Product Description Document
Operational Extended Convective Forecast Product (ECFP)

Updated: March 10, 2020

Part 1 – Mission Connection

1. Product Description: The Extended Convective Forecast Product (ECFP) planning tool is a graphical representation of the forecast probability of convection over the US. The product identifies where convection is likely during a 3-hour window, from approximately Day 2 through 4. This forecast is based only on the model output probability of thunderstorms. The ECFP begins at hour 30 and continues through hour 87. This product uses Traffic Flow Management Convective Forecast (TCF) style graphics to facilitate ease of interpretation and use with the operational TCF. While TCF depicts convective tops and coverage, the ECFP only depicts probability. It is intended to support the long-range planning for convective constraints within the National Airspace System.

2. Purpose/Intended Use: The ECFP planning tool has been developed in response to FAA and industry needs to begin planning for weather hazards, specifically convection, one and two days in advance. To meet these needs and to support TCF planning beyond Day 1, the ECFP is intended to provide traffic planners and collaborators a quick-look forecast of the greatest probability of convection. By utilizing TCF-style graphics, users familiar with TCF can easily determine where traffic constraints are most likely to occur beyond Day 1.

3. Audience/Users: FAA Traffic Managers at Air Route Traffic Control Centers, FAA Air Traffic Control System Command Center, airline and aviation industry dispatch and flight planners, and private weather vendors supporting airline/FAA.

4. Presentation Format: The product is available in graphical format at https://AviationWeather.gov/ecfp.

5. Feedback Method: For further information or to provide feedback, please contact:

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Part 2 – Technical Description

1. Format and Science Basis: This automated graphical forecast is created from the Short Range Ensemble Forecast (SREF) Calibrated Thunderstorm output. Contours are drawn at 30, 50, and 70% probability using TCF-like shading. Dashed areas represent 30-49% probability, solid lined areas represent 50-69% probability, and solid blue filled areas represent greater than 70% probability.

2. Availability: An "Info" page will be available and will provide training material on the use and interpretation of the product.

3. Additional Information: The ECFP is available 24/7 and is updated with each successive SREF run, around 00:30 UTC, 06:30 UTC, 12:30 UTC, and 18:30 UTC each day.