

MADIS Innovations and Path to Operations

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CIRES

Performing work for ESRL/GSD

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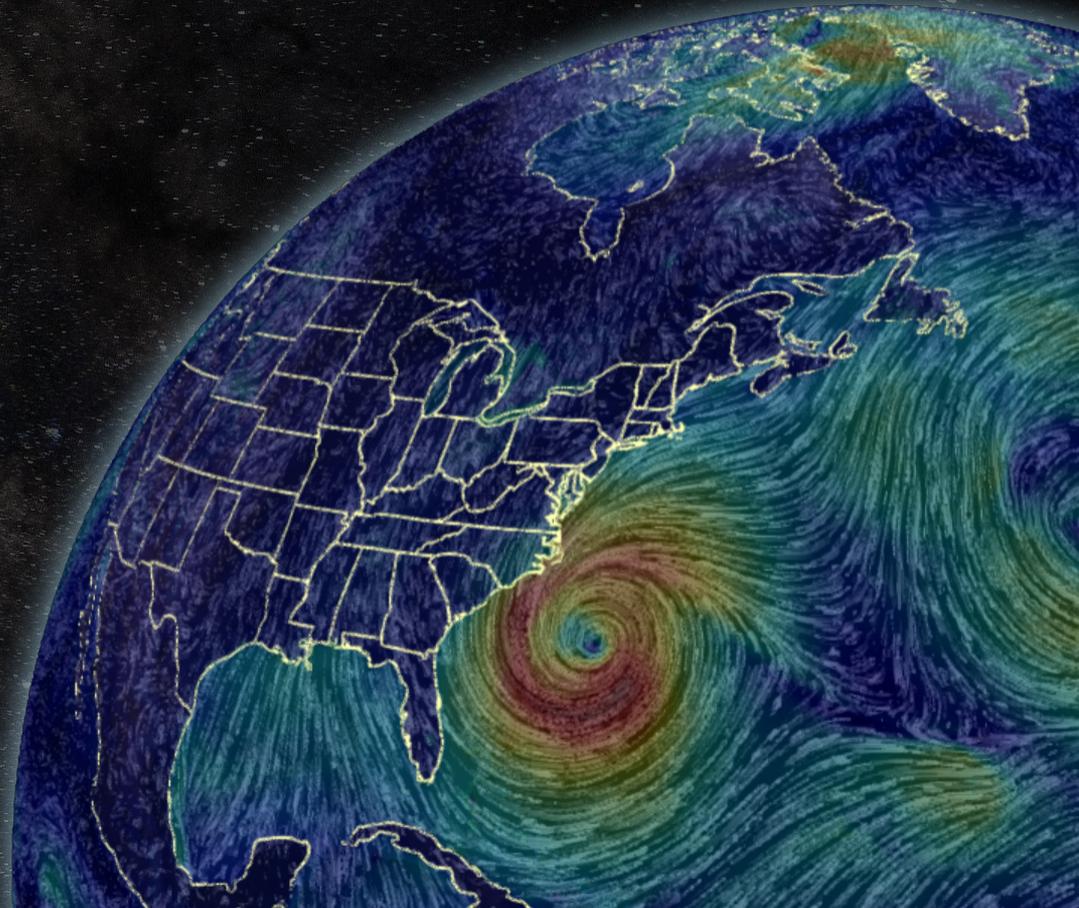
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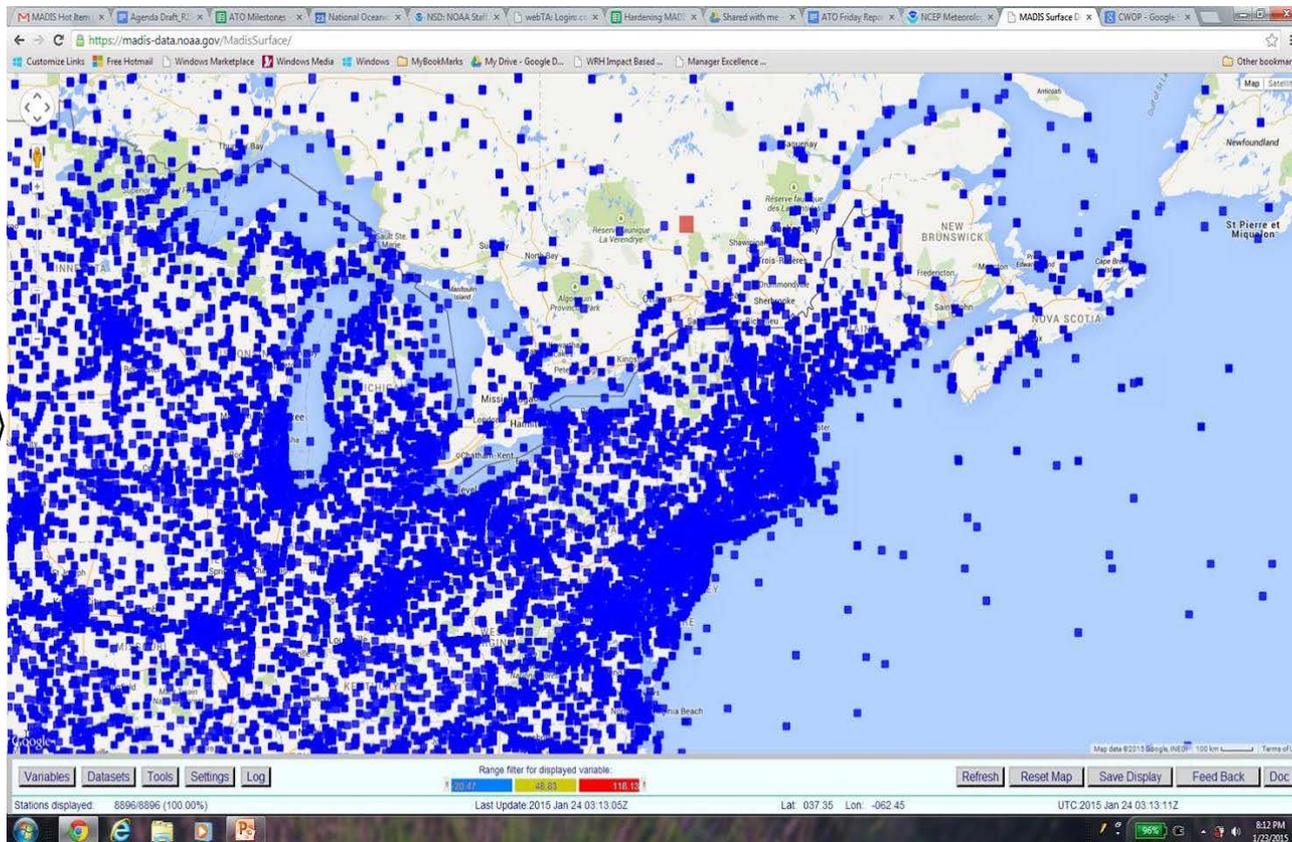


