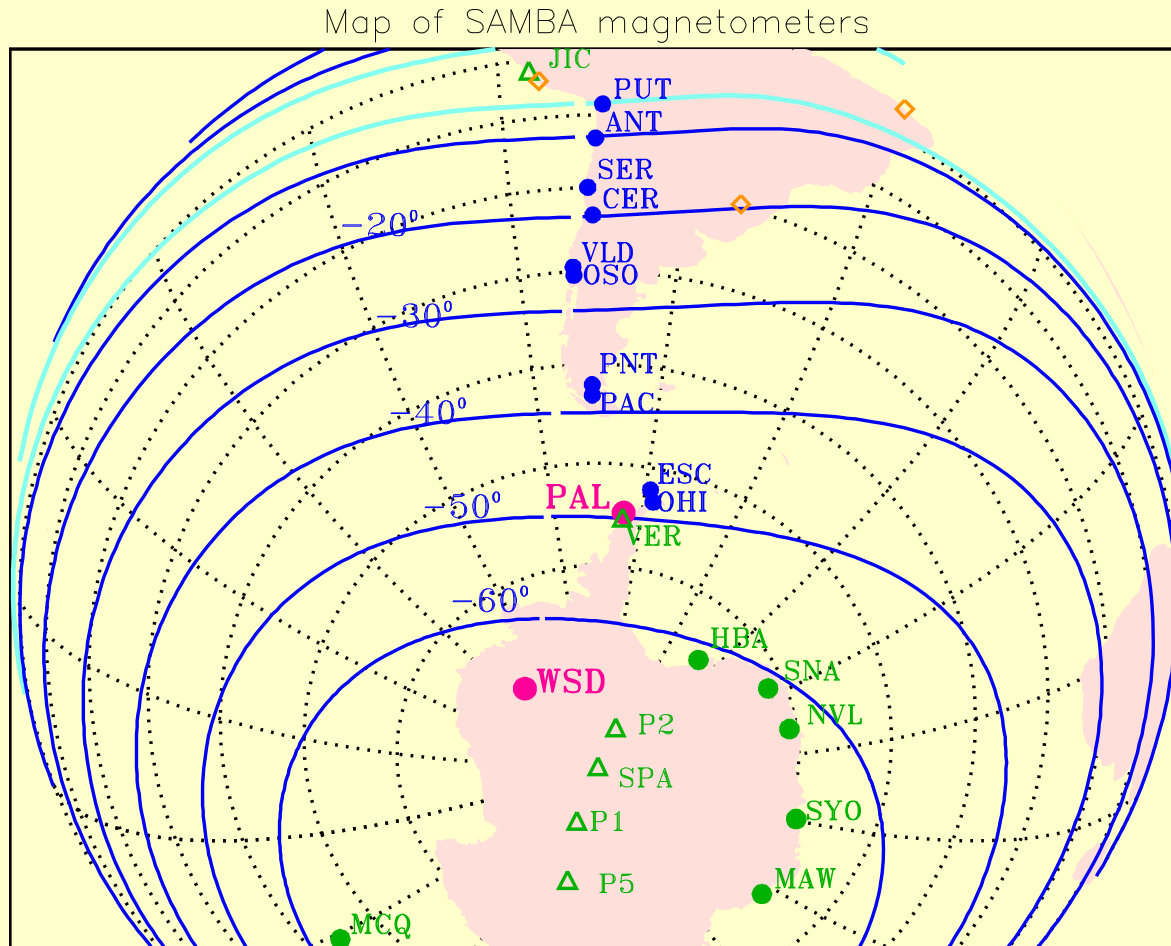


# SAMBA (South American Meridional B-field Array)



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<http://samba.atmos.ucla.edu>

