

## Aircraft Icing Product (AIP)

**PROGRAM/PROJECT:** Satellite Meteorology and Climatology Division,  
[<http://orbit-net.nesdis.noaa.gov/arad/aradproj.html>]

**LEAD AGENCY:** National Oceanic and Atmospheric Administration (NOAA), National Environmental Satellite, Data, and Information Service (NESDIS)

**LEAD AGENCY POINT OF CONTACT:** Mitch Goldberg, NESDIS, 301-763-8078, [mitch.goldberg@noaa.gov](mailto:mitch.goldberg@noaa.gov)

**PROGRAM POINT OF CONTACT:** Gary Ellrod, NESDIS, 301-763-8204 ext 140, [gary.ellrod@noaa.gov](mailto:gary.ellrod@noaa.gov)

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

- *National Aviation Weather Initiatives:*  
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### **FUNDING**

- *Programmed/Planned (\$'s/FY):*        \$15K /FY 03;        TBD /FY 04;        TBD /FY 05

### **TYPE OF PROGRAM/APPLICATION**

- R&D/Product Development

### **SCOPE OF PROGRAM/PROJECT**

- *What's being developed, procured, etc.:* multi-spectral IR GOES image product depicting areas of potential icing and approximate altitudes (Icing Enhanced Cloud-top Altitude Product (ICECAP)).
- *How will operations be changed/improved:* The new product will allow forecasters to provide improved warnings and short range forecasts of in-flight icing.

### **PROGRAM/PROJECT MANAGEMENT**

- *Basic guidance document for this program:* GOES Improved Measurement Product Assurance Plan (GIMPAP). Office of Research and Applications (ORA) Research Project Plan.
- *Program/Project verification process:* GIMPAP reviews.
- *Method used for end product validation:* Comparison with aircraft pilot reports by means of NOAA/FSL's Real-Time Verification System (RTVS). Reports from individual forecast offices or other users.
- *Operational training for the user:* Periodic workshops sponsored by National Weather Service (NWS), Cooperative Program for Operational Meteorology, Education and Training (COMET), National Weather Association (NWA), and the American Meteorological Society (AMS). Distance learning modules.

### **SCHEDULE/IMPLEMENTATION**

- *Next major program milestone:* Availability of composite icing/cloud top product (ICECAP) on Web (FY04)
- *Program becomes operational:* TBD. Product is experimental, but could become available for operational implementation by FY05 if funding is available. Dependant on NWS requirements and AWIPS Build schedules.
- *Plans for further improvements:* Improve the depiction of cloud top information from the GOES Sounder. Develop an optimum product to mitigate loss of the 12 micrometer IR channel beginning with GOES-12 (degraded product due to excessive false icing caused by thin cirrus). Improve the detection of icing at night.