

Boise River Basin

Snowpack Summary
April 12, 2016

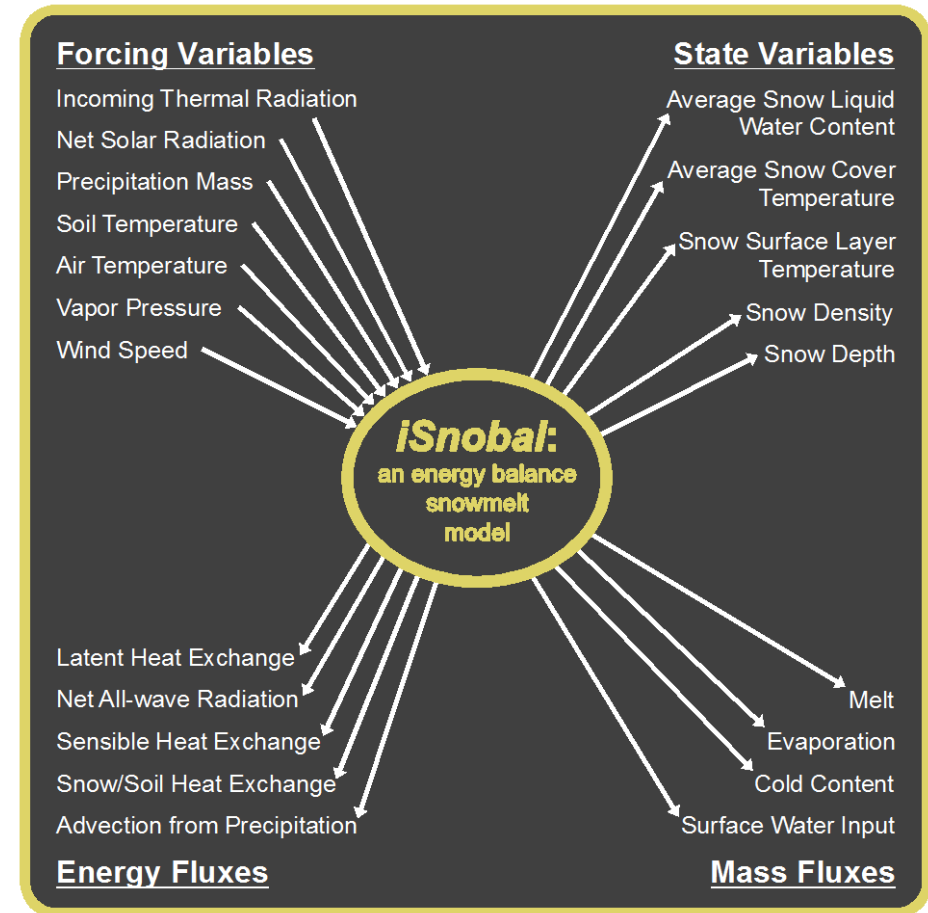
USDA-ARS
USBR



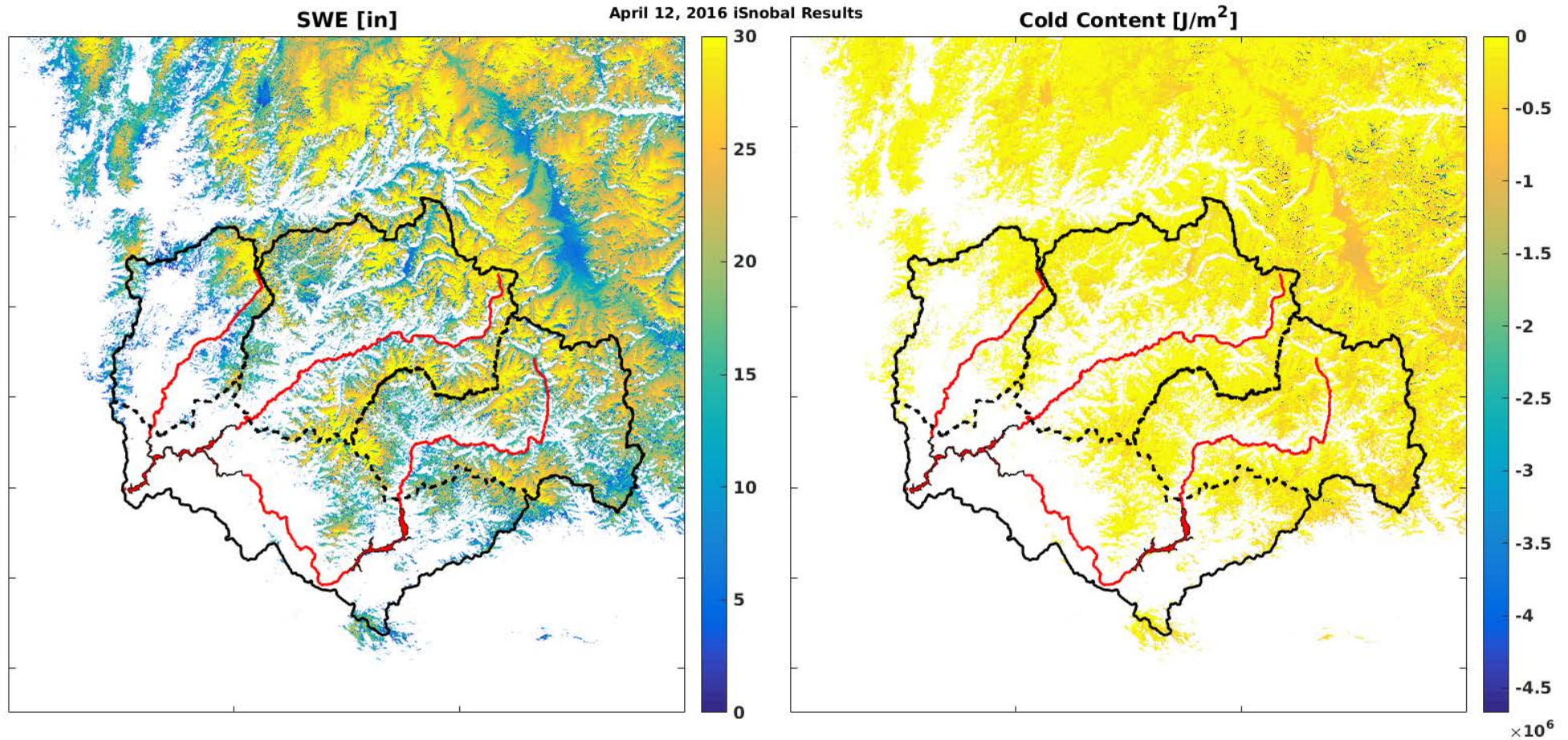
Water Supply

iSnobal

- Physically based snow model (Marks et al. 1999)
- Varying spatial and temporal resolution
- Model restart flexibility at any time during season
- Easily handles rain and rain on snow events
- Forcing data
 - Air temp, RH, precip, wind, radiation

