

AVCamsPlus – Your Weather InSight

<http://avcamsplus.faa.gov>

Session Title:

Ceiling and Visibility Forecast/NowCast
Improvements CONUS and Alaska,
to Include Use of Models, Satellites, and Cameras

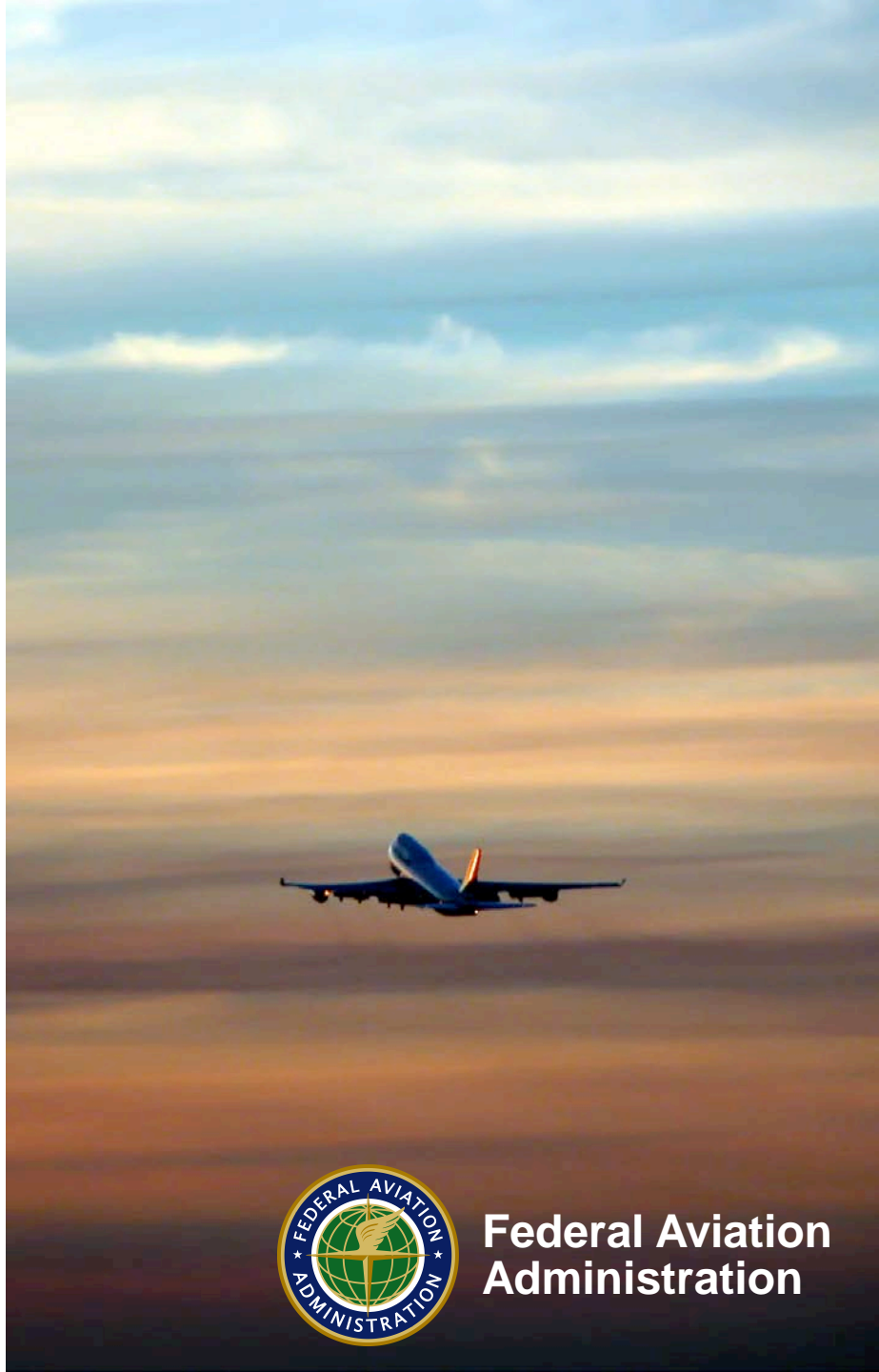
**Presented at: Friends and Partners of Aviation
Weather (FPAW) meeting**

