UNITED NATIONS UNIVERSITY
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Geothermal Training Programme
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APPENDICES TO THE REPORT:

TEM AND MT RESISTIVITY SURVEYING: DATA ACQUISITION, PROCESSING AND 1D INVERSION WITH AN EXAMPLE FROM HÁGÖNGUR GEOTHERMAL FIELD, MID-ICELAND

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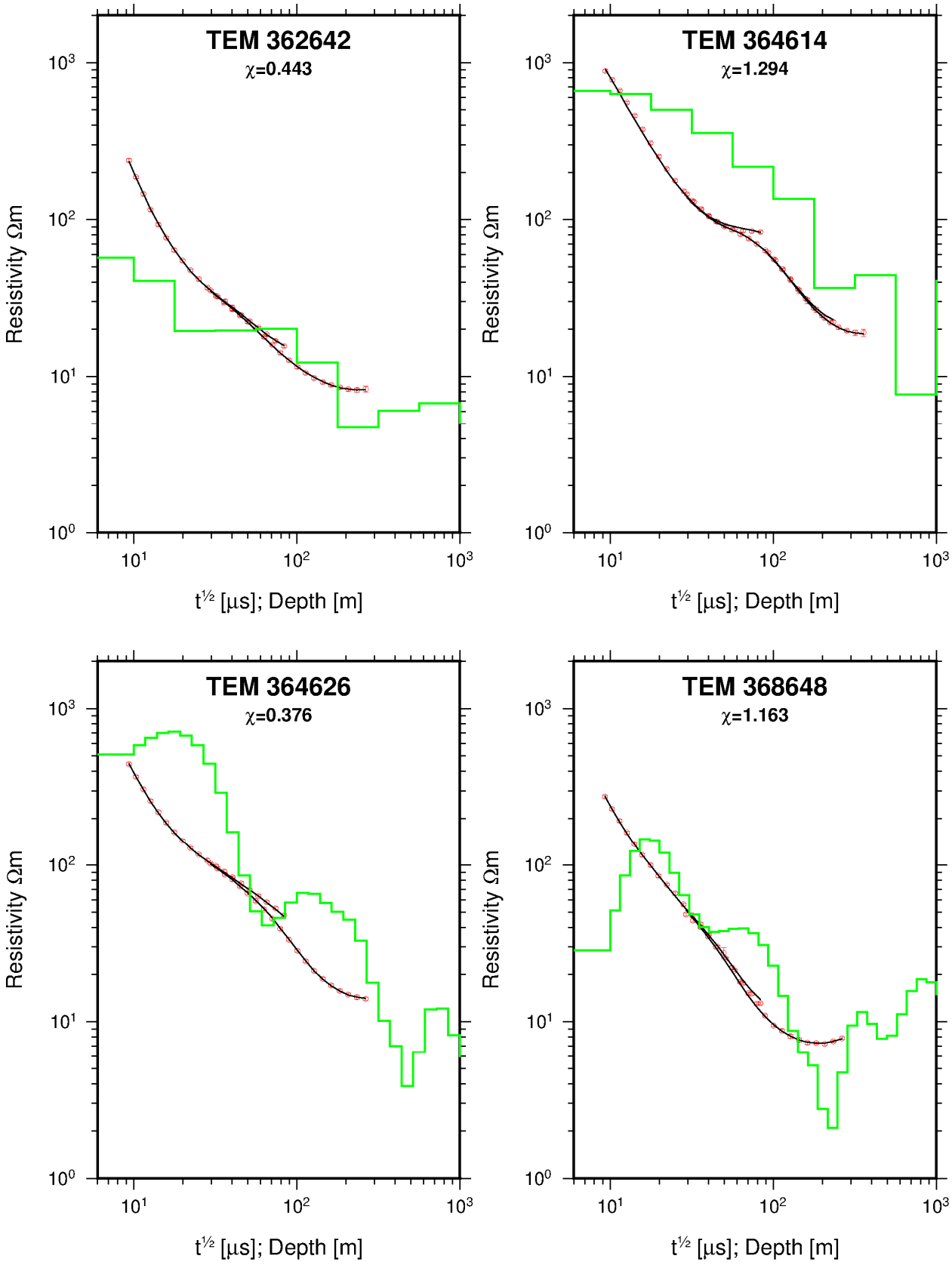
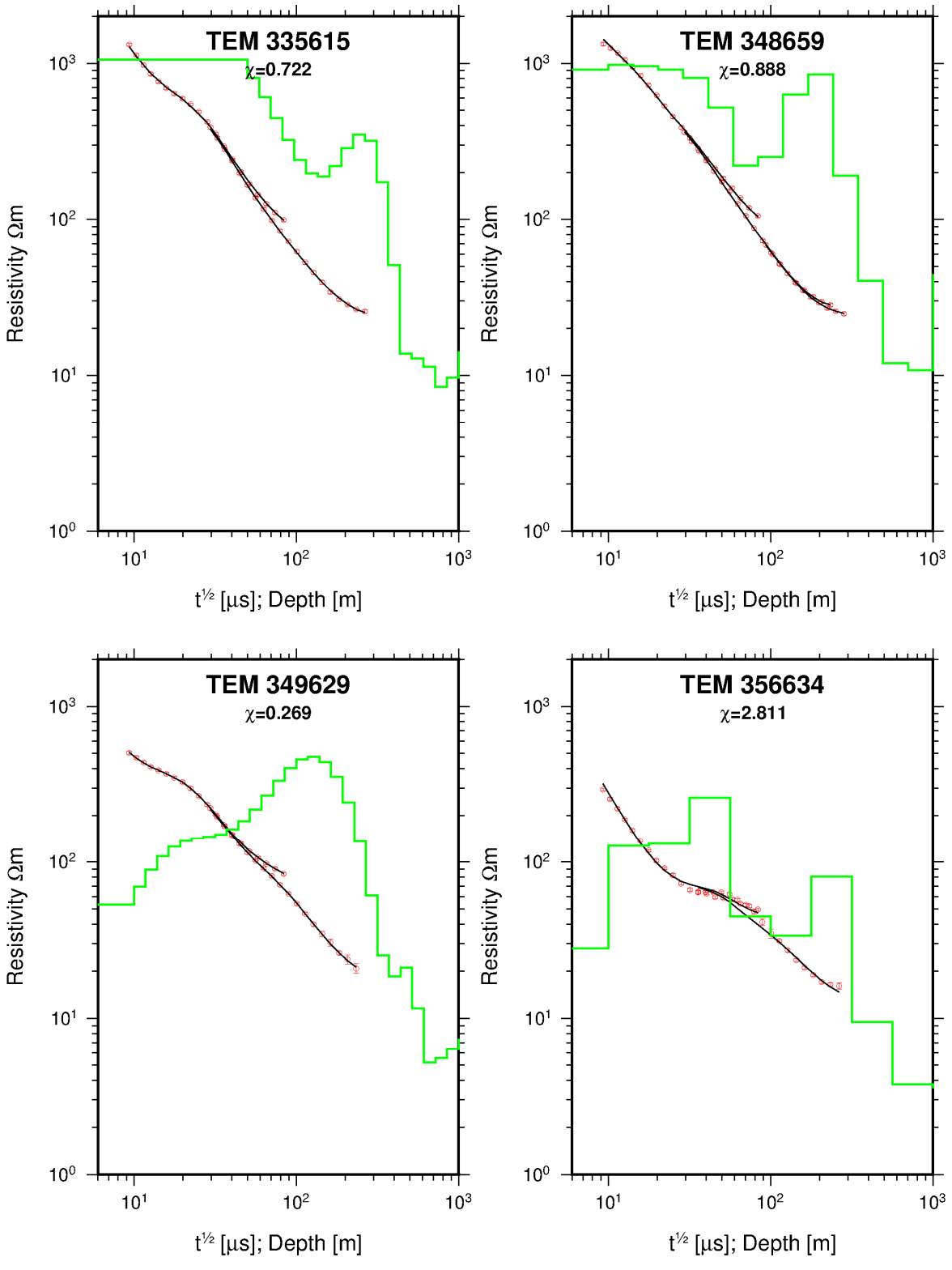
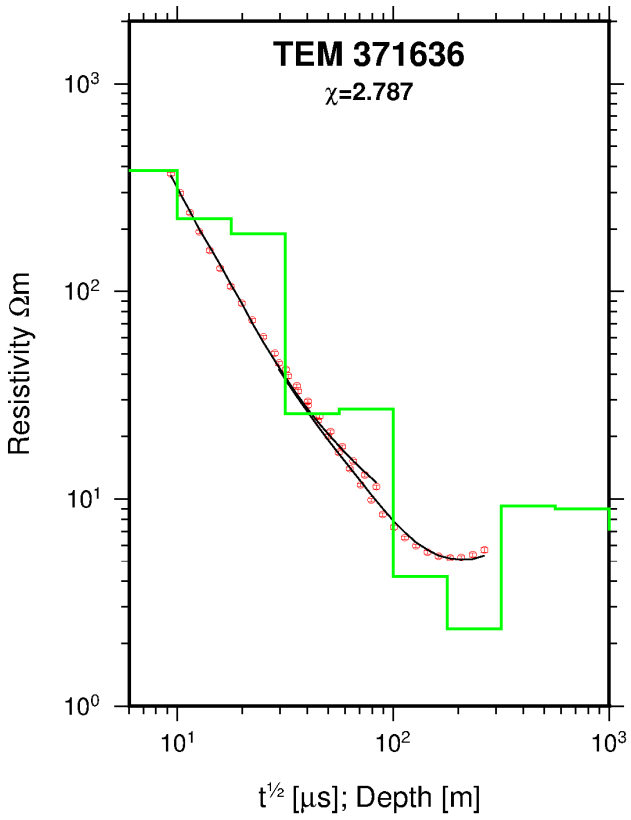
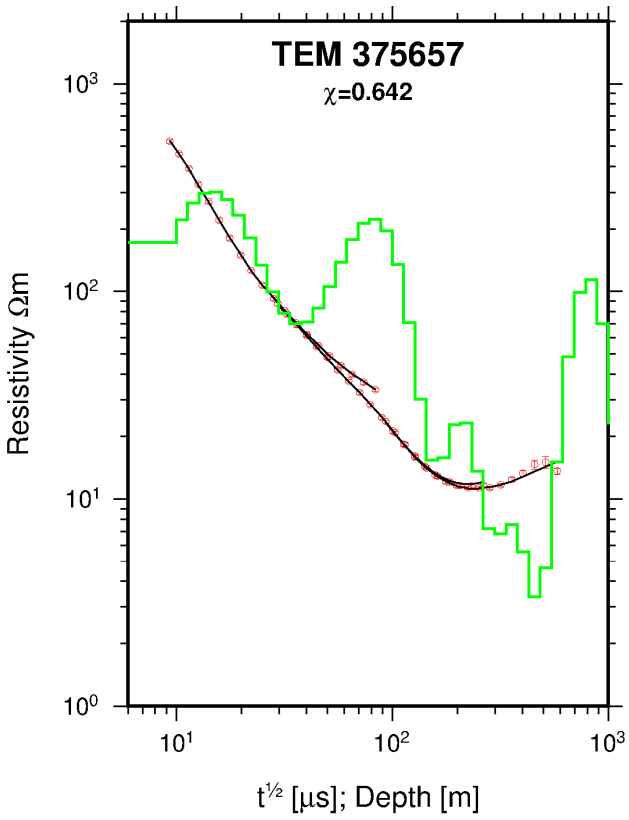
These are appendices to the report “TEM and MT resistivity surveying: Data acquisition, processing and 1D inversion with an example from Hágöngur geothermal field, Mid-Iceland” by Ali Soumail Abdou at the UNU Geothermal Training Programme in 2015. Appendix I shows the TEM data and associated 1D models for the TEM soundings in Hágöngur. Appendix II shows all the processed data for the MT soundings in Hágöngur. Appendix III contains the 1D models of the joint inversion for the all the TEM and MT data in Hágöngur.

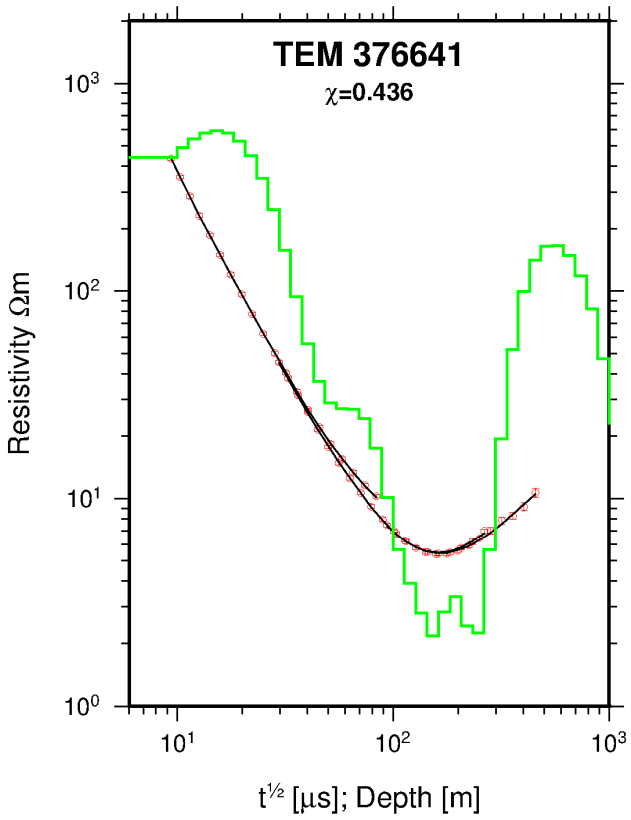
APPENDIX I: TEM data and the associated 1D models for the TEM soundings around Hágöngur geothermal field.

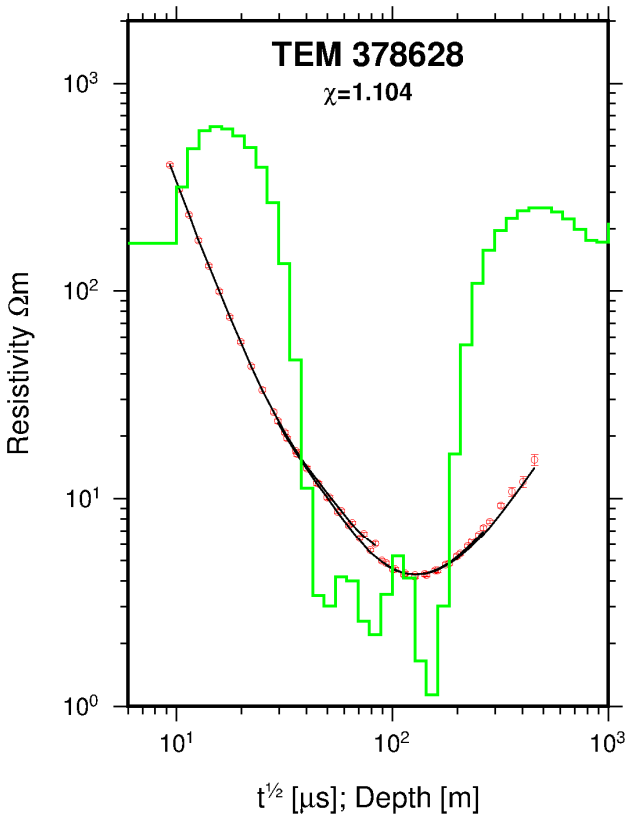


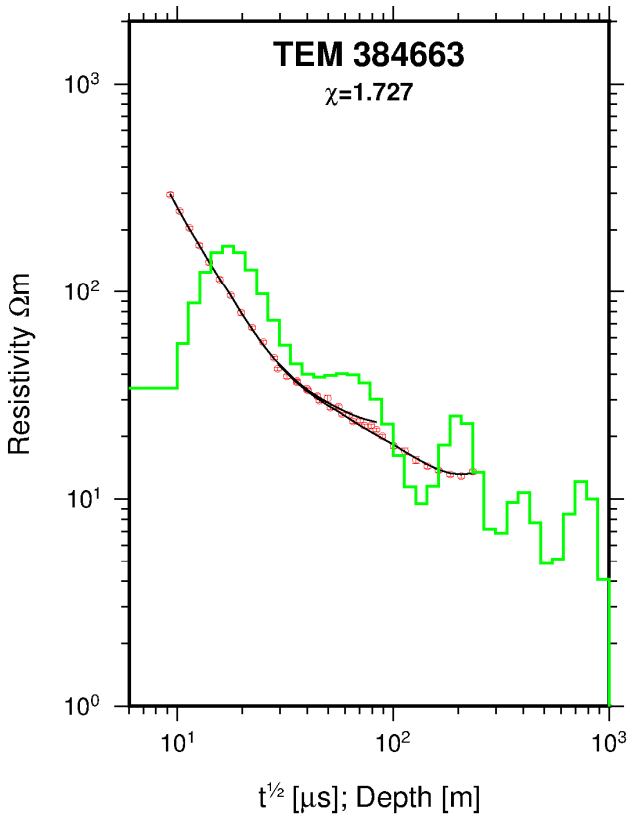

TEM 335615
χ=0.722
TEM 348659
χ=0.888
TEM 349629
χ=0.269
TEM 356634
χ=2.811
Resistivity Ωm
t½ [µs]; Depth [m]

