

## Wind Gust Potential Product (WGPP)

**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)

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### **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.:* Numerical indices that estimate the pre-storm potential for convective microbursts in both wet and dry environments using GOES sounder data.
- *How will operations be changed/improved:* Provide lead time (1-3 hours) for forecasters, flight controllers, and dispatchers concerning the potential for strong convective wind gusts in the airport environment.

### **PROGRAM/PROJECT MANAGEMENT**

- *Basic guidance document for this program:* GOES Improved Measurements 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 of wind gusts or other index values obtained from GOES and Aviation Model "first guess" with SPC storm data and METAR reports. Comparisons with radiosonde profiles.
- *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). NWA and AMS publications. Distance learning modules such as VISIT (planned for FY04).

### **SCHEDULE/IMPLEMENTATION**

- *Next major program milestone:* Wet Microburst Severity Index (WMSI) to become available on Web (FY04).
- *When program will become operational:* Wind Index and Microburst Day Potential Index became available on AWIPS effective with OB-1 (completed May, 2003). Future improvements dependant on AWIPS Build schedules and NWS requirements.
- *Plans for further improvements:* Derived product image formats for AWIPS, WMSI upgrades.