



NWS CWSU and WFO Aviation Mission and Introduction

AWC Aviation Weather Community Forum
April 14-16, 2009

Progression

1. CWSU – WFO Structure

2. Strengths and Opportunities

3. Strategy - Synergy

4. Discussion

NWS Aviation Products & Services

Who does what?



Seamless Support

Aviation Customer Service

WFO

CWSU

AWC

OTHERS



Field Offices - Partners!

A circular logo with a blue gradient background and a white border. The letters "WFO" are written in white, bold, sans-serif font in the center.

WFO



WFO – CWSU Structure

WFO - NWS Weather Forecast Office – 122 locations, **established**, issue local warnings and forecasts, typically smaller-scale and highly specific forecast products and services to many different customers.

CWSU - Center Weather Service Unit – located at the 21 FAA ARTCCs – **flexible**, solely tasked to provide aviation forecast support via regionally based products and services; primary liaison to FAA facilities.

WFO Products

Airport
Weather
Warnings

Terminal
Forecast (TAF)

Area Forecast
Discussion

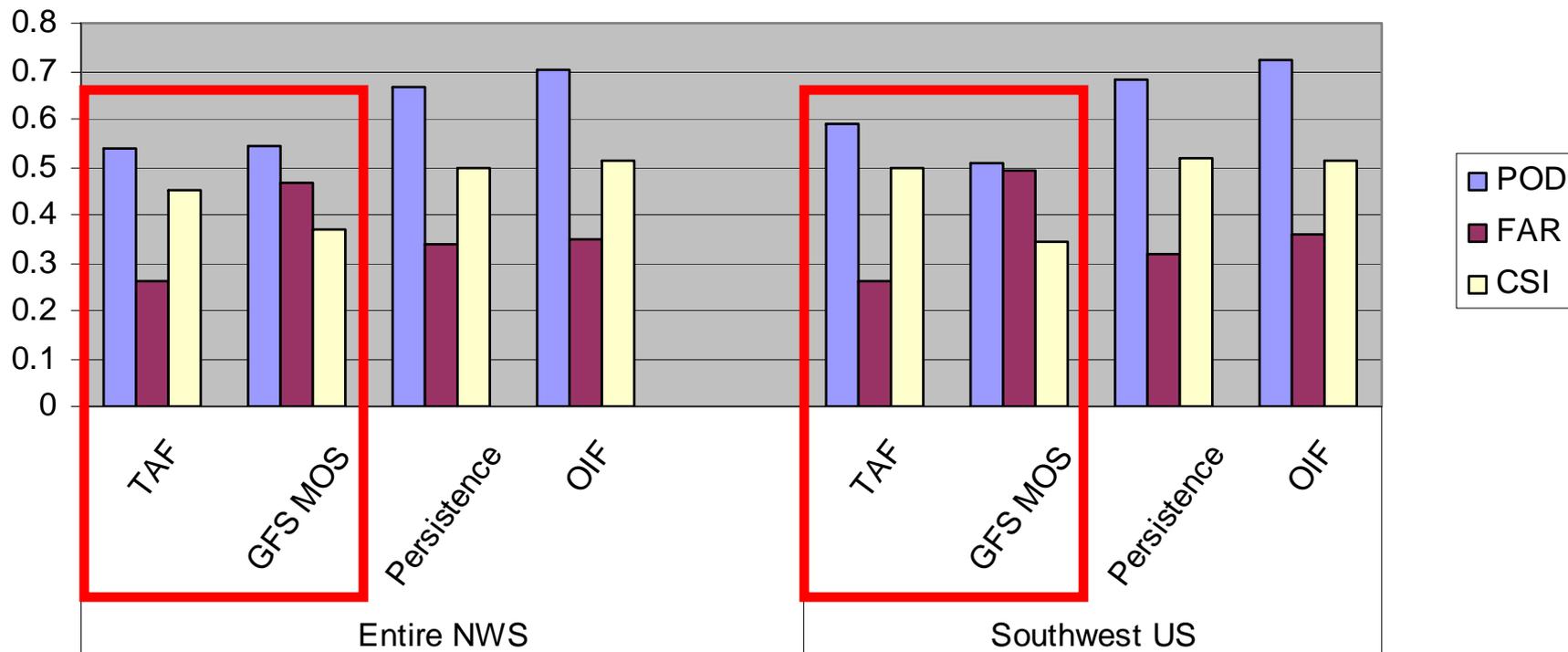


Flight Category

Ceiling below 1000 ft. OR Visibility below 3 mi.

