

Challenging Forecasts for a Challenging Environment: An Educational Module for Antarctic Weather and Forecasting

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“Antarctica: Challenging Forecasts for a Challenging Environment”

- “**Scripted Webcast**”: Web-based instructional units on Antarctic meteorology, forecasting, and climate
- Location: www.meted.ucar.edu
- Purposes
 - *Education and training*
 - *Promote interest and awareness of polar regions*
 - *Complement IPY outreach efforts*

- Audience
 - Weather forecasters
 - Scientists & students
 - General public



- Funding: U.S. National Science Foundation



- Producer

- Cooperative Program for Operational Meteorology Education and Training (COMET)

(University Corporation for Atmospheric Research

Office of Programs)



- Composition

- Narrative audio

- Material prepared by*

- experts (SMEs)*

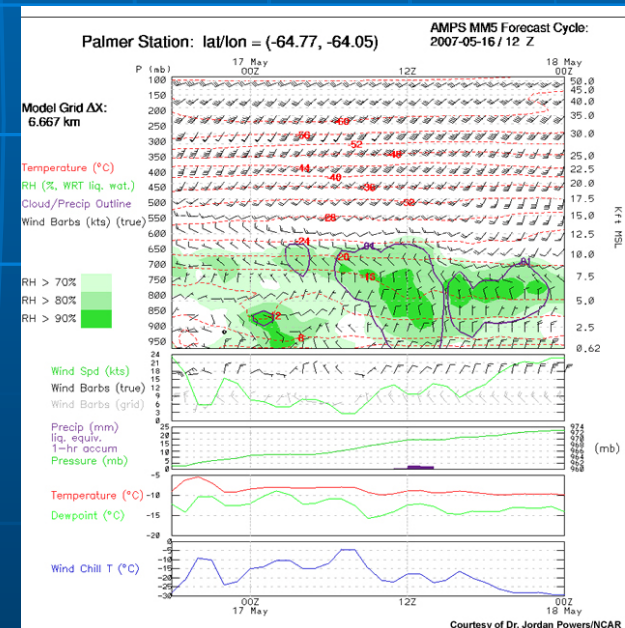
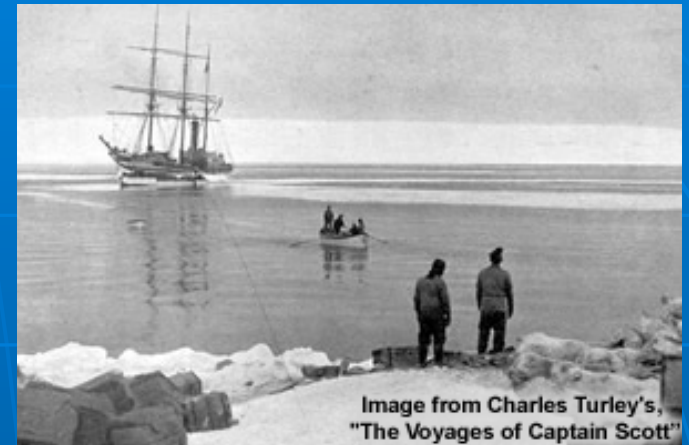
- Audio/video interviews with SMEs

- Varied graphics

- Animations*

- Imagery and published figures*

- Model output*



Produced by the COMET® Program
With funding by the National Science Foundation

Antarctica:

Challenging Forecasts for a Challenging Environment

Begin Overview (10 min.)

Begin In-Depth (50 min.)

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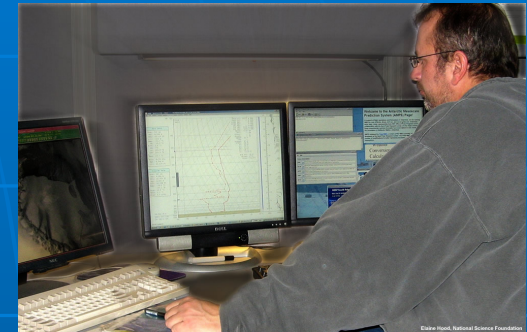
- Organization: Layered approach