Station Name	Station Code	Geographic Latitude	Geographic Longitude	CGM Latitude	CGM Longitude	UT of noon MLT	L-value
Putre	PUT	-18.33	-69.5	-5.50	1.44	16:30	1.01 <b>May 2003</b>
Antofagasta	ANT	-23.39	-70.24	-10.31	0.72	16:26	1.03 <b>May 2003</b>
La Serena	SER	-30.0	-71.13	-16.55	0.17	16:28	1.09 <b>May 2003</b>
<b>Los Cerrillos</b>	<b>CER</b>	<b>-33.45</b>	<b>-70.6</b>	<b>-19.80</b>	<b>0.75</b>	<b>16:26</b>	<b>1.13 May 2003</b>
Valdivia	VLD	-39.48	-73.14	-25.58	359.60	16:32	1.23 <b>Apr 2002</b>
<b>Osorno</b>	<b>OSO</b>	<b>-40.34</b>	<b>-73.09</b>	<b>-26.39</b>	<b>359.73</b>	<b>16:32</b>	<b>1.25 Apr 2002</b>
Puerto Natales	PNT	-52.13	-70.9	-37.58	1.59	16:22	1.59 <b>Apr 2002</b>
Punta Arenas	PAC	-53.2	-70.9	-38.27	2.87	16:22	1.63 <b>Apr 2002</b>
Escudero	ESC	-62.18	-58.92	-47.17	11.45	15:48	2.18 <b>Jan 2004</b>
O'Higgins	OHI	-63.32	-57.9	-48.8	12.43	15:45	2.28 <b>Jan 2004</b>
<b>Palmer</b>	<b>PAL</b>	<b>-64.77</b>	<b>-64.05</b>	<b>-49.74</b>	<b>9.20</b>	<b>16:00</b>	<b>2.39 (Apr 2005)</b>
<b>Vernadsky</b>	<b>VER</b>	<b>-65.25</b>	<b>-64.27</b>	<b>-50.19</b>	<b>9.19</b>	<b>16:00</b>	<b>2.44 (Ukranian)</b>
<b>WAIS-D</b>	<b>WSD</b>	<b>-79.47</b>	<b>-112.86</b>	<b>-66.99</b>	<b>355.43</b>	<b>17:08</b>	<b>6.54 (Dec 2005)</b>
<b>MEASURE CONJUGATE STATIONS</b>							
APL, MD	APL	39.17	-76.88	50.01	358.65	17:02	2.42
Fredricksburg, VA	FRD	38.20	-77.40	49.11	357.82	17:05	2.33
Boone, NC	DSO	36.22	-81.68	47.55	351.54	17:26	2.23
Aiken, SC	USC	34.00	-81.00	45.37	352.34	17:23	2.06
Jacksonville, FL	JAX	30.33	-81.66	41.79	351.16	17:26	1.83
Melbourne, FL	FIT	28.07	-80.63	39.57	352.39	17:21	1.71

# Update on Funding status

- First phase of SAMBA run from 2001 to 2006.
- We just got funded for another 5 years, 2007-2012.
- Major updates are the installation of 3 real-time stations and a new website that is more interactive and has more data retrieval opportunities.

