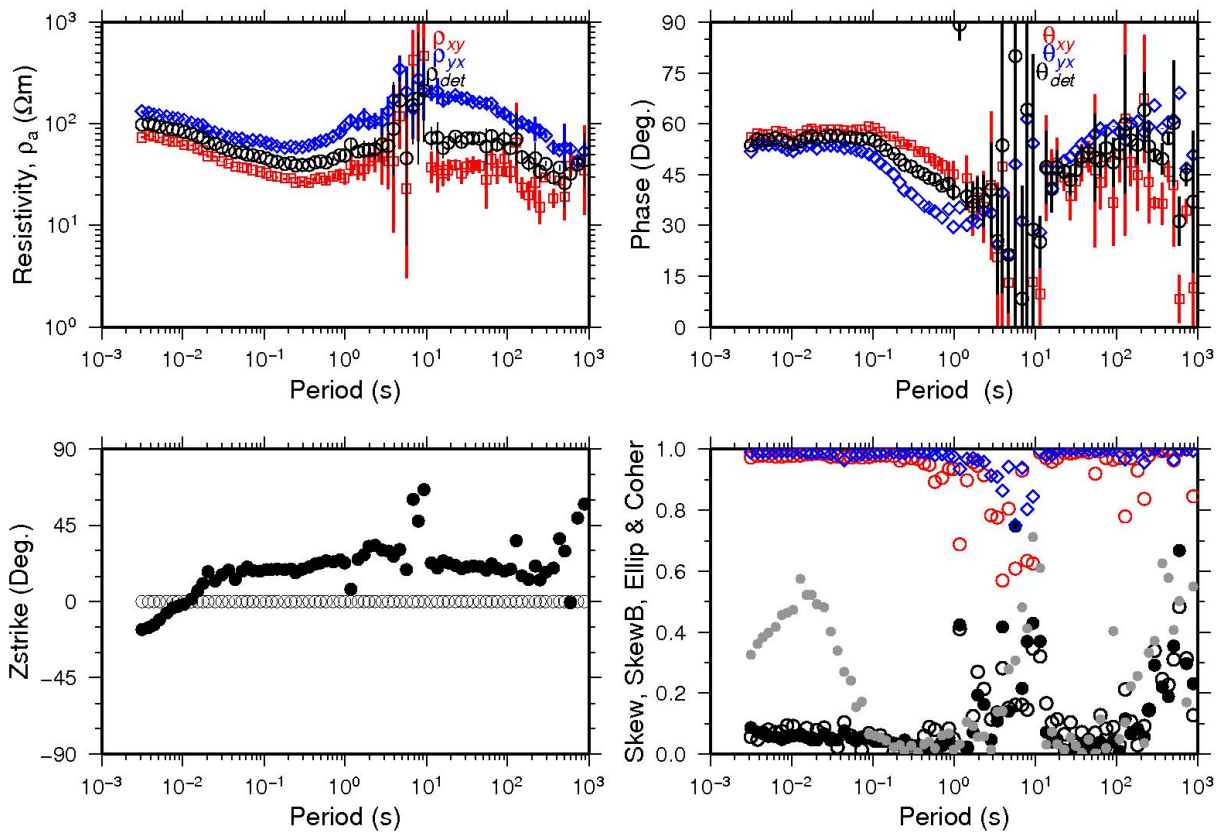
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Skrá: EBMT12.EDI



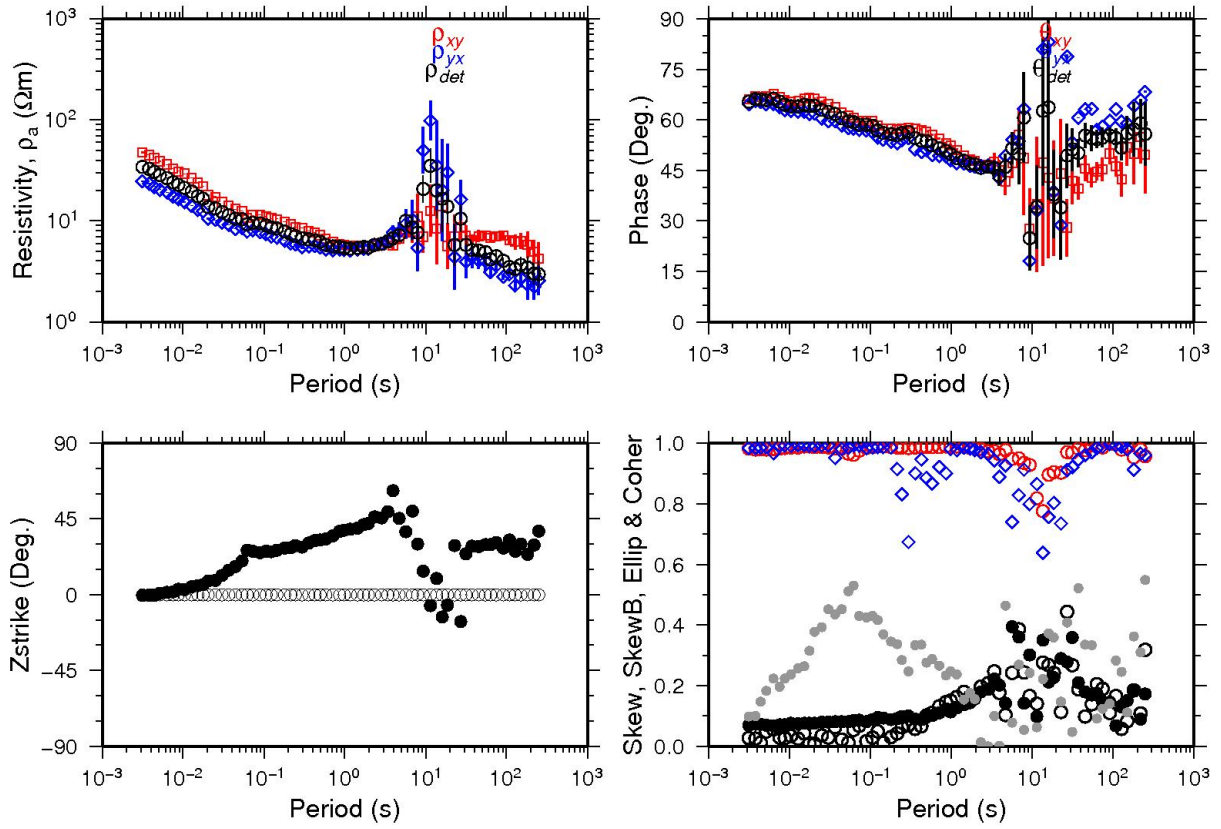
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Skrá: EBMT13.EDI



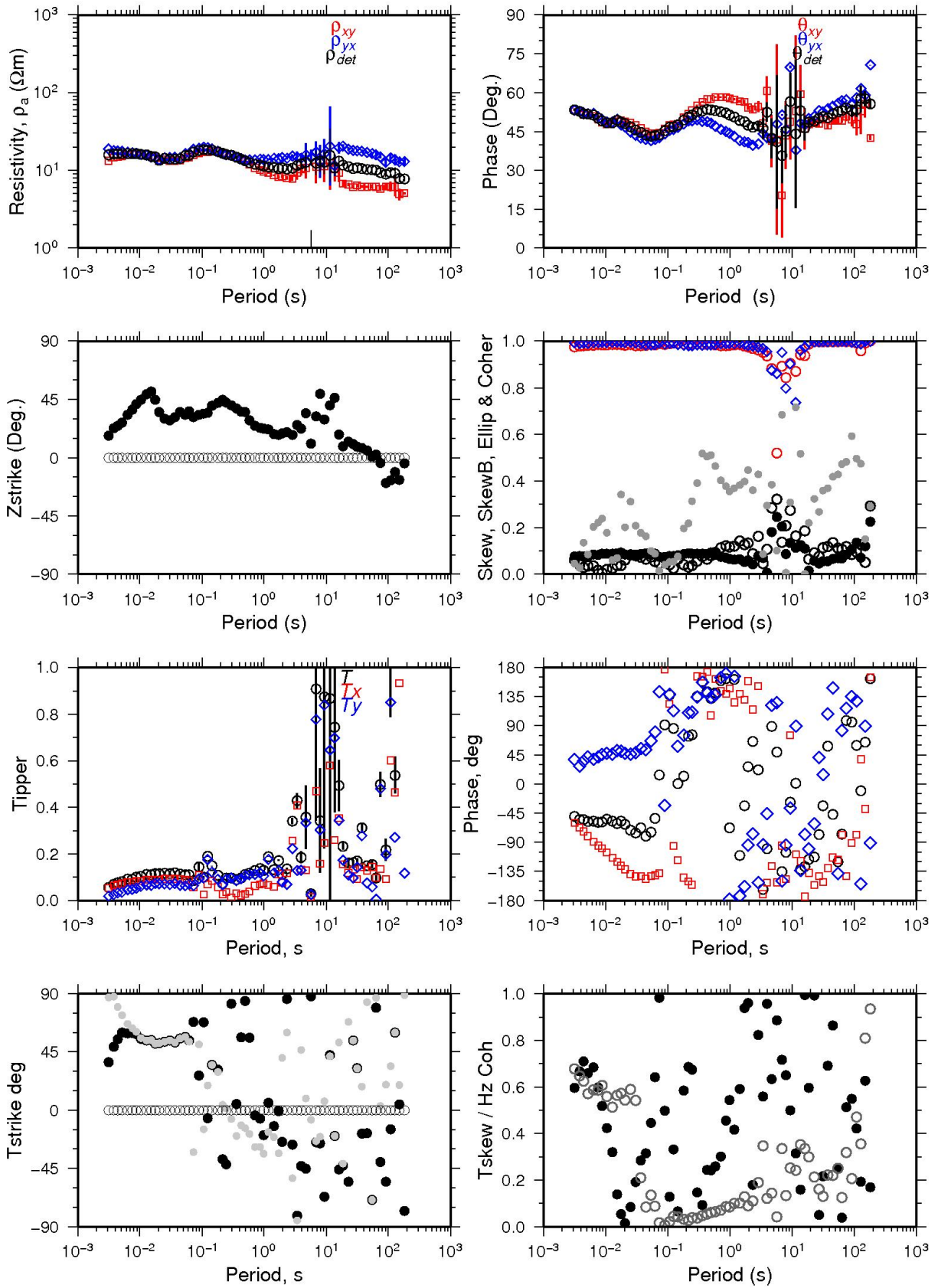
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Skrá: EBMT14.EDI



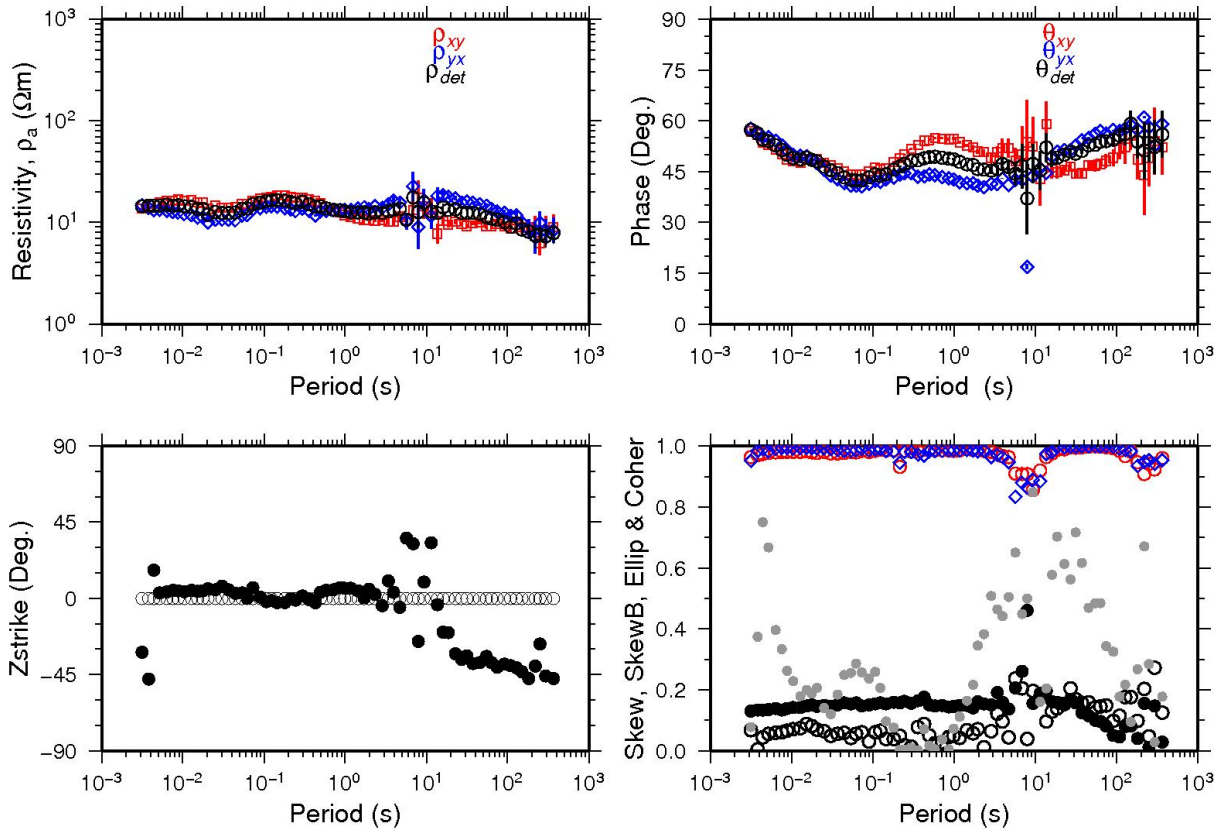
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Skrá: EBMT15.EDI



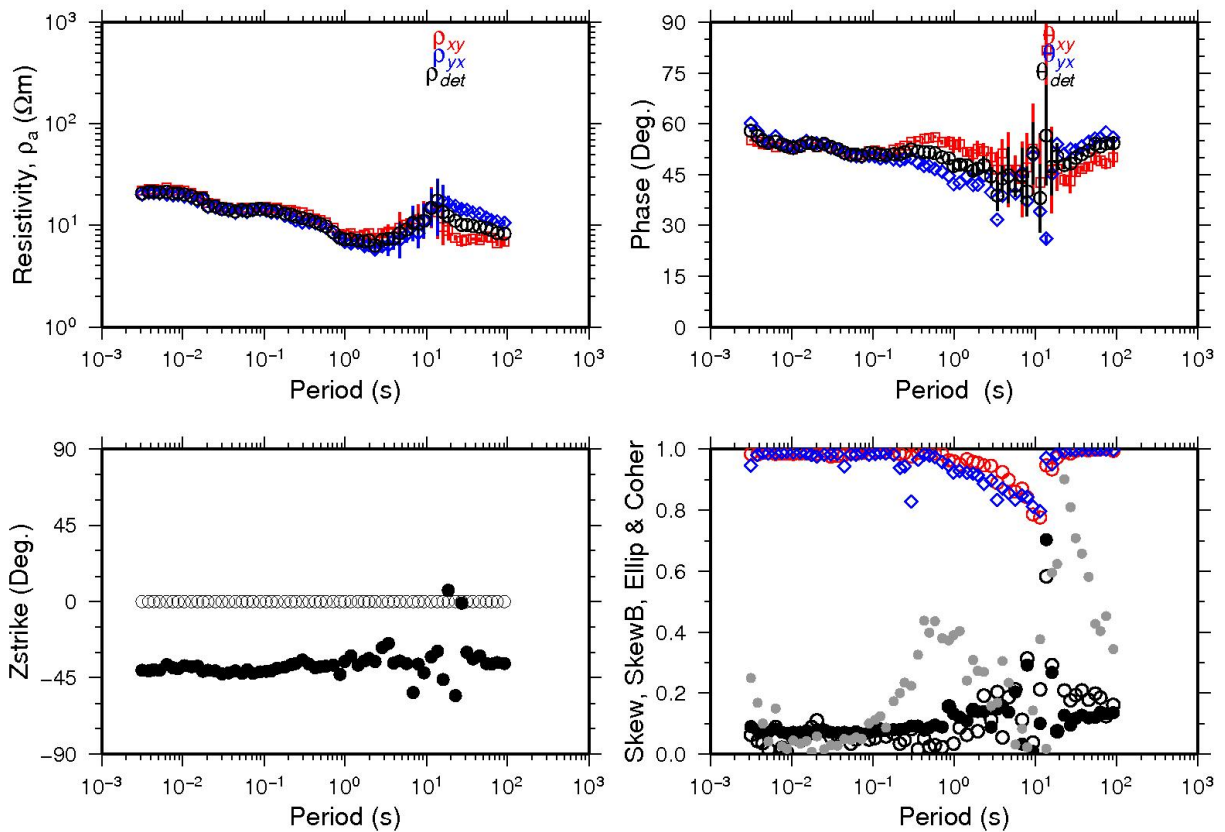
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Skrá: EBMT16.EDI



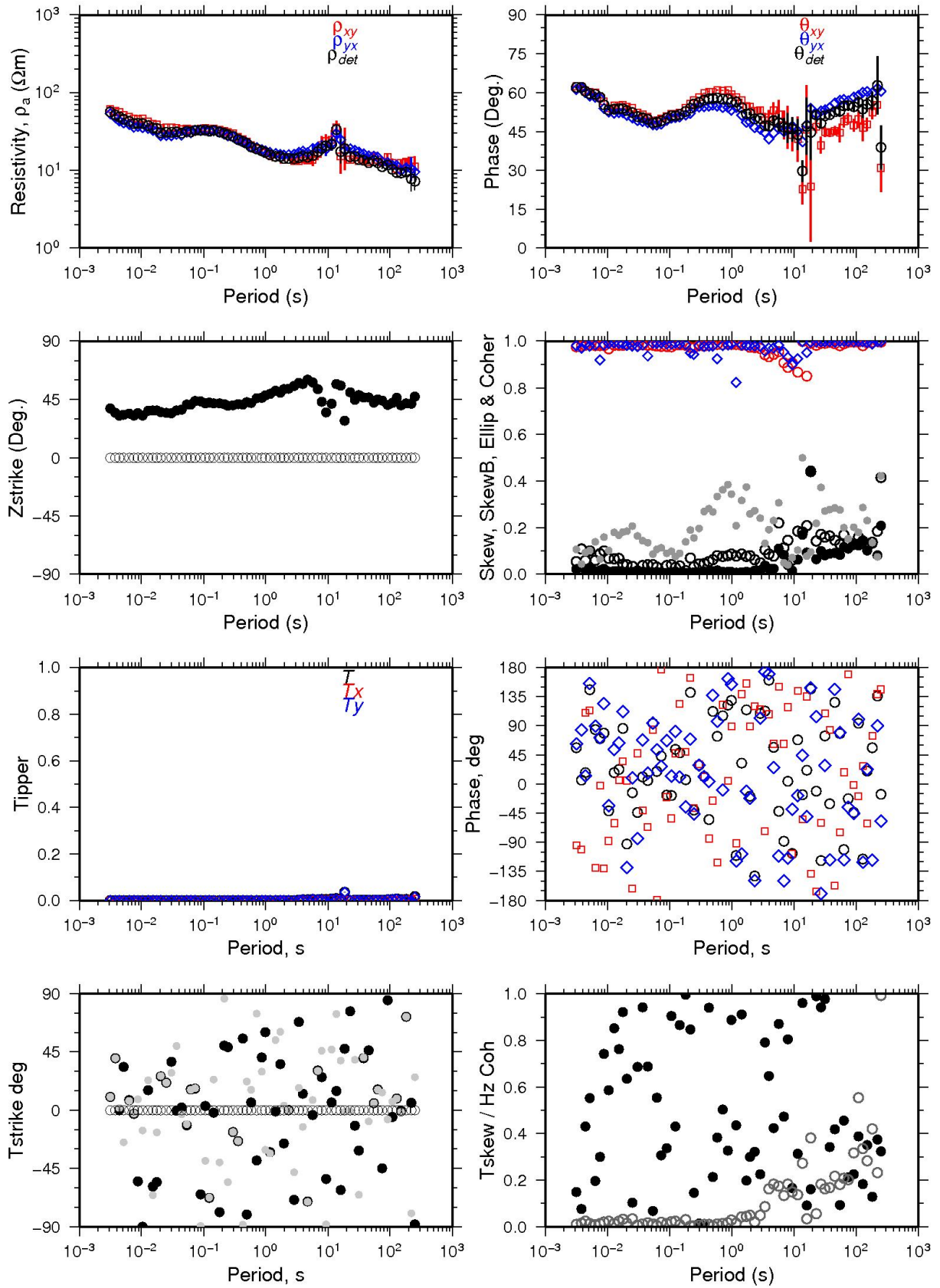
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Skrá: EBMT17.EDI



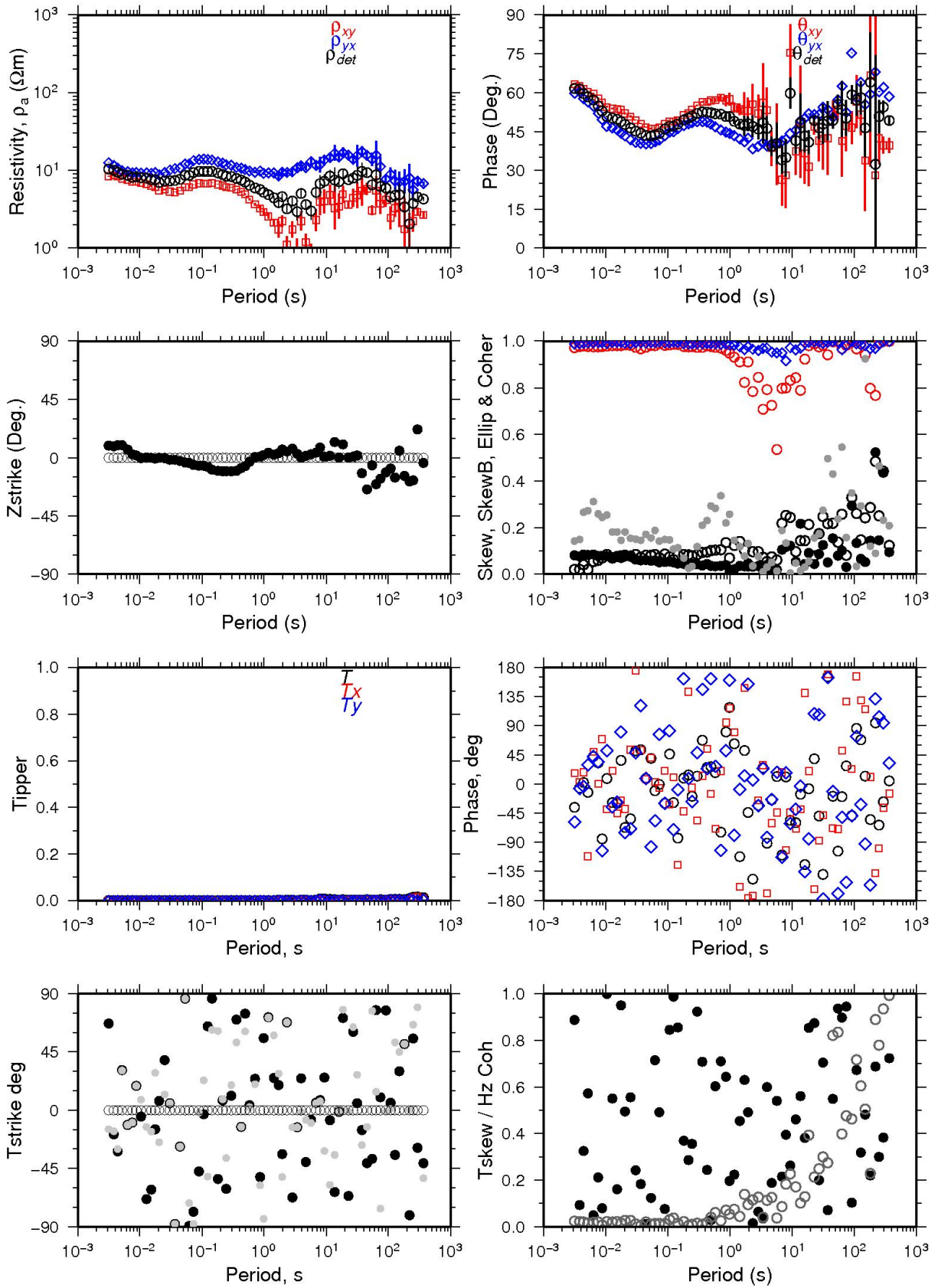
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Skrá: EBMT18.EDI



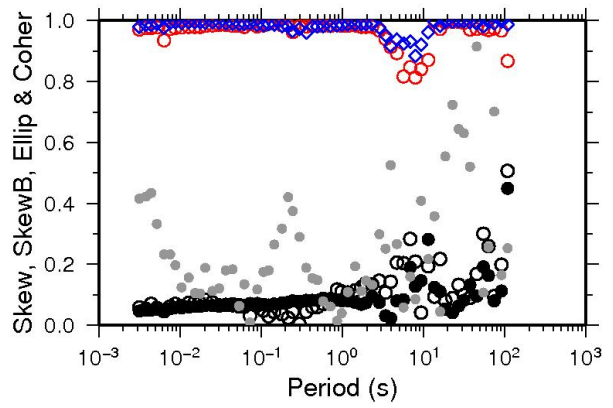
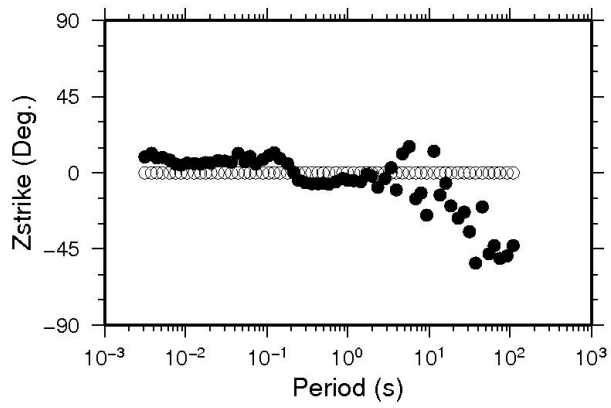
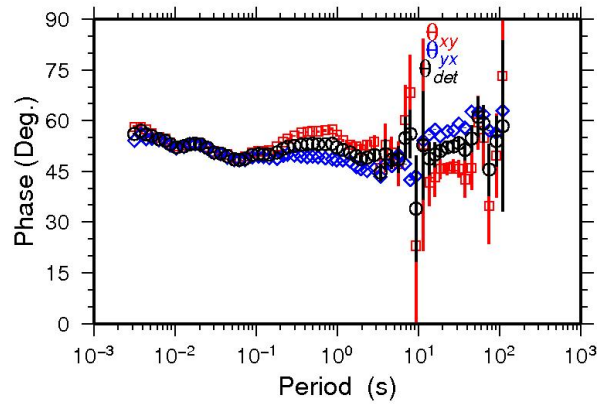
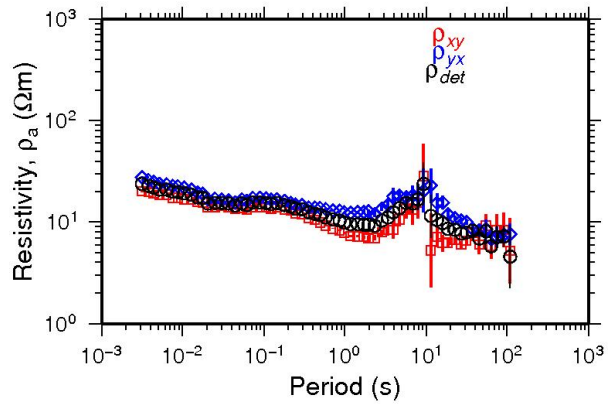
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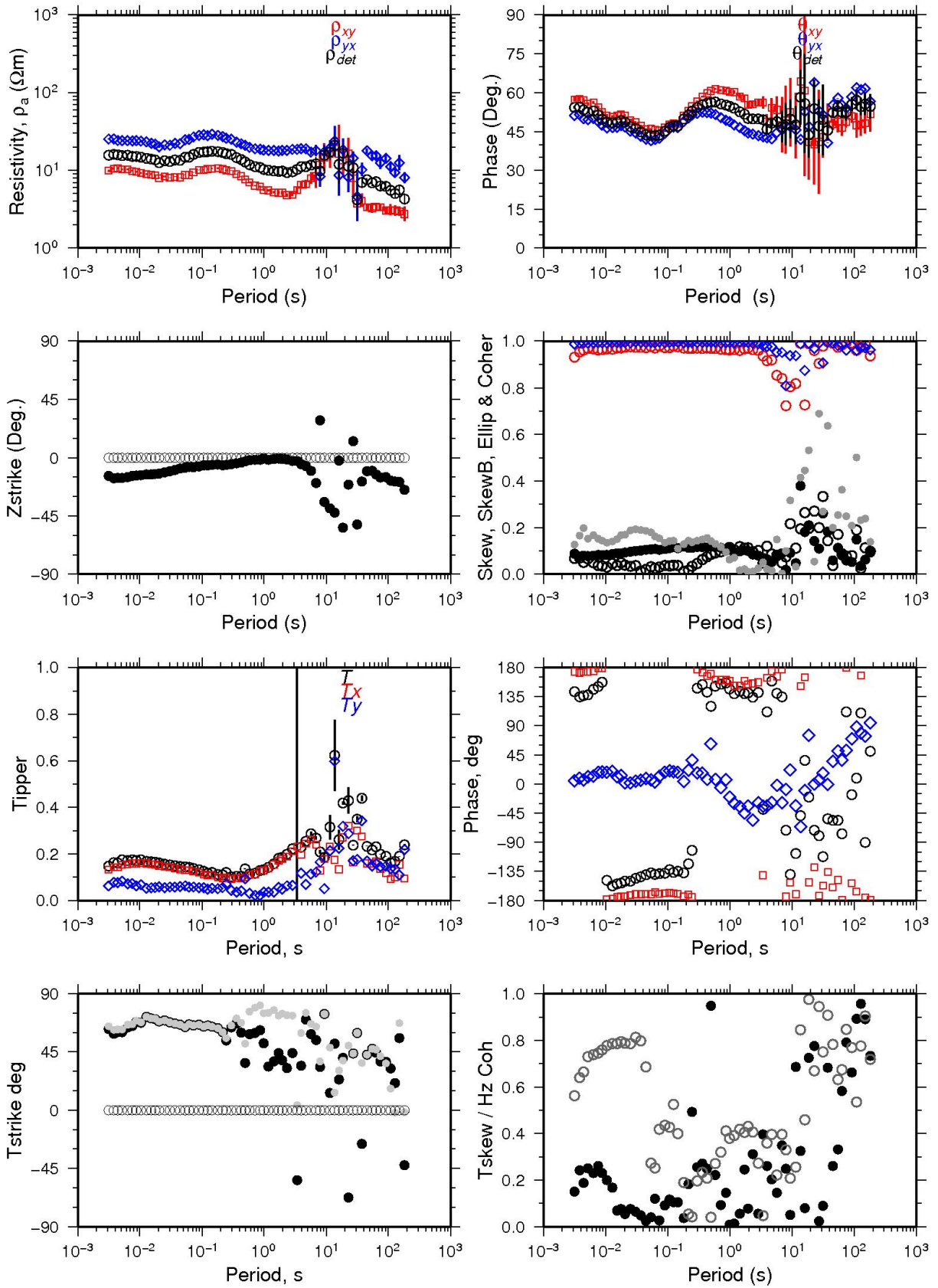
ebm

