



Status and News about the THEMIS GBOs

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Canada: Eric

Alaska/Greenland: Harald



Data Status



Magnetometer CDF up to date
All-sky image CDF complete until April 2011
All-sky image PGM complete until April 2011
Skymaps for the 2011/12 season will be available October



Alaska

KIAN: Operating nominally

MCGR: Operating nominally

FYKN: Powered off, start predicted early October

GAKO: Operating nominally

Greenland

NRSQ: All-sky operating, magnetometer data up to May

*Note this does not include EPO Mags



Canada

ATHA: Operating nominally
CHBG: Not Imaging (small PC failure), projected to be operational in early October
FSIM: Operating nominally
FSMI: Operating nominally
GBAY: Not Imaging (PC offline, unknown), awaiting custodian intervention
GILL: Not Imaging (Serial Switch compromised), site visit scheduled September
INUV: Operating nominally
KAPU: Operating nominally
KUUJ: Operating nominally
PINA: Not Imaging (ASI Fault), site visit scheduled for end of September
RANK: Operating nominally
SNAP: ASI Operating nominally, GMAG disconnected for @mine (oper. late Sept)
SNKQ: Operating nominally
TALO: Operating nominally
TPAS: Operating nominally
WHIT: Operating nominally

Canadian instrument, site, and data work will continue as is (CSA funding to UofC) for at least 2.5 more years.



Starting September 1, 2011 NSF agreed to fund operation of the Alaska/Greenland GBO for the next 5 years under the name:
Ground-based Imager and Magnetometer Network for Auroral Studies (GIMNAST)

- UCB-SSL receives funding for site operations, data collection and recovery, maintenance and repairs
- UCLA receives funding for magnetometer maintenance and potential repairs
- Use of Alaska/Greenland GBO data collected after September 2011 should be acknowledged to NSF award 1004736

Slide 5

E1

Hi Harald - I'm not suure how I feel about splitting the credit the way implied here. One of our strenggths on both sides is that we have this 25 siite network... could you add the following "As well, users of ASI data from Alaska, Canada, Greenland should *also* acknowledge "Harald Frey and Eric Donovan for use of the THEMIS ASI data, and the Canadian Space Agency for logistical support of the GBO network." My point is, if you use a gile from *any* asi, there are contributions ffrom both teams (you make the cdf files and evolve the software as described below and we maintain the on site software, produce the skymaps, and we both create the complete PGM file archive... so it really is both teams for every single file. I think this is important, because I do not want people to start looking at this as two different arrays.... what do you think?

