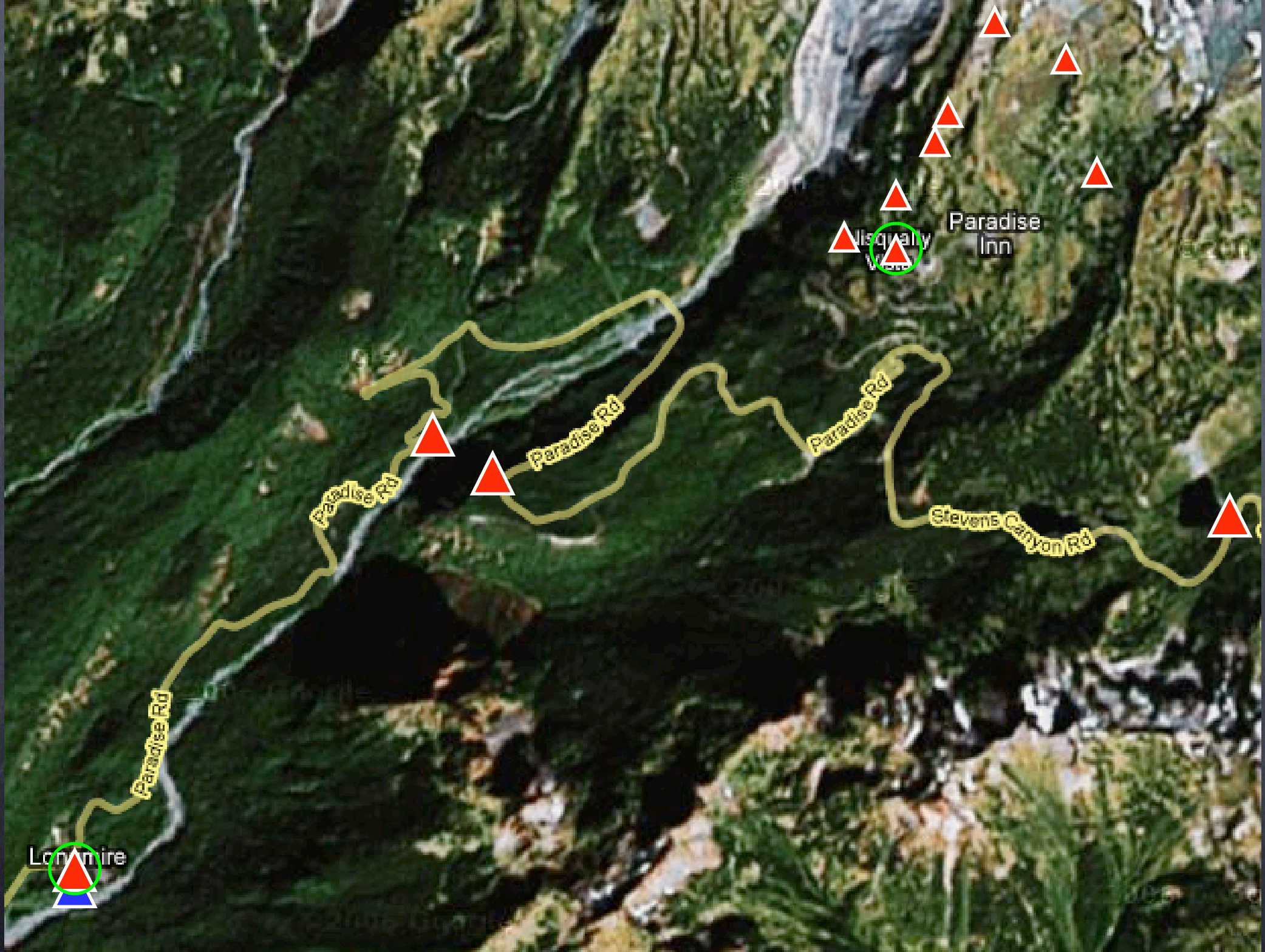


A scenic view of Mount Rainier, showing snow-capped peaks and evergreen trees in the foreground. The sky is blue with some clouds. The text is overlaid on the image.

