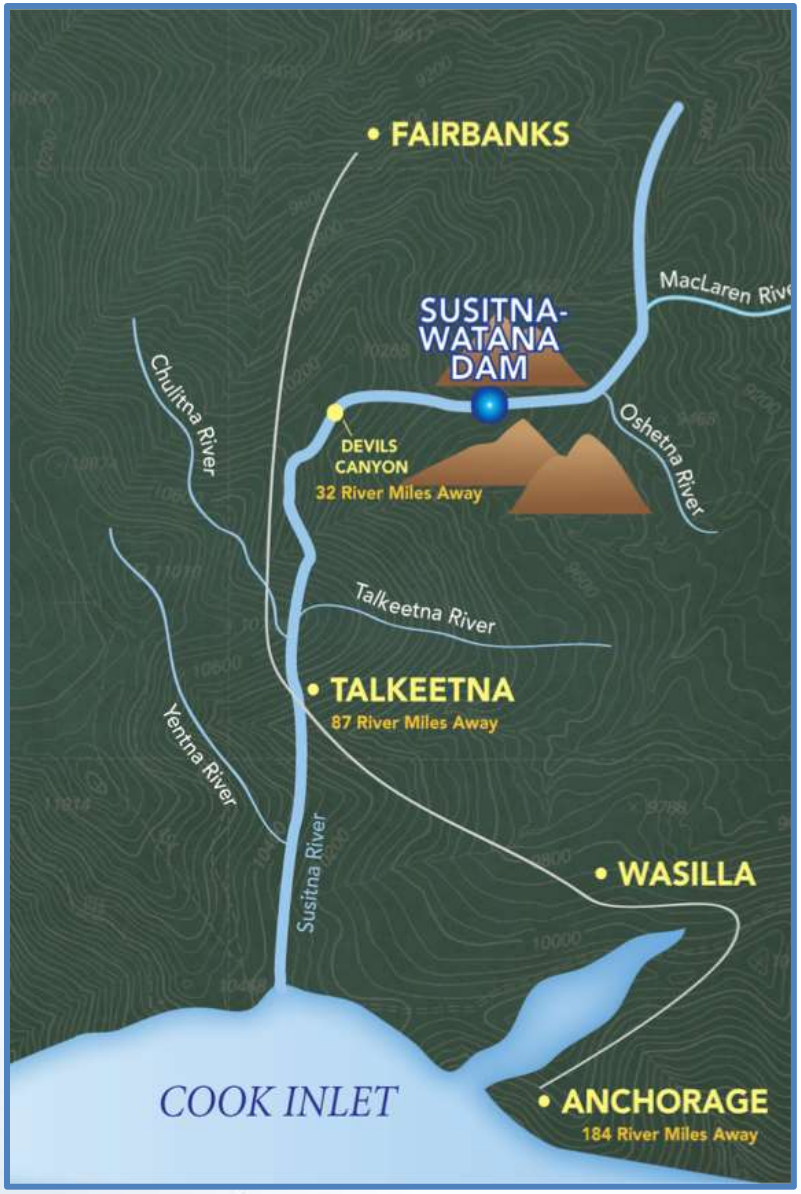

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Technical WorkGroup Meeting

Q3 2013 TWG

RSP 7.7

Glacier and Runoff Changes - Update

Sept. 25, 2013

Prepared by:

Dr. Gabriel Wolken,

Alaska Div. of Geological & Geophysical Surveys

RSP 7.7 – Q3 2013 Update

- Completed Summer fieldwork including weather station servicing, seasonal ablation measurements, and the addition of five new mini-weather stations in the tundra
- Analyzed data from Spring fieldwork and used these in model calibration/validation runs
- Continued runoff model calibration and module development

