

The Southern Hemisphere Meteorological Observing System

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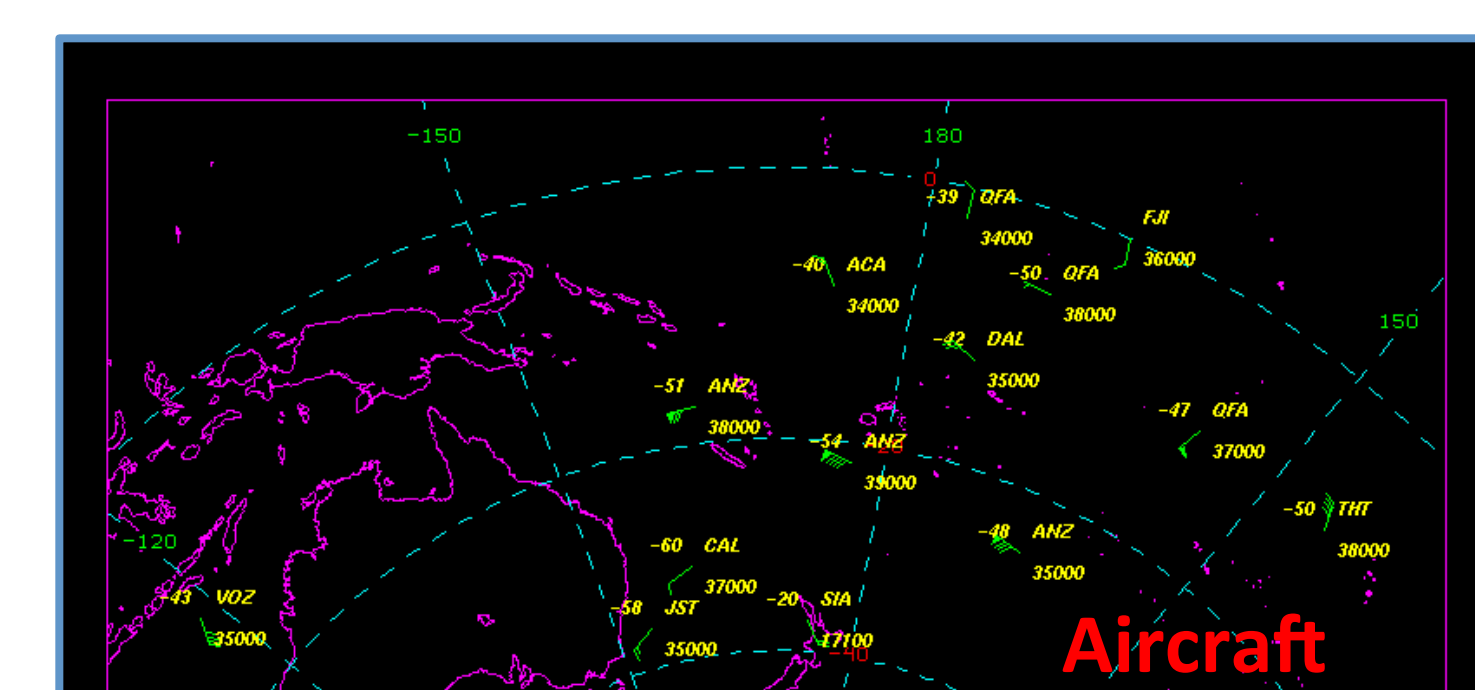
Department of Physical Sciences, School