

Product/Service Description Document

TRACON Approach and Departure Gate Forecast for Convection

Part 1 – Mission Connection

Product/Service Description – TRACON Approach and Departure Gate Forecasts will complement the Collaborative Convection Forecast product by providing greater detail of convective occurrence. TRACON Approach and Departure Gate Forecasts will be developed for the 8 TRACONs listed here (<http://www.aviationweather.gov/cwsu>) or per local request.

- A. Purpose – TRACON Approach and Departure Gate Forecasts will provide ATCSCC, ARTCC, TMU and TRACON a graphical product for planning air traffic flow safely and efficiently around convection into and out of the TRACON area. The graphic will provide easy to interpret color-coded convective forecasts and allow partners to make more informed decisions regarding the air traffic flow through the NAS.
- B. Audience –The target audience for this graphical product includes the ATCSCC, ARTCC TMU and TRACONs serviced by the CWSU or WFO issuing the product. Other FAA supervisors and controllers will have access to the product through the CWSU website.
- C. Presentation Format-Use any appropriate graphical creation software and then upload to the web. See Figure 7.1 in NWSI 10-803 and/or examples at the bottom of this document.
- D. Additional Information – For questions about this product:

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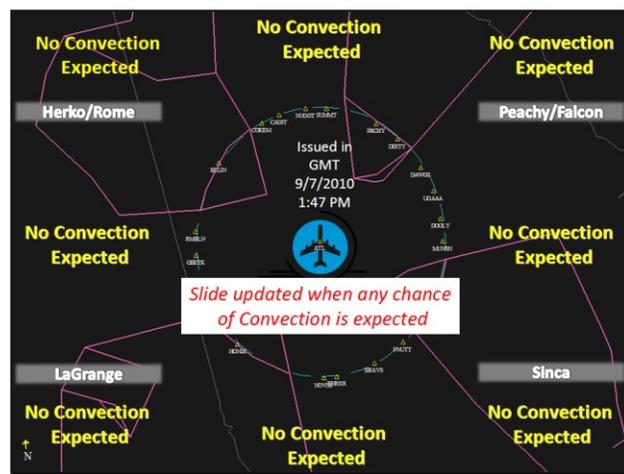
Part II – Technical Description

Format and Scientific Basis –The TRACON Approach and Departure Gate Forecast may be issued daily for the likelihood of convection affecting the air traffic control sectors associated with arrival and departure gates. Convection is defined as moderate or greater precipitation and tops equal to or exceeding FL250. The following values and colors will be used to indicate the likelihood of convection affecting the sector

Unlikely (0%-29%)	Green	R=0 G=155 B=0
Chance (30%-59%)	Yellow	R=255 G=255 B=0
Likely (60%-100%)	Red	R=255 G=0 B=0

Guidance from the Storm Prediction Center (SPC) and the National Center for Environmental Prediction (NCEP) should be considered. Trends in satellite, lightning and radar data will be considered in addition to the mesoscale analysis and the CCFP forecasts as well as Corridor Integrated Weather System (CIWS) and Consolidated Storm Prediction for Aviation (CoSPA). Collaboration between the CWSU and WFO is necessary to ensure consistent convective forecasts. Forecasters should strive for consistency between this forecast and other convective forecasts. Forecasts should be 1-hour intervals for a minimum of 6 hours and a maximum of 12 hours. Each hour will have a color associated with the likelihood of convection affecting the sector. See Figure 7.2 in NWSI 10-803. This figure is also provided above.

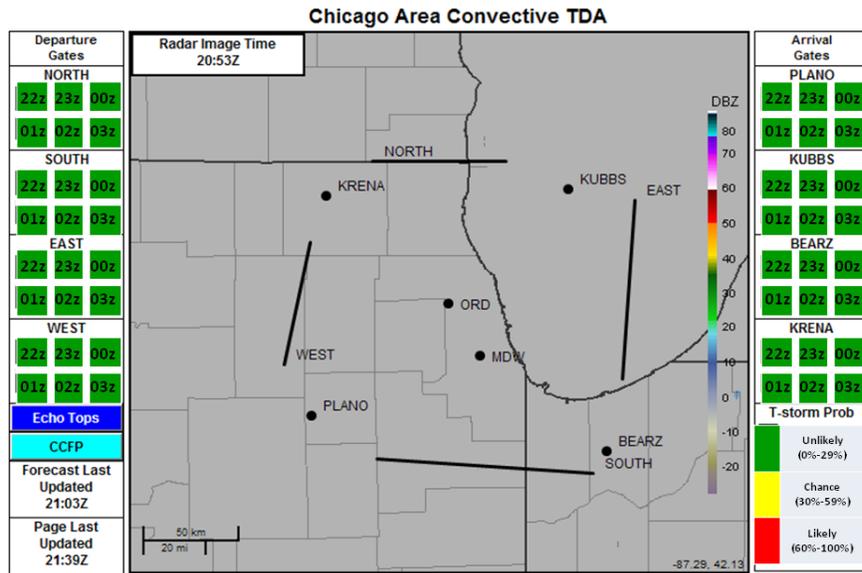
1. A forecast of no convection may be issued when no (0% chance) convection is forecasted in the area for extended periods of time (e.g. winter, strong ridging). This product is a single forecast that can be used to alleviate the workload of the forecaster during times of no convection and should state that the TRACON/Approach and Departure Forecast will be updated when convection is once again expected. See Figure 7.3 in NWSI 10-803. This figure is also shown below.



