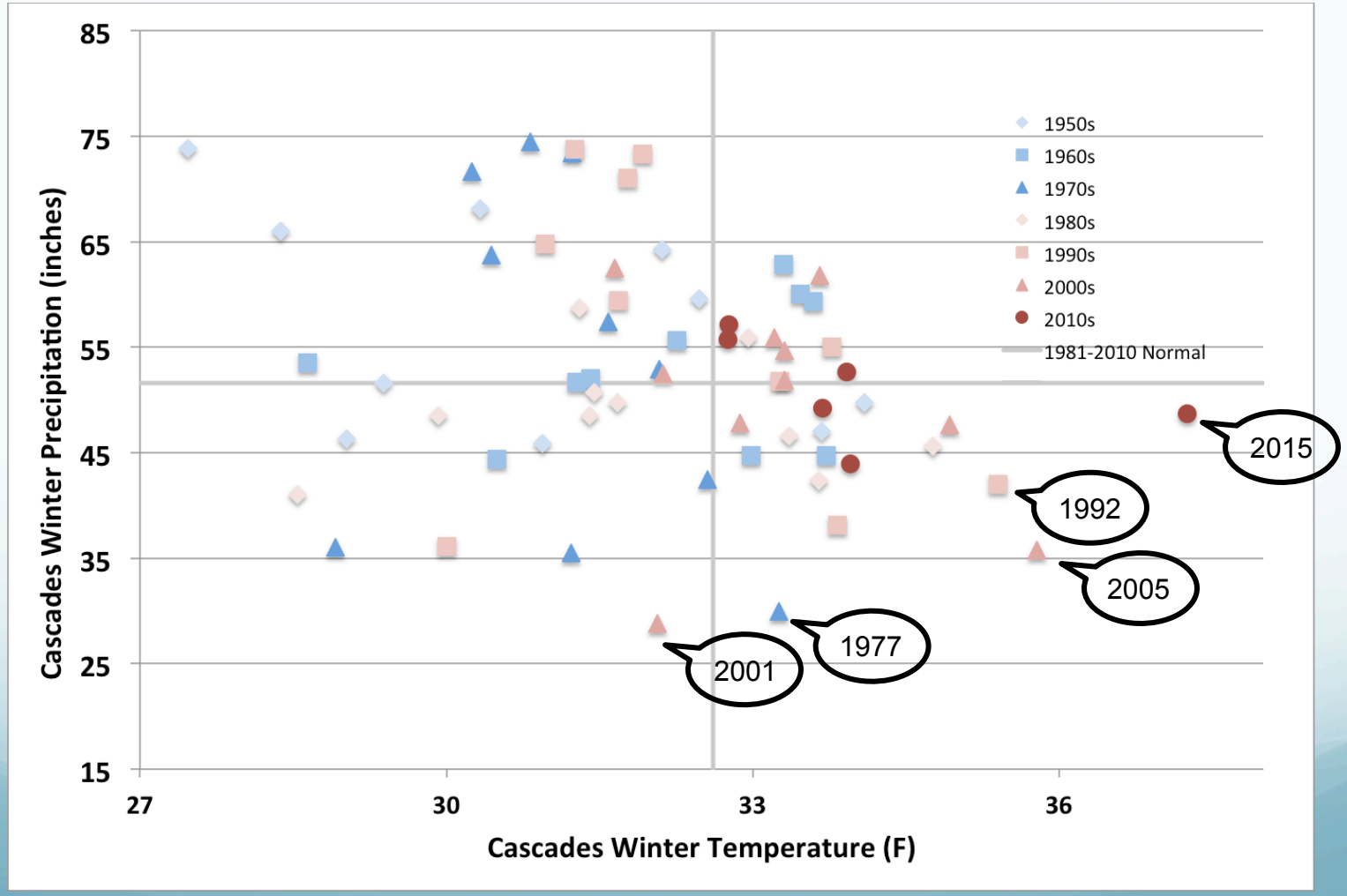
Oct-Mar WA Cascade Mountain temperature and precipitation