Fiscal year 2008

0-3 hour Scheduled TAFs
Entire NWS versus Southwest US

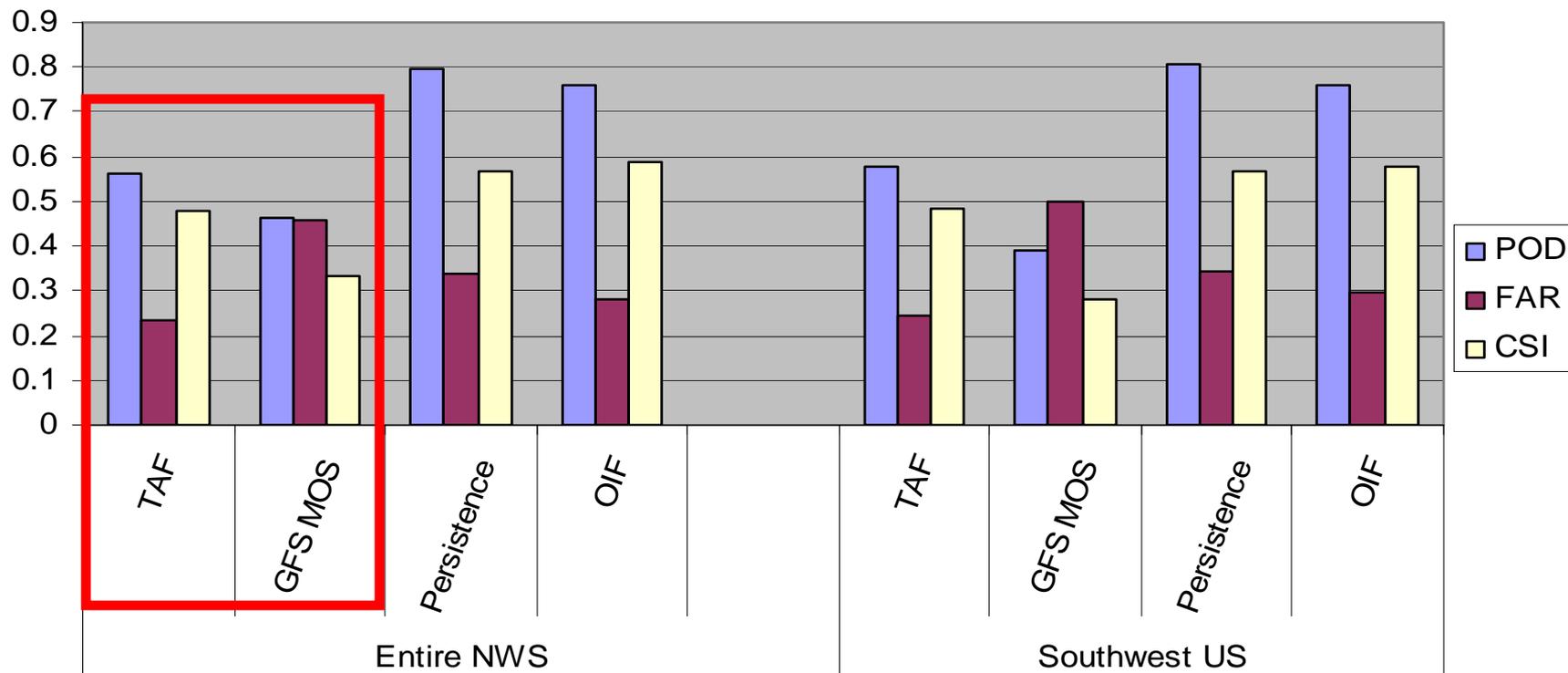