Microclimates of Mt Rainier with microsensors

Philip Mote, Josiah Mault, and Jessica Lundquist
University of Washington



Longmire

Alisqualy View

Paradise Inn

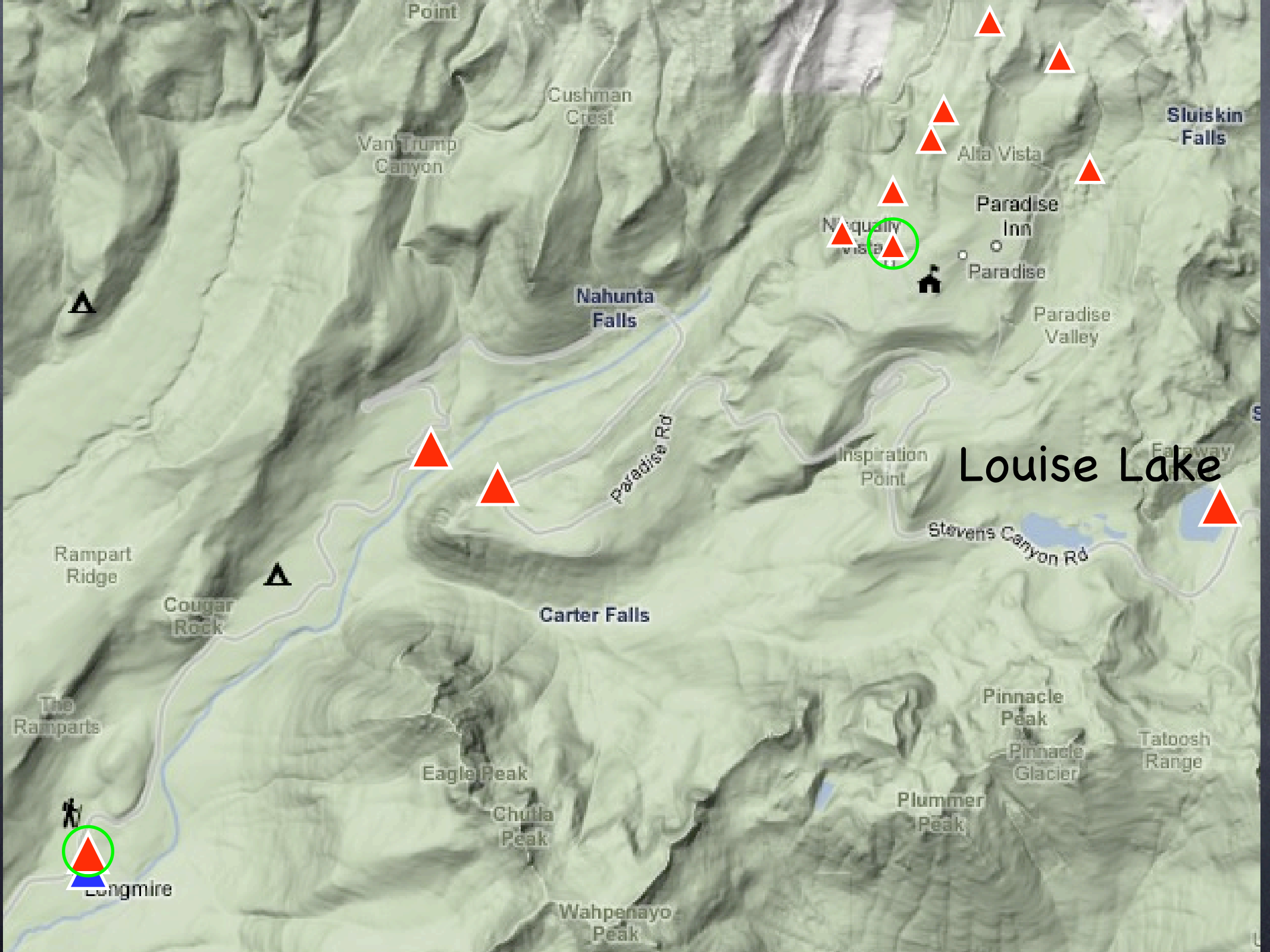
Paradise Rd

Paradise Rd

Paradise Rd

Paradise Rd

Stevens Canyon Rd