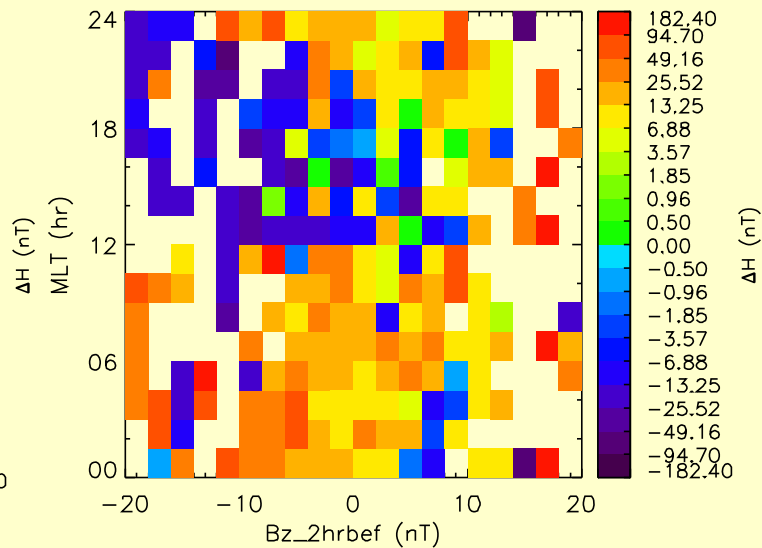
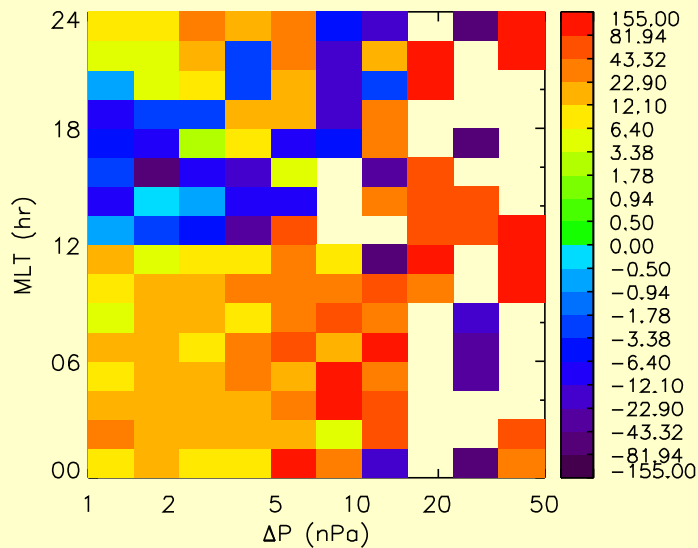
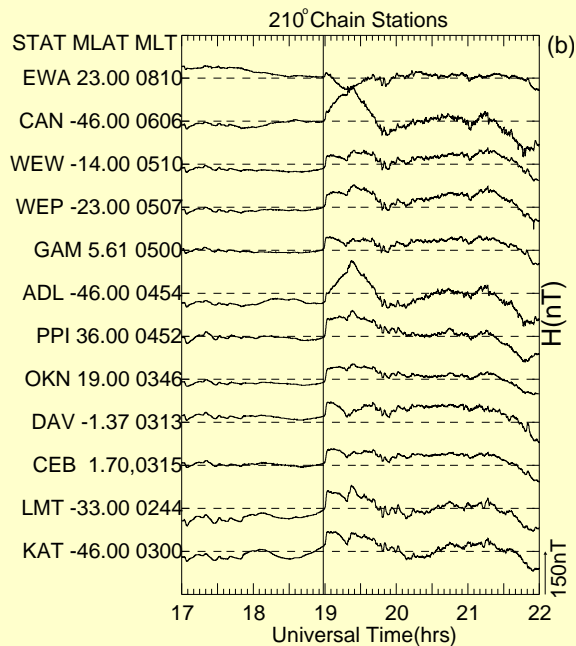
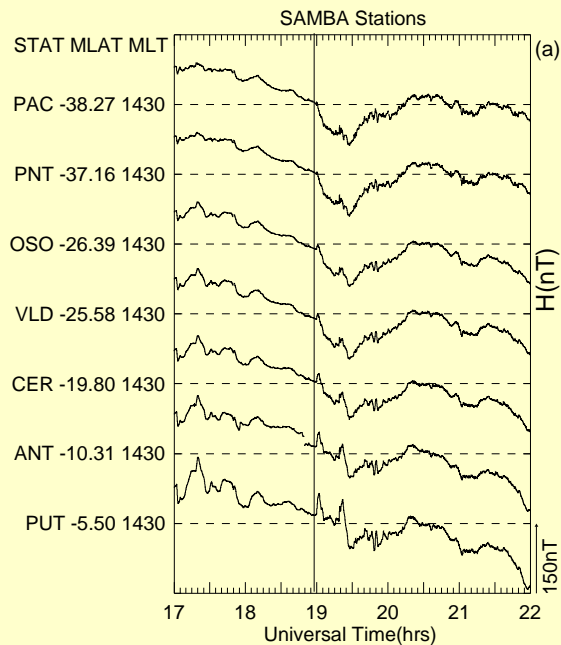
# **Update on Magnetometer operation and data availability**

