MT Processing Notes
Terrex Seismic Pty Ltd
Gawler Curnamona Arrowie MT Transect

1. Association/Logistical Notes

MT Acquisition: November 30-December 2, 2008
Document Date: December 4, 2008

QuickLay Version: 3.00.Alpha_33

Notes By: Joel Stockill

BC Line 1 – Sites read

Sites	Location UTM WGA84 Zone 54J		Magnetic Sensors			True Azimuth			
	Northing	Easting	Hx	Hy	Hz	Hx	Hy	Ex	Ey
BC14	6606632	418369	BF7-7007	BF7-9602	BF7-9802	360	270	360	270
BC15	6616047	415258	BF7-9104	BF7-9306	BF7-9307	360	270	360	270
BC16	6625188	415877	BF7-7001	BF7-7004	BF7-7006	360	270	360	270

Magnetic Declination: approx.7˚E

1.1.1 Notes

All sites are located in sandy terrain.

Site BC14:
The site is roughly 4m to the West of a track. The site was split into two events (BC14a and BC14b) due to an interruption of the recording.

Site BC15:
The site is 2m to the West of a track.

Site BC16:
The site is located 100m to the North of a track with a fence running along it.

2. MT Processing

MT Events

Sample Rate 1000 sps

Site	Serial Event @ Site	Serial Event @ Remote Site	Intersecting Event	Reference Site	Notes
BC14a	SEvBC14_20081130.0334	SEvBC16_20081130.0114	BC14a (03:34, 30/11/2008 to 00:04, 01/12/2008)	BC16	Created 5 4h subevents Created 2 ~9h30m subevents
BC14b	SEvBC14_20081201.0027	SEvBC16_20081130.0114	BC14b (00:27, 01/12/2008 to 22:48, 02/12/2008)		Created 11 4h subevents Created 4 ~12h35m subevents
BC15	SEvBC15_20081130.0218	SEvBC16_20081130.0114	BC15 (02:18, 30/11/2008 to 22:48, 02/11/2008)	BC16	Created 17 4h subevents Created 5 ~13h35m subevents
BC16	SEvBC16_20081130.0114	SEvBC15_20081130.0218	BC16 (02:18, 30/11/2008 to 22:48, 02/11/2008)	BC15	Created 17 4h subevents Created 5 ~13h35m subevents

2.1.1 Site BC14

Name: BC14
Date: December 4, 2008

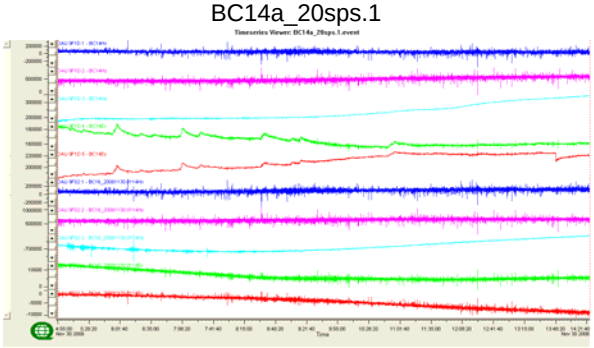
Setup Notes:

- All the events were scrubbed with spike rejection turned off
- Processed using Robust processing and Coherency sorting
- Total of 2days 18h and 51min of data were acquired and used for final processing.

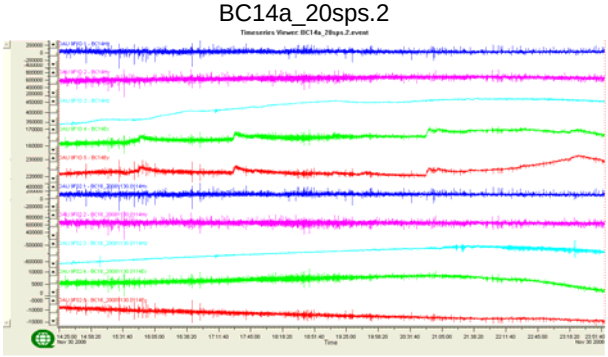
Events in Order	Time Series Notes
BC14a_20sps.1 BC14a_20sps.2 BC14b_20sps.1 BC14b_20sps.2 BC14b_20sps.3 BC14b_20sps.4	TS looks OK, some shifting and drifting in the site electrics. Drifting in the Hz.

