

# The UW-Madison 2016-2017 Antarctic Automatic Weather Station Program Field Season: McMurdo AWS and International Collaboration

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# Outline

- ▶ AWS Team Members
- ▶ Current UW AWS Map
- ▶ UW Field Season
- ▶ International Collaboration
- ▶ Other Field Season Activities



# AWS Team



Dr. Matthew Lazzara



Lee Welhouse



Dave Mikolajczyk



George Weidner



Peter Voytovich

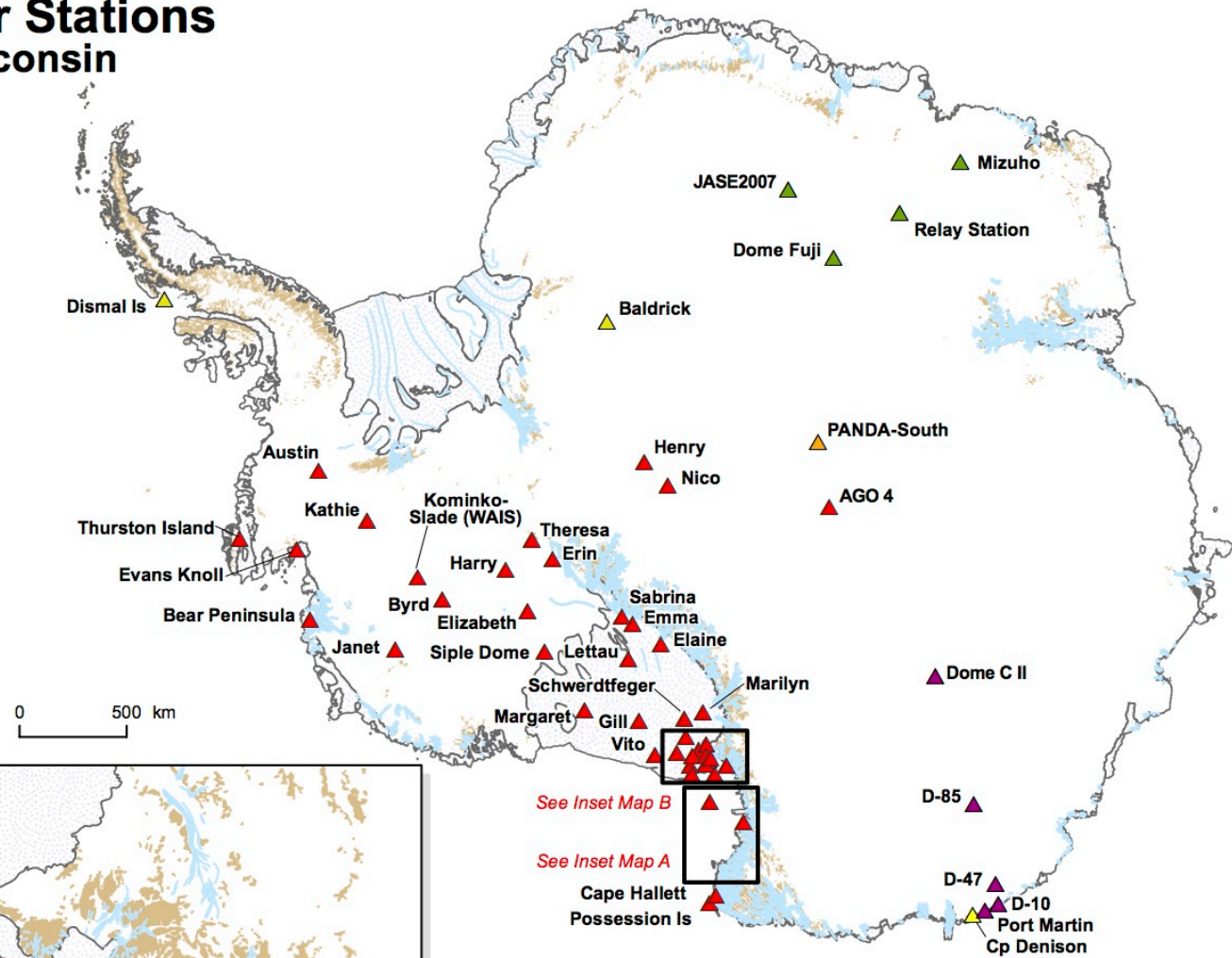
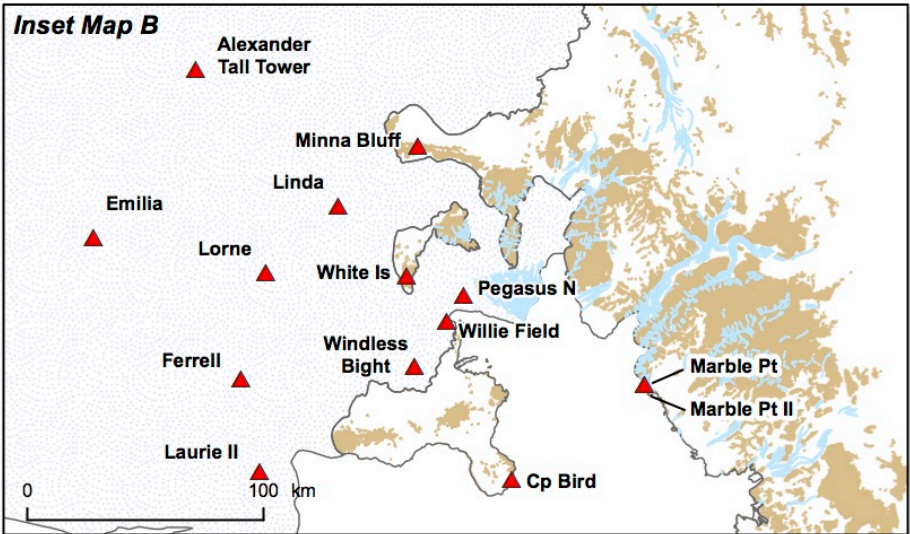
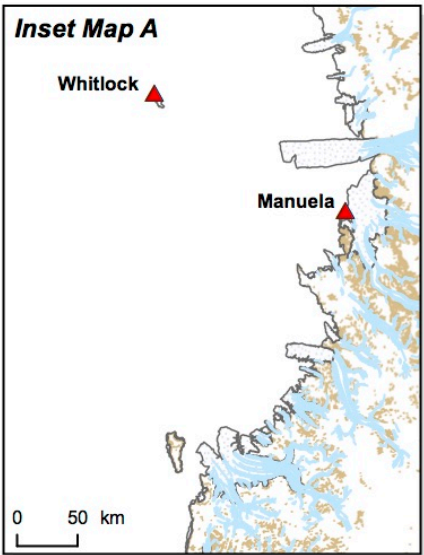