GSD Science Review

3-5 Nov 2015



NOAA surface stations with MADIS



Provides a finer resolution higher quality NOAA observational database and distribution system through partnerships with non-NOAA providers.

Surface



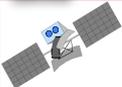
Profilers



Radiosonde



Satellite



Aircraft

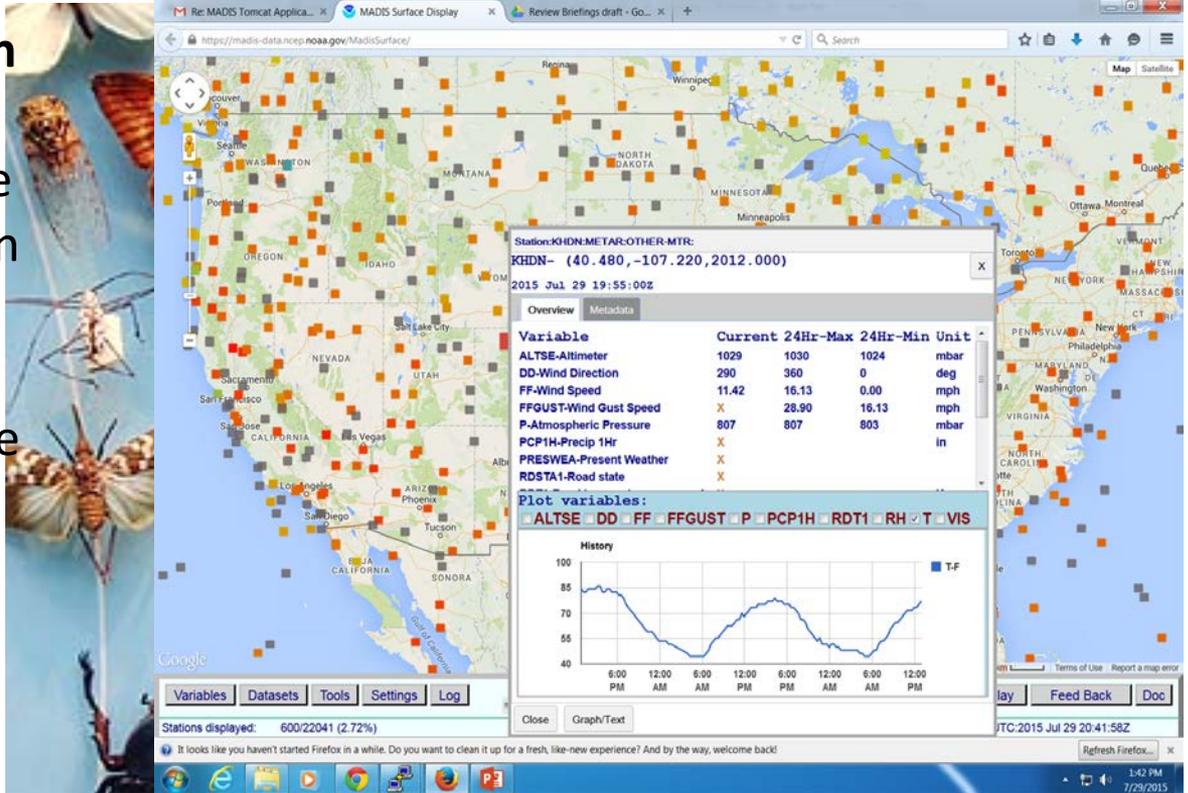


Radiometer



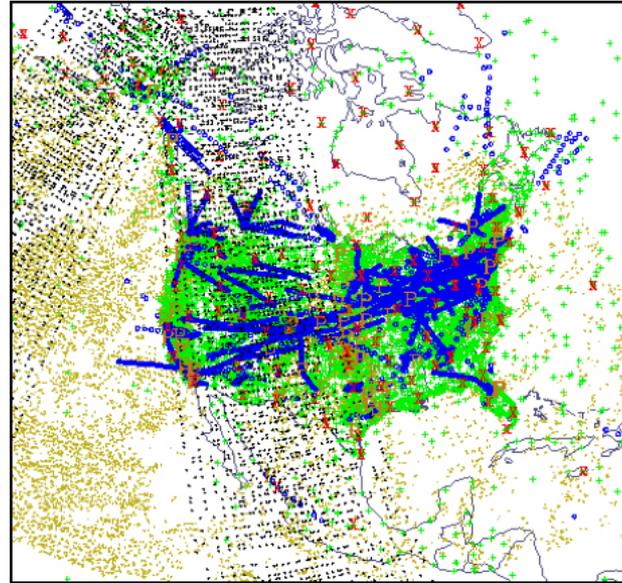
Quality Control/Distribution

- MADIS data handling time disparate 15 datasets down to 5 minutes.
- Improve Observational Knowledge with NWS and the FAA on data delivery and adopt data standards where possible.
- Google maps and ESRI displays to fill holes.



MADIS Innovations Summary

- +** - Surface
- o** - Aircraft
- X** - Radiosonde
- P** - Profiler
- - GOES Satellite
- - POES Satellite
- R** - Radiometer

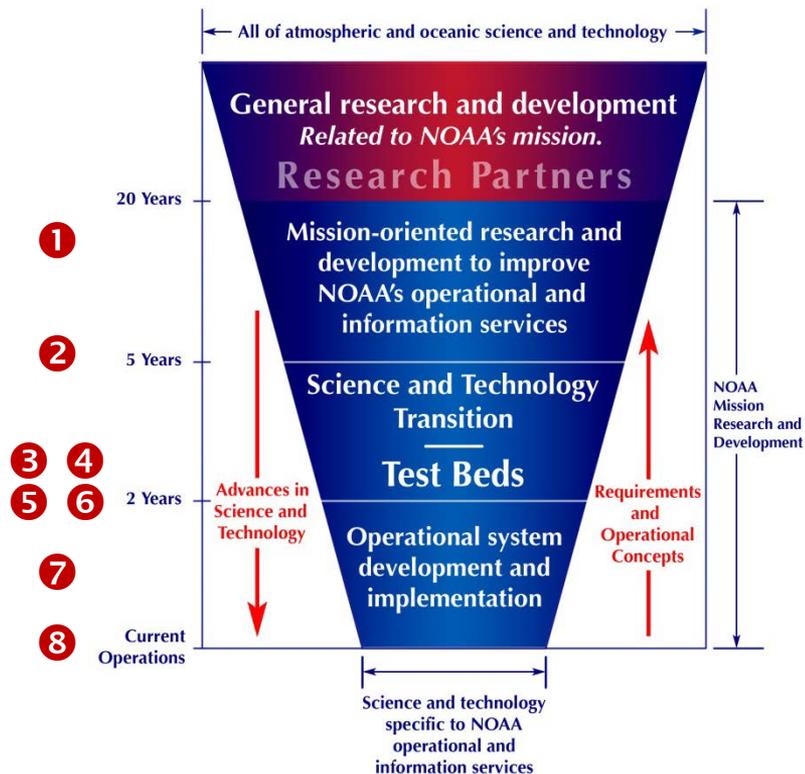


- In order for MADIS to stay relevant, MADIS must continually be making improvements to:
 - Gap filling data from the ground up
 - Quality.
 - Data throughput.
 - Distribution services.

Path to MADIS Operations

1	Pre 2005	General R&D on ingest, integration, Quality Control, and data delivery techniques.
2	2005 – 2008	Develop transition strategy. LOA between NWS and OAR signed
3	Sept 2010	MADIS accomplish Initial Operating Capability (IOC) at NWS
4	May 2012	Revised transition strategy from lessons learned with IOC system. New LOA between NWS, NESDIS, and OAR
5	Sept 2013	Funding and operational location for MADIS transition identified and agreed to
6	Oct 2013	MADIS Implementation Project charter signed
7	Dec 2014 – Jan 2015	MADIS enters final development and testing at NCEP and NESDIS
8	Jan 2015	Operational MADIS achieved

NOAA Research and Development Funnel



- Must be sustainable.
- Must have a common vision.
- The last mile is hardest, but most rewarding.



- It was a hard process to go through.
- MADIS now bridges the gap between research and operations.