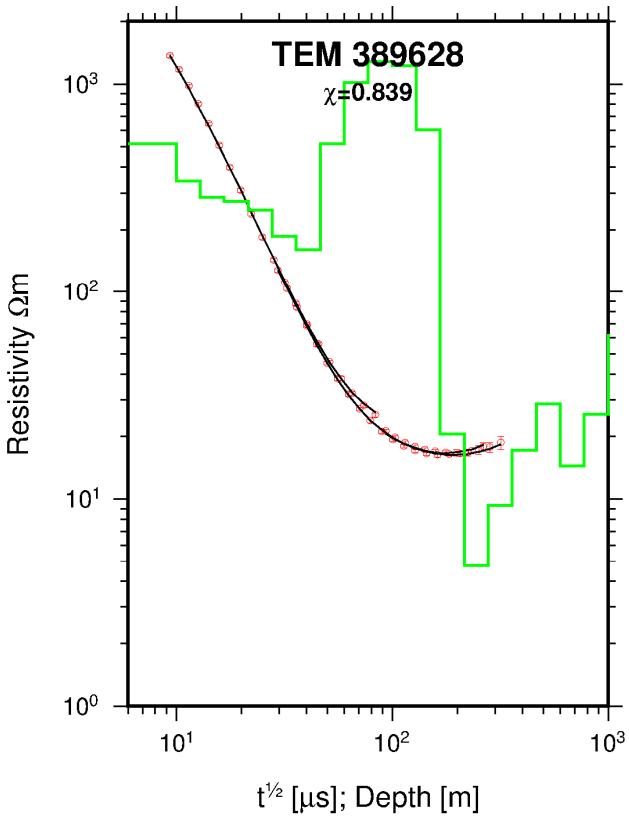

TEM 371636
χ=2.787
Resistivity Ωm
t½ [µs]; Depth [m]

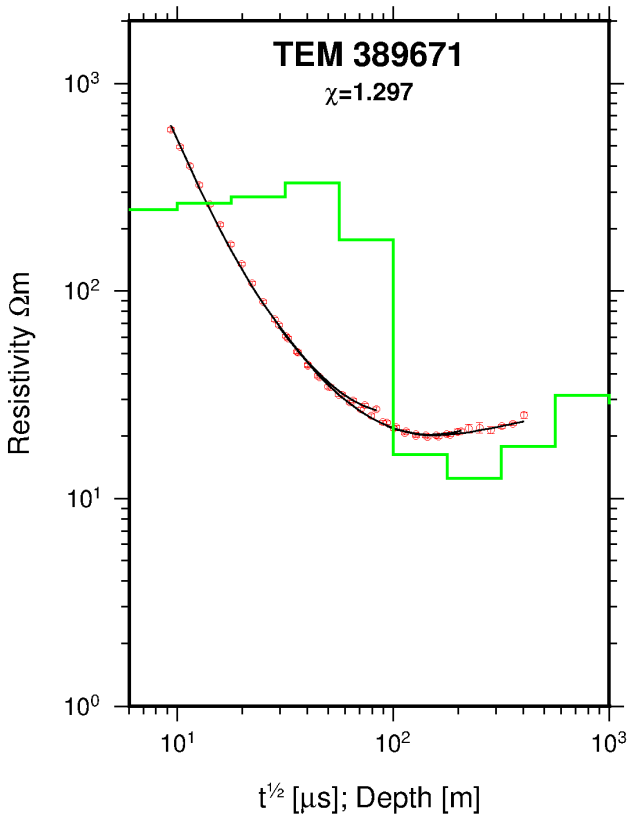

TEM 375657
χ=0.642
Resistivity Ωm
t½ [µs]; Depth [m]

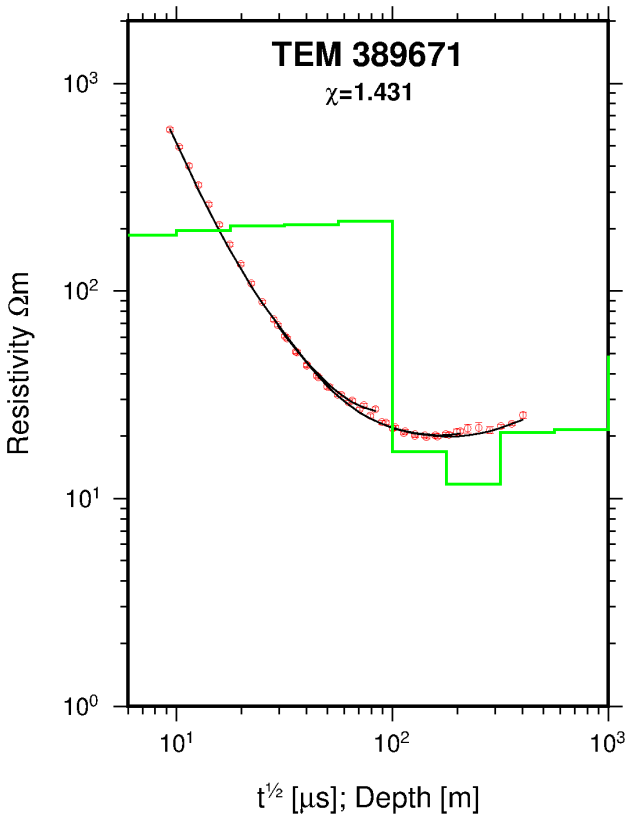

TEM 376641
χ=0.436
Resistivity Ωm
t½ [µs]; Depth [m]

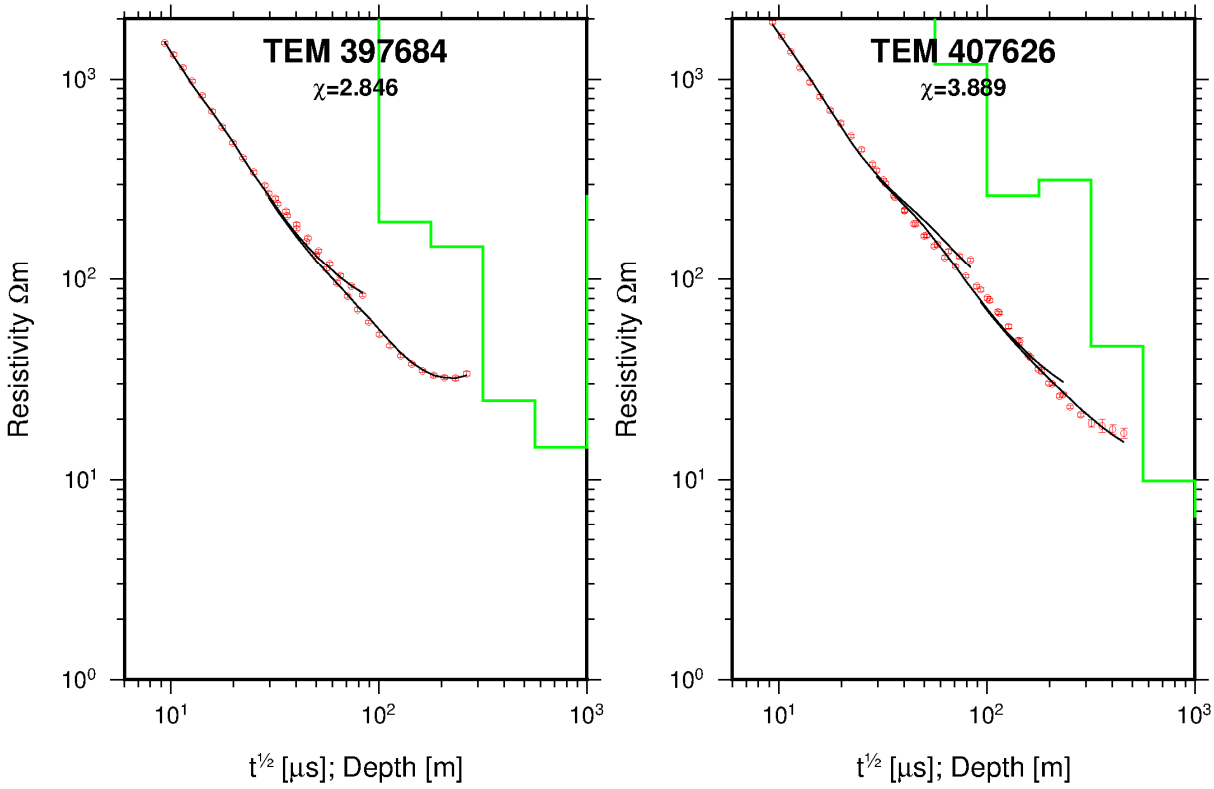

TEM 378628
χ=1.104
Resistivity Ωm
t½ [µs]; Depth [m]


TEM 384663
χ=1.727
Resistivity Ωm
t½ [µs]; Depth [m]

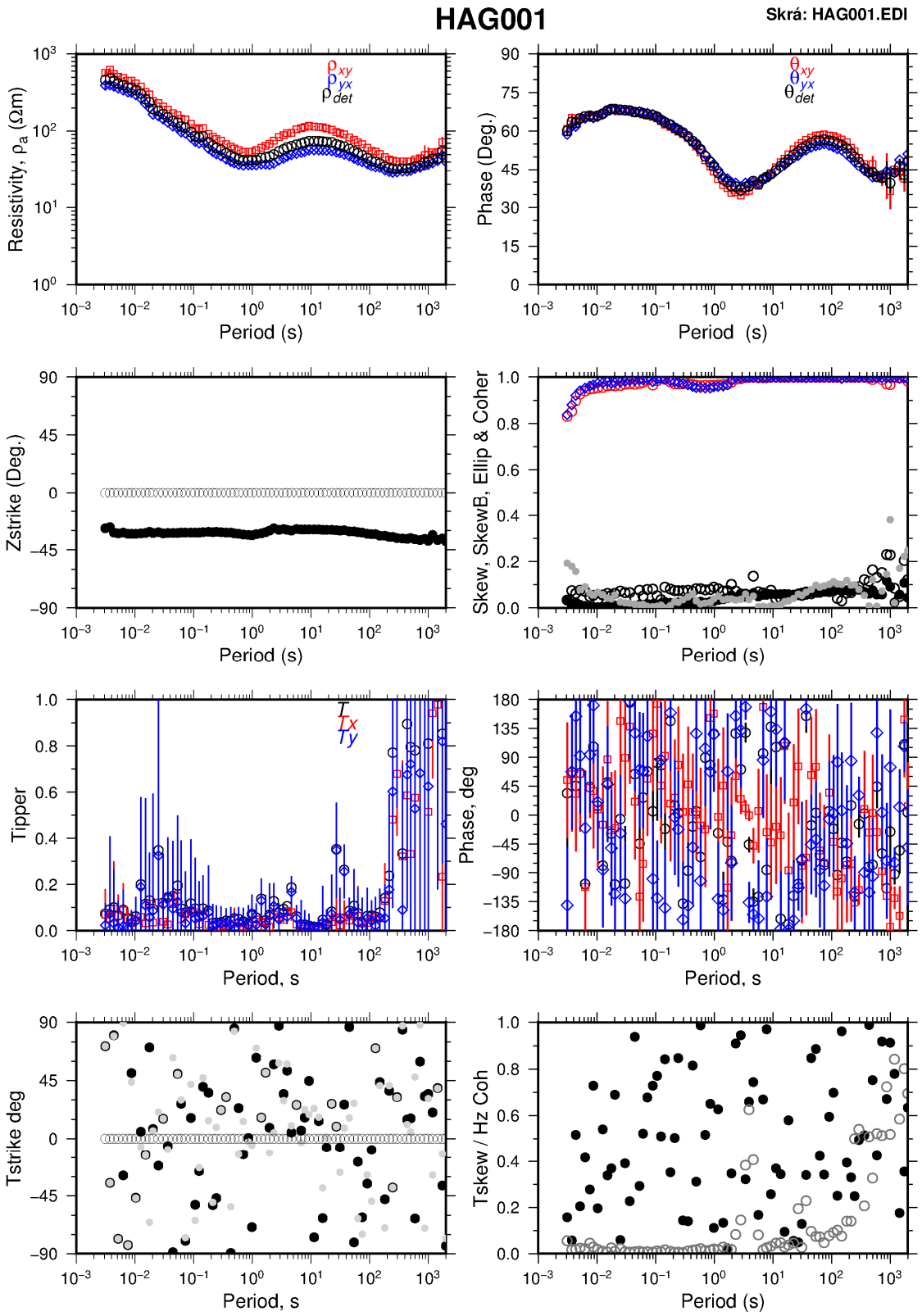

TEM 389628
χ=0.839
Resistivity Ωm
t½ [µs]; Depth [m]

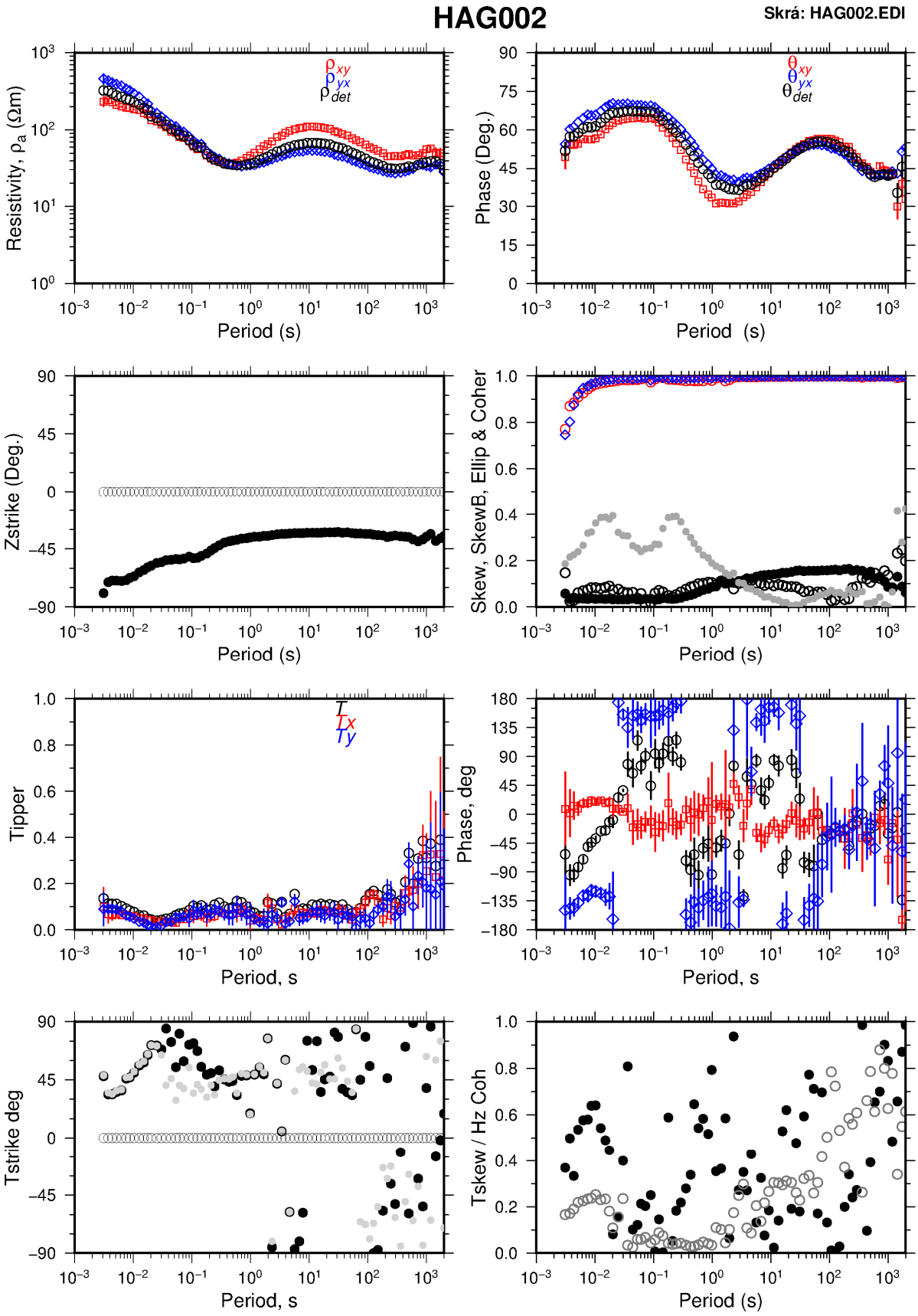

TEM 389671
χ=1.297
Resistivity Ωm
t½ [µs]; Depth [m]