Eric, 9/13/2011

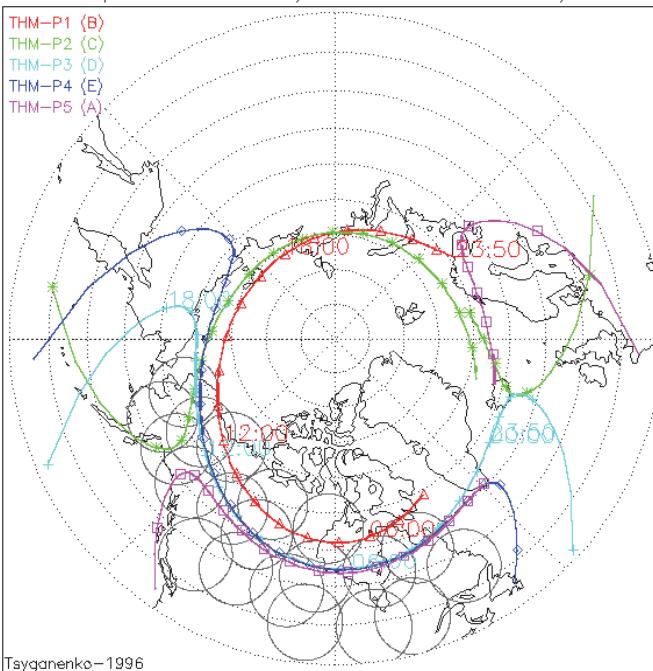


New software tools

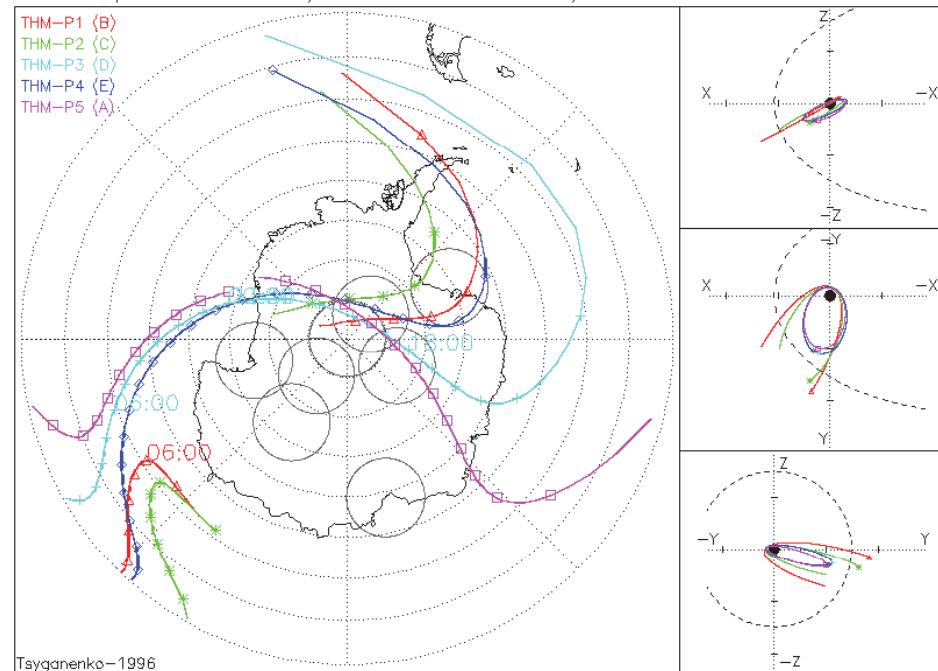


- `thm_gmag_stations` provides information about GMAG similar to `thm_asi_stations`
- `map_themis_state_t96` and `map_themis_state_south_t96` to map THEMIS spacecraft to northern and southern hemispheres

Final footprints 2008-02-03/00:00:00 – 2008-02-04/00:00:00



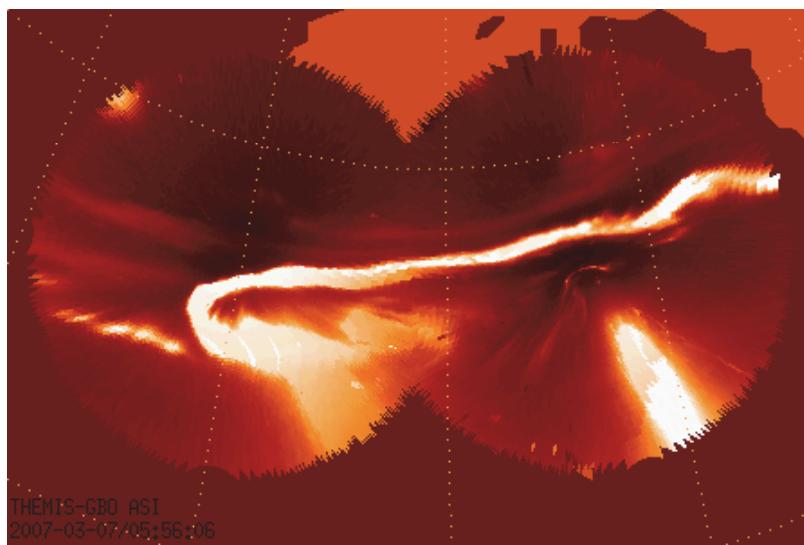
Final footprints 2008-06-08/00:00:00 – 2008-06-09/00:00:00



