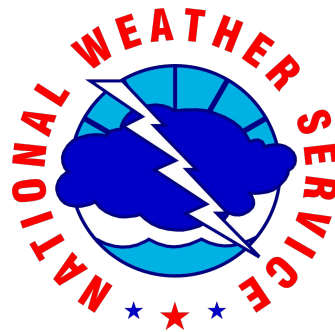
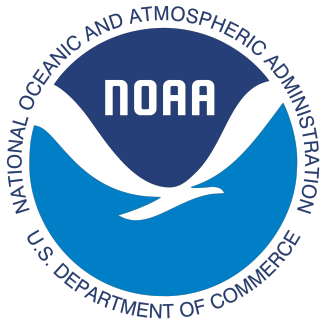


NWS Aviation Weather Center

Kansas City, MO

Jennifer Stroozas - Warning Coordination Meteorologist



Quick Response Polling

We will be using interactive polling. Please use your phone or laptop.



<https://pollev.com/snowycow503>

In a word or two, what do you want to learn in this presentation?



Organizational Structure



US Government



Executive Branch



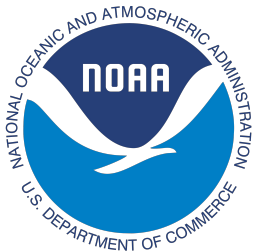
Department of Commerce



National Oceanic and
Atmospheric Administration



National Weather Service

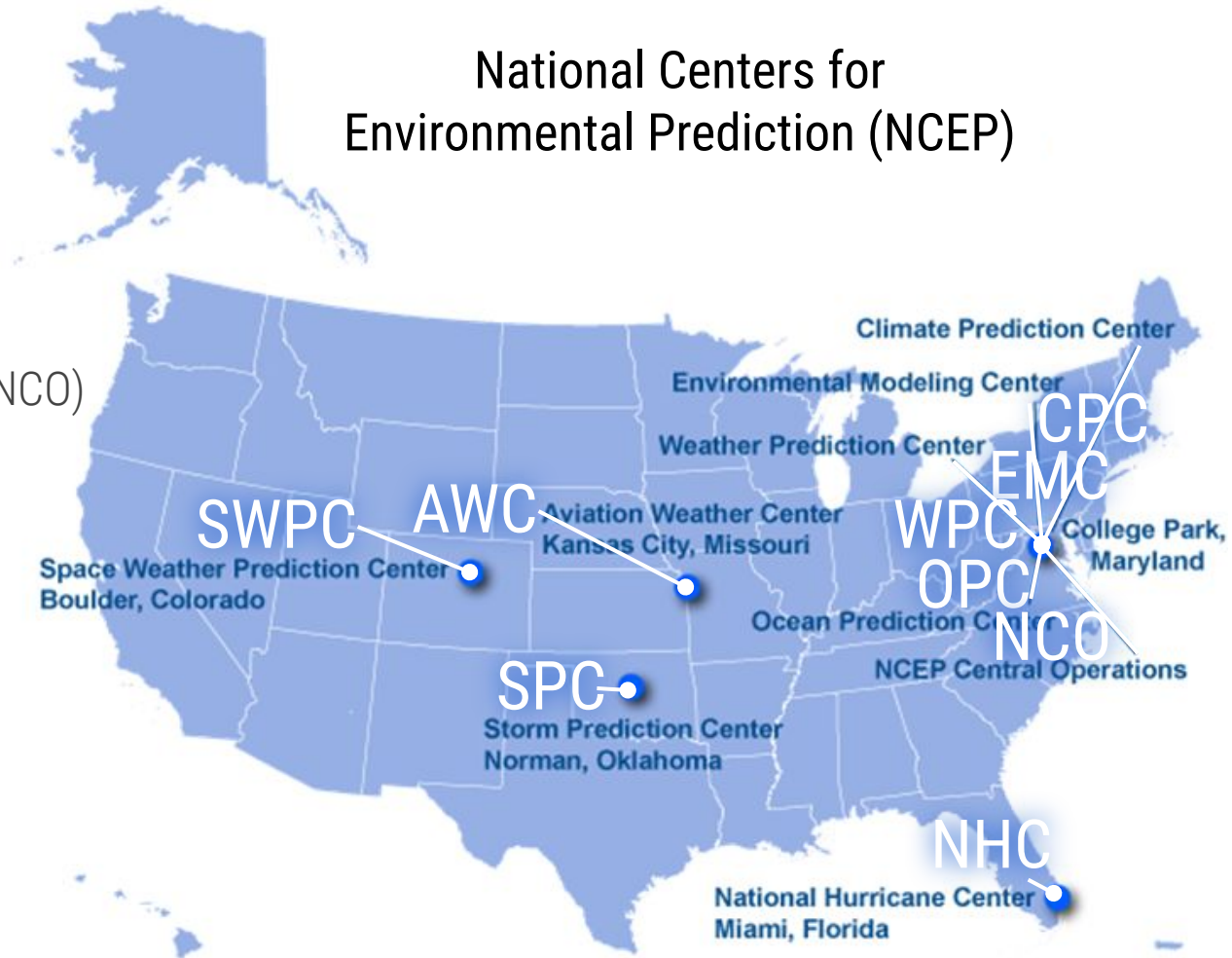


- 1 national headquarters
- 6 regional headquarters
- 122 local weather forecast offices (WFO)
- 13 river forecast centers (RFC)
- 1 national water center
- 21 Center Weather Service Units (CWSU)
- 9 national centers

National Centers for Environmental Prediction (NCEP)

9 Specialization Centers

- Aviation (AWC)
- Climate (CPC)
- Modeling (EMC)
- Supercomputing & data flow (NCO)
- Hurricanes (NHC)
- Oceans (OPC)
- Severe storms (SPC)
