

Join NASA scientist, Bob Bindschadler,  
for a fascinating evening as he takes you  
to Antarctica to share his research,  
tales of adventure, and answers to the question ...



# Who Left the Freezer Door Open?

## - Clues from the Polar Regions -

**Date:** Friday, November 14th

**Time:** 7 – 9PM

**Location:** Quimper U.U. Fellowship; 2333 San Juan Avenue; PT

**Cost:** FREE; Donations accepted     **Info:** [L2020.org/climate-action/](https://L2020.org/climate-action/)

**Bring:** a dessert to share; your own cups, plates and utensils

Thawing permafrost, thinning sea ice and retreating glaciers all signal changes that have become the “new normal” for the colder parts of our planet. These changes continue to affect the daily lives of arctic residents but now as the large ice sheets have also begun to lose ice rapidly, billions more people are being impacted through the acceleration of rising seas. While the ice sheets also provide the climatic history that shows that human activity is a primary driver of these modern changes, the rapidity of the changes has posed puzzles that scientists only recently solved. The answers to these puzzles will be described by the speaker, and demonstrated to the audience.



### Biography

Dr. Robert Bindschadler's career spanned over 30 years at NASA where he retired in 2010 as the Chief Scientist of NASA's Hydrospheric and Biospheric Sciences Laboratory and a Senior Fellow of the Goddard Space Flight Center. He is a Fellow of the American Geophysical Union, a past President of the International Glaciological Society and is currently a NASA Emeritus Scientist, living in Quilcene, WA. He remains active in lecturing to the public. He has led major multi-institutional and international research projects, most recently a major ice-sheet modeling study for the Intergovernmental Panel on Climate Change. During his distinguished NASA career, he developed numerous unique applications of remote sensing data for glaciological research including measuring ice velocity and elevation using both visible and radar imagery, monitoring melt of the ice sheet by microwave emissions, and detecting changes in ice-sheet volume by repeat space-borne radar altimetry. His extensive field experience includes leading 18 Antarctic field expeditions to study dynamics of the West Antarctic ice sheet. He has testified before Congress, briefed the U.S. Vice President, published over 150 scientific papers, including numerous review articles and is often quoted commenting on glaciological impacts of the climate on the world's ice sheets and glaciers.