Next Steps on Validation Data Collection

US Plans

Taylor Rowley

On behalf of project Calval team

Overall Goals

- More SWORD reaches in more places, increase diversity
- Maintain T1 sites to have temporal comparisons
- Implement refined field techniques learned from last season/iterations with algorithm team



Maintain several 'gold standard' sites

- Connecticut R.
- Willamette R.
- North Saskatchewan R.
- Reinstall PTs on 3
 consecutive reaches
 - PTs only installed at reach boundaries, compliment with GNSS drifts to level in
- GNSS drift under SWOT



Conn R. PT Reinstall

Add reaches and diversity – Yukon Flats, AK

- 2-month campaign (July and August)
- 70 PTs
 - Reach boundary only (12 reaches)
 - 5 PT reaches (7 reaches)
- GNSS drifts (80 reaches)
 - Target SWOT overpass as close in time as possible
 - Landscape diversity

 - Wide braid plainsNarrow single channel
 - Highly meanderingIncised with bluffs



Add reaches and diversity – GNSS drifts

- Increase node observations and direct comparisons with GNSS drifts
- Few/no PT installs
- Southwest US
 - CO River :~20 reaches (incised, ag. floodplain, canyon)
 - Gunnison: 2 (incised)
- Pacific Northwest US
 - Yakima: 2 (bluffs, forested)
 - Mckenzie: 2 (steep mountain)
 - Rogue: 2 (steep mountain, forested)
 - Umpqua: 2 (forested)
- New England
 - Housatonic: 4 (narrow and forested)
 - Hudson: 5 (very wide, mixed terrain, canal/locks)



Grand Canyon

Continuing Lake Validation

- Reinstall Sierra Lakes
 ~4 months
- Reinstall Yukon Flats lakes
 ~2 months
- New lakes near N. Sask R., prairie potholes region



Prairie Potholes



Yukon Flats



Next steps beyond the field

- Refine calval toolbox to continue to improve in situ data processing
- Continue to work closely with and respond to the algorithm team
- Work with science team to communicate field methods for more validation data
- Push our field data to PO.DAAC





Questions?



Contact throwley@umass.edu