

CMA – Help

1. Introduction.

The Chinese Meteorological Agency is also disseminating a number of products derived from the FY2G and FY2H Geostationary satellites. To support ingestion of these products also import routines have been prepared but given lack of meta data description some deficiencies are still appearing, like for the precipitation product not providing intensities greater than 50 mm. Also the meta data is lacking for the atmospheric motion vectors. Taking these precautions into account you can start the processing of the MPEF data derived from Fengyun. Here we focus on FY2G, the procedures to import the products for FY2H are identical.

2. Fengyun 2G / 2H

The following products are processed – results obtained.

product	Temporal resolution	Time Stamp expected	Starting from – to (UTC)	Output format	Unit
AMV	6 hrs	yyyymmddhhmm	05:30-FY2G 06:00-FY2H	table	various
CLT	1 hr	yyyymmddhhmm	00:00	raster	class
CTA	1 hr	yyyymmddhhmm	00:00	raster	%
HPF	3 hr	yyyymmddhhmm	00:00	MapList	??
OLR_003	3 hr	yyyymmddhhmm	00:00	raster	W/m2
OLR_024	24 hr	yyyymmddhhmm	00:00	raster	W/m2
PRE_006	6 hr	yyyymmddhhmm	06:00	raster	mm
PRE_024	24 hr	yyyymmddhhmm	00:00	raster	mm
SSI	24 hr	yyyymmddhhmm	00:00	raster	W/m2
TBB_IR1_001	1 hr	yyyymmddhhmm	00:00	raster	K
TBB_IR1_024	24 hr	yyyymmddhhmm	00:00	raster	K

Product name and units additional:

- AMV: Atmospheric Motion Vectors. A dedicated application is reading the dataset and is creating an ILWIS table
- CLT: Cloud Type / Cloud Classification. A maximum of 8 classes, classes identified are: 0: clear oceans, 1: clear lands, 11: mixed pixels, 12: altostratus or nimbostratus, 13: cirrostratus, 14: cirrus dense, 15: cumulonimbus, 21: stratocumulus or altocumulus.

- CTA: Cloud Amount
- Cloud Humidity Profiles at 300, 400, 500, 700, 850, 925 and 1000 (01K) hPa
- OLR_003 / OLR_024: Outgoing Longwave Radiation for 3 or 24 hrs
- PRE006 / PRE_024: Accumulated precipitation (note that higher rainfall amounts, e.g. >50 mm are not properly captured)
- SSI: Ground Incident Solar radiation
- TBB_001 and TBB_024: Brightness Temperatures at respective integration times.

Metadata provided within the AWX (raster) files do not provide all required information to derive a complete description of the parameters provided. For the AMV a dedicated routine was developed, retrieving the data in a table, the column names could not be validated but it is believed that wind direction is presented in column B and wind speed is provided in column C.