Skrá: EBMT20.EDI



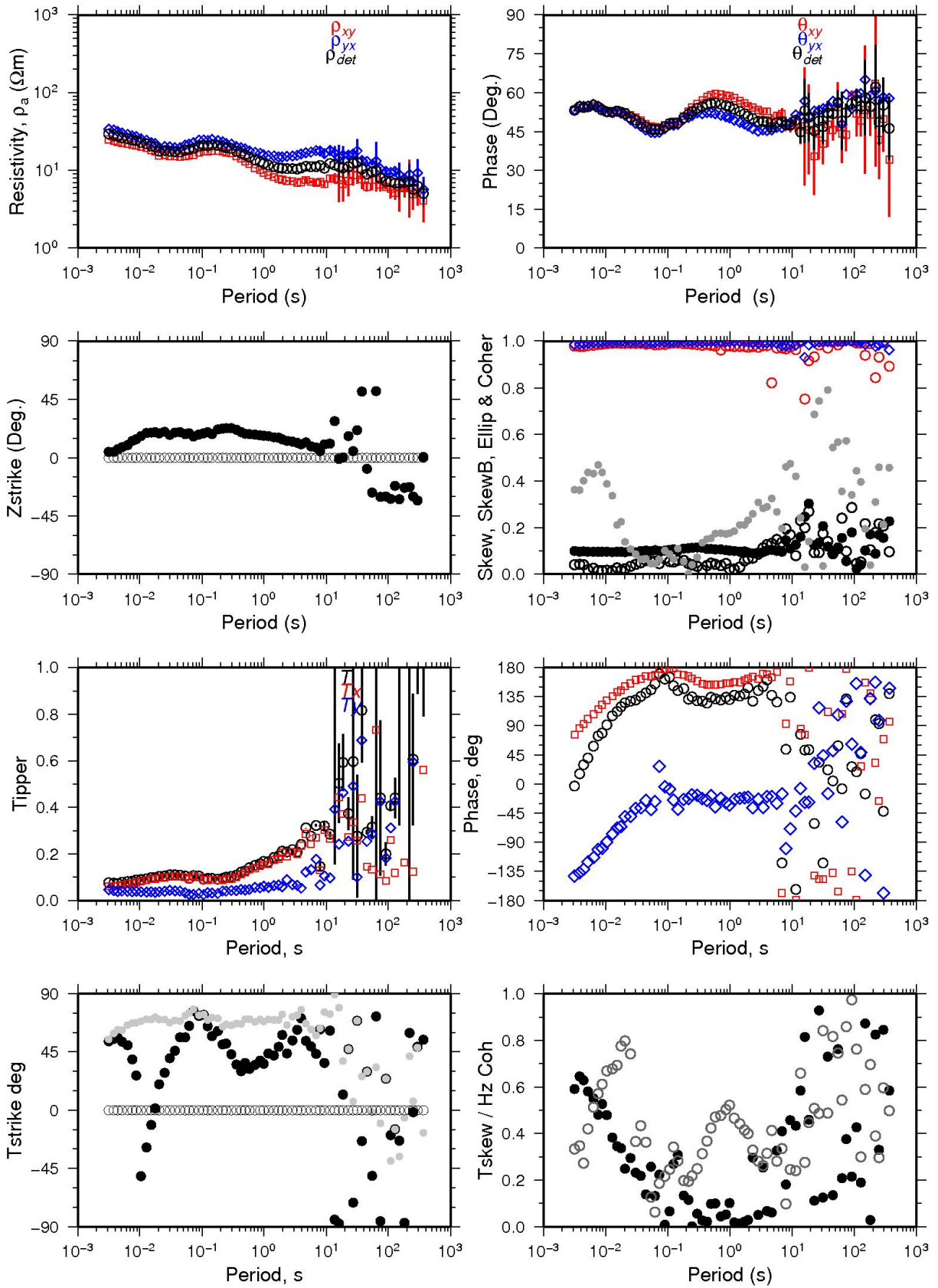
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Skrá: EBMT26.EDI



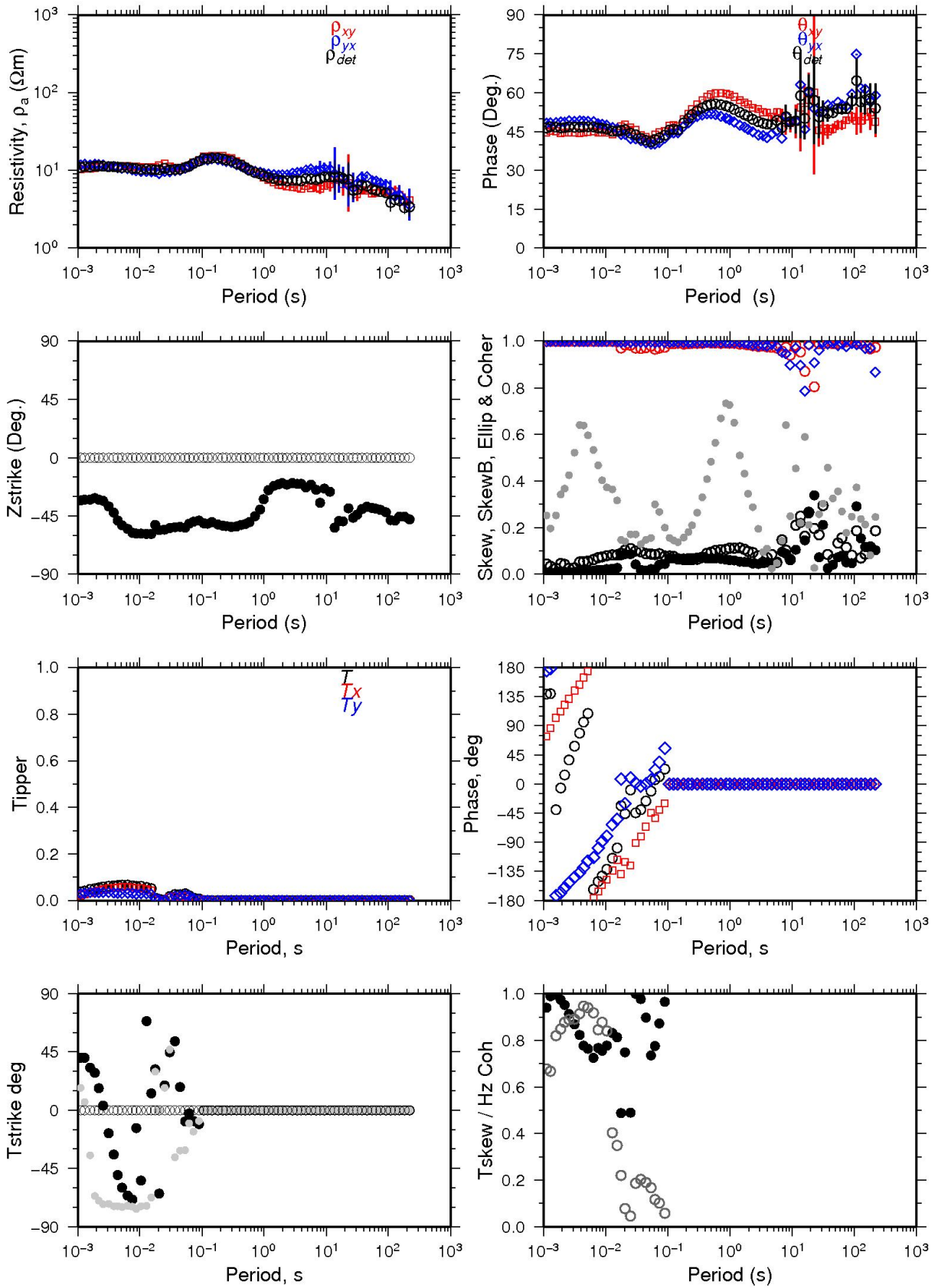
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Skrá: EBMT27.EDI



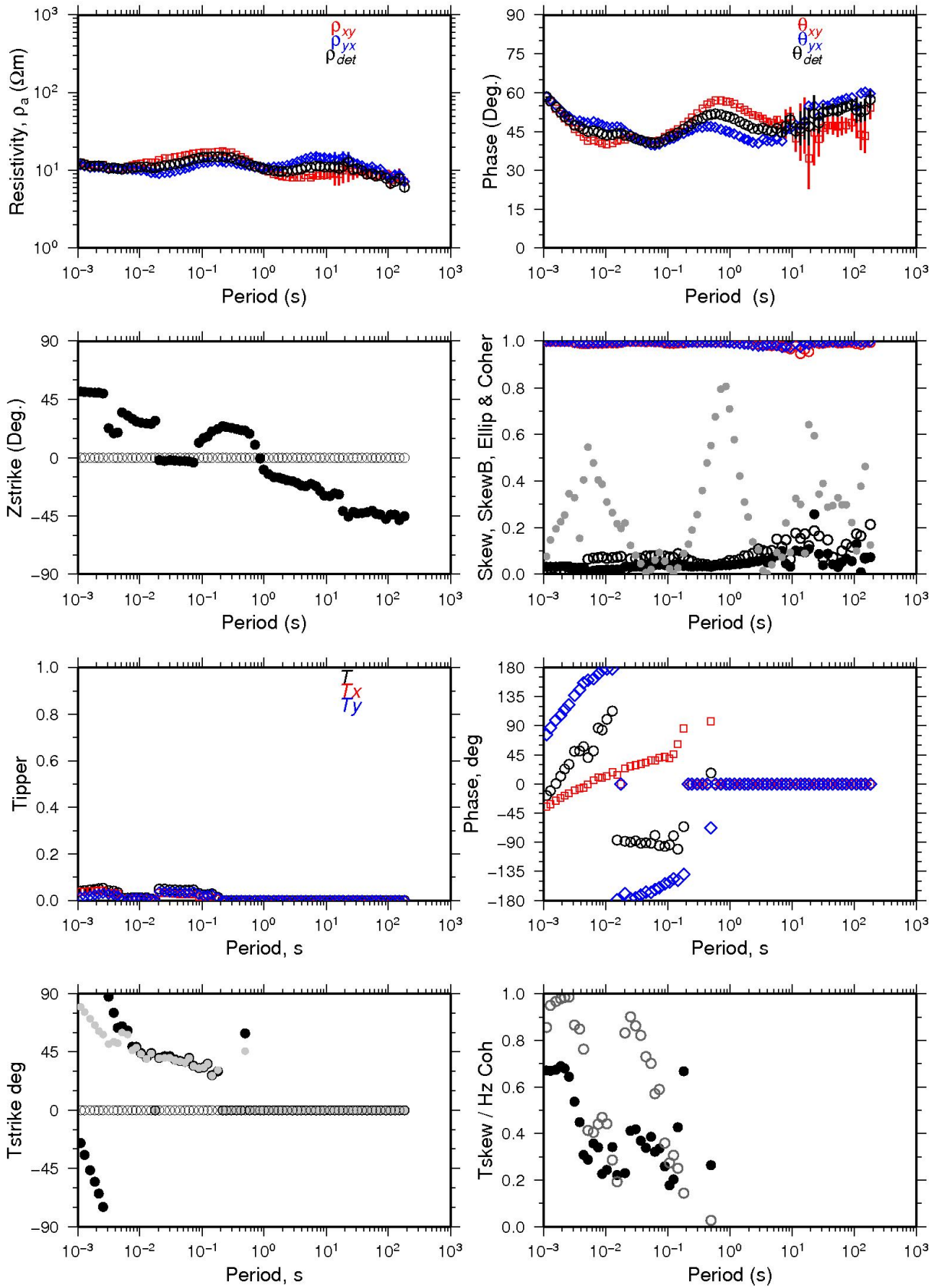
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Skrá: EBMT28.EDI



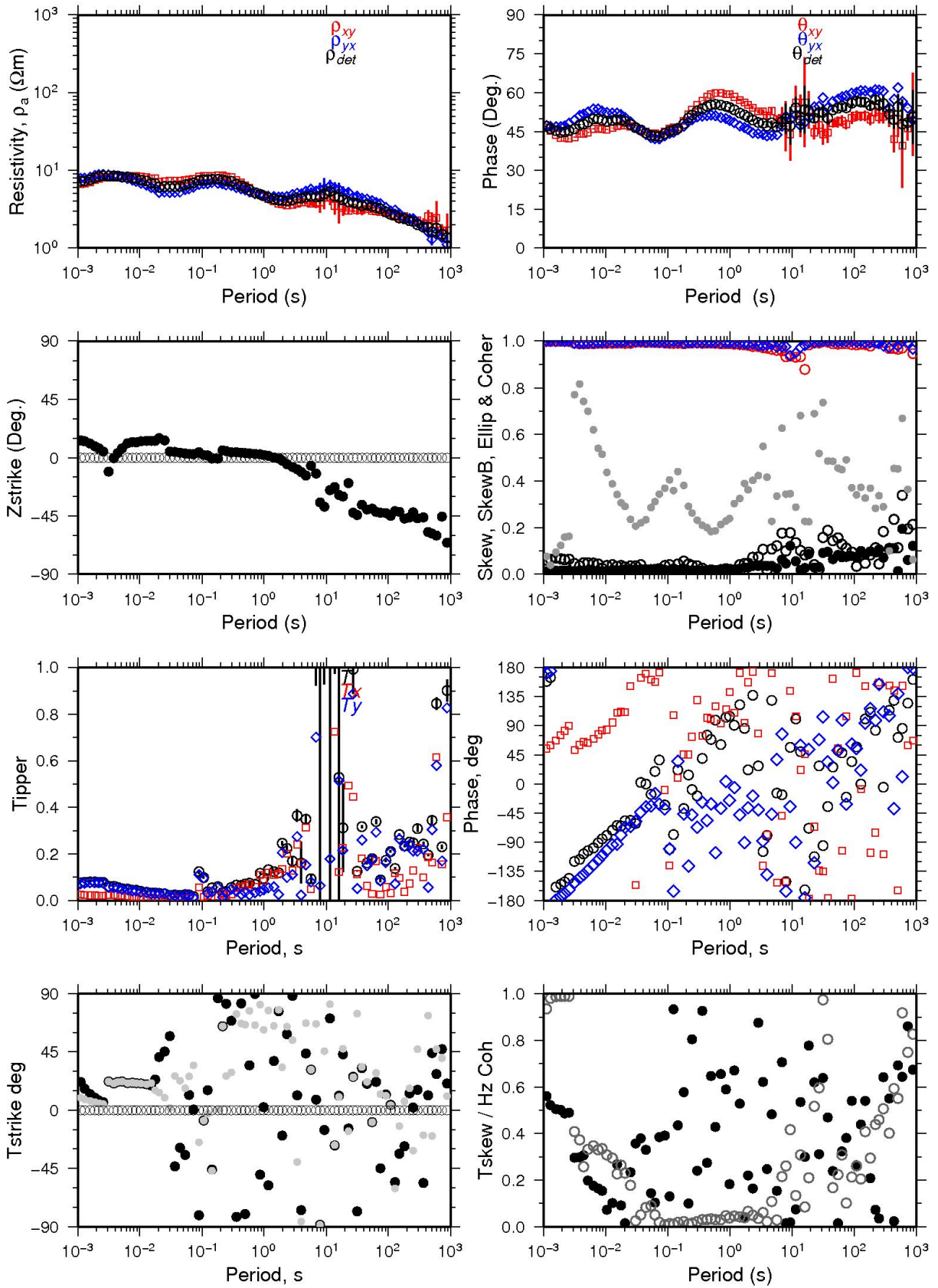
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Skrá: EBMT29.EDI



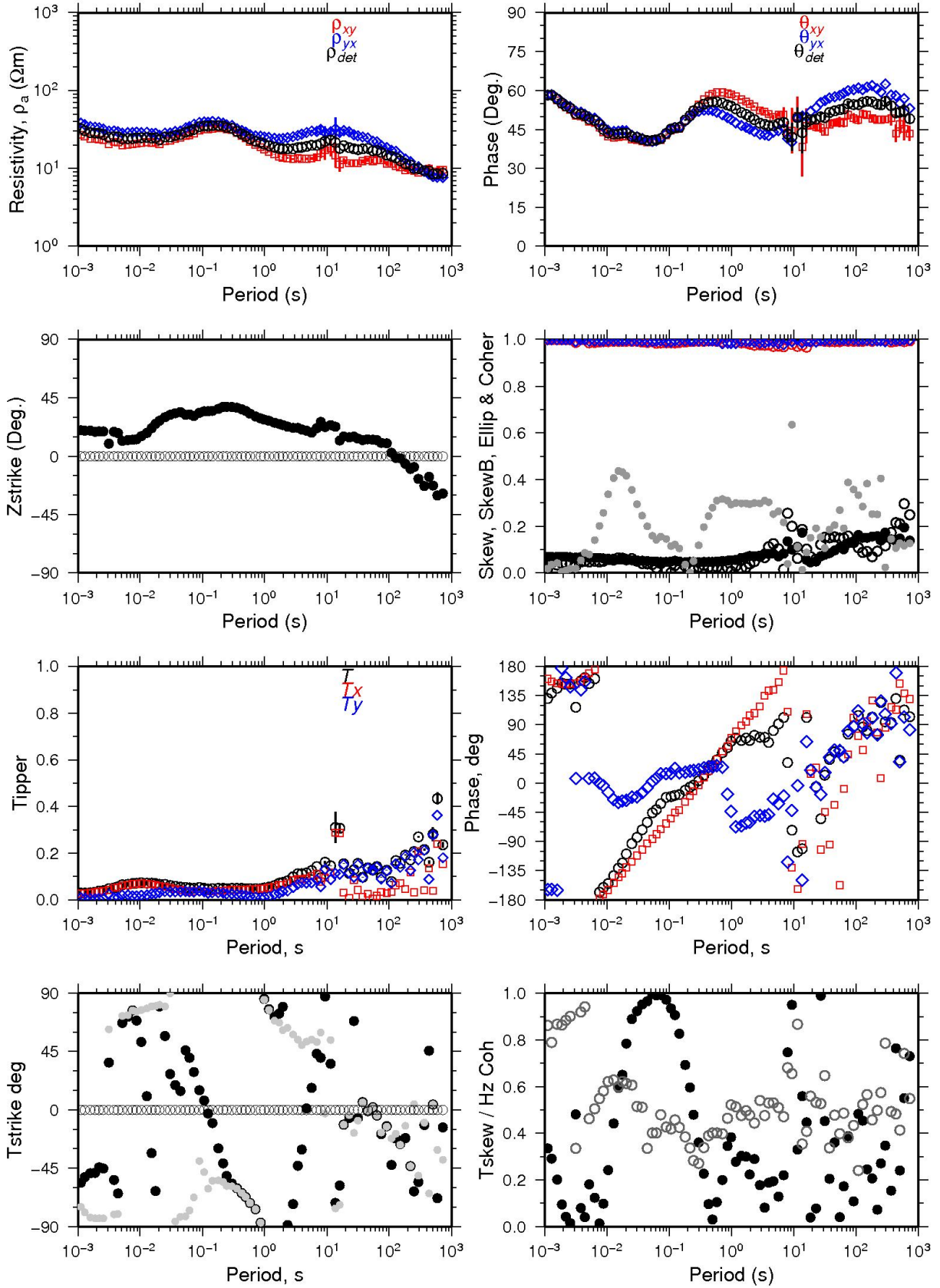
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Skrá: EBMT30.EDI



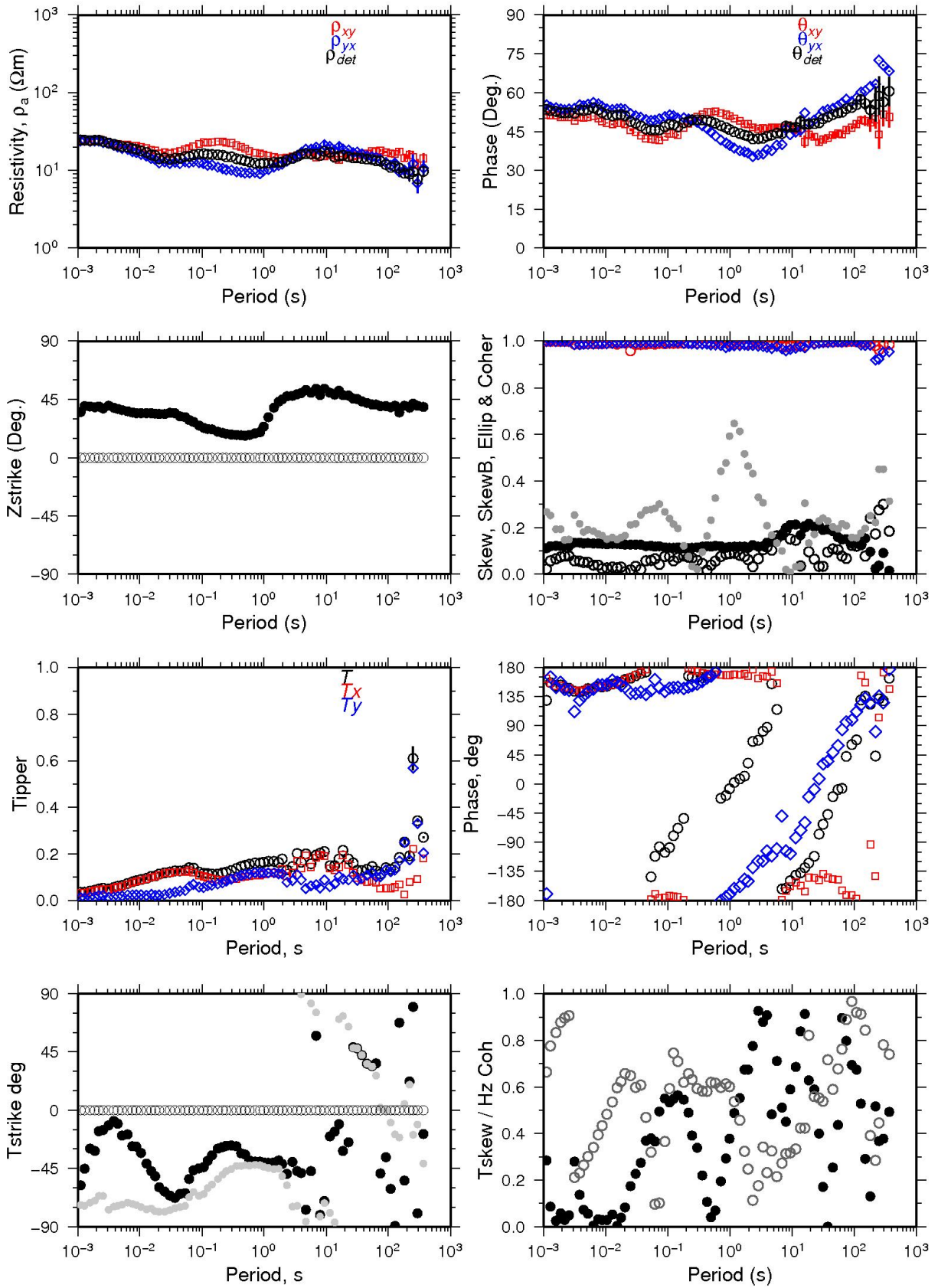
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Skrá: EBMT31.EDI



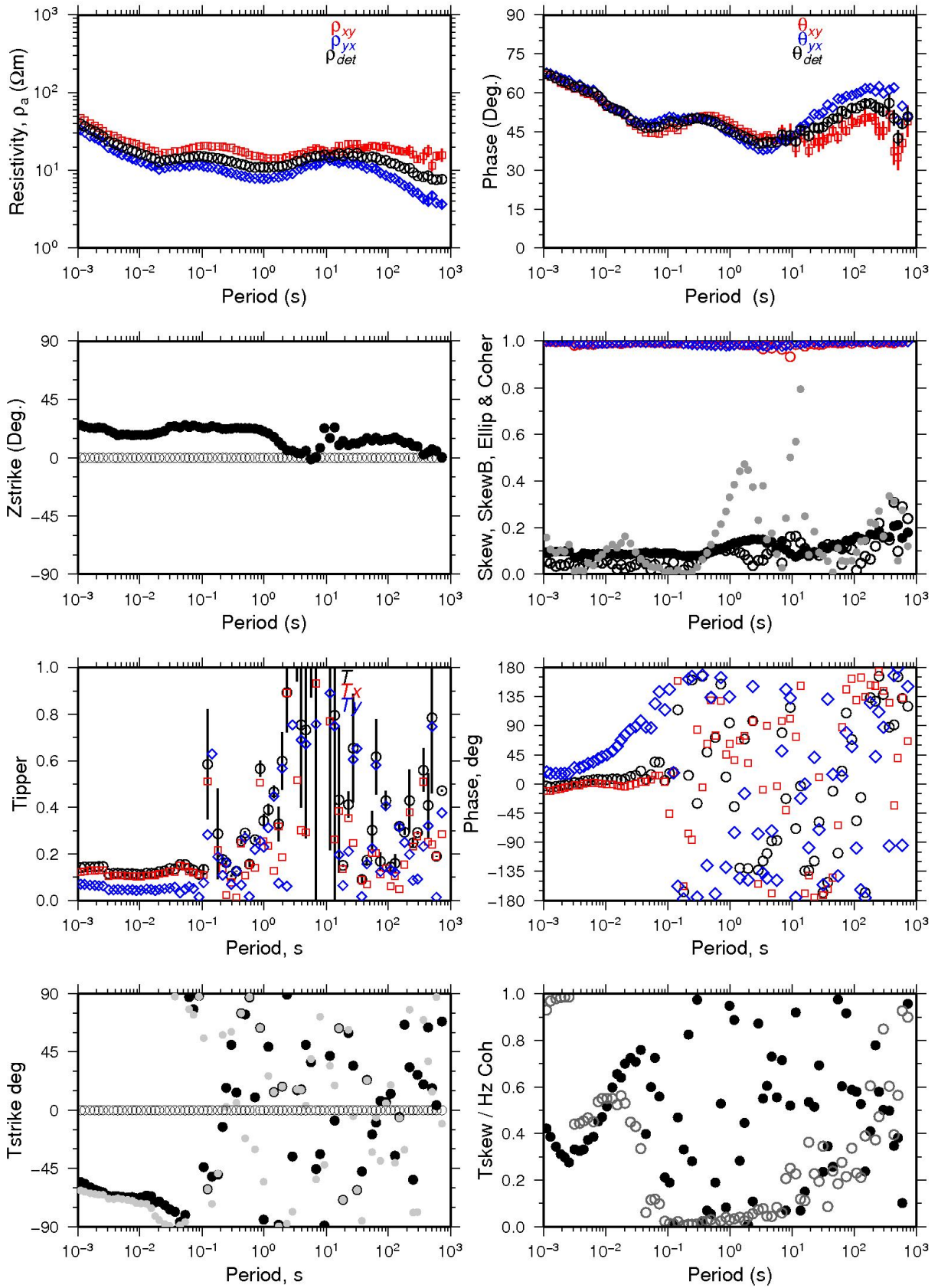
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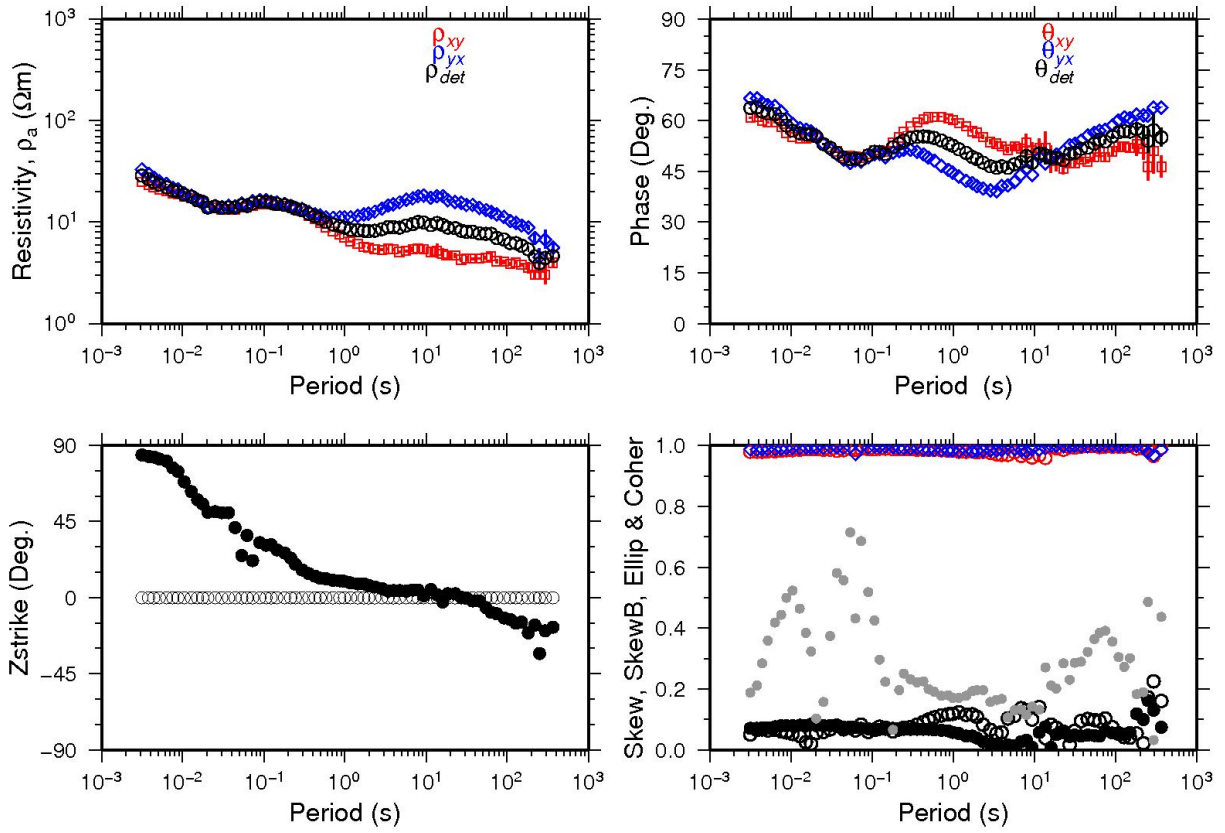
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Skrá: EBMT33.EDI



