

US HELICOPTER SAFETY TEAM

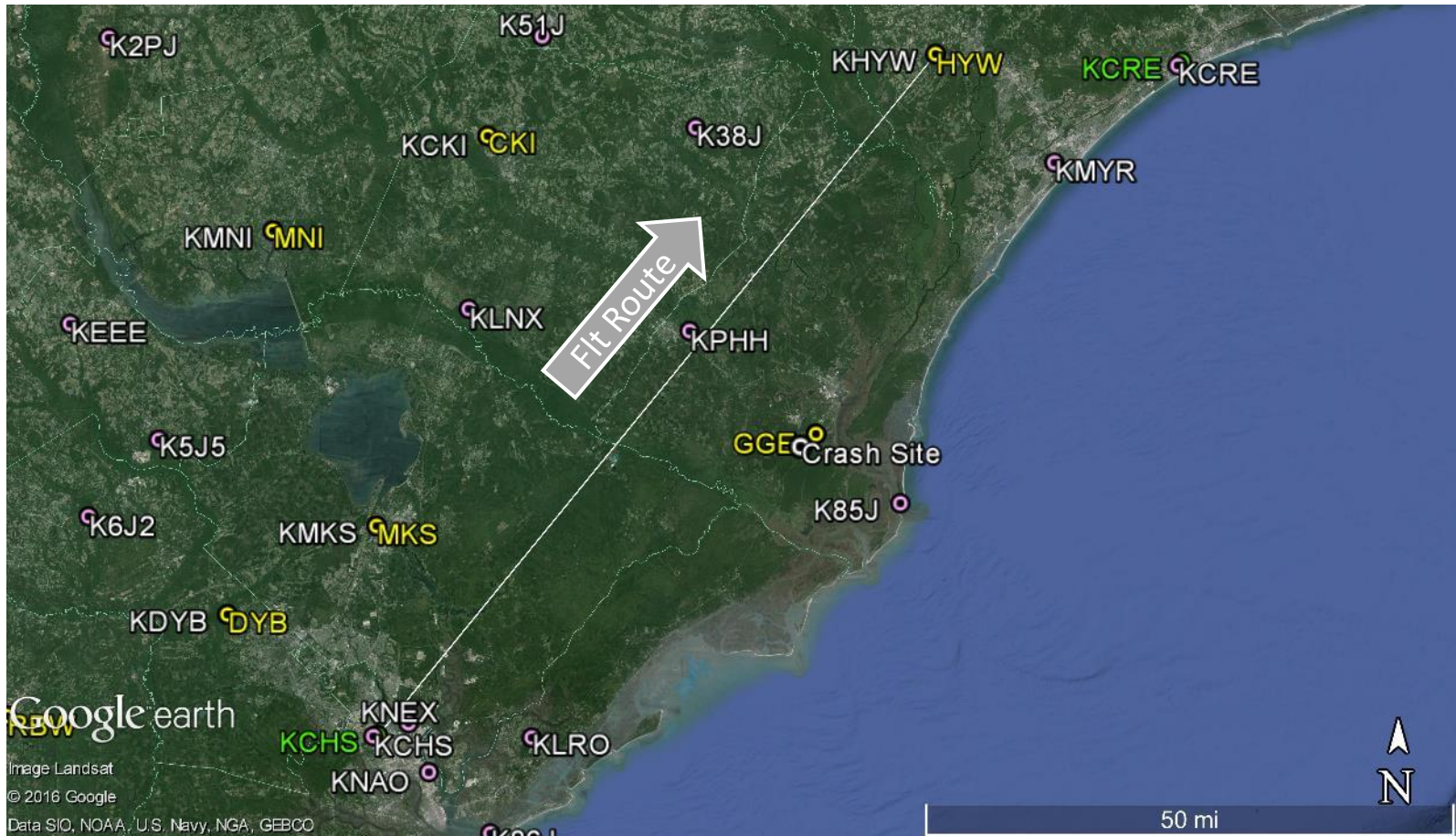
FRIENDS AND PARTNERS OF AVIATION
WEATHER

NTSB WASHINGTON, DC
3 AUGUST 2016





Accident Review #1





Accident Review #1

- **NTSB Report:** ERA09FA537
- **Date:** 09/25/2009
- **Flight Route:** CHS-HYW
 - **CHS:** Charleston International Airport (SC)
 - **HYW:** Conway-Horry Co. Airport (SC)
- **Note:** Accident occurred 1.98 nautical miles southwest of Georgetown Co. Airport(GGE). AWOS at GGE out of service for past 6 weeks.