Carol Costanza



Linda Keller

# Automatic Weather Stations University of Wisconsin 2017



- University of Wisconsin AWS**
- ▲ Univ. of Wisconsin (UW)
  - ▲ UW / Australia
  - ▲ UW / China
  - ▲ UW / France
  - ▲ UW / Japan
  - ▲ UW / United Kingdom

# UW Field Season November 2016 Pt. 1

- ▶ Marble Point and Marble Point II
- ▶ Pegasus North (removed enclosure)
- ▶ Cape Bird (replaced aerovane)
- ▶ White Island
- ▶ Minna Bluff (replaced high wind speed sensor)
- ▶ Laurie II (new power system)



Cape Bird AWS



Laurie II AWS

# UW Field Season November 2016 Pt. 2

- ▶ Emma (new power system)
- ▶ Schwerdtfeger (raised)
- ▶ Pegasus North (replaced enclosure)
- ▶ Windless Bight (raised and new power system)
  - ▶ 3 – battery power system



Schwerdtfeger AWS



Windless Bight AWS

# UW Field Season December 2016

- ▶ Willie Field (new solar panel and power system)
  - ▶ 3 - battery power system
- ▶ Alexander Tall Tower! (EXTREME raise)
  - ▶ Raised power system
  - ▶ 5 levels of instrumentation raised by the riggers
- ▶ Linda (converted to Iridium)
- ▶ Lorne (replaced pressure sensor)



Linda AWS



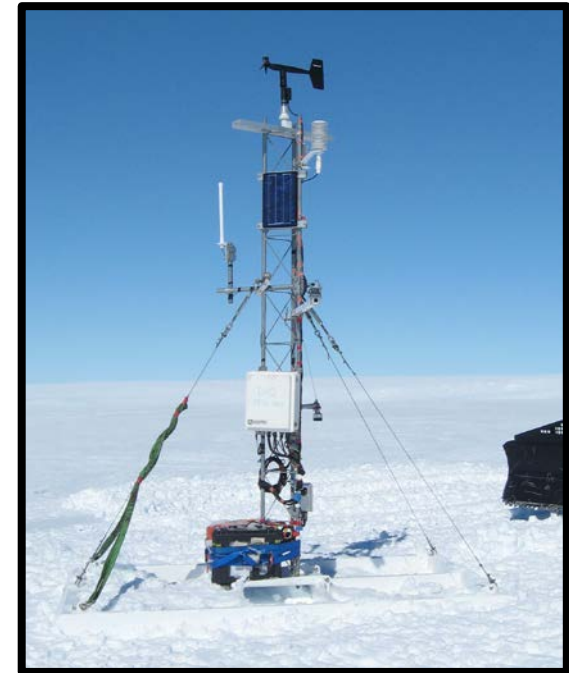
Alexander Tall Tower! AWS

# French Collaborations

- ▶ Serviced by Philippe Dordhain and team
- ▶ D-85 (new power system)
- ▶ D-10 (raised and power system fixed)
  - ▶ Installed on a sled for ease of raising in the future
- ▶ D-47 (raised and new power system)



D-85 AWS



D-10 AWS



# British Collaborations

- ▶ Serviced by Rosey Grant and team
- ▶ After MANY years, Dismal Island was visited!
- ▶ CR10X was replaced with a CR1000
- ▶ New set of instruments installed
- ▶ More in Rosey's talk...