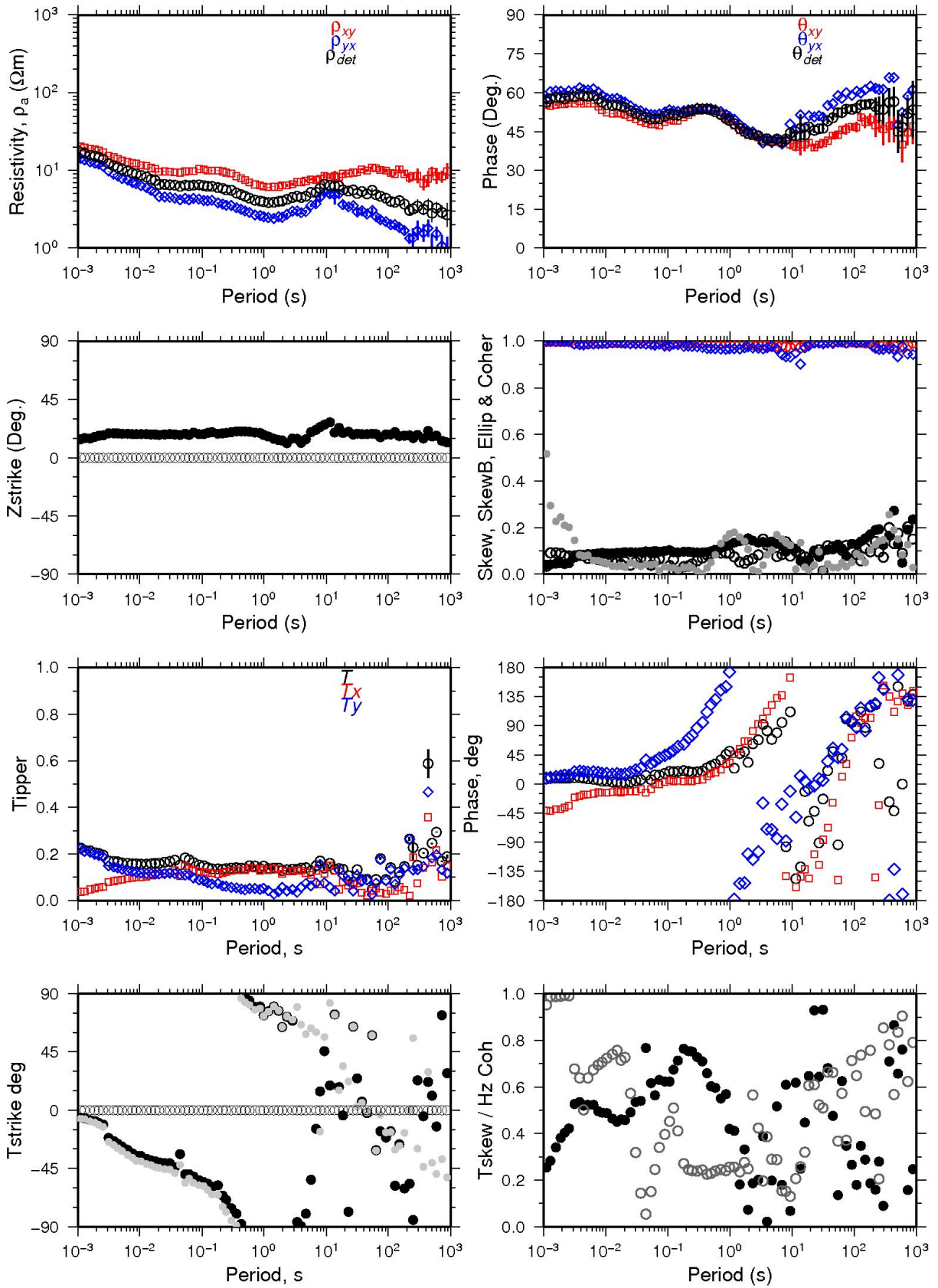
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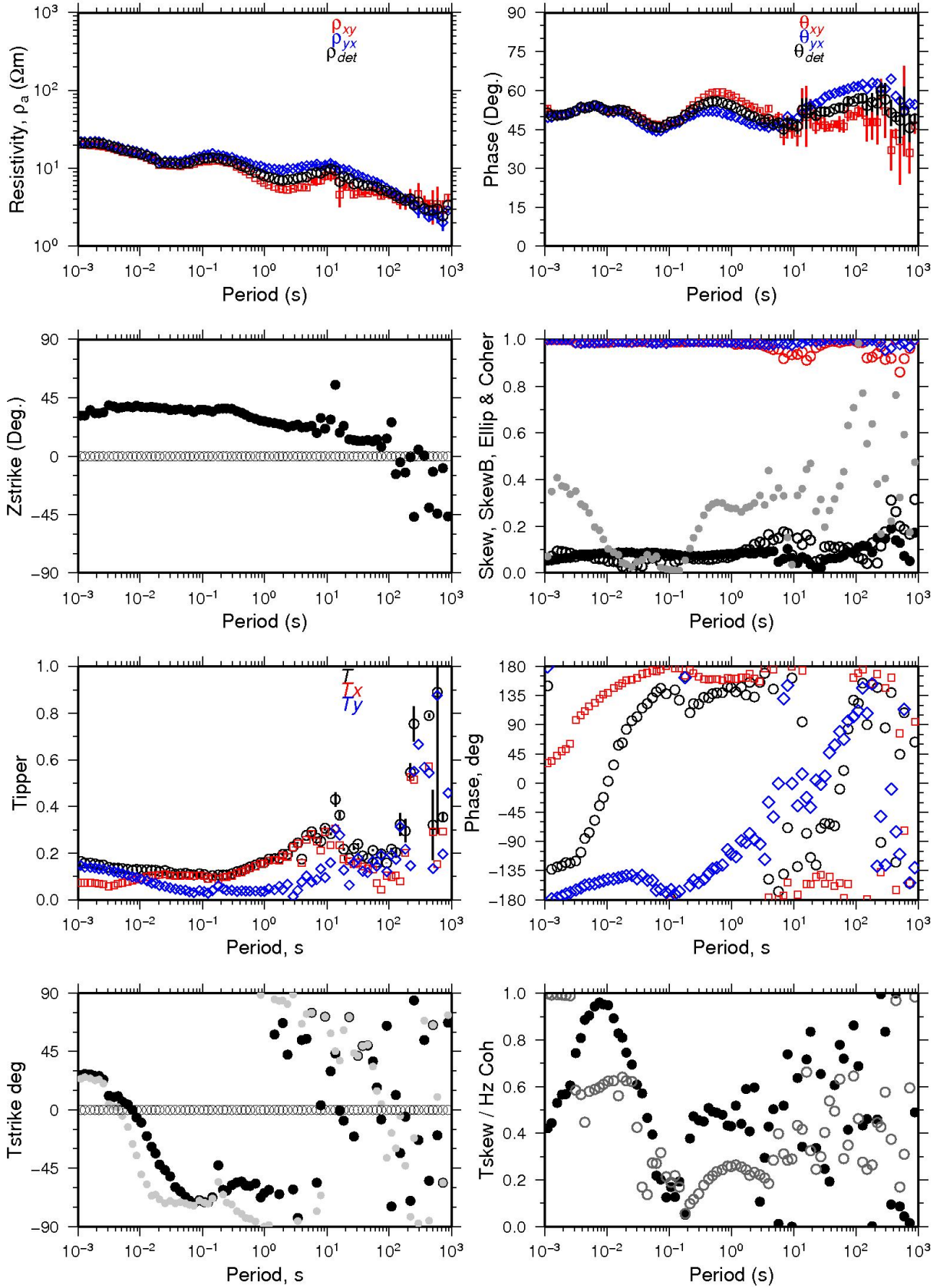
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Skrá: EBMT36.EDI



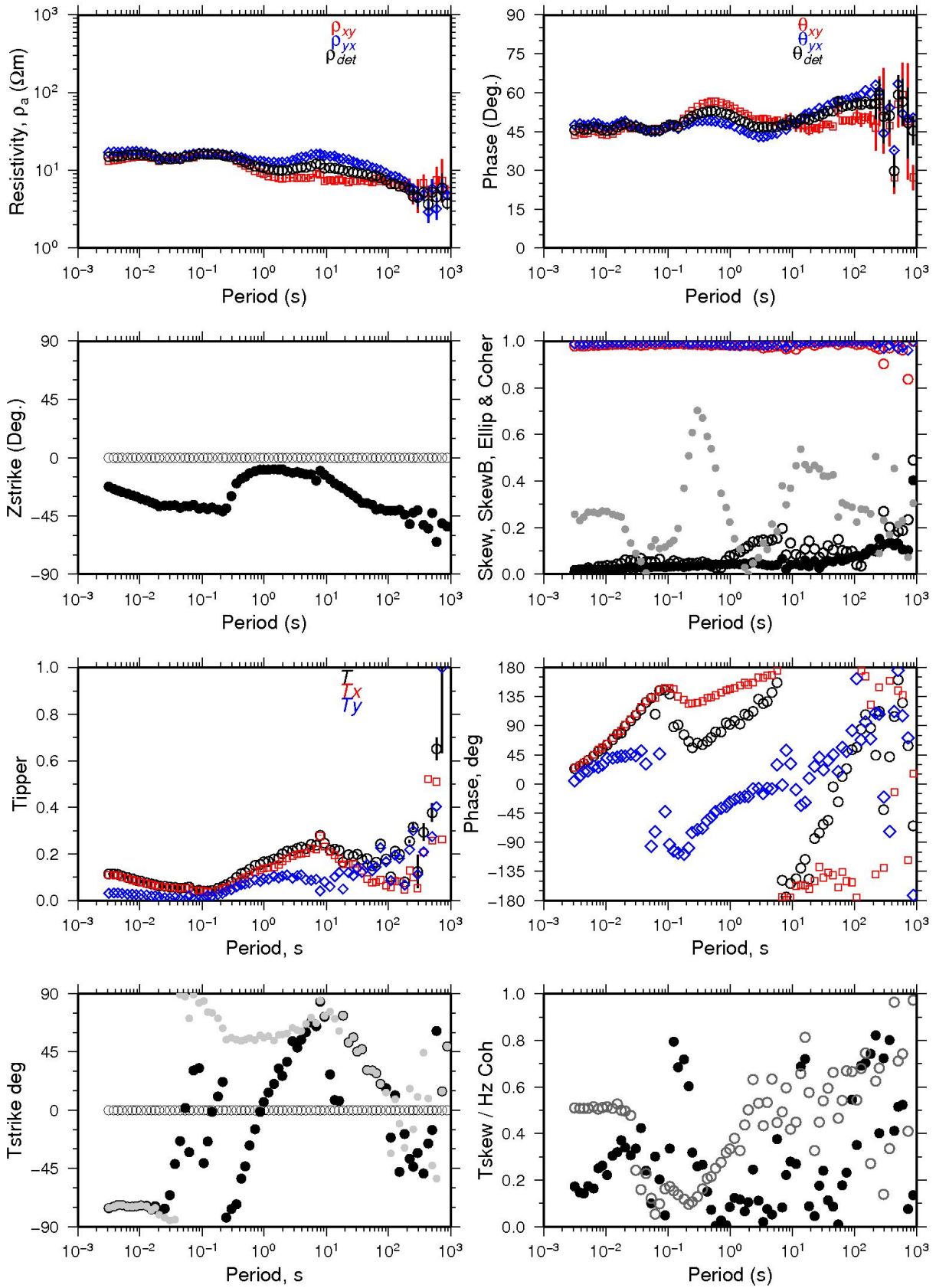
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Skrá: EBMT37.EDI



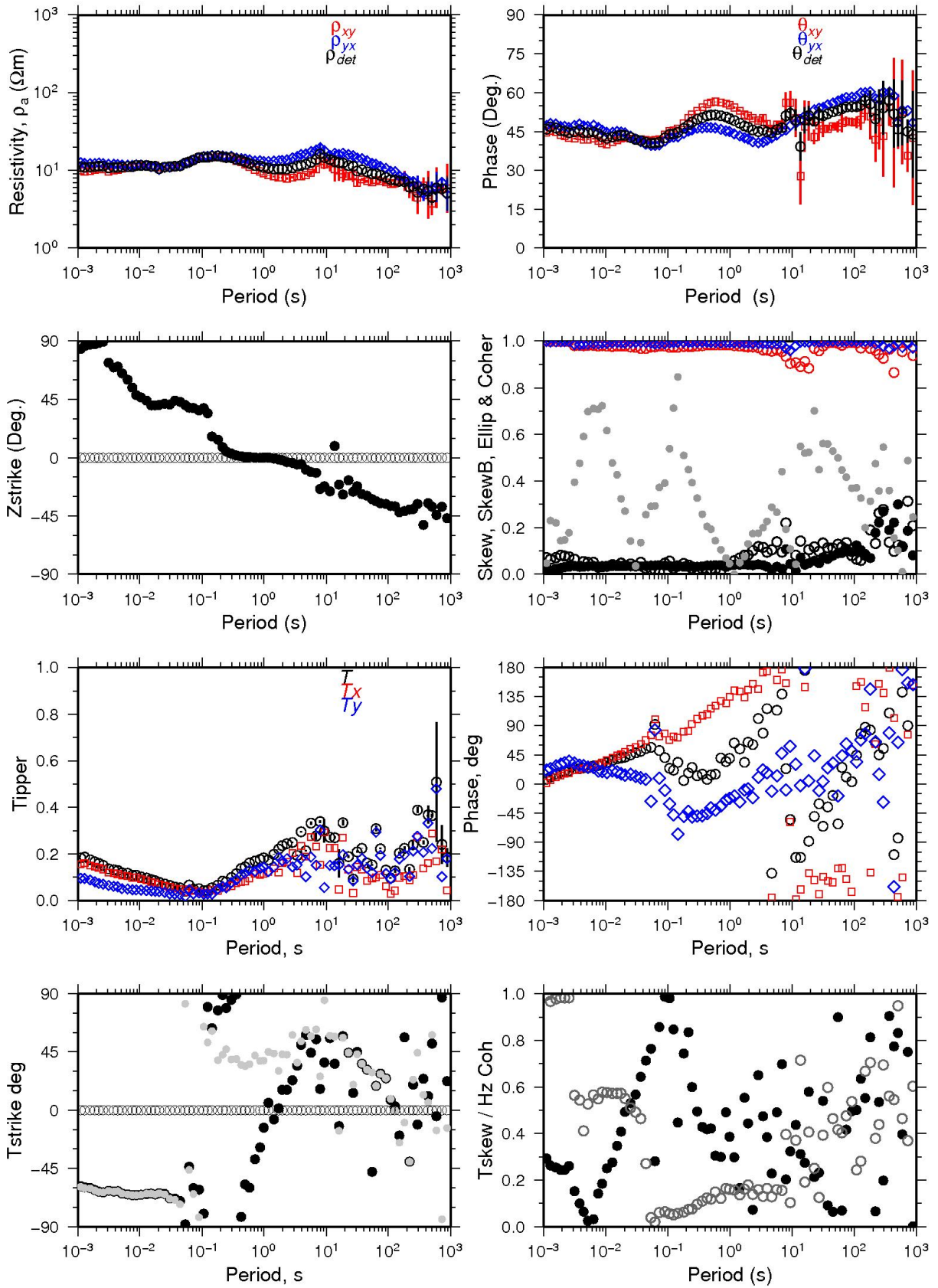
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Skrá: EBMT38.EDI



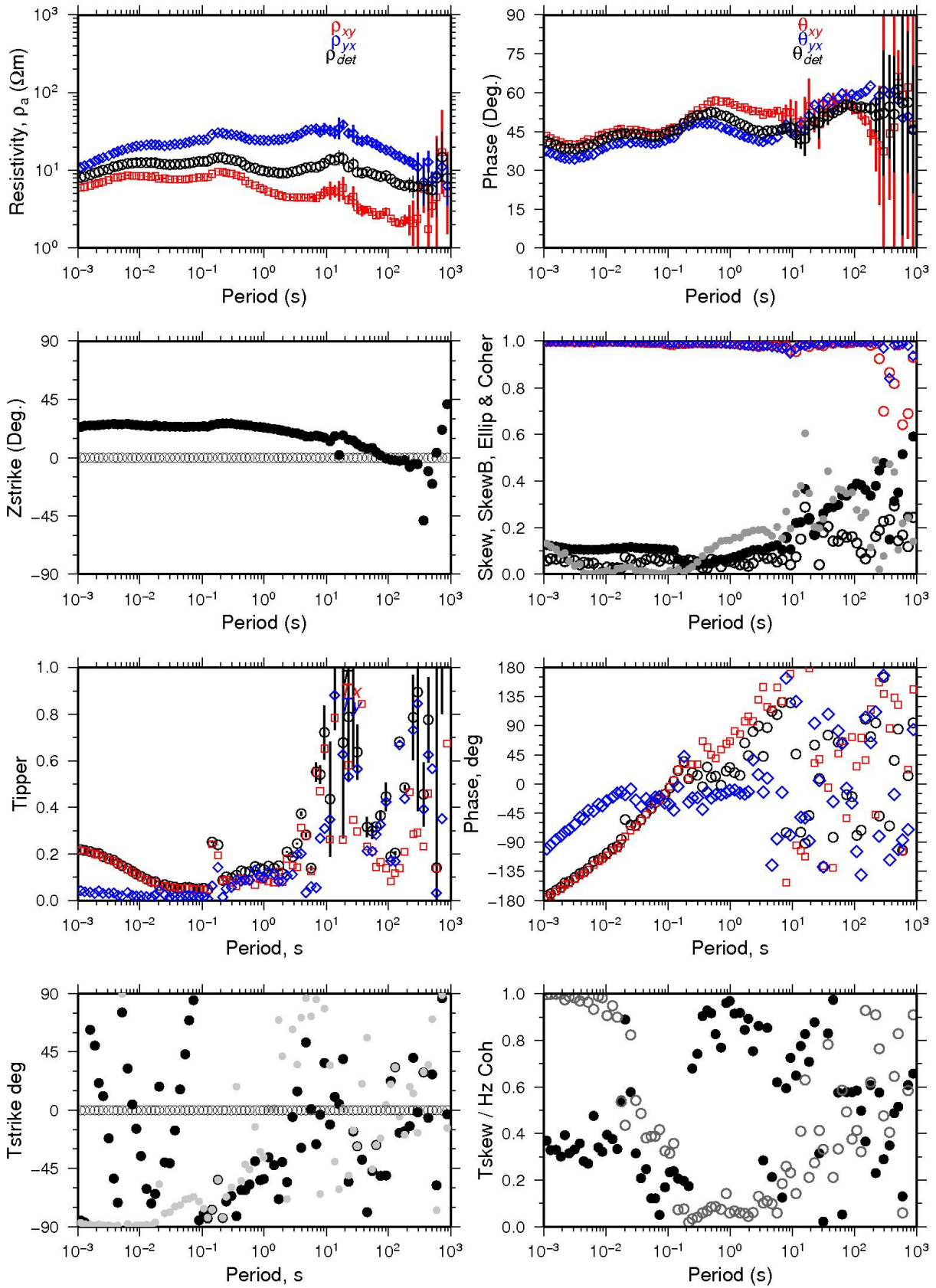
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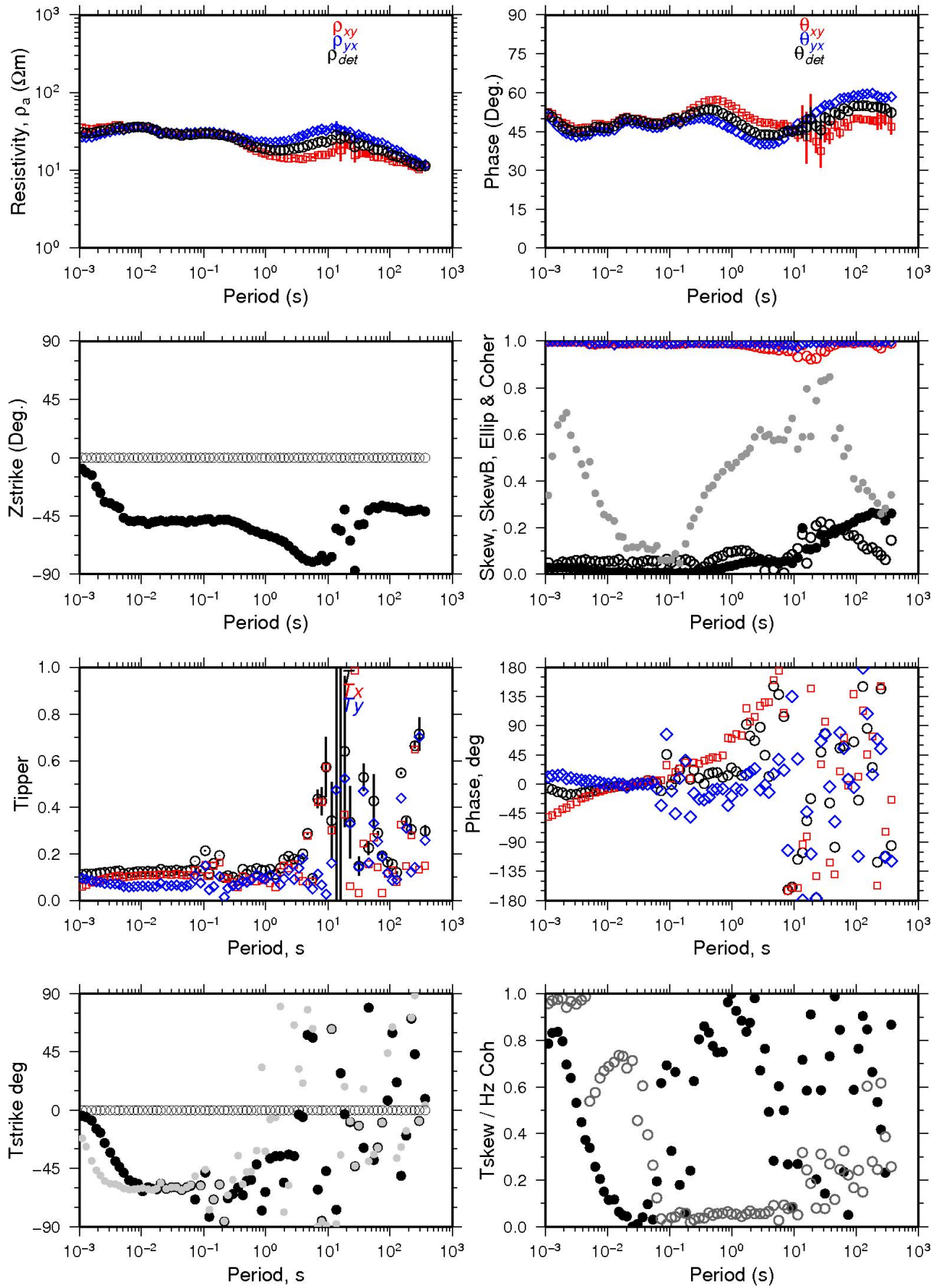
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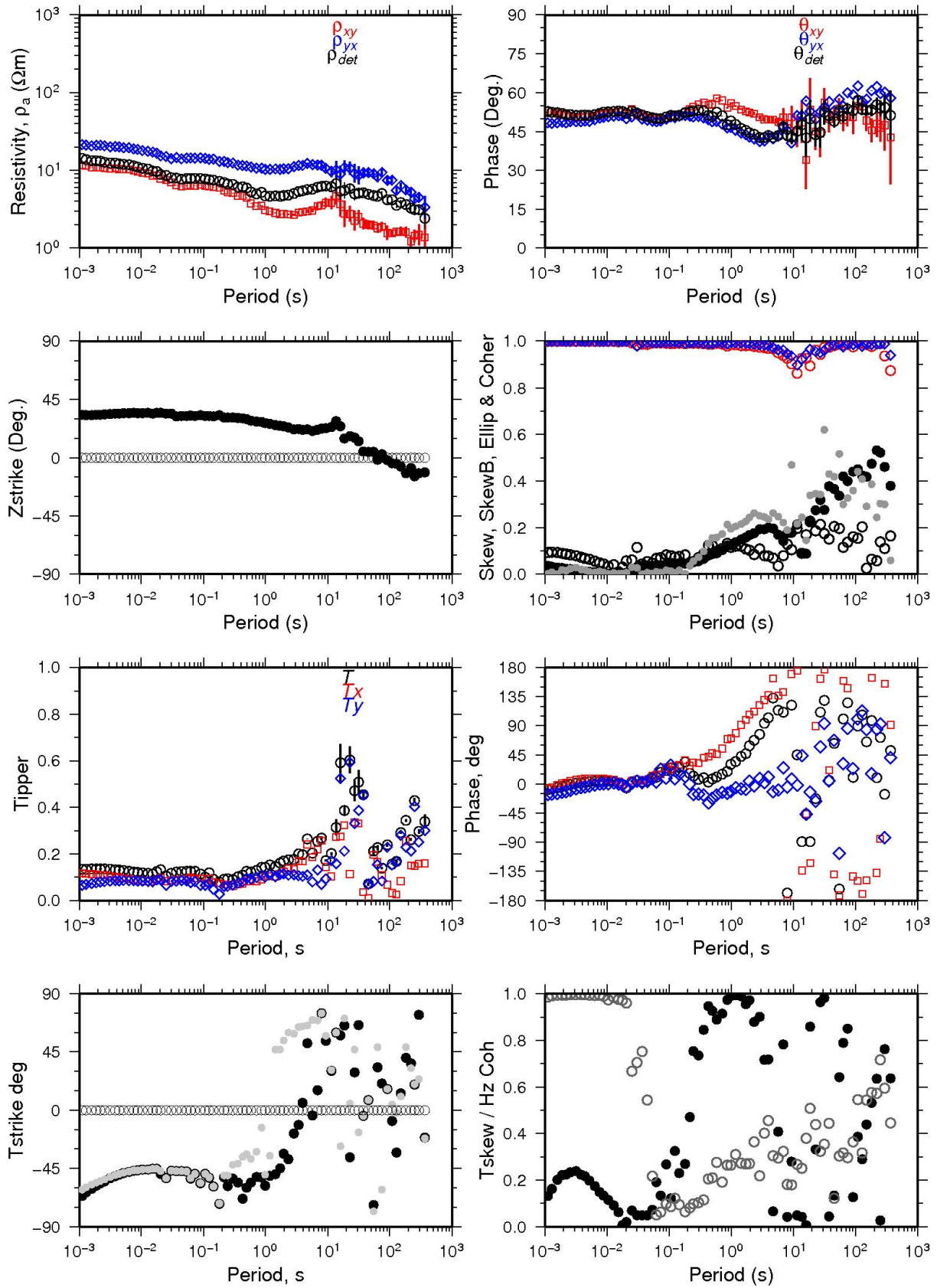
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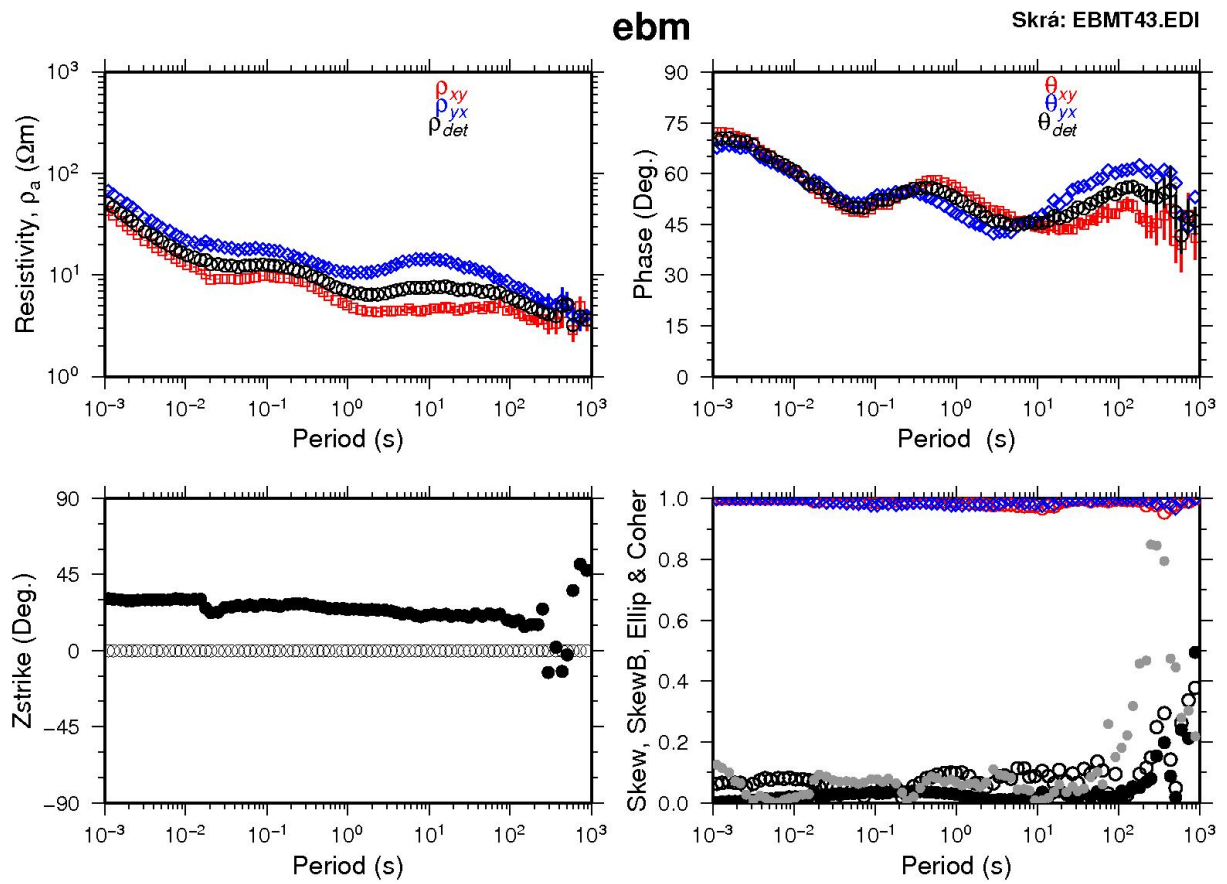
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Eam