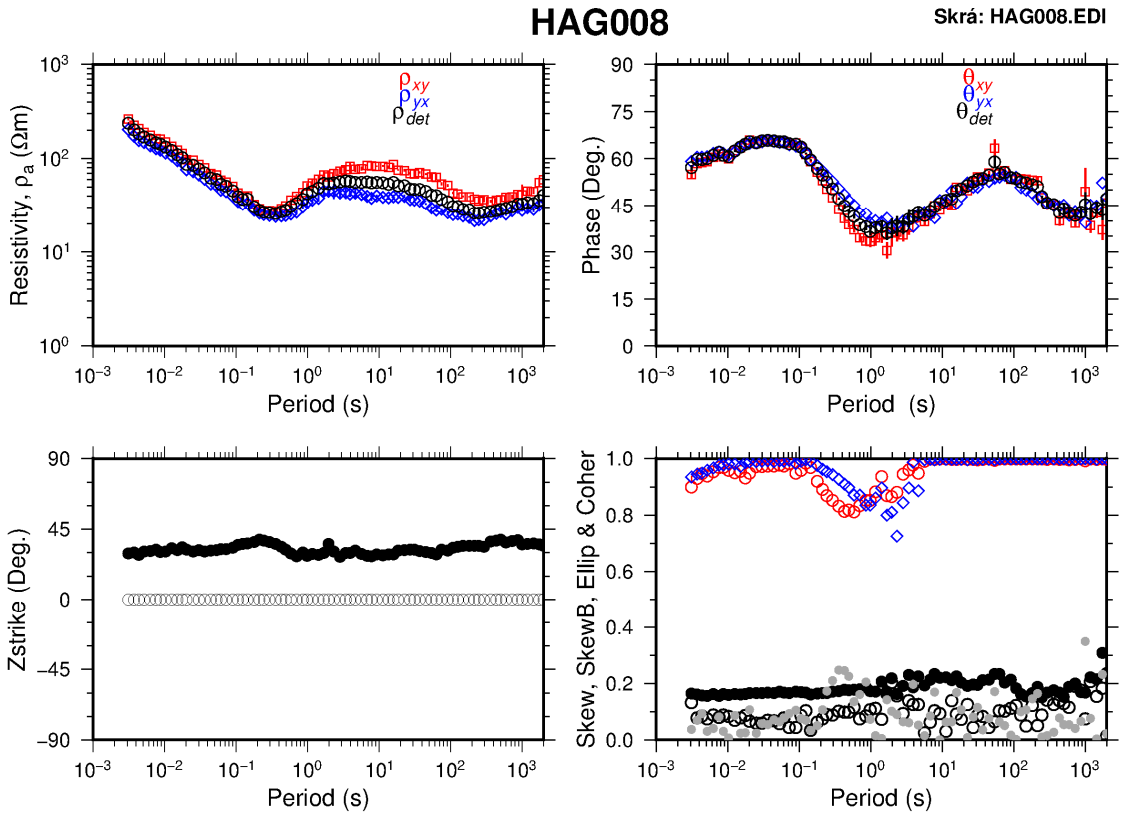

TEM 389671
χ=1.431
Resistivity Ωm
t½ [µs]; Depth [m]

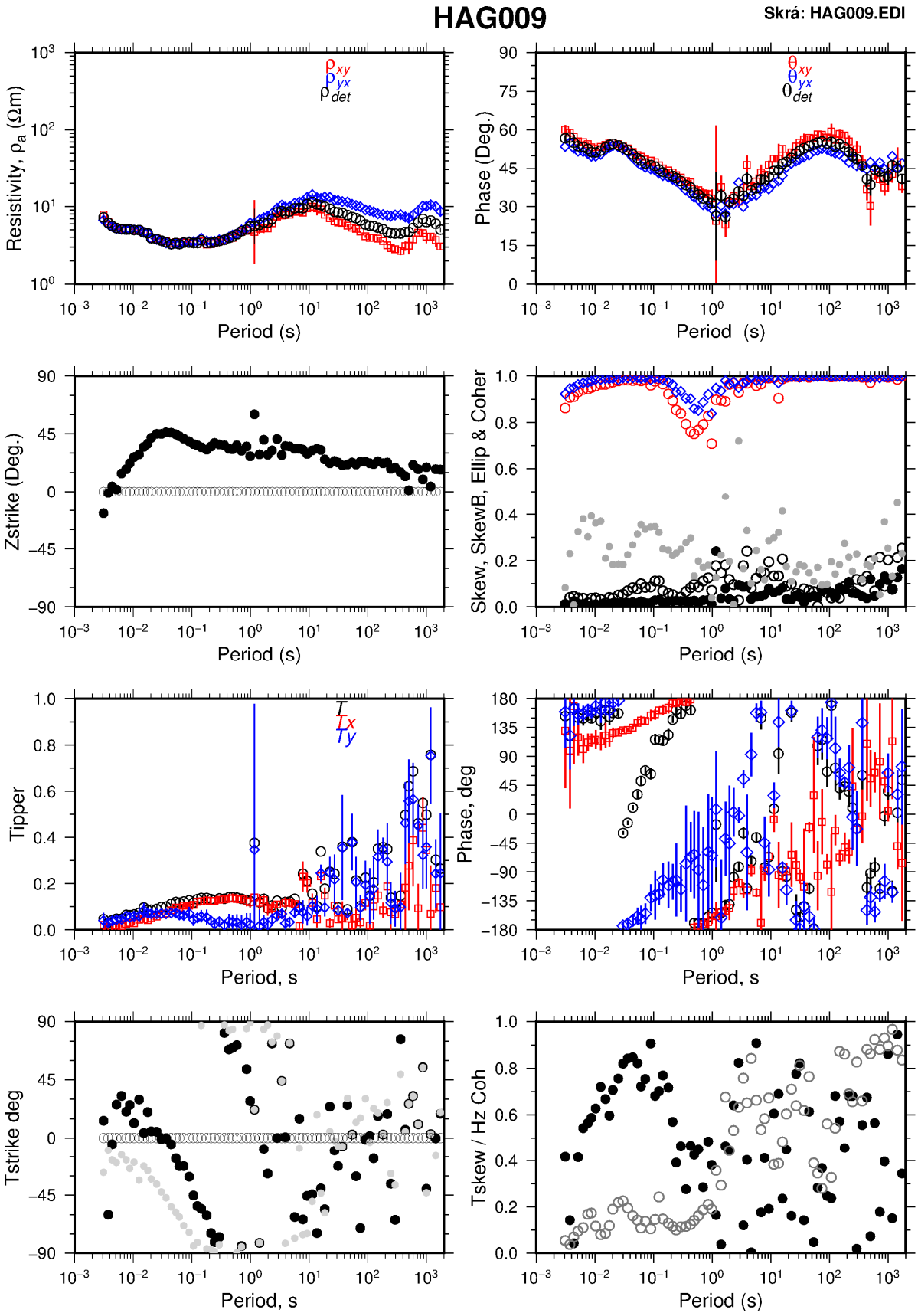

TEM 397684
χ=2.846
Resistivity Ωm
t½ [µs]; Depth [m]
TEM 407626
χ=3.889
Resistivity Ωm
t½ [µs]; Depth [m]

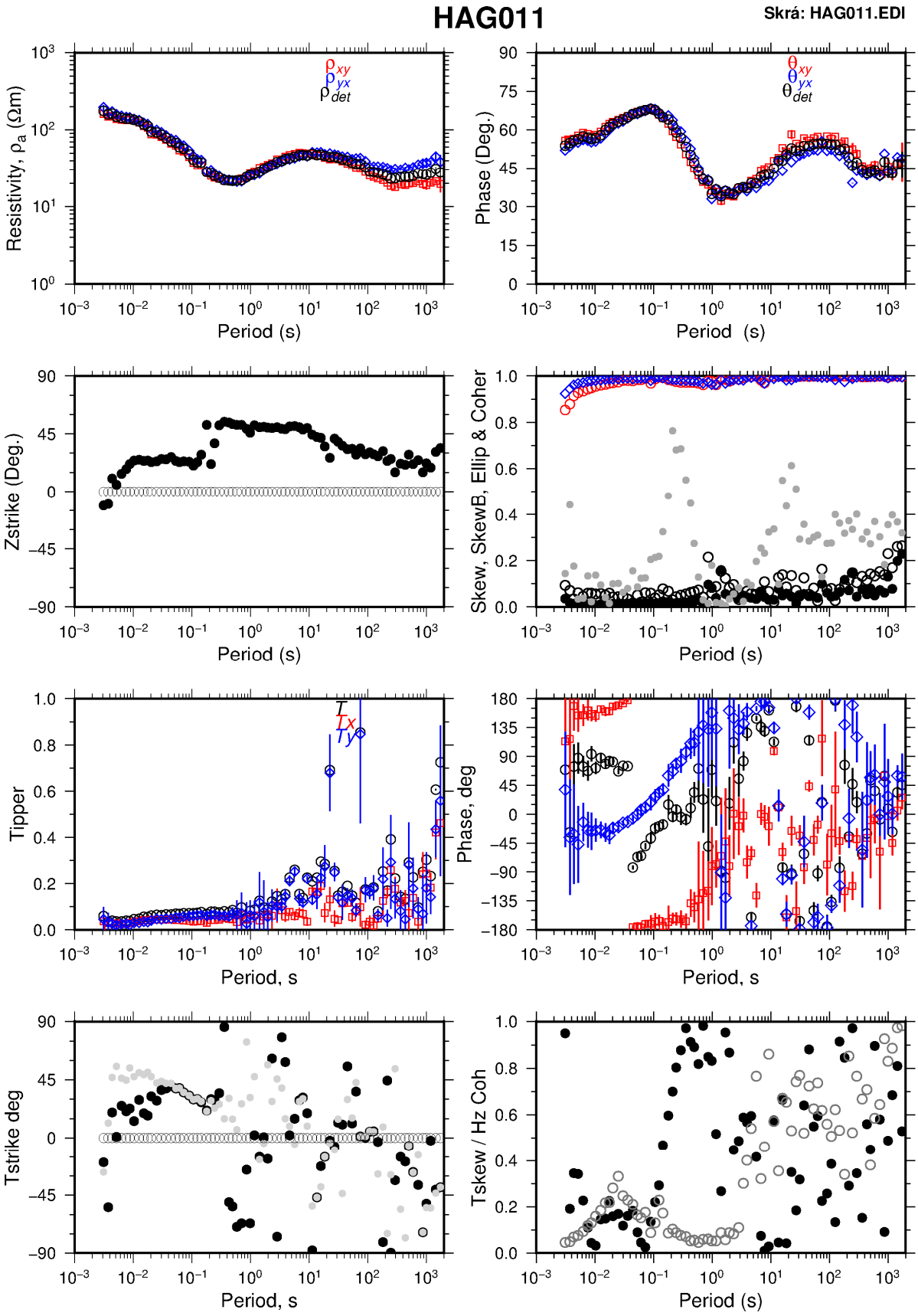
APPENDIX II: Processed data for all the MT soundings. Some of them have not magnetic z component (H_z).

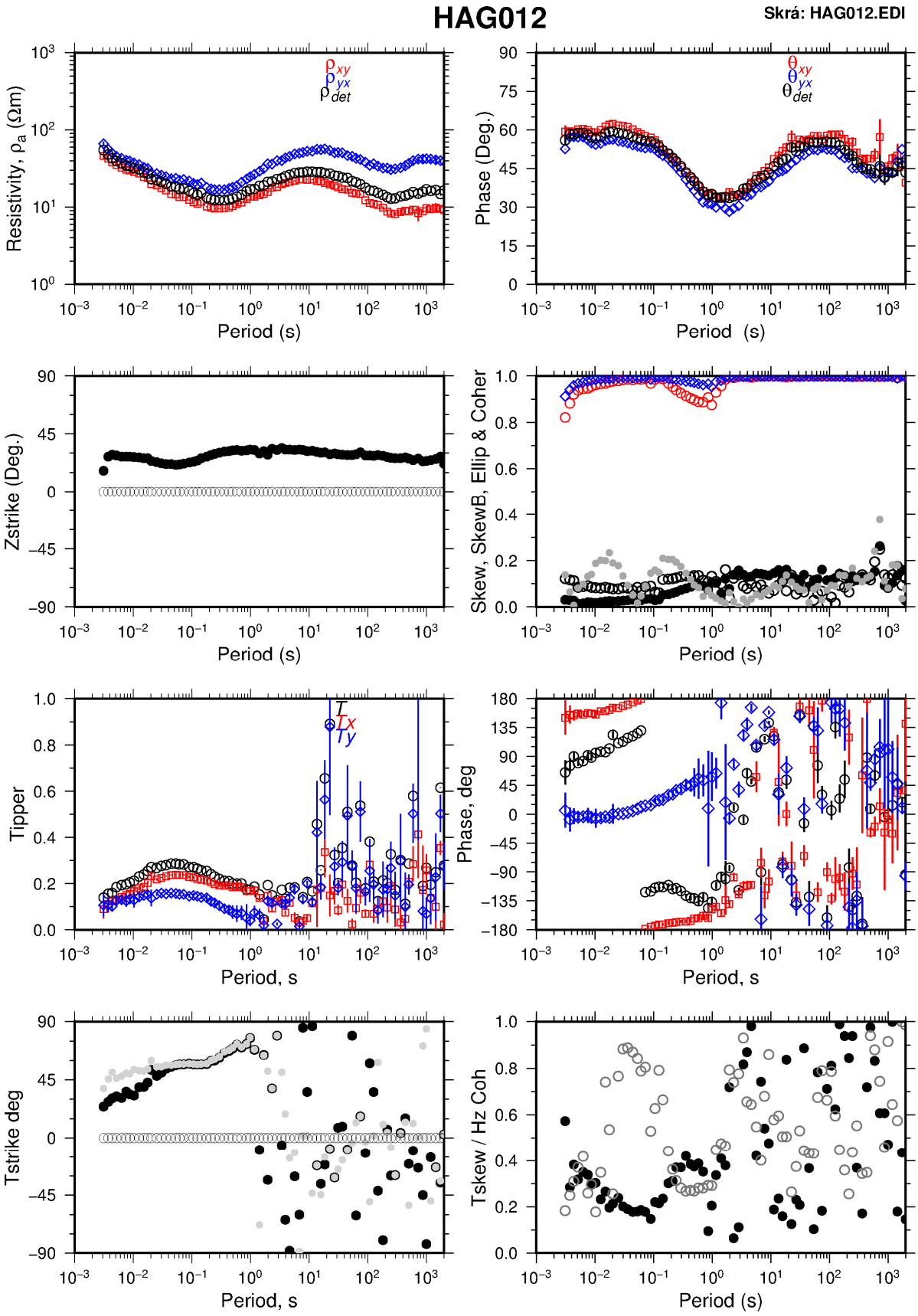


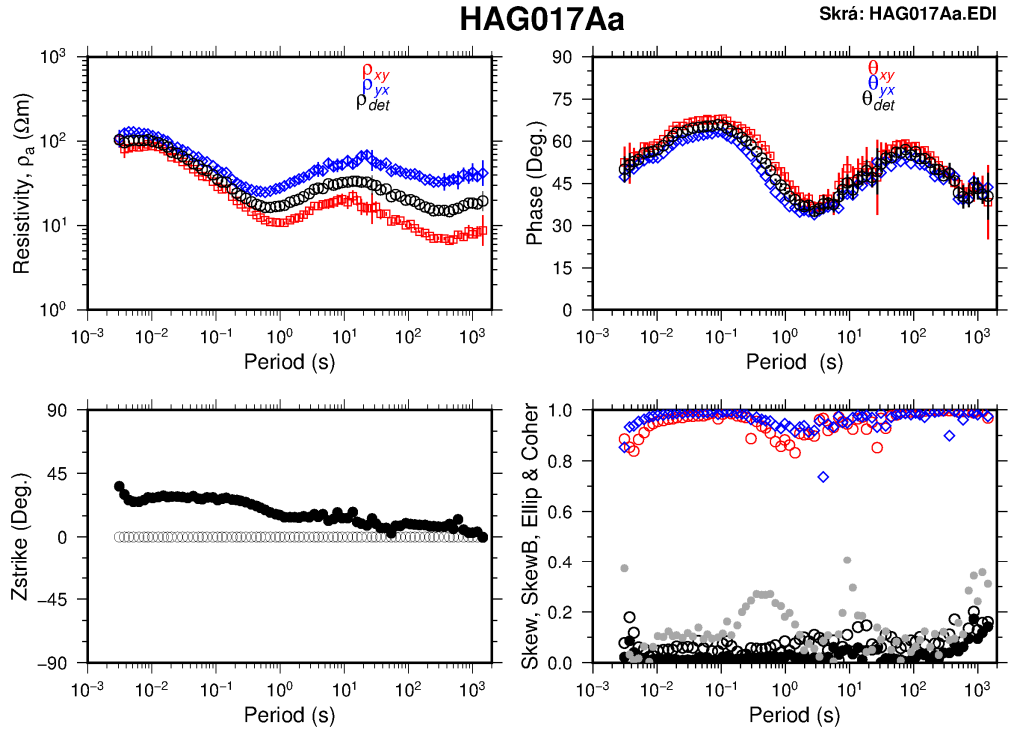

HAG002
Skrá: HAG002.EDI
Resistivity, ρa (Ωm)
Period (s)
Phase (Deg.)
Period (s)
Zstrike (Deg.)
Period (s)
Skew, SkewB, Ellip & Coher
Period (s)
Tipper
Period, s
Phase, deg
Period, s
Tstrike deg
Period, s
Tskew / Hz Coh
Period (s)