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Date: Jul 12, 2017



**Federal Aviation
Administration**

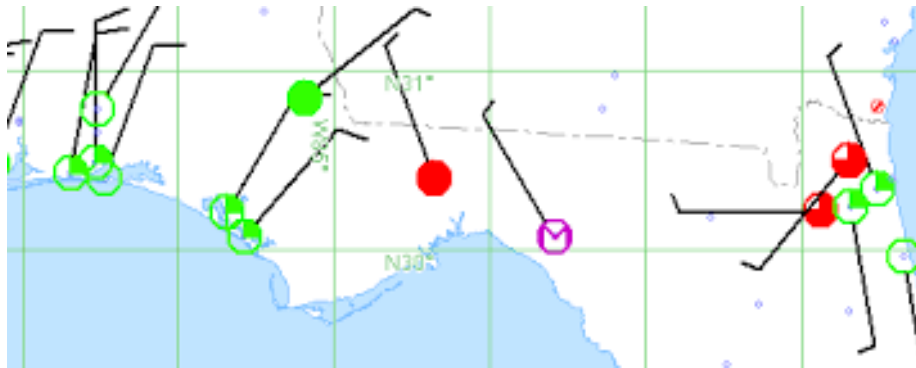
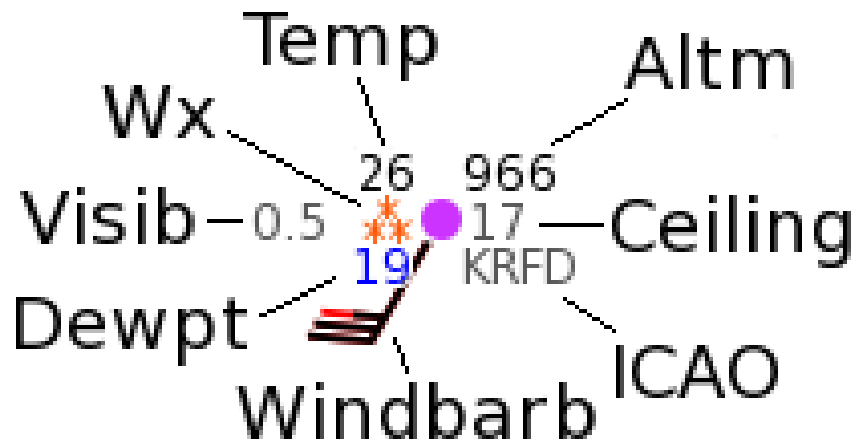


AVCams*Plus* – Your Weather In*Sight*

- **Goal** - Provide a comprehensive weather self-briefing and Go-No-Go decision-making tool supporting route-based data acquisition
- **Key aspect** - Access to near real-time aviation weather camera images combined with other essential aviation weather data, aeronautical charts, and NOTAMs
- **Benefits** - Minimized need of using numerous sources
- **Method** - User-centered interface design philosophy applied into the end-to-end systems engineering process
 - End-user population – continuously engaged in the design process
 - Demographic composition
 - Significant collaboration between different FAA organizations
 - Aviation Weather Camera Program
 - Civil Aerospace Medical Institute (CAMI)
 - Alaska Flight Services



The Station Model



The Station Model Revisited



Airport & Camera Site Symbol
and ICAO ID

Airport PIREP(s)
(last 3 hours)