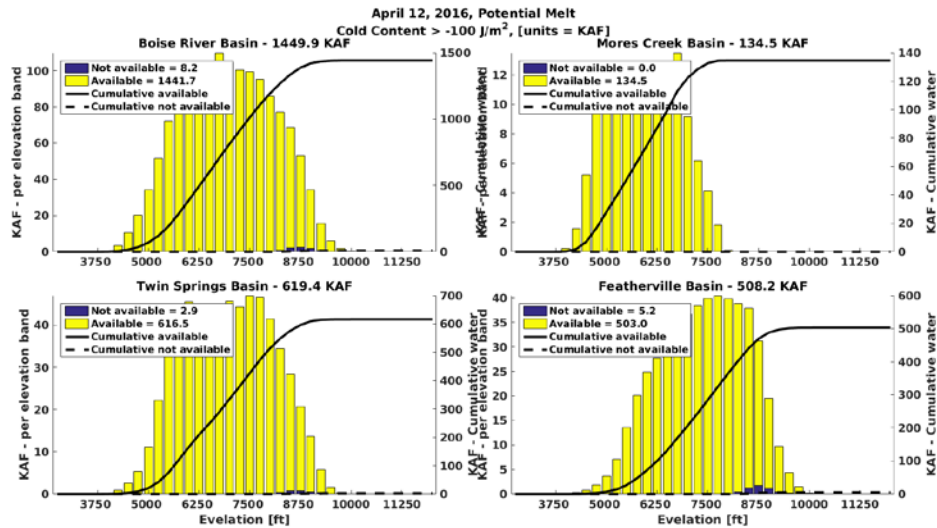


Current Model Results



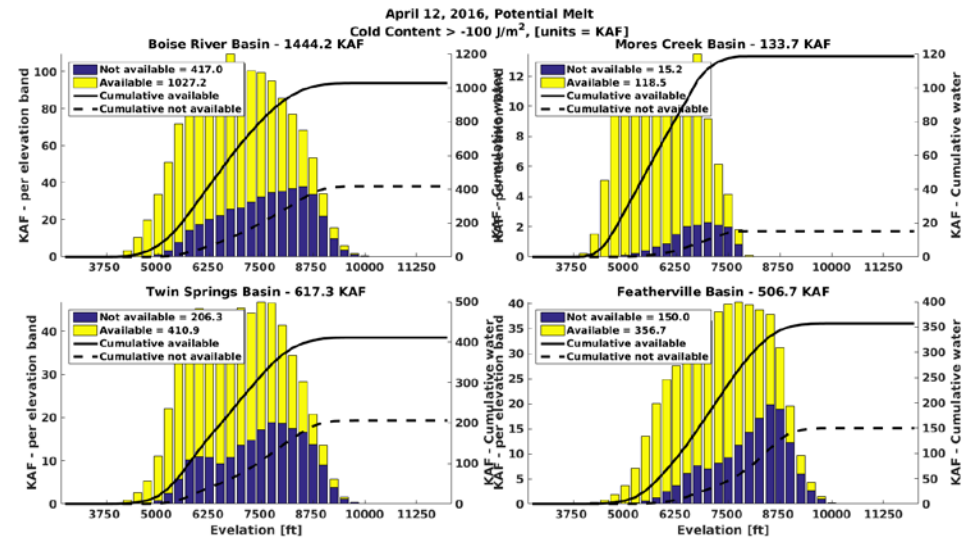
Significant snowpack at higher elevations.

Current Model Results



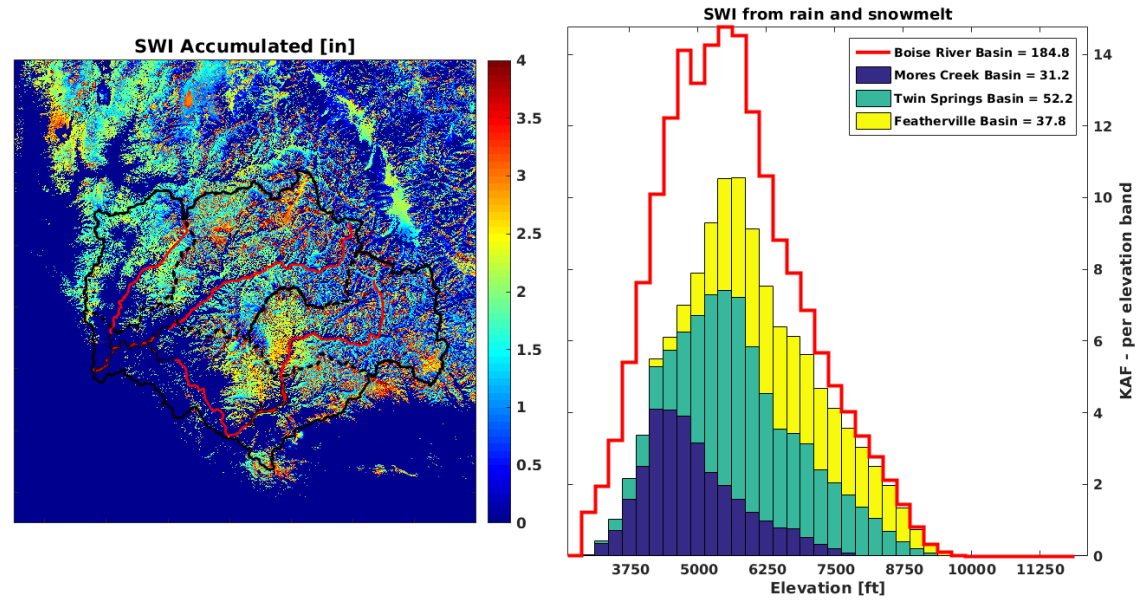