- Space weather (SWPC)
- Hydrometeorology (WPC)



NOAA/NWS Aviation Program



122 Weather Forecast Offices



21 Center Weather Service Units



3 Meteorological Watch Offices



2 Volcanic Ash Advisory Centers

NWS Meteorologists provide embedded Impact-Based Decision Support Services at the ATCSCC as well as the 21 ARTCCs



Aviation Weather Center

www.aviationweather.gov



OUR MISSION STATEMENT

The Aviation Weather Center delivers consistent, timely and accurate weather information for the world airspace system.

We are a team of highly skilled people dedicated to working with customers and partners to enhance safe and efficient flight.

OUR VISION

To be the trusted authority and leading innovator for aviation weather information.

AWC Operations

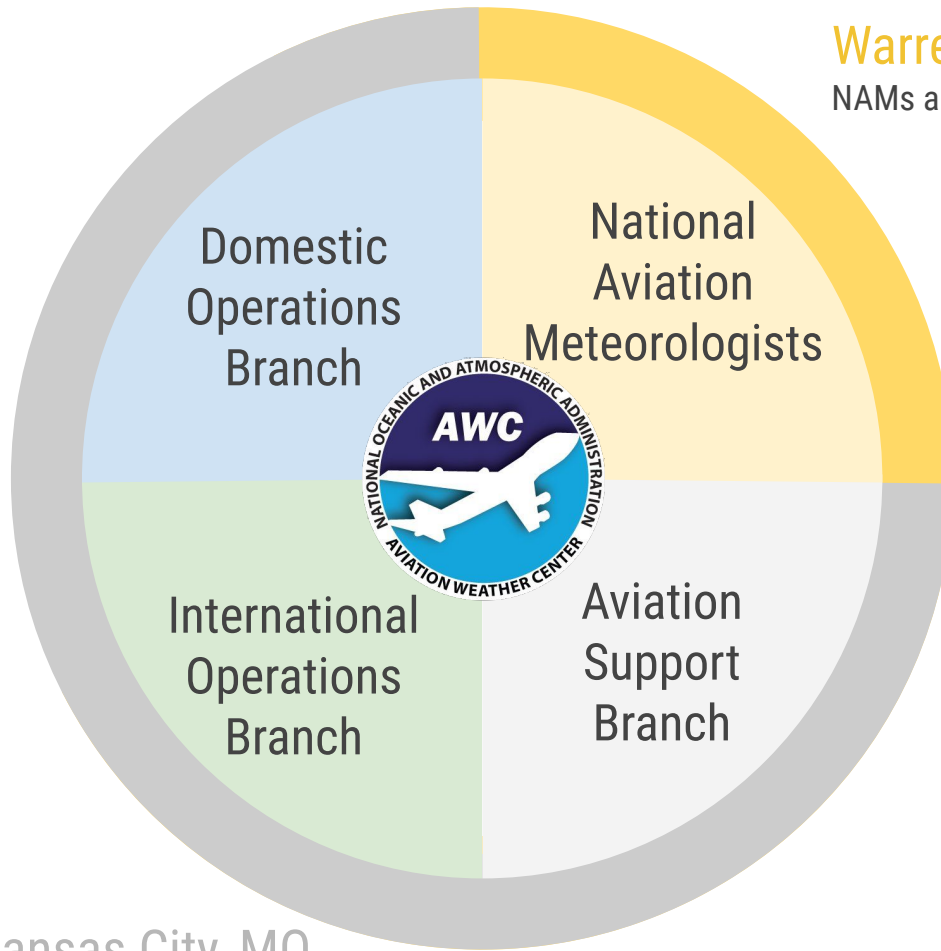
AAWU

AWC

HFO

Warrenton, VA

NAMs are embedded with the FAA at the ATCSCC



- 4 branches
- 2 locations
- ~80 people
 - Forecasters
 - Researchers/developers
 - IT staff
 - Administrative support staff
 - Managers & supervisors
 - NOAA Corps Officer