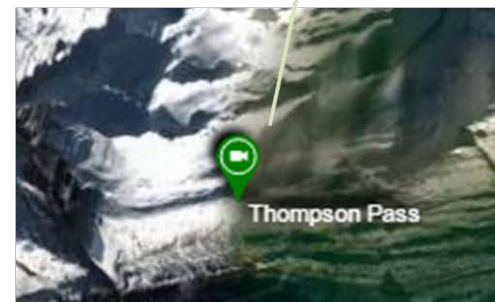
METAR with flight
category color
coding



Airport symbol
and ICAO ID

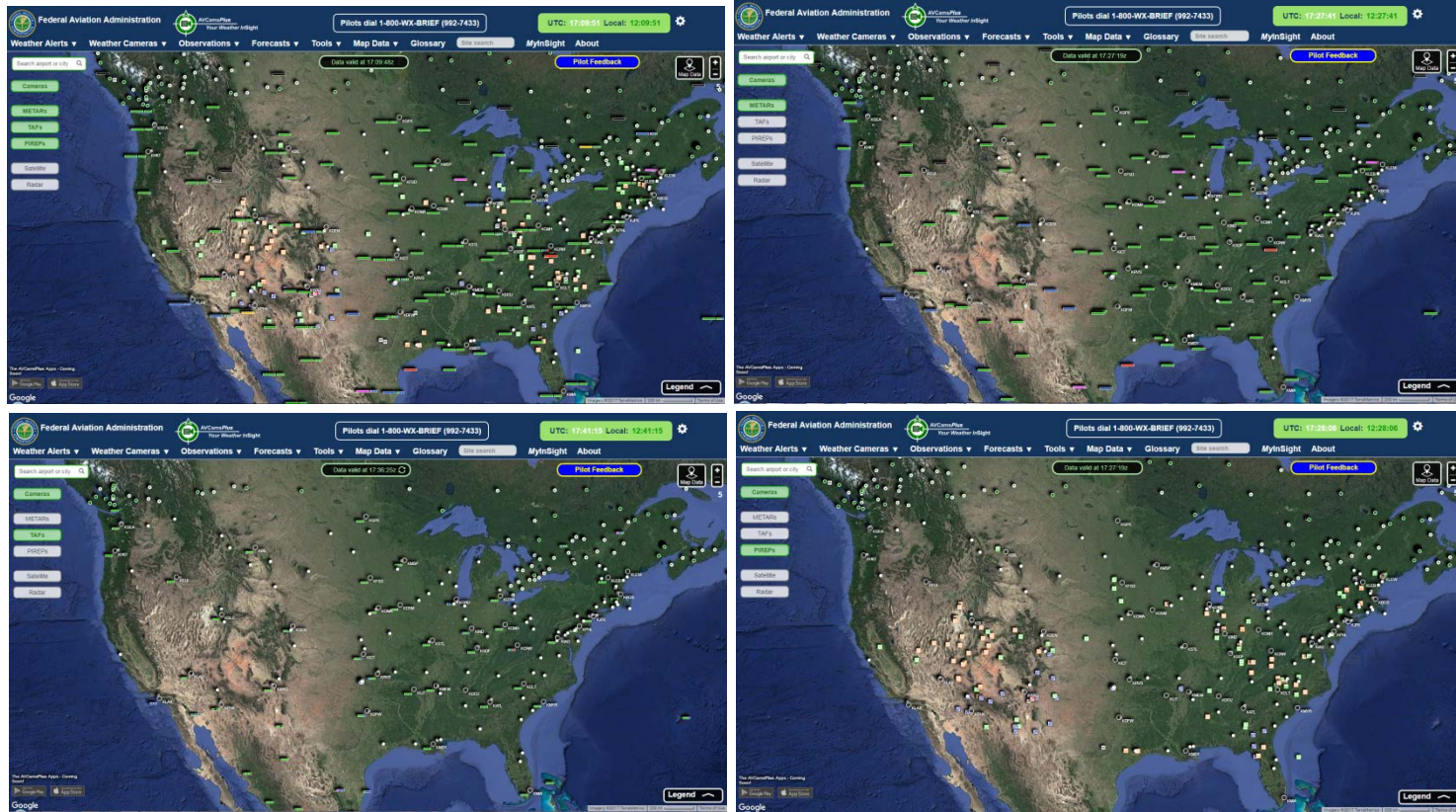
Camera Only Site
symbol and Site ID

TAF with the first 4 valid
forecast periods and flight
category color coding



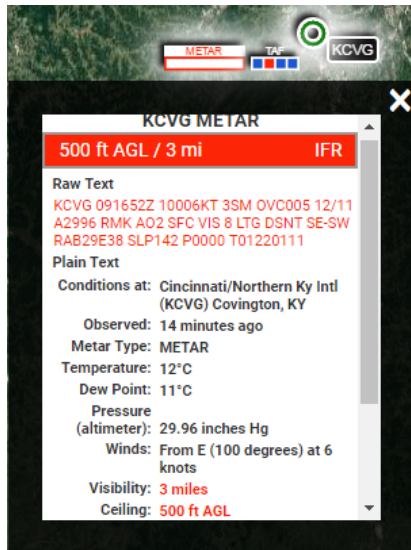
Ceiling & Visibility Presentation

- Current and Forecast Flight Category
 - Available at a glance



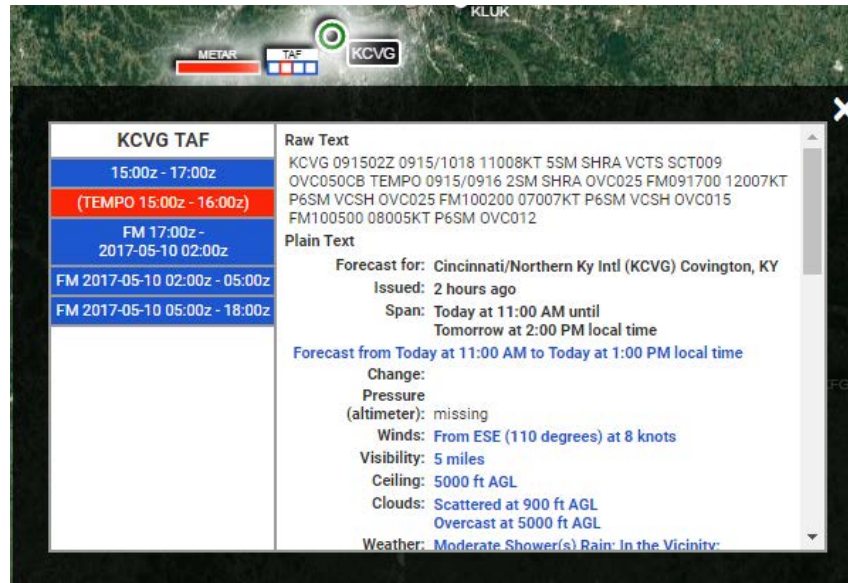
Ceiling & Visibility Presentation

- Current and Forecast Flight Category
 - Details available in raw and plain text
 - Color coded Flight Category based on ceiling & visibility