Skrá: EBMT42.EDI

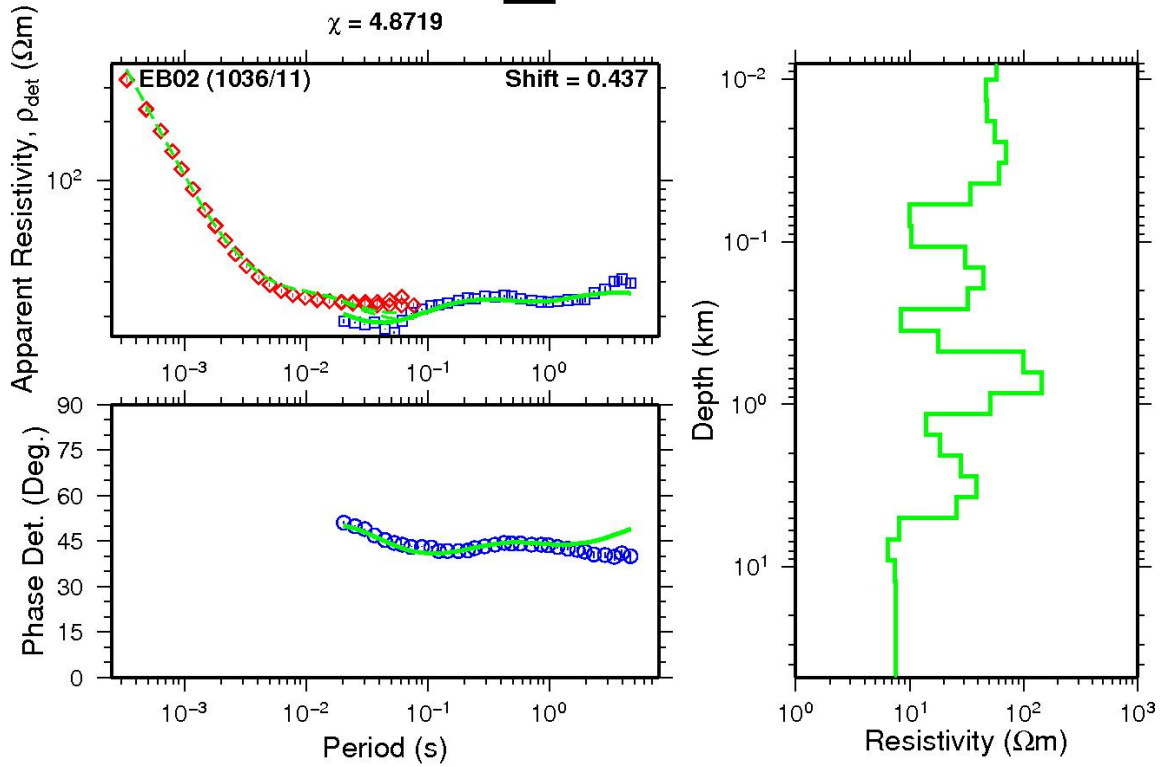




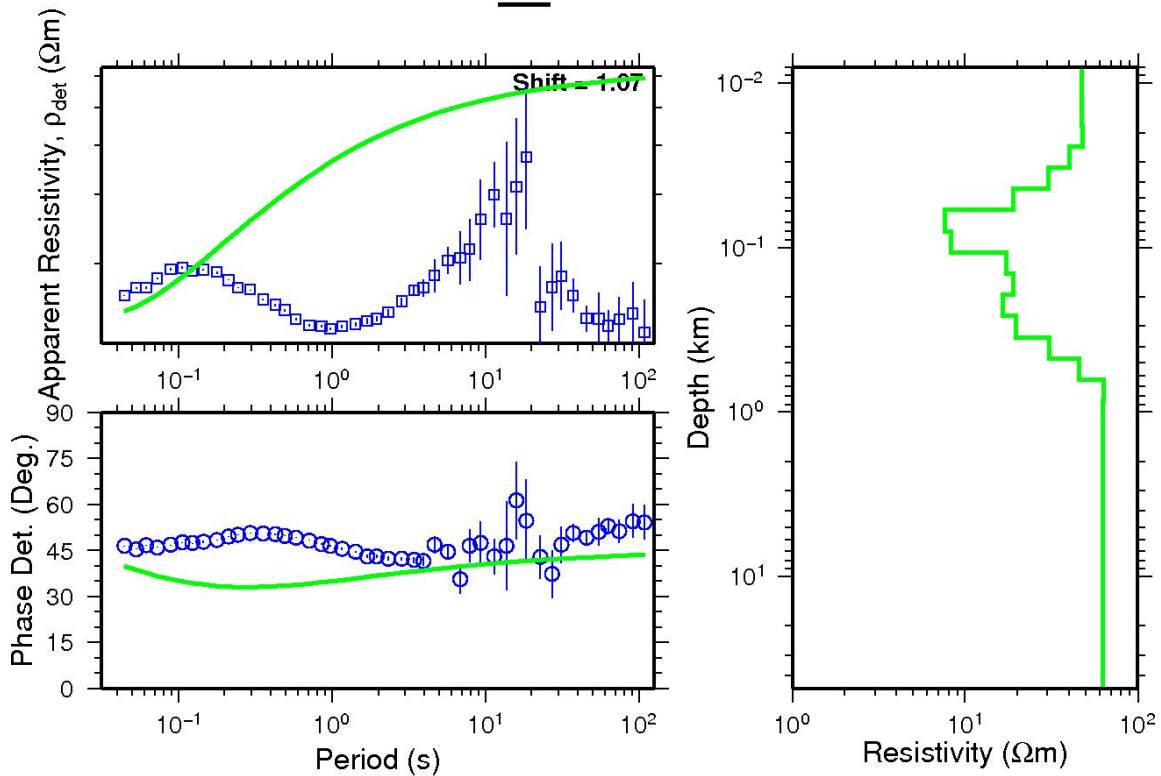
APPENDIX III: TEM and MT joint inverted resistivity data from the Eburru prospect and the corresponding model curves

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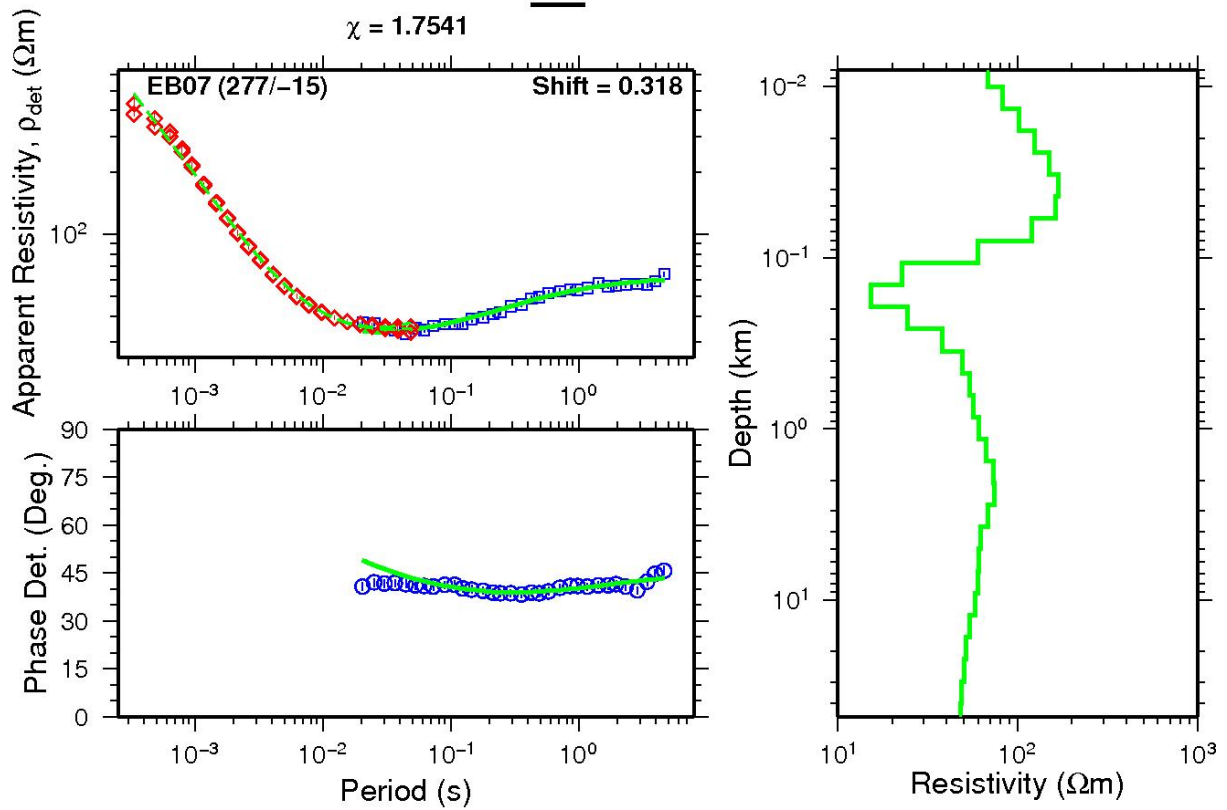


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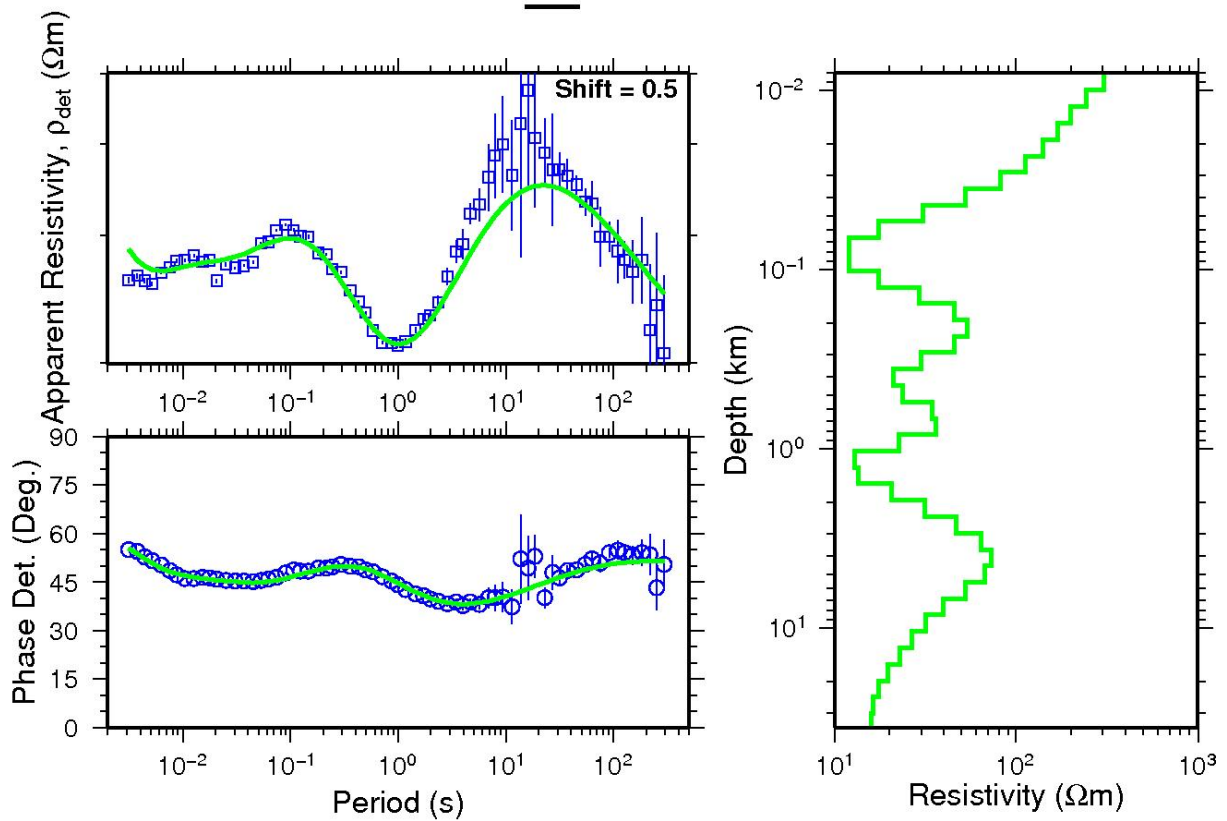


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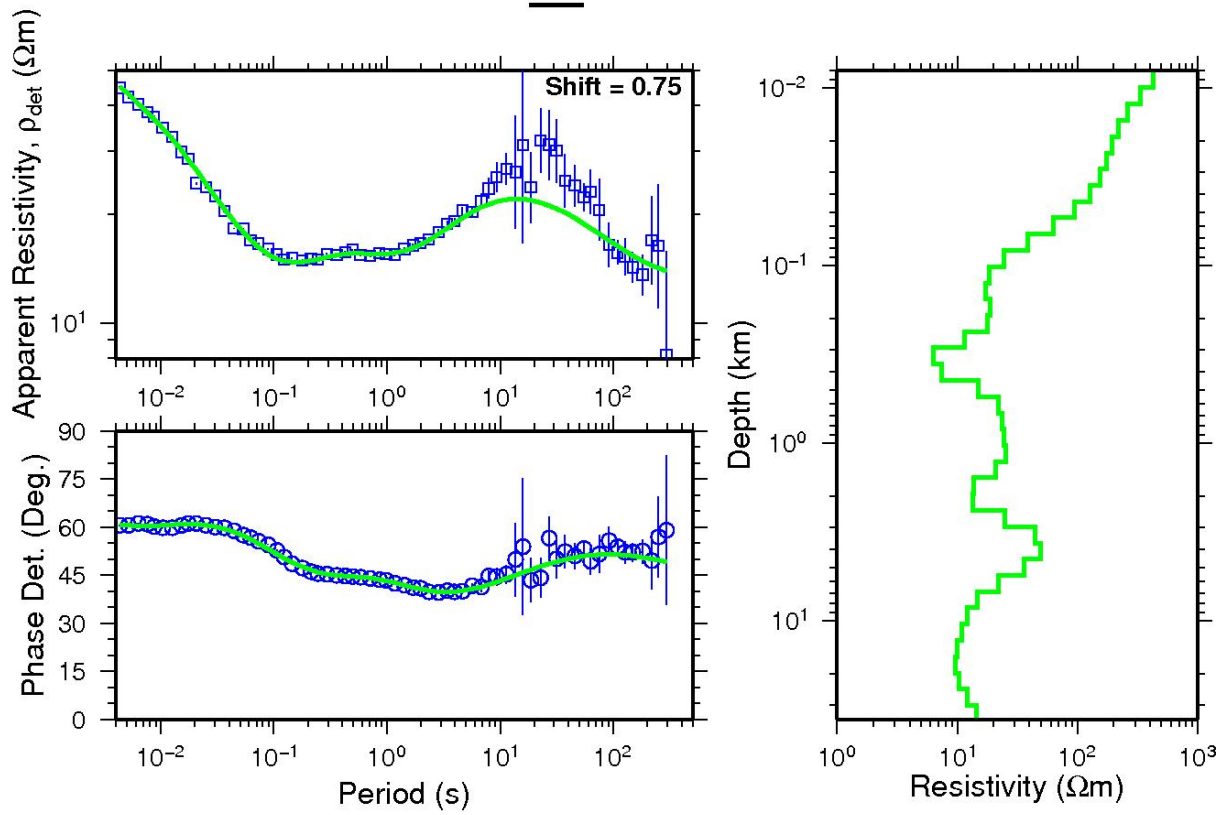
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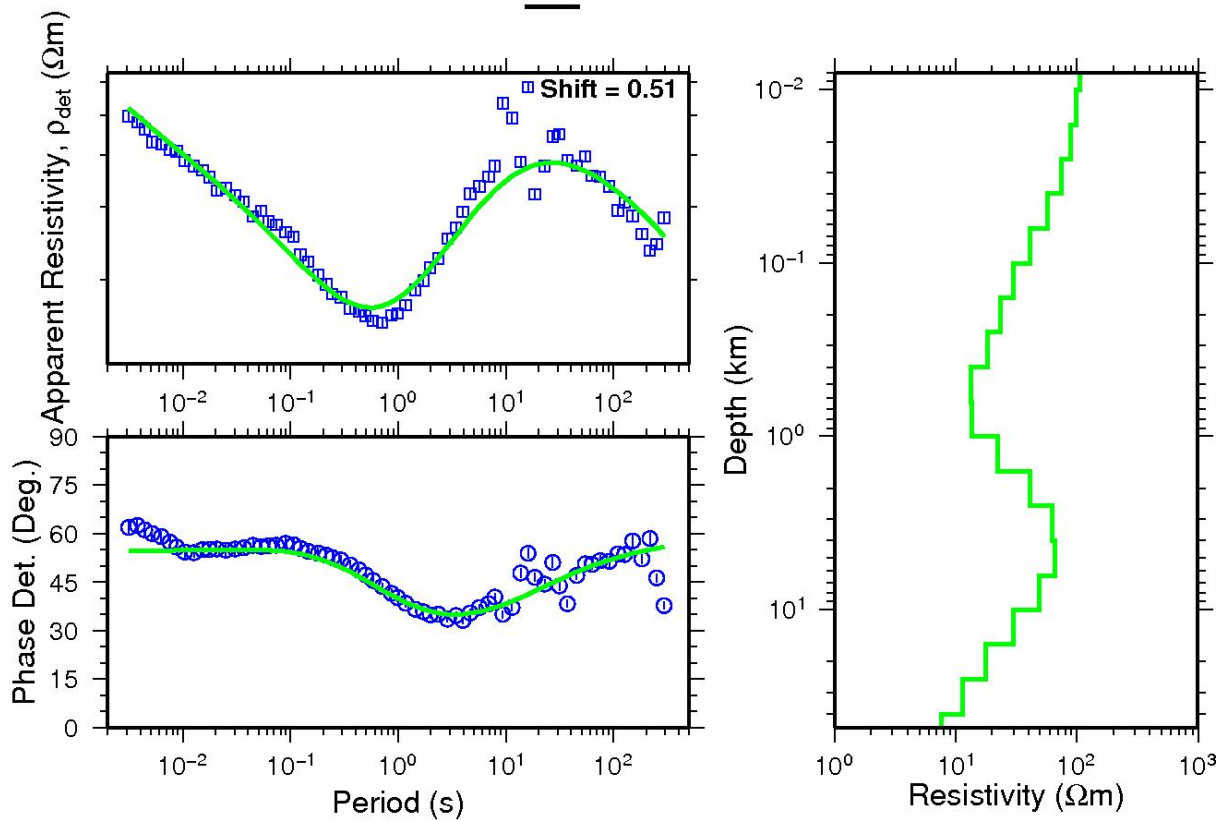
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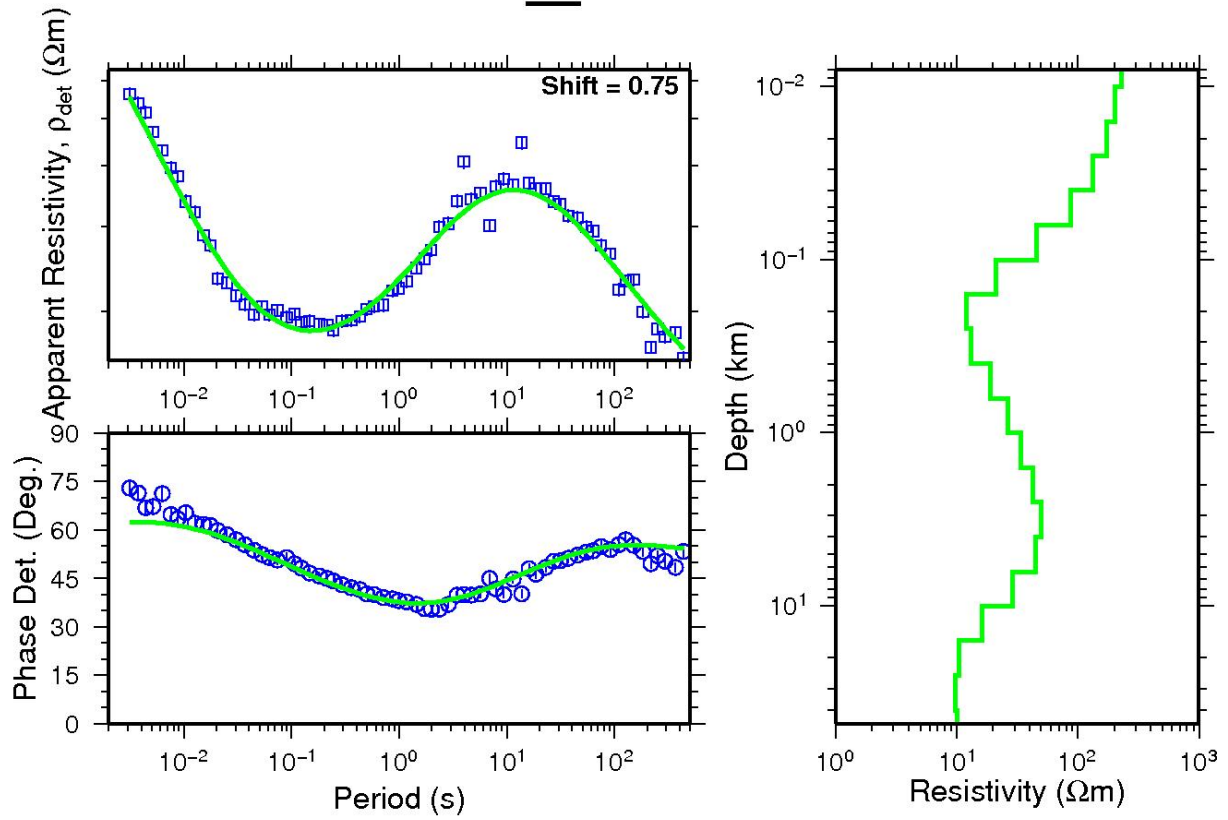
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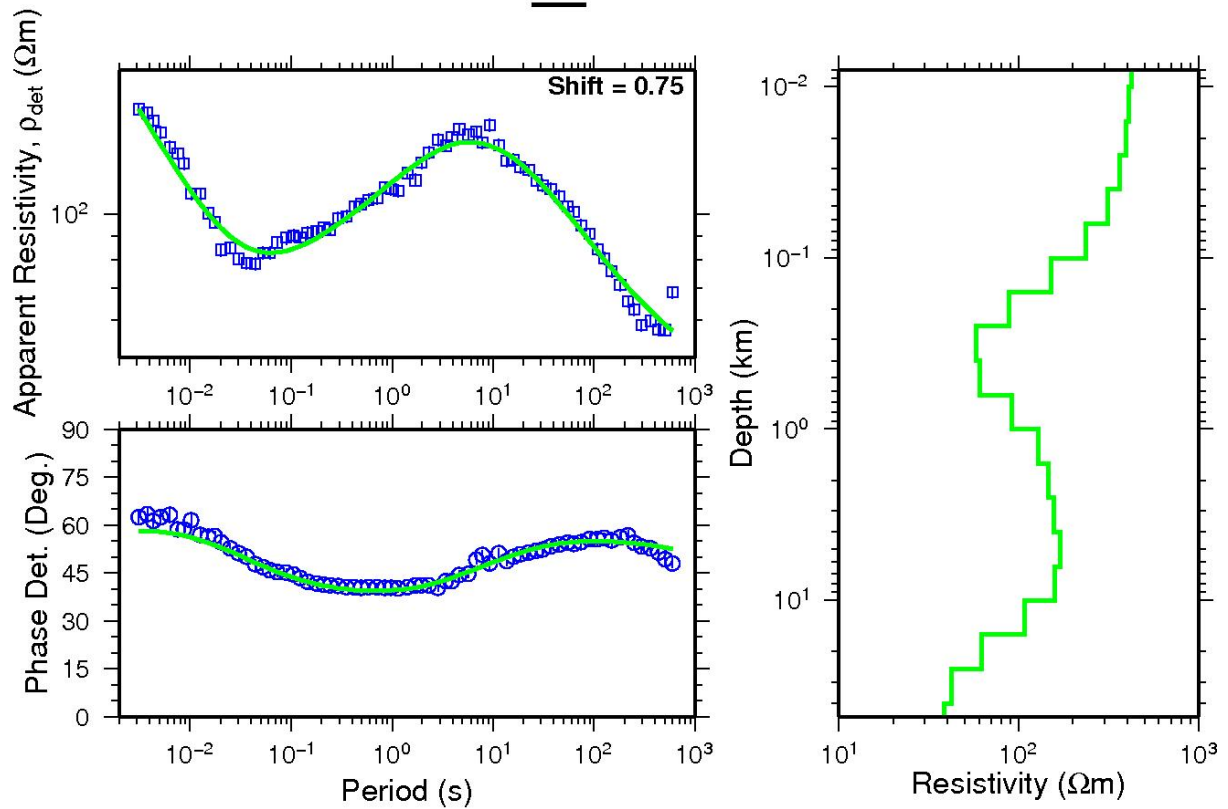
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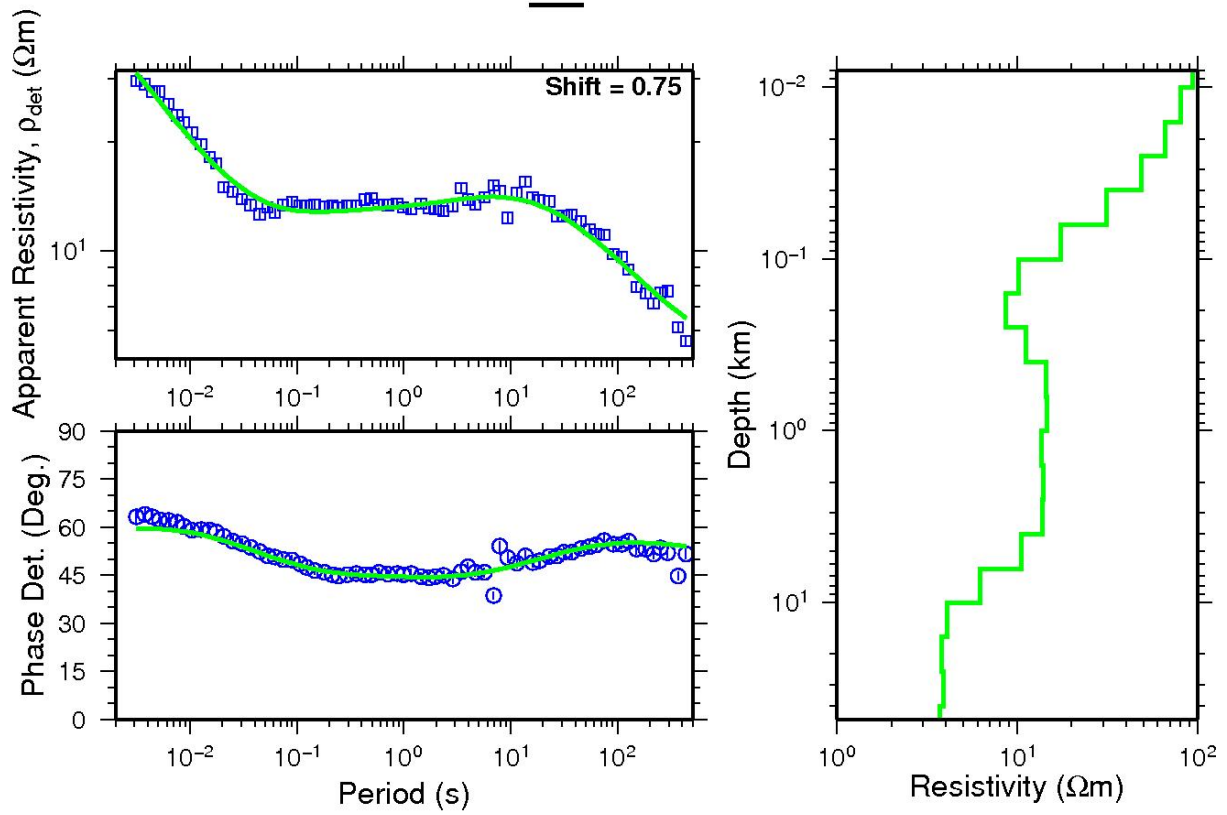
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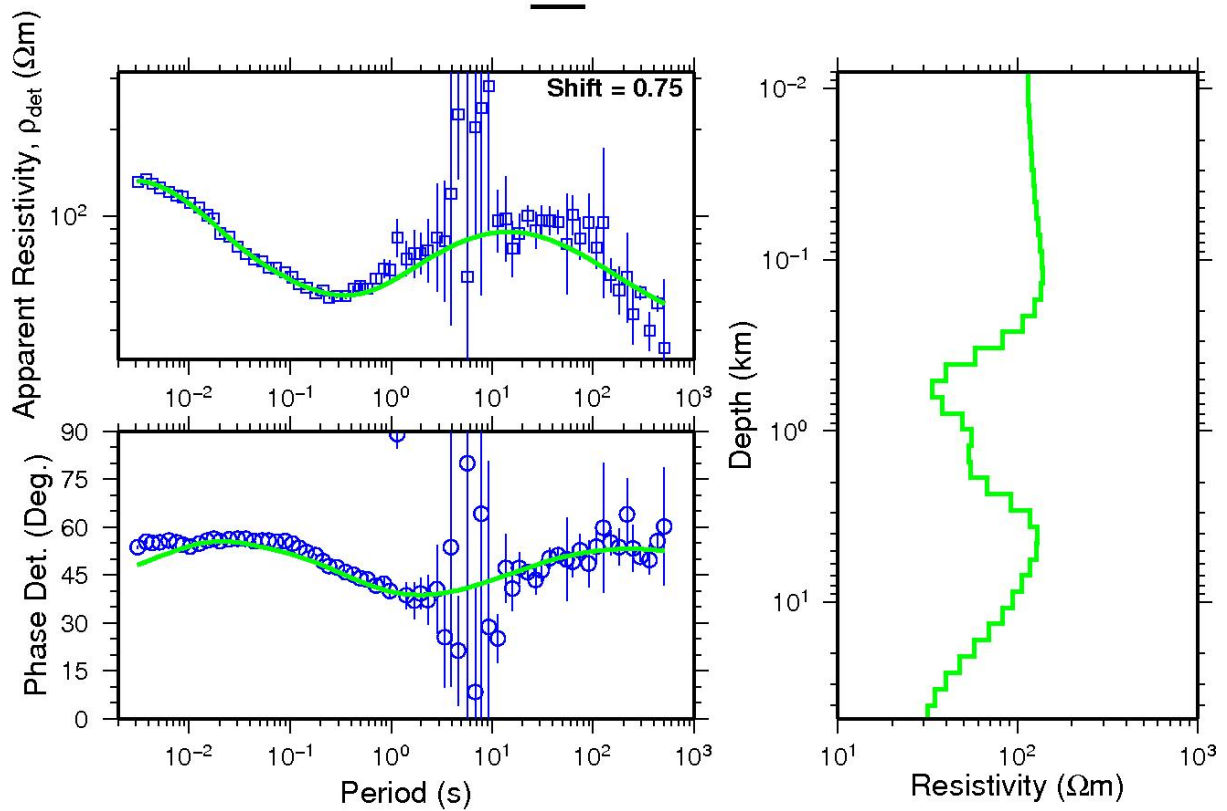
EBMT11_o