of Arts and Sciences,
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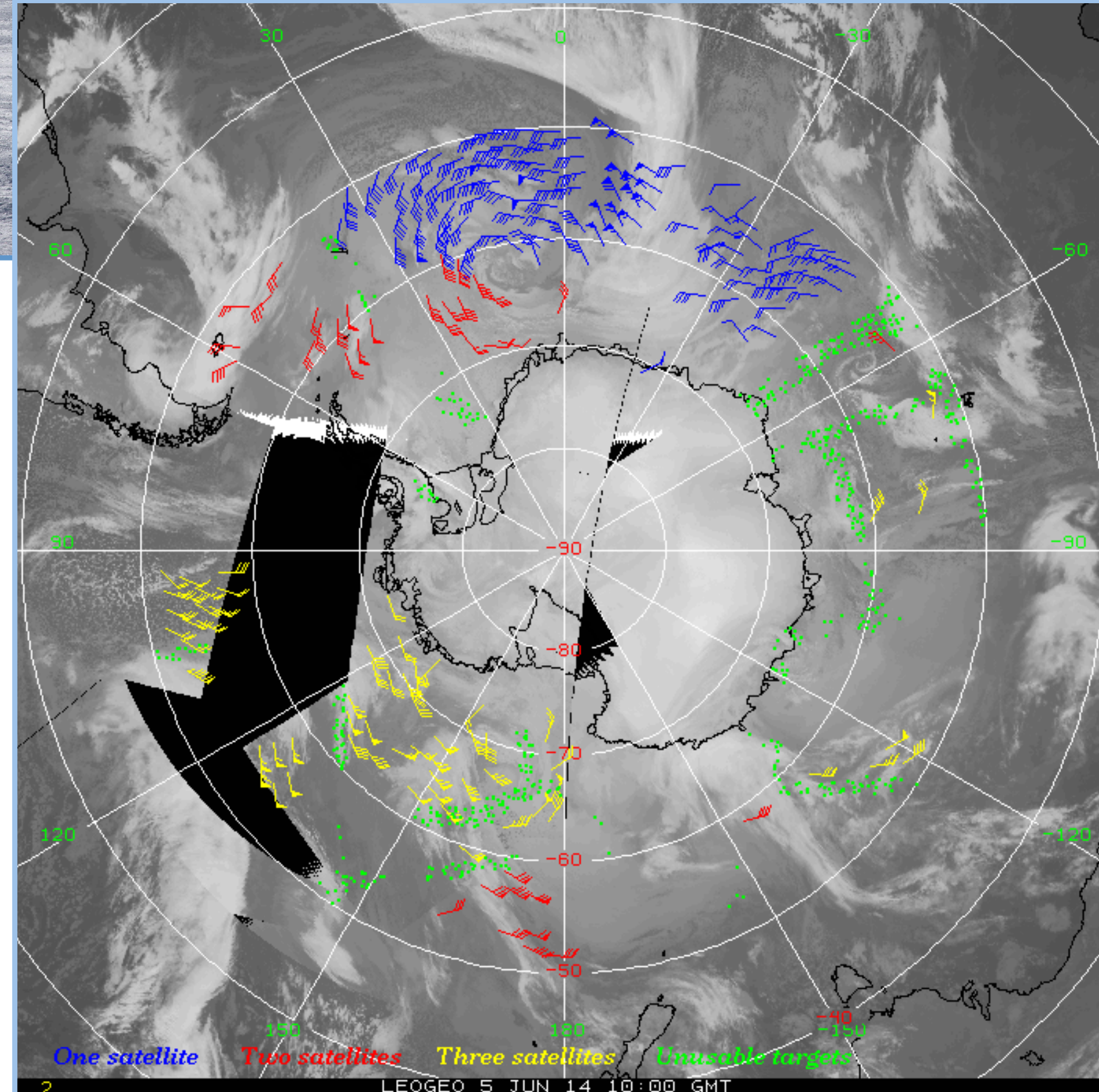
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Aircraft