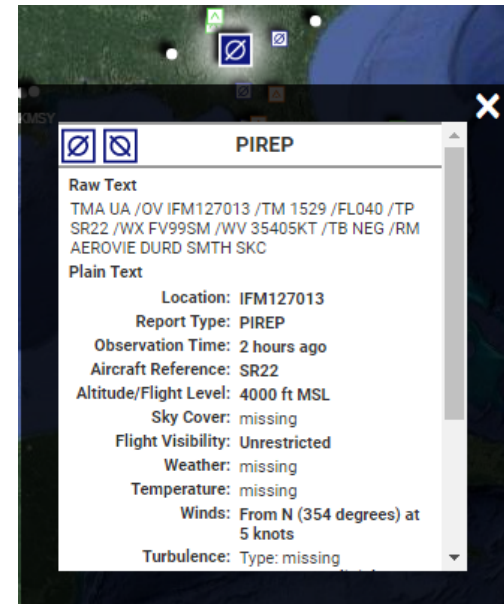
The screenshot shows a METAR display for KCVG. At the top, there are buttons for METAR, TAF, and KCVG. The main display area is titled "KCVG METAR" and shows a color-coded flight category of "500 ft AGL / 3 mi" in red, with "IFR" in white. Below this, the "Raw Text" is displayed in red, and the "Plain Text" is displayed in black. The "Plain Text" section includes conditions at Cincinnati/Northern Ky Intl (KCVG) Covington, KY, observed 14 minutes ago, METAR type, temperature of 12°C, dew point of 11°C, pressure of 29.96 inches Hg, winds from E at 100 knots, visibility of 3 miles, and ceiling of 500 ft AGL.

METAR



The screenshot shows a TAF display for KCVG. At the top, there are buttons for METAR, TAF, and KCVG. The main display area is titled "KCVG TAF" and shows a color-coded flight category of "15:00z - 17:00z" in blue, with "(TEMPO 15:00z - 16:00z)" in red. Below this, the "Raw Text" is displayed in black, and the "Plain Text" is displayed in black. The "Plain Text" section includes the forecast for Cincinnati/Northern Ky Intl (KCVG) Covington, KY, issued 2 hours ago, span from today at 11:00 AM until tomorrow at 2:00 PM local time, forecast from today at 11:00 AM to today at 1:00 PM local time, change, pressure, winds from ESE at 110 knots, visibility of 5 miles, ceiling of 5000 ft AGL, clouds scattered at 900 ft AGL overcast at 5000 ft AGL, and weather of moderate shower(s) rain in the vicinity.

TAF



The screenshot shows a PIREP display. At the top, there are buttons for METAR, TAF, and KCVG. The main display area is titled "PIREP" and shows a color-coded flight category of "IFM127013" in blue. Below this, the "Raw Text" is displayed in black, and the "Plain Text" is displayed in black. The "Plain Text" section includes location of IFM127013, report type of PIREP, observation time of 2 hours ago, aircraft reference of SR22, altitude/flight level of 4000 ft MSL, sky cover of missing, flight visibility of unrestricted, weather of missing, temperature of missing, winds from N at 354 knots, and turbulence of type missing.

PIREP



Ceiling & Visibility Presentation

- Visual/spatial and verbal information – side-by-side

Seward (PAWD) UTC: 19:36:55 Local: 11:36:55

Camera Images

METAR PAWD VFR ▲

METAR Raw Text
PAWD 091853Z AUTO 20006KT 10SM CLR 08/03 A3002 RMK
AO2 SLP167 T00830028 TSNO

METAR Plain Text
Conditions at: Seward (PAWD)
Observed: 44 minutes ago
Metar Type: METAR
Temperature: 8°C
Dew Point: 3°C
Pressure (altimeter): 30.02 inches Hg
Winds: From SSW (200 degrees) at 6 knots
Visibility: 10 miles
Ceiling: No ceiling
Clouds: Clear
Vertical Visibility: missing
Weather: missing
Remarks: AO2 SLP167 T00830028 TSNO ▲

Previous METARs ▼

TAF

PIREPs

NOTAMs ▼

Airport Information ▼

Seward (SWD) - SE

Seward (SE) UTC: 19:36:05/17 Local: 11:36:05/17

Site Elevation: 21' MSL

3650' MSL 4.6 SM

4600' MSL 8.5 SM

3000' MSL 5.0 SM

FAA advisory weather product

NorthEast (25°)

SouthEast (125°)

South (170°)

NorthWest (325°)

Current

Loop

Site Cameras



<http://avcamsplus.faa.gov>

