National Weather Service

Operational Perspectives from a CWSU and WFO

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Discussion Topics

- CWSU Training and Shift Work
- A Different View of TAF's
- Example of CWSU and WFO Coordination
- A Quick Discussion of Changes to Severe Hail Criteria

Transition to CWSU Operations

- **Training:** Coordinated training with CWSU MIC beginning spring 2008. Training continued when time was available through early summer.
  - Equipment: ARD/WARP/AISR
  - Products and Duties: MIS/CWA/CCFP/Graphics/Weather Briefings
  - Some shifts worked at the CWSU

A Different View of TAF's

Weather Service Forecast Office

- At WFO's, forecasters issue TAF's and Aviation AFD.
  - Point based forecasts for airports within 5SM of airport's runway complex center.
  - For example: WFO CLE Responsible for following sites
    - TOL, FDY, MFD, CLE, CAK, YNG, ERI
  - WFO forecasters utilize AvnFPS to create initial TAF's 4X daily. Depending on evolving weather conditions, a WFO aviation forecaster can amend a TAF if conditions change after initial issuance. Questions or feedback on amendments can vary.
  - TAF collaboration should occur when time appropriate, but as stated in NWS Directive 10-803 section 7.5, the WFO aviation forecaster has final authority of the TAF.

A Different View of TAF's

Center Weather Service Unit

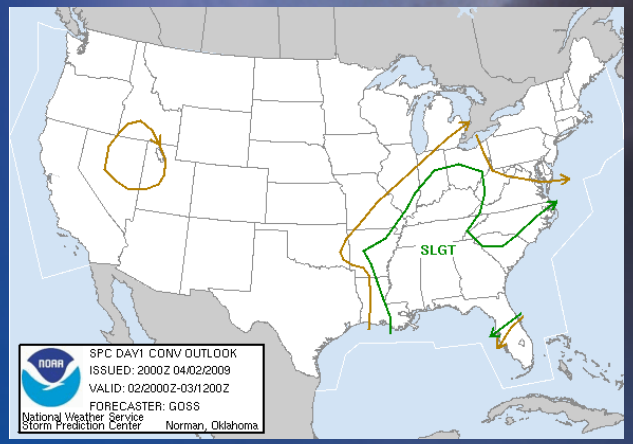
- AT CWSU's, forecasters utilize TAF's as part of weather briefings to ARTCC.
- Ultimately, CWSU forecasters and ARTCC are CUSTOMERS of the TAF's.
- WFO's are responsible for TAF's within their CWA for weather occurring at the surface. CWSU forecasters are responsible for providing not only TAF briefings for sites within and around their area of responsibility for surface conditions, but also in flight weather in and around the area of responsibility.

  For example, at ZOB CWSU a briefing consists of 13 TAF sites:

  DTW, CLE, PIT, ORD, CVG, BUF, BOS, JFK, LGA, EWR, BWI, DCA, IAD. (There are numerous other additional airports within/around ZOB that are designated as TAF sites.)
- Time does not allow a CWSU forecaster to quality control each TAF aside from evaluating initial conditions. CWSU forecaster must place trust that each TAF is proper representation of forecast, and does not have fallback to amend if TAF becomes out of line. TAF's used for a briefing are information ARTCC staff will use as tool for air traffic planning.
- While amendments are the best course of action by a WFO aviation forecaster when a TAF becomes unrepresentative to conditions, a significant amendment of a TAF for CWSU and ARTCC operations may have limited usefulness.
  - May be too late as other courses of action by ATC and TMU have already begun to react to changes.
  - A CWSU forecaster may be involved in several priority issues at one time; i.e. CCFP discussion, issuing CWA(s), providing short term briefings, updating MIS statements.
  - TAF's are accessible at an ARTCC through the CWSU.

“Working Together to Save Lives”

- Example of Coordination between CWSU and WFO



- Date: THU 2 APR 2009

- WFO CLE monitoring thunderstorms moving nearly due north into CWA.

- At 1816 EDT WFO CLE issues NOWCAST for Wyandot, Marion, and Morrow Counties in SW portion of CWA for thunderstorms.

