

National Spot Webpage HYSPLIT Trajectories Request Function NWS Product Description Document (PDD) August 24, 2011

Part 1 - Mission Connection

a. Product Description – The National Spot Webpage provides is a nationally uniform portal for NWS customers to request, receive, and leave feedback for site specific spot forecasts.

As of September 19, 2011, the National Spot Webpage will host a new functionality for requesting HYSPLIT (Hybrid Single Particle Lagrangian Integrated Trajectory model) trajectory runs from NOAA’s Air Resources Laboratory (ARL) on an experimental basis. These elements will be available based on the NAM for the CONUS, and based on the GFS for Alaska and Hawaii.

The HYSPLIT Trajectories Request Function would allow users to request HYSPLIT trajectory runs at 500, 1500, and 3000 meters for the latitude/longitude of the spot request. The trajectory runs will begin at the specified ignition time on the spot request. To request HYSPLIT trajectories with a spot request, the user must enter the phrase “hysplit to email@domain.gov” in the remarks section of the spot request form. The HYSPLIT trajectory raw data, as well as gif and kml files will be sent to the specified email address.

b. Purpose – The HYSPLIT Trajectories Request Function of the National Spot Webpage is a core element in the design of the new spot request webpage currently under development. This feature is directly addresses recommendations in the 2008 Science Advisory Board Report “Fire Weather Research: A Burning Agenda for NOAA”

c. Audience - The audience for HYSPLIT Trajectories Request Function of the National Spot Webpage includes users of weather decision support information including fire managers, emergency managers, and numerous local, state, and federal government agencies.

d. Presentation Format – The HYSPLIT trajectories will be emailed to the requestor as raw data in the body of the email, as well as two graphical attachments in gif and kml (for display in Google Earth) formats.

Part II – Technical Description

a. Format and Science – The technical information about HYSPLIT trajectories is available at: http://ready.arl.noaa.gov/HYSPLIT_trajinfo.php

b. Product Availability – The HYSPLIT trajectory data are available for request through the spot webpage interface. Data are emailed to the requestor in raw data format, and gif and kml

graphical formats. HYSPLIT trajectory data can be requested directly from the NOAA Air Resources Laboratory (ARL) page at: http://ready.arl.noaa.gov/HYSPLIT_email.php

c. Additional Information –

(1) NOAA ARL HYSPLIT webpage <http://ready.arl.noaa.gov/HYSPLIT.php>