- *Whittier, AK* – Dec. 3, 2007 – BK117 – 4 fatal
- *Cherokee, AL* – Dec. 30, 2007 – **Bell 206** – 3 fatal
- *S. Padre Island, TX* – Feb. 5, 2008 – **AS350** – 3 fatal
- *La Crosse, WI* – May 10, 2008 – EC135 – 3 fatal
- *Huntsville, TX* – June 8, 2008 – **Bell 407** – 4 fatal
- *Flagstaff, AZ* – June 26, 2008 – 2x **Bell 407's** – 7 fatal
- *Greensburg, IN* – Sept. 1, 2008 – **Bell 206** – 3 fatal
- *Forestville, MD* – Sept. 28, 2008 – AS365N1 – 4 fatal *
- *Aurora, IL* – Oct. 15, 2008 – Bell 222 – 4 fatal
- *Georgetown, SC* – Sept. 25 2009– **AS350** – 3 fatal
- *Doyle, CA* – Nov. 14, 2009 – **AS350** – 3 fatal
- *El Paso, TX* --Feb. 6, 2010 -- **AS350** – 3 fatal
- *Brownsville, TN*, - 26 March 2010, **AS350** – 3 fatal
- *Midlothian, TX*– 5 June 2010—Bell 222 – 2 fatal
- *Kingfisher, OK*– 22 July, 2010---**AS350**– 2 fatal
- *Tucson, AZ*— 28 July, 2010—**AS350**—3 fatal
- *Scotland, AR*– 31 August, 2010- **Bell 206**– 3 fatal
- *Kearney, MO* –26 August, 2011– **AS350**--- 4 fatal
- *Greenville Springs, FL*– 26 December 2011— **Bell 206** —3 fatal
- *Rochelle, IL*– 11 December 2012-- BK117– 3 fatal
- *Cerro Gordo Cty, IA*, 3 January 2013, **B407**- 3 fatal
- *Oklahoma City, Ok.* 25 February 2013, **AS350**- 2 fatal
- *Manchester, KY*, 6 June 2013, **B206**- 3 fatal
- *Talihina, OK*, 11 June 2013, **AS350**– -1 fatal, 2 critical, 1 injured
- *Somerville TN*, 22 Oct. 2013 **AS350**– 3 fatal
- *Newkirk, NM*, 16 July 2014 A109E, --3 fatal
- *Wichita Falls, TX*, 4 Oct. 2014, **Bell 206**,--1 fatal, 1 critical
- *St. Louis, MO* , 3 March 2015, **EC130**- 1 fatal
- *Eufaula, OK*, 12 March 2015, **AS350**, - 1 fatal, 2 injured
- *Frisco, CO*, 3 July 2015, **AS350**, 1 fatal, 2 injured
- *Bakersfield, CA*, 10 Dec. 2015, **Bell 407**, 4 fatal
- *Apache Junction, AZ*, 15 Dec. 2015, **AS350**, 2 fatal, 1 injured
- *Coffee County, AL* , 26 Mar. 2016, **AS350**, 4 fatal

33 fatal crashes

33/Single Pilot

32/33 VFR *

27 / 33 SE

28/33 Night

16/33 IIMC

Blue= day time., **Orange = night, clear conditions** **Red = night, marginal weather, low visibility.**

With exception of MSP Trooper 2 crash (Forestville, MD) all aircraft operating VFR.



Strategies

1.