Kansas City, MO

Most AWC staff are based here

Aviation Weather Advisories and Warnings

A SIGMET is a weather warning for aviation. SIGMET stands for Significant Meteorological Information.



SIGMETs are issued by the Aviation Weather Center. They're meant for aircraft in flight. SIGMETs tell pilots where to expect severe conditions such as:

Severe turbulence



Severe icing

Volcanic ash

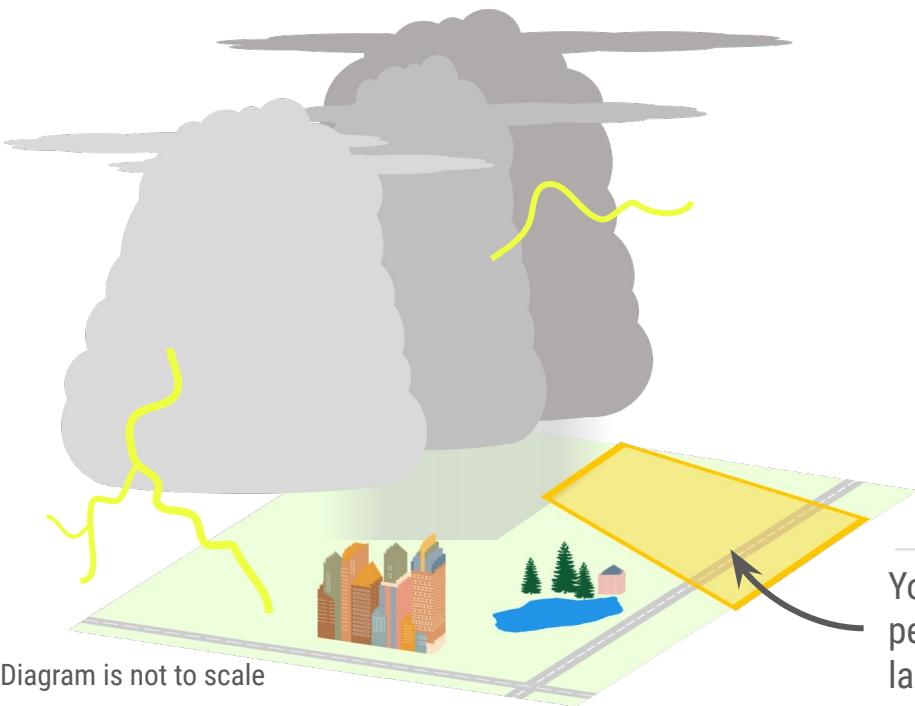


Areas of widespread sandstorms or dust storms

Areas of thunderstorms




Tropical cyclones



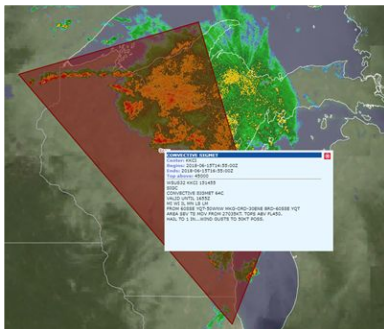
Your local Weather Forecast Office will issue weather warnings for people on the ground. These warnings tell people where to expect large hail, very strong wind gusts, flash flooding, or tornadoes.