Sensor Impedance Ω	Hx	Hy	Hz	Ex	Ey
	50	50	50	250	250

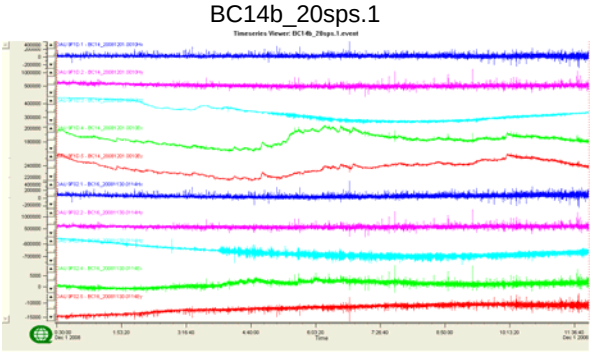
BC14a_20sps.1



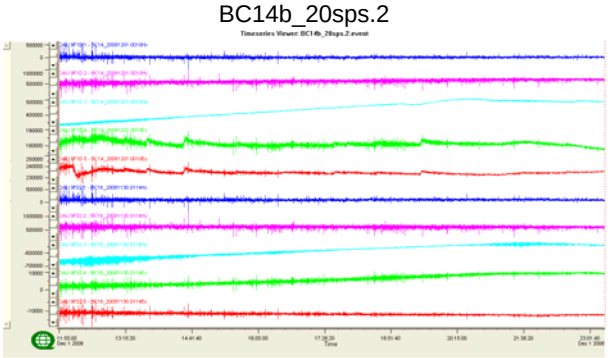
BC14a_20sps.2



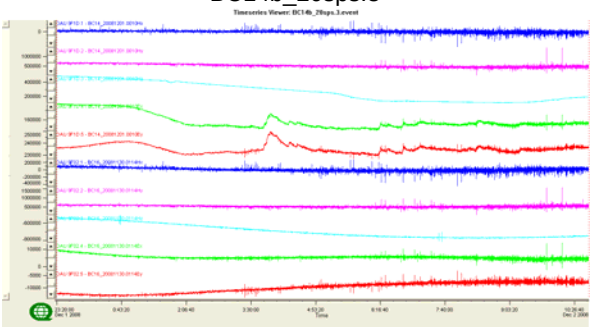
BC14b_20sps.1



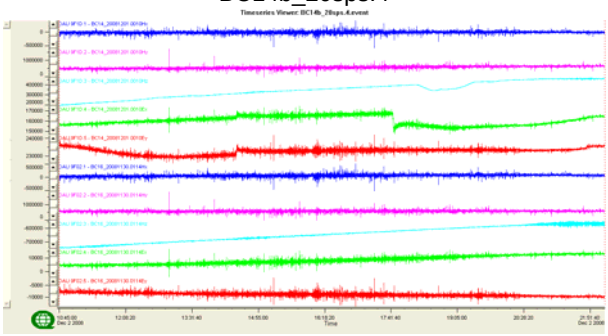
BC14b_20sps.2



BC14b_20sps.3



BC14b_20sps.4

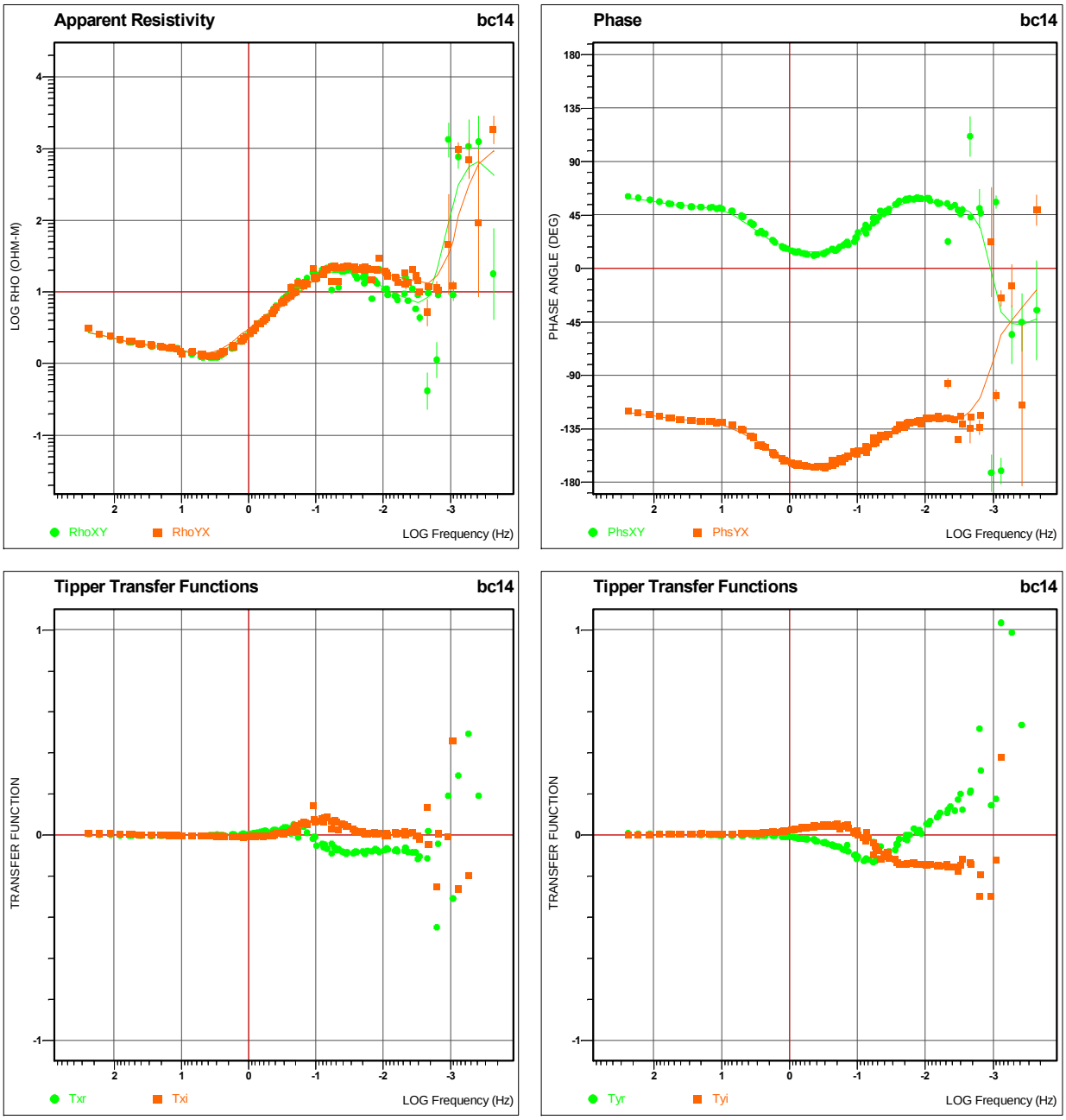


Reviewer Date: December 4, 2008

Comments:

- Both the horizontal and vertical components are good
- Noise in all components below 0.002Hz

Site BC14 Final Result Sounding Curves (Raw data)
App. Resistivity – Phase – Tipper Transfer Functions (Txr-Txi & Tyr-Tyi)



Rho XY ------- Green
Rho YX ------- Orange

2.1.2 Site BC15

Name: BC15
Date: December 4, 2008

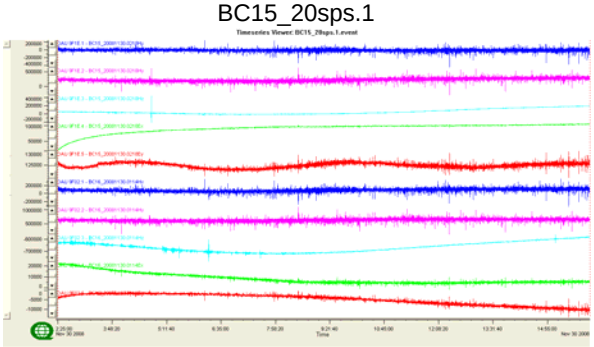
Setup Notes:

- All the events were scrubbed with spike rejection turned off
- Processed using Robust processing and Coherency sorting
- Total of 2days, 20h and 29min of data were acquired, with 2days 8h and 10min used for processing