NW “Flavors” of Drought

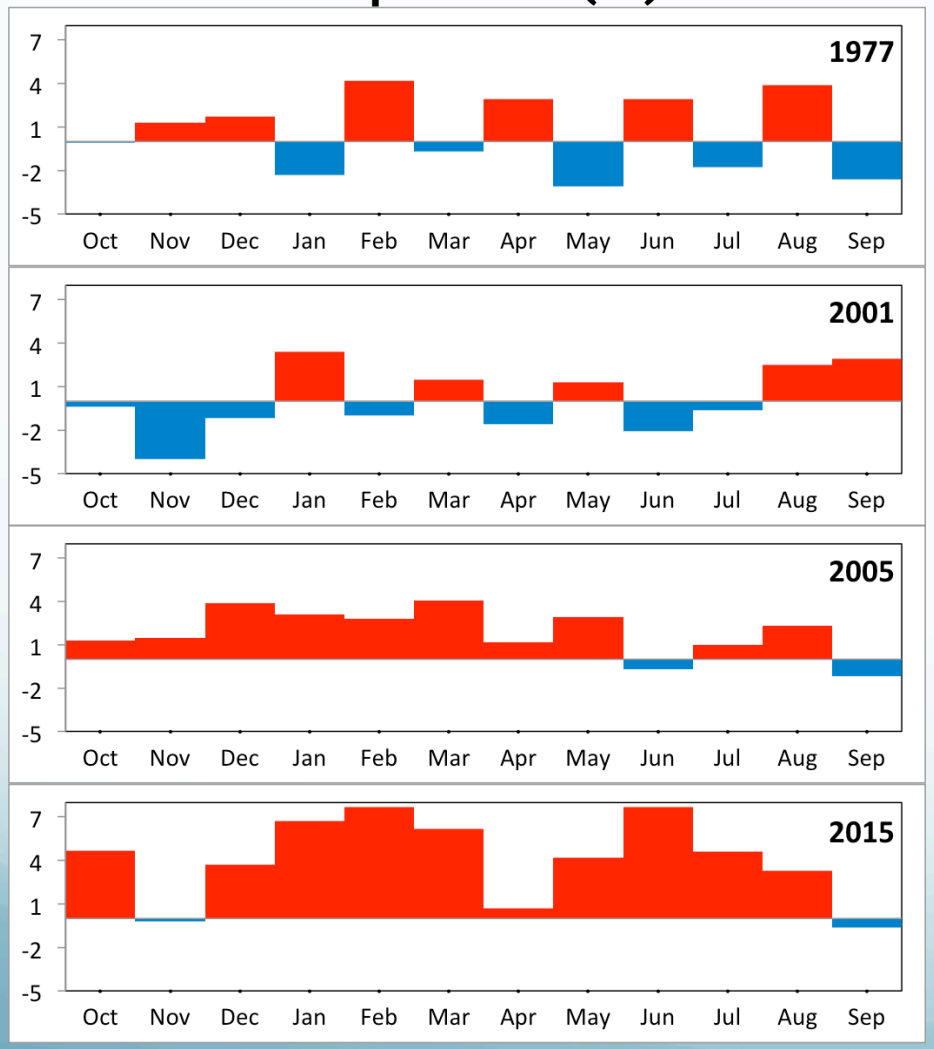
- Dry winter (e.g., 1976-77, 2000-01)
- Dry summer (e.g., 2003)
- Warm winter (e.g., 2004-05 in WA; 2013-14 in OR; 2014-15)