Diagram is not to scale

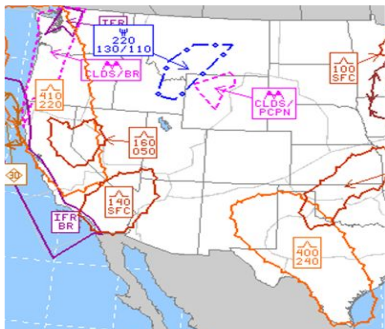
WE  **PILOT REPORTS**

Aviation Weather Center Operations

Domestic Operations



CONUS · coastal waters



AIRMETs · TFM convective forecast · Low-level SIGWX



CWSUs · Airlines · FAA



Convective SIGMET · TCF · Turbulence · Icing · Clouds & visibility

AVIATION WARNINGS

AVIATION FORECASTS

COLLABORATION

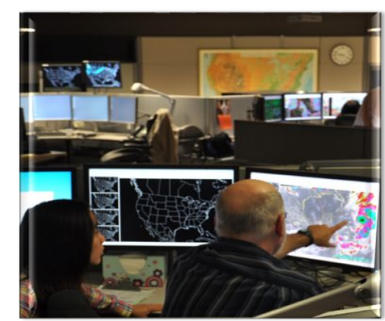
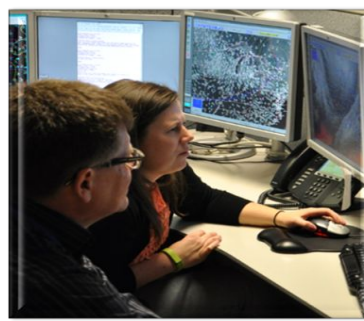
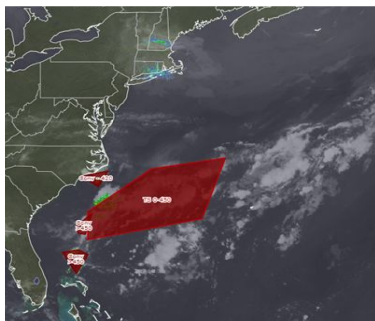
DESKS

Atlantic · Pacific

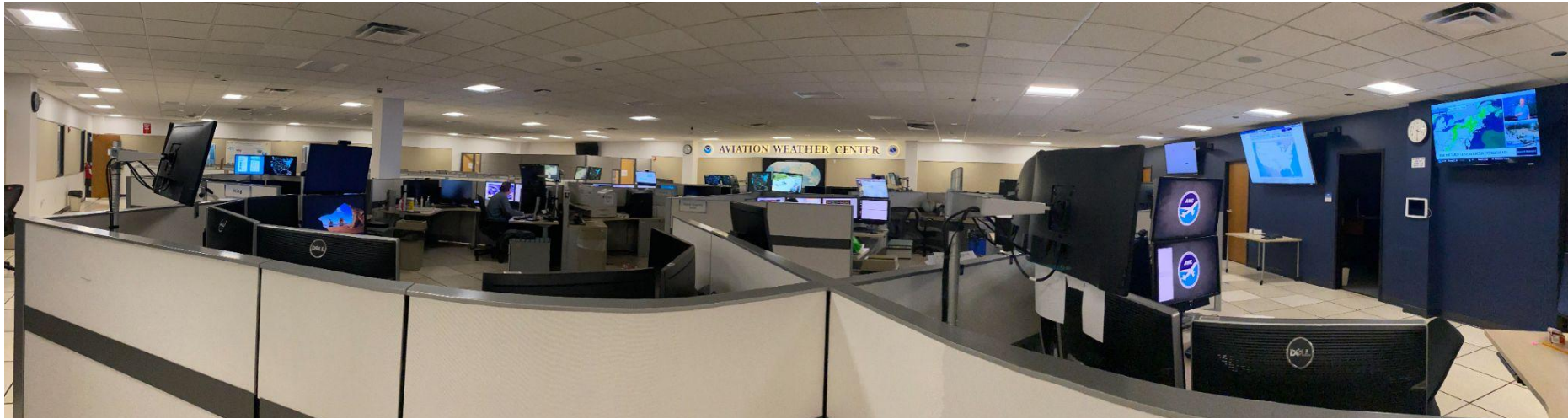
Global Significant Weather (SIGWX)
· Area Forecasts for Gulf of Mexico & Caribbean

International meteorological services

Tropical · SIGWX North · SIGWX South

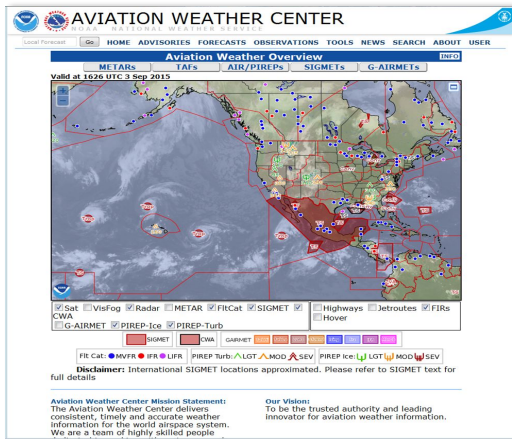


International Operations



Kansas City, MO

Aviation Weather Center Support Branch



PRODUCTS & SERVICES

Graphical Forecasts for Aviation (GFA)
· WAFS Internet File Service (WIFS)
· Computer models · Operational shift fill-in

DATA, TECHNOLOGY, & INFRASTRUCTURE

IT architecture & security · Production systems · Data management · Support for remote forecast operations

SCIENCE & TECHNOLOGY

Aviation Weather Testbed (AWT)
· Aviation Weather Research Program · Research initiatives

AviationWeather.gov



When poll is active, respond at pollev.com/snowycow503

Text **SNOWYCOW503** to **22333** once to join

Have you visited beta.aviationweather.gov before?