EBMT12_o

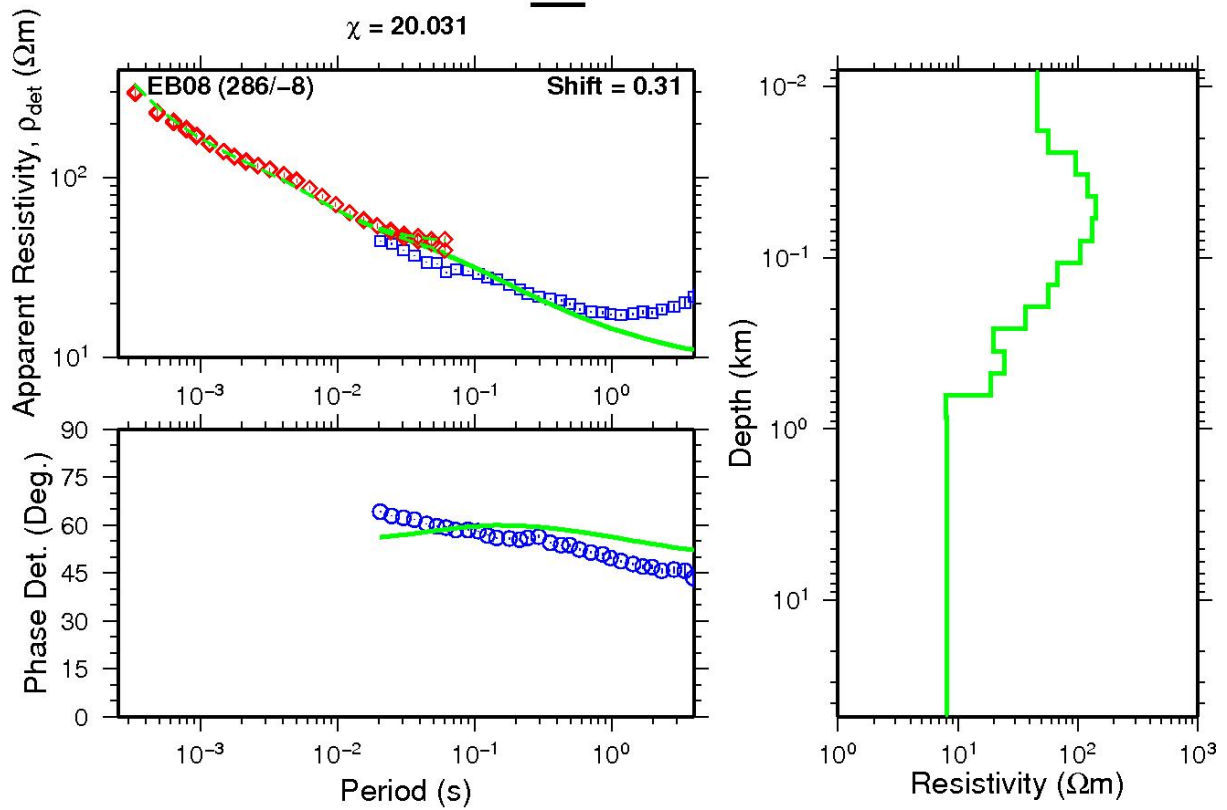


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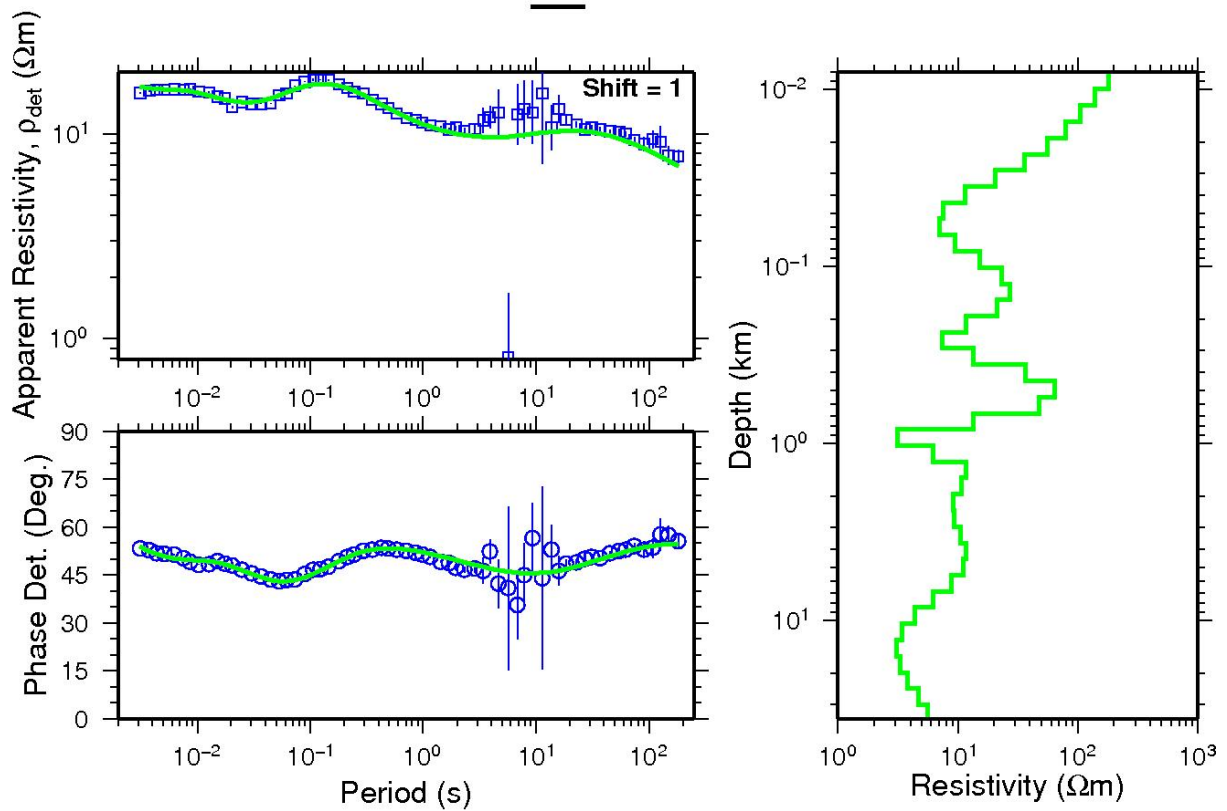


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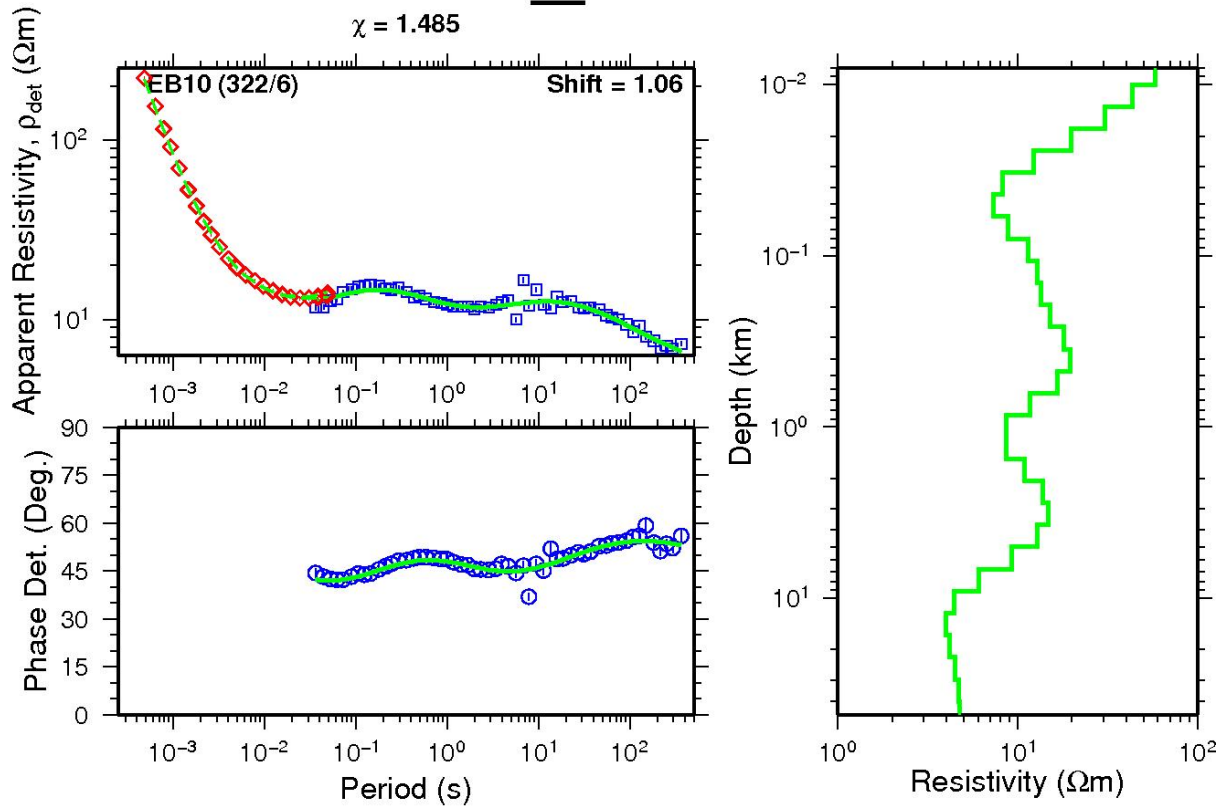


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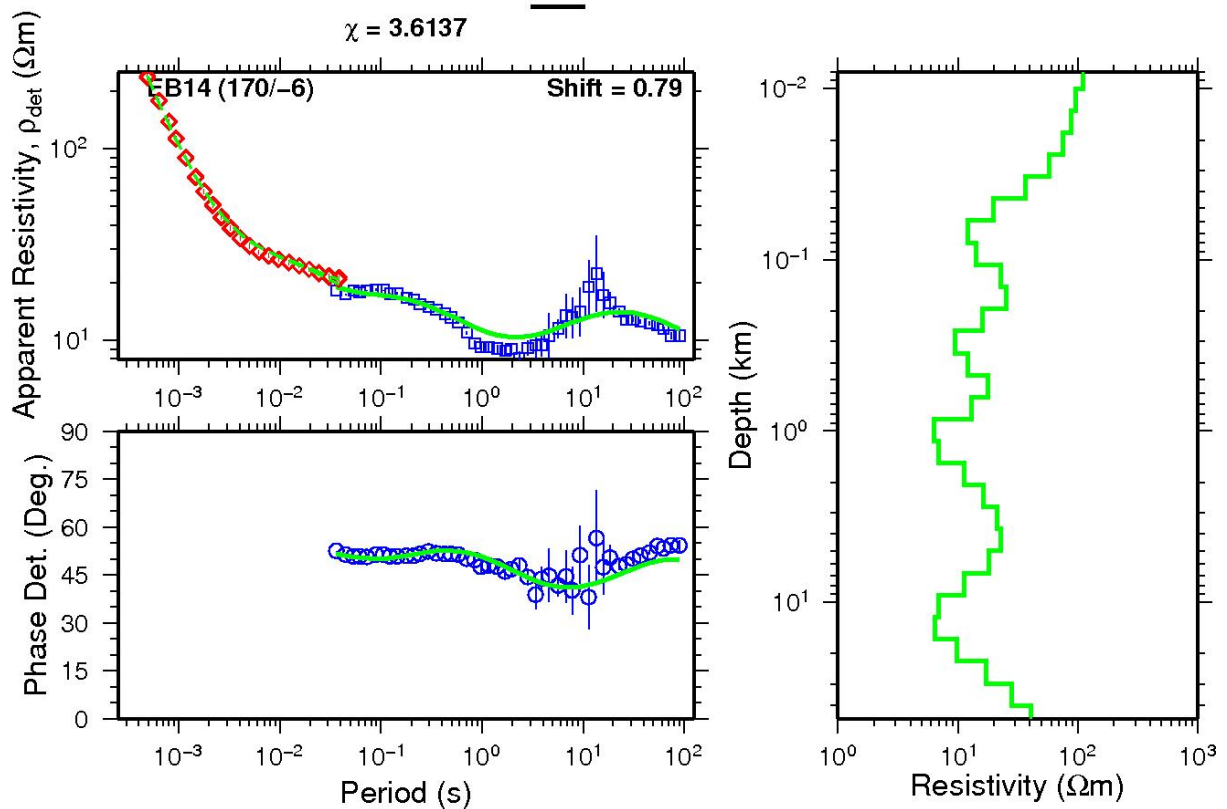
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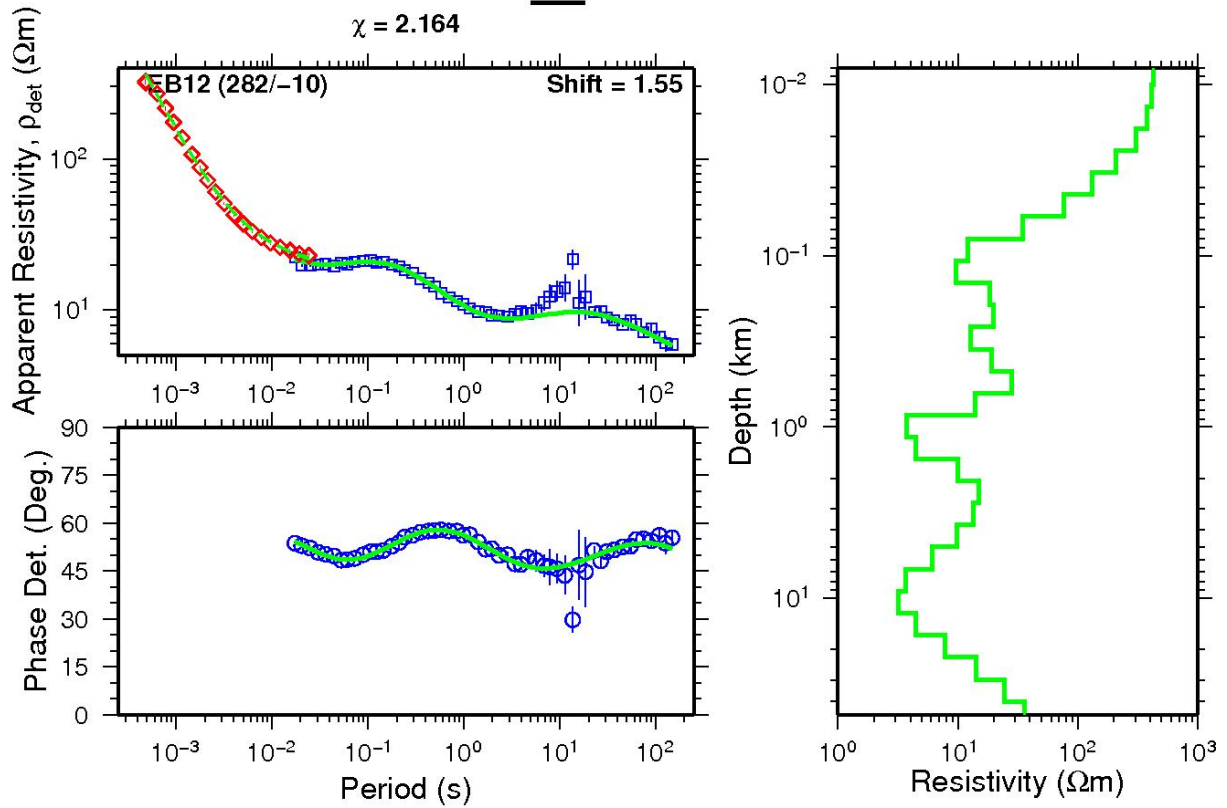
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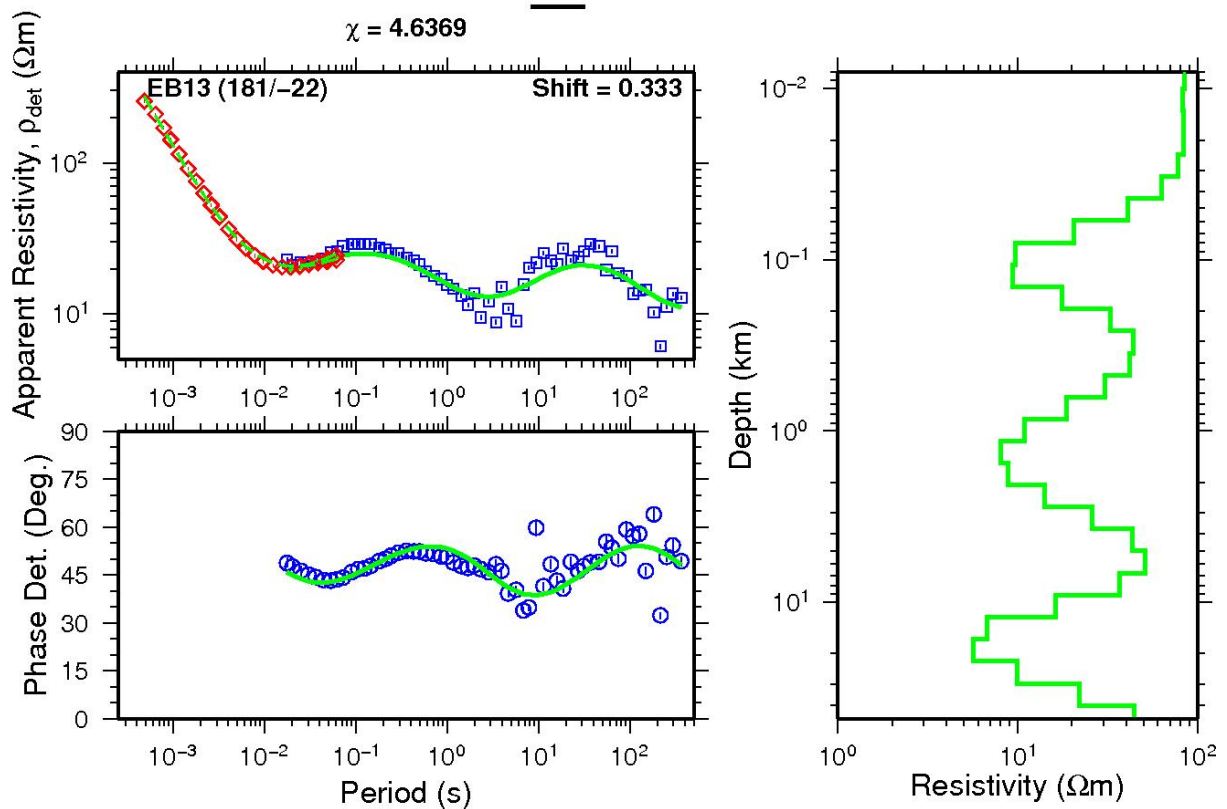
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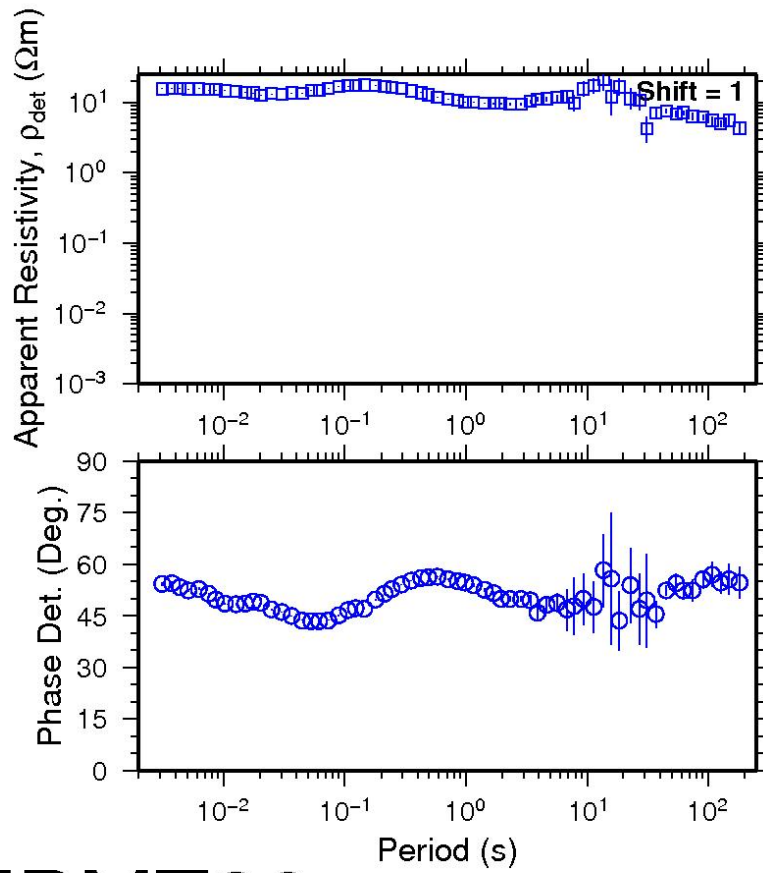


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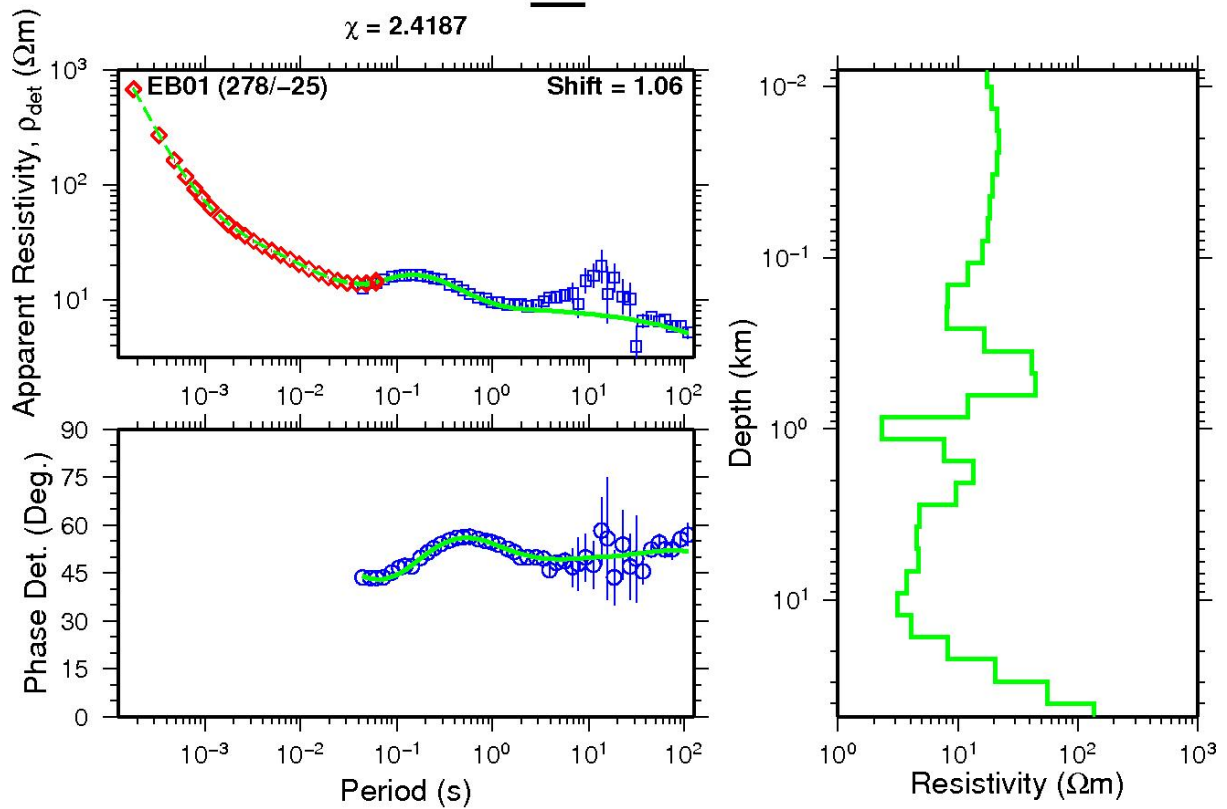


EBMT26



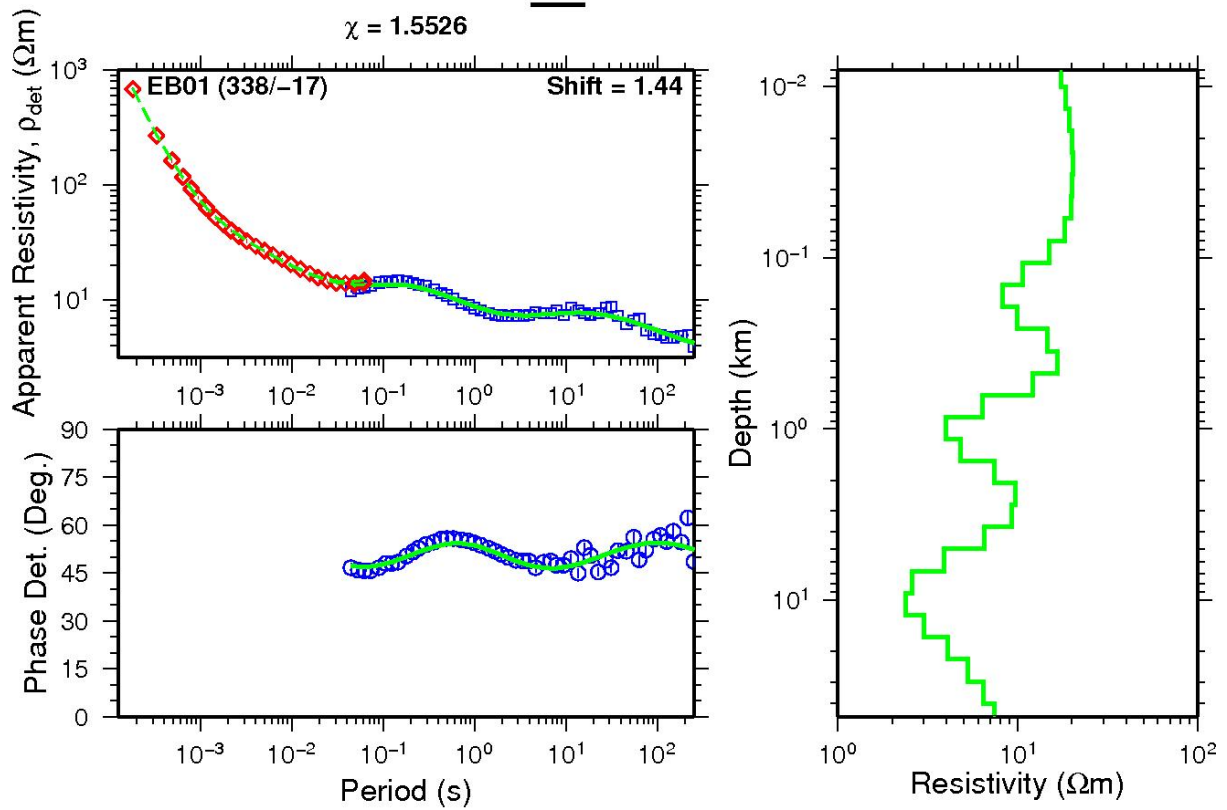
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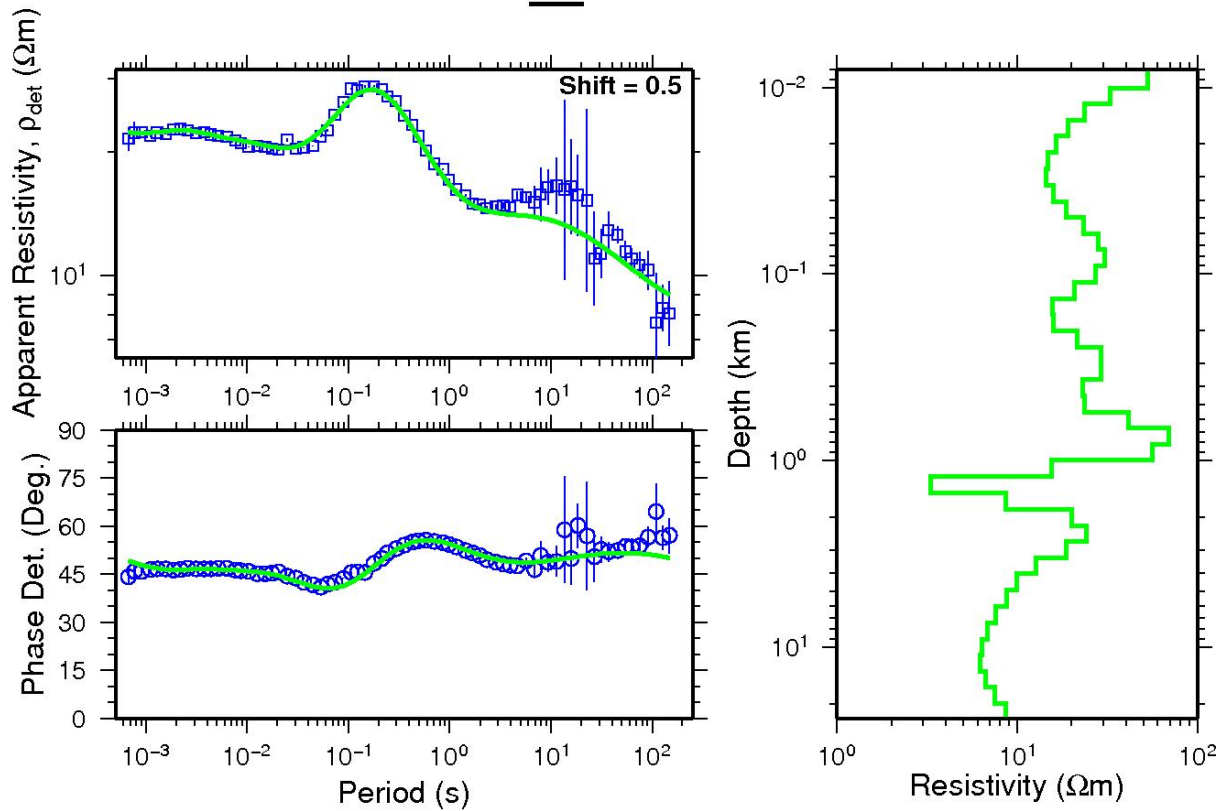


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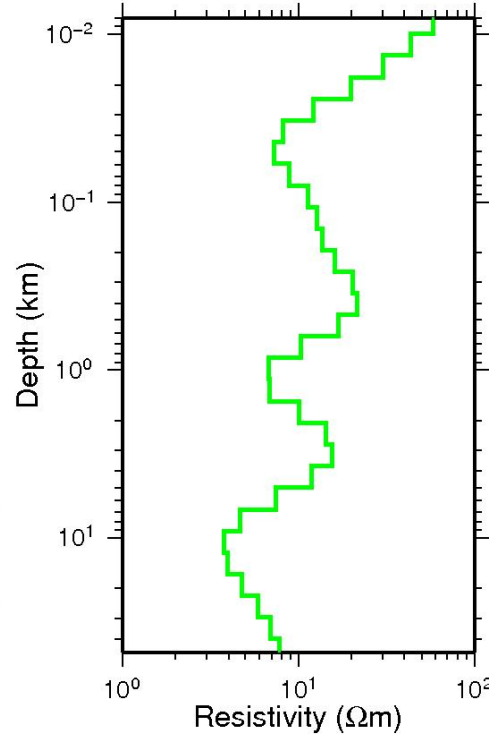
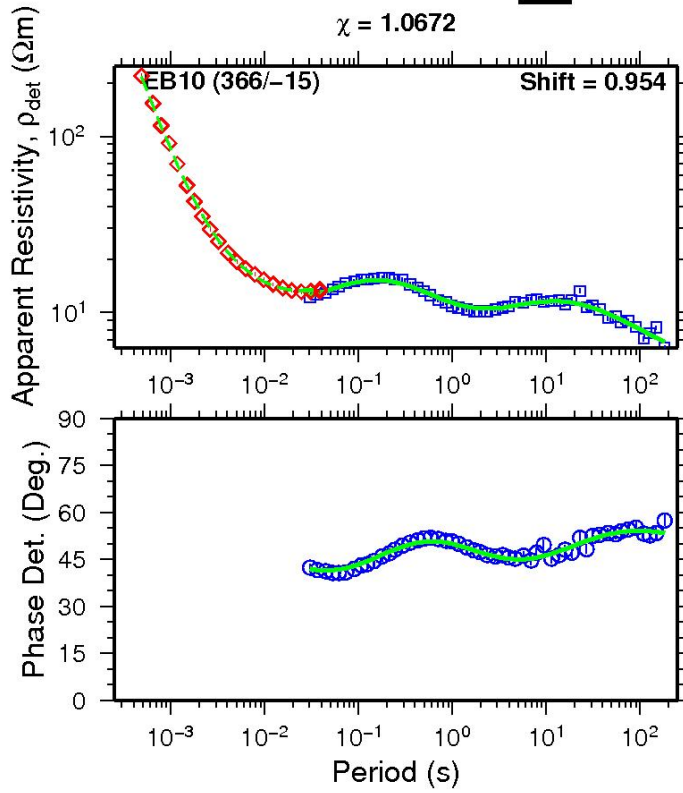