Bumbaco and Mote 2010

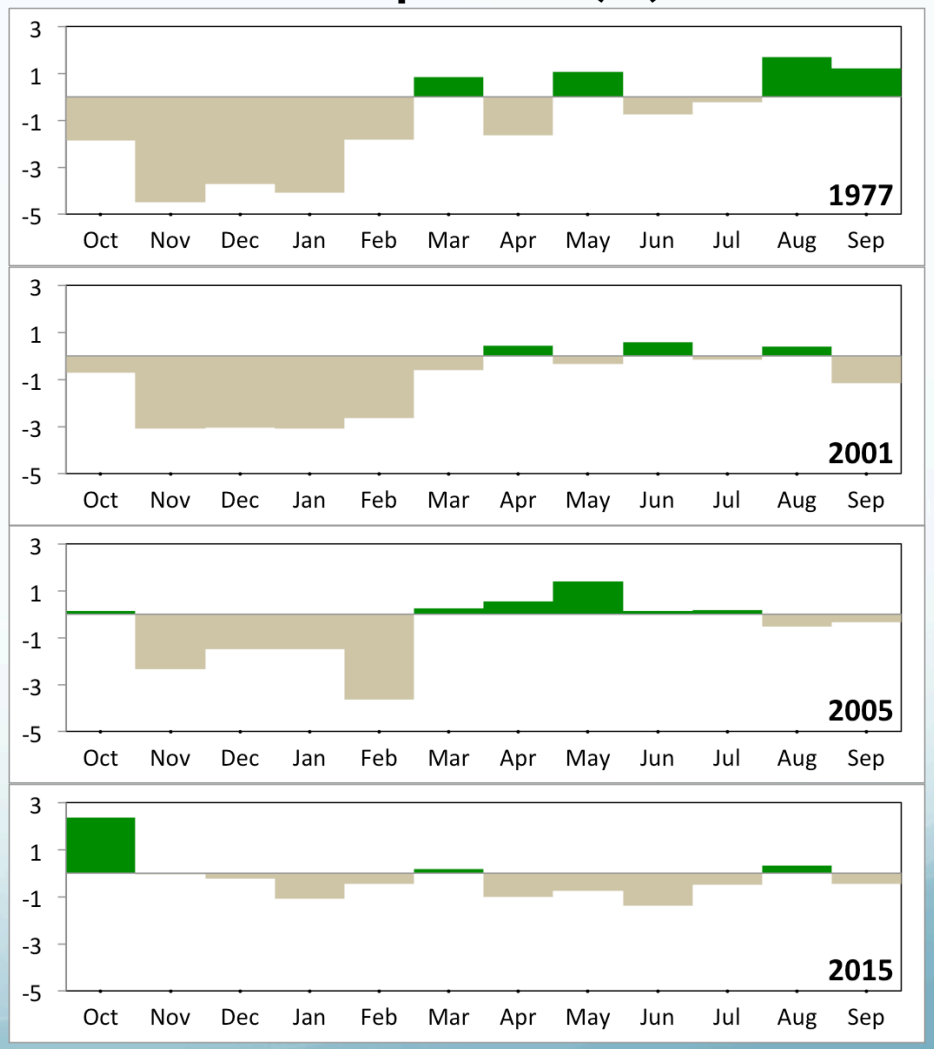
Recent WA Droughts

WA State anomalies for the 1977, 2001, 2005, and 2015 WYs

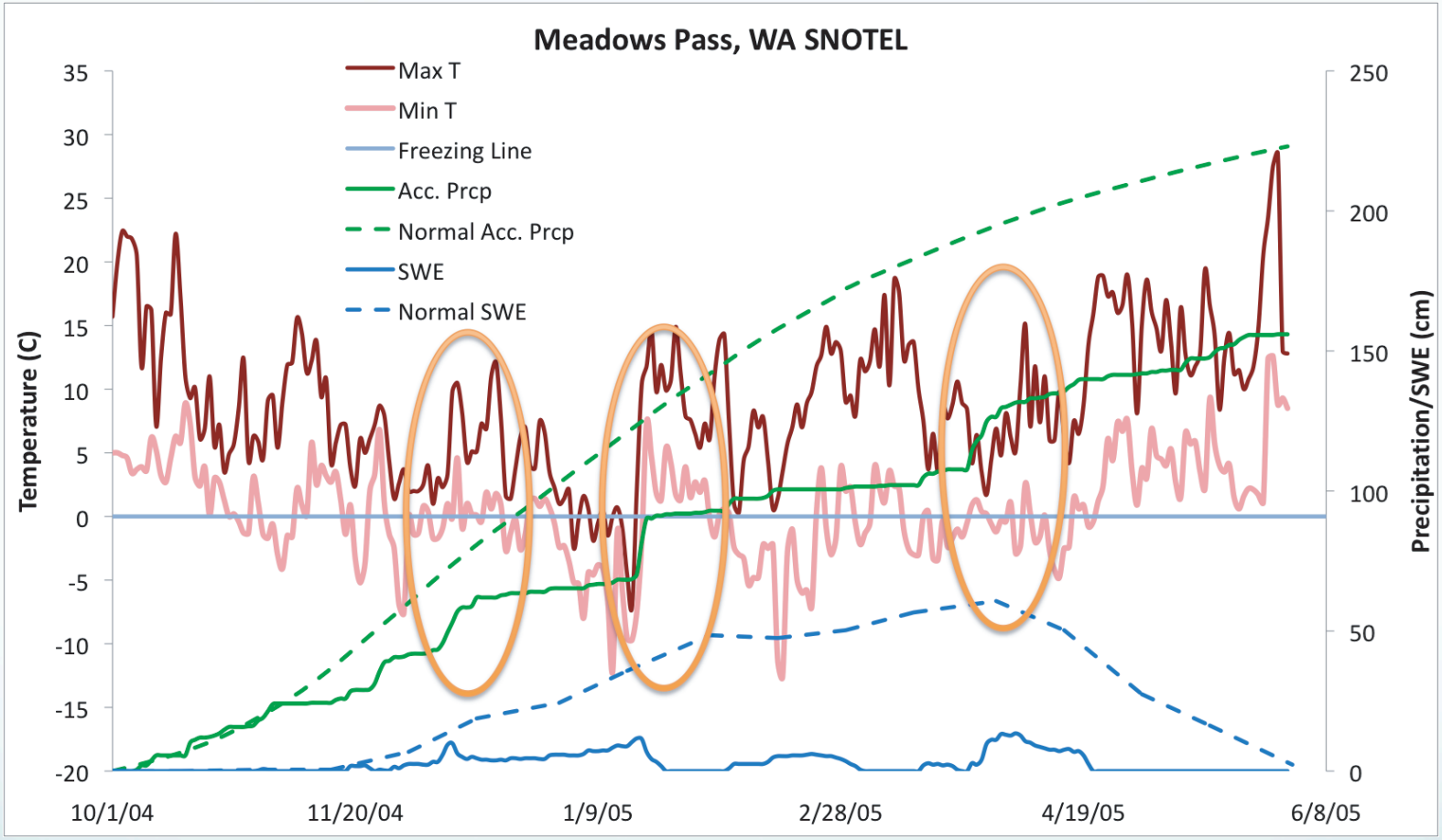
Temperature (°F)



