

Weather Evaluation Team



CDM

Collaborative
Decision Making

Brandon Smith, FAA

Richard Egert, United Airlines

April 2025



CDM
Collaborative
Decision Making

Weather Team Objective

Weather Evaluation Team

Objective:

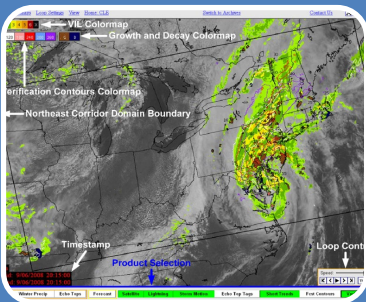
The overall role of the Weather Evaluation sub-team (WET) is to serve as the primary point-of-contact for coordination, feedback and recommendations on weather information.

Team responsibilities include:

- **Act as the Subject Matter Experts for weather integration into CDM tools**
- **Provide external outreach to weather products developers and researchers**
- **Provide internal coordination with CDM sub-teams on weather related issues**

Ultimately, the WET's goals are to provide comprehensive weather products that allow for *improved predictability* and *better decision-making* during weather events.

Current and Future Taskings



Task 125 – Consolidated Storm Prediction for Aviation (CoSPA) Performance Metrics

- *Work with the Weather Community of Interest to recommend and review metrics for CoSPA*



Task 142 – Turbulence Capability Analysis

- *Turbulence-focused tasking that analyzes current reporting methods to ensure compliance with regulations and identify means to increase reporting.*

Current and Future Taskings



Task 145 – Removal of TWR VIS in the prevailing section of the METAR

- *Work with the Weather Community of Interest to assess benefits/impacts to moving TWR VIS to the remarks section*



CDM

Collaborative
Decision Making

**CDM**Collaborative
Decision Making**WET Co-Leads**

Brandon	Smith	FAA-ANG-WX	FAA-ANG-C6
Richard	Egert	United	Industry SME

FAA Members

Eric	Avila	ZHU	FAA/NATCA
Danielle	Perry	ATCSCC	FAA/ATCSCC/BUE

Industry

Barbara	Becker	Southwest	Industry SME
Lilliana	Boor	American	Industry SME
Kory	Gempler	FedEx	Industry SME
Christine	Gregg	JetBlue	Industry SME
Neal	Husa	Alaska	Industry SME
Mark	Johnson	Southwest	Industry SME
Stephanie	Klipfel	Delta	Industry SME
Timothy	Matuszewski	Spirit	Industry SME
Erik	Proseus	FedEx	Industry SME
Jeff	Sarver	UPS	Industry SME
Eric	Wildgrube	Delta	Industry SME

NWS/NavCanada Members

Eric	Dupuis	NavCanada
Giles	Ratte	MetServices Canada
Kevin	Stone	NWS/HQ



CDM

Collaborative
Decision Making

WET Subject Matter Experts

Scott	Birch	NWS/Western Region
Debra	Blondin	NWS/AWC
Chris	Brinton	MosaicATM
Jenny	Colavito	FAA-ANG-C6
Jon	Cunningham	MosaicATM
Christopher	DiPrima	SFO
Ken	Fenton	NOAA/GSL
Matt	Fronzak	MITRE
Jonathan	Leffler	NWS/AWC
Nathan	Polderman	United
Nupar	Sinha	SFO
Jennifer	Stroozas	NWS/AWC/NAM
Kyle	Struckman	NWS/AWC/NAM
Matt	Wandishin	NOAA/GSL



Task 125 CoSpa Performance Metrics

Current Efforts:

- ✓ MIT-LL has been very helpful in describing how CoSPA assesses forecast accuracy
- ✓ Convective Weather Metrics is a hot topic; confirmed through recent FAA Assessment - CoSPA will be added to the Aviation Weather Display (AWD)
- ✓ Focus of metrics seems are in the 2-8 forecast window; with some interest going out to 36 hours.
- ✓ Metrics should be verifiable and applicable to the forecast
- ✓ Metric standards should be developed – not for just convective weather



CDM
Collaborative
Decision Making

Task 142 – Turbulence Assessment

WET Team Task 142 Status:

- ✓ Patterns of increased MOD-SVR turbulence have been observed in recent years
- ✓ Increased risk to passengers and flight crews
- ✓ To address this growing concern, the FAA is conducting the following work:
 - ✓ leading efforts to develop a Graphical Turbulence Guidance Nowcast (GTGN) for both the CONUS and global.
 - ✓ Analyzing derived Eddy Dissipation Rate (EDR) is an essential data input to produce the operational GTGN.



CDM
Collaborative
Decision Making

Task 142 – Turbulence Assessment

WET Team Task 142 Status:

- ✓ Recommend weather products that can be utilized by all stakeholders.
- ✓ Develop an awareness campaign to ensure the participants in the NAS are cognizant of the risks in becoming over-reliance on technology. Need observations to back up data that is used in decision-making.
- ✓ Explore future concepts for airborne weather reporting that leads to increased safety.



Task 145 Tower Visibility

- ✓ **Current METAR reporting requirements treat TWR VIS and SFC VIS the same – as long as both are $< 4\text{SM}$**
- ✓ **The lower of the two is used as the prevailing VIS**
- ✓ **This is problematic – especially at airports with tall towers – when the TWR VIS is substantially lower than what is reported on the runway**
- ✓ **Leads to lower AAR and increased delays**



Task 145 Tower Visibility

KCLT 221152Z 05009KT **1/2SM R18C/P6000FT** -RA BR OVC005 18/17
A2994 RMK AO2 **SFC VIS 4** DZE23RAB23 SLP147 P0001 60002 70022
T01780167 10178 20178 53007

KCLT 221052Z 07006KT **1/2SM R18C/P6000FT** -DZ BR OVC004 18/17
A2993 RMK AO2 **SFC VIS 3** DZB45 SLP145 P0000 T01780167

KCLT 221045Z 06007KT **1/2SM R18C/P6000FT** -DZ BR OVC004 18/17
A2993 RMK AO2 **SFC VIS 3** DZB45 P0000 T0178016

METAR KATL 181252Z 10008KT 1/2SM BR OVC005 20/18 A2998 RMK AO2
SFC VIS 5 SLP146 DZE40 TWRINC P0000 T02000183=

METAR KATL 181152Z 11006KT 1/2SM -DZ BR OVC003 20/19 A2996 RMK AO2
SFC VIS 4 SLP137 DZB44 **TWRINC** P0000 60000 T02000189 10200 20194
53019=



Task 145 Tower Visibility

- ✓ The WET is tasked with the following:
- ✓ Conduct an analysis on the need, including any impacts to flight operator machine readability.
- ✓ Provide a summary of the benefits to moving Tower Visibility to the Remarks section.
- ✓ Provide recommendations on best steps to efficiently move forward with the objective.

**** A separate effort working with FAA ATO is underway to assess impact to terminal procedures****



CDM
Collaborative
Decision Making

Questions?

Thank you!

Questions for the WET can be directed to:

Brandon.smith@faa.gov

Richard.egert@united.com

BACKUP



CDM

Collaborative
Decision Making