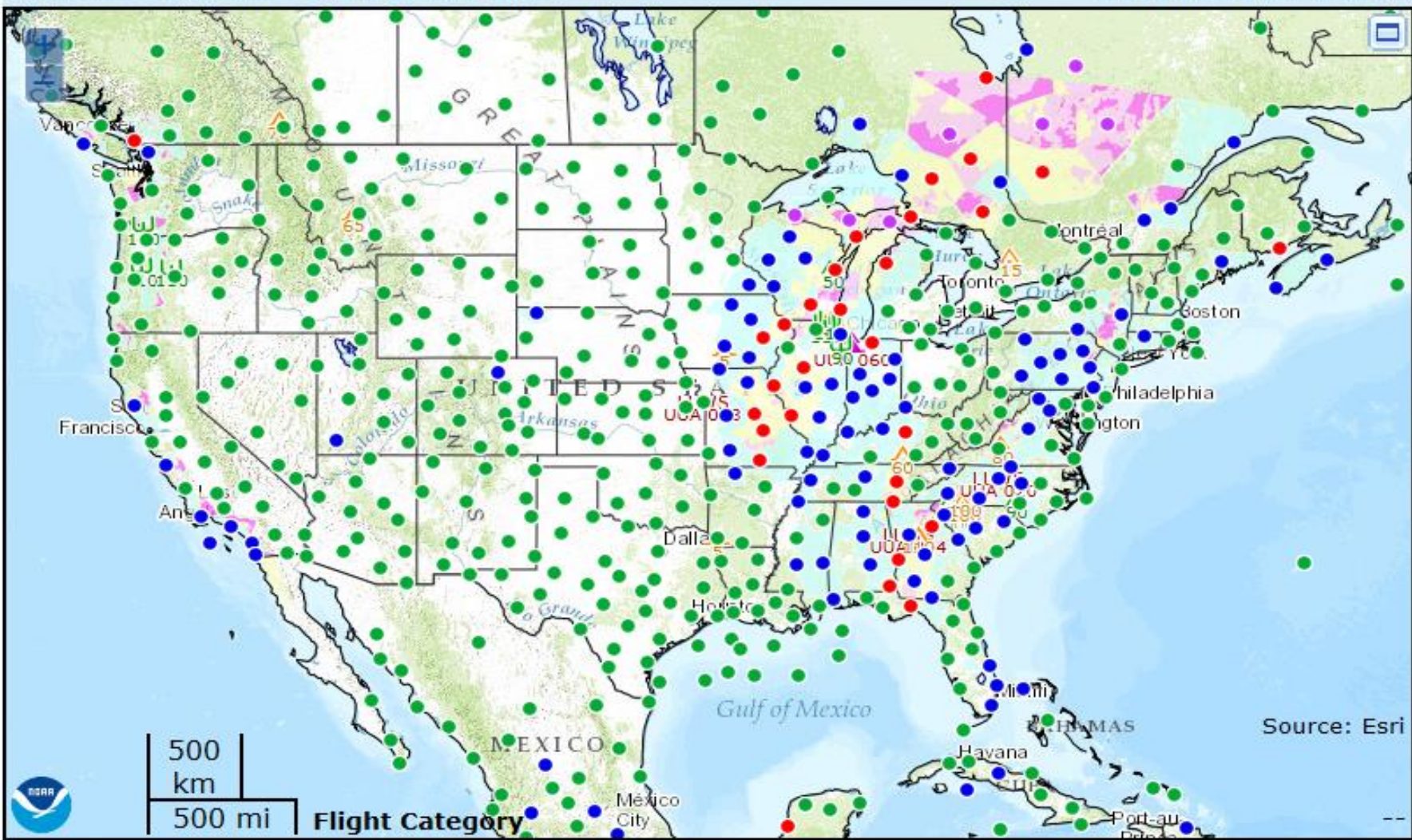
Increasing the density of reporting stations by including additional weather reporting sites.

- Non Federal AWOS-IIIs are lowest hanging fruit but all AWOS AV and higher commissioned by FAA
- Non-aviation weather systems, i.e. DOT road systems, RAWs (Remote Automatic Weather Stations), and private weather stations.