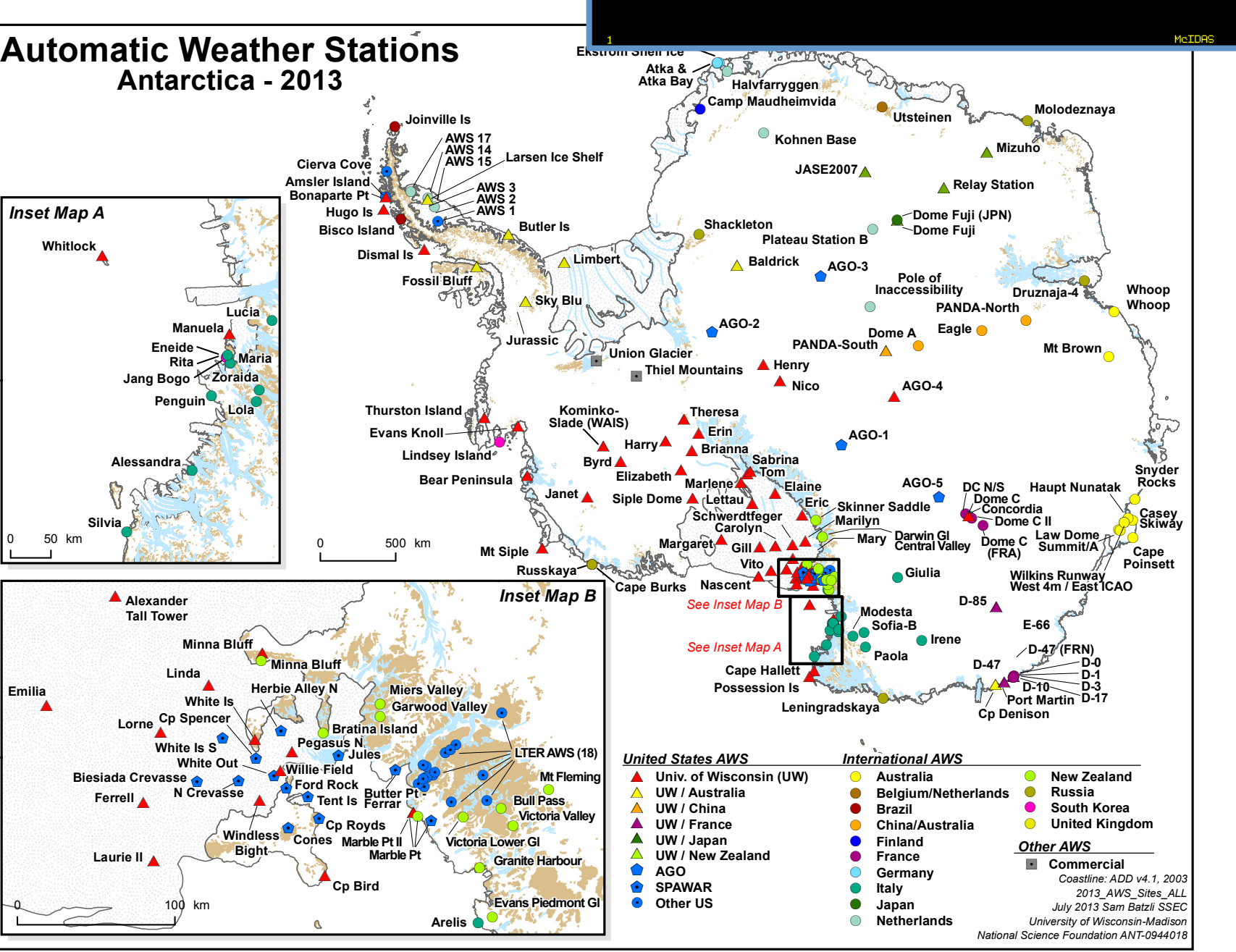


Aircraft



Satellites

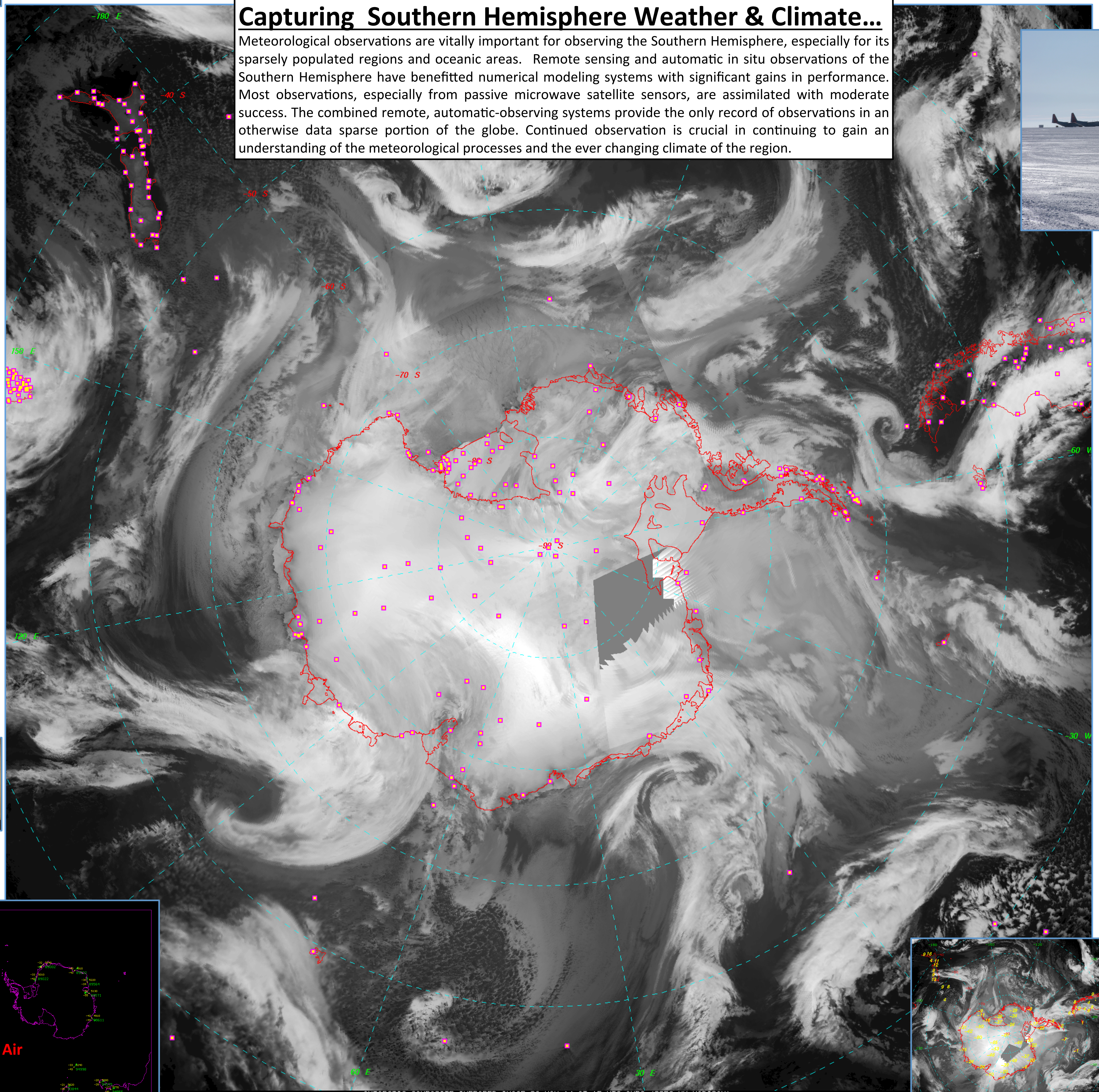
Surface



Ship/Buoy

Capturing Southern Hemisphere Weather & Climate...