Yes

Not
yet



www.aviationweather.gov

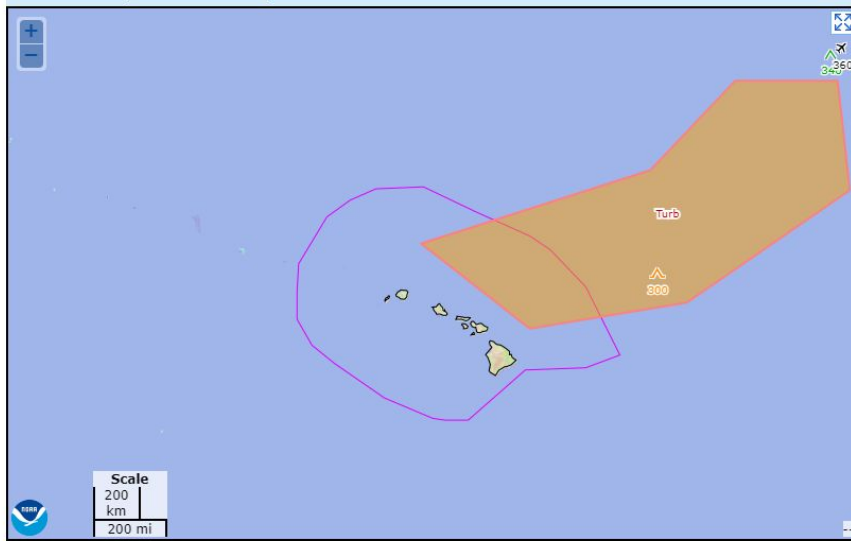


Aviation Weather Overview

-

NOTICE Please check out the experimental preview of an upcoming version of this site at [Beta.AviationWeather.gov!](#)

Data Overlay View Configure 1940 UTC Tue 6 Jun 2023



Fit Cat: ● MVFR ● IFR ● LIFR
 SIGMET
 CWA
 GAIMET

PIREP Turb: NIL LGT MOD SEV
 PIREP Ice: NIL LGT MOD SEV
 PIREP Other:

Disclaimer: International SIGMET locations approximated. Please refer to SIGMET text for full details

ADVISORIES FORECASTS OBSERVATIONS TOOLS

HOME ADVISORIES FORECASTS

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ASTS OBSERVATIONS TOOLS

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ADVISORIES FORECASTS OBSERVATION

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IONS TOOLS NEWS SEARCH

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beta.aviationweather.gov



Aviation Weather Center Weather Products Tools Connect

What's new?
New look and feel for AWC! Try it on your phone or tablet!

Current Conditions

Graphical Forecasts for Aviation

Interactive maps of aviation observations

Decision Support System

Static Images to enhance decision making

Get station data

IDs:

Raw Decoded

KMCI 1818531 310140211KT 10SM FEW200 08/109 A3046 RPK AO2 PK WND 20R26/1834 SLP
KMCI 1817532 320146211KT 10SM FEW200 07/118 A3048 RPK AO2 SLP328 T08071000 1007
KMCI 1816532 31015024KT 10SM FEW200 06/118 A3049 RPK AO2 PK WND 20R29/1624 SLP
KMCI 1815532 31013026KT 10SM FEW200 04/109 A3049 RPK AO2 PK WND 30R26/1551 SLP
KMCI 1814532 30011KT 10SM FEW200 03/109 A3048 RPK AO2 SLP327 T08031000 51026
KMCI 1813532 29006KT 10SM FEW200 00/109 A3046 RPK AO2 SLP329 T08001000
KMCI 1812532 28007KT 10SM CLR M01/109 A3043 RPK AO2 SLP330 T10111004

TAF:

