

Hybrid Single Particle Lagrangian Integrated Trajectory (HYSPLIT) Model

PROGRAM/PROJECT: [http://www.arl.noaa.gov/ready/hysp_info.html]

LEAD AGENCY/COLLABORATING AGENCIES: National Oceanic and Atmospheric Administration (NOAA), Air Resources Laboratory (ARL)

LEAD AGENCY POINT OF CONTACT:

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SERVICE AREA(S)/INITIATIVE (S)

- *National Aviation Weather Initiatives:*
8: 5, 6

FUNDING

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

TYPE OF PROGRAM/APPLICATION

Product Development

SCOPE OF PROGRAM/PROJECT

- *What's being developed, procured, etc:* HYSPLIT will be replacing VAFTAD as the NCEP dispersion model for volcanic ash. HYSPLIT can run on output from meteorological models of varying scales corresponding to the spatial/temporal scale of interest. HYSPLIT can also simulate dispersion of other airborne hazardous materials.
- *How will operations be changed/improved:* Improved dispersion forecasts of volcanic ash and other airborne hazardous materials will allow better strategic and tactical avoidance of hazardous materials with the potential of saving aircraft and lives.

PROGRAM/PROJECT MANAGEMENT

- *Basic guidance document for this program:* N/A
- *Program/Project verification process:* N/A
- *Method used for product validation:* The model output is evaluated using satellite imagery or other measurements or observations.
- *Operational training for the user:* Hands-on training and text materials.

SCHEDULE/IMPLEMENTATION

- *Next major program milestone:* N/A
- *Program becomes operational:* HYSPLIT is currently the NCEP operational dispersion model for radiological applications. An upgraded HYSPLIT that will be used for all NCEP dispersion applications is expected to replace VAFTAD and the current HYSPLIT in 2004.
- *Plans for further improvements:* N/A