- Data complete up to 2005. Most available up to 2006. 4 stations data available until recently. Uncollected data remain from part of 2006 and 2007.
- Full online access: up to 2004 (plots on demand, browsing plots, data).
- Online plots: up to some months of 2005.
- Current problem stations: SER, ANT, WSD, VLD

# Contact

- The PI, Eftyhia Zesta, [ezesta@atmos.ucla.edu](mailto:ezesta@atmos.ucla.edu)
- The co-PI, Athanasios Boudouridis, [thanasias@atmos.ucla.edu](mailto:thanasias@atmos.ucla.edu)
- The co-PI, Mark Moldwin, [mmoldwin@igpp.ucla.edu](mailto:mmoldwin@igpp.ucla.edu)
- The website: <http://samba.atmos.ucla.edu> (in need of serious revision)

*Shi et al. [2005, 2006]*  
**Effects of Pdyn on the ring current asymmetry**



December 21, 2003

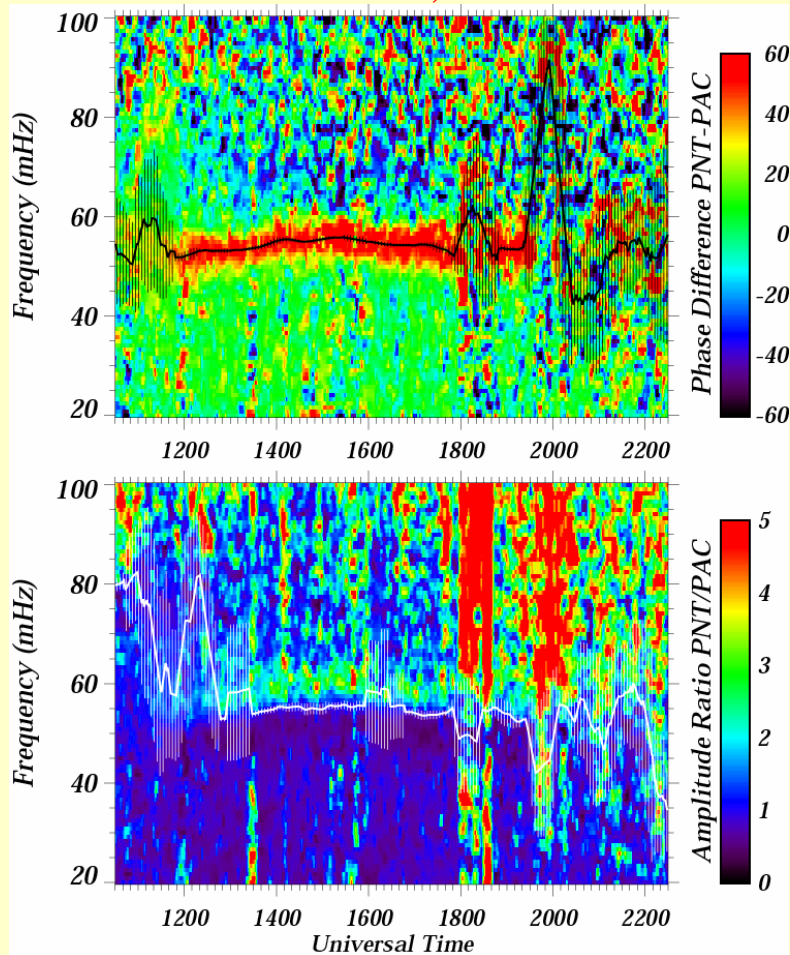
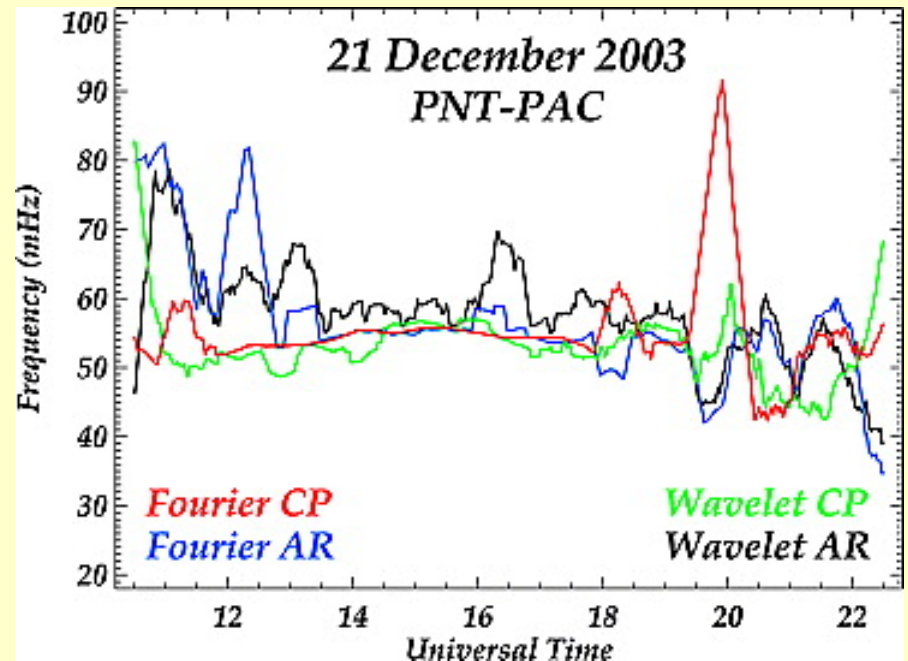
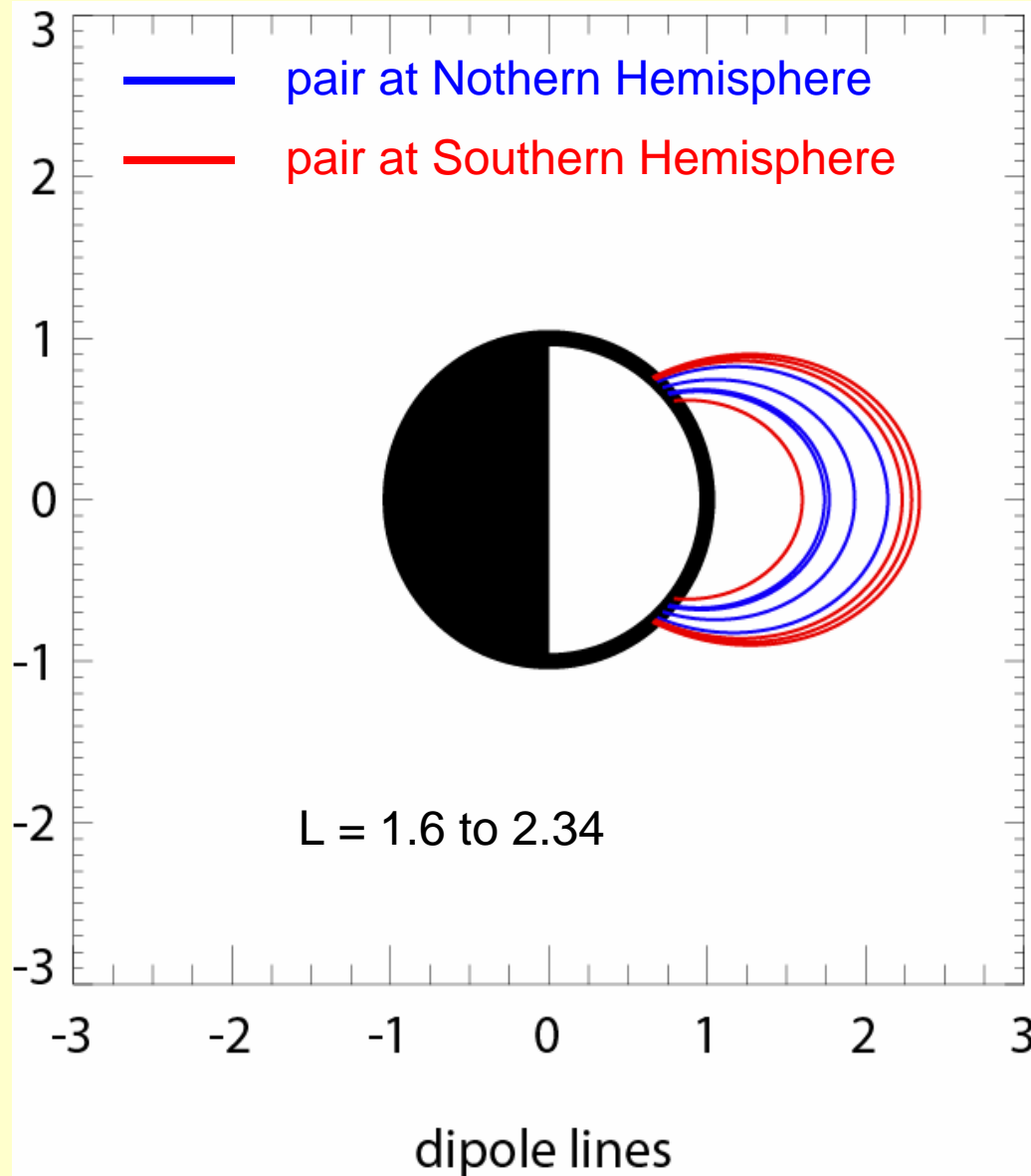