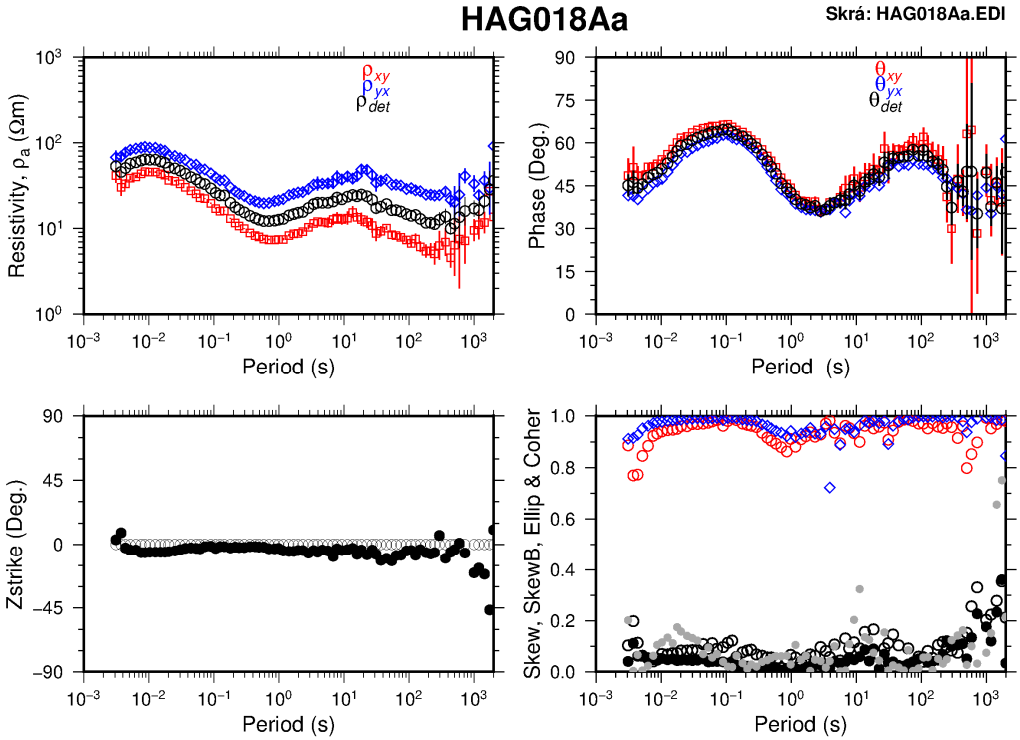

HAG008
Skrá: HAG008.EDI
Resistivity, ρa (Ωm)
Phase (Deg.)
Zstrike (Deg.)
Skew, SkewB, Ellip & Coher
Period (s)
ρxy
ρyx
ρdet
θxy
θyx
θdet

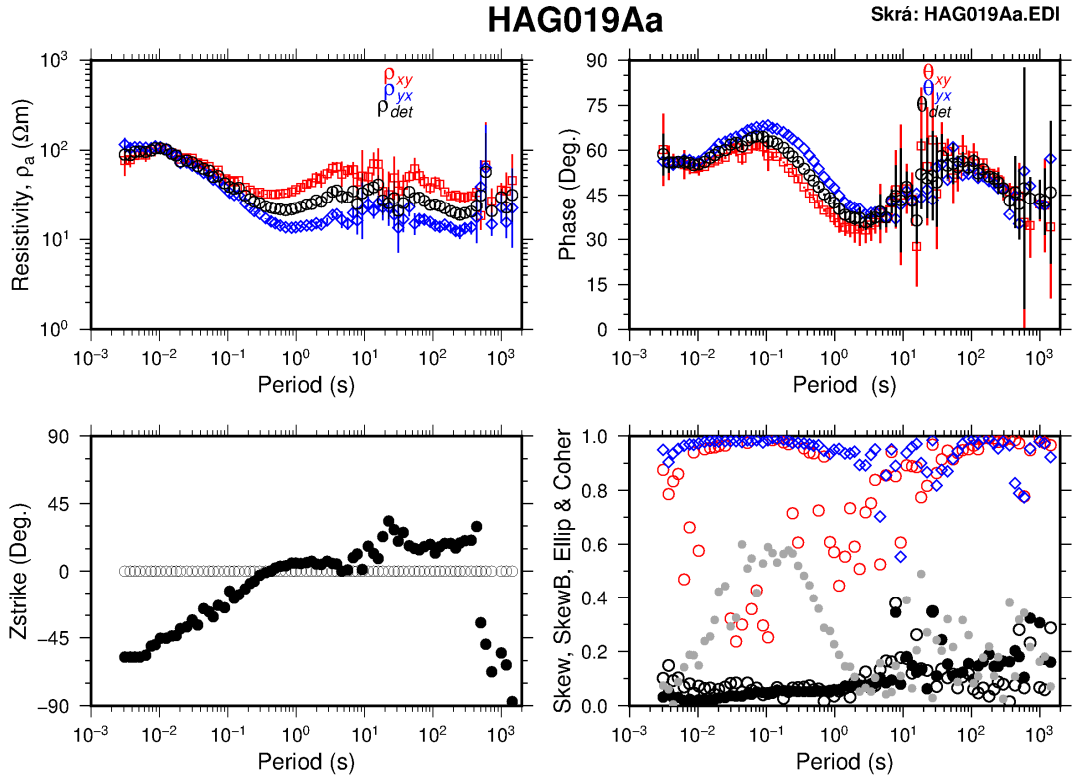

HAG009
Skrá: HAG009.EDI
Resistivity, ρa (Ωm)
ρxy
ρyx
ρdet
Period (s)
Phase (Deg.)
θxy
θyx
θdet
Period (s)
Zstrike (Deg.)
Period (s)
Skew, SkewB, Ellip & Coher
Period (s)
Tipper
T
Tx
Ty
Period, s
Phase, deg
Period, s
Tstrike deg
Period, s
Tskew / Hz Coh
Period (s)


HAG011
Skrá: HAG011.EDI
Resistivity, ρa (Ωm)
ρxy
ρyx
ρdet
Period (s)
Phase (Deg.)
θxy
θyx
θdet
Period (s)
Zstrike (Deg.)
Period (s)
Skew, SkewB, Ellip & Coher
Period (s)
Tipper
T
Tx
Ty
Period, s
Phase, deg
Period, s
Tstrike deg
Period, s
Tskew / Hz Coh
Period (s)


HAG012
Skrá: HAG012.EDI
Resistivity, ρa (Ωm)
ρxy
ρyx
ρdet
Period (s)
Phase (Deg.)
θxy
θyx
θdet
Period (s)
Zstrike (Deg.)
Period (s)
Skew, SkewB, Ellip & Coher
Period (s)
Tipper
T
Tx
Ty
Period, s
Phase, deg
Period, s
Tstrike deg
Period, s
Tskew / Hz Coh
Period (s)


HAG017Aa
Skrá: HAG017Aa.EDI
Resistivity, ρa (Ωm)
Phase (Deg.)
Zstrike (Deg.)
Skew, SkewB, Ellip & Coher
Period (s)
ρxy
ρyx
ρdet
θxy
θyx
θdet


HAG018Aa
Skrá: HAG018Aa.EDI
Resistivity, ρa (Ωm)
Phase (Deg.)
Zstrike (Deg.)
Skew, SkewB, Ellip & Coher
Period (s)
ρxy
ρyx
ρdet
θxy
θyx
θdet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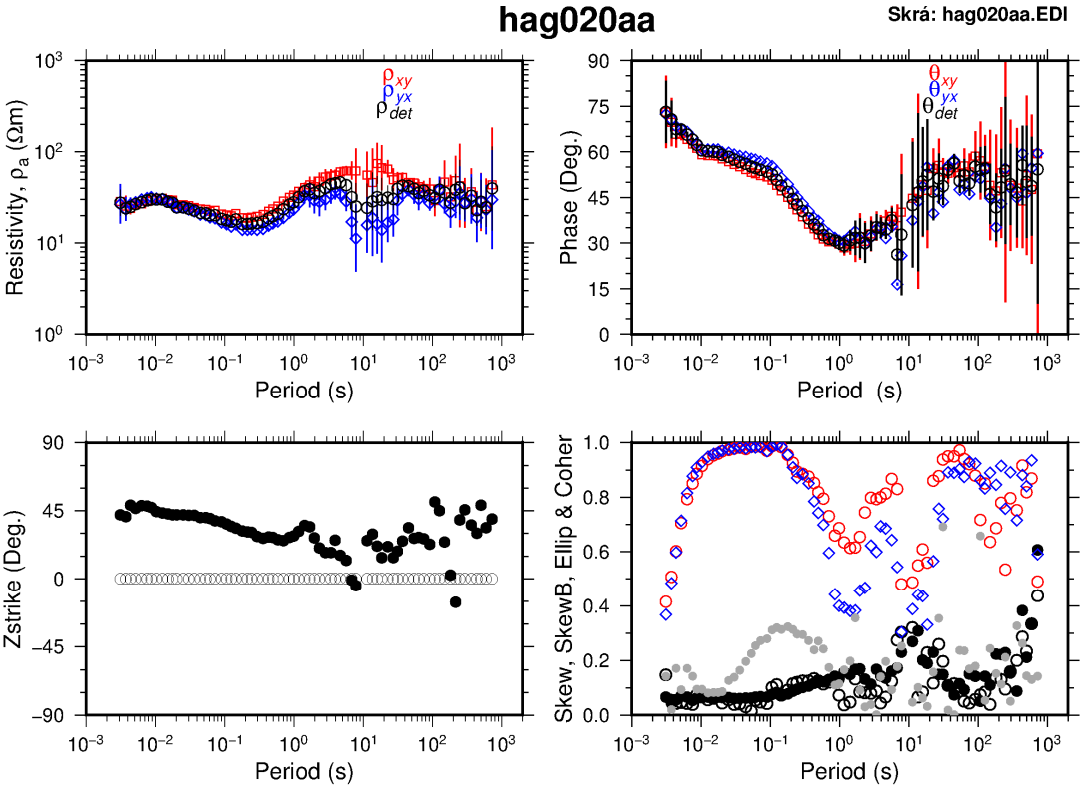
Resistivity, ρa (Ωm)
Phase (Deg.)
Zstrike (Deg.)
Skew, SkewB, Ellip & Coher
Period (s)


hag020aa
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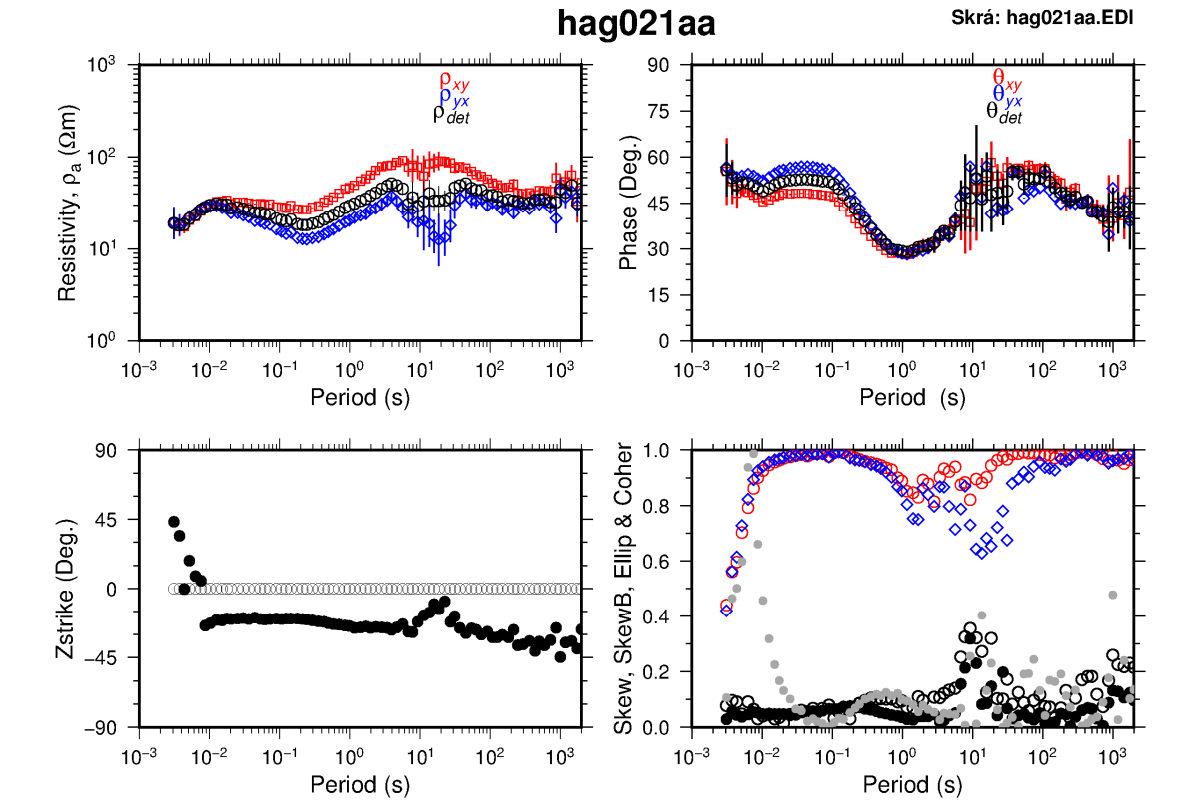
Phase (Deg.)
Zstrike (Deg.)
Skew, SkewB, Ellip & Coher
Period (s)


hag021aa
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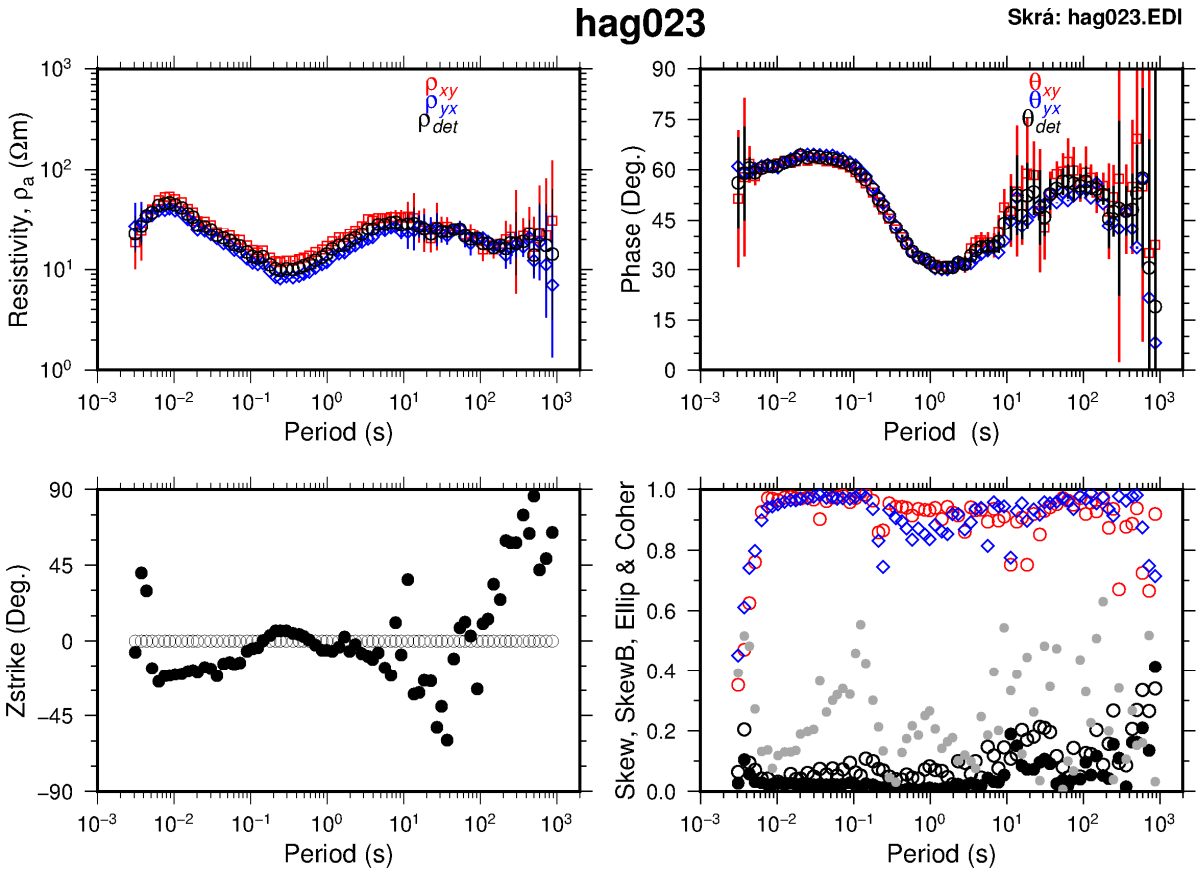
Resistivity, ρa (Ωm)
Phase (Deg.)
Zstrike (Deg.)
Skew, SkewB, Ellip & Coher
Period (s)