Precipitation (in)



2004-05 Meadows Pass, WA



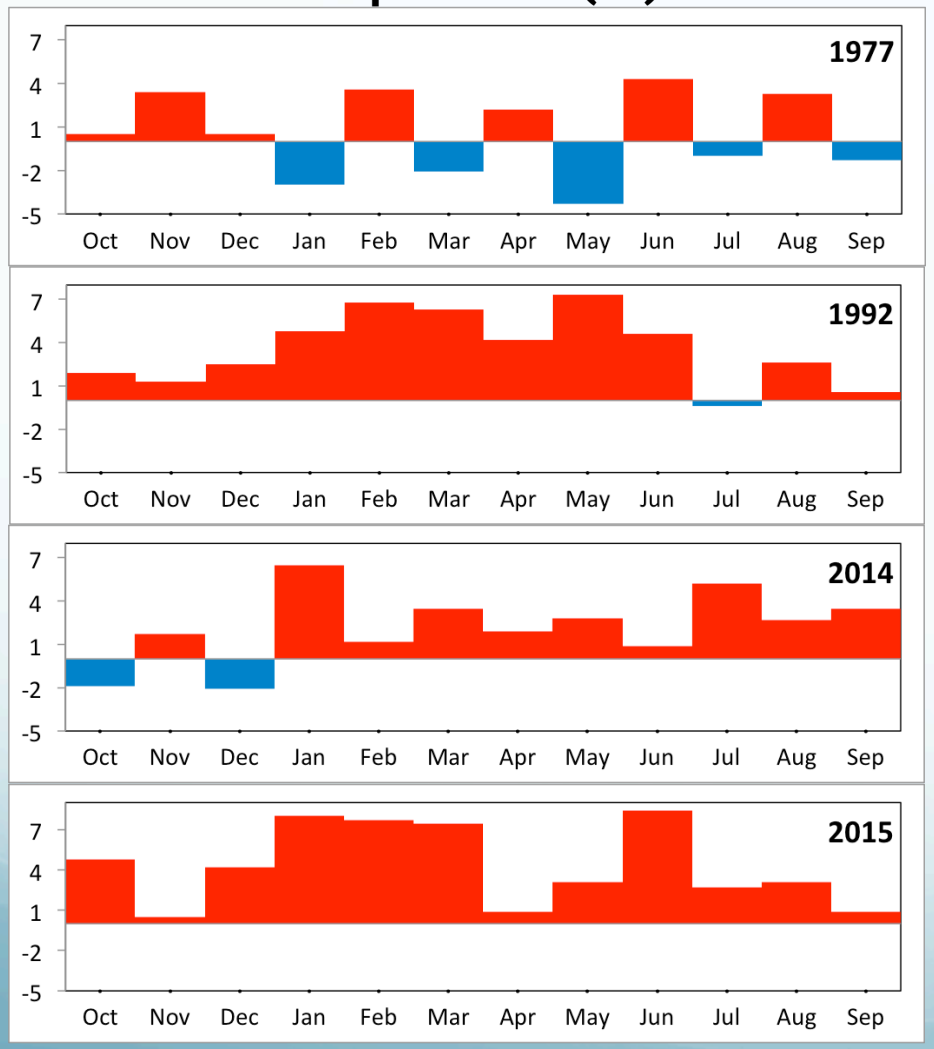
- Short-lived warm temperatures anomalies during precipitation events
- Elevation ~3200'

