

## Cloud Depiction and Forecast System (CDFS II)

### PROGRAM/PROJECT:

**LEAD AGENCY:** Headquarters United States Air Force, Directorate of Weather (HQ USAF/XOW)

**LEAD AGENCY POC:** HQ USAF/XOWR, 703-696-4930, DSN 426-4930, scats.xowr@pentagon.af.mil

**PROGRAM POC:** Mr. Tony Leute, 402-294-0828, tony.leute@afwa.af.mil

### SERVICE AREA(S)/INITIATIVE(S)

- *National Aviation Weather Initiatives:*  
1: 5

### FUNDING

- *Programmed/Planned (\$'s/FY):*                      /FY03                      /FY04

### TYPE OF PROGRAM/APPLICATION

Product Development/Product Improvement

### SCOPE OF PROGRAM/PROJECT

- *What's being developed, procured, etc.:* real-time cloud analyses and forecasts supporting Air Force, Army, National Intelligence Community, and other processing centers including the National Weather Service and Navy. CDFS II performs real-time data fusion from multiple sources.
- *How operations have been changed/improved:* improved support (finer scale resolution) to decision makers that require cloud cover information.

### PROGRAM/PROJECT MANAGEMENT

- *Basic guidance document for this program:* Operational Requirements Document for Cloud Depiction and Forecast System (CDFS) II, USAF ORD 005-92-I/II/III (3 Sep 1993, approved by CSAF 3 Dec 1993)  
HQ USAF Mission Needs Statement (MNS) 005-92, Cloud Depiction & Forecast System II (10 Sep 1992)
- *Program's verification process:* CDFS II followed a 4-build spiral development evolutionary acquisition strategy where in each build identified requirements are tested.
- *Method used for end product validation:* AFWA staff experts made comparisons between raw satellite imagery, the old RTNEPH analysis algorithm output, and the CDFS II SERCAA output. Continual evaluation and product quality improvement mechanisms and system capabilities exist.
- *Operational training for the user:* Operator training was provided prior to system delivery. Follow-on training will be provided by the contractor on an as-needed basis at additional cost. The formal courses were specifically designed for operators, programmers, and data base administration courses.

### SCHEDULE/IMPLEMENTATION

- *Next major program milestone:* CDFS II transitions from Air Force Space Command to the Air Force Weather Agency for operations and maintenance in FY04.
- *Program becomes operational:* CDFS II was operational on June 24, 2002.
- *Plans for Further improvements:* Improved cloud analysis algorithms, resolution improvements for regional target scale (64<sup>th</sup> mesh, 3NM) products, and technology refreshments.