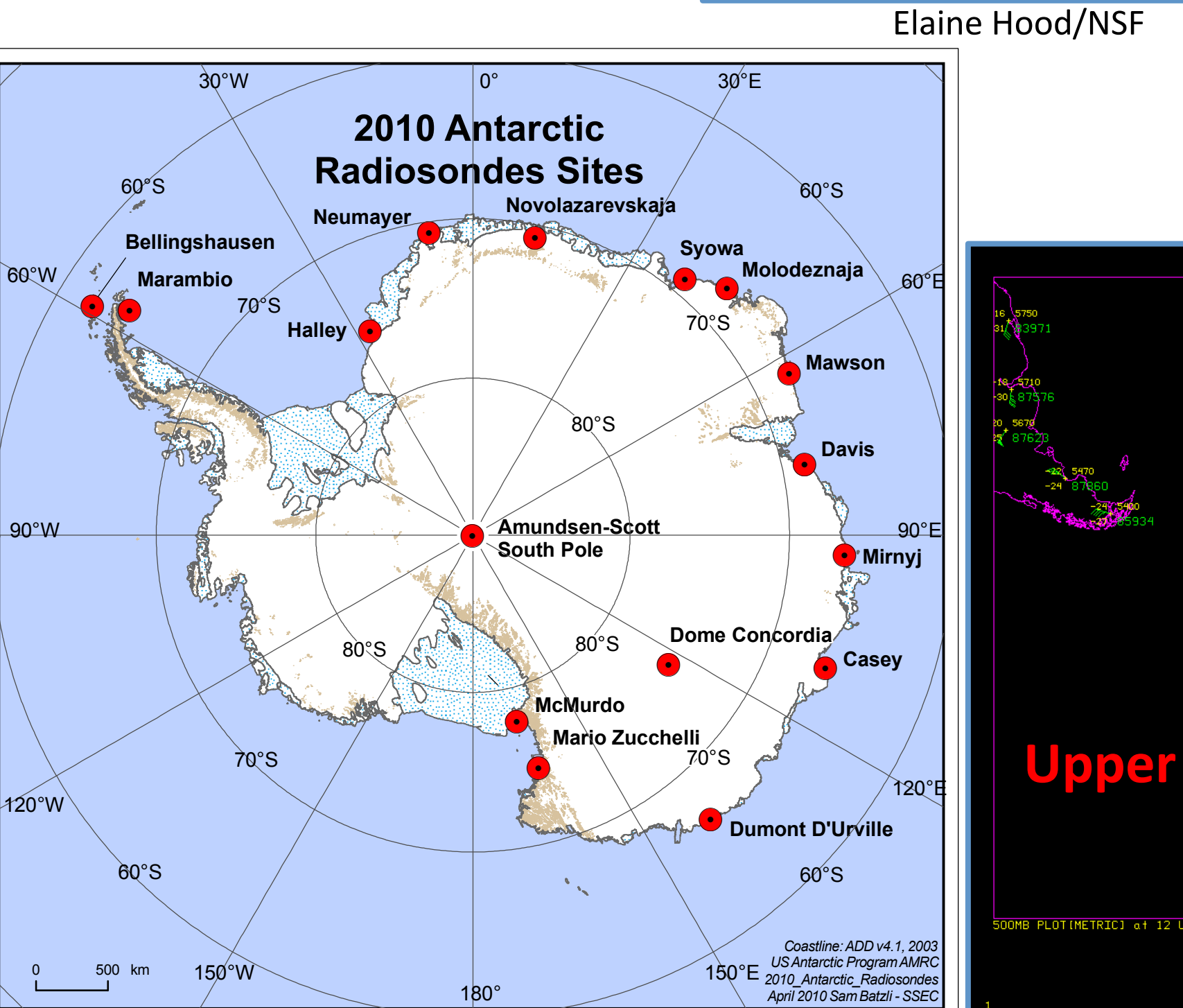
Meteorological observations are vitally important for observing the Southern Hemisphere, especially for its sparsely populated regions and oceanic areas. Remote sensing and automatic in situ observations of the Southern Hemisphere have benefitted numerical modeling systems with significant gains in performance. Most observations, especially from passive microwave satellite sensors, are assimilated with moderate success. The combined remote, automatic-observing systems provide the only record of observations in an otherwise data sparse portion of the globe. Continued observation is crucial in continuing to gain an understanding of the meteorological processes and the ever changing climate of the region.



Selected Data Sources:

- NOAA: National Climatic Data Center & National Buoy Data Center
- Australian Bureau of Meteorology
- Climate Research Unit – University of East Anglia
- British Antarctic Survey (BAS)
- National Center for Atmospheric Research (NCAR)
- NASA
- AMRC
- Others...

Upper Air



Elaine Hood/NSF

Upper Air

The Uncertain Future...

With funding coming to an end, the Antarctic Meteorological Research Center's Data Center holdings will likely come to an end in the summer of 2014. This includes a variety of the data types. Some datasets are unique such as the composite imagery, illustrated here, and are not readily available elsewhere. Their future is uncertain. Other on-going observational collections could be at threat for termination. Vital observations are fundamental for future understanding and research. Future pathways are required to support these efforts.

ACKNOWLEDGEMENTS

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