Flight Category

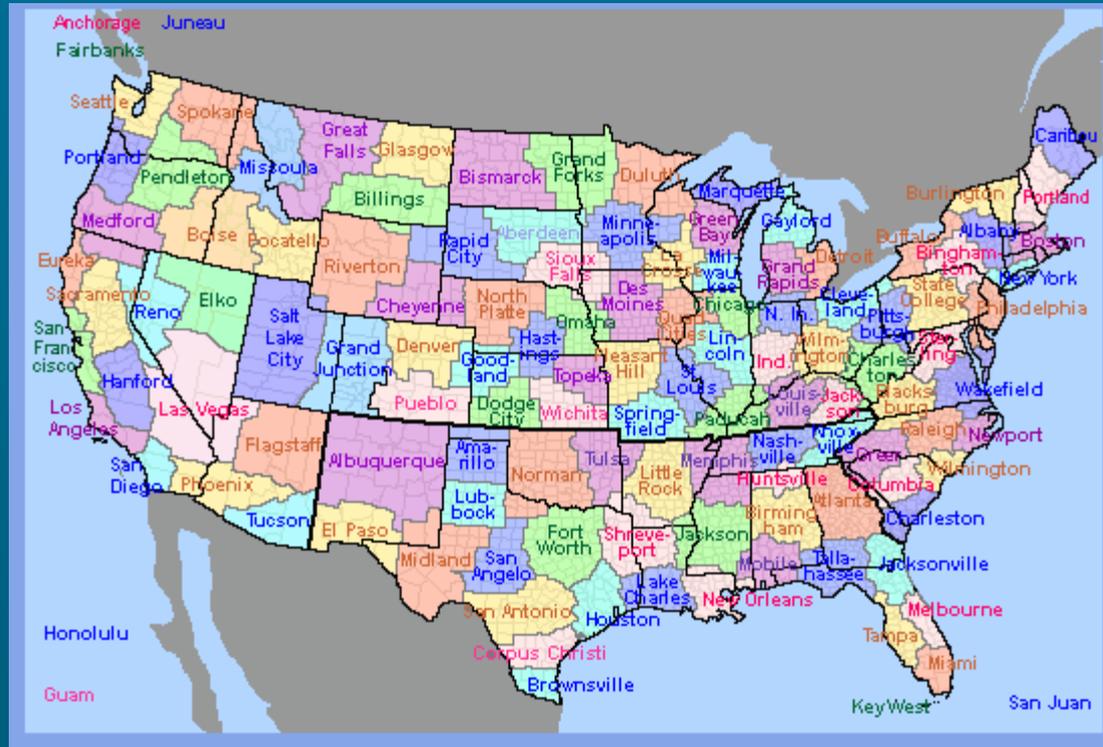
Ceiling below 1000 ft. OR Visibility below 3 mi.