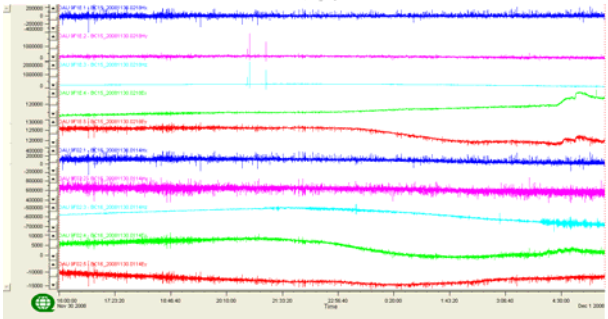
Events in Order	Time Series Notes
BC15_20sps.1 BC15_20sps.2 BC15_20sps.3 BC15_20sps.4 BC15_20sps.5	TS looks ok. Early drifting in the site electrics. Noise in Hx and Hz on site at 21:20, 30/11/09 (BC15_20sps.2).

Sensor Impedance Ω	Hx	Hy	Hz	Ex	Ey
	50	50	50	800	1000

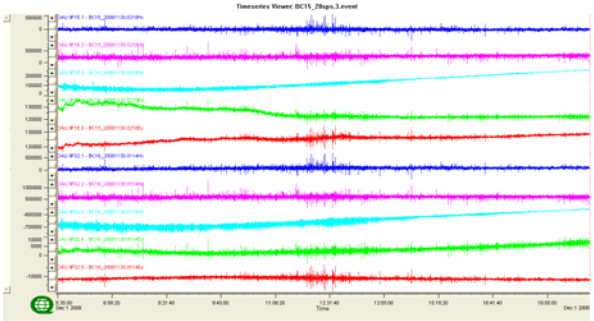
BC15_20sps.1



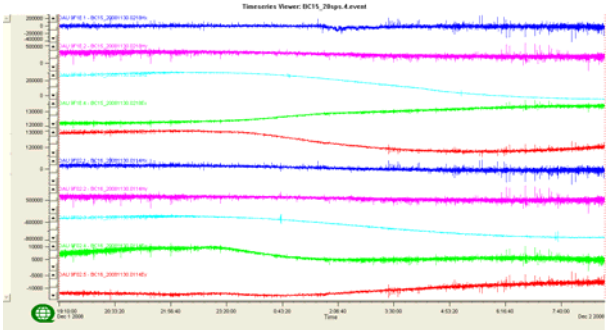
BC15_20sps.2



