Changes to Aviation Weather Center Products/Services

- Collaborative Aviation Weather Statement
- Automated CCFP
- Area Forecasts Replaced with Hi-res SIGMET/AIRMET
- Better Website
- Better ADDS backend
CAWS is an event driven, impact based product with both graphics and text

- Only issued for weather that impacts air traffic
- Collaborated with FAA, CWSUs, WFOs and airlines
- Can be requested by any of the above entities
- Summer 2015 Demo convection only

CCFP now stands for Collaborative Decision Making (CDM) Convective Forecast Product

- Automated from various models.
- Looks/feels like old human drawn product
- Issued 24x7x365 every 2 hours
- Issued earlier than human drawn product
New CCFP Example
Collaborative Aviation Weather Statement 001
NWS Aviation Weather Center Kansas City MO
1345 UTC Wed 03 Aug 2014
Weather: Thunderstorms
Valid: 1600-1900Z
ARTCCs affected: ZJX, ZMA
Terminals affected: MCO, TPA

SUMMARY: Thunderstorms along the W coast of FL are expected to move inland and become numerous throughout the central FL peninsula during the early afternoon hours.

DISCUSSION: Scattered thunderstorms primarily overwater along the W coast of FL are expected to move inland and increase to numerous across the center of the FL peninsula through the early afternoon, more quickly and with greater coverage than shown by CCFP. Thunderstorm tops will reach FL450. Terminal impact at TPA probable after 1600Z but ending no later than 1730Z. Terminal impact at MCO probable after 1730Z. Expect another CAWS covering FL thunderstorms to be issued after 1600Z.
NOTE:
1) Solid Blue outline = current weather
2) Dash-dot Red outline = forecast weather
How will a CAWS be Disseminated?

- Posted on the Aviation Weather Center website: www.aviationweather.gov/caws
- NWS Telecommunications Gateway
- Command Center will issue an advisory when CAWS is issued

```
DCC 12/17/14 CAWS 001 ISSUED FYI

CAWS 001 HAS BEEN ISSUED VALID 1800-2030Z.
CONVECTION IS EXPECTED TO GRADUALLY INCREASE IN AREAL COVERAGE AND INTENSITY ACROSS SOUTHERN ZDC (SOUTHEASTERN VA AND NORTHEASTERN NC).
SEE HTTP://WWW.AVIATIONWEATHER.GOV/CAWS TO VIEW CAWS 001 IN ITS ENTIRETY.
171530-172359
```

- Command Center planner will reference active CAWS during SPT
Scenario- 21 Aug 2014 18Z

- Possible Chicago terminal impacts in the next 2-4 hours.

CCFP shows weakening trend over N IL, but there is some moderate instability!
Continuous chat will contain links on where to look at the preliminary CAWS for interested parties. An alert when the final CAWS is available will also be issued.
Preliminary and Final CAWS

- Available online via link on NWSChat
- Steps of Production:
  1. Continuous OB Collaboration will identify the need for CAWS in NWSChat
  2. AWC will produce preliminary graphics and text
  3. AWC will publish preliminary CAWS and issue link in NWSChat
  4. Changes can be made to preliminary if needed (5-10 minutes)
  5. Once no changes are required a final CAWS will be issued and a notice will be posted in NWSChat
  6. Command Center NAM or NOM will issue notification of CAWS via advisory
21Z radar image with CG lightning overlaid. Scattered thunderstorms over the terminal materialized despite guidance having little to no activity. Storms later intensified into a line and approached IND. Another subsequent CAWS would have been issued around 21-22Z timeframe.
Cessation of Area Forecast (FA)

• The FA is a labor intensive, yet low detail product.
• Cessation passed public comment period
• FAA Safety Risk Assessment resulted in a few requirements
  – Implement a comprehensive website
  – Include cloud tops and layers on that website
  – Re-evaluate again this Fall.
• Time saved would enable higher resolution SIGMET/AIRMET and improve forecast consistency
HEMS

- Helicopter Emergency Medical Services Tool
- Tool that provides aggregate near-surface data to the user community for hazards
  - Specifically designed for VFR, low-altitude first responders
- Underwent SRM for conversion from java based to Open GeoSpatial
  - Allows for a broader audience
- [http://new.aviationweather.gov/hemst](http://new.aviationweather.gov/hemst)
- Adaptable to meet FA cessation requirements.
● Timeline
  o Integrated with aviationweather.gov in Open GeoSpatial - 2013
  o Safety Risk assessment - Dec 2014
  o Operational Release - Spring 2015
Operational Products via ADDS

Future Plans

- Transition algorithms from local computing resources and support to nationally supported infrastructure
- Weather and Climate Operational Supercomputing System (WCOSS)
- Run at NCEP
Operational Products via ADDS

- **Benefits**
  - Dedicated support
  - Direct access to input data
    - Reduced data latency
    - Will be able to retrieve model data from source of the model run
    - Current access relies on dataflow from NCEP to AWC
Operational Products via ADDS

- **Current timeline**
  - GTG - In development cycle on WCOSS
    - Goes to Analyst team for prod implementation April 2015.
    - 30-Day evaluation begins May 2015
    - Ready for Operations June 2015
  - CIP/FIP to follow