

# **Product Description Document**

## **Extended Convective Forecast Product (ECFP)**

### **Part 1 – Mission Connection**

**1. Product Description:** The Extended Convective Forecast Product (ECFP) Planning Tool is a graphical representation of the forecast probability of thunderstorms. The product identifies graphically where in the US thunderstorms are likely tomorrow afternoon (Day 2) and the following afternoon, (Day 3) based only on the model output probability of thunderstorms. The CCFP is only valid out to 6 hours. This graphical product will use CCFP-style graphics, to facilitate ease of interpretation and use by those already familiar with the operational CCFP. The product is not a CCFP forecast (it is not forecasting the exact CCFP criteria), but intended to support the long range planning for CCFP type of constraints in 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 planning needs, and to support CCFP planning beyond 6 hours, the ECFP is intended to provide traffic planners and collaborators a quick-look forecast of the greatest probability of convection/thunderstorms. By utilizing CCFP-style graphics, users familiar with CCFP can easily determine where traffic constraints are most likely to be realized on Days 2 and 3.

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

**4. Presentation Format:** The product is available in PNG graphic format on the AviationWeather.gov website.

**5. Feedback Method:** Feedback will typically be collected via comments provided to the AviationWeather.gov webmaster. An optional survey will be available where users can provide feedback and recommendations for improvement. Opportunities for face-to-face responses will occasionally occur in the context of media workshops, public outreach events, etc.

For further information 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 40, 60, and 80% probability of “thunderstorm” (not convection) using CCFP-like shading. Hashed areas represent 40-59% probability, solid lined areas represent 60-79% probability, and solid blue filled areas represent greater than 80% probability. The automated graphic uses the 09Z initialization of the SREF valid for 18Z-00Z the next day.

**2. Training:** An FYI/Help page will be available via hyperlink from the ECFP website. This help page will provide training material on the use and interpretation of the product.

**3. Availability:** The ECFP will be available 24/7. It will be updated by 18:00 UTC each day and is valid for the time period of 18-24UTC the next day (Day 2) and 18-24UTC the following day (Day 3).

The ECFP will be available at:  
<http://aviationweather.gov/products/ecfp/>