hag023
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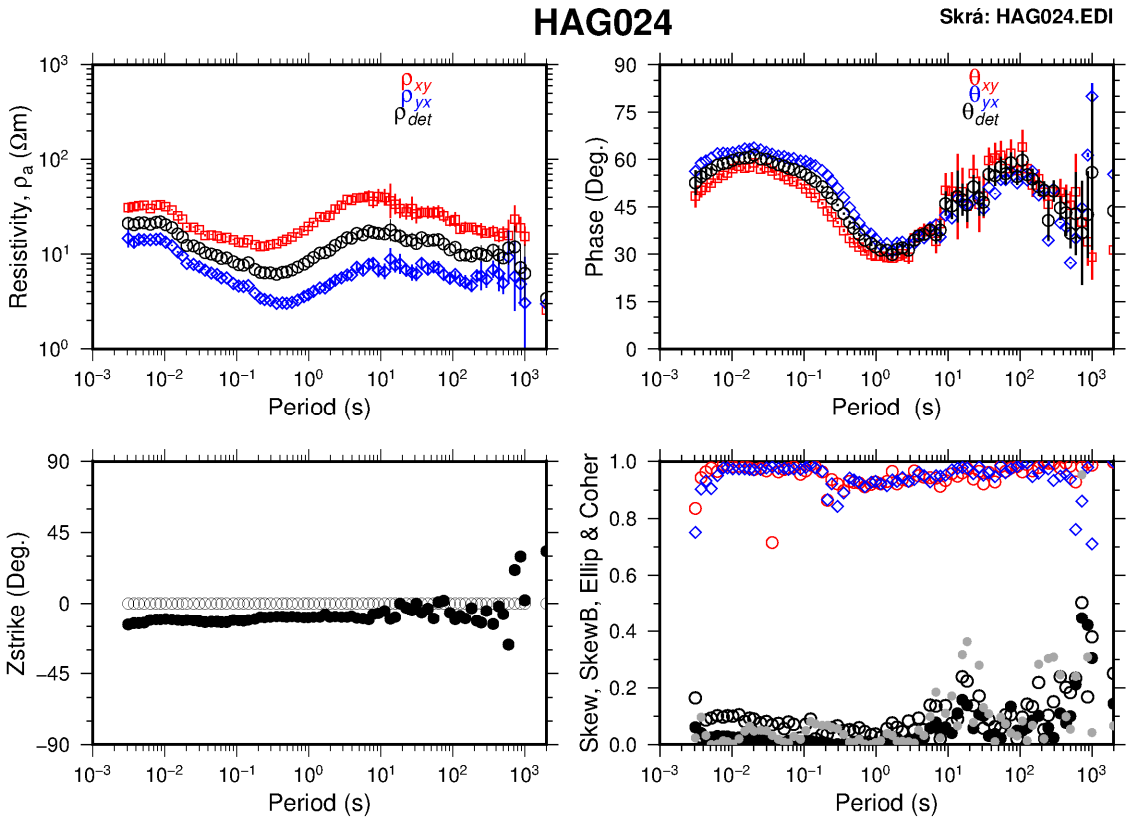
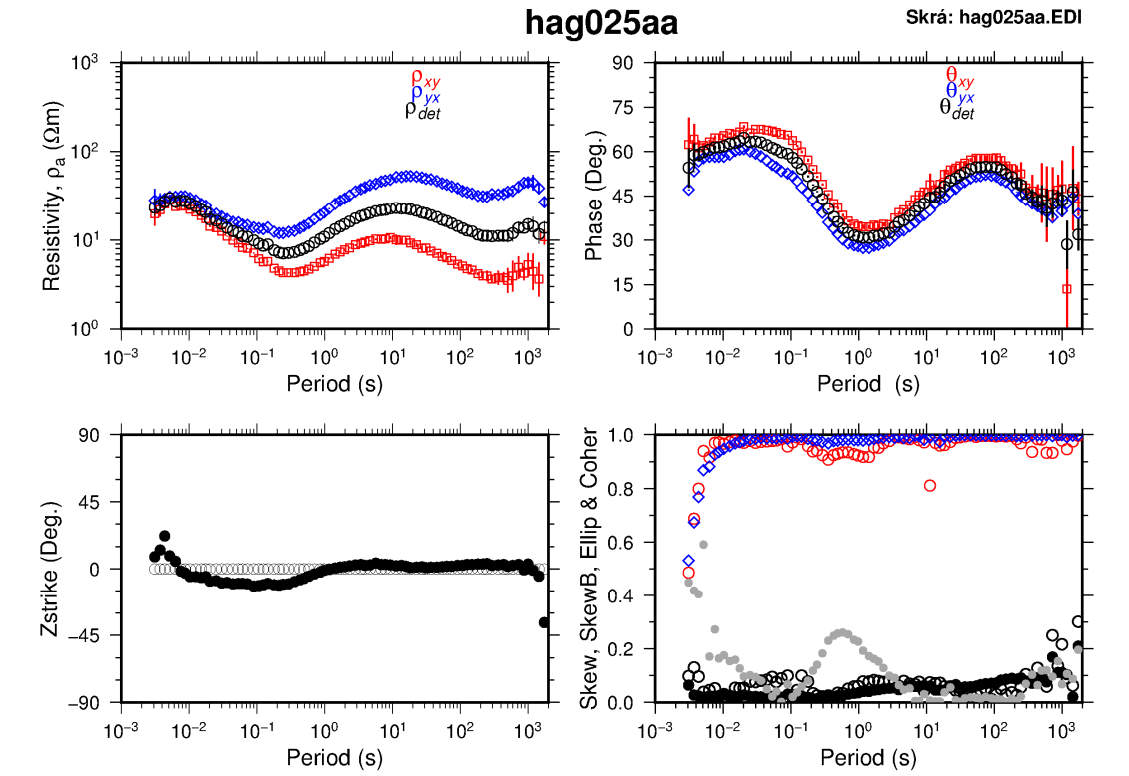
Resistivity, ρa (Ωm)
Phase (Deg.)
Zstrike (Deg.)
Skew, SkewB, Ellip & Coher
Period (s)


HAG024
Skrá: HAG024.EDI
Resistivity, ρa (Ωm)
Phase (Deg.)
Zstrike (Deg.)
Skew, SkewB, Ellip & Coher
Period (s)


hag025aa
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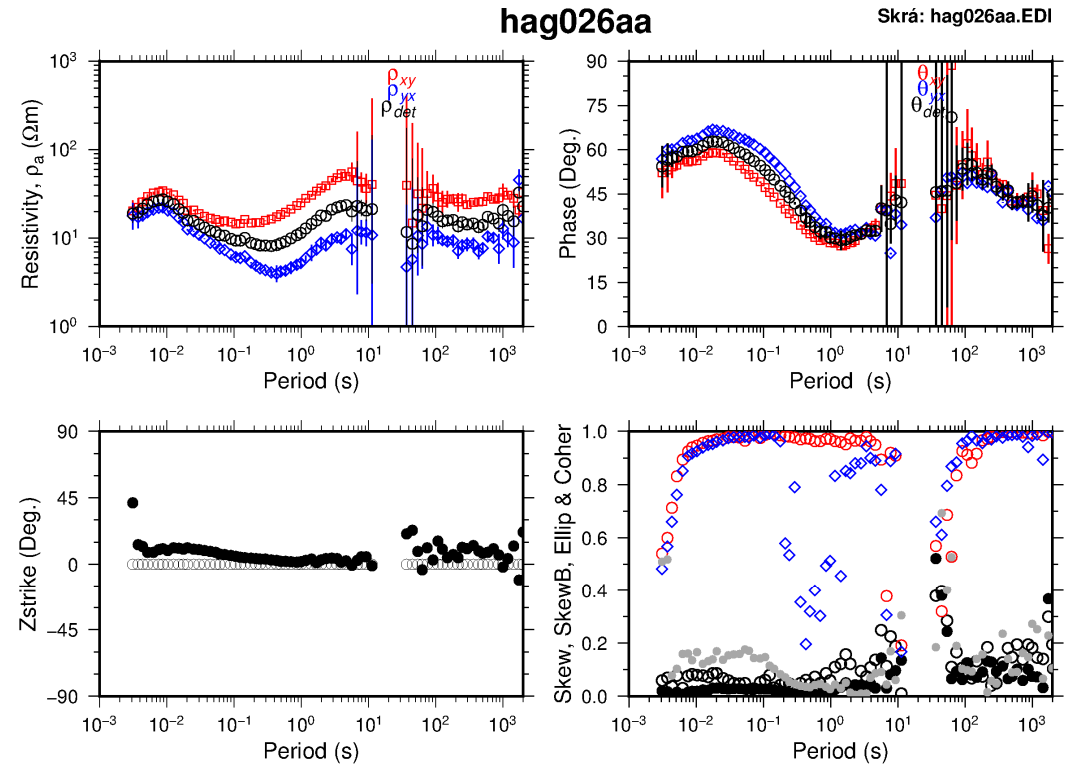
Phase (Deg.)
Zstrike (Deg.)
Skew, SkewB, Ellip & Coher
Period (s)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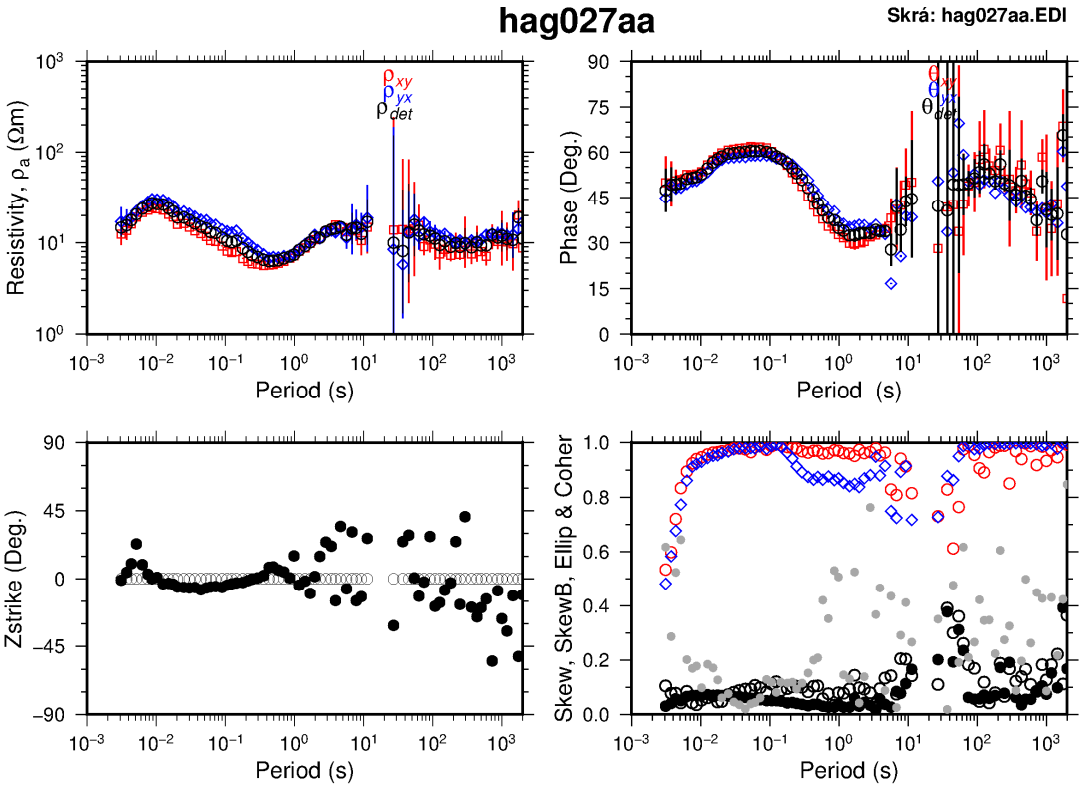
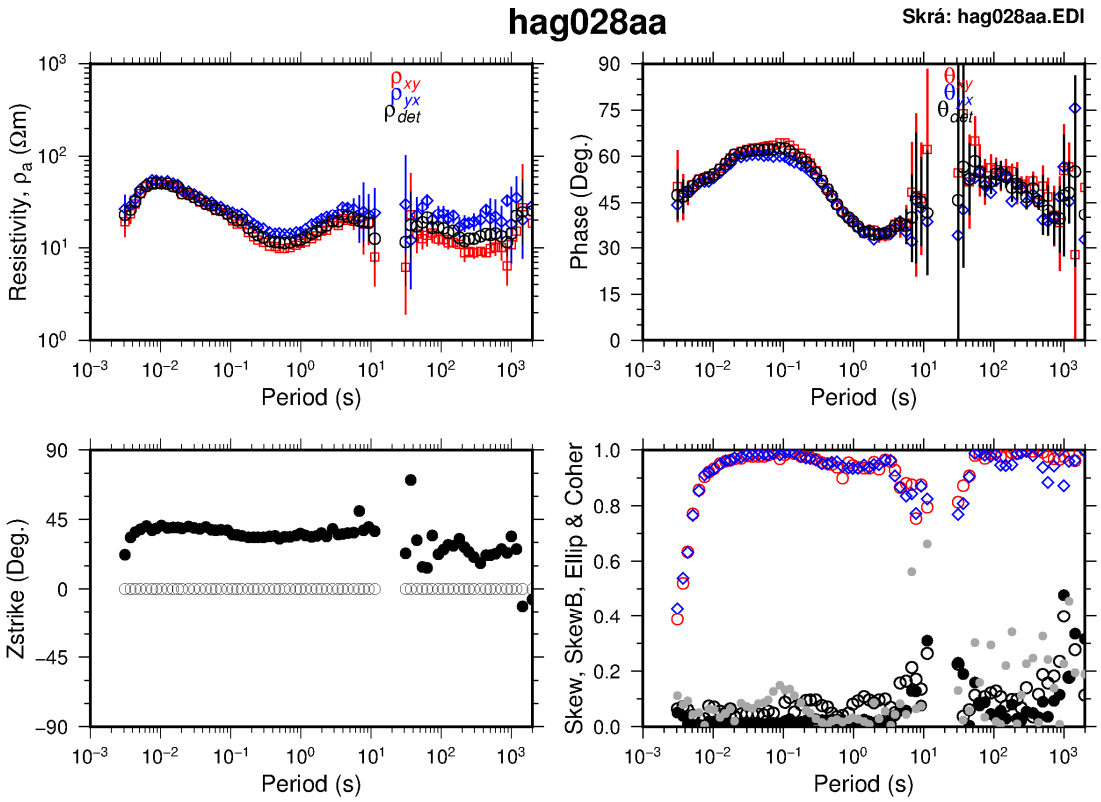
Skrá: hag026aa.EDI
Resistivity, ρa (Ωm)
Phase (Deg.)
Zstrike (Deg.)
Skew, SkewB, Ellip & Coher
Period (s)
ρxy
ρyx
ρdet
θxy
θyx
θdet