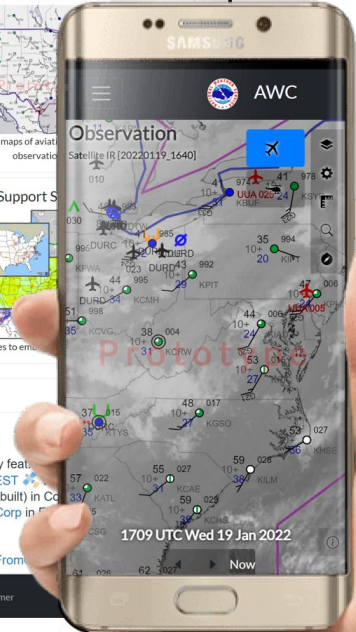
Tweets by @NWSAWC

NWS AWAC Retweeted
NOAA Satellites @NOAA-Satellites
Transporting a satellite is no easy feat. Last week, @NOAA's new #GOEST was launched by @LockheedMartin (where it was built) in collaboration with @NASAKennedy & @AstrotechCorp in support of the #Orion launch.

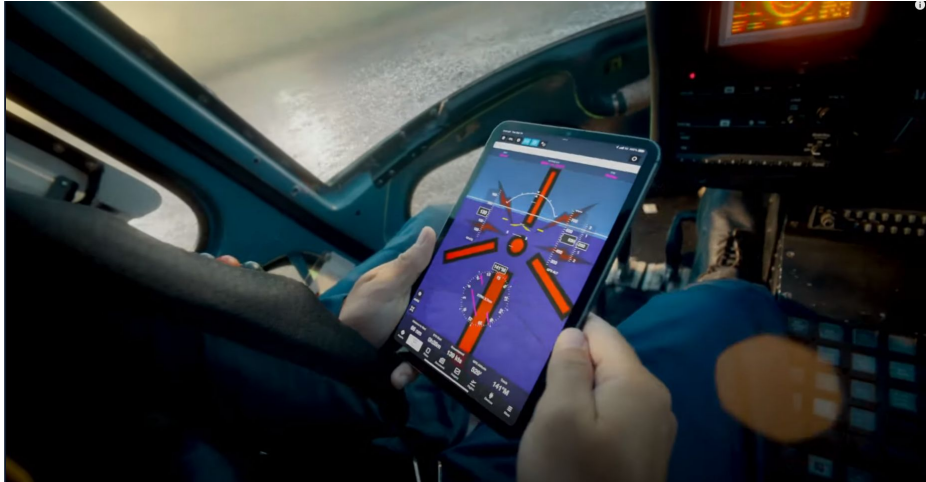
See this trip in this week's #EarthFromSpace

1709 UTC Wed 19 Jan 2022

Privacy Policy Freedom of Information Act NWS Glossary Information Quality Disclaimer