- Users select the level of detail matching their interest

- Outline

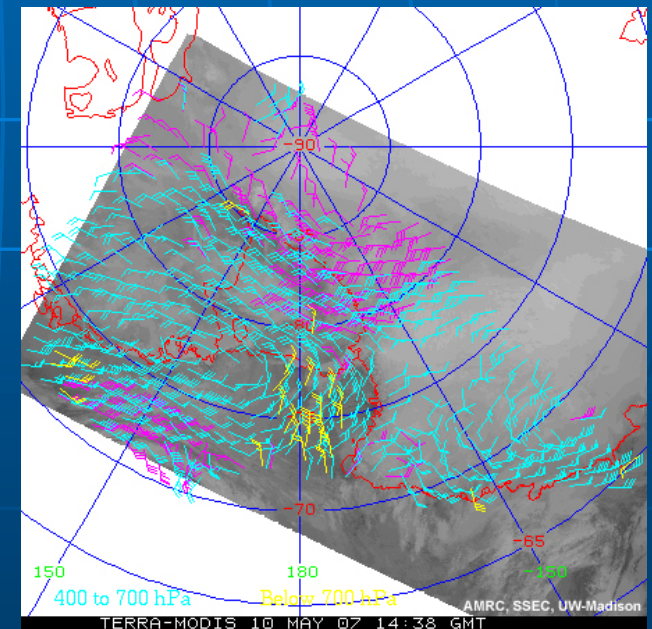
- 1. Overview Layer

- a. Lands to the South
 - b. More than Just an Interesting Scientific Exercise
 - c. At the Mercy of the Elements
 - d. Harsh Observations
 - e. A Different Kind of Super-Model
 - f. Driving Global Climate



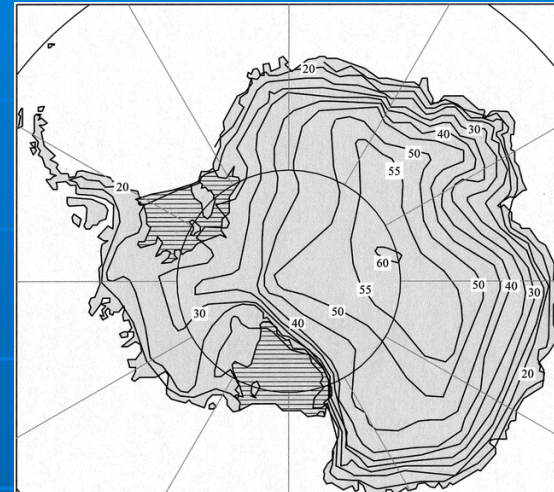
- 2. In-Depth Layer

- a. The Frozen Continent
 - b. Antarctica's Weather
 - c. Forecasting
 - d. Antarctica and Global Climate
 - e. Conclusion

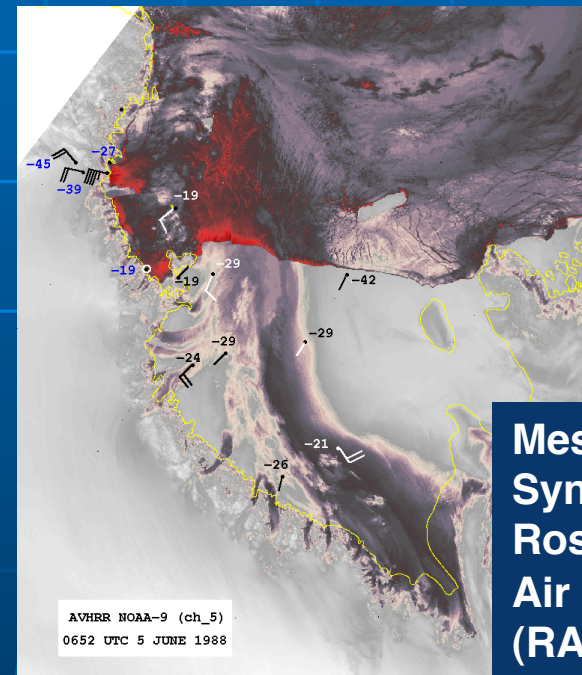
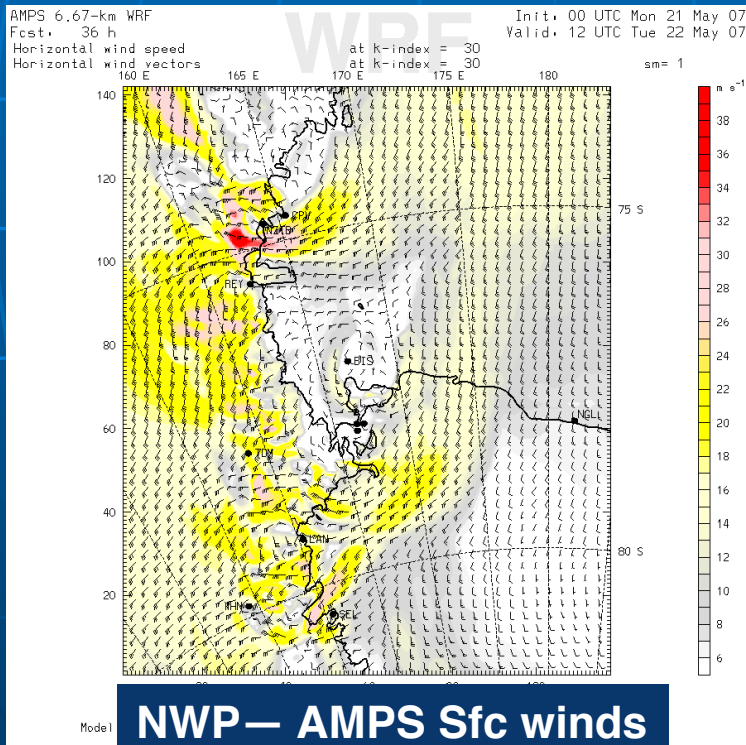




Observational systems— AWS



Climate— Annual Sfc Temp



**Mesoscale/
 Synoptic Met—
 Ross Ice Shelf
 Air Stream
 (RAS)**

Topic Examples

- Consultants

- Observational efforts:

- Matthew A. Lazzara* (Univ. of Wisconsin)

- Synoptic and mesoscale meteorology:

- Dr. John J. Cassano* (Univ. of Colorado)

- Dr. David H. Bromwich (The Ohio State Univ.)

