Connecting Texas to the Poles - IPY outreach at the University of Texas Institute for Geophysics

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Polar Research Cruise Websites:

- 2006 - Integrated Geophysical and Geologic Investigation of the Crustal Structure of Western Canada Basin, Chukchi Borderland, and Mendeleev Ridge - http://www.ig.utexas.edu/research/projects/chukchi/hly0602/
- 2004 - Neotectonic Structure of the Terror Rift, Western Ross Sea, Antarctica - http://www.ig.utexas.edu/research/projects/terror_rift/nbp0401/
- Neotectonic Evolution of Antarctic Peninsula/Scotia Sea Region: Multi-Beam, Sidescan Sonar, Seismic, Magnetics and Gravity Studies - http://www.ig.utexas.edu/research/projects/scotia/nbp9507/

UTIG IPY Web Page - http://www.ig.utexas.edu/ipy/

UTIG Polar Studies Web Page - http://www.ig.utexas.edu/research/projects/polar_studies/
This is an extensive update the UTIG website. It is designed to inform visitors about the polar research efforts of scientists at UTIG. It includes photos, researcher information, project summaries and connections to current web sites maintained by the projects.

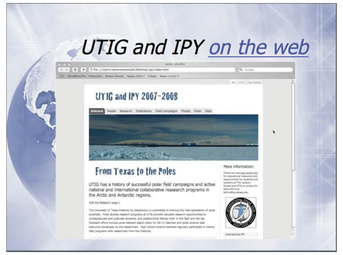
Google Earth Antarctica – Antarctic georeferencing activity using flight data from Dr. Jack Holt and georeferenced by Kevin Carver (undergraduate). - http://www.ig.utexas.edu/outreach/googleearth/

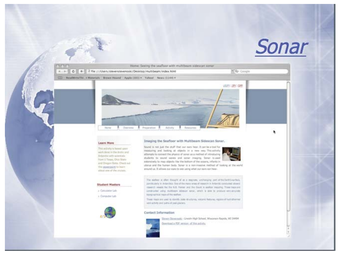
UTIG Polar Resources for Educators

- Web Page - http://www.ig.utexas.edu/research/projects/polar_studies/resources/
- Activites
- Beyond Polar Bears and Penguins: 7-12 research Web quest - http://www.ig.utexas.edu/outreach/polar/pandp/
- Marine Glacier Formations 7-12 Student Inquiry – They look like pepperoni - http://www.ig.utexas.edu/outreach/polar/pepperoni/
- Imaging the seafloor with multibeam sidescan sonar – 7-12 student inquiry - http://www.ig.utexas.edu/outreach/polar/multibeam/
- Texas to the Poles – IPY poster for UTIG Polar Science Outreach - http://www.ig.utexas.edu/ipy/Poster.pdf

Future Plans:.

- Submit Google Earth Activity to International Polar Year Website
- Submit UTIG IPY Poster to International Polar Year Website
- Submit Google Earth Activity to Google Earth Website
- NSTA Conference – 2009 – Submit abstract for presentation on activities and outreach.
- Partner with PolarTrec Program to include a teacher on 2007 Scotia Cruise with Lawver and Daiziel – April, 2008
- Include activities as part of Earth Science Teacher Professional Development training and workshop – Kathy Ellins UTIG contact.
- Maintain an update UTIG Polar Sciences Website.
- Submit article to NSTA for publication in Science Teacher.





Antarctic Science

***UTIG** - Leader in Polar Research on Land, at Sea, in the Air and Beyond…*

UTIG Polar Researchers & Their Projects

Donald D. Blankenship
- Advanced Technology for Radar Sounding in Ice (ATRS), Antarctica
- Airborne geophysical survey of the Amundsen Sea Embayment, Antarctica (AGASEA)
- Geophysical Exploration of Martian Radar Targets From the Dry Valleys, Antarctica
- Onset of Ice Stream Flow, West Antarctica

Ginny Catania
- The importance of meltwater to the peripheral thinning of Greenland
- Grounding Line Forensics, West Antarctica

Gail Christeson
- St. Elias Erosion/tectonics Project (STEEP), Alaska

Ian W. D. Dalziel
- WAGN Collaborative Research: A GPS Network to Determine Crustal Motions in the Bedrock of the West Antarctic Ice Sheet
- Collaborative Research Scotia Arc GPS Project (SCARP)
- Integrated Geophysical Survey of the Drake Passage Deep Ocean Current Gateway, Antarctica
- POLENET, Antarctica

UTIG and IPY 2007-2008

IPY (The International Polar Year)
for more information - www.ig.utexas.edu/ipy

The University of Texas Institute for Geophysics is committed to training the next generation of polar scientists. Polar studies research programs at ***UTIG*** provide valuable research opportunities to undergraduate and graduate students, and postdoctoral fellows both in the field and the lab. Outreach effors include polar-relevant lesson plans for GK-12 teachers and polar science web resources developed by the researchers. High school science teachers regularly participate in marine field programs with researchers from the Institute.

From Texas to the Poles

***UTIG** has a history of successful polar field campaigns and active national and international collaborative research programs in the Arctic and Antarctic regions.*

***UTIG**: University of Texas Institute for Geophysics* - JACKSON SCHOOL OF GEOSCIENCES
10100 Burnet Road R2200 Austin, TX 78758-4445 phone 512-471-6156
[Check out www.jsg.utexas.edu for educational resources and opportunities for students and teachers or contact Dr. Kathy Ellins at kellins@ig.utexas.edu.]

Arctic Science

*For nearly two decades **UTIG** has been at the forefront of polar research.*

UTIG Polar Researchers & Their Projects

Sean Gulick
- Collaborative Quaternary Climate/Terrestrial/Oceanic Linkages in southern Alaska and IODP Site Survey
- St. Elias Erosion/Tectonics Project (STEEP), Alaska

John W. "Jack" Holt
- Airborne Geophysical Survey of the Amundsen Sea Embayment (AGASEA), Antarctica
- Radar Sounding of Mars with SHARAD on Mars Reconnaissance Orbiter, Antarctica
- Terrestrial Analogs of Martian Radar Targets from the Dry Valleys, Antarctic

Lawrence A. Lawver
- Collaborative Research Neotectonic Structure of Terror Rift, Western Ross Sea, Antarctica
- Central Scotia Seafloor & the Drake Passage Deep Ocean Current Gateway, Antarctica
- Integrated Geophysical and Geologic Investigation of the Crustal Structure of Western Canada Basin, Chukchi Borderland, and Mendeleev Ridge, Alaska

Fred Taylor
- WAGN A GPS Network to Determine Crustal Motions in the Bedrock of the West Antarctic Ice Sheet
- POLENET, Antarctica

Harm Van Avendonk
- Newfoundland Rifted Margin
- Integrated Geophysical and Geologic Investigation of the Crustal Structure of Western Canada Basin, Chukchi Borderland, and Mendeleev Ridge, Alaska