Figure : Automated determination of FLR.

*Boudouridis and Zesta [2007]*

Automated FLR techniques work better with the Fourier transform rather than the wavelet transform, giving less variable FLR.

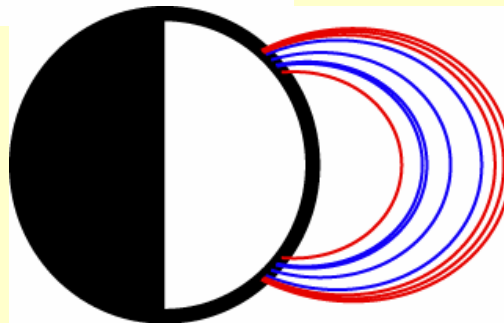
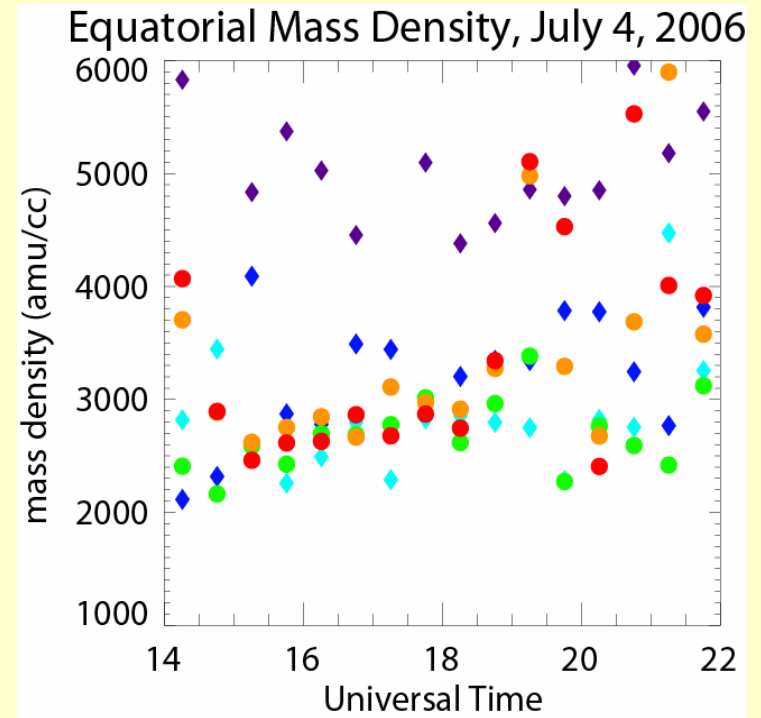
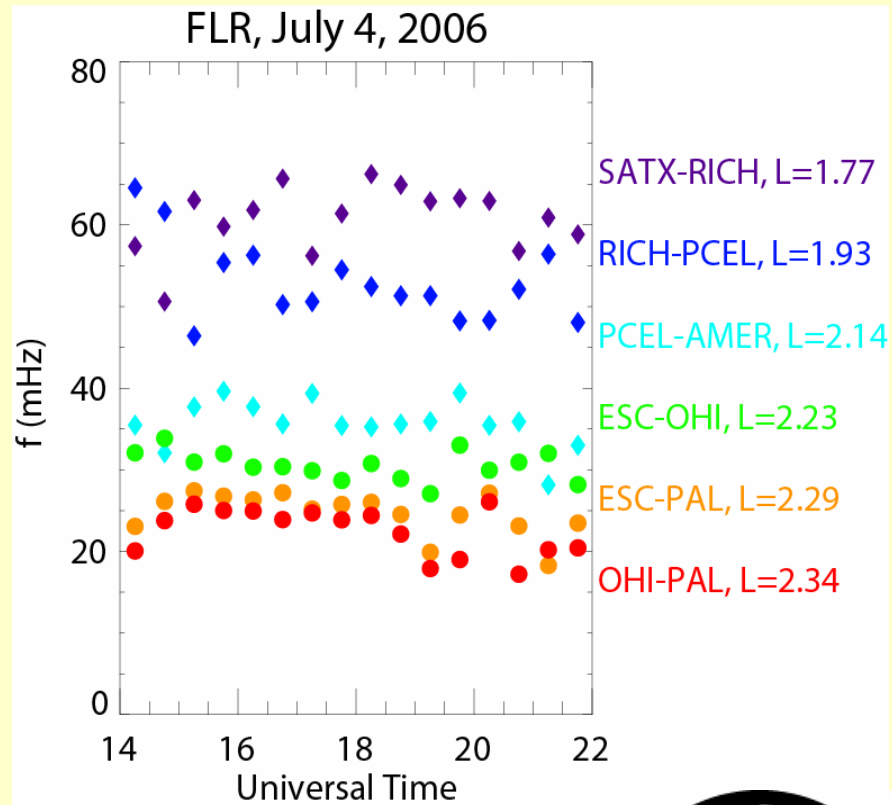