Fiscal year 2008

3-6 hour Amended TAFs Entire NWS versus Southwest US



WFO – Area Forecast Discussion



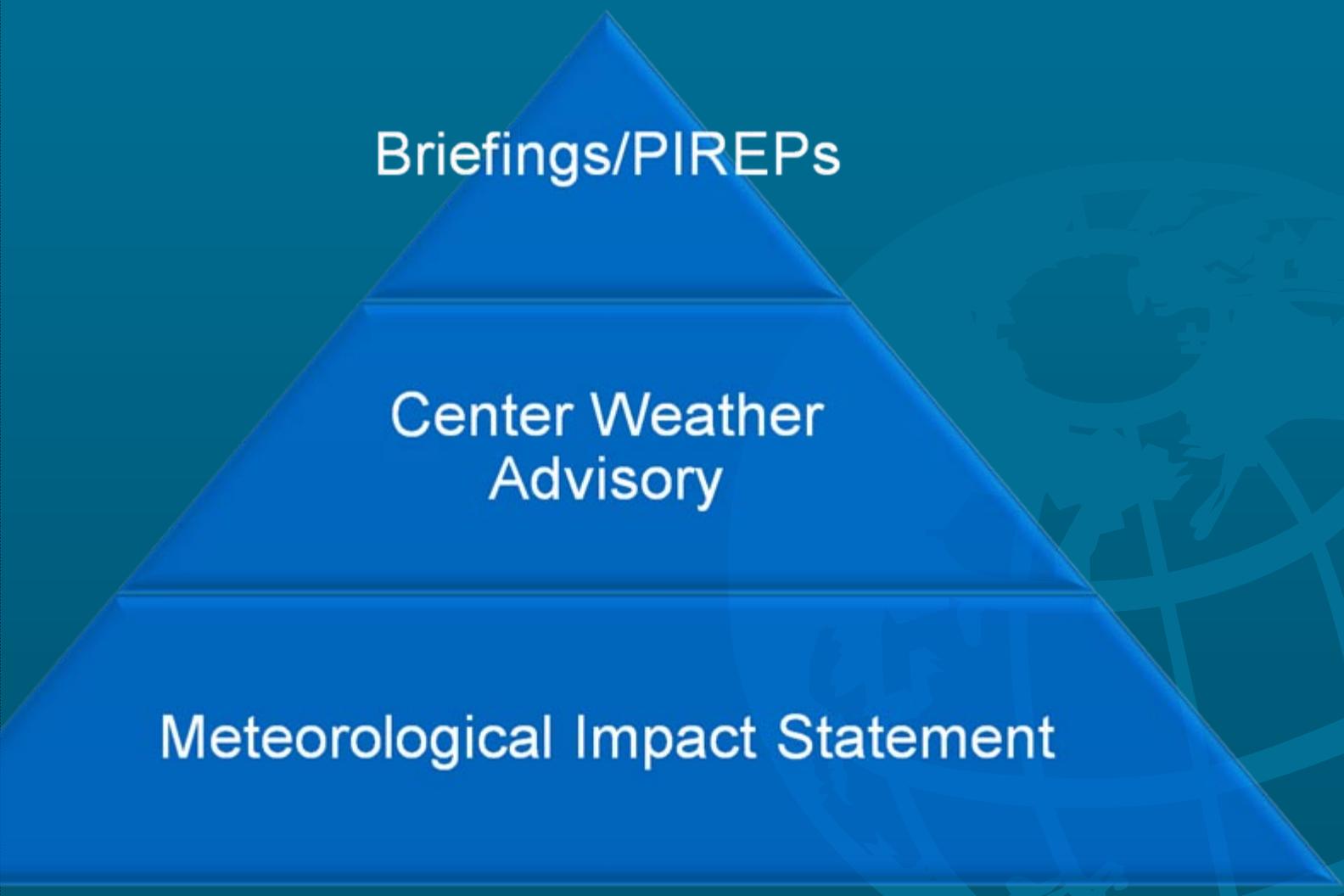
<http://aviationweather.gov/testbed/afd/>

(EXTRACTED FROM FXUS65 KPSR 031158)
NATIONAL WEATHER SERVICE PHOENIX AZ
458 AM MST TUE MAR 3 2009

KPHX...KIWA...AND SURROUNDING AIRFIELDS...

EXPECT TYPICAL DIURNAL FLOW FOR THE 12Z TAF PACKAGE WITH EASTERLY WINDS THROUGH ABOUT 20Z BEFORE WESTERLIES COMMENCE. WINDS WILL SHIFT AND CONTAIN MORE OF AN EASTERLY COMPONENT AFTER 06Z WEDNESDAY. OTHERWISE...HIGH CLOUDS WILL REMAIN OVER THE REGION WITH CIGS REMAINING AOA 18K FT.