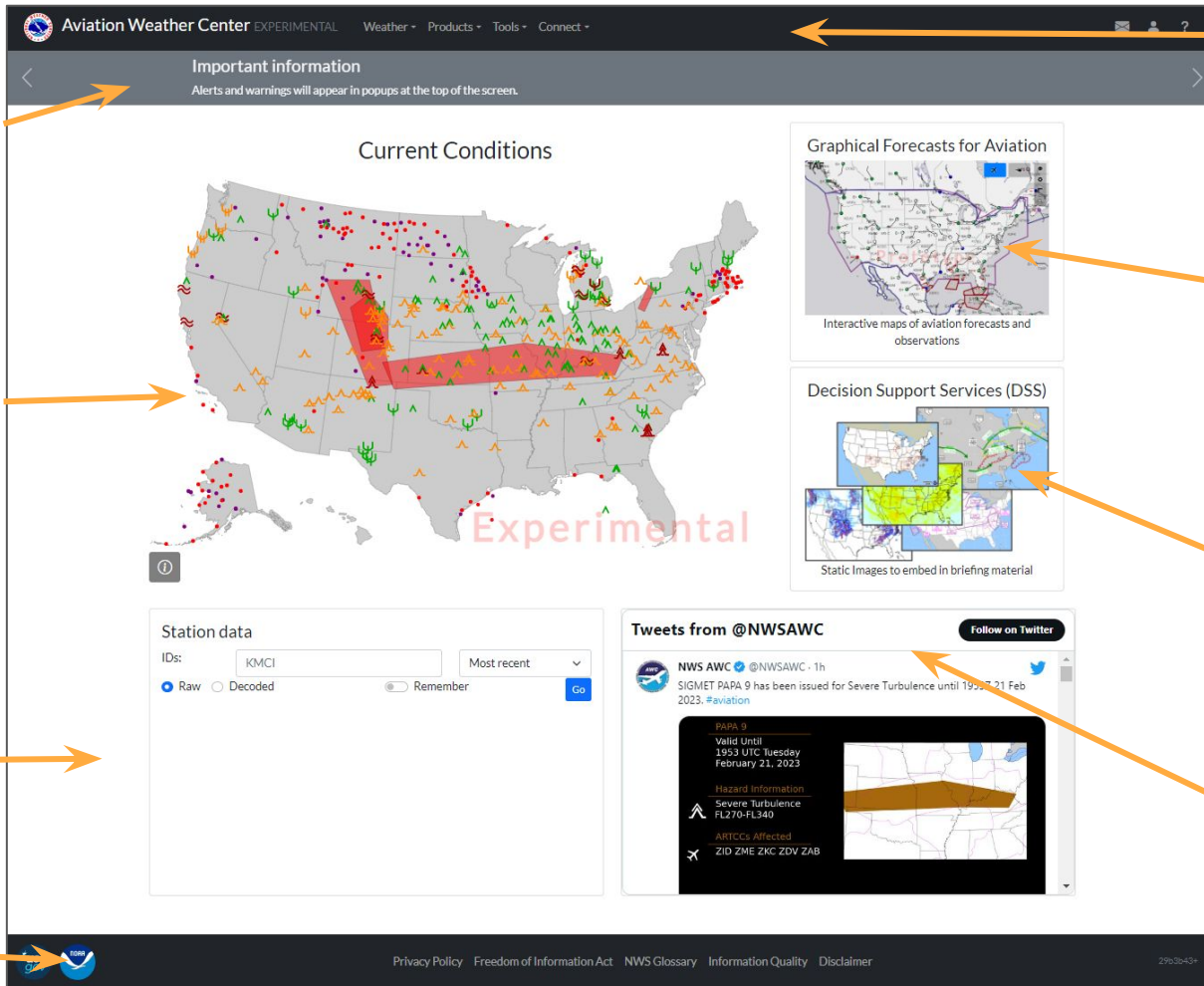


Different Computing Platforms



iPad Mini in the cockpit at Apple Sept. 2021 event

- Mobile accounts for ~50% of all web traffic
- Site is used on-the-go:
 - on the tarmac
 - in the cockpit
 - in remote locations
- Developed as “mobile-first”



Navigation bar

Messages/news (scrolling)

Quick view of aviation weather conditions (click to go to GFA)

Quick access to station data

Consolidated footer info

Link to GFA (we plan to rotate the link here, possibly seasonally)

