THEMIS Online Summary Plot Descriptions.

Found at: http://themis.ssl.berkeley.edu/summary.shtml?autoload=1

Plot Type/Name	Description	Observatories	Time Intervals
Overview[1]	General snapshot of THEMIS spacecraft instruments and ground data.	Single Spacecraft[2] Selected ASI site. Aggregated GMAGs[3]	24hr,6 hr,2 hr
Space ESA moments.	Electron/Ion velocity, pressure, field aligned temperature vector, and energy eflux.[4] Values derived from high resolution ESA data on spacecraft before down sampling for transmission	Single Spacecraft.	24hr,6 hr,2 hr
Ground ESA moments.	Electron/Ion velocity, pressure, field aligned temperature vector, and energy eflux.[5] Values derived from ESA reduced[6] distribution during ground processing.	Single Spacecraft	24 hr,6 hr,2 hr
ESA burst	Electron/Ion energy eflux spectrograms derived from ESA burst[7] distribution during ground processing and spacecraft mode indicator plots.	All Spacecraft	24 hr,6 hr,2 hr
ESA Full	Electron/Ion energy eflux spectrograms derived from ESA full[8] distribution during ground processing and spacecraft mode indicator plots.	All Spacecraft	24 hr,6 hr, 2 hr
ESA Reduced	Electron/Ion energy eflux spectrograms derived from ESA reduced distribution during ground processing and spacecraft mode indicator plots.	All Spacecraft	24 hr, 6 hr, 2 hr

1 . Detailed description at http://themis.ssl.berkeley.edu/key.png

2 . All single spacecraft plots are available for all THEMIS spacecraft when data is available, but displayed on separate plots.

3 . Aggregated using an algorithm like AE-index, but using THEMIS gmags rather than standard AE ground stations. .The gmag sites used in creating the AE-Index are listed below, following this table.

4 . Also for reference E= -VxB, spacecraft measured spin resolution magnetic field, and t89 model predicted magnetic field.

5 . Also for reference E= -VxB, spacecraft measured spin resolution magnetic field, and t89 model predicted magnetic field.

6 . ESA Reduced distribution has high temporal(~3 second) resolution but low angle(1-6 bins) resolution.

7 . ESA Burst distribution has high temporal(~3 second) and high angle(88 bins) resolution but limited availability.

8 . ESA Full distribution has low temporal (~395/~98 seconds) and high angle(88 bins) resolution.

SST Full	Electron/Ion energy eflux spectrograms derived from SST full[9] distribution during ground processing and spacecraft mode indicator plots.	All Spacecraft	24 hr, 6 hr, 2 hr
SST Reduced	Electron/Ion energy eflux spectrograms derived from SST reduced[10] distribution during ground processing and spacecraft mode indicator plots.	All Spacecraft	24 hr, 6 hr, 2 hr
FGM	Fluxgate Magnetometer FGS[11] and FGL[12] data. Spacecraft mode indicator plots.	All Spacecraft	24 hr,6 hr, 2 hr
Burst Memory	Burst memory segment fill level.	All Spacecraft	24 hr, 6 hr, 2 hr
Survey Memory	Survey memory segment fill level.	All Spacecraft	24 hr, 6 hr, 2 hr
GMAG High-H	Stacked plot of H component of HDZ ground magnetometer readings.	High Latitude THEMIS-GBO sites.	24 hr
GMAG High-D	Stacked plot of D component of HDZ ground magnetometer readings.	High Latitude THEMIS-GBO sites.	24 hr
GMAG High-Z	Stacked plot of Z component of HDZ ground magnetometer readings.	High Latitude GBO sites.	24 hr
GMAG Low-H	Stacked plot of H component of HDZ ground magnetometer readings.	Low Latitude GBO sites.	24 hr
GMAG Low-D	Stacked plot of D component of HDZ ground magnetometer readings.	Low Latitude GBO sites.	24 hr
GMAG Low-Z	Stacked plot of Z component of HDZ ground magnetometer readings.	Low Latitude GBO sites.	24 hr
ASI-Summary[13]	Interactive grid of station versus hour/minute/second ASI thumbnails.	20 THEMIS ASI sites.	1 hr/1 minute/3 second.
ASI-Keograms	Interactive grid of station versus hour ASI Keograms.	20 THEMIS ASI sites.	1 hr
ASI-Averages	Interactive grid of station versus hour ASI averages.	20 THEMIS ASI sites.	1 hr
ASI-Mosaic	Map showing ASI station mosaic overlayed on map.	20 THEMIS ASI sites.	3 second.

9 . SST Full distribution has low temporal and high angle(128 bins) resolution.
10 . SST Reduced distribution has high temporal(~3 second) and low angle(1-6 bins) resolution.
11 . FGS data is at spin resolution(~3 second) and is continuously available for most of the mission.
12 . FGL data is at 1/4 second resolution and is available during configured regions.
13 . Map indicating ASI site locations and field of view provided for reference.

Orbits-GSM	3 plots of THEMIS orbits over X/Y/Z axis of GSM coordinates, in an earth centered frame and 40 Re range in each dimension.	All Spacecraft	24 hr/6 hr
Orbits-GSE	3 plots of THEMIS orbits over X/Y/Z axis of GSE coordinates, in a moon centered frame and 120 Re range in each dimension.	All Spacecraft	24 hr/6 hr
Ground Tracks North	Plot of THEMIS footprints on map of northern polar region. Generated by tracing field lines from spacecraft position to the north using the T89 model.	All Spacecraft	24 hr/6 hr
Ground Tracks South	Plot of THEMIS footprints on map of southern polar region. Generated by tracing field lines from spacecraft position to the south using the T89 model.	All Spacecraft	24 hr/6 hr

Ground Based Magnetometer stations used in calculating AE-Indexes	
Dates:	Station Names:
From 2007-2014	'atha', 'chbg', 'ekat', 'fsim', 'fsmi', 'fykn', 'gako', 'gbay', 'gill', 'inuv', 'kapu', 'kian', 'kuuj', 'mcgr', 'pgeo', 'pina', 'rank', 'snap'
From 2015 to present	'pbk', 'tik', 'dik', 'amd', 'nor', 'hop', 'jck', 'and', 'nal', 'roe', 'dob', 'sol', 'dmh', 'lvr', 'leth', 'naq', 'stf', 'kuv', 'nain', 'sept', 'thl', 'salu', 'vldr', 'inuk', 'rbay', 'rank', 'fsmi', 'atha', 'gill', 'fsim', 'inuv', 'whit', 'sit', 'kako', 'fykn', 'cigo', 'trap', 'ded', 'brw', 'kian', 'shu'