Bumbaco and Mote 2010

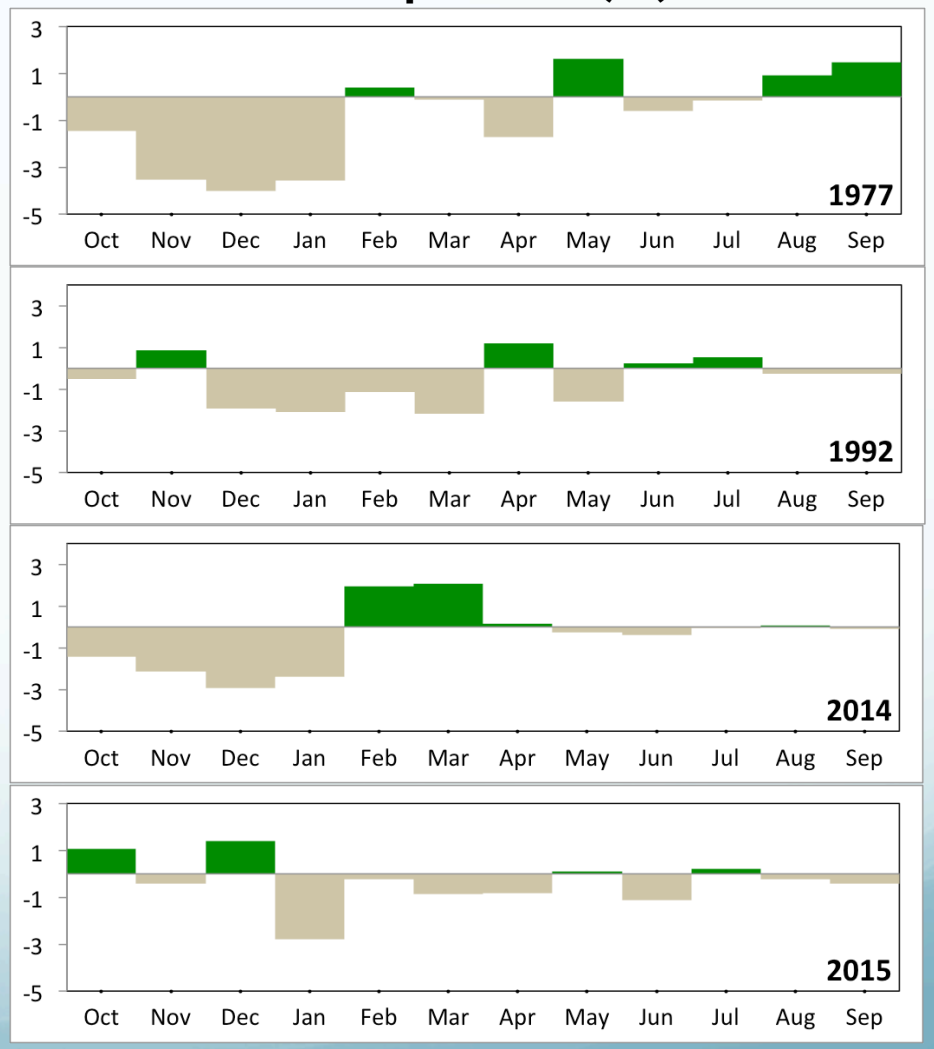
Recent OR Droughts

WA State anomalies for the 1977, 1992, 2014, and 2015 WYs

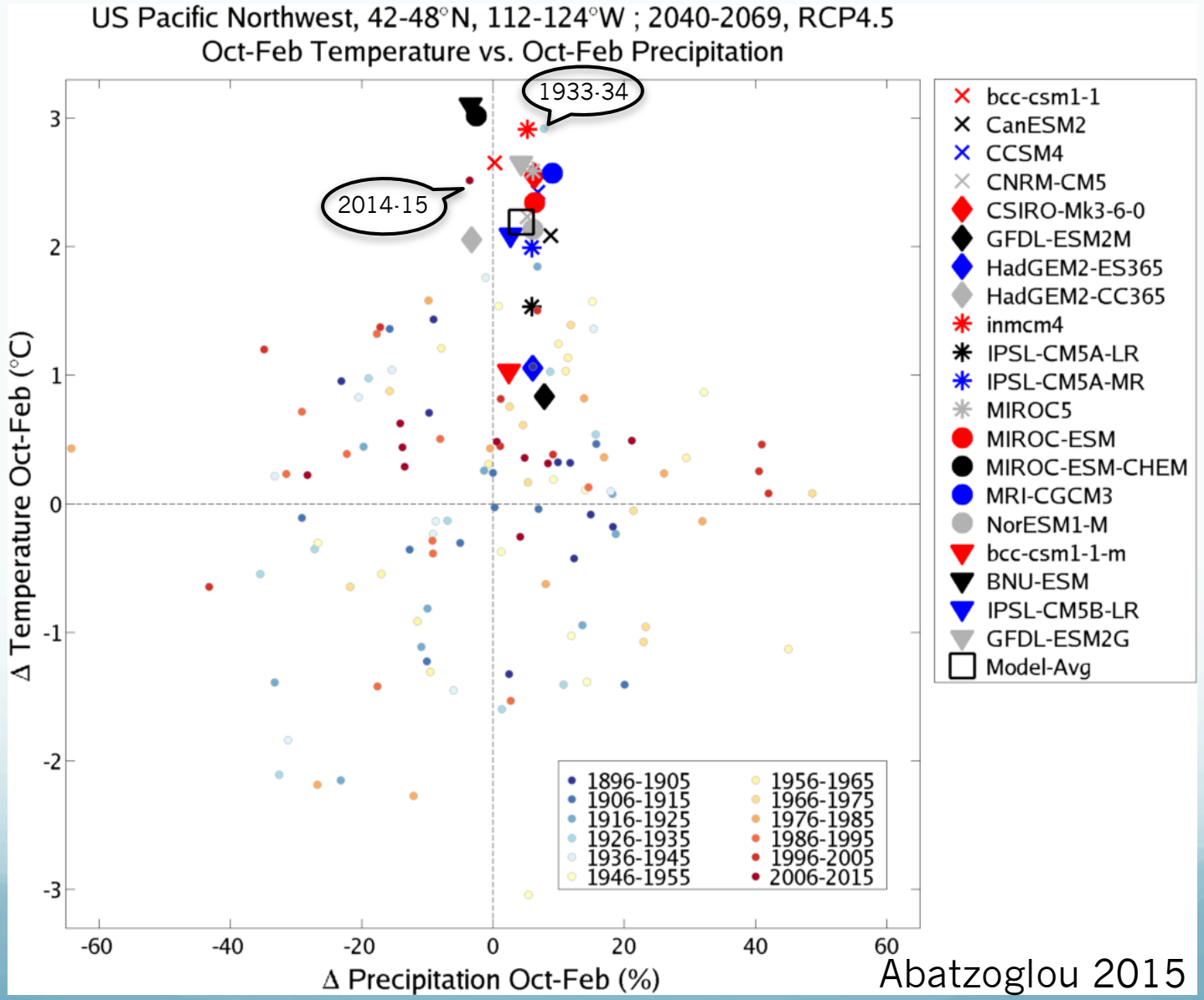
Temperature (°F)



Precipitation (in)



A look into the future...



Abatzoglou 2015

Conclusions

- Oregon and Idaho droughts have been prolonged
- Record warmth played a big role in the drought of 2014-15 for the entire PNW
- Historically, the drought is unique in comparison to others in the record
- We can use 2014-15 as a “dress rehearsal” for what winters may look like under climate change scenarios