

## Useful resources

### Database facilities

- [NASA's Space Physics Data Facility \(SPDF\)](#)
- [MultiMission Magnetopause Crossing Database](#)
- [Multi mission Bow Shock Crossing](#)

### CDF File Format

- [NASA CDF Library](#)
- [NASA CDF Lib documentation](#)
- [ISTP Standard](#)
- [Convert from/to non-CDF, CDF and conversion tools](#)
- [CDF tools](#)

### Known Time Descriptions in CDF Files

- [Summary Table](#)

### Plot and OpenGL in QtCharts

- [Test of limits](#)

### Mission resources

#### Types of plots

- [Spectrograms](#)

#### Cluster

- [Cluster Science Archive](#)
- [Web Server for the CIS Experiment](#)
- [PEACE instrument webpage](#)

#### THEMIS

- [the Themis mission](#)
- [Data Retrieval](#)
- [List of L2 data products](#)
- [List of THEMIS instruments and associated products](#)

### Software

#### Visualization and analysis toolkits

- [CEF library](#)
- [IRFU-matlab web site](#)
- [IRFU-matlab library](#)
- [CLWeb](#)
- [Tools for Cluster data](#)
- [TDAS/SPEDAS](#)

#### Algorithms

- [Downsampling Time Series for Visual Representation](#)

### Web Services

- [Web Service Activity News](#)
- [Web Service Activity Documents](#) (SOAP, WSDL, etc.)
- **Spacecraft orbits**
  - [Satellite Situation Center \(SSC\) System and Services](#)
  - [SSC webservice](#) including soap/rest for location/graphics/conjunctions queries
  - <http://sscweb.gsfc.nasa.gov/WebServices/tipsod/>
- **WSDL**
  - [SOAPui](#) support for testing WSDL / SOAP based services;
  - [How to test a webservice](#)
- **database web services**
  - [AMDA, CL etc. web services](#)
  - [Helio/space models, data, services, catalogs](#)
  - [IMPEX services](#)
  - [CDAWeb service](#)
  - [AMDA webservice software](#) (OBSOLETE)
  - [Impex trees](#) (ccmc, amda, clweb, etc.) (OBSOLETE)
  - [impex wsdl methods](#) (OBSOLETE)

## Space Weather

- [Space Weather catalog](#)
- [EU Space Weather Portal](#)

## Models

### CCMC

- [CCMC homepage](#)

## Event catalogs

- [ICME Richardson list](#) (ACE)
- [IPShocks](#)

## Machine Learning

- [JPL Machine Learning systems](#)
- [Onboard machine learning classification of images by a cubesat in Earth orbit](#)