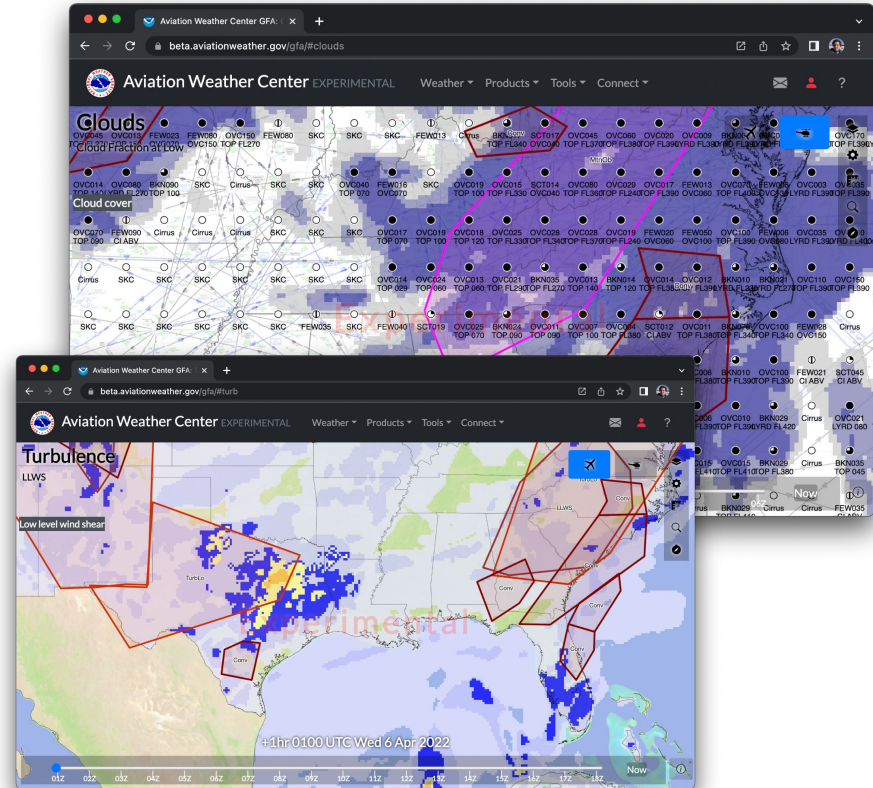
Link to dedicated DSS imagery

Recent tweets from @NWSAWC

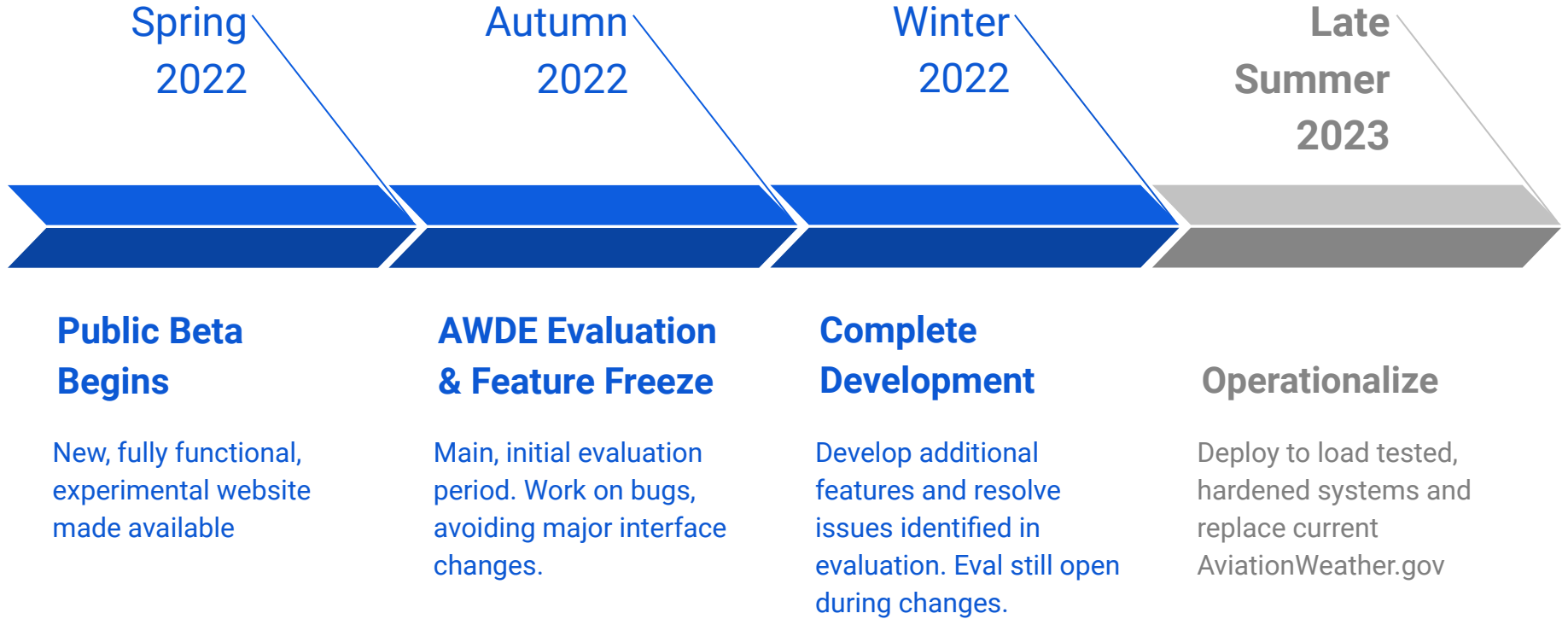
Graphical Forecast for Aviation (GFA) Tool

The GFA/GFA-LA represent the official AWC Forecasts

- Underlying guidance is agile and represents the best data currently available
- Key underlying guidance:
 - Forecast grids primarily RAP based
 - Thunderstorms/Precip come from the NDFD (NWS gridded forecast)
 - Prog Charts generated by WPC (Weather Prediction Center)
 - Ceiling and Visibility forecast and analysis from Gridded LAMP
 - Turbulence/CIP/FIP derived from NCAR, funded by FAA



Timeline



Spring
2022

Autumn
2022

Winter
2022

Late
Summer
2023

Public Beta Begins

New, fully functional, experimental website made available

AWDE Evaluation & Feature Freeze

Main, initial evaluation period. Work on bugs, avoiding major interface changes.

Complete Development

Develop additional features and resolve issues identified in evaluation. Eval still open during changes.

Operationalize

Deploy to load tested, hardened systems and replace current AviationWeather.gov



Questions?

jennifer.stroozas@noaa.gov
aviationweather.gov