

Strengthening CWSU Partnerships ... Moving Toward the "New" Aviation Weather World

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12 May 2009

Who Are The CWSU's Partners?

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Help

- Primary:
 - FAA
 - ARTCC Traffic Management Unit
 - ARTCC Front Line Managers and Controllers
 - NWS
 - WFOs providing TAFs for Hubs (BOX)
 - Neighboring CWSUs (ZOB, ZNY)

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Help

- Secondary:
 - FAA
 - Other FAA facilities within ARTCC airspace
 - TRACONs, ATCTs
 - Neighboring ARTCC TMUs during times of CWSU service backup
 - NWS
 - WFOs providing TAFs to any airport within ARTCC airspace
 - In particular, those that provide service backup to WFO BOX

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Help

- Operations
 - We live Decision Support Services every day!
 - 0600-2100 local, 7 days/week
 - MIC plus 3 forecasters
 - Combined 100+ years of forecasting experience
- Customers
 - Primary: ZBW TMU
 - Secondary:
 - ZBW Front Line Managers, Controllers
 - Other TRACON/ATCT facilities within ZBW AOR
 - Tertiary:
 - NWS Forecast Offices within ZBW AOR

Current CWSU ZBW Services

- Scheduled and on-demand briefings
 - ARTCC
 - A90 (Boston Consolidated TRACON)
 - BOS ATCT
- Product Issuances
 - Meteorological Impact Statement (MIS – AWIPS header: CWSZBW)
 - Center Weather Advisories (CWA – AWIPS header: CWABW1-6)
- CCFP
- DSS Support to local WFOs
 - Extra “set of eyes”
 - CAC/other aviation support

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Help

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- Collaborative Convective Forecast Product
 - Strategic forecast of convection to guide traffic managers in their system-wide traffic management approach
- CCFP forecast suite:
 - Set of 3 forecast maps (2, 4 and 6 hour lead times)
 - Updated every 2 hours
 - Release times are from 0300-2300 EDT/EST

CCFP – The Pictures

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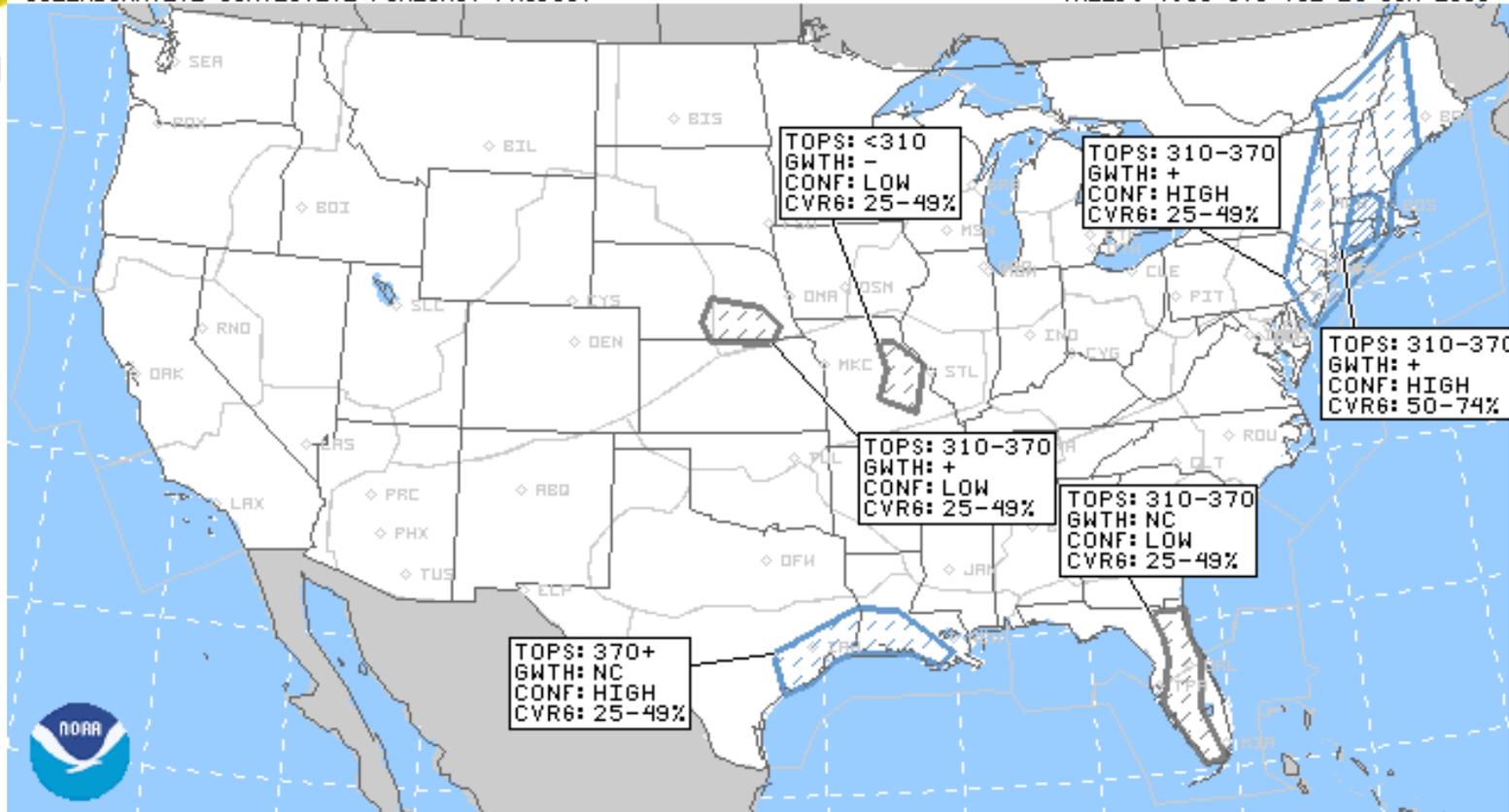
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COLLABORATIVE CONVECTIVE FORECAST PRODUCT