CWSU Products

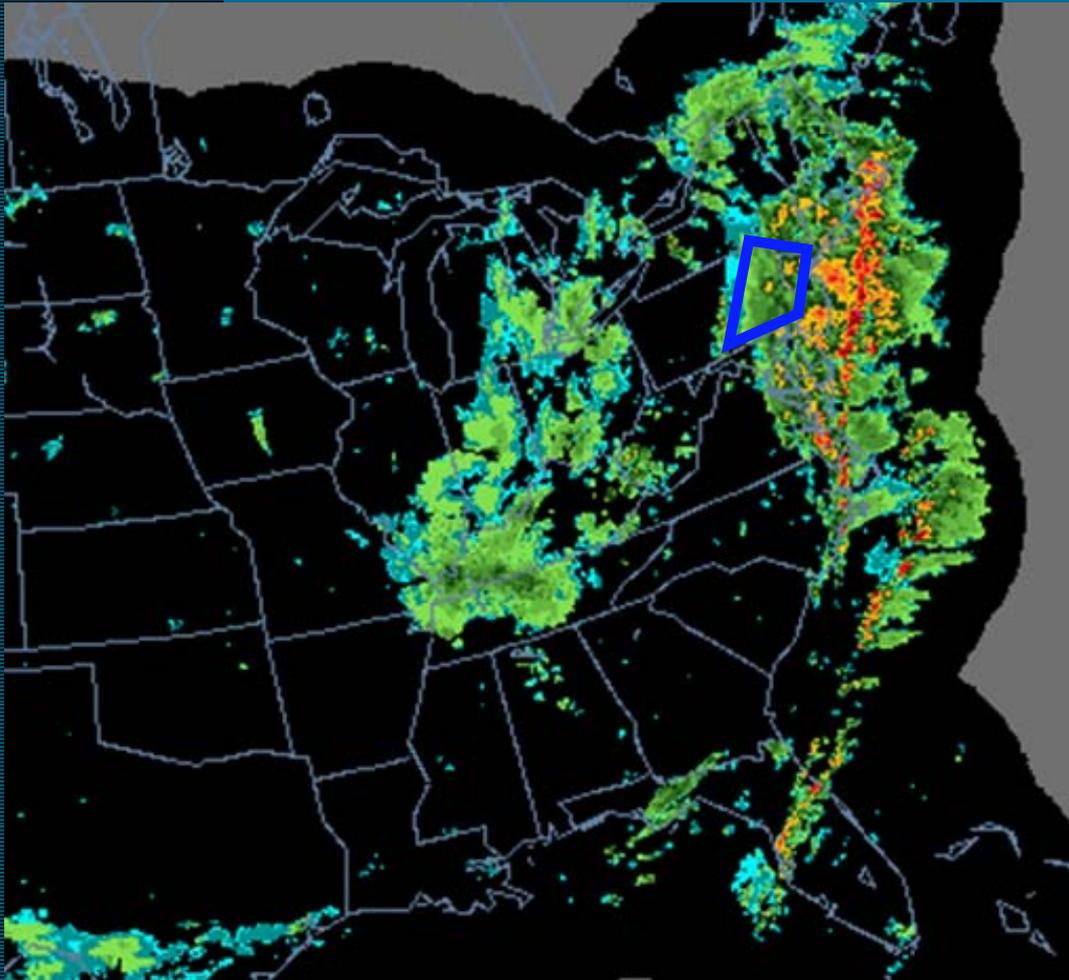


Briefings/PIREPs

Center Weather
Advisory

Meteorological Impact Statement

CWA



ZNY UCWA 101 VALID UNTIL 061747
FM 20SW HAR TO HNK TO 70SE HNK TO
50W CYN TO 20SW HAR
AREA OF SEV TURB BTN 080 AND FL180.
RPTD BY B772 NEAR LRP.

