Aviation Initiatives: Weather Update

Spring General Aviation Association Meeting

April 20, 2021

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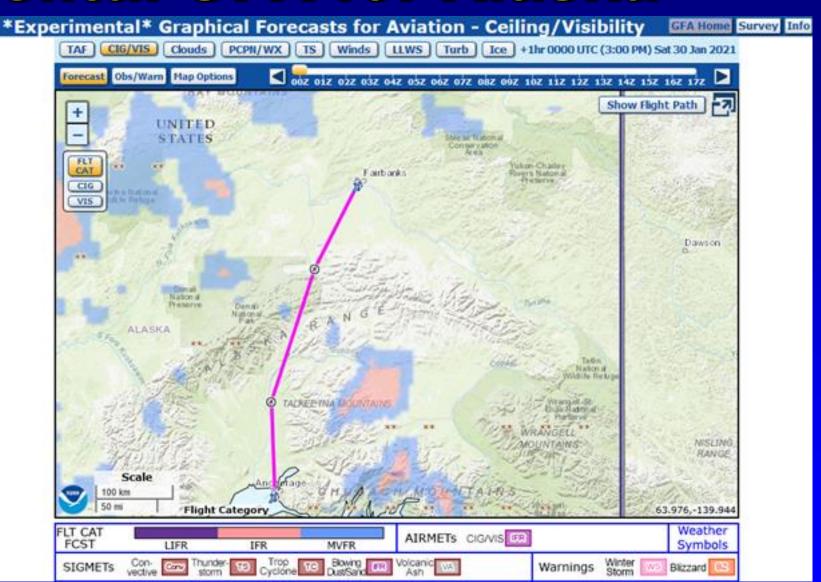
Topics:

It's all about the weather!

- Graphic Forecast for Aviation (GFA) -- Alaska
- Visibility Estimation through Image Analytics (VEIA) from weather cameras
- Visual Weather Observing System (VWOS) Demonstration
- River Watch

Experimental GFA for Alaska

- NWS Graphical Forecasts
 - Available in CONUS since 2017
 - Now expanded to Alaska, in testmode
 - Look ahead and back in time!

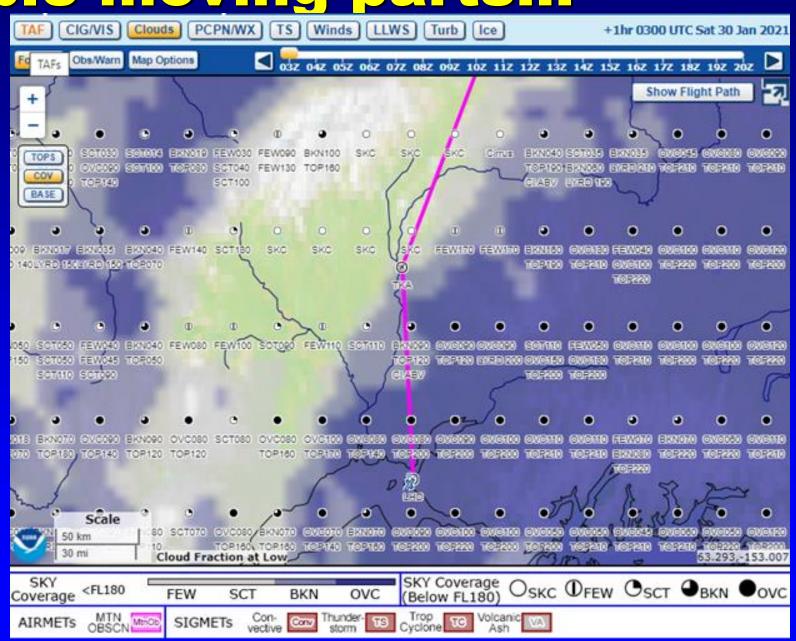


Multiple moving parts...