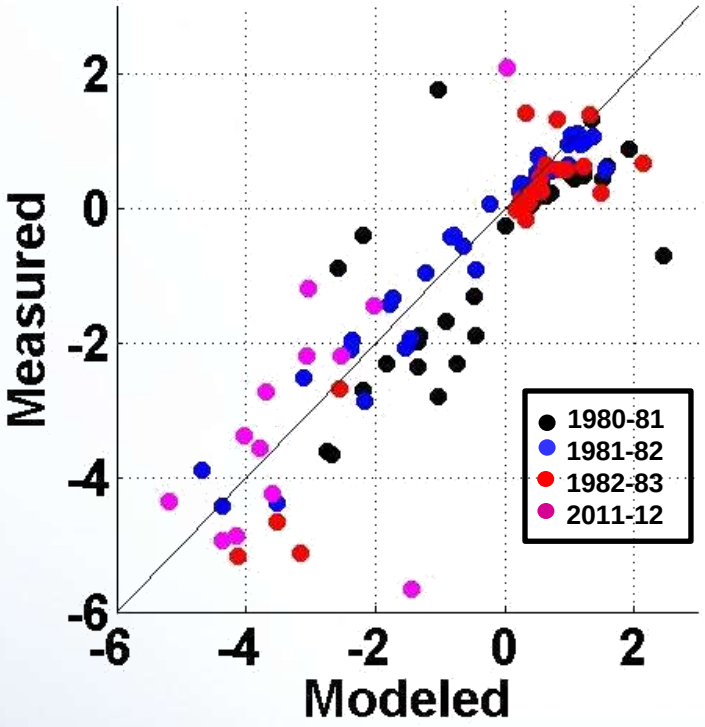
RSP 7.7 – Q3 2013 Update

Installation of new soil temperature probes at a shrub tundra weather station near upper Kosina Creek, June 2013

Glacier ablation stake measurements on lower MacLaren Glacier (MAC3), September 2013

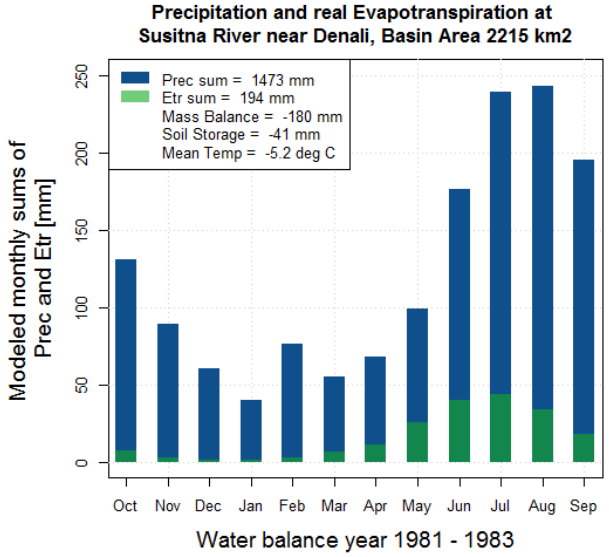
RSP 7.7 – Q3 2013 Update

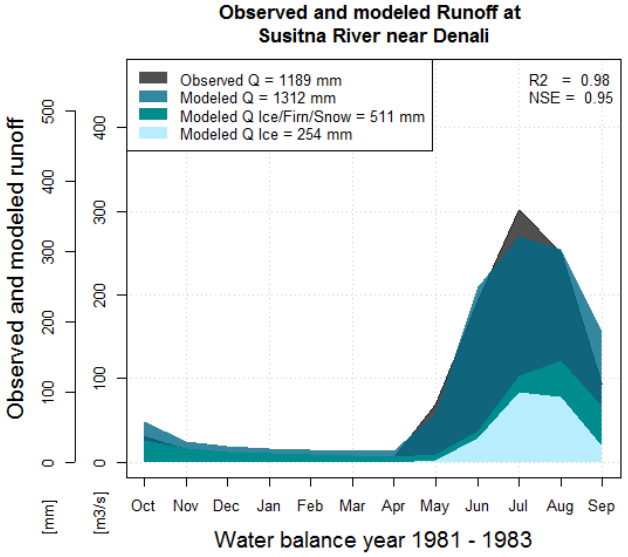
Mass Balance Validation Run (PRELIMINARY)