*Zesta et al., in preparation*

Conjugate observations of FLRs

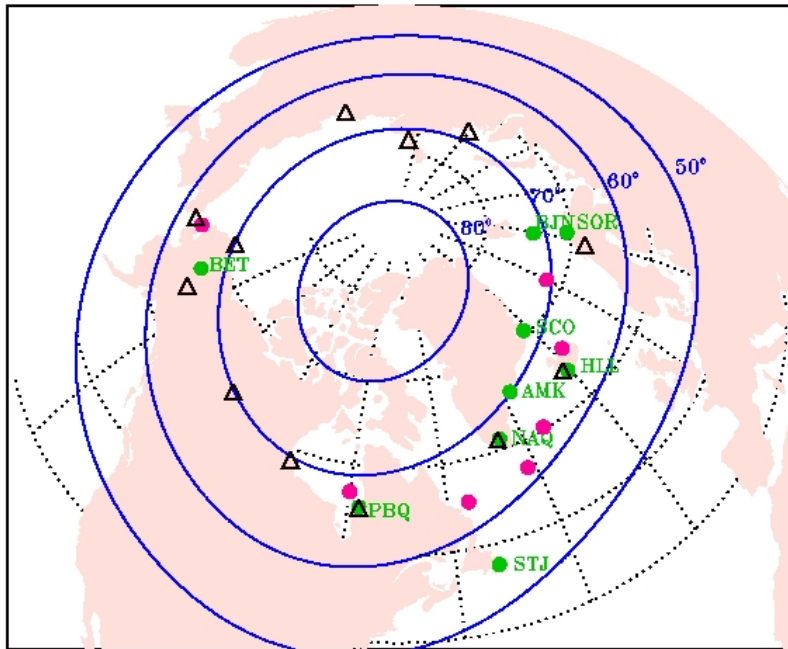




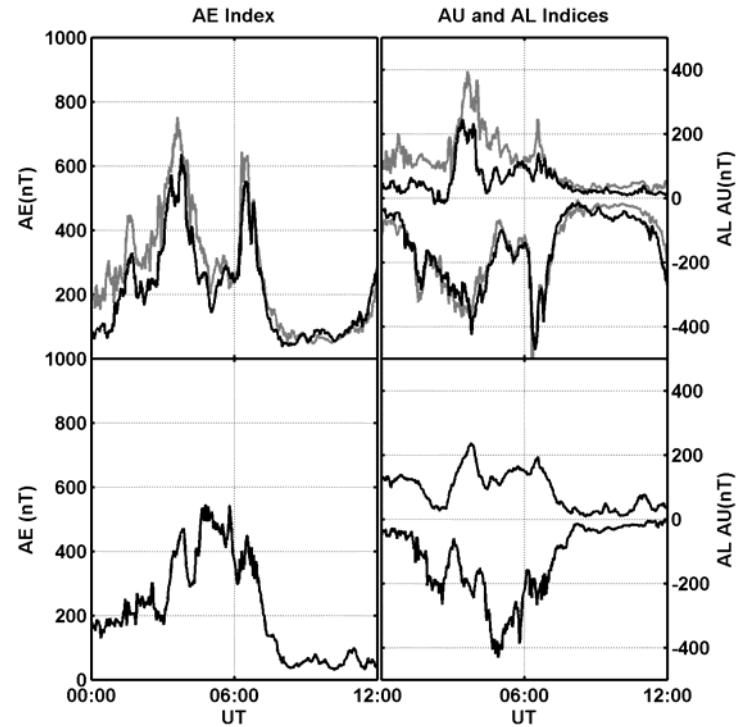
*Weygand and Zesta, 2007*  