- Includes gridded forecasts
 - Better spatial resolution than current Area
 Forecast text product
 - Look ahead 18 hours

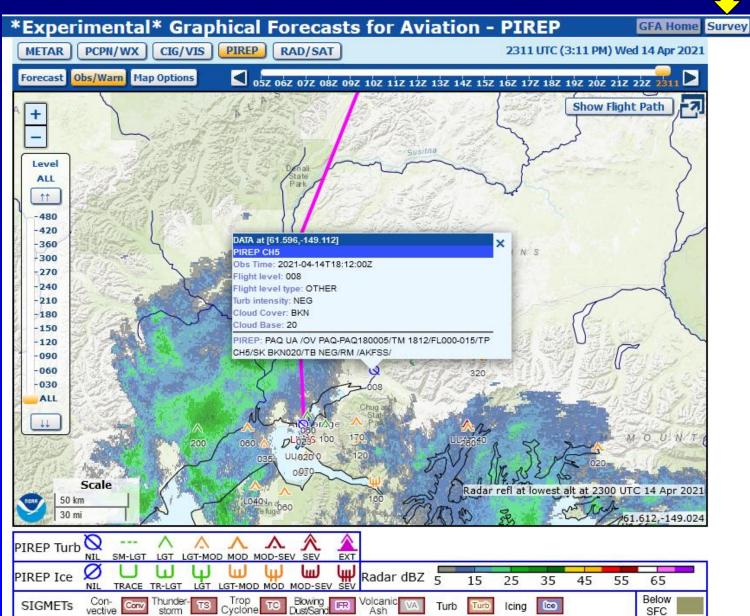


tutorial video



Look back at observations

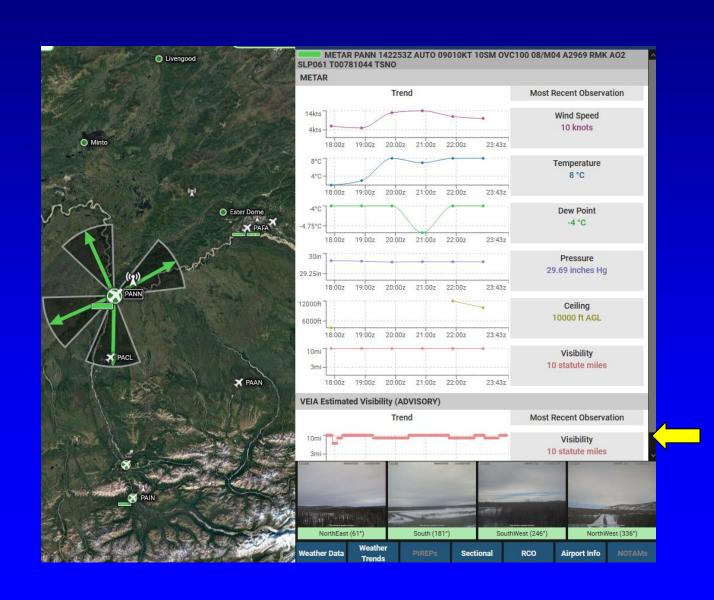
- Current conditions
 - NexRad
 - METARs
 - PIREPs can be set to display for up to 12 hours in the past.
- Please provide feedback!
- https://testbed.aviation weather.gov/gfa
- More info: https://blog.aopa.org/aopa/2021/02/ 03/experimental-graphic-aviationweather-for-alaska/



Visibility from Weather Cameras

Visibility Estimated from Image Analytics (VEIA)

- Experiment using image analysis to estimate visibility
- Assessment under way to evaluate:
 - April-June, 2021
 - Evaluate utility for aviation
- Looking for volunteers
- https://blog.aopa.org/aopa/2021/04/13/extrac ting-visibility-from-webcams/