2. The background for the forecast may be generated from the FAA’s Performance Data Analysis and Reporting System (PDARS) available at each ARTCC, or other graphics software. Black backgrounds are recommended to reduce controller eye strain in dark control rooms.

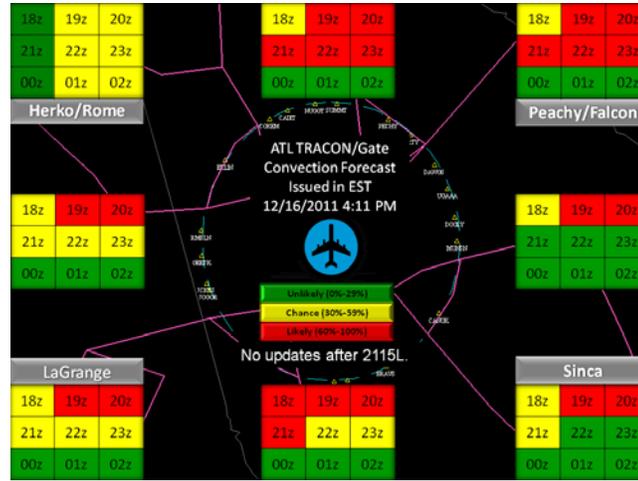
3. Automated TRACON/Gate forecast may be developed for the core airports (NWSI 10-803, Fig. 7.4). Automated TRACON/ Approach and Departure Gate convection forecasts may be derived automatically from meteorological models or gridded data produced at the parent WFO, but should

follow the same standards as the manually developed products stated above. See Figure 7.4 in NWS 10-803. Figure is also shown below.

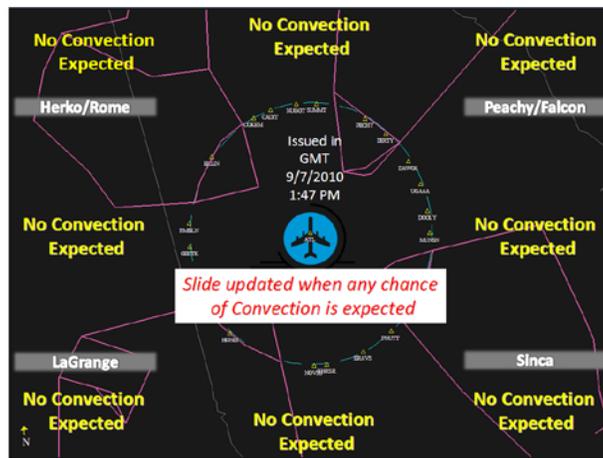


Product Availability –The TRACON Approach and Departure Gate Forecast graphic should be available each morning, afternoon and for the overnight. Recommended times of issuance are 0700L, 1300L and 1900L (at a minimum). If product is valid during a time the CWSU is closed, the product needs to have disclaimer citing product will not be updated until CWSU opens. Additional forecast lengths and product delivery methodology should meet local requirements set forth by ARTCC TMO.

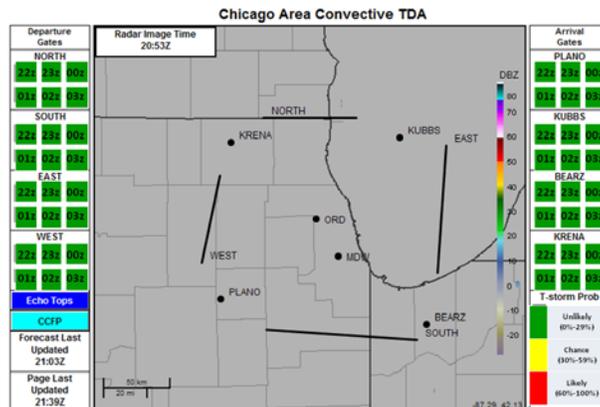
A. Examples –



Example 1



Example 2



Example 3