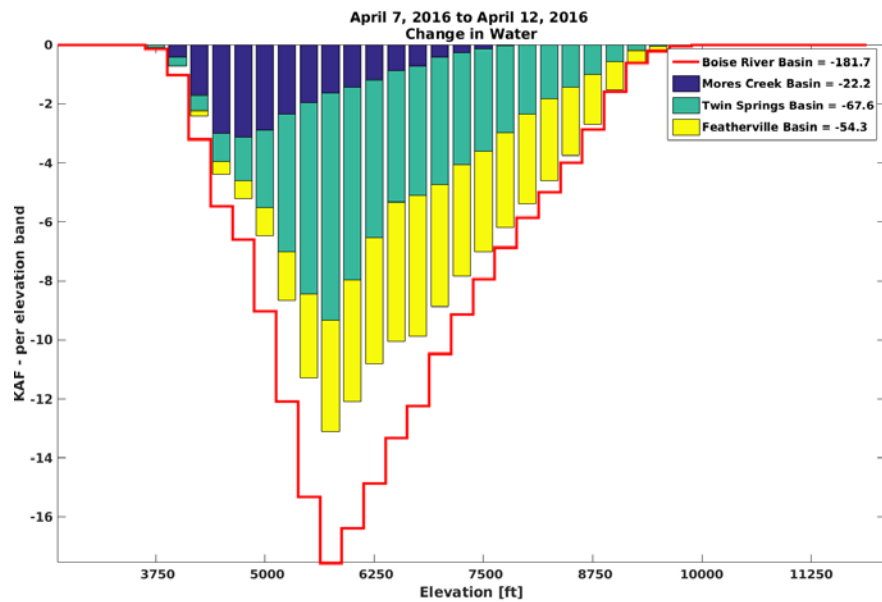
Day time melt potential

Night time melt potential



Isothermal conditions during the day, some locations are cold enough at night to slow or stop melt.