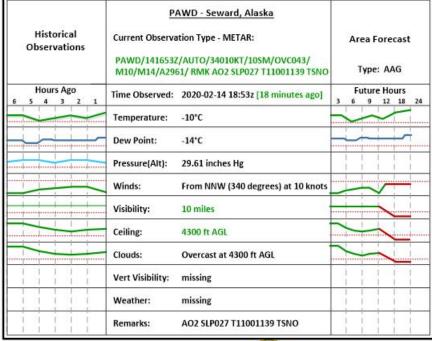
FAA VWOS Demonstration

Visual Weather Observing System (VWOS)

- Uncertified weather system
- Include ceiling and visibility
- Co-located with FAA
 Weather Cameras
- Validation period~1 year



(Trend Wx Obs - Current Obs - Forecasts)

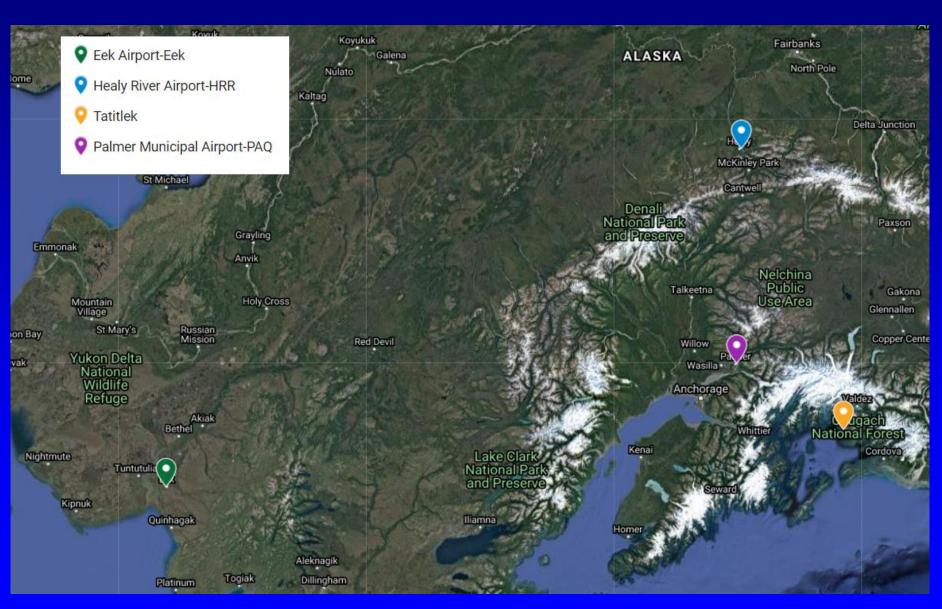




Demonstration locations

Initial test sites:

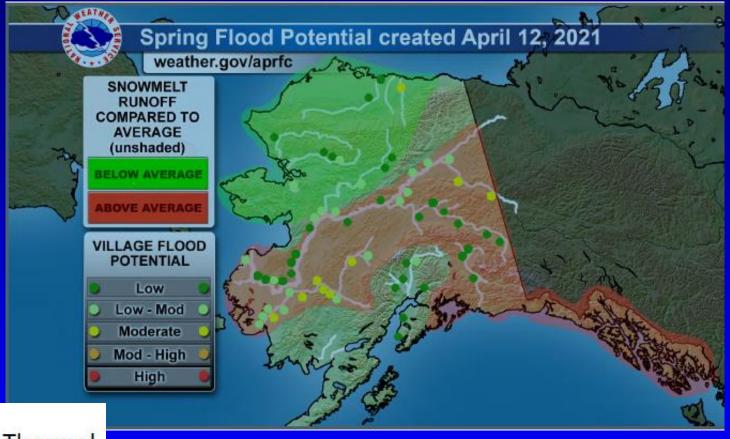
- Palmer
- Eek
- Healy River
- Tatilek



River Watch

River Watch

- NWS 2021 outlook anticipates more "mechanical breakup"
- Photos emailed to NWS along rivers helps monitor breakup!



2021 Trending

Mechanical

Most Breakups are a Blend

Thermal

https://www.weather.gov/aprfc/riverWatchProgram

https://blog.aopa.org/aopa/2021/04/19/riverwatch/

