

Product/Service Description Document
Experimental International Arrival and Departure Gate Forecasts
(updated 11/3/2015)

Part I - Mission Connection

a. Product/Service Description - These web-based International Departure Gate Forecast (IDGF) and International Arrival Fix (IAF) forecasts provide categorical convective guidance for specific locations in the National Airspace System (NAS) allowing for more accurate air traffic management. These forecasts will be a collaborative effort between the NOAA/NWS Center Weather Service Units (CWSU) located at the FAA Air Route Traffic Control Centers in Nashua NH (Boston), Ronkonkoma NY (New York) and Leesburg VA (Washington).

b. Product Type - Experimental

c. Purpose - The purpose of this experimental web page is to provide the Federal Aviation Administration (FAA) and the airlines with expanded weather planning information. This expanded information begins to address a gap in the NWS convective product suite and the Terminal Aerodrome Forecast (TAF). Specific forecast products are not available that forecast convective weather at aeronautical arrival and departure fixes (known as 'gates'). Thunderstorm impact at or near these gates has a significant impact on the flow of aircraft through the NAS causing delays. This will allow critical partners and customers to make more informed decisions regarding the air traffic flow through the NAS.

d. Audience - The target audience for this experimental product is the FAA and airline dispatchers.

e. Presentation Format - A variety of presentation formats are used on the enhanced web page including graphical forecast information, and text based information.

f. Feedback Method -

A customer comment period on this product runs from December 1, 2015 through May 31, 2016. Comments can be submitted using the following web link:

www.nws.noaa.gov/survey/nws-survey.php?code=EIADGF

Technical and content-related comments for this website may also be addressed to:

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Part II - Technical Description

a) Format and Science Basis

There is a noted gap in the NWS product suite regarding convective weather forecasts from an aerial perspective. TAFs are designed to forecast

convective weather within a small radius of a given airport. The Collaborative Convective Forecast Product (CCFP) provides some automated guidance regarding aerial thunderstorm coverage over large areas, for convective weather that meets a specified set of criteria, but only for a 2-8 hour period into the future. Tactical Decision Aids (TDA) created at the local CWSUs provide categorical gate-specific thunderstorm forecasts. Forecasters will issue probabilistic convective forecasts for individual arrival/departure gates, or for groups of gates depending on airspace configuration for advanced planning. This is presented in a color-coded graphical form.

This product will be issued twice per day, and include forecasts for three (3) time periods: 1800z-2100z, 2100z-0000z, and 0000z-0300z for the departure gates; and 1500z-1800z, 1800z-2100z and 2100z-0000z for the arrival fixes. These times coincide with the highest volume of departures for international flights out of the Northeast Corridor. At around 2300z each day, the forecast will be issued for the next calendar day's afternoon and evening arrival and departure pushes (1500z-0000z and 1800z-0300z time frames, respectively). An update to this product will be issued the following day by 1330z.

b) Methods to Construct Page

The International Arrival Fix and Departure Gate forecast graphics are created via software on the AWIPS Remote Display (ARD) at the CWSU. PHP code is used to generate all webpage content.

c) Availability - The website will run 24 hours per day and be monitored by NWS staff.

d) Evaluation and Testing

The departure and arrival forecasts will be available respectively at:

<http://www.weather.gov/images/zbw/IDGF.gif>

<http://www.weather.gov/images/zbw/IAF.gif>

The page will be monitored to ensure accuracy and timeliness of the information provided. In addition, users will be solicited for feedback on the page, and changes made in a rapid prototype environment to best meet the needs of the users.