-At 2018 EDT WFO CLE issues SVR for Marion and Wyandot Counties

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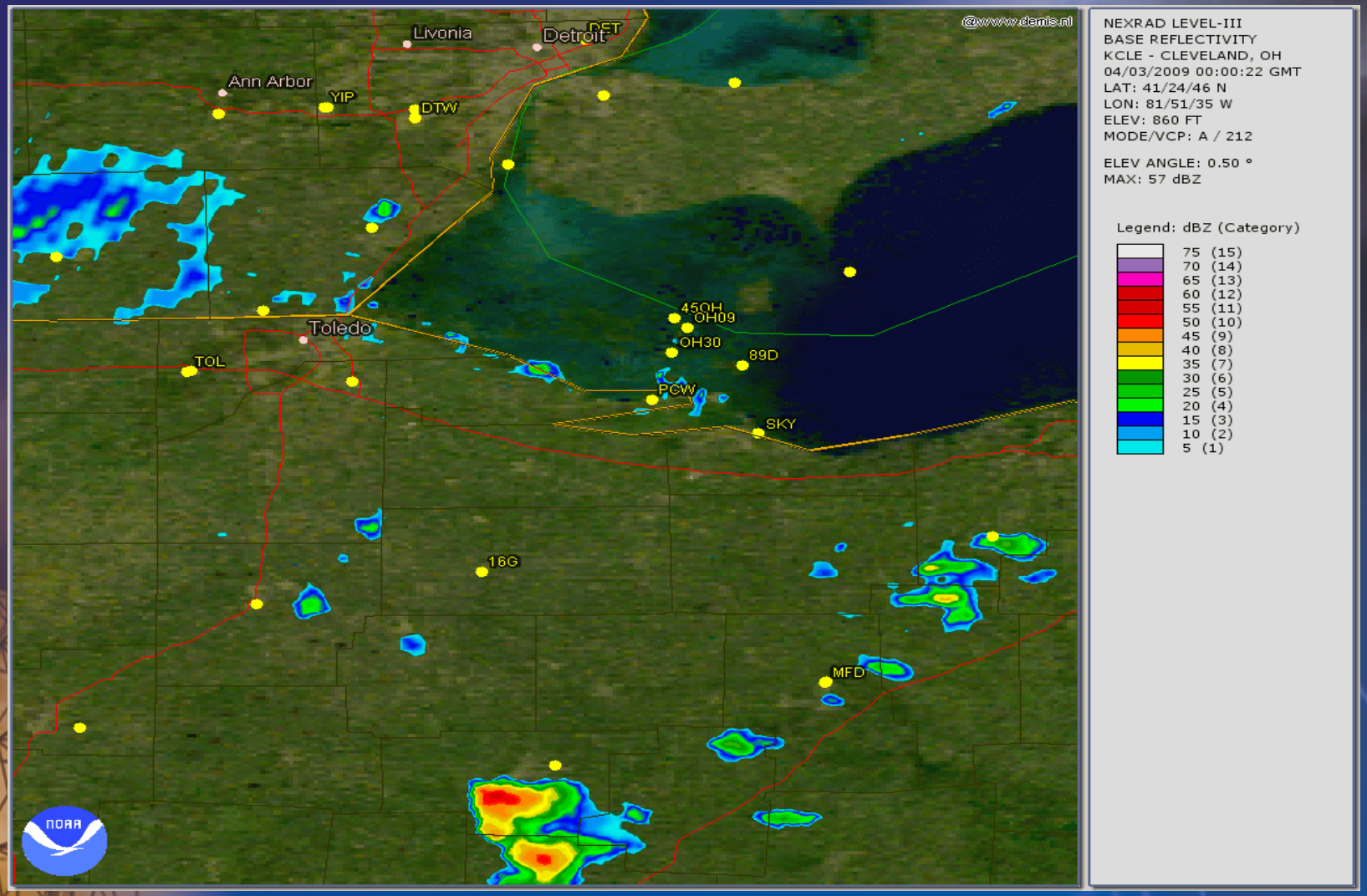

“Working Together to Save Lives”

- Shortly after warning was issued, WFO CLE placed a call to ZOB CWSU regarding issuance of SVR. Also relayed current spotter reports from storm.

- By working at CWSU ZOB, I realized that during the time this warning was issued the CWSU forecaster may have been dividing attention between current conditions and preparing the overnight forecast.

- This action resulted in:

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FAUS21 KZOB 030035
ZOB1 UCWA 030035
ZOB UCWA 102 VALID UNTIL 030115
FROM 40NE ROD TO 45SW CLE TO 30N APE TO 30E ROD TO 40NE ROD
AREA OF SCT TS..WITH EXTREME RAINFALL AND HALF INCH HAIL REPORTED BY
GROUND OBSERVER MOVING FM 17030KT. TOPS FL320.
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10 Minutes May Not Have Been Enough

- Other items that could have been included: boundary areas compared with WFO's, understanding of appropriate identifiers for CWA and MIS products (VOR [VHF Omni-Directional Range] sites as well as airports).

Any Questions??

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