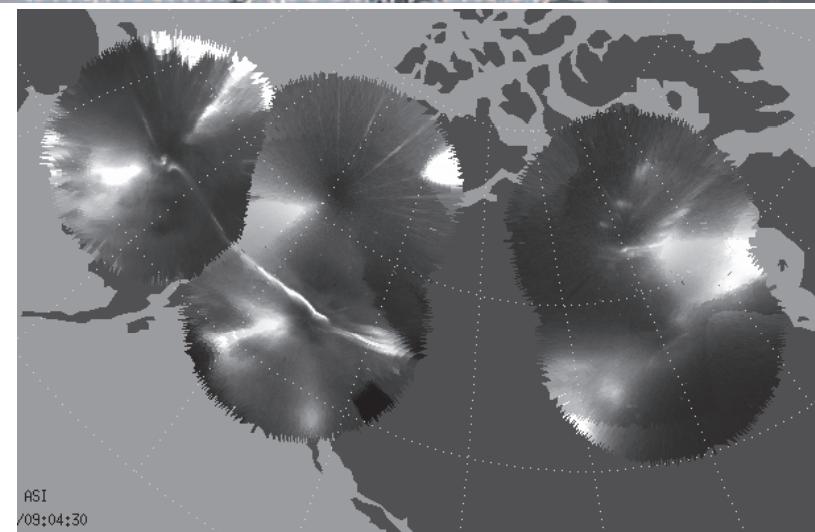
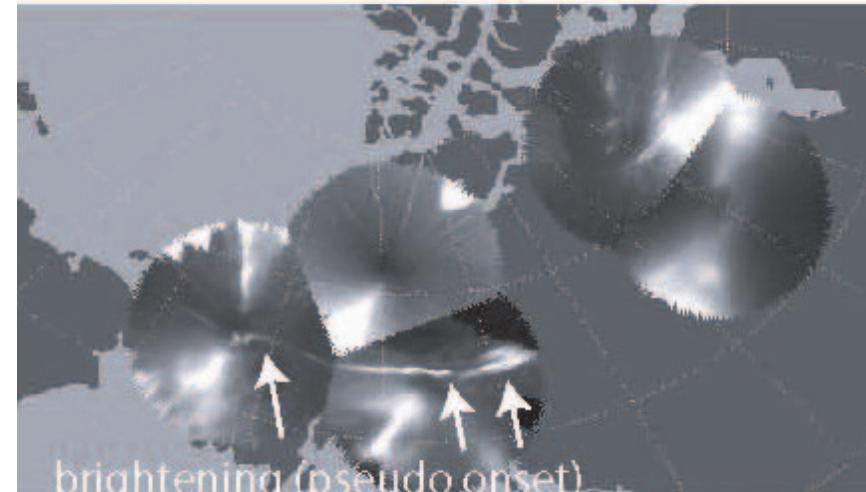
- `thm_asi_merge_mosaic` to merge all-sky images and make mosaic look “nicer”



