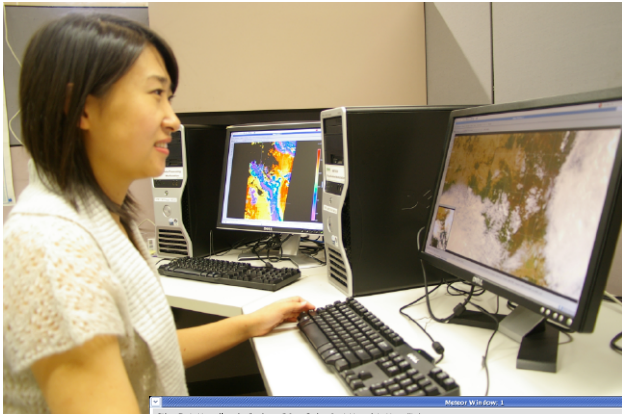
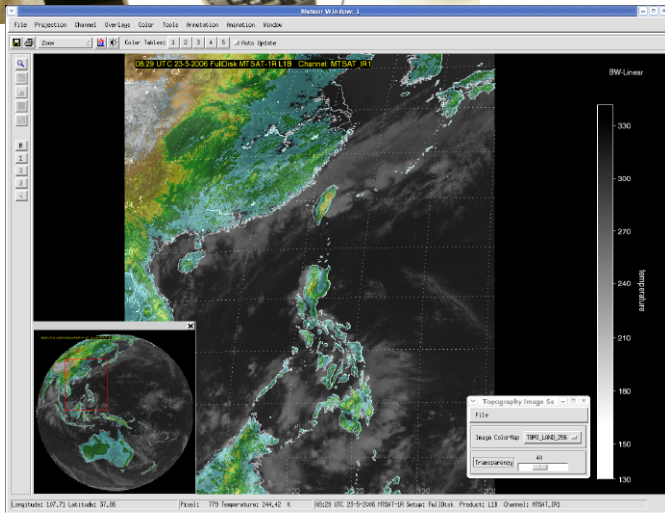


## METEOR satellite image processing system



### Features

- Multiple image display
- Image zooming and zoombox panning
- Grid overlays
- Coast outline overlays
- Topography and river overlays
- Animation loops (auto updatable)
- Range/bearing and speed calculations
- Multiple map projections
- Application or user defined color tables
- Histogram plots
- Scatter plots
- Transect plots
- Histogram equalisation
- Brightness and contrast image enhancements
- Integration with dissemination operations



### Applications

METEOR is a multi-platform meteorological forecaster application, designed to display and analyse satellite imagery.

It includes the traditional image processing and analysis functions, and has been enhanced with extra functionality to make it particularly suitable for the analysis of remote sensing data.

The METEOR package is capable of displaying image data from all meteorological satellites.

It can be used for general meteorological processing applications. For example:

- analysis of satellite data
- generation of animation loops
- creation of output products for forecasting, distribution and media release

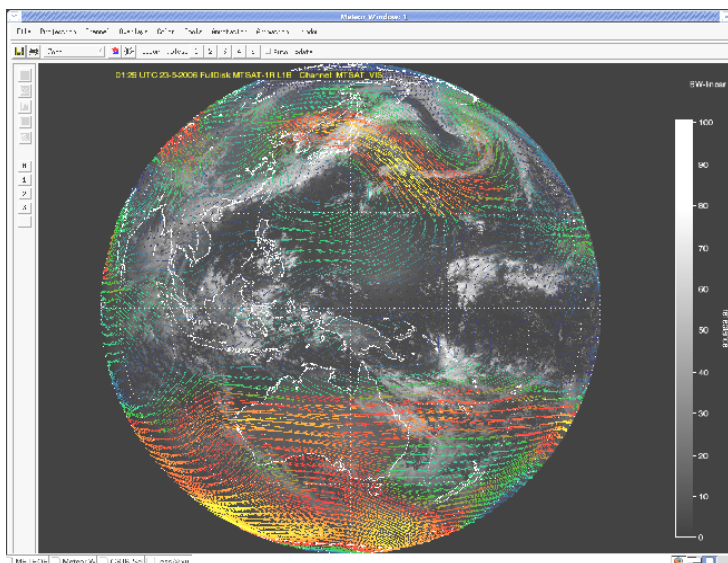
Still pictures and animation sequences can be generated. It also provides facilities for analyzing satellite images for general weather forecasting purposes.



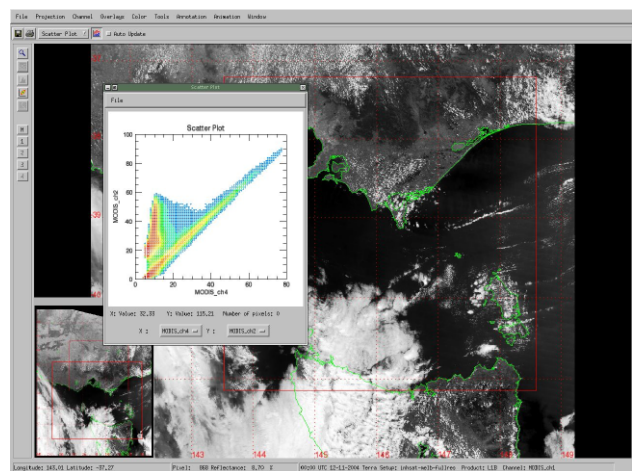
# METEOR Functions

Function	Notes
Cursor display	Pixel value, physical value (temp or albedo) and lat/lon of the cursor position are displayed.
Configuration Selection	Based on SETUP files. Setup files determine parameters of automatic image generation.
SETUP file Parameters	Data channel Map projection Image resolution Geographic coverage (plus others)
Predefined SETUP files	Full Globe Half Globe Quarter Globe
Simultaneous window displays	User can select up to four image simultaneously opened display windows.
Generation of MPEG2 or AVI	Animation loops can be saved as MPEG2 or AVI files, with user specified speed and image quality. These files can be used to output directly to PAL/NTSC format (for display on a monitor) if video output card is available.
Topography Map	Provision is made for the overlaying of animation or still pictures over a suitably formatted topography map.
Colour LUTs	Selection of 10 pre-defined lookup tables for met applications. Up to 50 user defined tables.
2x2 km res Overlays	<i>Inbuilt Overlays:</i> Gridlines Political boundaries and coastlines Latitude Longitude labels <i>User defined overlays:</i> User can define Overlays using drawing primitives
Annotation	Automatic annotation of satellite name, data and time to images and animations.
Zooming and Panning	Zooming and panning are controlled by mouse
Movie Loop Display	Up to 48 image animation loops can be generated from a) time span b) last picture and total number c) mouse highlighting from selection Animation loop can be automatically updated with the latest satellite image. Full control of the animation loop: (start/stop, dwell, speed, direction, end delay)
Image combination	Arithmetic combination of images can be used to generate new images. Operations can be on pixel or physical values (temperature or albedo).
Generation of standard image formats	Images can be saved as PNG, BMP, TIFF, PS, or JPEG.

Example of GRIB data



Example of a Scatter Plot



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