VALID: 1900 UTC TUE 24 JUN 2008



AVIATION WEATHER CENTER (NOAA/NWS/NCEP)

ISSUED: 1500 UTC TUE 24 JUN 2008

CCFP – The Chat

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19Z
Mon

AVIATION WEATHER CENTER (NOAA/NWS/NCEP) ISSUED: 1700 UTC MON 11 MAY 2009

100% Freehand EDIT MENU View All Maps

Size 1 Set Background

Float Logout

<AWC-Forecaster> 16:13:54Z - Prelim 19z-21z-23z. Stry fnt extends fm nern SC swwd thru cntl AL then wwd to ern TX. Diffrence alt will cont to support crvtn s of sfc bndy where instability and cape is most sgfnt. Contd prev trends with minor adjmnts. At 23z...cont lo/hi area ovr gulf states. Lo/lo extend swd ovr FL PEN with afn seabreeze.

<ZDV> 16:17:56Z - Maps good for ZDV.

<ZFW> 16:19:10Z - Maps good for ZFW. TS east of DFW now.

<ZOB> 16:19:20Z - Maps look good for ZOB. Still thinking isol cvrg sm/sern OH-swrn PA, but not enough for inclusion on the maps.

<ZHU> 16:19:59Z - Think we can go ahead and extend hi conf W over SE TX based on current dvlpmnt over area of good convergence & instability.

<AWC-Forecaster> 16:21:43Z - ZHU...copy your changes

Name ZBW

Chat To

ALL
ZBW
ZNY
ATCSCC
ZAU
ZFW
ZOR

Center Weather Advisories

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Help

- Short-term warning of hazardous weather conditions provided to all aviation interests, including private pilots, towers, flight service stations, and commercial airlines.
- Issued as needed for weather hazards up to two (2) hours from issuance time.
 - Thunderstorms, icing, clear air (high level) turbulence, low level turbulence, low level wind shear.
- Availability:
 - CWSU ZBW and AWC webpages
 - ZBW Flight Data enters into host for all facilities to receive

Meteorological Impact Statement (MIS)

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- Scheduled planning forecast and discussion of weather conditions expected to impact ZBW air traffic.
- Issued at least 3 times per day, (800-900 am, 1200-100 pm, and 600-700 pm).
- Emphasis on the 0-12 hour time frame
 - Brief synopsis of expected conditions out to 24 hours.
- However, this will be changing soon...

New MIS Format (v2.0)

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- Issued 4x/day (0800-0900, 1200-1300, 1600-1700, 2000-2100L)
- Forecast product, not a discussion product
- Add value to existing aviation forecasts (i.e. CCFP, AIRMETS)
 - Detailed emphasis on H+0-6, H+6-24 outlook period

New MIS Format

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ZBW MIS 01 VALID 231200-231800
...FOR ATC PLANNING PURPOSES ONLY...

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ISSUED: 1200Z, THU APR 23 2009

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NEAR TERM IMPACTS: 231200-231800

TS: *Coverage; tops; movement; impacted
routes/gates/approaches/airports (hubs and alternates)*

Help

ENROUTE:

- TURB: *high and low level turbulence*
- ICE: *high and low level icing*

TRACON/TERMINAL AREAS: HUB/Alternates

- CIG BLO 050:
- SIG LOW LVL WINDS/LLWS:
- COMPRESSION:

OUTLOOK: 231800-241200 (Hours 06-24)
(bullet format, "highlights" only)

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- <http://www.weather.gov/zbw/>
- TRACON/ATCT specific information pages to be designed
 - Summer intern project
 - Target date for “unveiling” – Fall 2009

Coming attractions ...

- Web-based briefings
 - Similar to those currently produced by CWSUs ZTL, ZFW, ZME, ZSE?
 - Tentative target date for “unveiling” – early FY2010
- <http://www.srh.noaa.gov/ztl/>
- <http://www.srh.noaa.gov/zfw/>
- <http://www.srh.noaa.gov/zse/>
- TRACON-specific forecasts
 - A90 initially (BOS/MHT)
 - After workload assessment, may add additional locations
 - Format TBD (i.e. web only, text, combo of both?)

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- On-demand briefings for “major” events?
 - Winter storms
 - Severe weather outbreaks
 - “Big events” – i.e. NASCAR event support
 - Via “GoToMeeting”
- Cross-training initiative with BOX

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- Still a lot of unknowns, but we do know this...
 - Weather is attributed to:
 - 70% of all delays
 - Annual loss of \$28B (commercial delays)
 - 14% of all GA accidents
 - 34% of all GA fatalities
- The expectation is for a significant increase in air traffic in the next 10-15 years
 - Double or triple the “metal in the sky”

Where Are They Gonna Put All That Metal?

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Help

- On the ground...
 - The hubs don't have that much more room (some at/over capacity right now)
 - Smaller airports
 - BDL, MHT, PVD, ISP
 - Other similar-sized airports, such as BUF, SWF, PWM, BTV, ALB, SYR
 - Will be important (a level below the hubs), but will become that much more important to "be on our game"

More future plans

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- Enhanced Situational Awareness and TAF Monitoring at the CWSU
 - Pilot program with BOX this fall or winter?
 - Enhanced monitoring of hubs, alternates (ASPM 77 airports...PVD, MHT, BDL in ZBW airspace)
 - CWSU can utilize 12-Planet, WRKZBW to collaborate needed changes in TAFs
- CWSU to work with WFO BOX (others?) in helping establish new CAC criteria (Categorical Amendment Criteria) for TAFs