Helicopter Emergency Medical Services Tool

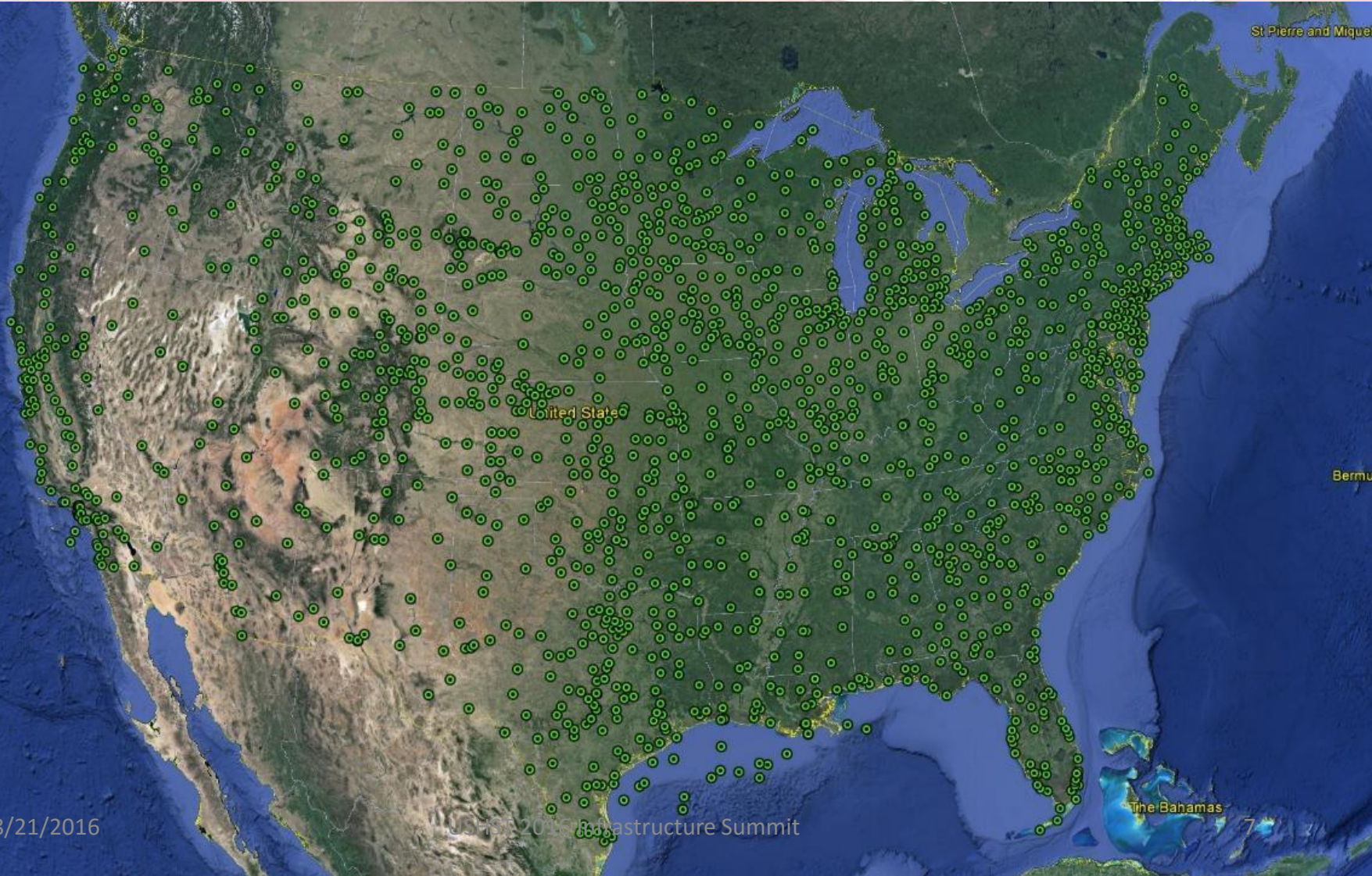
[INFO](#) [Feedback](#)