PIREPs

NOAA's National Weather Service Aviation Weather Center Aviation Digital Data Service (ADDS)

Home

News

Organ

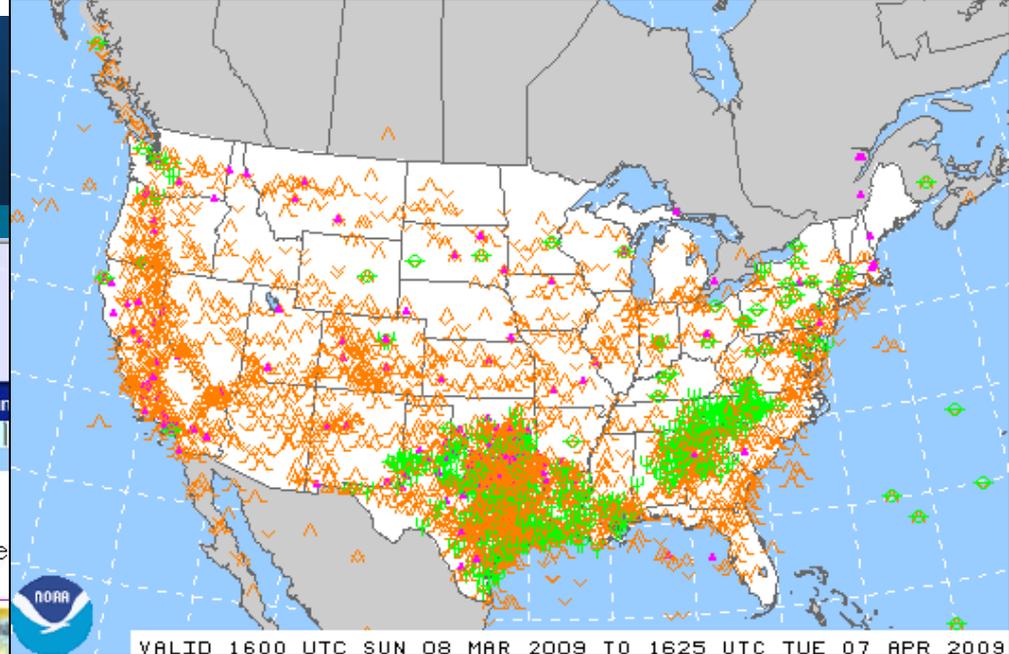
Home | Turbulence | Icing | Convection | Winds/Temps | Prog Charts | METARs | TAFs | PIREPs | AIR/SIGMETs | Satellite