Weekly Changes



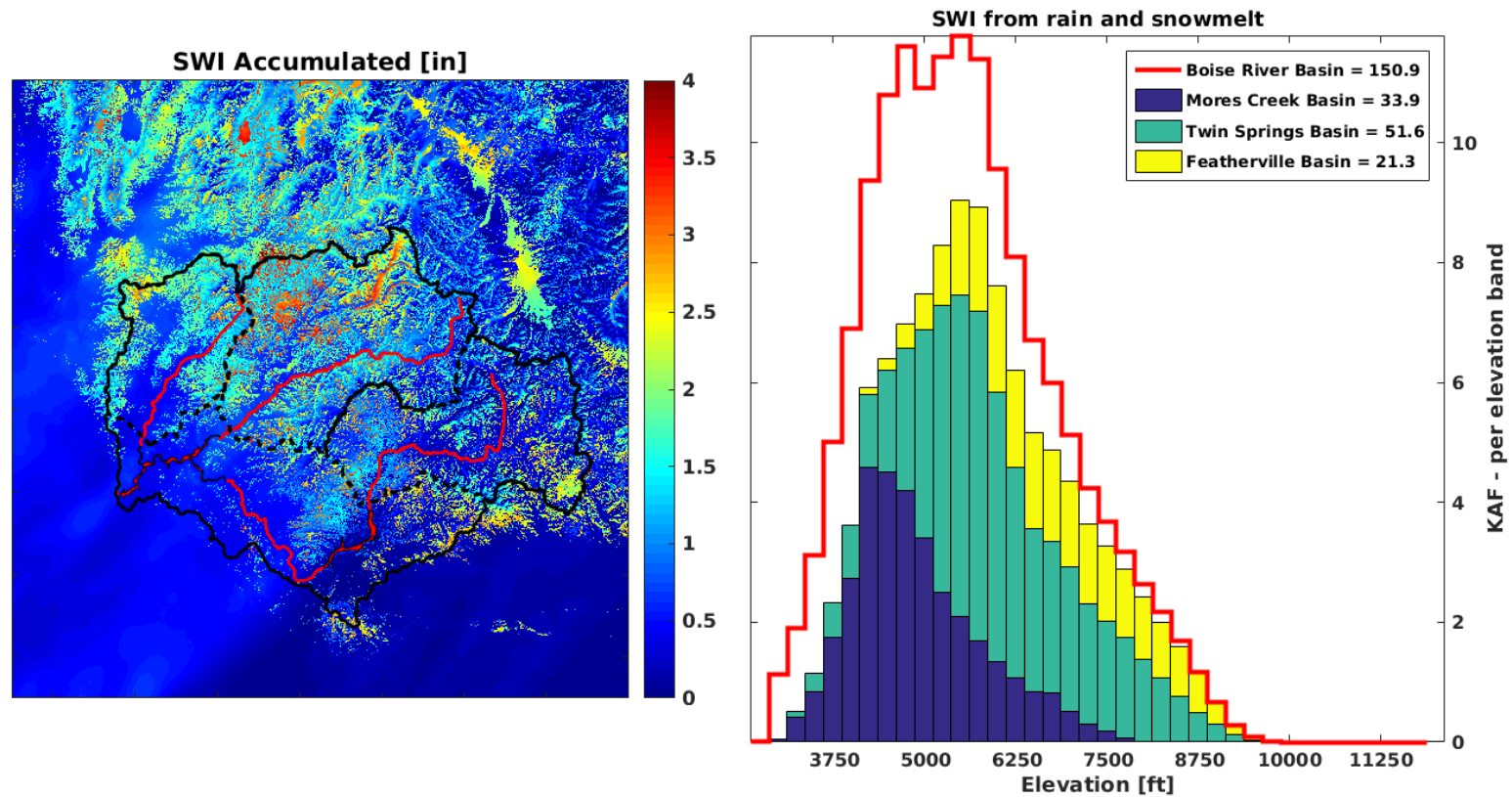
Snow water input (SWI), melt from snowpack or rain on soil

Forecast



Water Supply

Forecast



- Up to a 1 inch SWE increase in upper elevations
- Rain likely at lower elevations

Forecasted SWE

- Snowpack volume has (and will) decrease about 200 KAF
- Forecast has an increase in volume on 4/14

Forecasted SWI

- Last week diurnal melt cycles
- Forecast has an increase in SWI from precipitation and melt on 4/13