

## **The Polar Year Conference**

Dale Cruikshank –

I think these big international efforts that are mounted to make International Polar Years internationally heliophysics years; and of course, the original IGY are extremely valuable in coordinating international efforts with scientists of a variety of backgrounds, talents, areas of emphasis and resources that makes the whole much greater than the sum of the parts. And it's an enormous privilege to be any small parts of these big international efforts which have traditionally yielded enormous new insight and information about the Earth, it's relationship to the sun, it's place in the solar system, and all the nature of earth/sun interactions in general.

John Cooper –

This conference was called Polar Gateways Arctic Circle Sunrise partly because we agreed that we would meet the beginning on January 23<sup>rd</sup> of this year 2008 because that is the first day of official sunrise at Barrow, Alaska. There's really two things we're interested in this conference. We are interested in cold worlds that is on the polar region of the Earth that are models for other planets; the polar regions of other planets like Mars, and then there are entire bodies out there like Europa or Callisto, icy moons of the giant planets and also the Kiper belt objects beyond the giant planets that are entirely cold and dark worlds. So we have a kind of combination of things here to look at. We're in this local environment that resembles in some ways different aspects of those cold and icy, dark worlds and on the other hand we have, in the polar regions of Mars and perhaps the icy regions on the polar craters on the moon, we have the natural environment, the polar environment on how it relates to the sun on a seasonal basis. Both the sea ice environment and the tundra which is everywhere, it isn't anywhere in particular, it is everywhere around us and underneath us and so we experience the interaction of the sea environment with the shore but just seeing along the beach here and seeing the effects of the wind driving the ice up along the shore and forming different kind of interesting features, pressure ridges where the ice, different sheets of ice press up together and collapse and form piles of chunks of ice. We can see breaks in the ice that form in result of a instabilities in the ice. And so we can learn about ice in great detail as we go out and look at it and people talk to us about it who are experts.

Glenn Sheehan –

There is a very long history of science here in Barrow and it starts actually long before the first International Polar Year because people have been living here for thousands of years and it's not like each generation is born new and figures everything out for itself. People learn from other people and once scientists got here and once westerners got here, which wasn't very long ago, they started learning from the people that were here and science has benefited from that.