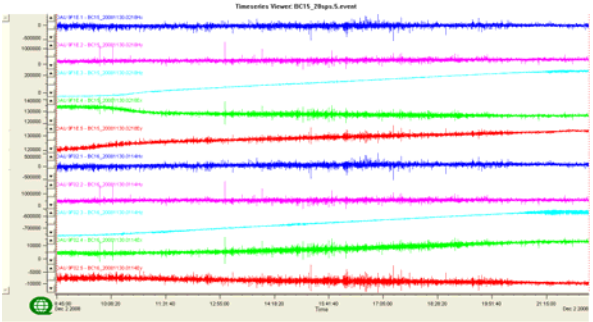
BC15_20sps.3



BC15_20sps.4



BC15_20sps.5

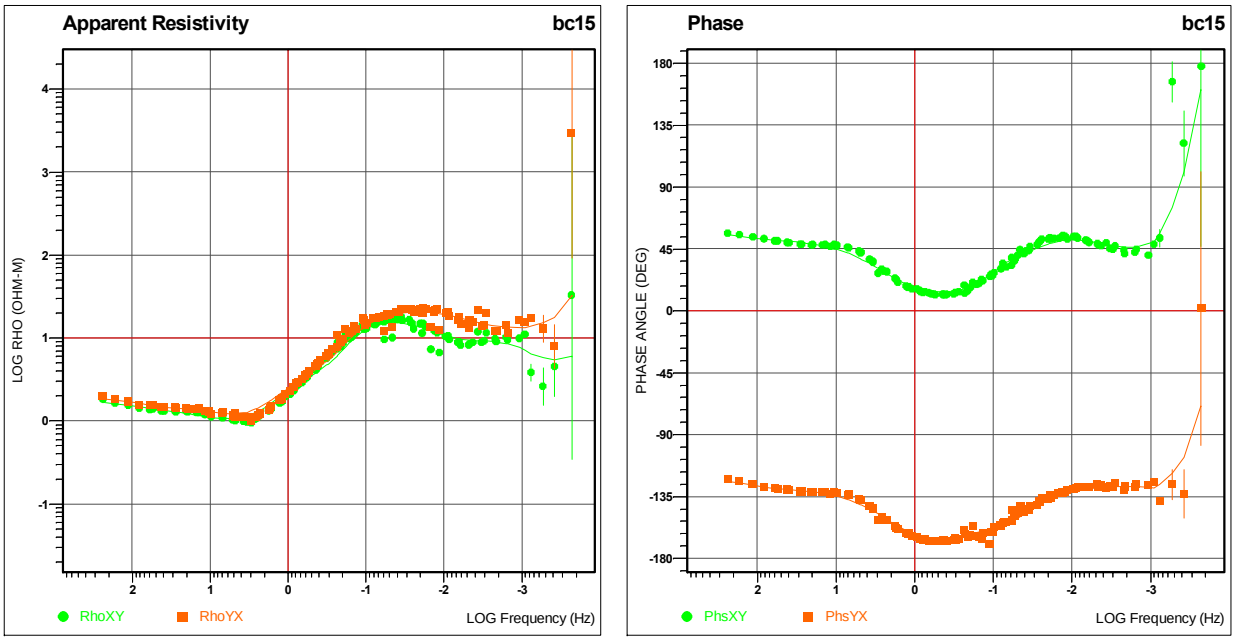


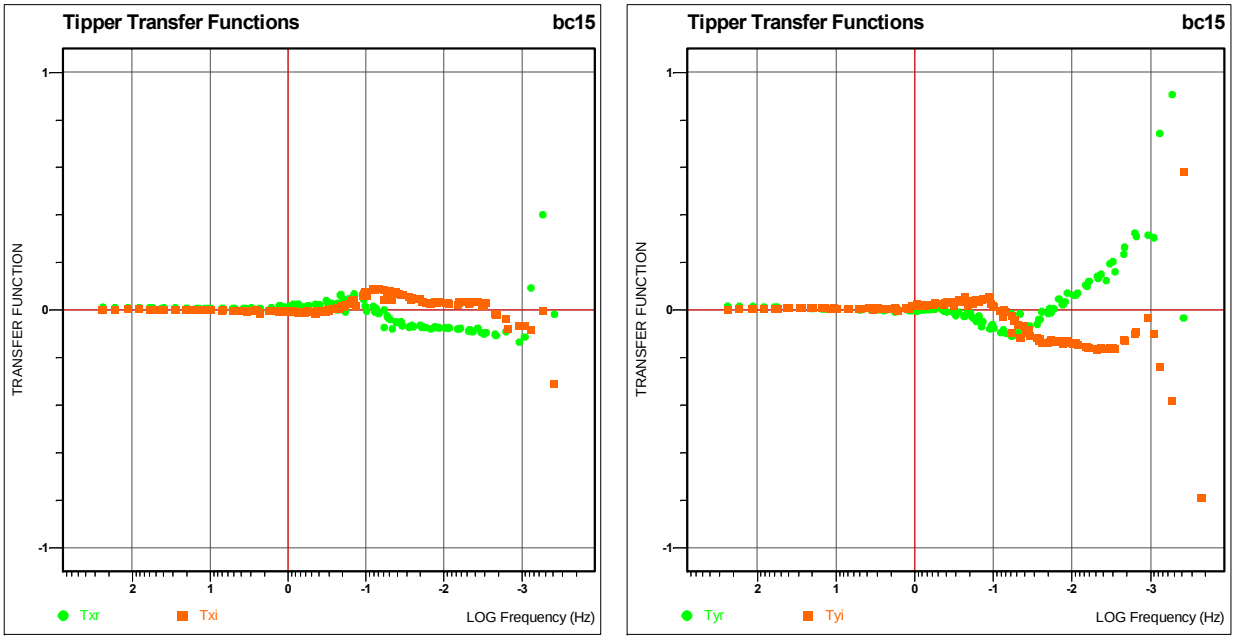
Reviewer Date: December 4, 2008

Comments:

- Good quality data
- Some noise in the vertical and horizontal components below 0.001Hz

Site BC15 Final Result Sounding Curves (Raw data)
App. Resistivity – Phase – Tipper Transfer Functions (Txr-Txi & Tyr-Tyi)