hag027aa
Skrá: hag027aa.EDI
Resistivity, ρa (Ωm)
Phase (Deg.)
Zstrike (Deg.)
Skew, SkewB, Ellip & Coher
Period (s)
ρxy
ρyx
ρdet
θxy
θyx
θdet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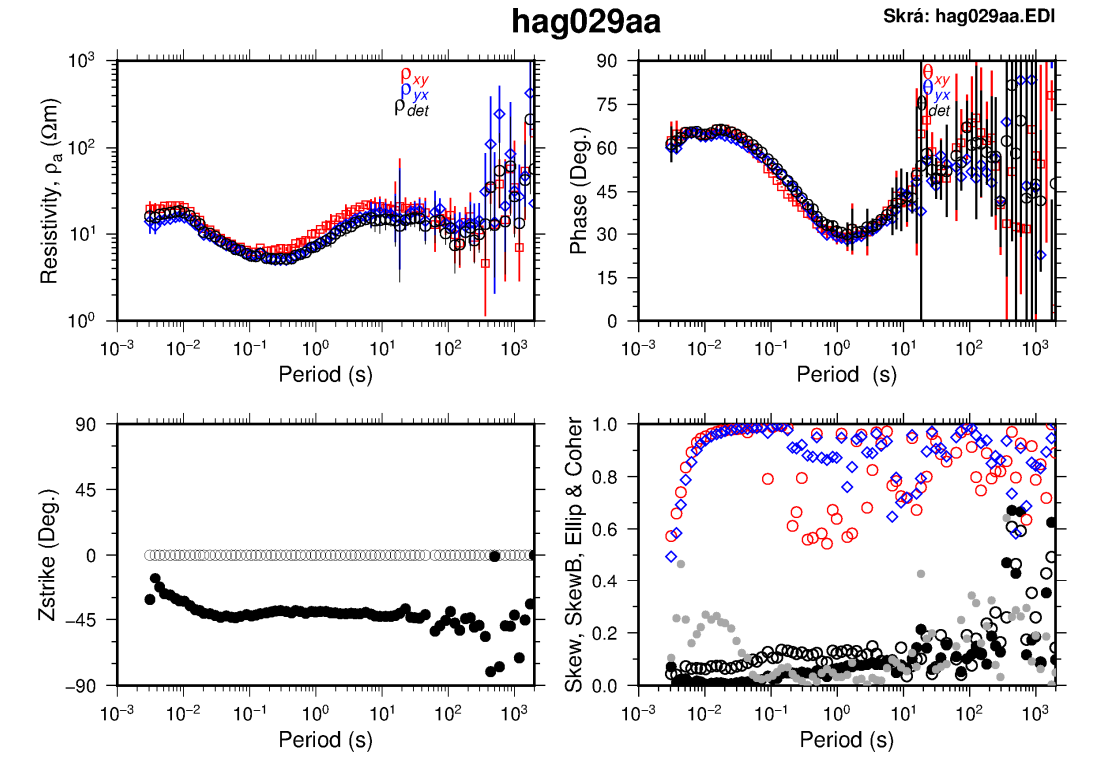
Resistivity, ρa (Ωm)
Phase (Deg.)
Zstrike (Deg.)
Skew, SkewB, Ellip & Coher
Period (s)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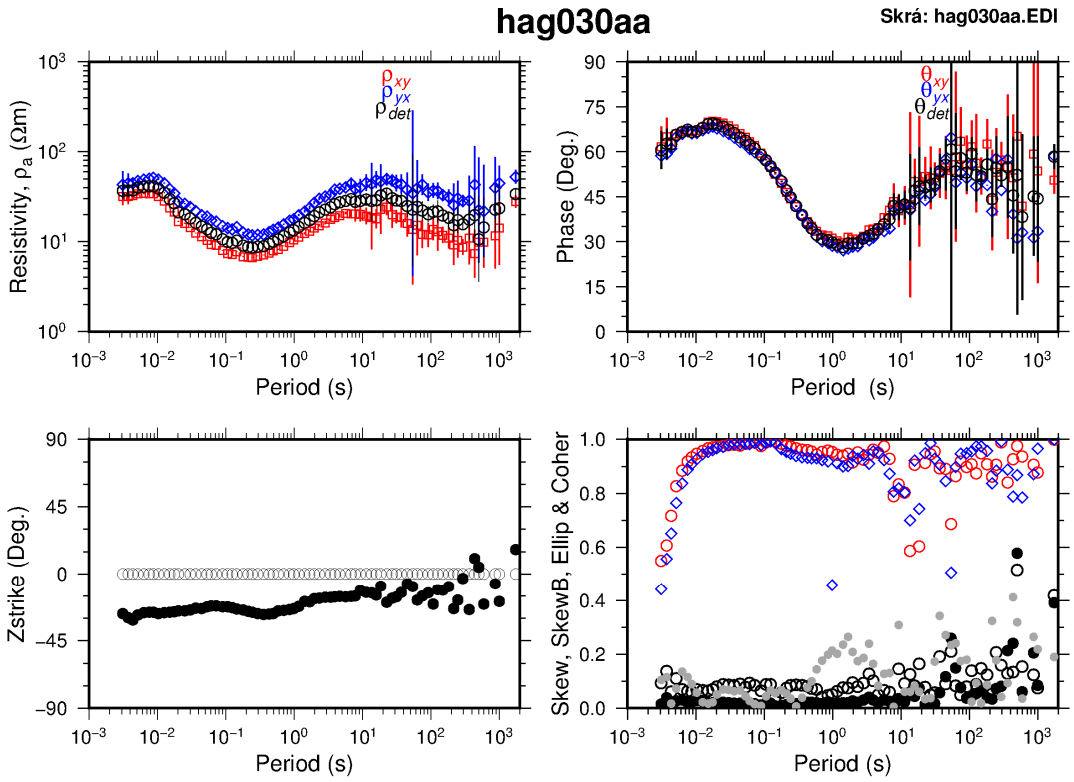
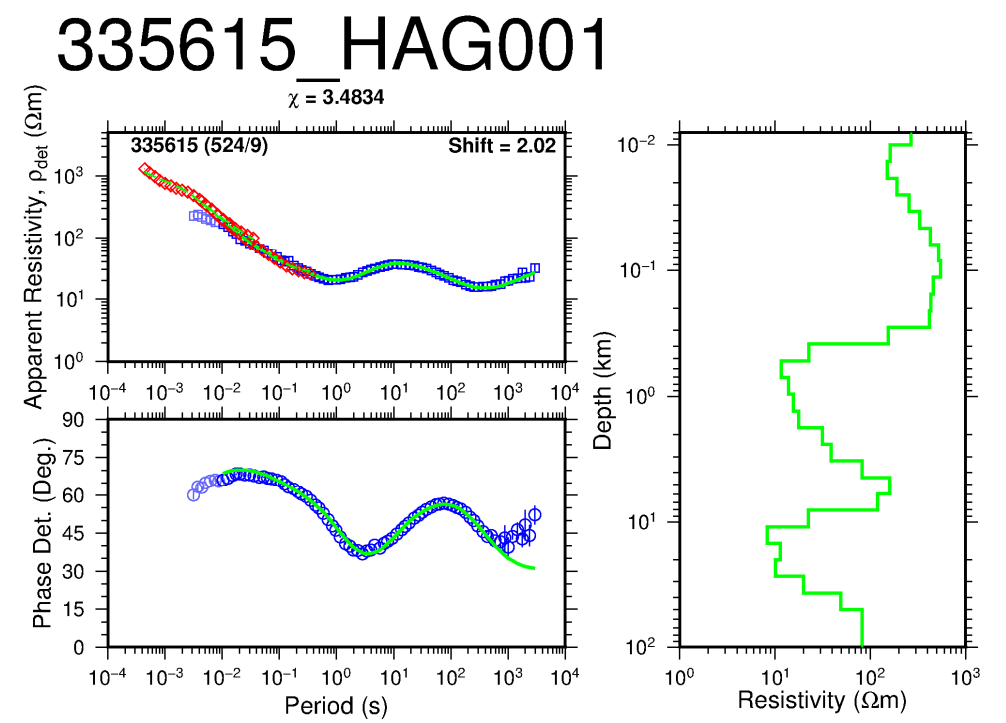
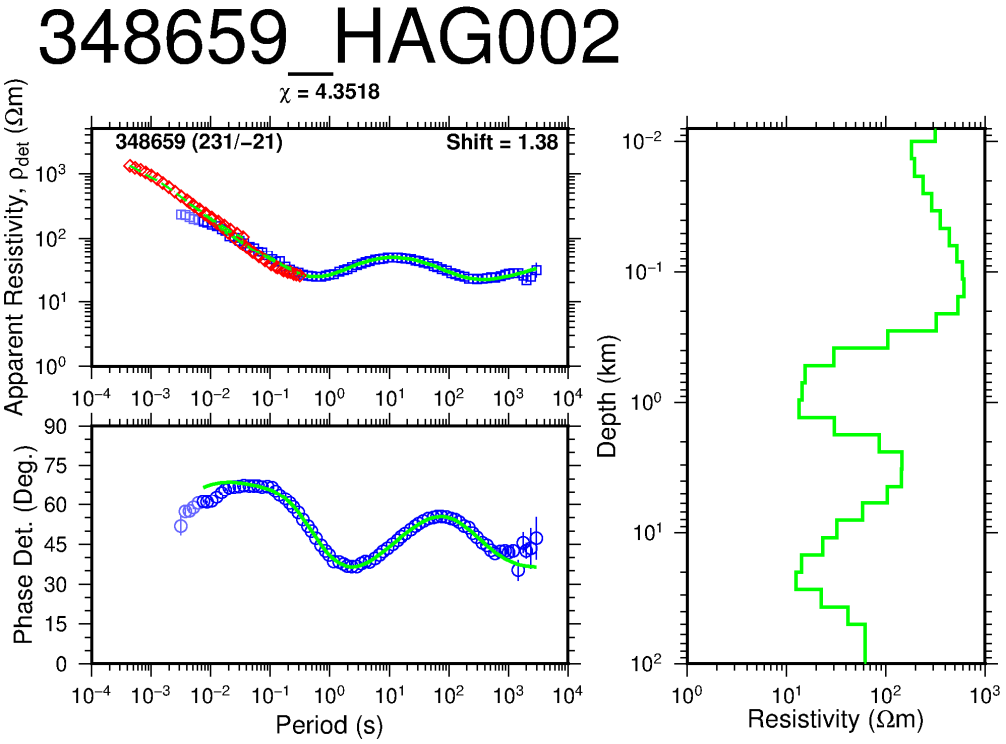
Resistivity, ρa (Ωm)
Phase (Deg.)
Zstrike (Deg.)
Skew, SkewB, Ellip & Coher
Period (s)


hag030aa
Skrá: hag030aa.EDI
Resistivity, ρa (Ωm)
Period (s)
Phase (Deg.)
Zstrike (Deg.)
Skew, SkewB, Ellip & Coher

APPENDIX III: 1D models of the joint inversion for all the MT and TEM data.





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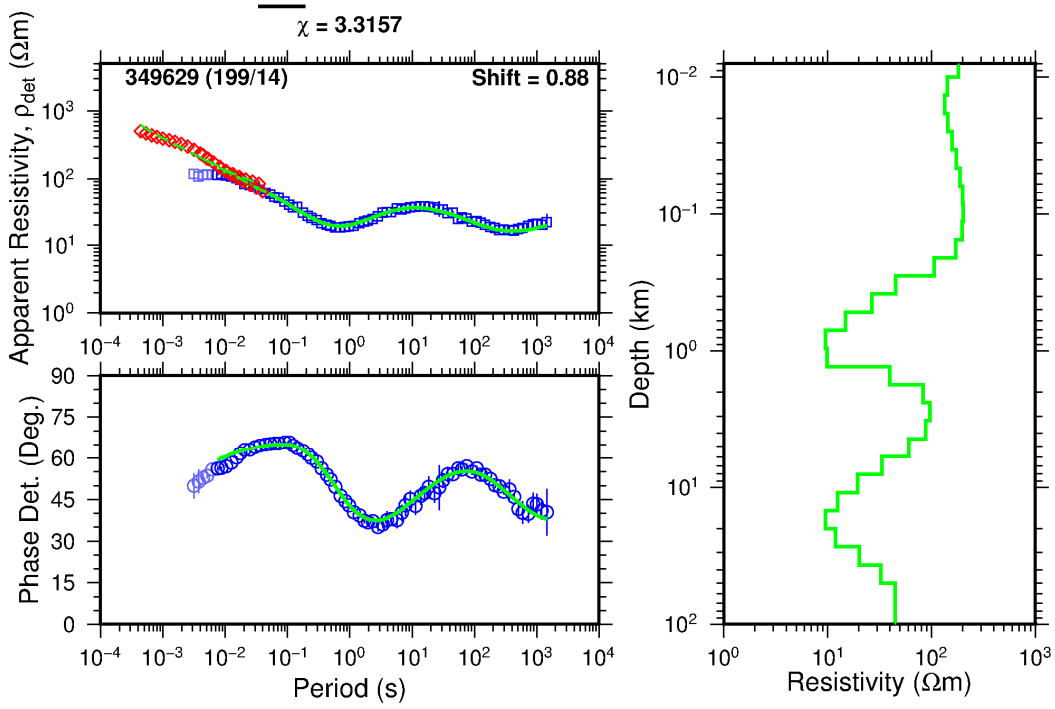

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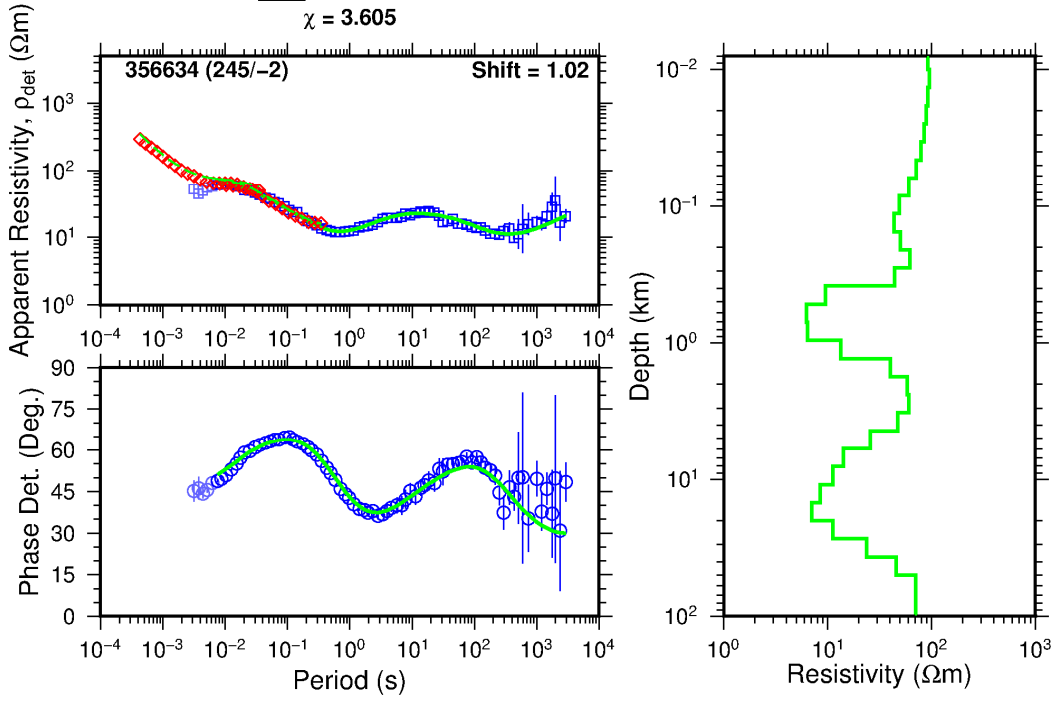

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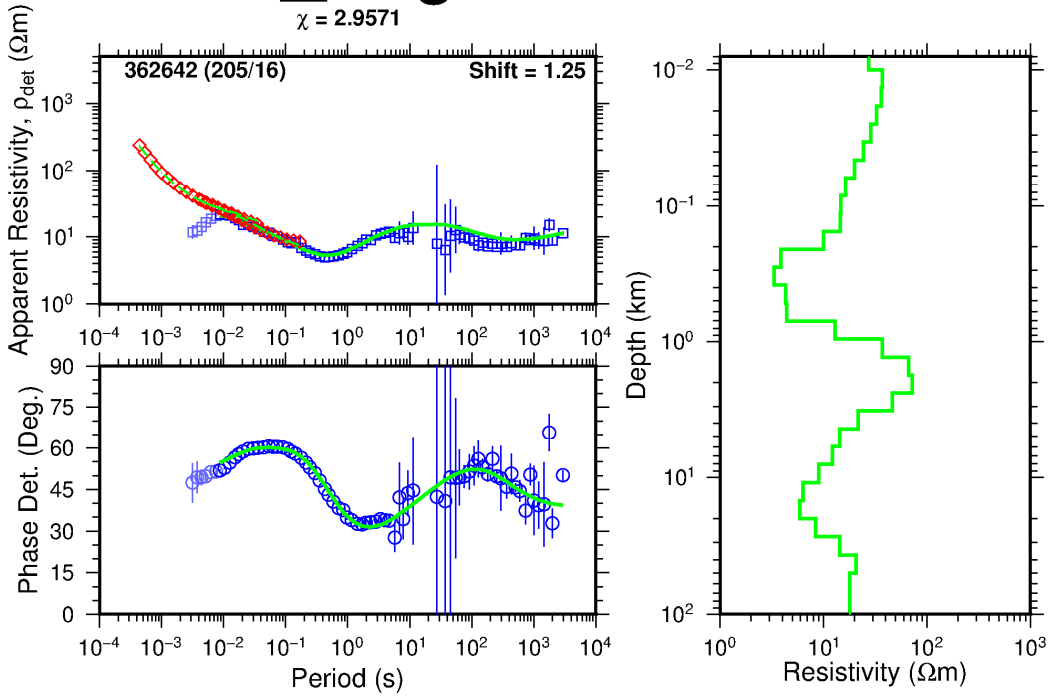