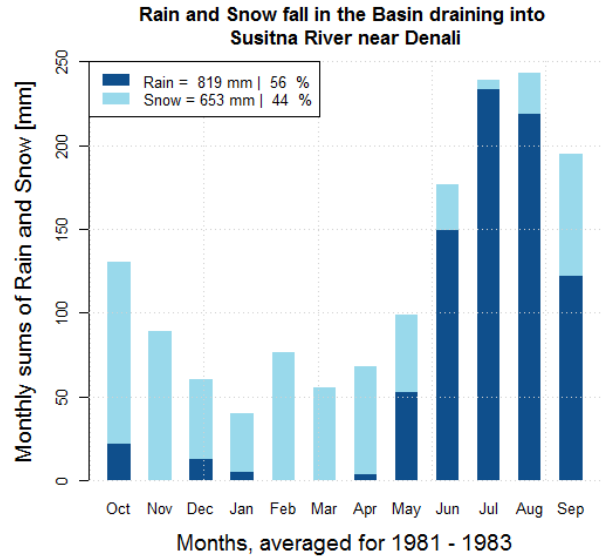


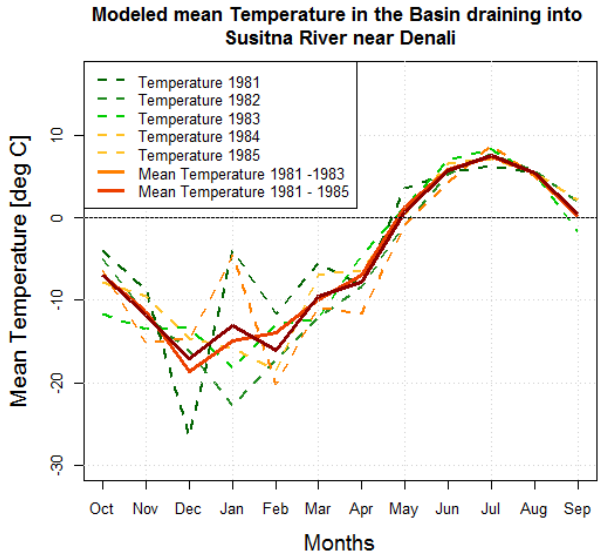
Installing an acoustic sensor for measuring/monitoring snow/ice surface change on West Fork Glacier (ESR1), Spring 2013.

RSP 7.7 – Q3 2013 Update



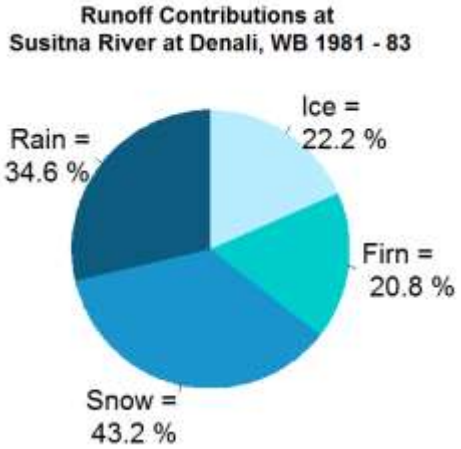






Calibration Run (PRELIMINARY):

3-year Mean Water Balance for Denali Sub-Basin



Estimated Glacier runoff contribution Clarke (1986) = 34 %

RSP 7.7 – Variances

- There are no variances to this study plan

RSP 7.7 – Next Steps

- Finish Fall fieldwork (in progress)
  - Mass balance measurements and data retrieval
  - Weather station data retrieval and maintenance
- QA/QC and Analyze All Summer 2013 Data
- Ingest 2013 field data into model framework for model calibration/validation runs
- Continue runoff model module development
- Continue work on glacier extent and volume change