

An Industry Perspective

Segment #4: Strategic Storm Fcsting for Air Traffic Merging Automation & Human-Over-The-Loop Fcst Efforts

Friends/Partners Aviation Weather (FPAW)

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09 October 2008

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Brief Remarks

Merging Automation & Human-Over-The-Loop Forecast Efforts

- Process & Product
- Definitions
 - Vary by Experience & Vested Interests
 - Strategic Time Frame (1-2hrs vs. 2-6hrs vs. 4-18hrs)
 - Human-Over-The-Loop (or Human-In-The-Loop)
 - Weather Variable of #1 Importance to Air Traffic

PROCESS

Merging Automation & Human-Over-The-Loop Forecast Efforts

- Full Disclosure:
 - Come from an operational fcst office Background.

Believe that a human fcster can add value to automated Tstrm fcsts especially in the 3 to 8 hour timeframe.

PRODUCT

Merging Automation & Human-Over-The-Loop Forecast Efforts

- **PRODUCT Based on Phase of Flight/Airspace**
 - **Departure & Landing/Immediate Terminal Area**
 - **Terminal Aerodrome Forecast (TAF)**
 - **Climb & Descent/Congested Airspace**
 - **TRACON Area Forecast**
 - **En Route / High & Super High**
 - **Collaborative Convective Forecast Product (CCFP)**

TRACON & En Route PRODUCT

TRACON Area Fcst

- Full Disclosure:
 - 2006: Industry Point-of-Contact for Fcst Requirements
 - 2007: MSP tested such a Automation & HITL product
 - 2008: NWS tested similar product in MCO

Believe that an Auto & HITL, TRACON Area
Convection Fcst product has potential to:

- Address the gap btwn the TAF & the CCFP
- Improve Efficiency When Integrated into AT
Decision Making Tools

TRACON & En Route

PRODUCT

Collaborative Convective Forecast Product (CCFP)

- Full Disclosure:
 - 1998-'99: NWA & NWS joint Development of 1st Product
 - 2000-'04: Industry Point-of-Contact for Fcst Changes
 - 2008: Still Industry POC for Fcst Changes

Bad News

- Since '04 been unable to navigate bureaucracy to continue the CCFP improvement process.
- Air Traffic Managers/Decision Makers are becoming Very Impatient/Dissatisfied

TRACON & En Route

PRODUCT

Collaborative Convective Forecast Product (CCFP)

Good News

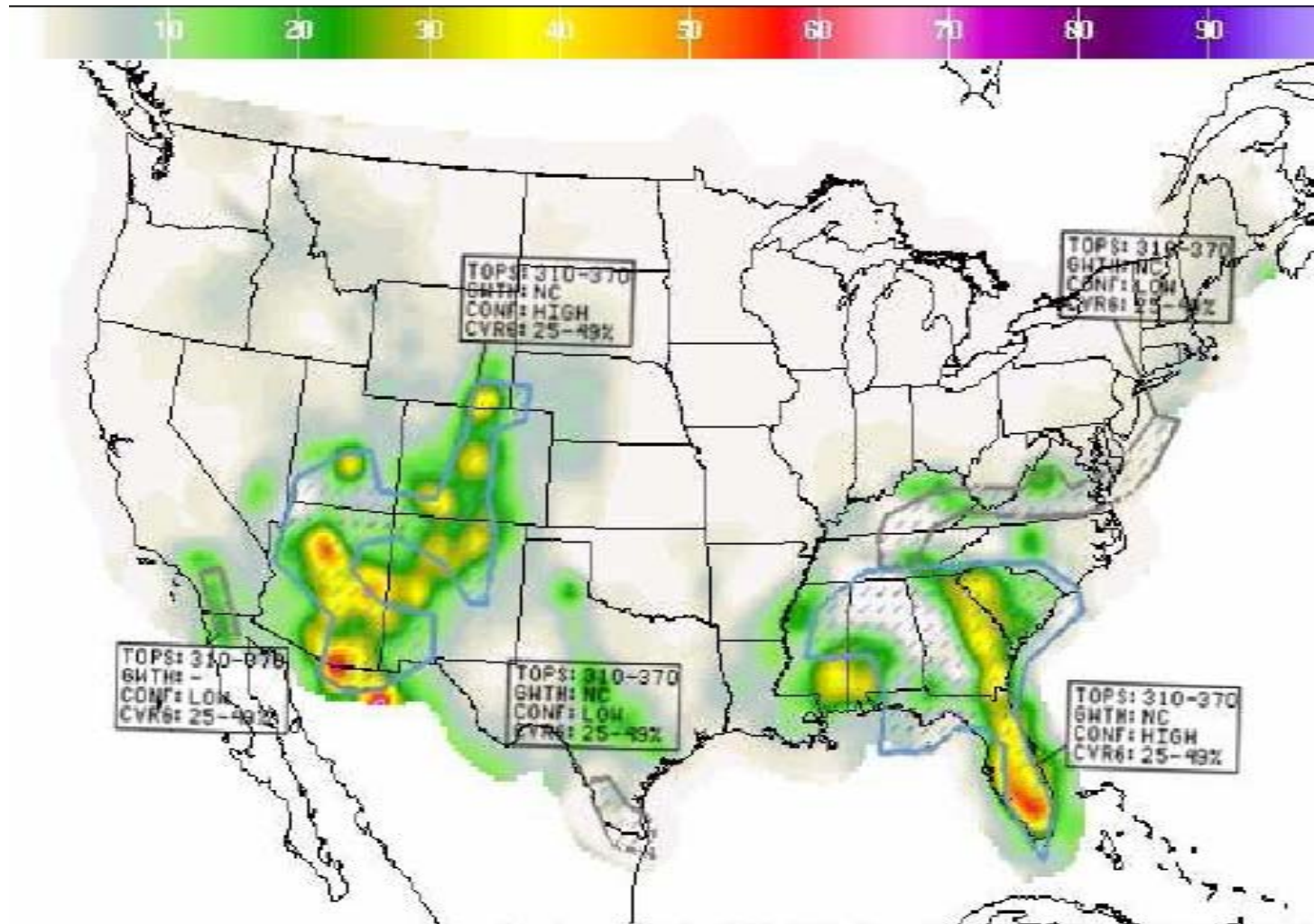
- Thanks to Judy Ghirardelli, Meteorological Development Laboratory, NWS, 27Sep2007 at FPAW displayed info re (Localized Aviation [Model OutputStatistics] Program) LAMP
- The WET is in process of working w/ VOLPE to develop a psbl LAMP & HITL solution for CCFP.

CCFP Verification

Counts of polygons by forecast coverage category and verifying observed coverage category for period 1 Mar – 31 Aug 2008. All issuances included. Ideally all values fall along the diagonal in the highlighted cells.

	Observed				
		< Sparse	Sparse	Medium	Solid
Forecast	Sparse	16807	55 (0.3%)	0	0
	Medium	1664	172	4 (0.2%)	0
	Solid	29	7	0	0

LAMP & CCFP



Thunderstorm Prob Valid Ending Mon Aug 25 2008 7PM EDT
(Mon Aug 25 2008 23Z)

Localized Aviation MOS Program

Issuance Graphic created-Aug 25 3:44PM EDT