Rho XY ------- Green
Rho YX ------- Orange

2.1.3 Site BC16

Name: BC16
Date: December 4, 2008

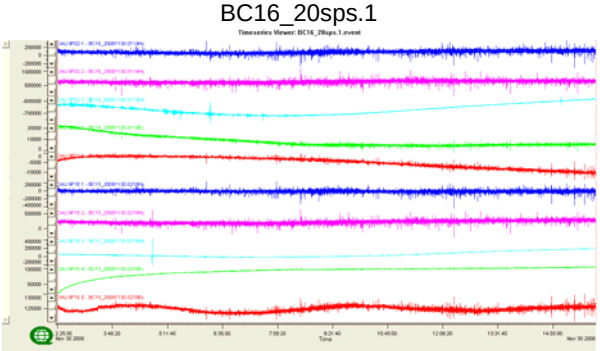
Setup Notes:

- All the events were scrubbed with spike rejection turned off
- Processed using Robust processing and Coherency sorting
- Total of 2days, 20h and 29min of data were acquired, with 2days 8h and 10min used for processing

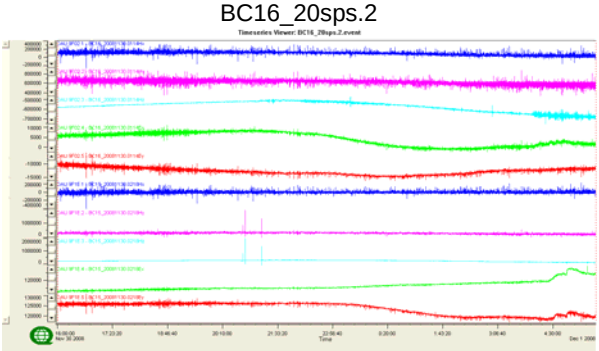
Events in Order	Time Series Notes
BC16_20sps.1 BC16_20sps.2 BC16_20sps.3 BC16_20sps.4 BC16_20sps.5	TS looks OK.

