

***NATIONAL WEATHER SERVICE
PRODUCT/SERVICE DESCRIPTION DOCUMENT (PDD)
TYPE: Official Product
DATE: April 16, 2003***

WORLD AREA FORECAST SYSTEM (WAFS)
SIGNIFICANT WEATHER HIGH LEVEL CHARTS

Part 1 - Mission Connection

1. Product/Service Description:

The WAFS Significant Weather (SIGWX) High Level Charts are graphic representations of forecasted significant weather on a global scale. The SIGWX High Level Charts indicate the 24-hour future position of jet streams, tropopause heights, convection, turbulence, and fronts.

2. Purpose/Intended Use:

The WAFS SIGWX High Level Charts provides aviation interests with a global perspective of significant weather to aid in flight planning safety and efficiency.

3. Audience:

The target audience of the WAFS SIGWX High Level Charts is primarily the national and international civil aviation community.

4. Presentation Format:

The WAFS SIGWX High Level Charts are presented as T4 format charts (facsimile) and gif images (Internet displays). The charts utilize limited text, abbreviations, and International Civil Aviation Organization (ICAO) approved contractions.

5. Feedback Method:

The National Weather Service (NWS) is constantly seeking to improve its products based on user feedback. Customers can provide continuous feedback through the National Centers for Environmental Prediction Aviation Weather Center (AWC) via the AWCs webmaster at <http://aviationweather.gov> and via the e-mail link (below) to the Aviation Weather Services Branch, National Weather Service Headquarters (NWSH). The AWC and NWSH also obtain feedback through meetings and service assessments with the national and international aviation community.

Technical and policy questions, and comments regarding the WAFS SIGWX High Level Charts may be addressed to:

National Weather Service
Attn: Richard Stone W/OS23
Aviation Weather Services Program Manager
1325 East-West Highway
Silver Spring, MD 20910
e-mail: Richard.stone@noaa.gov

Part 2 - Technical

1. **Format and Science Basis:**

The WAFS SIGWX High Level Charts are created in vector graphic file format. Output formats for the charts are T4 (facsimile) and gif images (Internet display). Machine-independent and geo-referenced format messages derived from the vector graphic files will be available via the WAFS Satellite Distribution Network. These messages will be available in the Universal Form for the Representation of meteorological data (BUFR) format. Limited text, abbreviations, and contractions appear on the charts. Meteorologists at the AWC combine expertise in aviation meteorology with the latest model guidance, satellite imagery, and surface and airborne observations to create the WAFS SIGWX High Level Charts.

2. **Availability:**

The AWC issues WAFS SIGWX High Level Charts every six hours at 0400, 1000, 1600, and 2200 UTC. Unscheduled updates or amendments can be issued as needed. Customers can receive the product via the Internet, NOAAPORT, and the WAFS and SADIS Satellite Distribution Networks. Additional information on NWS aviation product dissemination is available at: <http://weather.gov/om/disemsys.shtml>

3. **Additional Information:**

The following WWW Internet site is one location to access the WAFS SIGWX High Level Charts: <http://aviationweather.gov/hilvl>.

A description of WAFS SIGWX High Level Charts policy, area of responsibility, abbreviations and definitions, standards and guidelines, and methods of product dissemination are located in NWS Instruction 10-806 which is available via the Internet at:

<http://www.nws.noaa.gov/directives/010/pd01008d.pdf>.

Additional guidance is available in the ICAO Annex 3 to the Convention on International Civil Aviation.