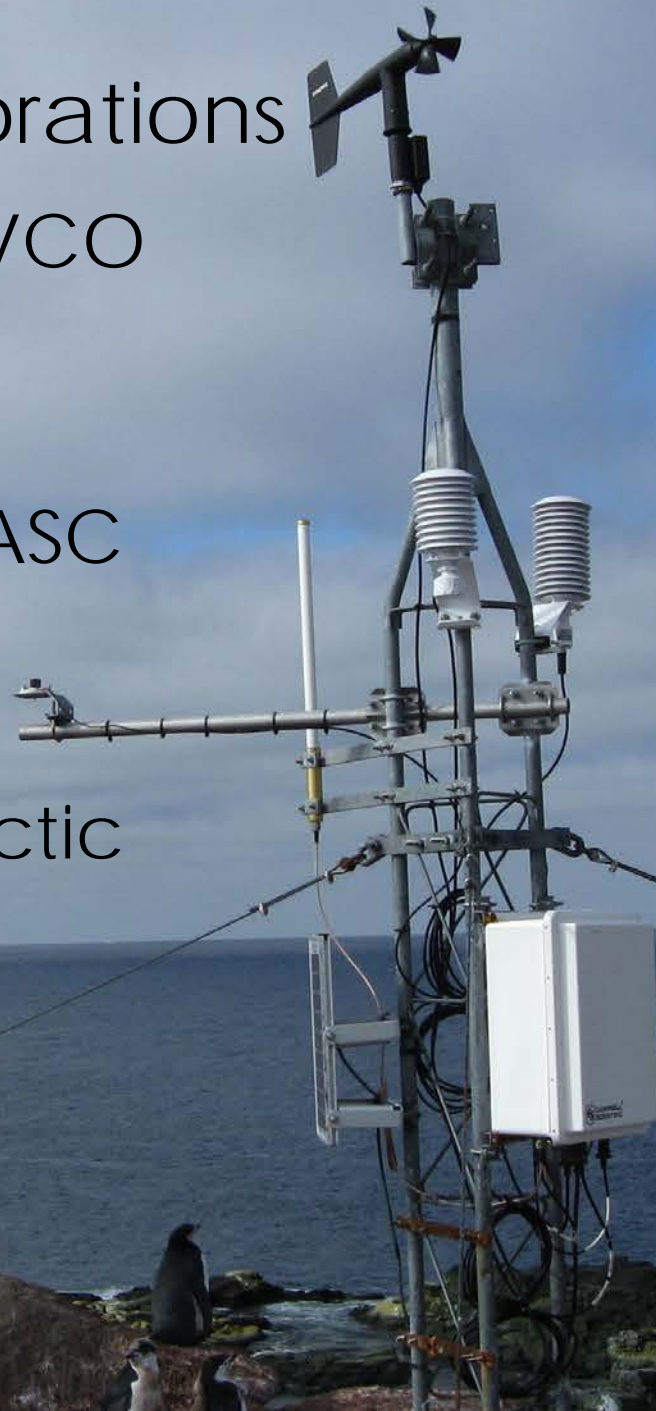
Dismal Island AWS before



Dismal Island AWS after

# USAP and UNAVCO Collaborations

- ▶ Hugo Island removed by UNAVCO team while servicing their GPS instrumentation
- ▶ Bonaparte Point removed by ASC staff from Palmer Station
- ▶ Thus, Dismal Island is the only UW affiliated AWS in the Antarctic Peninsula



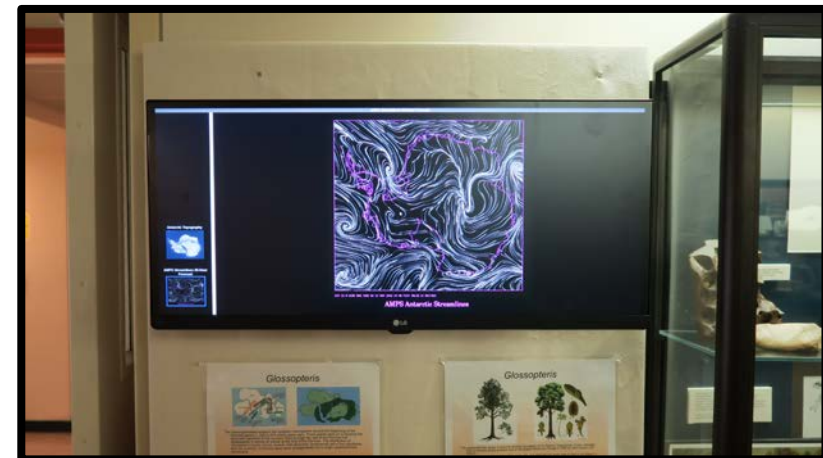
Hugo Island AWS, 2013  
Photo Credit: UNAVCO

# Other Field Season Activities

- ▶ Traveling up to T-site to troubleshoot
- ▶ Installing hardware and software for the new Online Weather Looper (OWL) in Crary Lab
- ▶ Various LDM fixes and LDM related conversations
- ▶ Inventory



T-Site



OWL in Crary Lab

# Thank You!



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