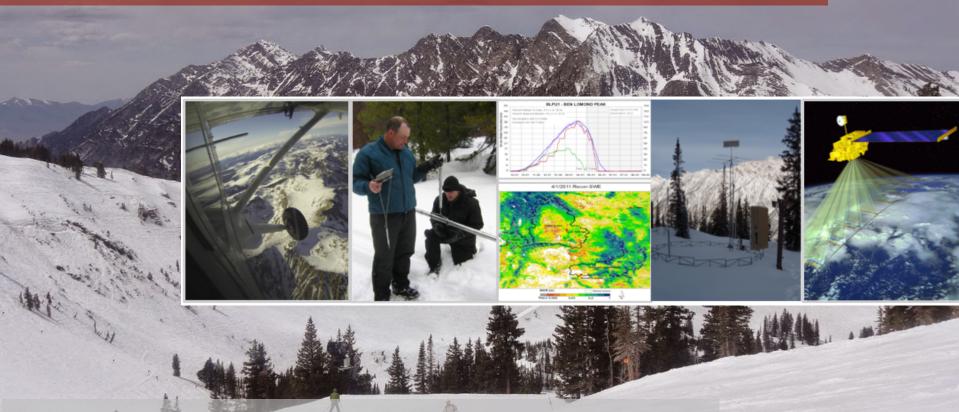




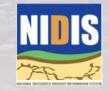


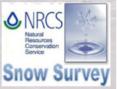
# Snowpack monitoring workshop for drought planning and streamflow forecasting



West Jordan, Utah - August 11, 2015

Background Photo: Jim Steenburgh Wasatch Weather Weenies











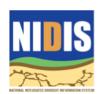




## Partners/Sponsors

- CIRES Western Water Assessment
- National Integrated Drought Information System
- NRCS Utah Snow Survey
- NOAA Colorado Basin River Forecast Center
- Jordan Valley Water Conservancy
  District

















### About the Western Water Assessment



Climate information and research







Resource management & decisionmaking









## Today's objectives

- Help improve the usability and use of snowpack monitoring information for runoff forecasting, drought early warning and planning, and other applications.
- Provide background information on snow hydrology and snow measurement to get us on the same page
- Describe operational snow-monitoring products and how they are used in runoff forecasts
- Provide guidance for accessing and interpreting these data
- Introduce and demonstrate new snow-monitoring products using satellite and airborne sensors
- Hear your ideas on how to better meet the needs for snowpack monitoring in Utah





## Agenda

#### About NIDIS and the DEWS; Results of workshop pre-survey

#### Fundamentals of snow hydrology and measurement

#### Current operational snowpack measurements and their use

- NRCS SNOTEL/snowcourse and runoff forecasts
- CBRFC runoff forecasts
- User perspectives on operational snow data and needs
- Group discussion

#### **LUNCH**

#### New spatially-distributed snowpack estimates

- MODIS-modeled snowpack estimates
- LIDAR- and hyperspectral-based SWE and albedo estimates from the Airborne Snow Observatory
- Group discussion