Louise Lake

Longmire



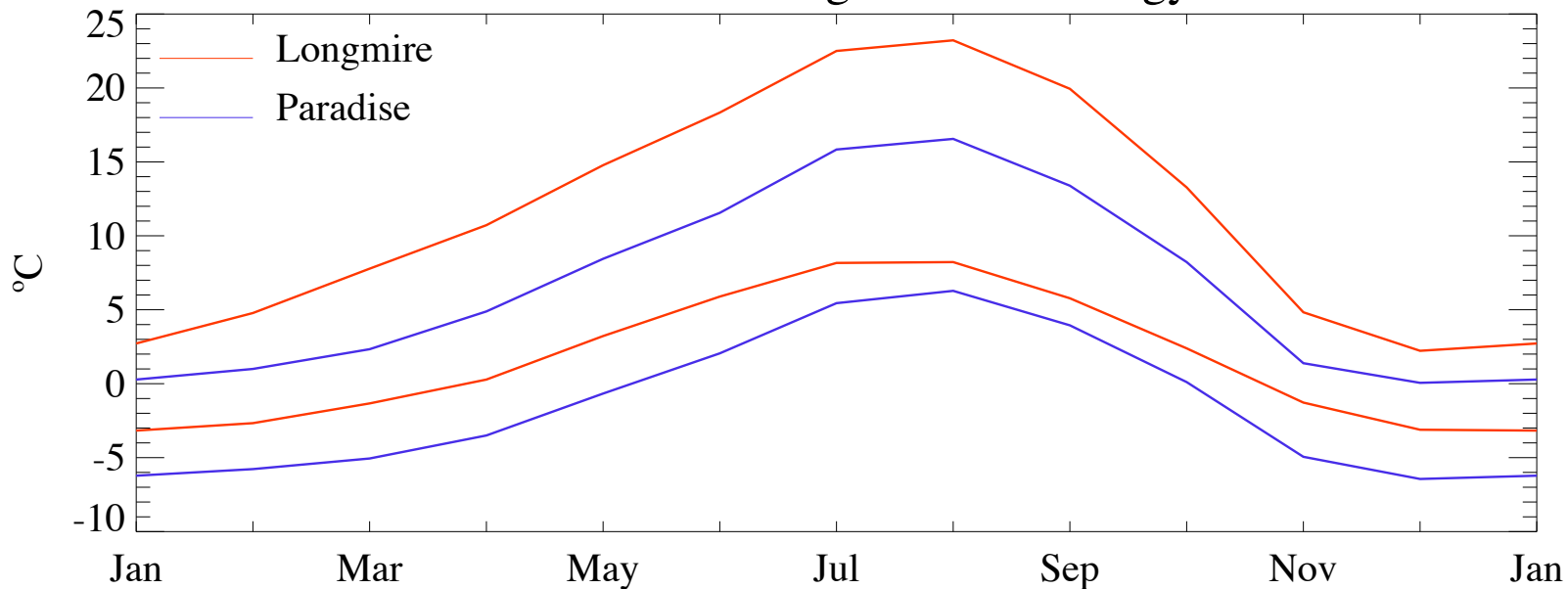




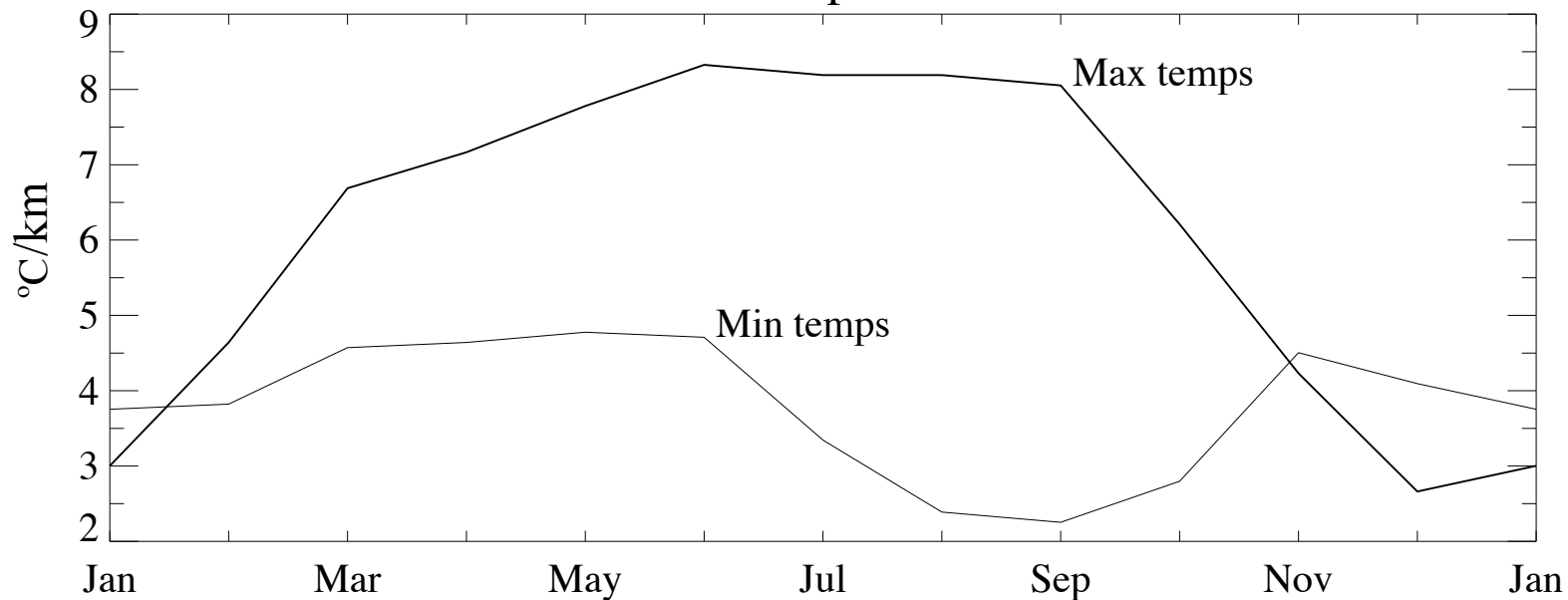