- Dr. Thomas R. Parish (Univ. of Wyoming)

- Forecasting

- Rolf Hennig* (SPAWAR)

- Chester Clogston (SPAWAR)

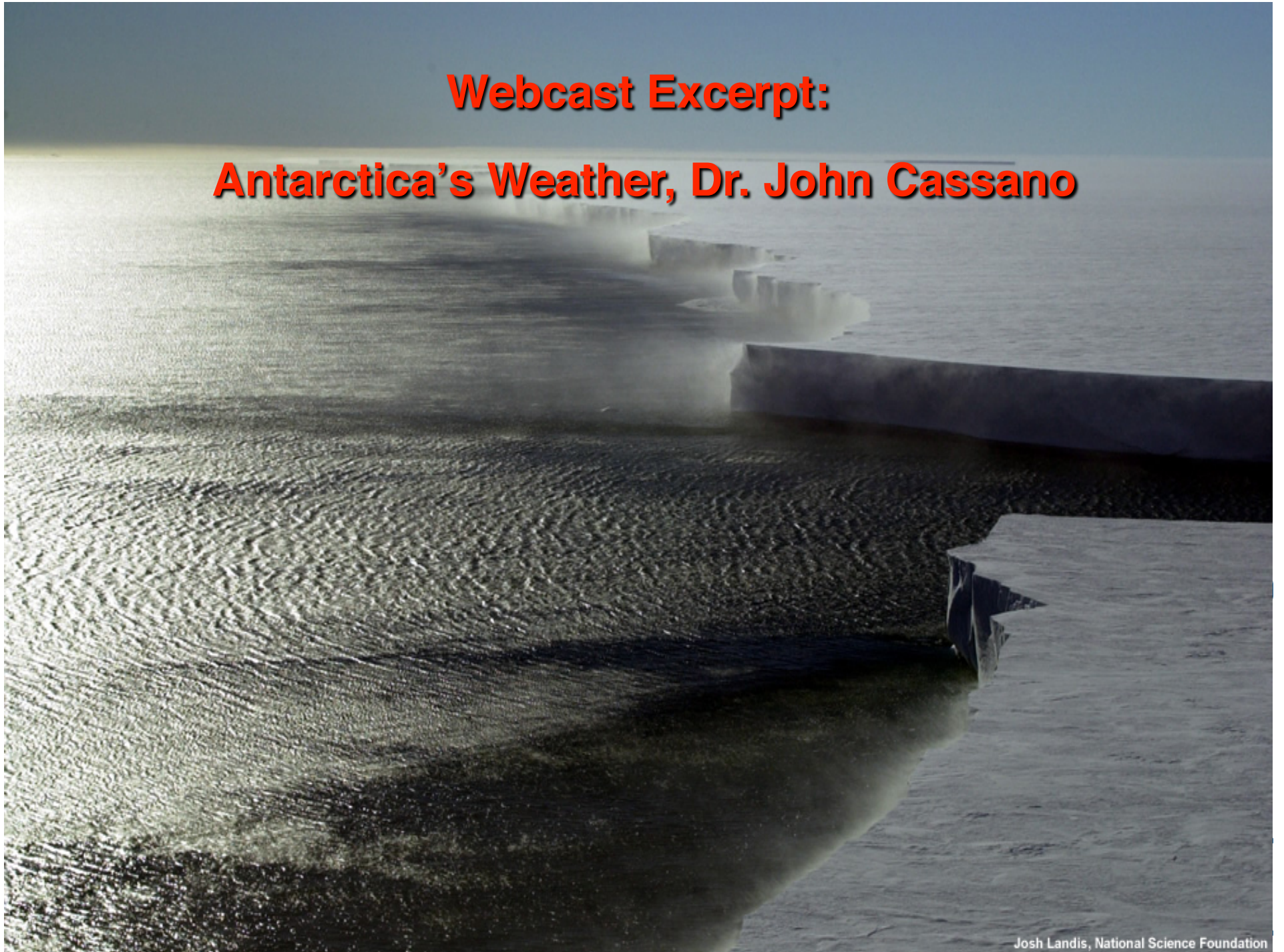
- NWP

- Dr. Jordan G. Powers* (NCAR)

* = *Video interviews*



Webcast Excerpt:
Antarctica's Weather, Dr. John Cassano



Antarctica: Challenging Forecasts for a Challenging

Environment

- Webcast on Antarctic weather and forecasting
- On-line in August 2007

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