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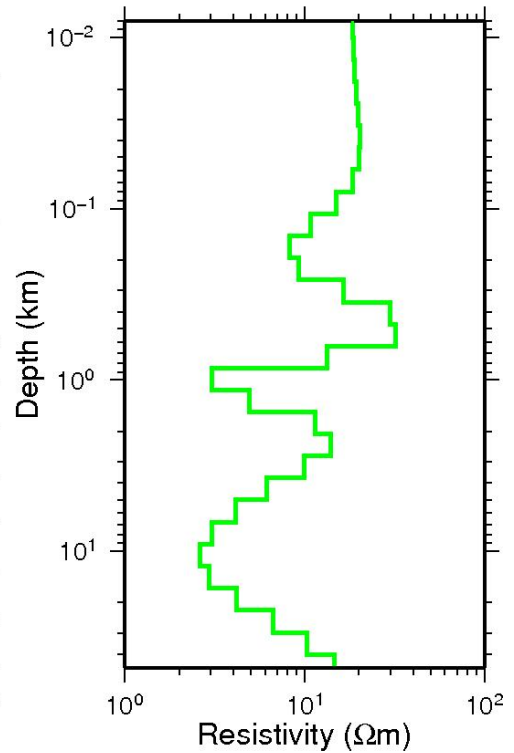
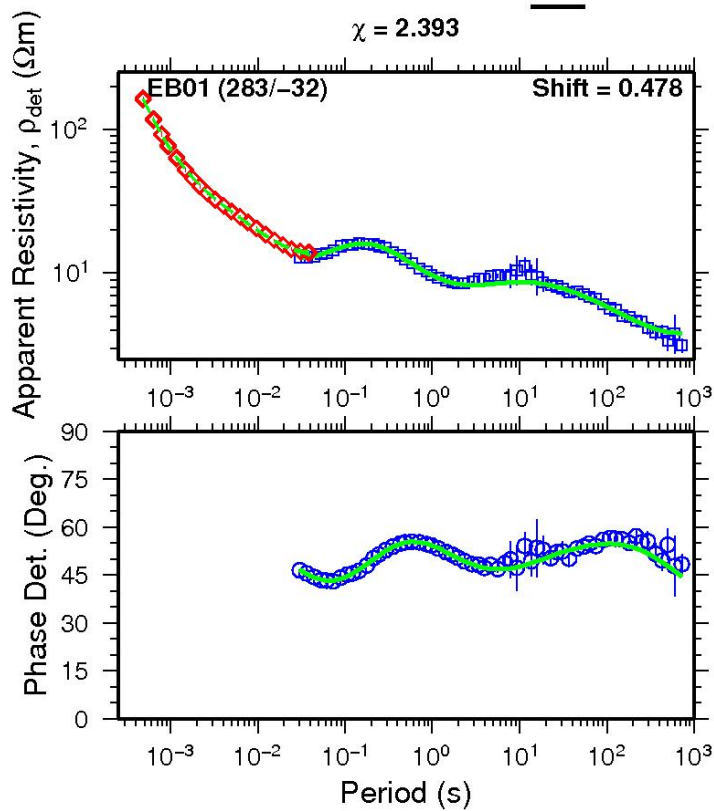
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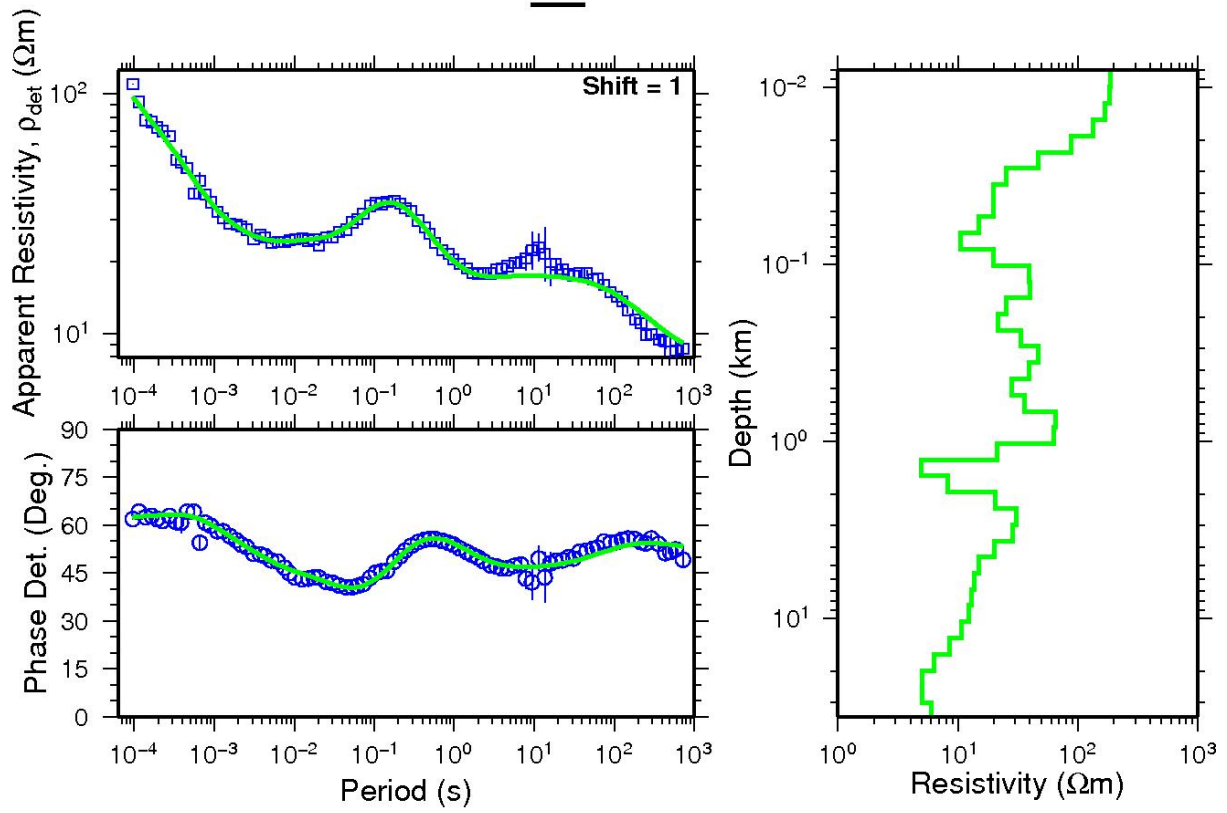


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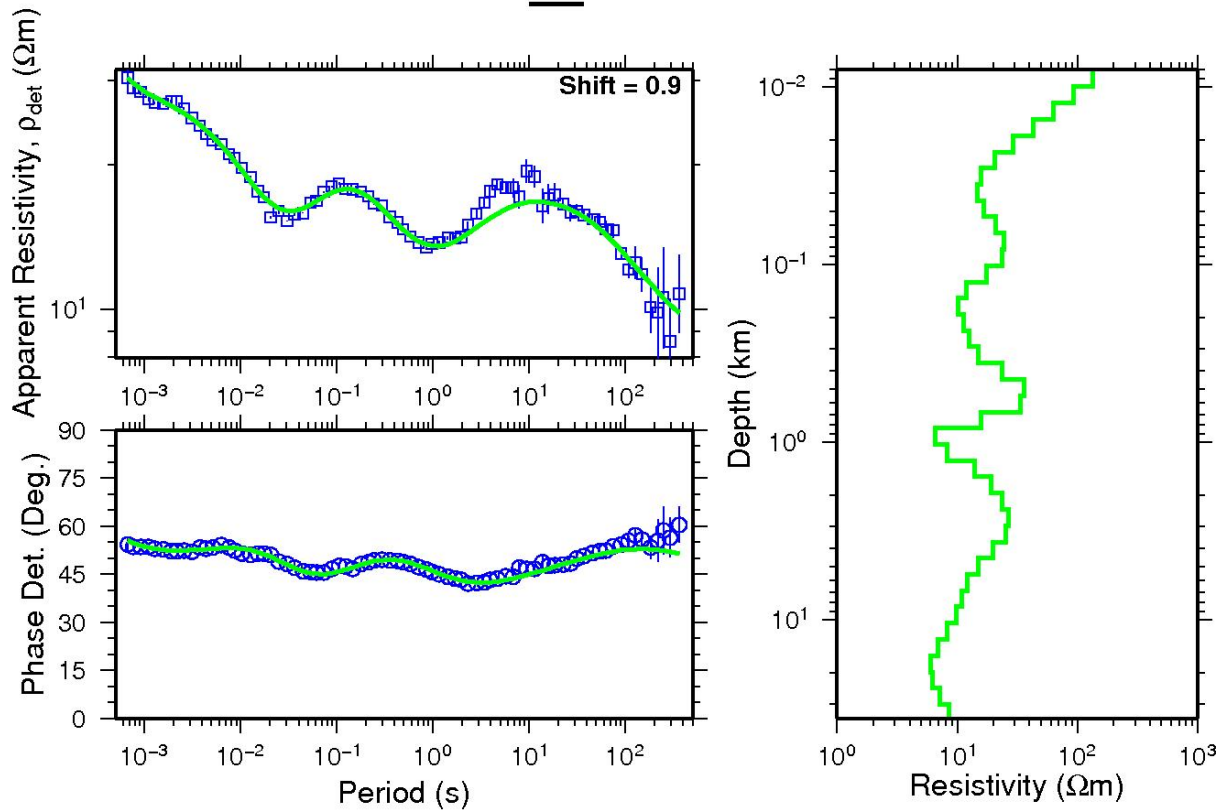
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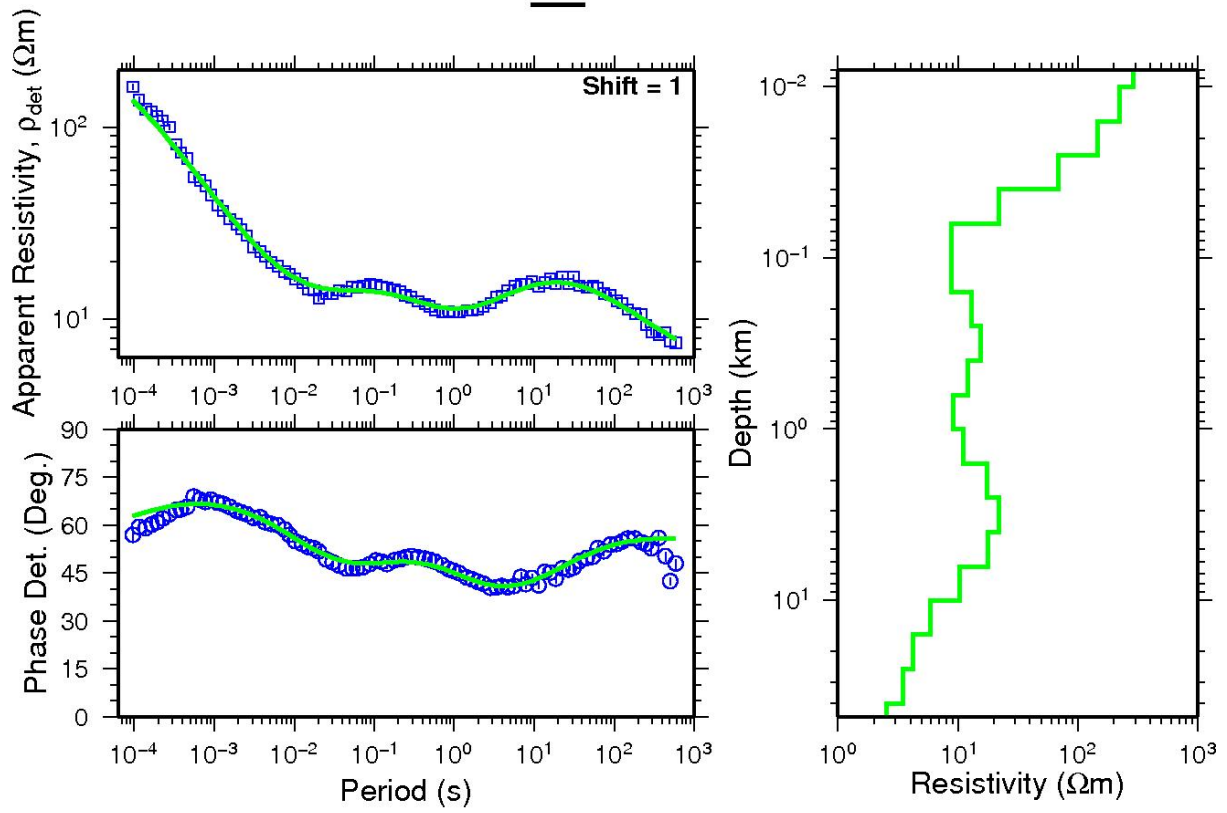
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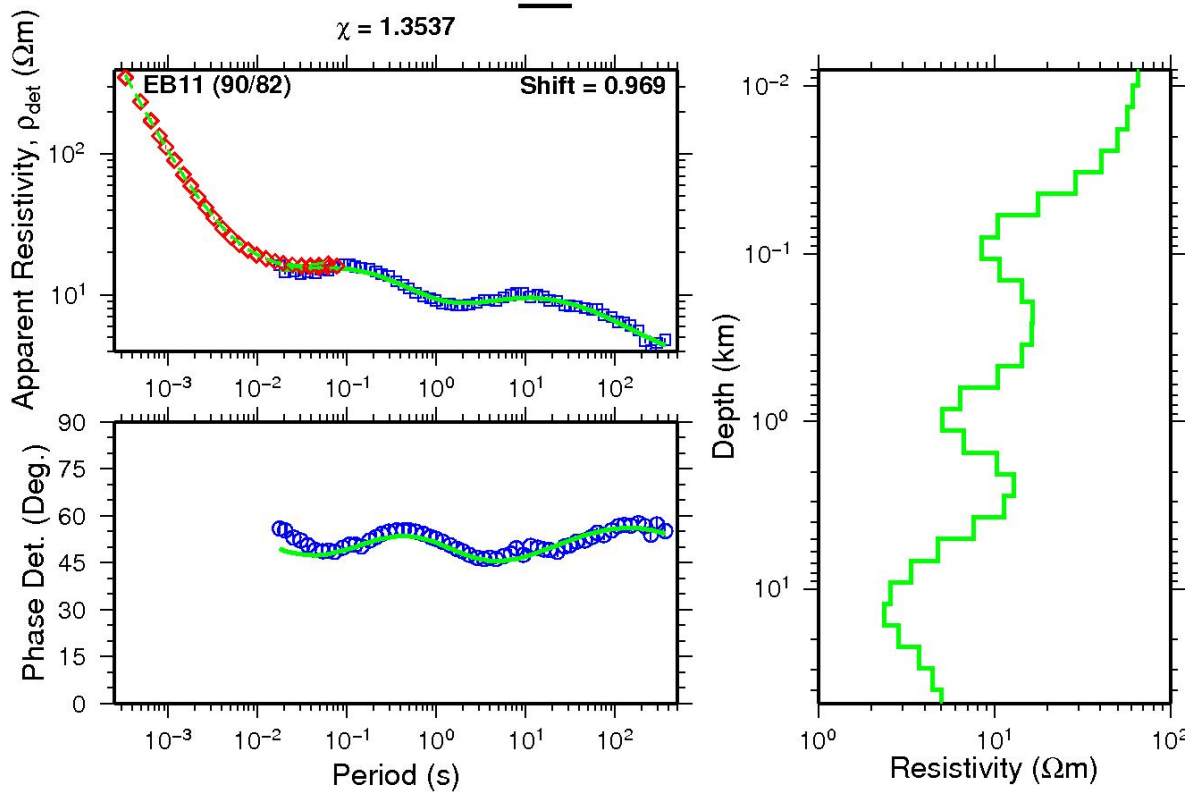
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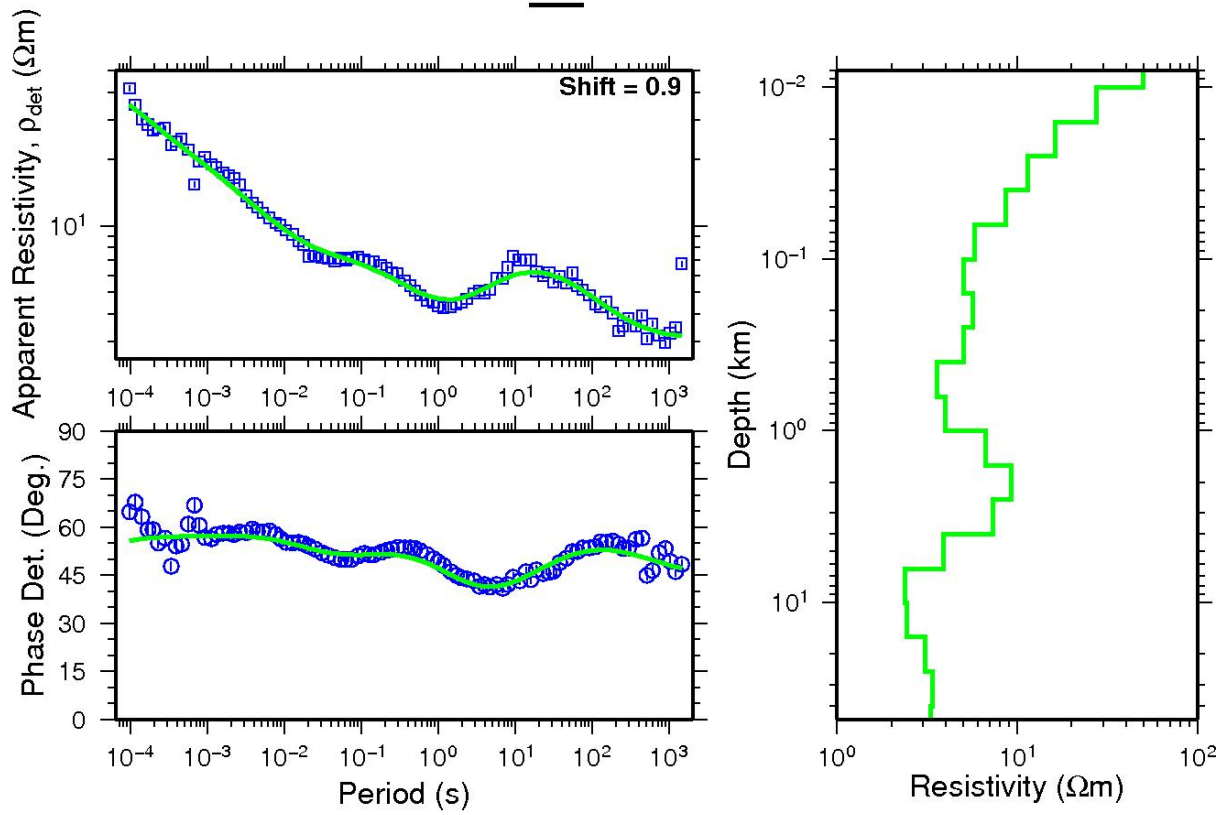
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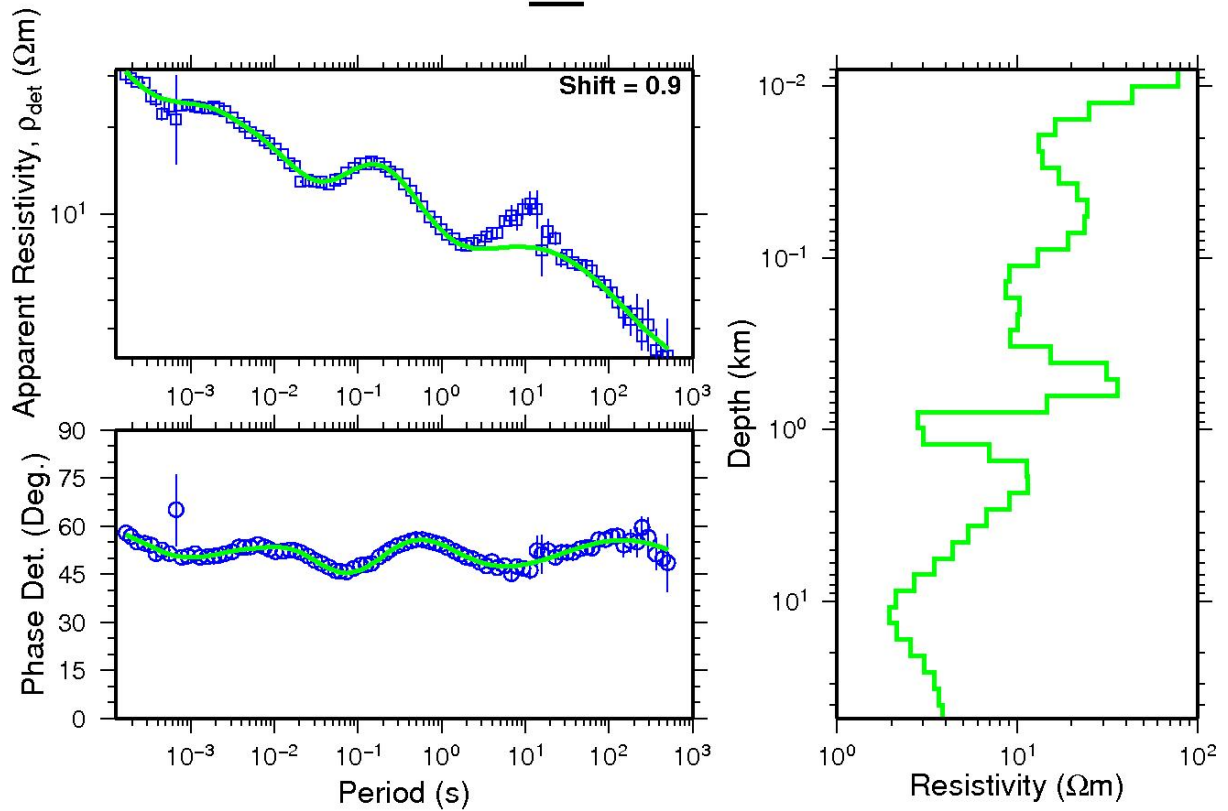
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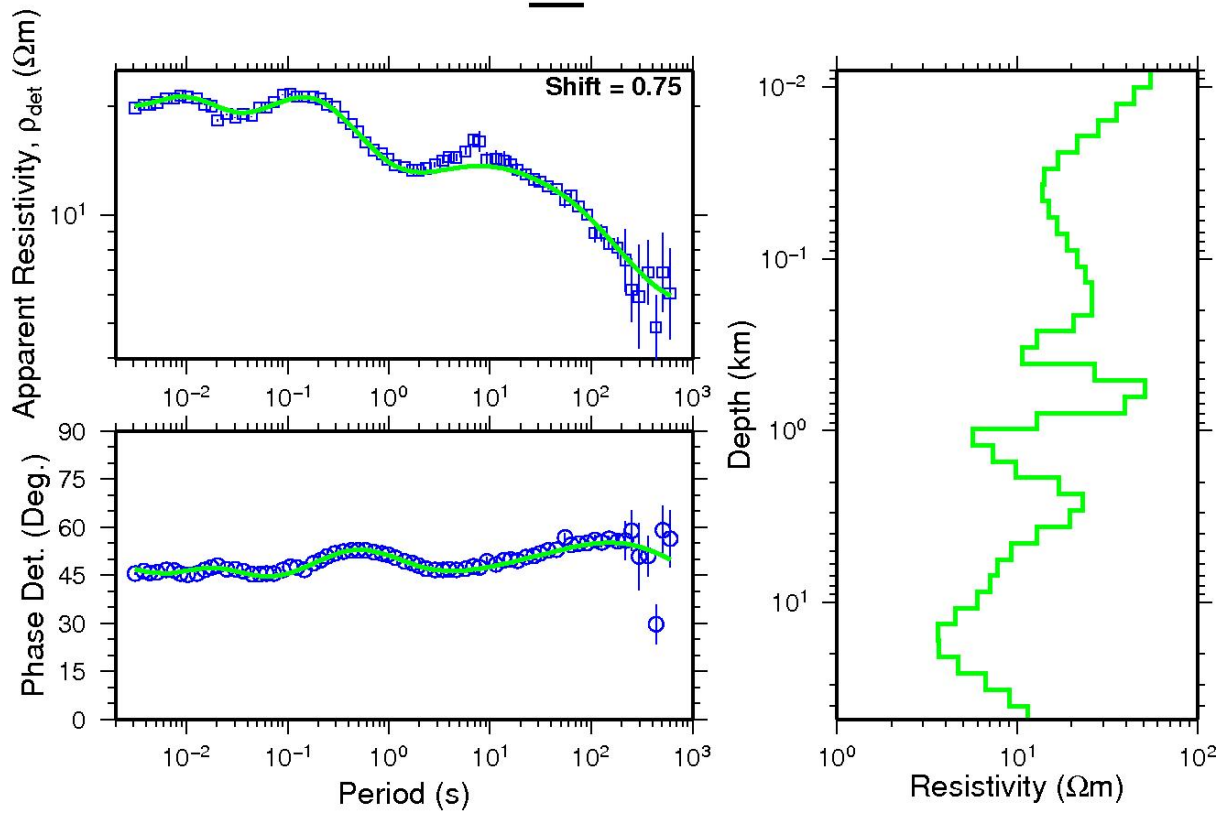
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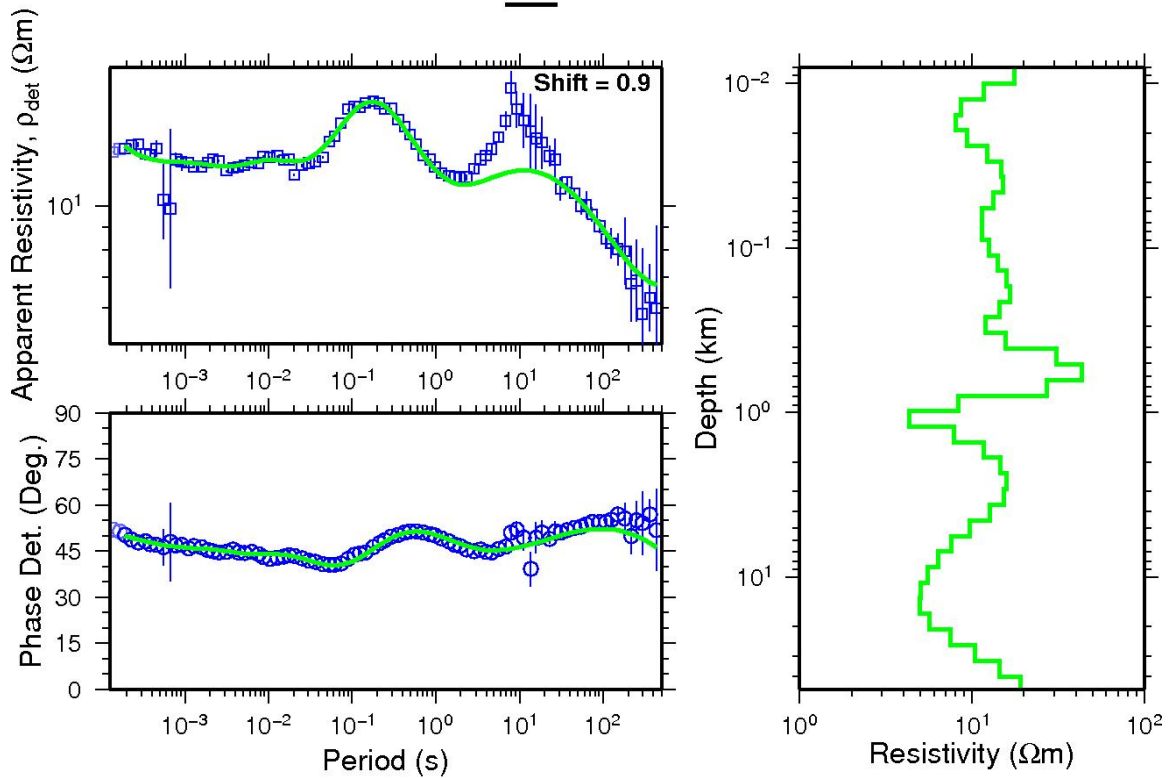
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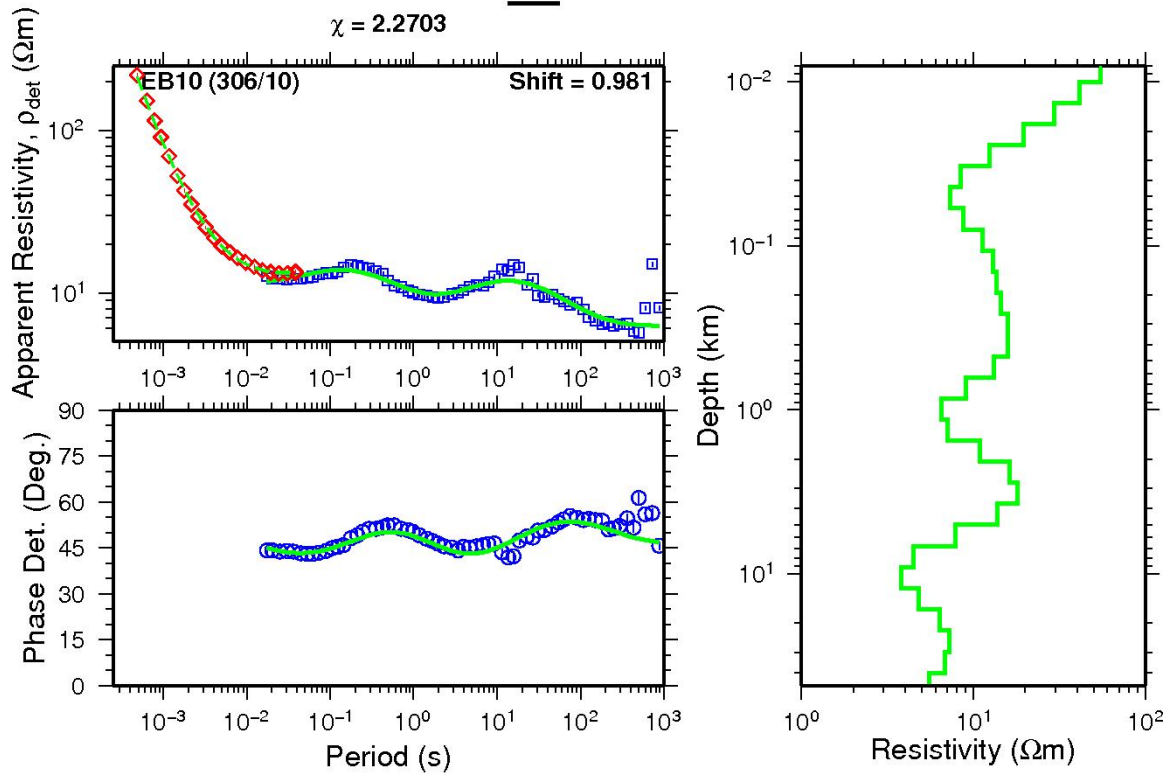