Paradise and Longmire climatology

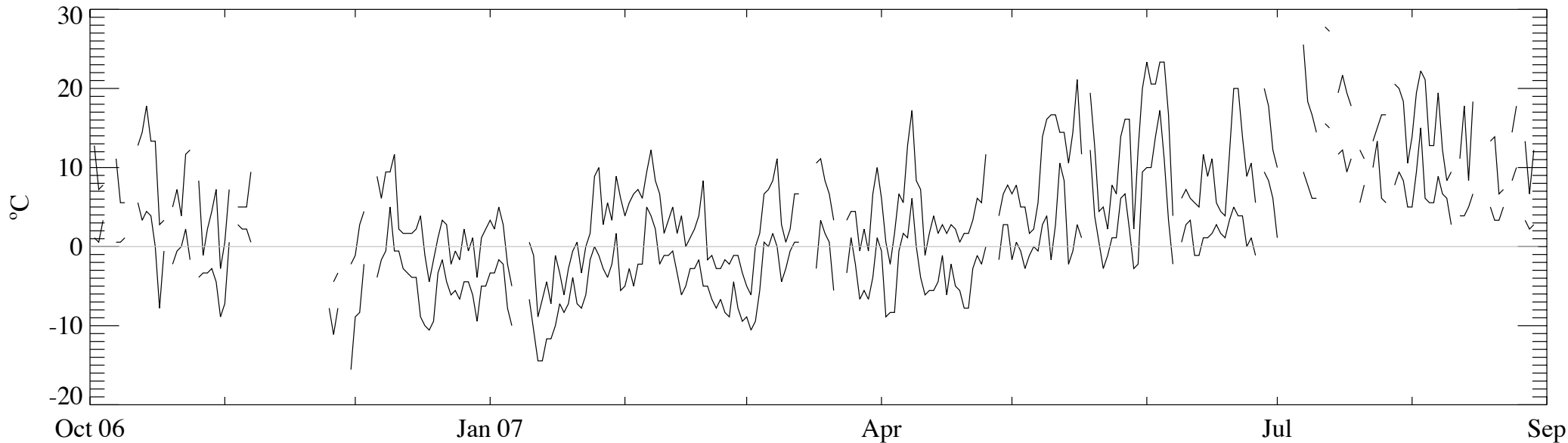


Mean lapse rate

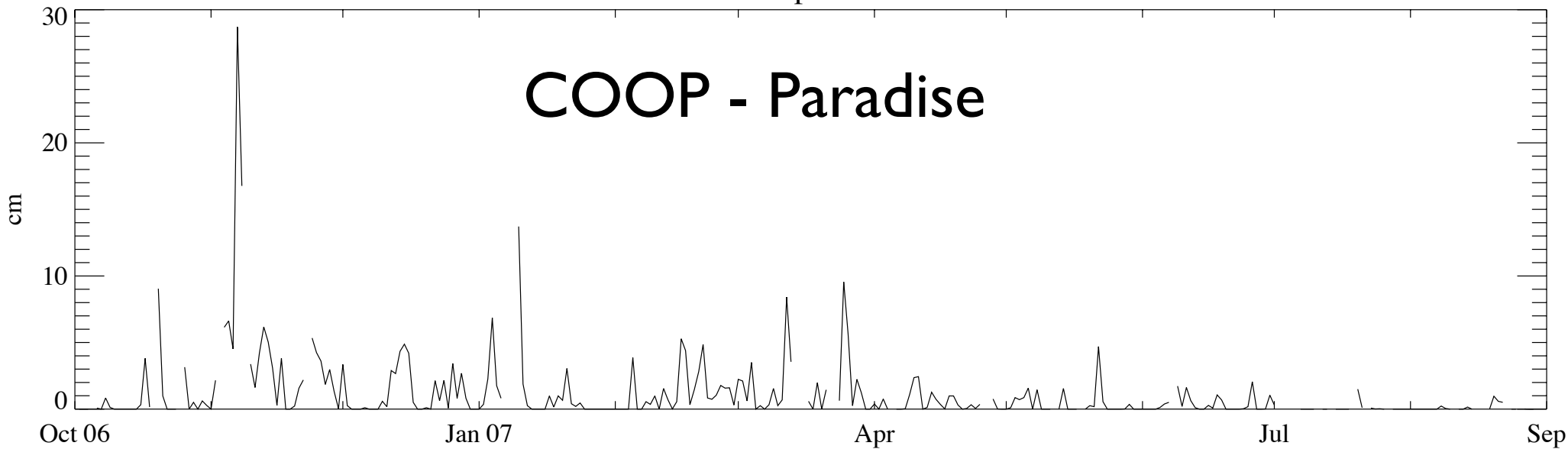


1971-2000