[Weather](#) [Overlays](#) [View](#) [Configure](#) 1543 UTC 14 Oct 2014





Federal AWOS/ASOS

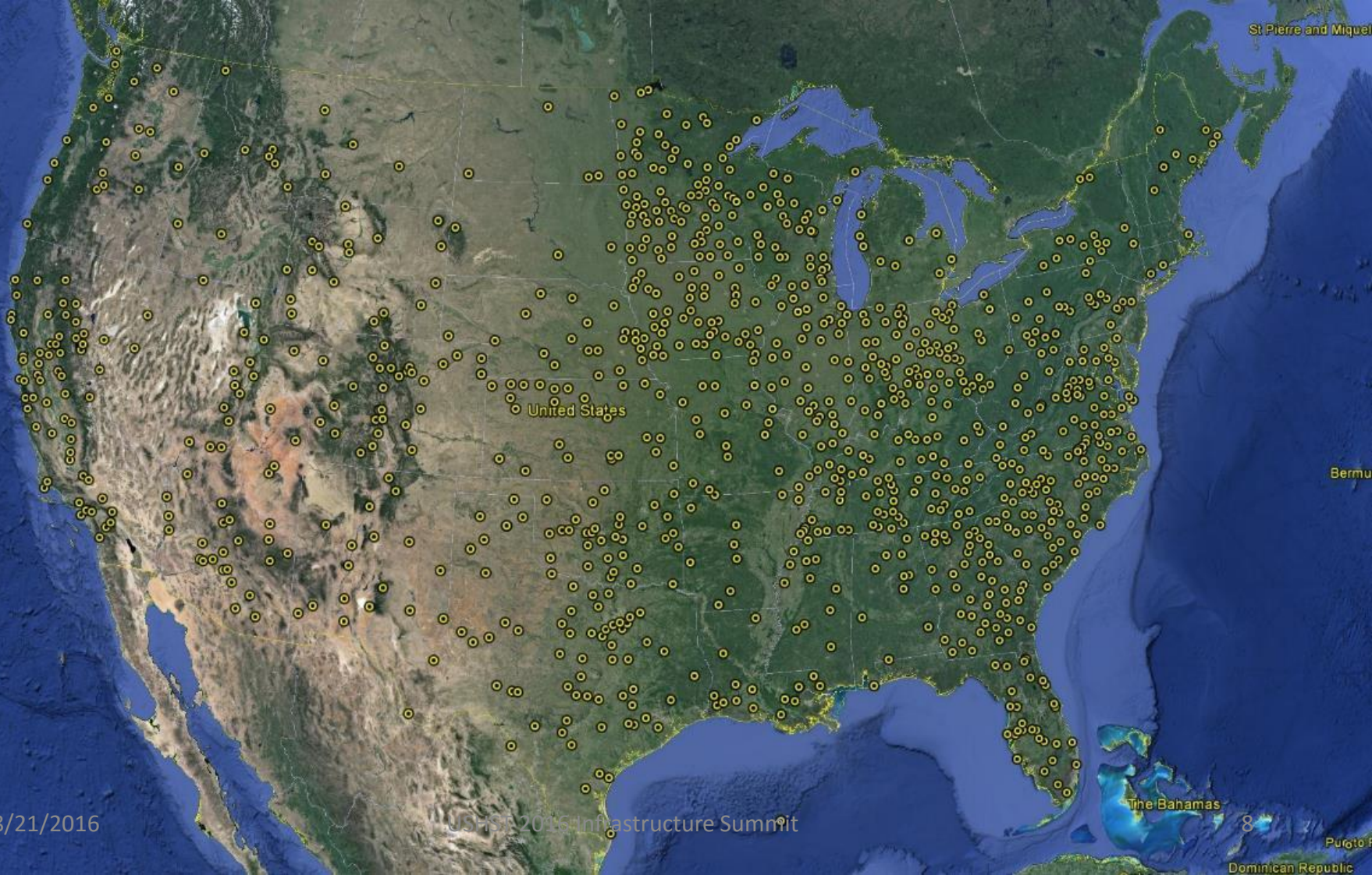


8/21/2016

NOAA 2016 Infrastructure Summit

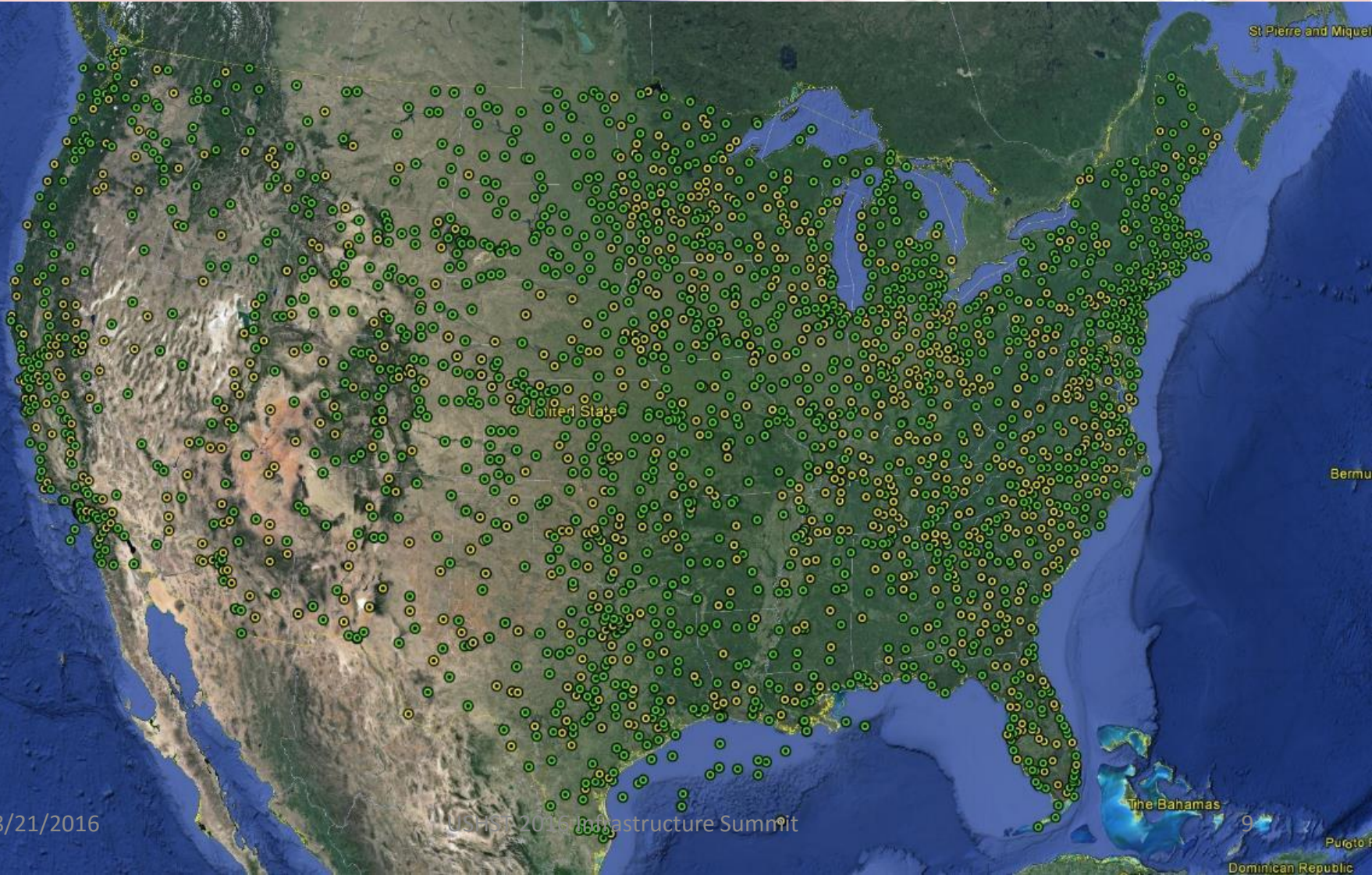


Non-Fed AWOS





Combined FED/Non-FED

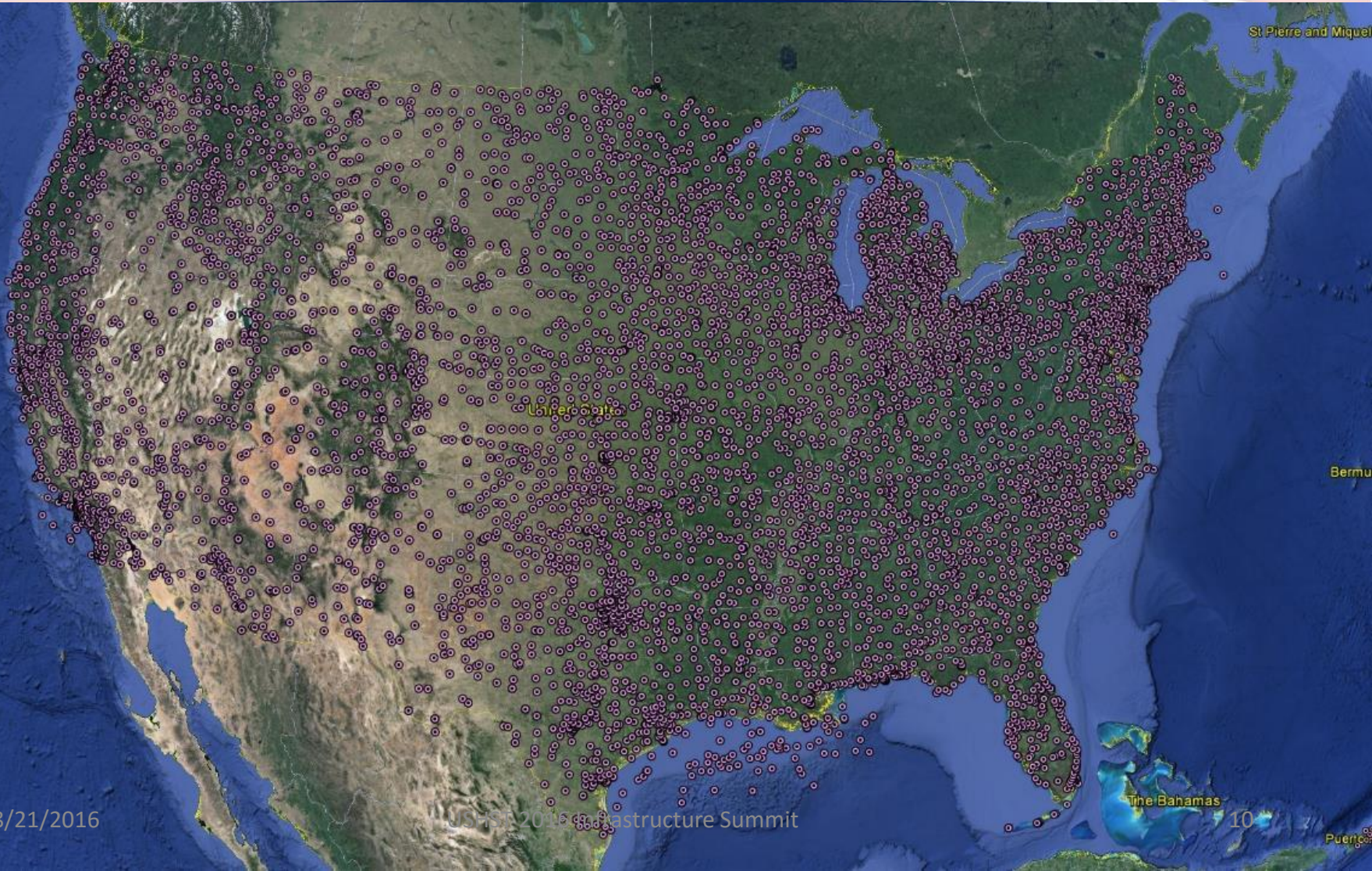


8/21/2016

NOAA 2016 Infrastructure Summit



All Known Weather Sites



8/21/2016

NOAA 2016 Infrastructure Summit



Strategies

Weather into the system:

- NADIN
- MADIS
- MESOWEST



Strategies

2.

Pertinent information that pilots make go no-go decisions on in dynamic HEMS environment.

- Not just Ceiling and Visibility
 - . Temperature
 - . Dew point
 - . Humidity
 - . Wind direction
 - . Wind speed
 - . Precipitation



Strategies

3.

Improving the ability to trend the above data so as to identify whether or not conditions are deteriorating or improving



Strategies

4.

Rapid access in flight to weather not being reported through normal aviation channels.