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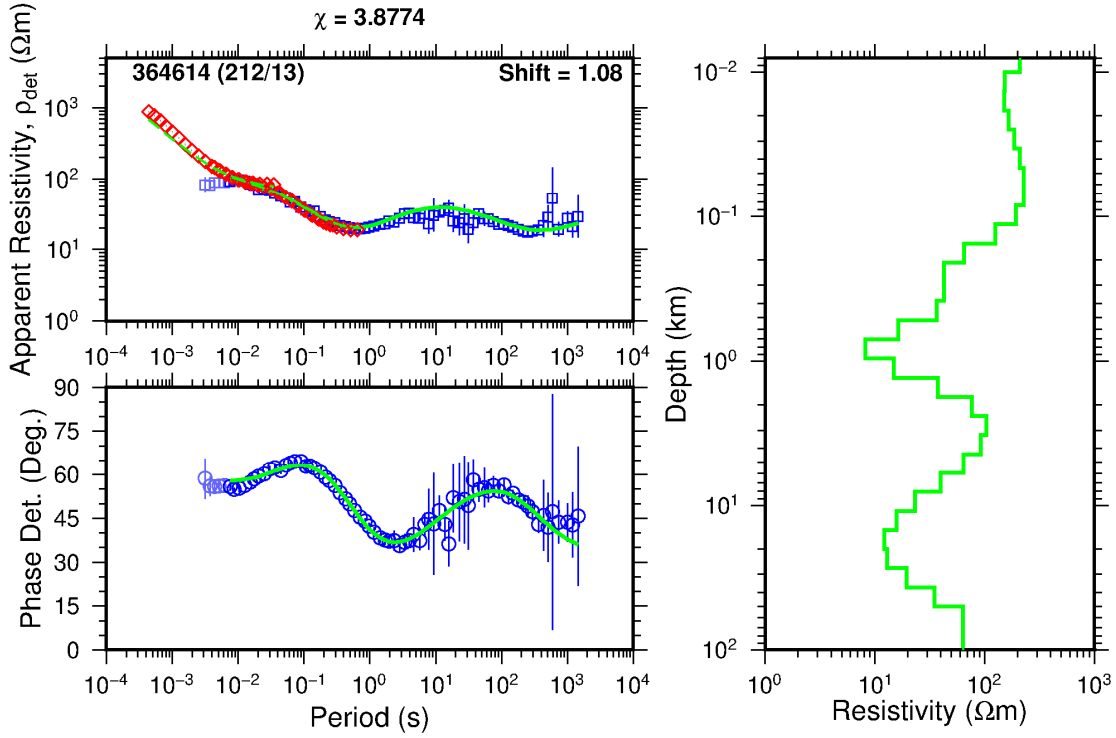

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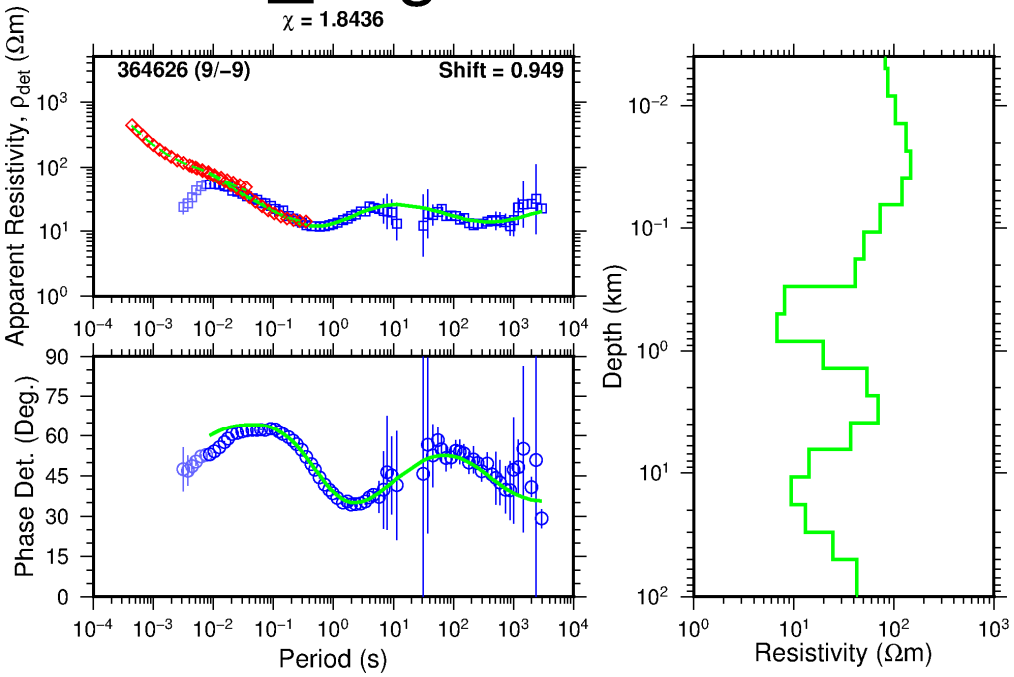

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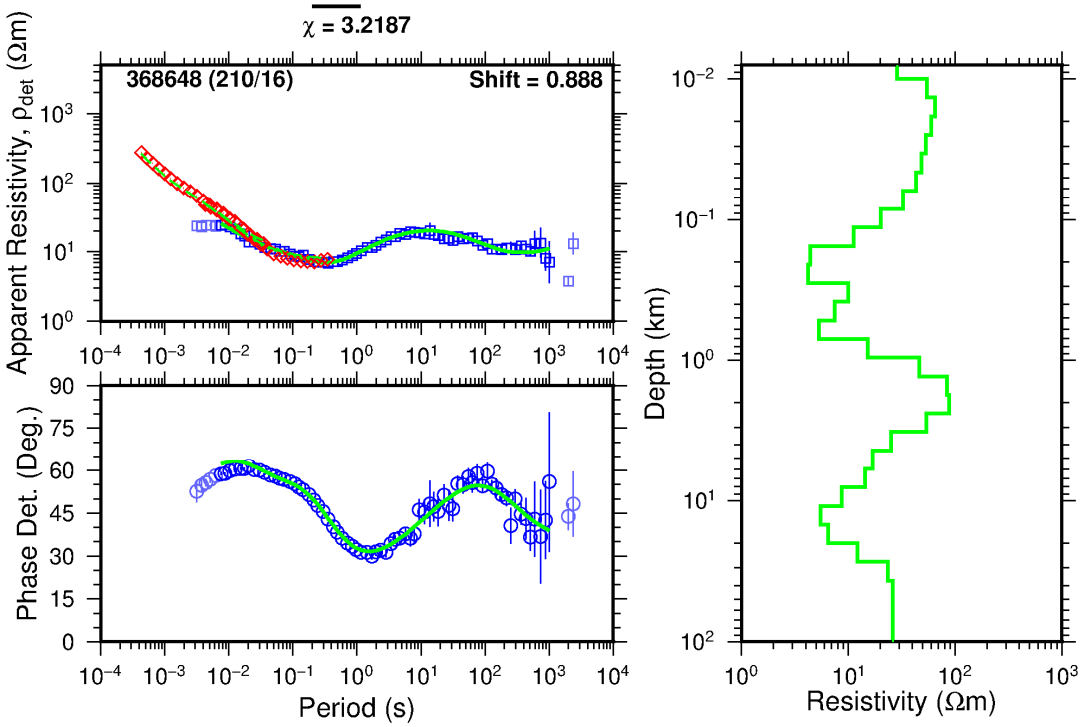

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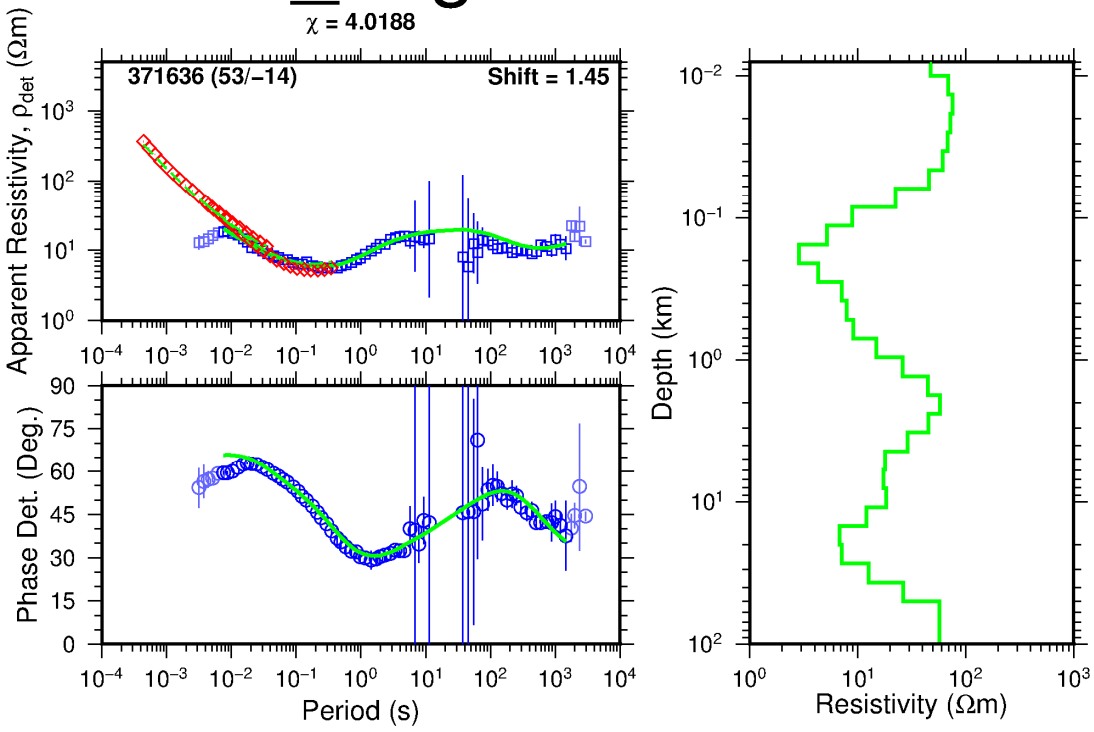

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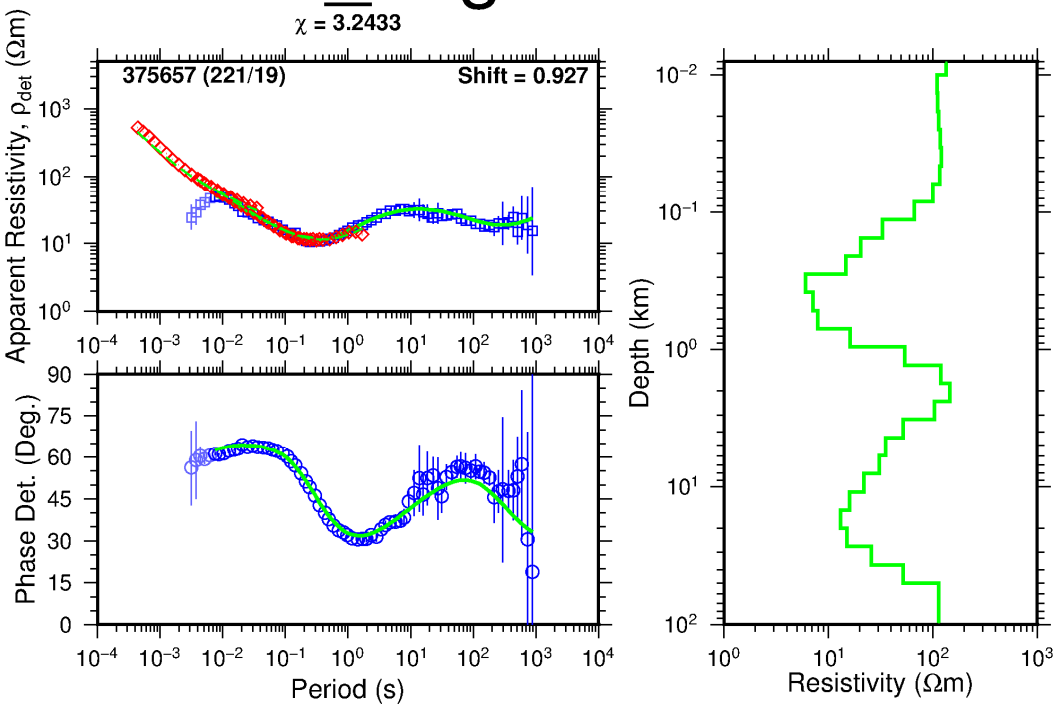

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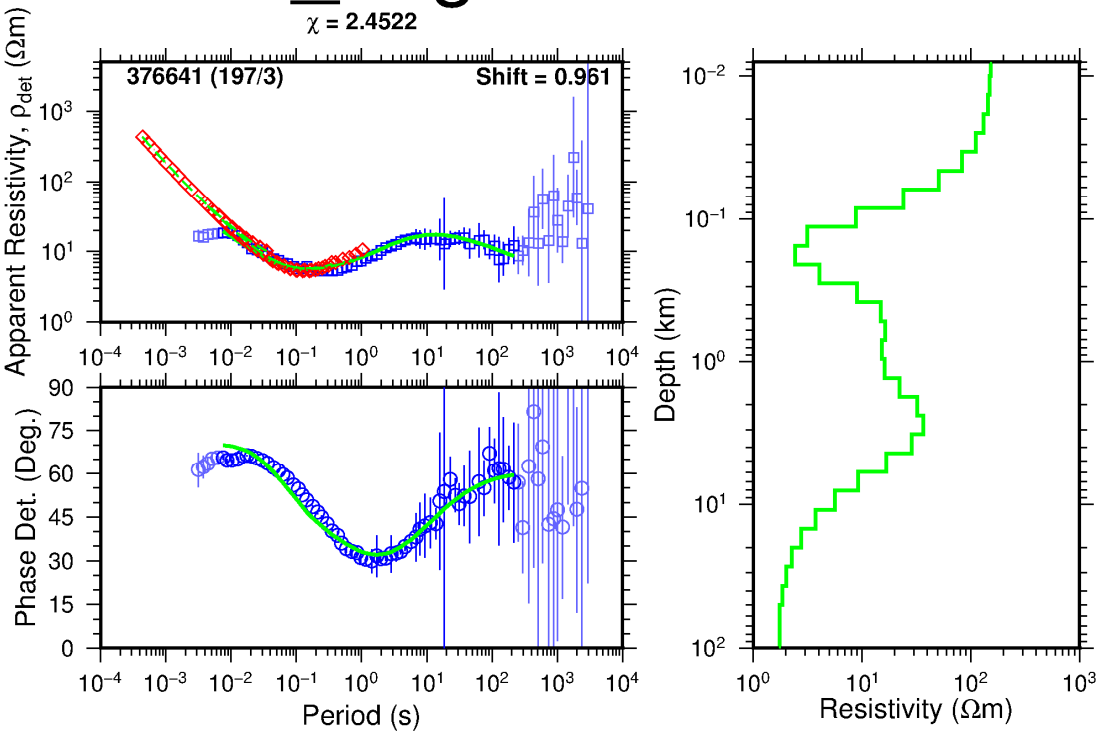

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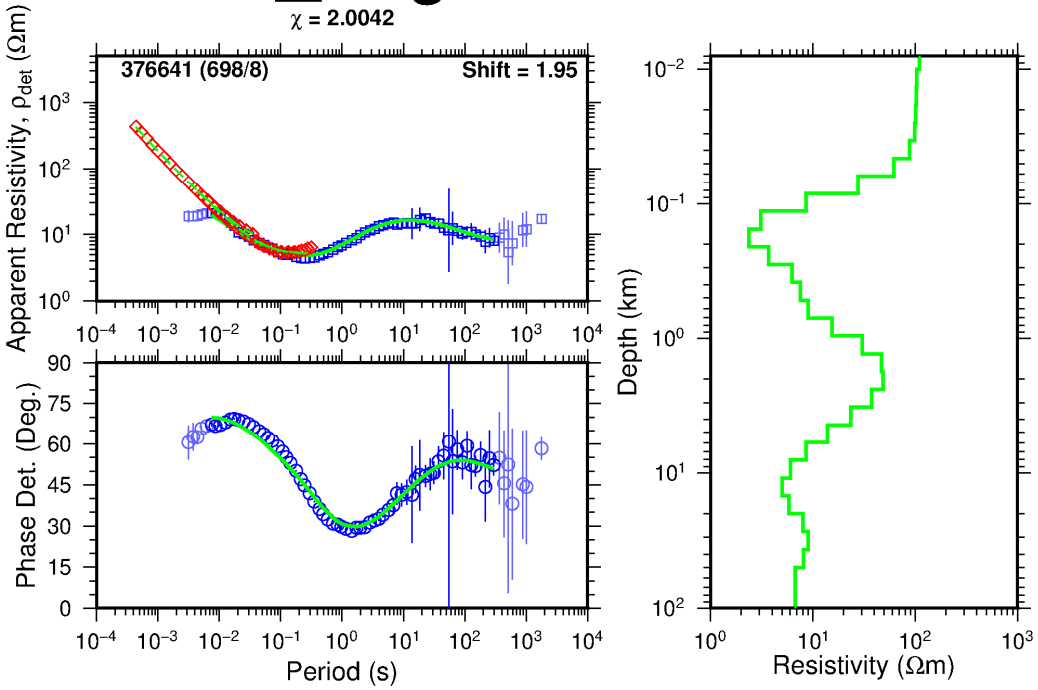

