CMACast

CMACast is a multimedia dissemination system based on the second-generation Digital Video Broadcast (DVB-S2) technology with both file and multimedia transmission capability. It uses a 36MHz C-band transponder of AsiaSat-4 satellite and transmission capacity is 70Mbps. CMACast has enhanced user management and improved interoperability in cooperation with other regional GEONETCast Network Centres (GNC): EUMETCast and GEONETCast Americas at present.

The integrated dissemination platform of hub station is located on campus of CMA. It is operated and maintained by the National Meteorological Information Centre (NMIC). The satellite uplink station is located at the Beijing Ground Station of the National Satellite Meteorological Centre (NSMC). Two dedicated fiber lines transmit the encoded data files and multimedia streams from the Hub station to the uplink station. Each user terminal within the footprint of the AsiaSat-4 satellite decodes the satellite signal and recreates data file according to a defined directory and data file name structure. The basic configuration of a user terminal includes a C-band receive-only antenna, LNB, DVB-S2 receiver, PC/server and receiving software package.

Data and products delivered by CMACast will include:

- Global surface observing and upper-air sounding data
- Numerical weather forecasts products
- Fengyun series Satellite data and derived products
- China next generation weather RADAR data and products
- Other relevant meteorological products
- Distance education and training

(Courtesy of Wang Chunfang)