Sensor Impedance Ω	Hx	Hy	Hz	Ex	Ey
	50	50	50	2200	1500

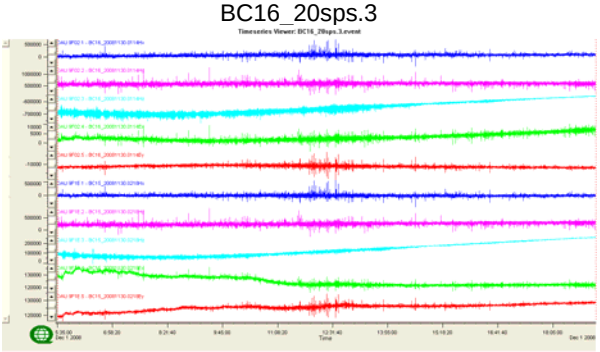
BC16_20sps.1



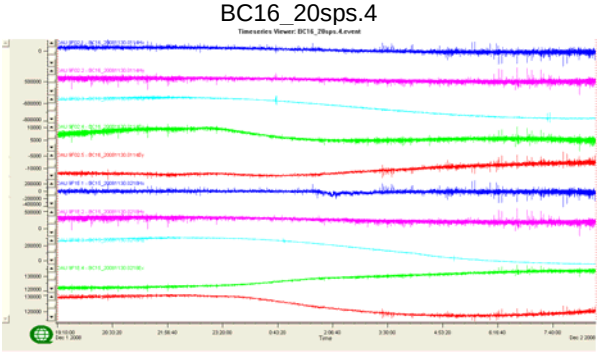
BC16_20sps.2



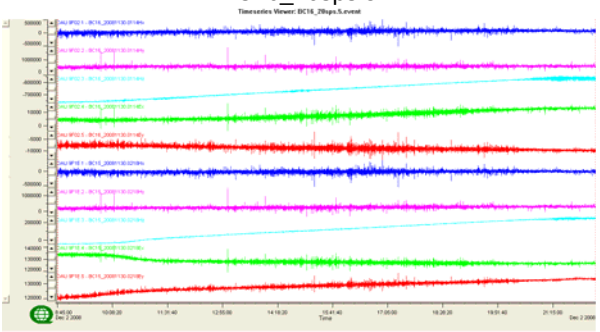
BC16_20sps.3



BC16_20sps.4



BC16_20sps.5

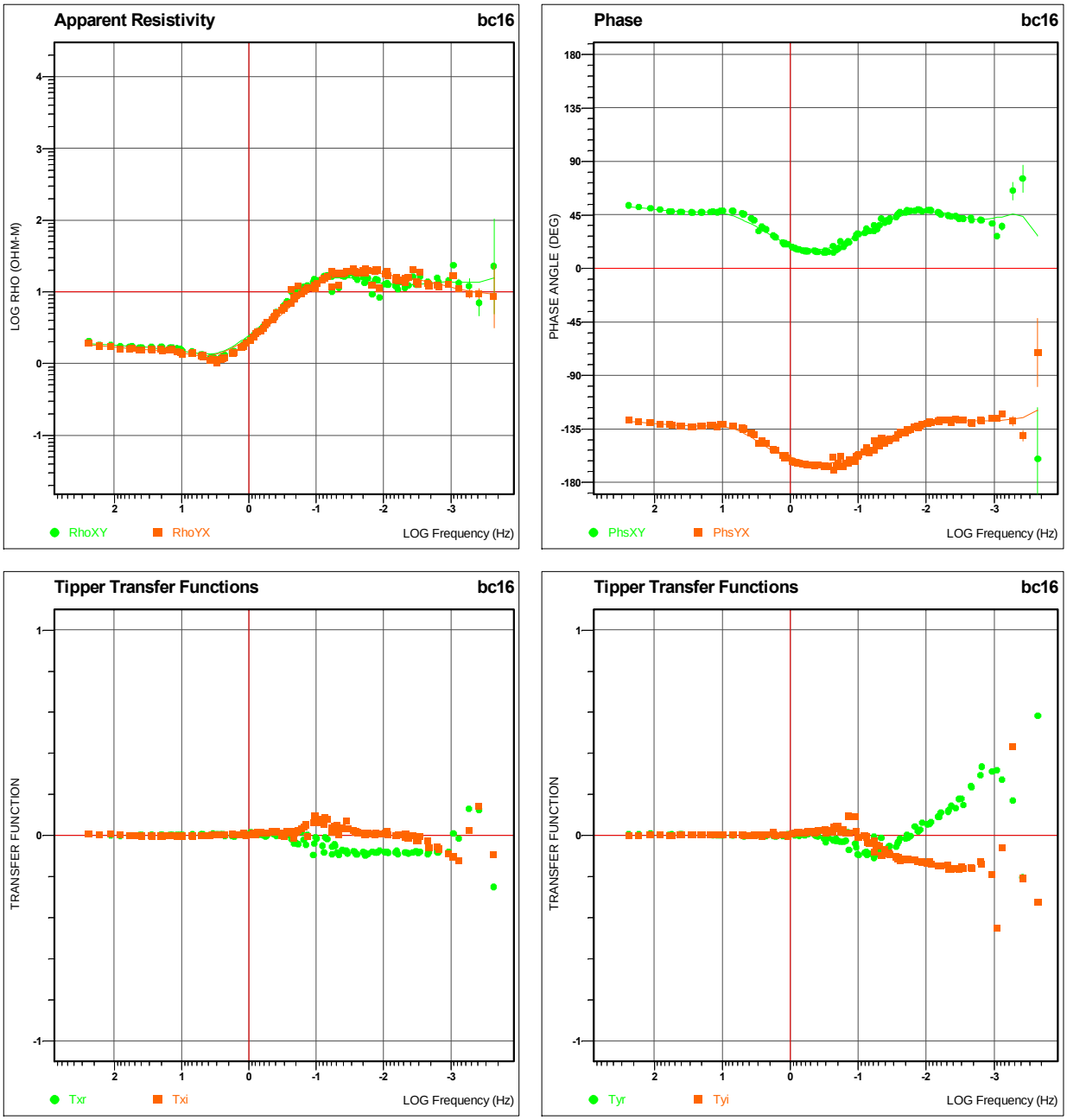


Reviewer Date: December 4, 2008

Comments:

- Good quality data
- Some noise in the vertical and horizontal components below 0.001Hz

Site BC16 Final Result Sounding Curves (Raw data)
App. Resistivity – Phase – Tipper Transfer Functions (Txr-Txi & Tyr-Tyi)



Rho XY ------- Green
Rho YX ------- Orange