EBMT39_o

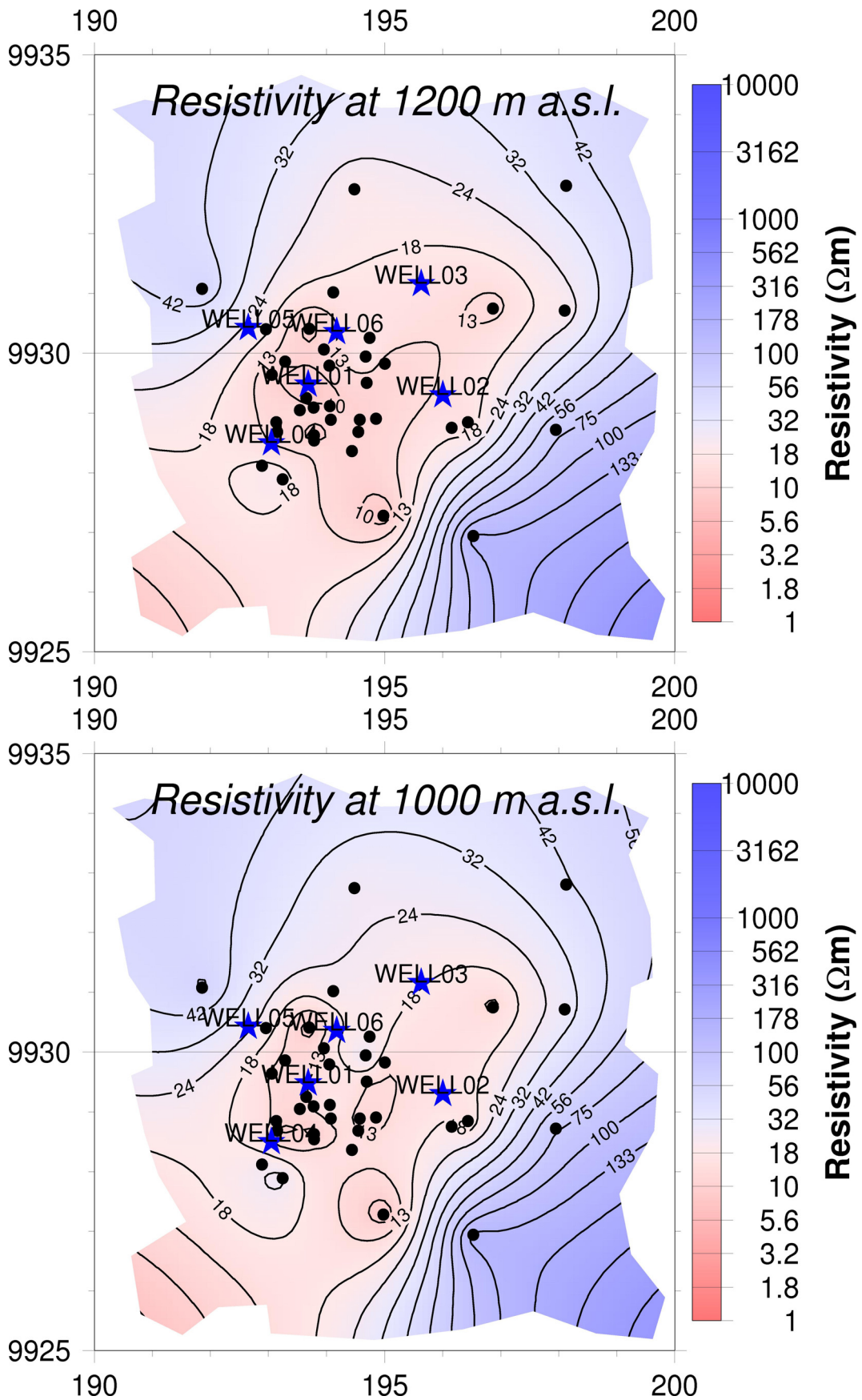


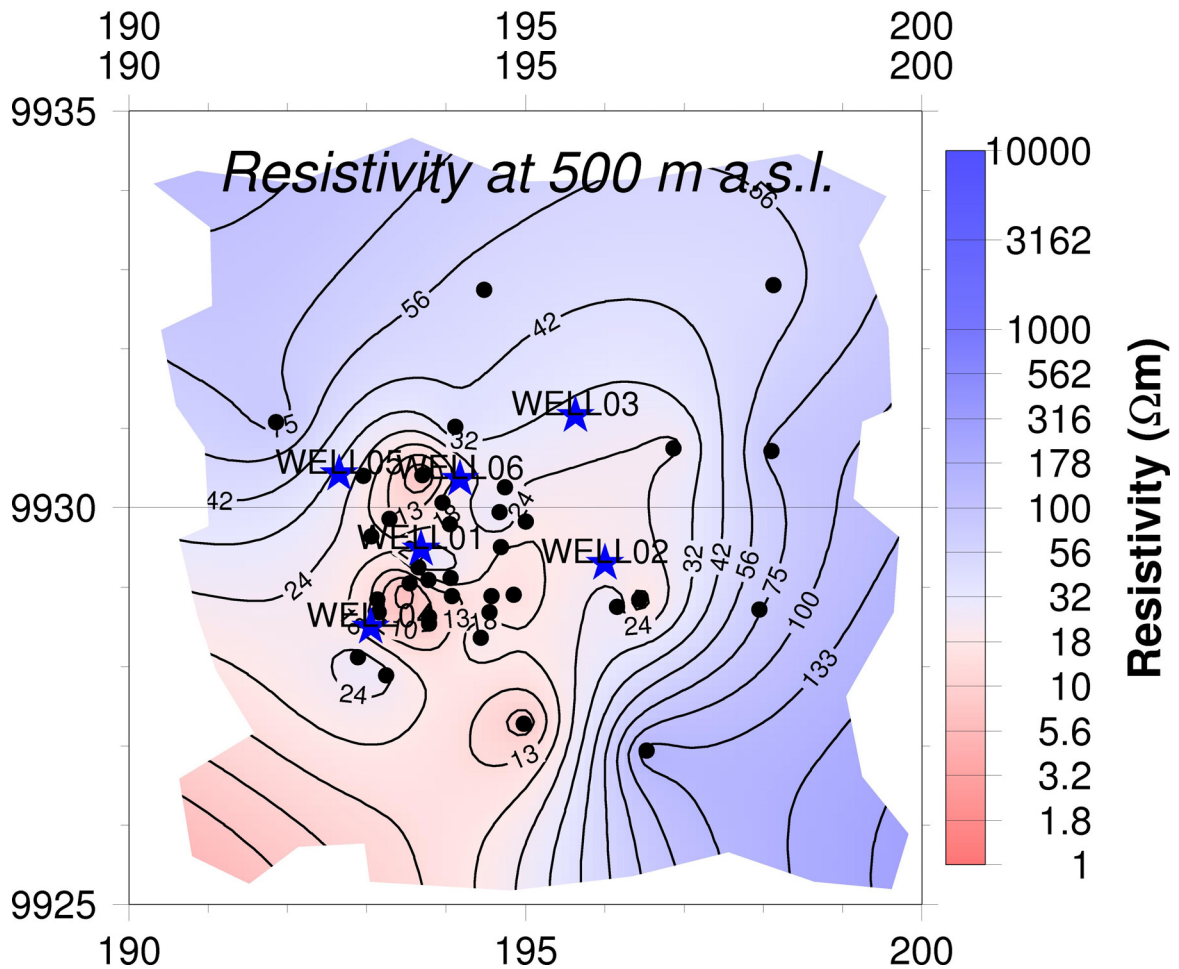
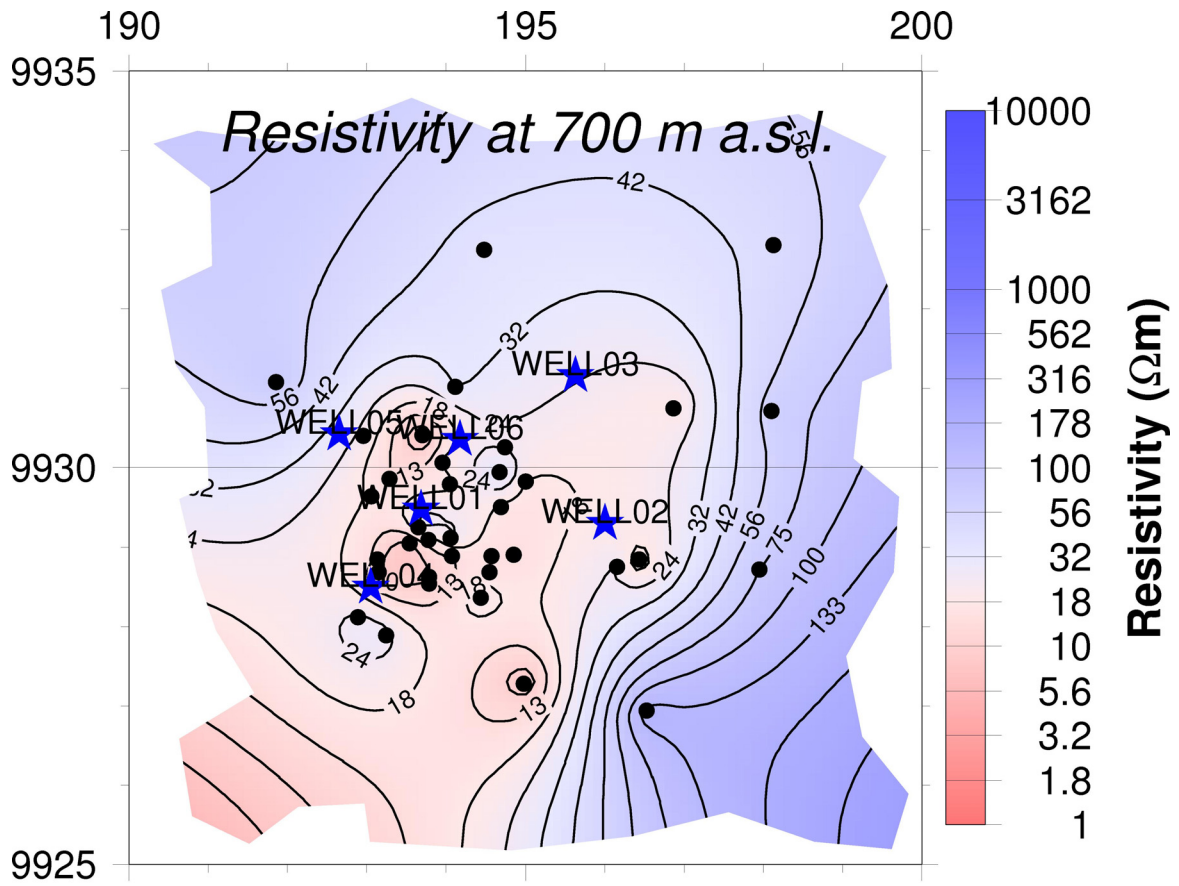
EBMT40_o

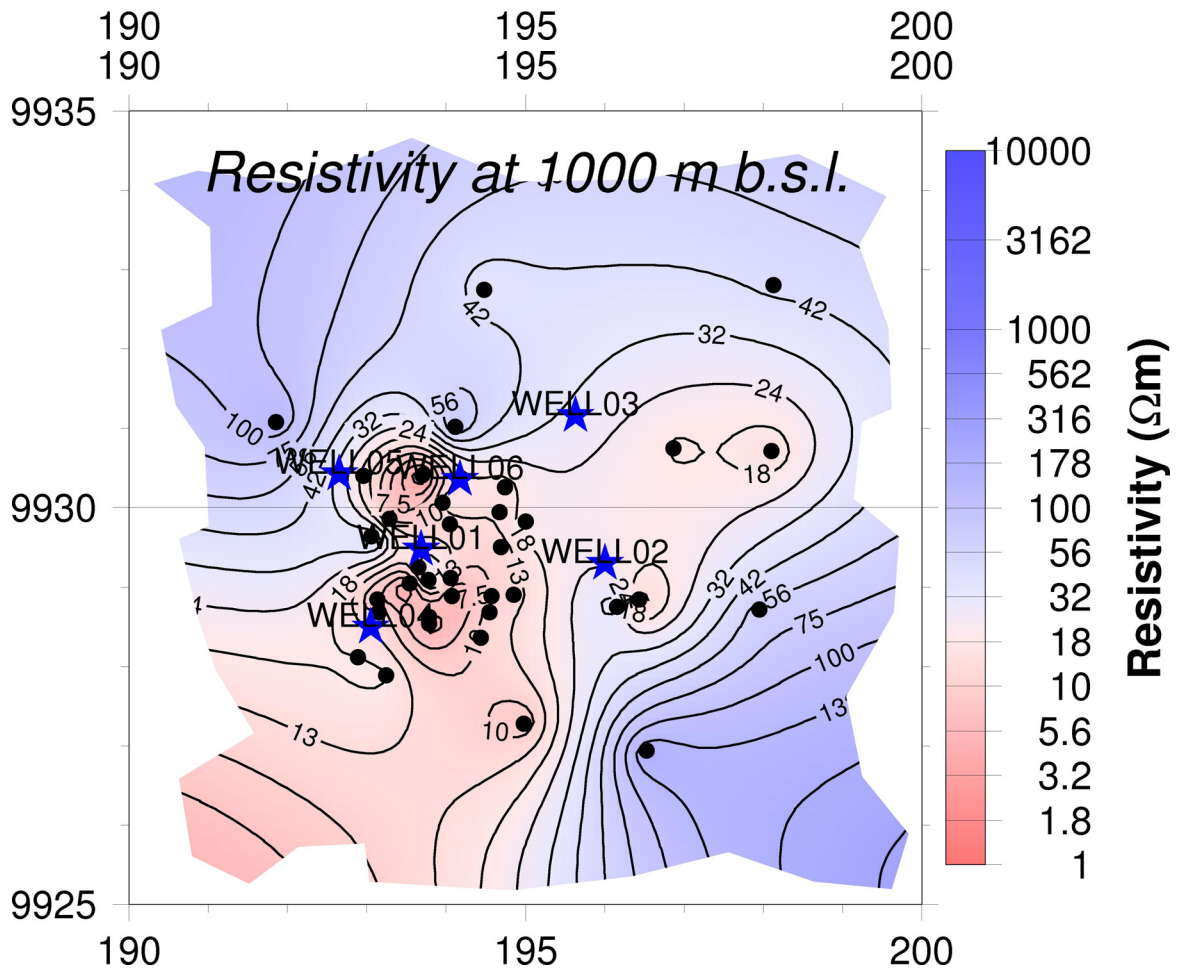
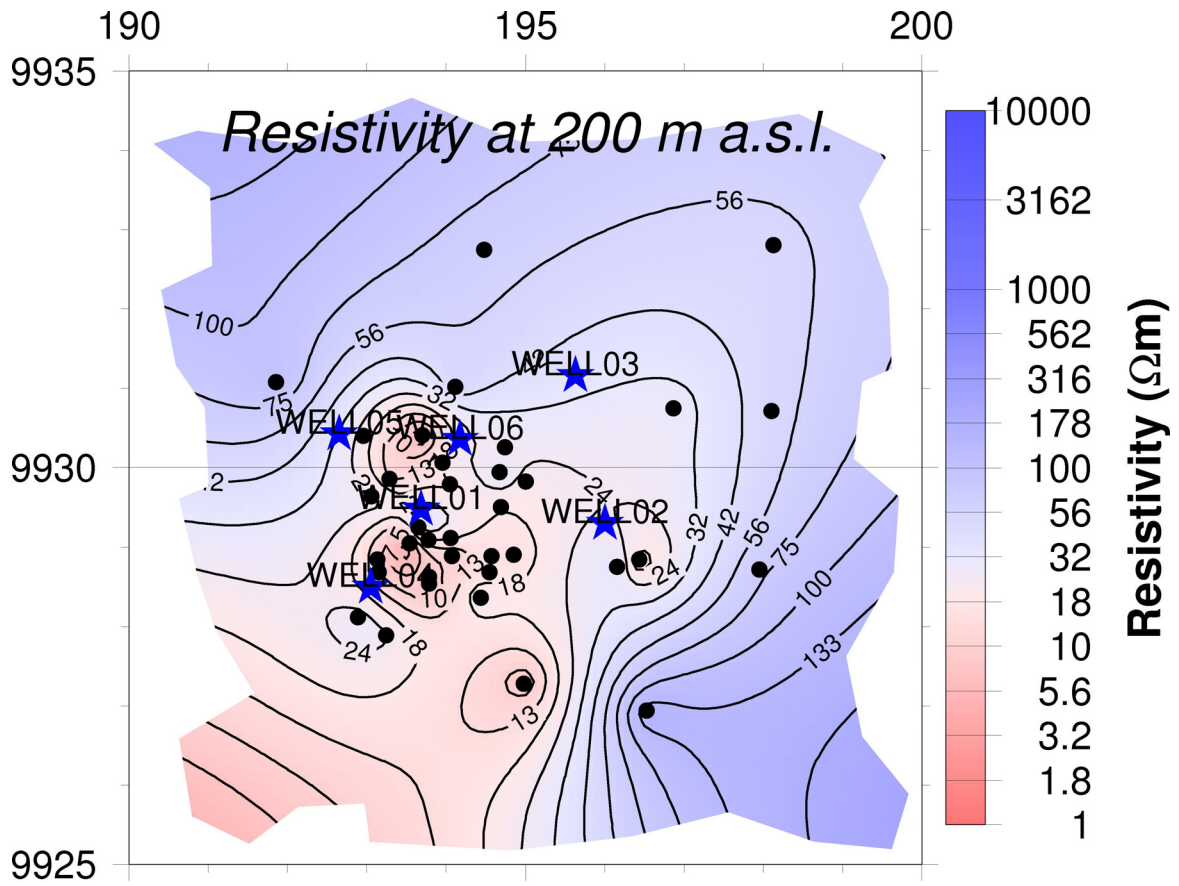
$\chi = 2.2703$

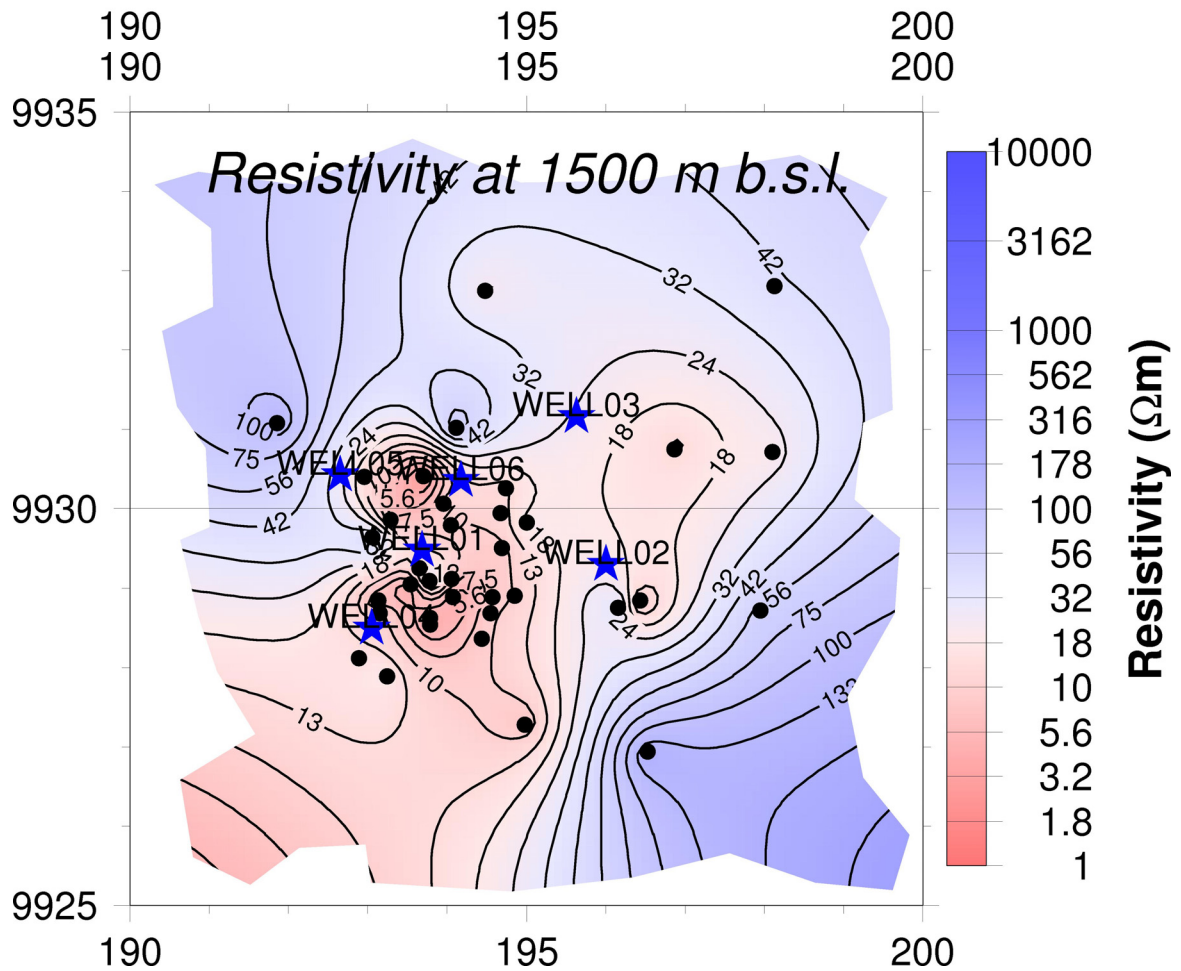
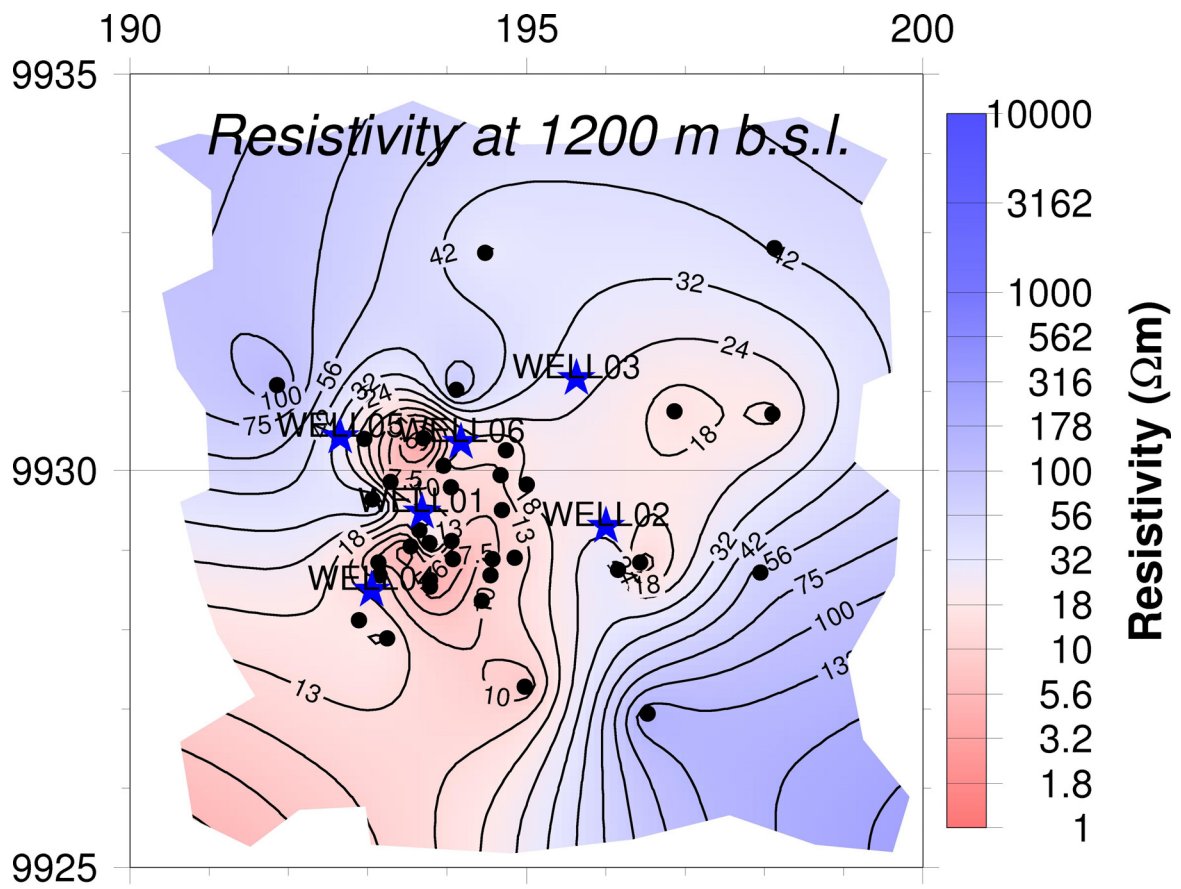


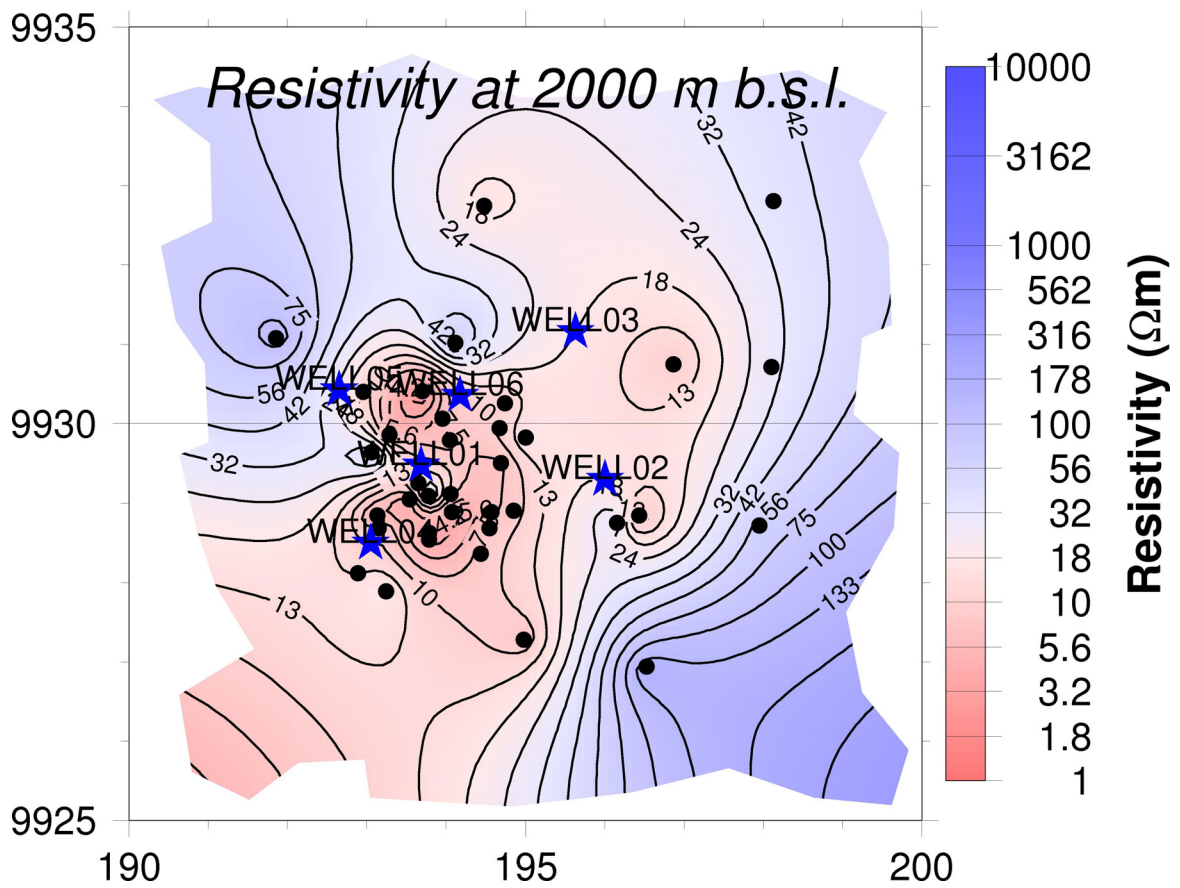
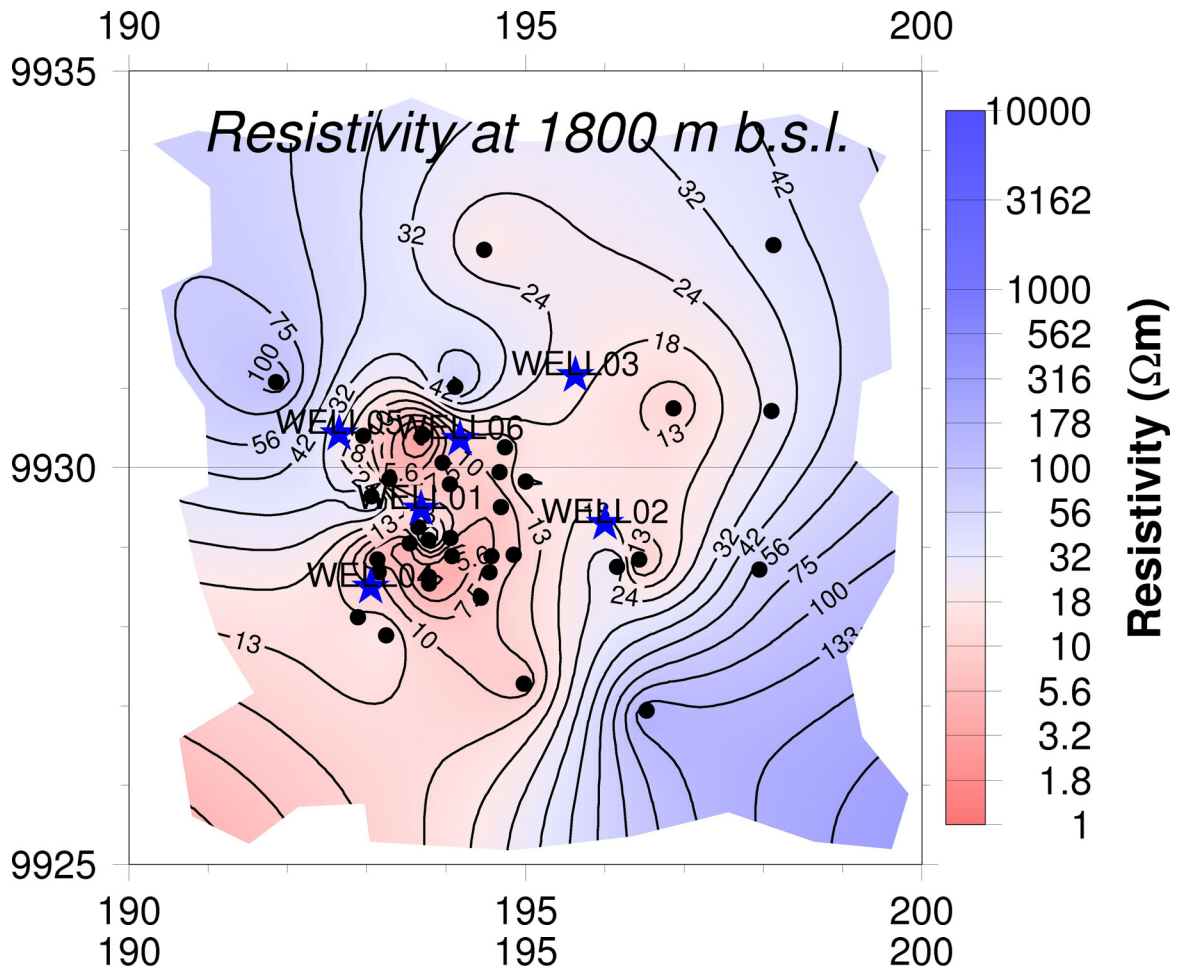
APPENDIX IV: Additional iso-resistivity maps from the Eburru prospect not given in the main report