(ready for submission)

## Conjugate AE calculations

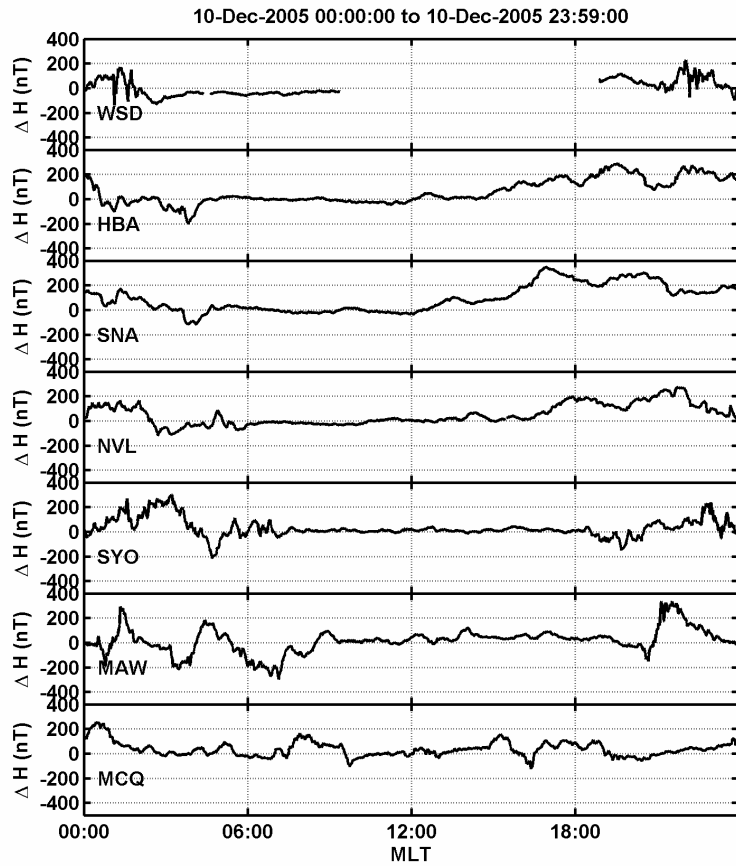
Northern Hemisphere stations



December 10, 2005



December 10, 2005



December 3, 2005