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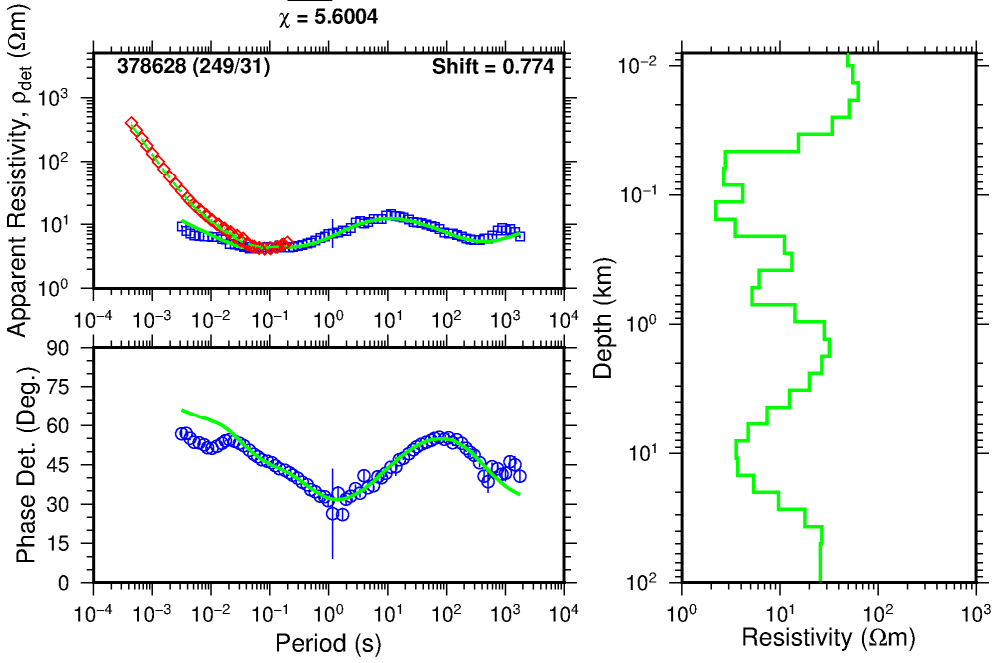

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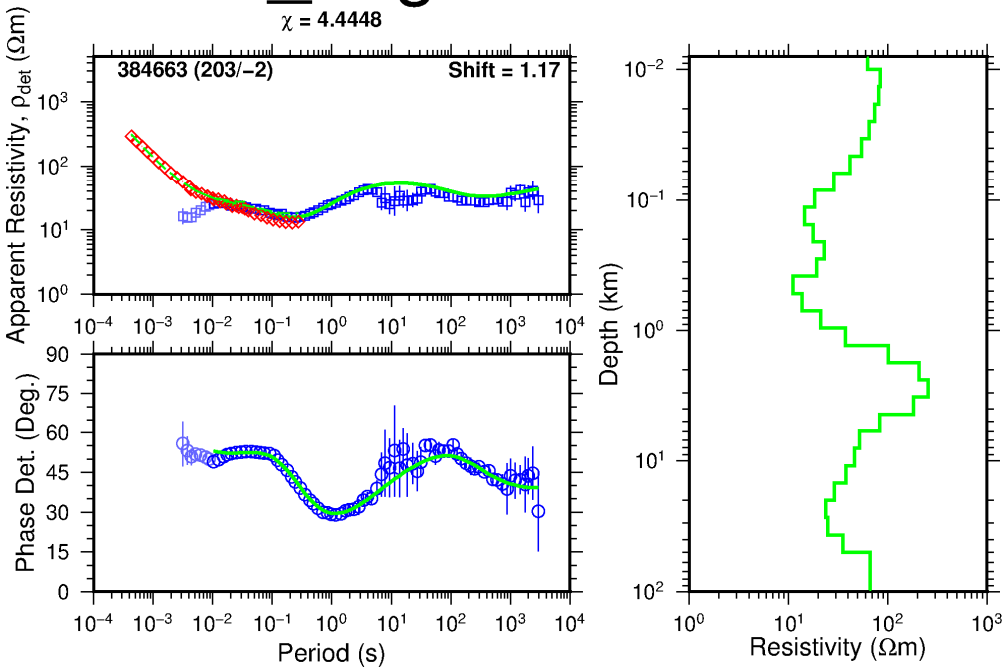

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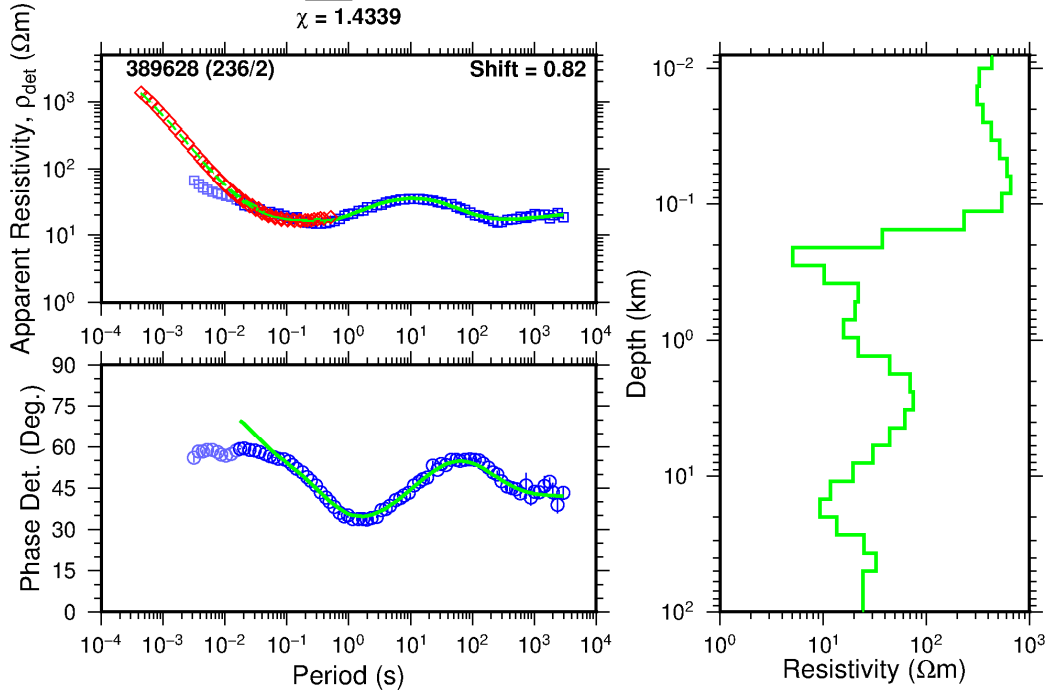

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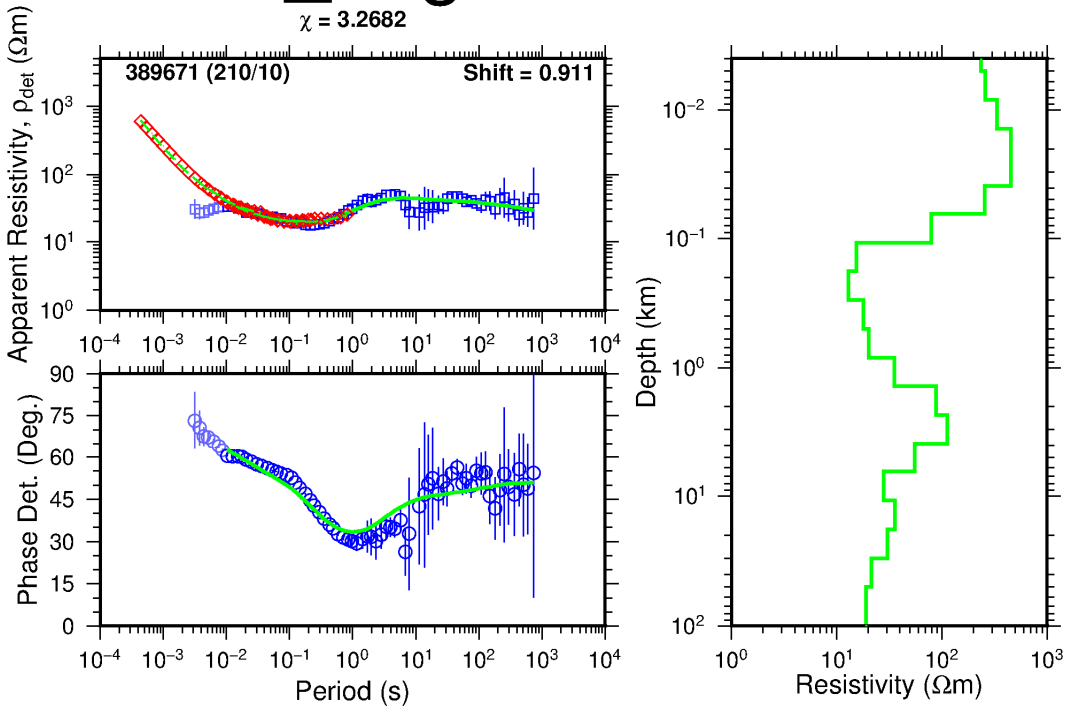

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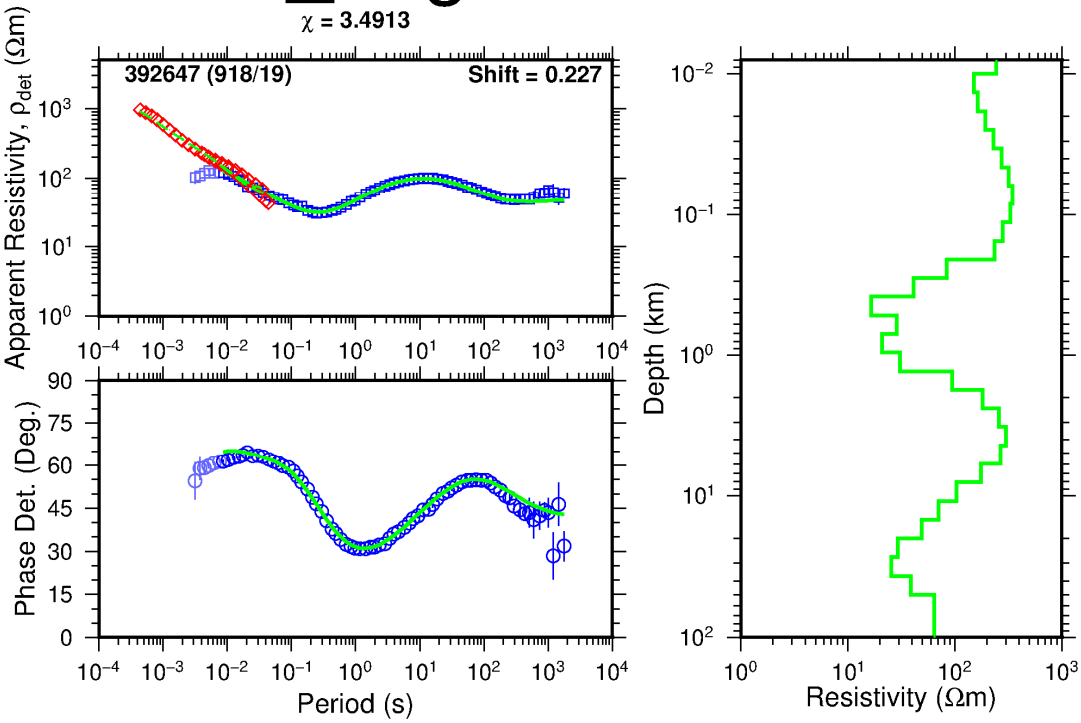

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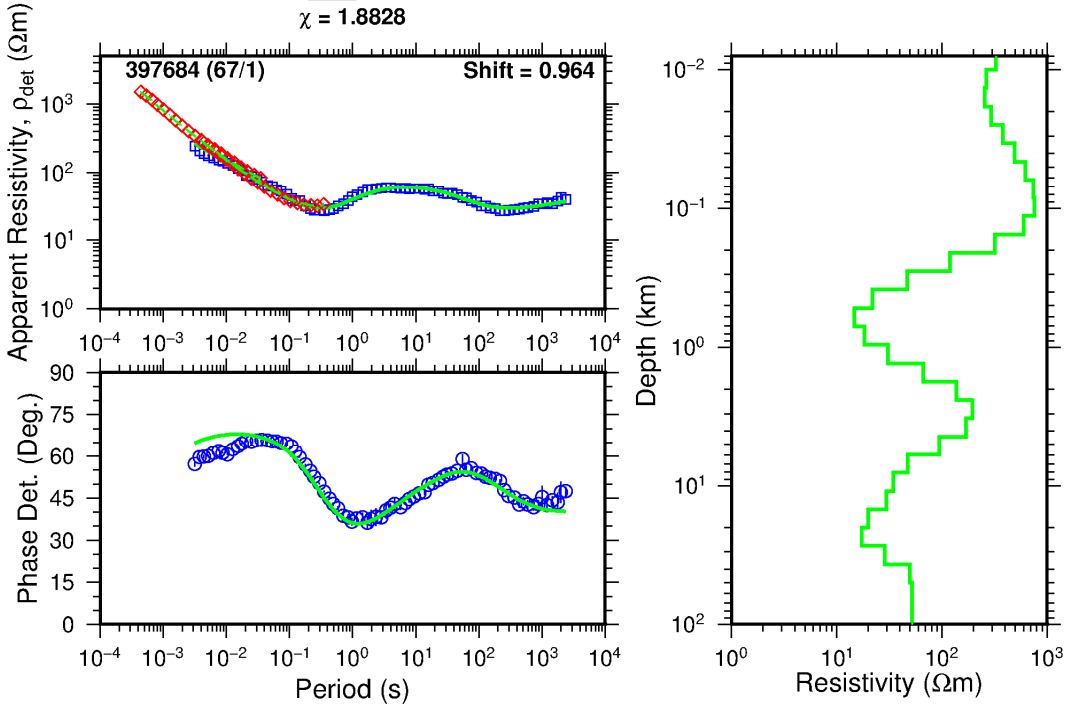
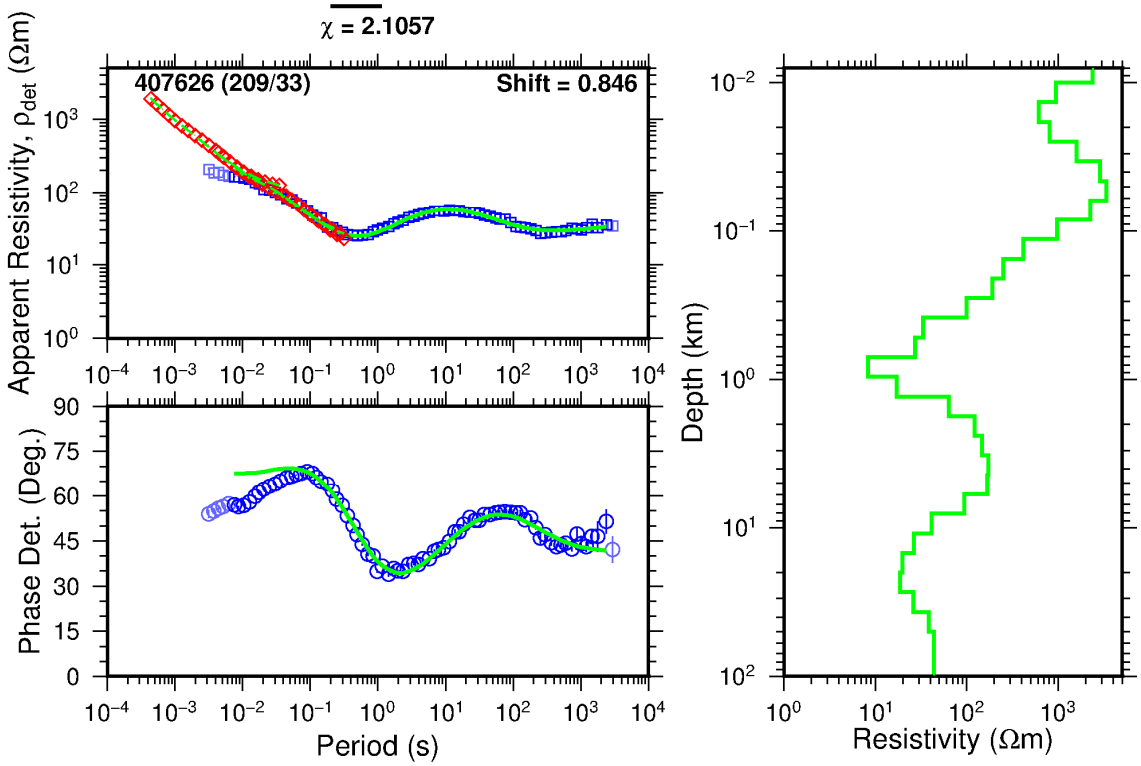
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