Oceanic Convective Nowcast (OCN) Product

PROGRAM/PROJECT: Aviation Weather Research Program, Oceanic Weather Product Development Team [http://www.rap.ucar.edu/projects/owpdt/description.html]
LEAD AGENCY/COLLABORATING AGENCIES: Federal Aviation Administration (FAA), National Center for Atmospheric Research (NCAR)
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SERVICE AREA(S)/INITIATIVE(S)

- ***National Aviation Weather Initiatives***:
  2: 10

FUNDING

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

TYPE OF PROGRAM/APPLICATION:

R&D/Product Development

SCOPE OF PROGRAM/PROJECT

- ***What's being developed, procured, etc.:*** *expert system framework that merges convective diagnosis, oceanic wind fields, data sets, and other algorithms to produce a 0-2 hour nowcast of convection relative to flight level in remote/oceanic regions.*
- ***How operations will be changed/improved:*** *Enhanced safety over oceanic and remote regions through high-resolution (space and time) alerting of hazard areas. Added ability to strategically plan around areas of* convection at flight level.

PROGRAM/PROJECT MANAGEMENT

- ***Basic guidance document for this program:*** Oceanic Weather Product Development Team (OWPDT) 7-year Plan.
- ***Program/Project verification process:*** Aviation Weather Technology Transfer (AWTT) process.
- ***Method used for end product validation:*** Human (pilot) reporting; comparison to other satellite imagery; verification of algorithms over data-rich regions such as the Gulf of Mexico and CONUS.
- ***Operational training for the user:*** Text, hands-on, distance learning (web-based).

SCHEDULE/IMPLEMENTATION

- ***Next major program milestone:*** AWTT D2 (R&D, test) FY05
- ***Program becomes operational:*** AWTT D4 (operational) FY08
- ***Plans for further improvements:*** R&D in FY04, leading to an operating prototype in the laboratory by the end of FY05. Subsequent merging of new data sets, diagnostics, and algorithms as they are proven during R&D.