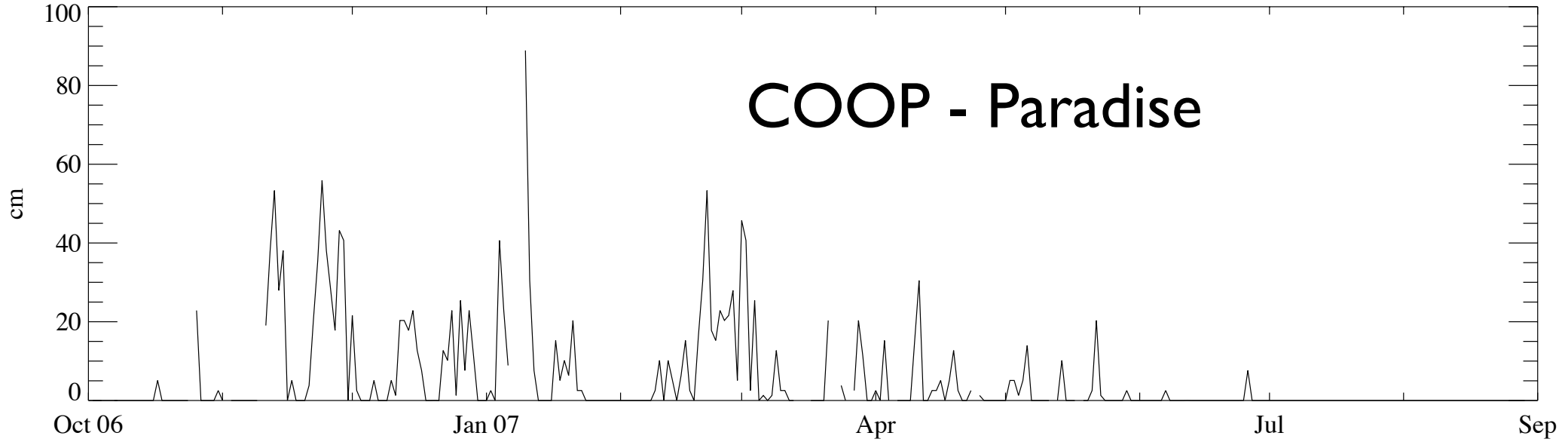
Paradise



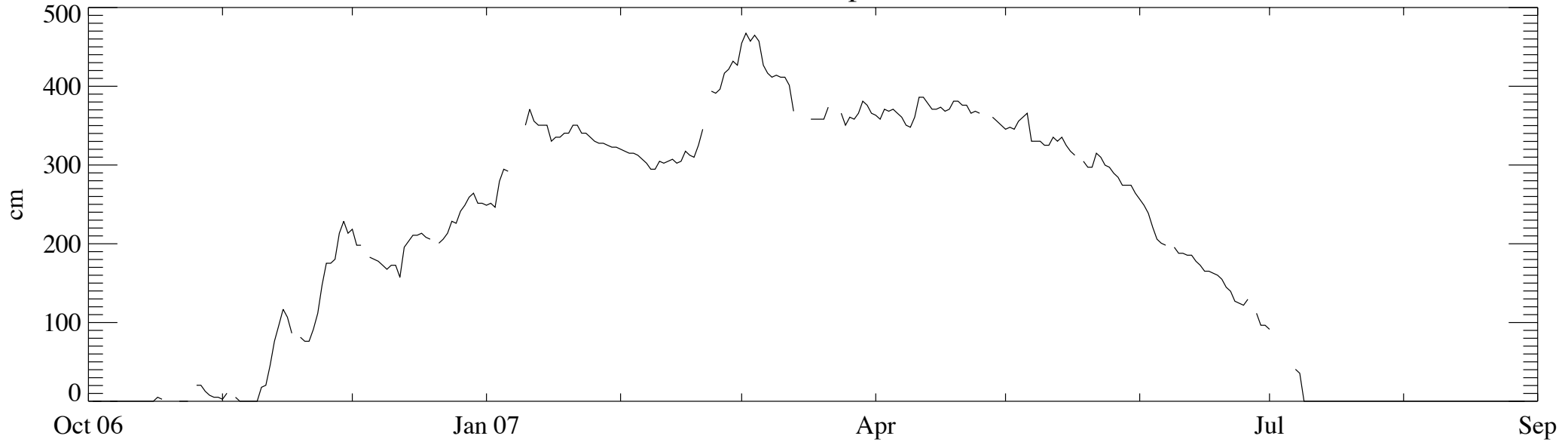
Precipitation



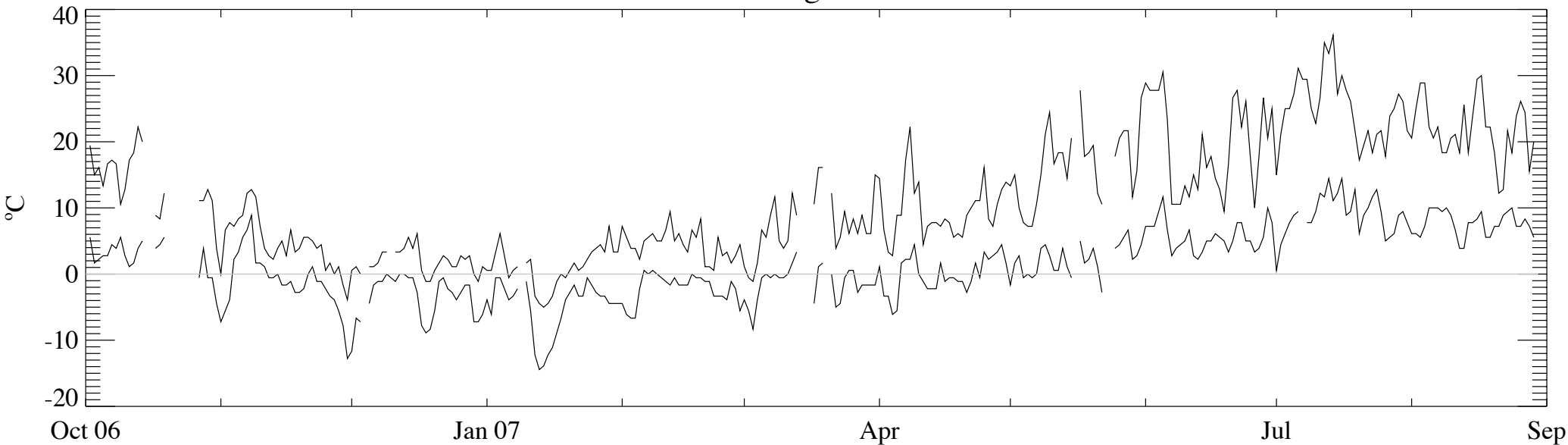