Back to Previous Page

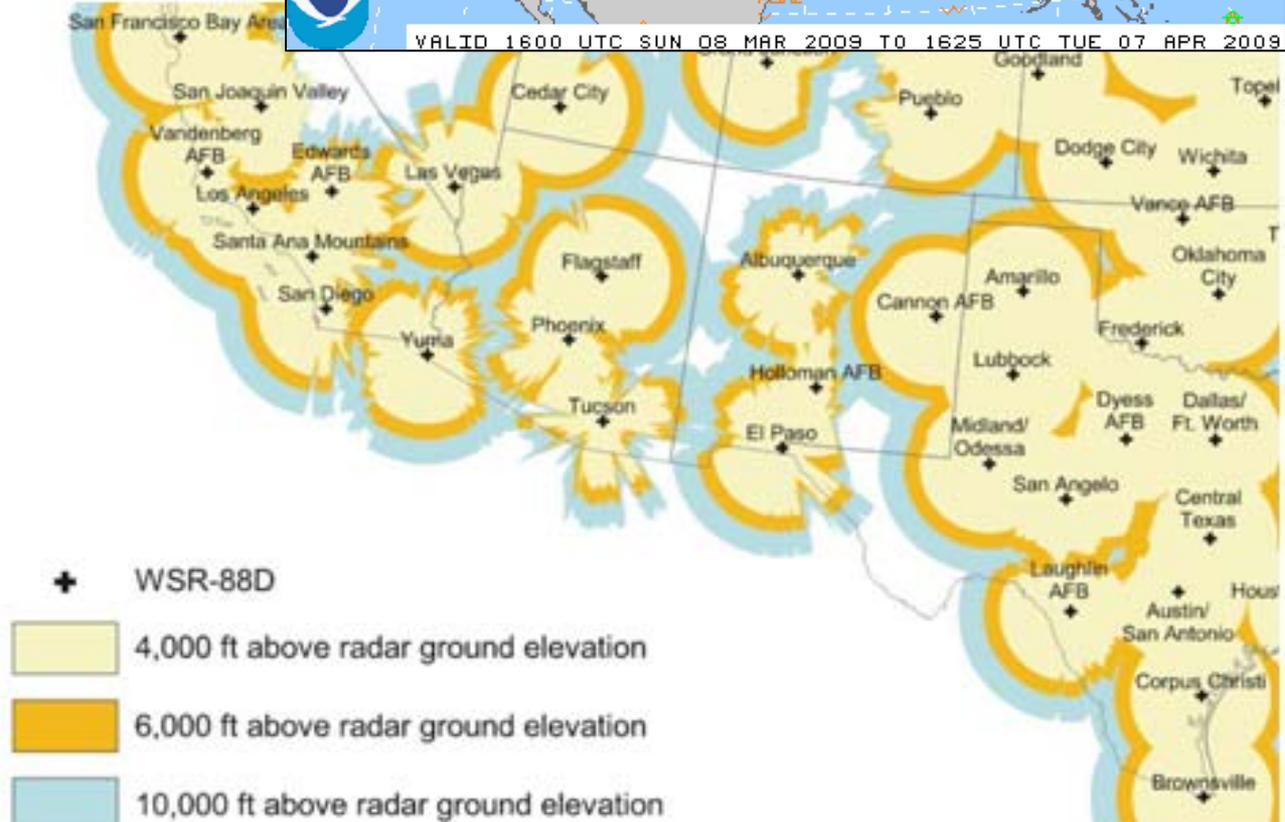
Pilot Reports (PIREPs) of Turbulence
1459z - 1622z 04/07/09



TB FREQUENCY: ✓ = ISOLATED



VALID 1600 UTC SUN 08 MAR 2009 TO 1625 UTC TUE 07 APR 2009



CWSU Innovation (Briefings)

Tactical Decision Aid(TDA) for Albuquerque International Support Airport - Windows Internet Explorer

http://www.srh.noaa.gov/zhu/main/TDA.php?id=abq

CLICK AND SAVE THIS LINK TO RETURN TO THIS PAGE!

[Alaska TDA](#) [Puerto Rico TDA](#)

Tactical Decision Aid(TDA) for Albuquerque International Support Airport

Based on 12Z TAF last updated @ 1120Z
This page will auto refresh every 5 minutes.
Last refreshed on Friday , April 03, 2009 @ 16:00Z

Enter 3 Letter Airport Code:

CURRENT OBS. 1456 Z

	15 Z	16 Z	17 Z	18 Z	19 Z	20 Z	21 Z	22 Z	23 Z	00 Z	01 Z	02 Z
CIG PREVAILING	UNL	UNL	UNL	UNL	UNL	UNL	UNL	UNL	UNL	UNL	UNL	UNL
TEMPO												
VSBY PREVAILING	10SM	P6SM	P6SM	P6SM	P6SM	P6SM	P6SM	P6SM	P6SM	P6SM	P6SM	P6SM
TEMPO												
PCPN PREVAILING												
TEMPO												
WIND PREVAILING	180° 10KT	VRB 06KT	210° 15KT	210° 15KT	210° 15KT	210° 15KT	240° 20KT	210° 15KT				
GUST							G30KT	G30KT	G30KT	G30KT	G30KT	G22KT
TEMPO												
CROSS WIND FOR RUNWAY 08/26												
SUSTAINED	10KT	VRB	13KT	13KT	13KT	13KT	10KT	10KT	10KT	10KT	10KT	13KT
GUST							G15KT	G15KT	G15KT	G15KT	G15KT	G19KT
CROSS WIND FOR RUNWAY 03/21												
SUSTAINED	7KT	VRB	4KT	4KT	4KT	4KT	5KT	5KT	5KT	5KT	5KT	4KT
GUST							G8KT	G8KT	G8KT	G8KT	G8KT	G6KT
CROSS WIND FOR RUNWAY 17/35												