thm_asi_merge_mosaic.pro



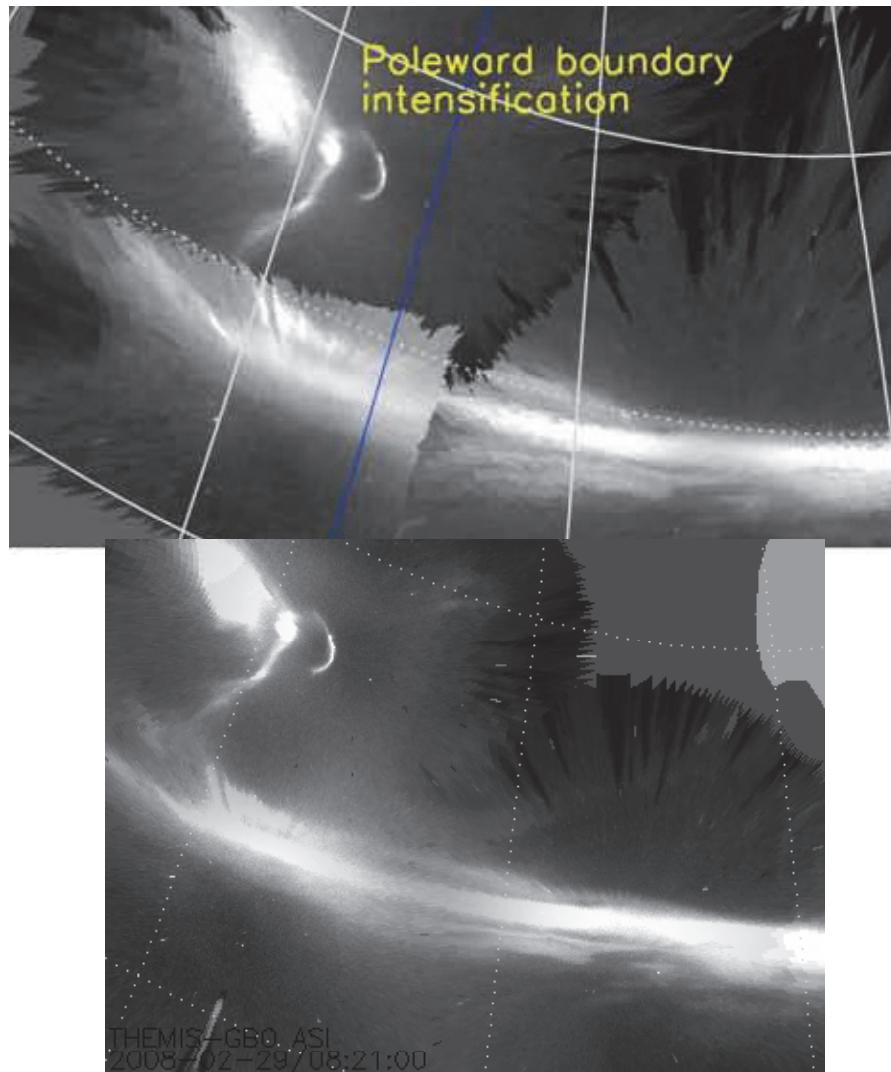
Rae et al., JGR 114, 2008JA013771, 2009



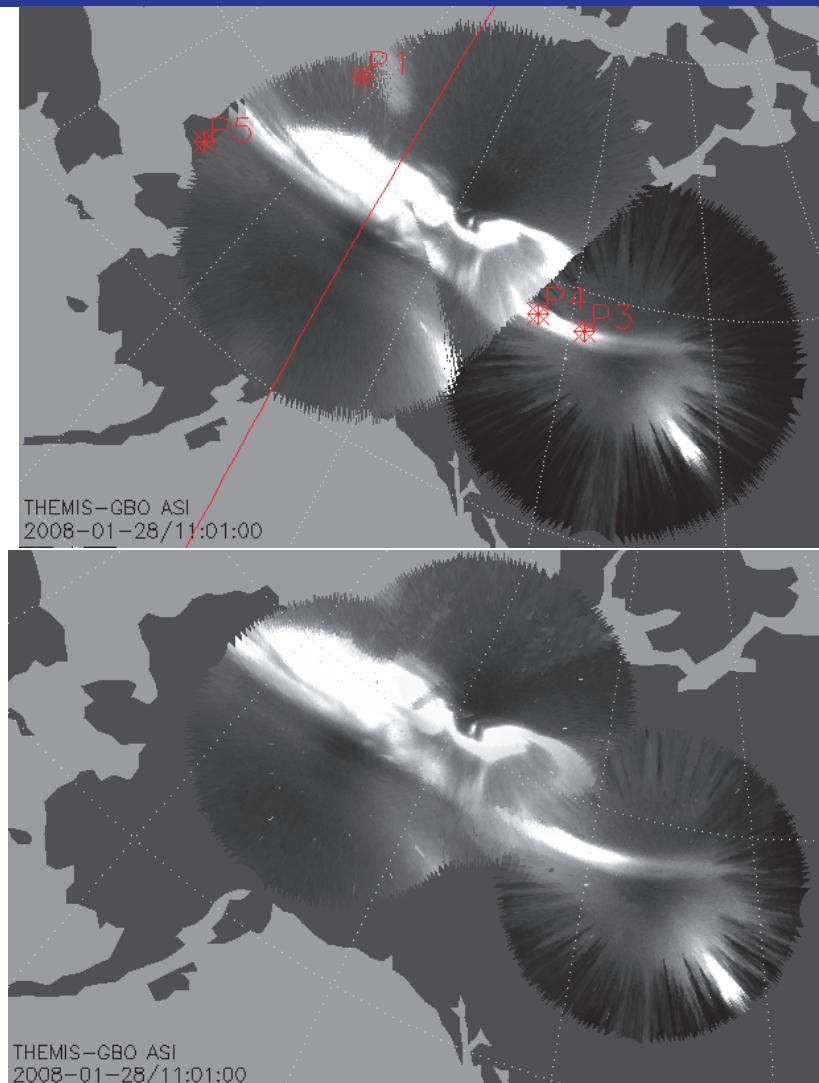
Kasahara et al., Ann. Geophys., 27, 3825, 2009



thm_asi_merge_mosaic.pro (2)



Nishimura et al., JGR, 2009JA015166, 2010



Frey et al., JGR, 115, 2010JA015537, 2010