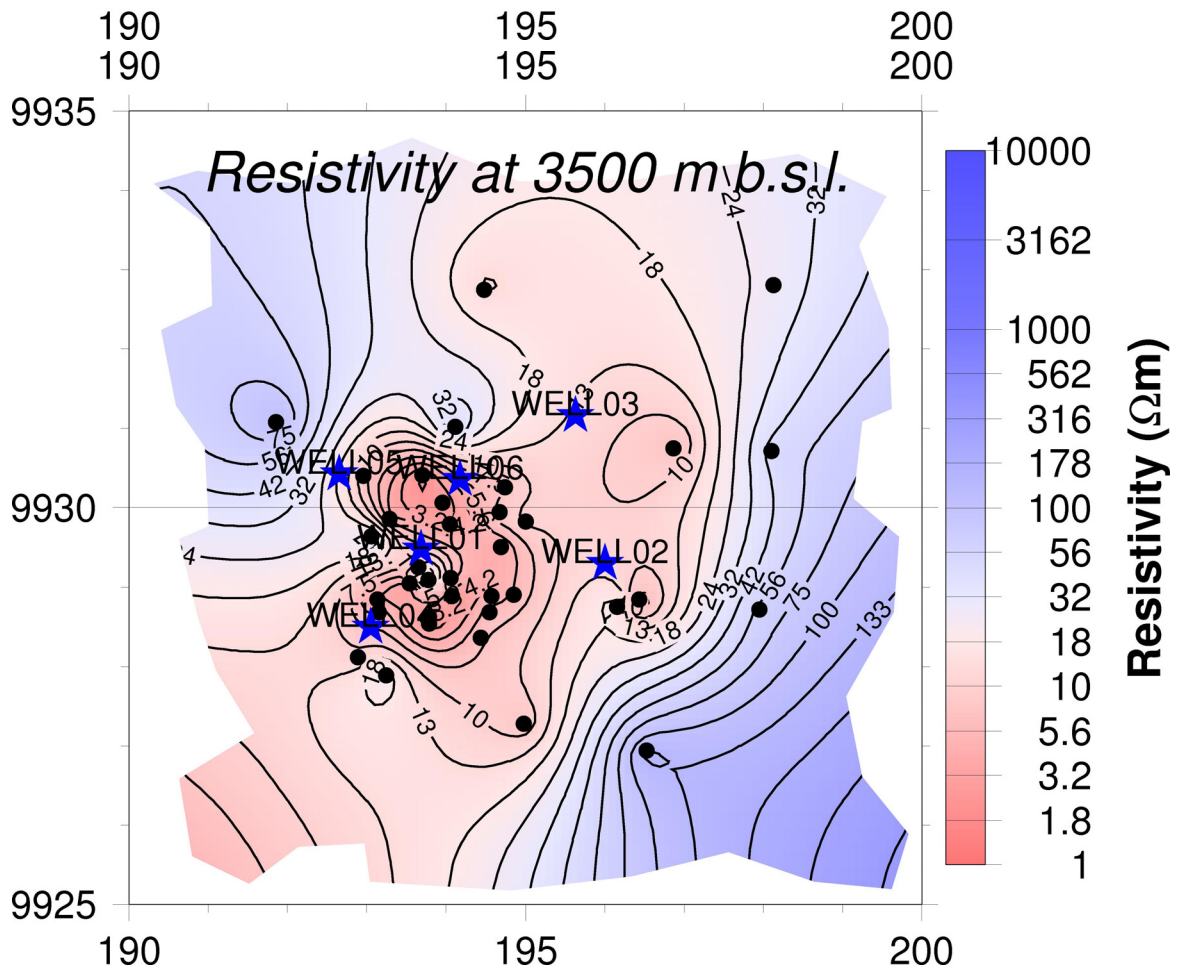
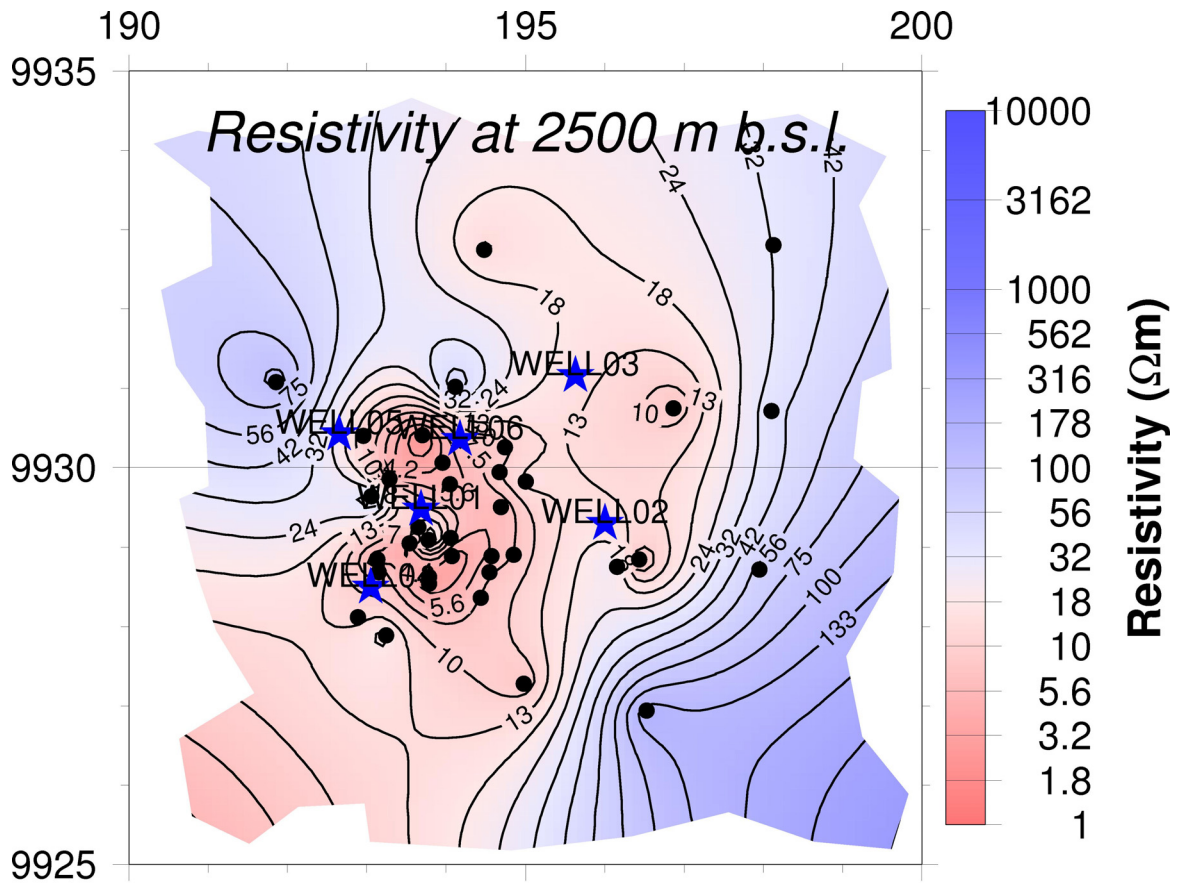


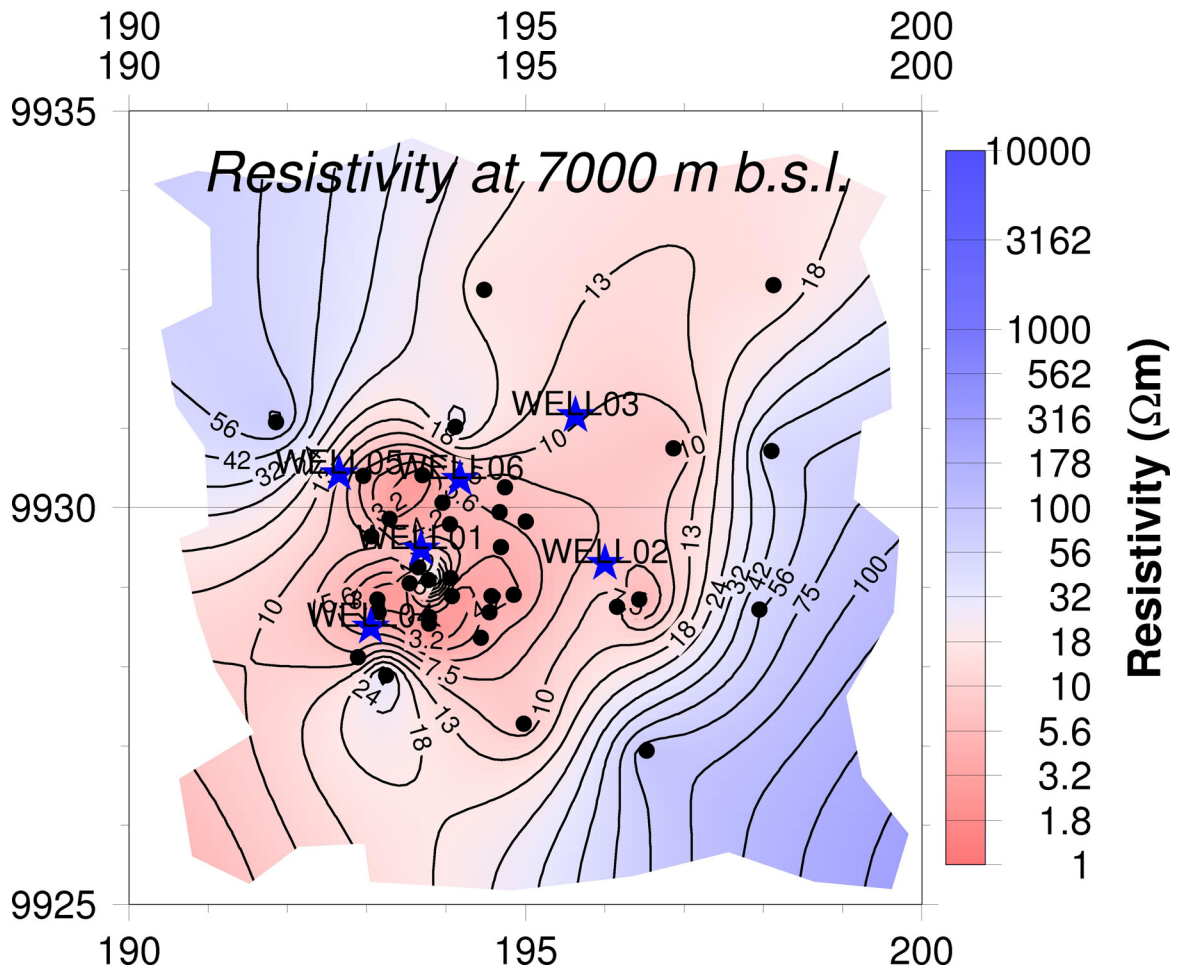
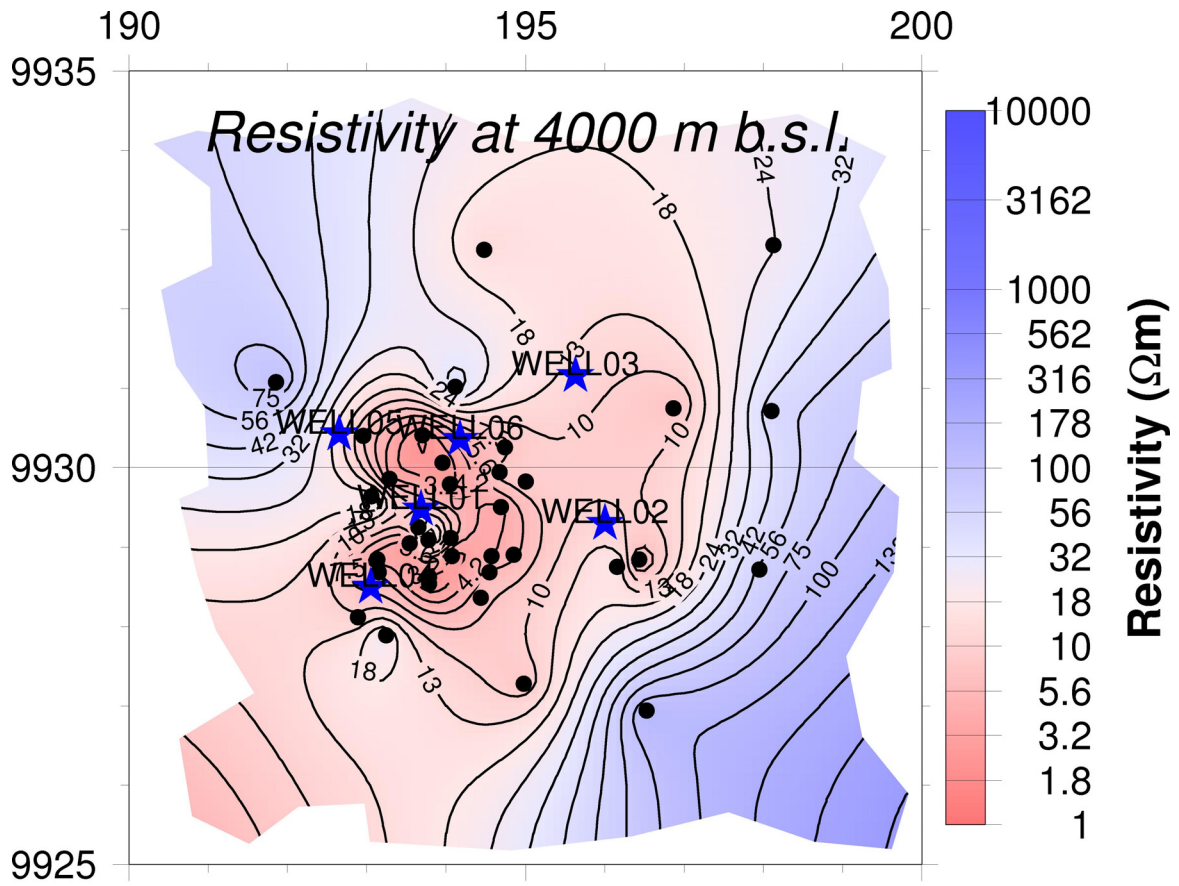


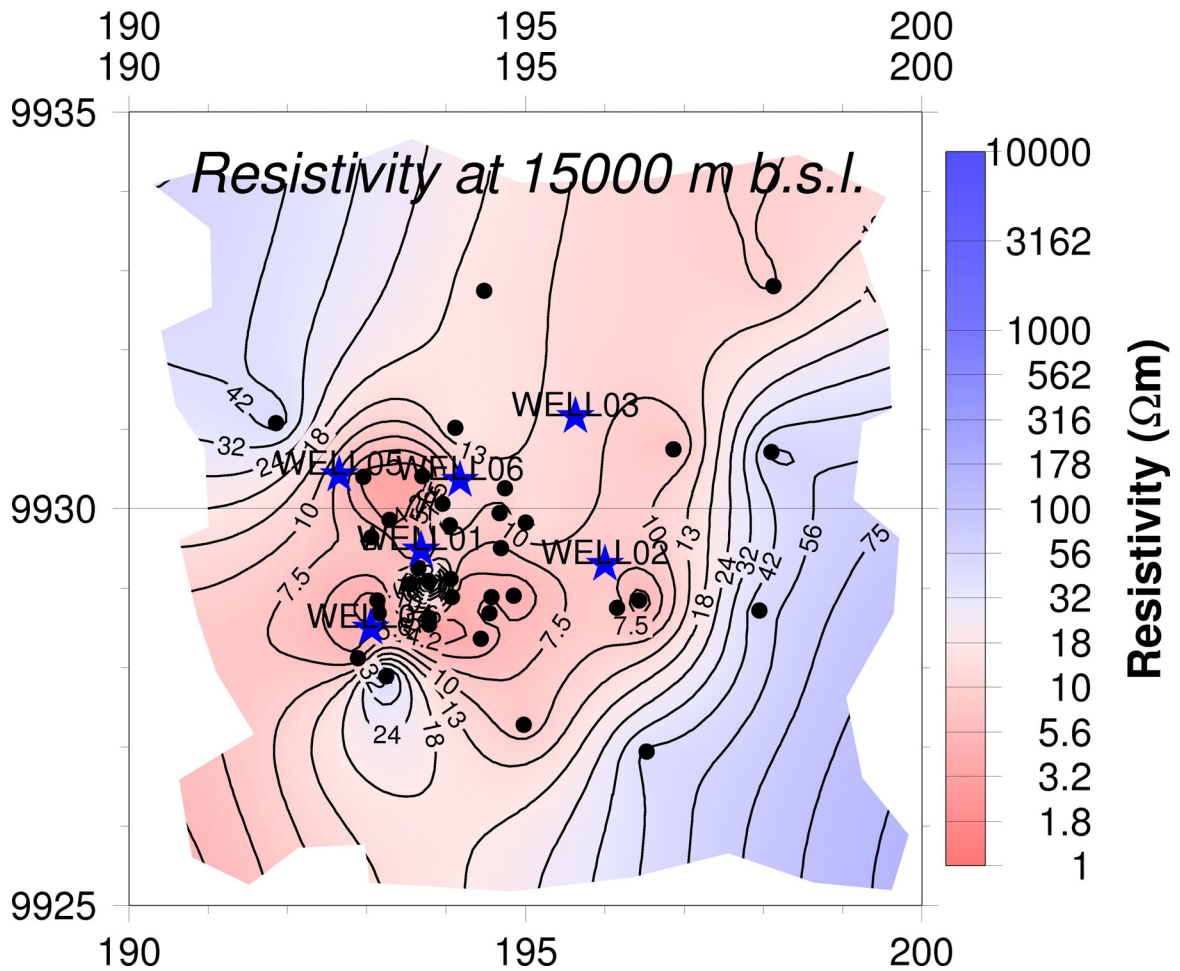
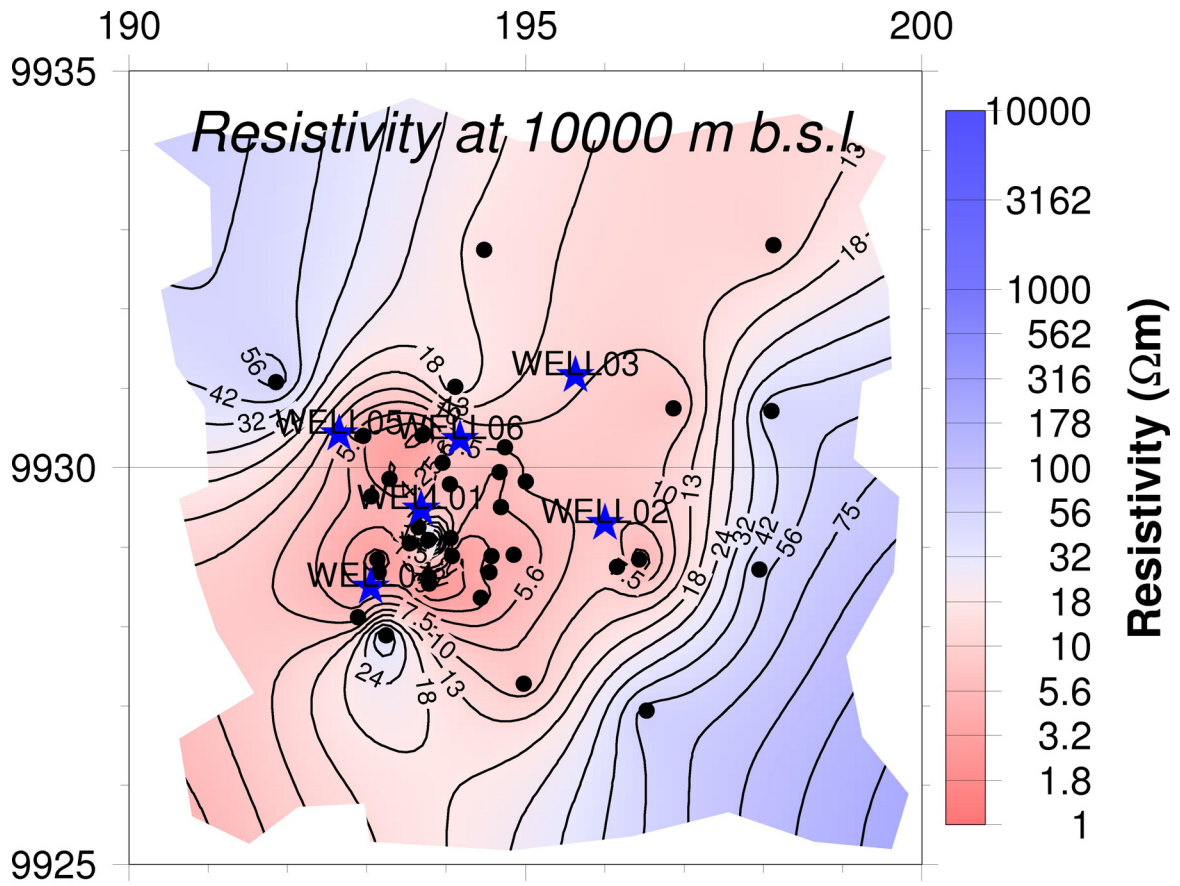


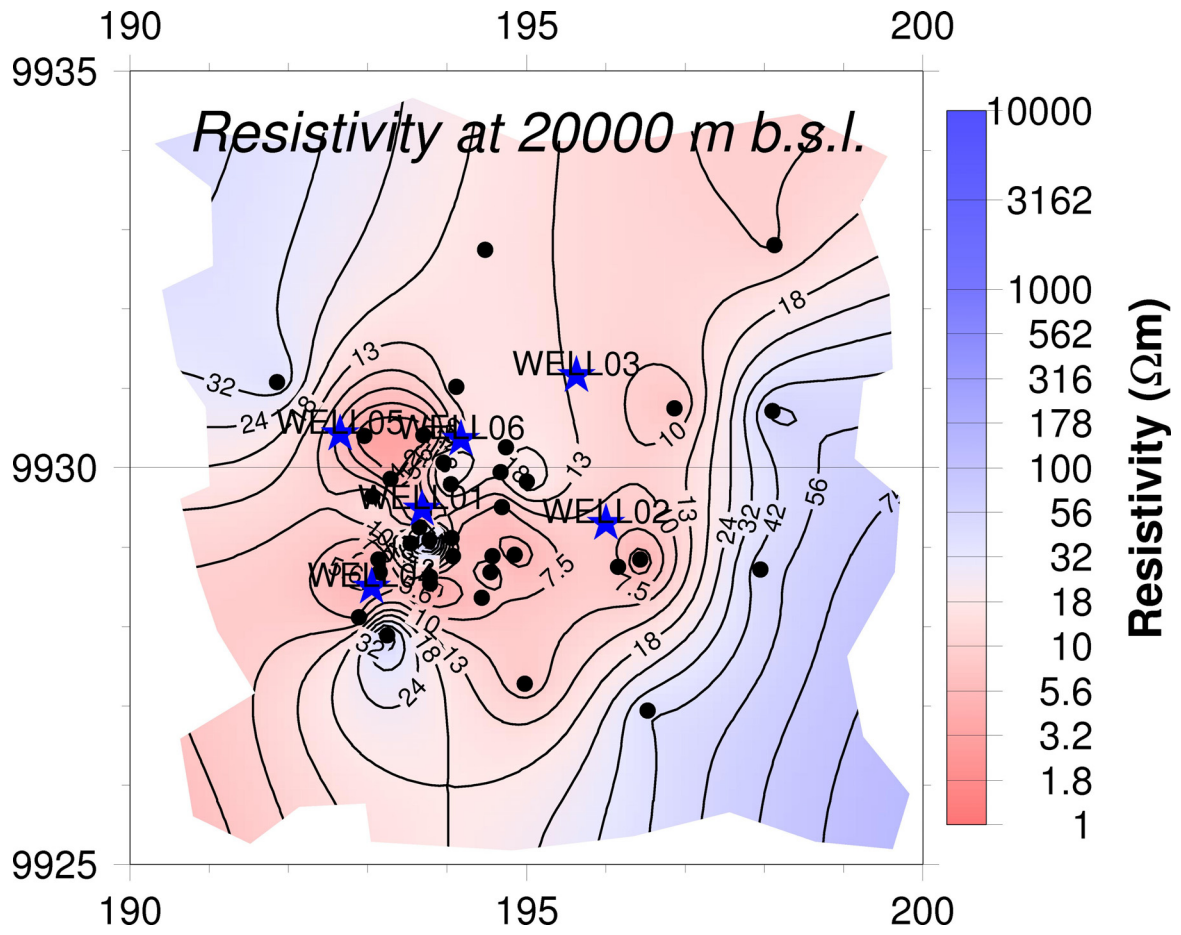




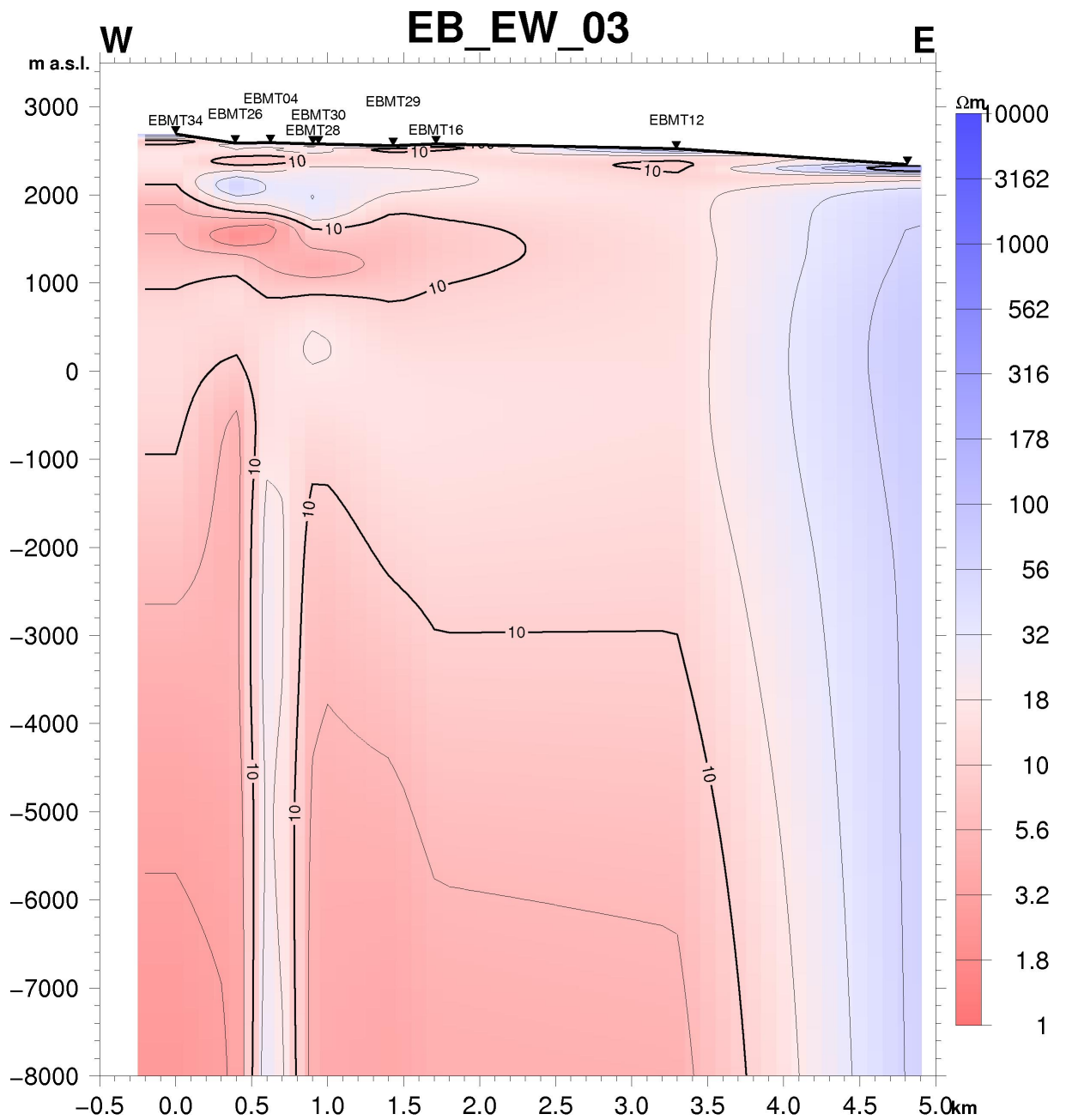








APPENDIX V: An additional resistivity cross-section from the Eburru prospect not given in the main report



APPENDIX VI: Gravity data from the Theistareykir area

FILE WITH INSTRUMENT TABLE:

FILE WITH BASE STATIONS: gravos.grb

FILE WITH STATION COORDINATES:

Theistareykir 2011				Field trip: 1		
Latitude	Longitude	Height	Name	Gravity	Residue	
65.88470	-16.96363	300.00	7441*	982291.749	-0.004	3
65.88398	-16.93305	363.00	TR12	982287.847	0.000	1
65.88470	-16.96363	300.00	7441*	982291.749	0.007	0
65.86978	-16.98710	400.00	TH18	982293.389	-0.002	2
65.85449	-16.99119	342.00	TR15	982291.288	0.000	1
65.86978	-16.98710	400.00	TH18	982293.389	0.002	0
65.88470	-16.96363	300.00	7441*	982291.749	-0.003	0
Drift: -0.00019 mGal/h				Max.Residue: 0.007 mGal		

Theistareykir 2011				Field trip: 2		
Latitude	Longitude	Height	Name	Gravity	Residue	
65.88398	-16.93305	363.00	TR12*	982287.842	-0.002	2
65.87443	-16.92469	485.00	TR24	982260.359	0.005	2
65.87420	-16.89934	500.00	BOND	982254.587	0.000	1
65.87443	-16.92469	485.00	TR24	982260.359	-0.005	0
65.88398	-16.93305	363.00	TR12*	982287.842	0.002	0
Drift: 0.00015 mGal/h				Max.Residue: 0.005 mGal		

Theistareykir 2011				Field trip: 3		
Latitude	Longitude	Height	Name	Gravity	Residue	
65.87389	-16.86116	527.00	TR25	982248.630	-0.007	3
65.87420	-16.89934	500.00	BOND*	982254.582	0.000	1
65.87389	-16.86116	527.00	TR25	982248.630	0.009	0
65.85671	-16.86973	509.00	TR36	982253.846	0.005	2
65.84001	-16.88378	441.00	TR37	982270.970	0.000	1
65.85671	-16.86973	509.00	TR36	982253.846	-0.005	0
65.87389	-16.86116	527.00	TR25	982248.630	-0.001	0
Drift: 0.00007 mGal/h				Max.Residue: 0.009 mGal		

Theistareykir 2011 Field trip: 4

Latitude	Longitude	Height	Name	Gravity	Residue
65.84372	-16.99283	358.00	TR16	982287.700	0.004 3
65.85449	-16.99119	342.00	TR15*	982291.293	0.000 1
65.84372	-16.99283	358.00	TR16	982287.700	0.004 0
65.83592	-16.98104	389.00	TR17	982280.319	-0.015 2
65.82057	-16.96152	400.00	KVIH	982273.673	0.000 1
65.83592	-16.98104	389.00	TR17	982280.319	0.015 0
65.84372	-16.99283	358.00	TR16	982287.700	-0.008 0

Drift: -0.00029 mGal/h Max.Residue: 0.015 mGal

Theistareykir 2011 Field trip: 5

Latitude	Longitude	Height	Name	Gravity	Residue
65.84001	-16.88378	441.00	TR37	982270.961	0.002 3
65.82498	-16.91692	445.00	TR38	982269.542	-0.003 2
65.82057	-16.96152	400.00	KVIH*	982273.682	0.000 1
65.82498	-16.91692	445.00	TR38	982269.542	0.003 0
65.84001	-16.88378	441.00	TR37	982270.961	-0.003 0
65.83698	-16.83778	458.00	TR39	982264.509	0.003 2
65.83573	-16.79123	437.00	TR29	982269.803	0.000 1
65.83698	-16.83778	458.00	TR39	982264.509	-0.003 0
65.84001	-16.88378	441.00	TR37	982270.961	0.001 0

Drift: -0.00014 mGal/h Max.Residue: 0.003 mGal

Theistareykir 2011 Field trip: 6

Latitude	Longitude	Height	Name	Gravity	Residue
65.86835	-16.78432	481.00	TR27	982260.344	-0.006 3
65.87239	-16.82307	524.00	TR26	982248.541	-0.002 2
65.87389	-16.86116	527.00	TR25*	982248.625	0.000 1
65.87239	-16.82307	524.00	TR26	982248.541	0.002 0
65.86835	-16.78432	481.00	TR27	982260.344	0.012 0
65.85266	-16.78406	460.00	TR28	982266.787	0.003 2
65.83573	-16.79123	437.00	TR29	982269.822	0.000 1
65.85266	-16.78406	460.00	TR28	982266.787	-0.003 0
65.86835	-16.78432	481.00	TR27	982260.344	-0.006 0

Drift: 0.00007 mGal/h Max.Residue: 0.012 mGal