National Weather Service Forecast Office
Oakland
Center Weather Service Unit

Home News Organization Frequently Asked Questions Search ALL NOAA Go

Get Local Forecast for: Enter location... Search Help

mouse over stations for TAF / METAR display - (auto-refresh=5 minutes)

Stackton Metropolitan Airport (KSKC) ELEVATION: 30 ft.

METAR
KSKC 031455Z 29010KT 10SM CLR 08/02 A2995

TAF
KSKC 031130Z 0312/0412 27008KT P6SM SKC
WS020/3403KT
FM031800 33027G38KT P6SM SKC
FM040000 30018G25KT P6SM SKC=

Created: Friday April 03, 2009 @ 15:43Z

FLIGHT CATEGORY RULES				
SYMBOL	CAT	CIG (ft agl)	Boolean	VIS (miles)
●	LFR	<500	and/or	<1
●	IFR	500 to <1000	and/or	1 to <3
●	MVFR	1000 to 3000	and/or	3 to 5
●	VFR	>3000	and	>5
●	MISSING OR INCOMPLETE OBSERVATION			

Service Concepts Review

- WFO

- “Push” (products)
- Local forecasts and expertise
- Standardized, with innovation
- Surface-based
- Services:
 - AWW (local)
 - TAF (local)
 - AFD Avn Section (regional)

- CWSU

- “Pull” (briefings)
- Regional forecasts, NAS expertise
- Innovative, with standards
- En route
- Services:
 - Briefings
 - CWA (regional)
 - MIS (regional)
 - PIREPs (local)

Synergy



SWOT Analysis

	Opportunities	Threats
Strengths	Competitive Advantage	Convert to Opportunity
Weaknesses	Convert to Strength	Minimize/Avoid

Strengths - Opportunities

	Opportunity: increasing aviation customer demand and sophistication	Threat Conversion opportunity: CWSU program transformation
Strength: two offices that have unique knowledge and share resources	Exploit ability to innovate while improving standard products	Capitalize on synergies and work toward office/service integration
Strength: two offices capable of assisting each other with staffing	Increase amount of time available for innovation and research	WFO/CWSU team provide robust, 24- hour service together

Why?

- Aviation is important!
- WFOs “provide direct meteorological support through advice and consultation to the TMU when CWSU meteorologists are not on duty” (NWSI 10-803, 5.3, p. 5) –
24 hour support already in place
- CWSUs need benefits/support of “mainstream” NWS to achieve goals
- It’s relatively easy and has few costs, with immediate benefits and long-term potential

Strategy Challenges?

- May be difficult at some locations where WFO-CWSU distance is significant
 - Mirrored AWIPS server installation at CWSU may allow GFE work
 - Opportunity to explore remote support (AvnFPS already installed)
- Cultural barriers?
 - Patience
 - Respect
 - Understanding



“Cross-Trained” Office Benefits

- CWSU:
 - Enhanced staffing flexibility
 - Enhanced operational recognition/support
 - Enhanced career opportunities
- WFO:
 - Enhanced staffing flexibility
 - Ongoing aviation knowledge exchange
 - Opportunity to expand career experience

What can I do?



Personally pursue WFO-CWSU cross-training

Facilitate forecaster exchanges and influence office culture

Provide specific support guidance to WFO-CWSU supervisors

Connect with both of your servicing CWSUs & WFOs

Summary

- Current structure and office strengths allow the NWS to collaborate and take advantage of synergies/efficiencies for any of the three future possibilities:
 - In situ
 - Consolidation
 - Outsource
- 

Questions?