Snowfall



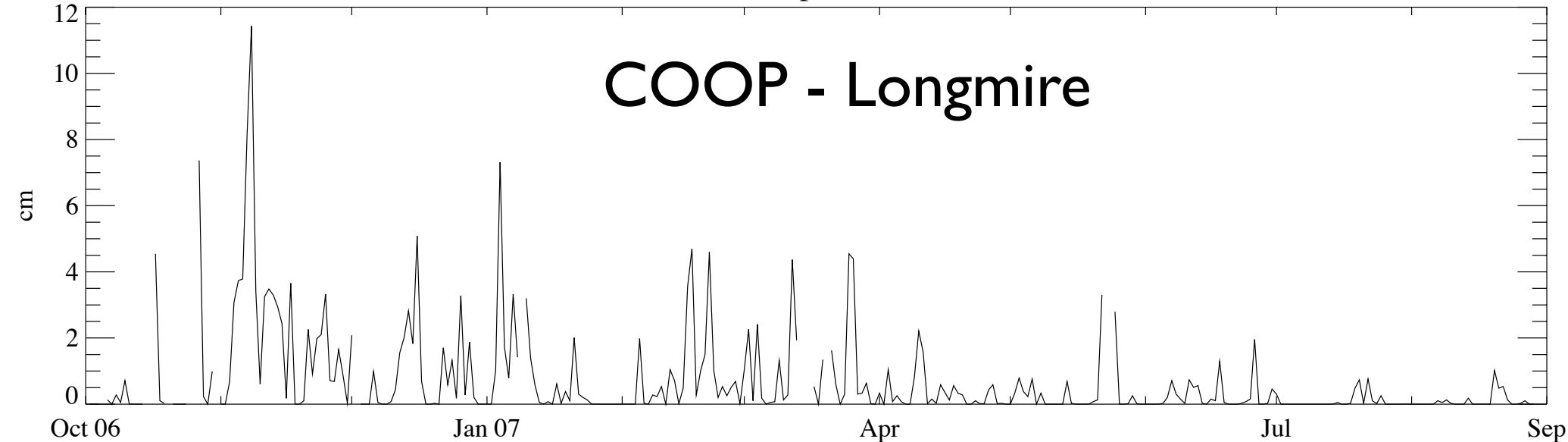
Snow depth



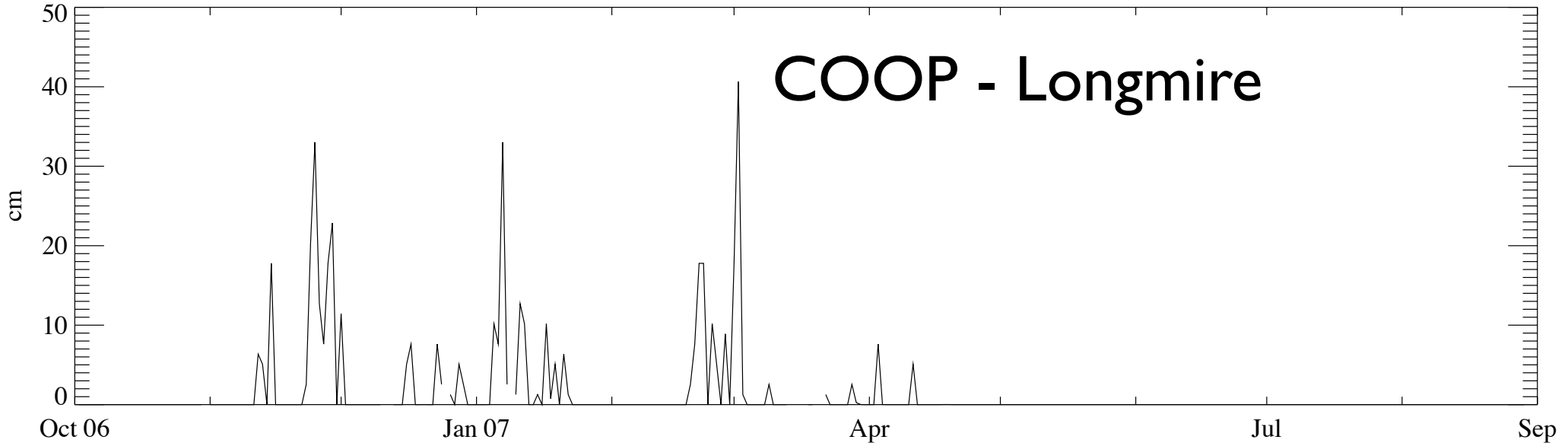
Longmire



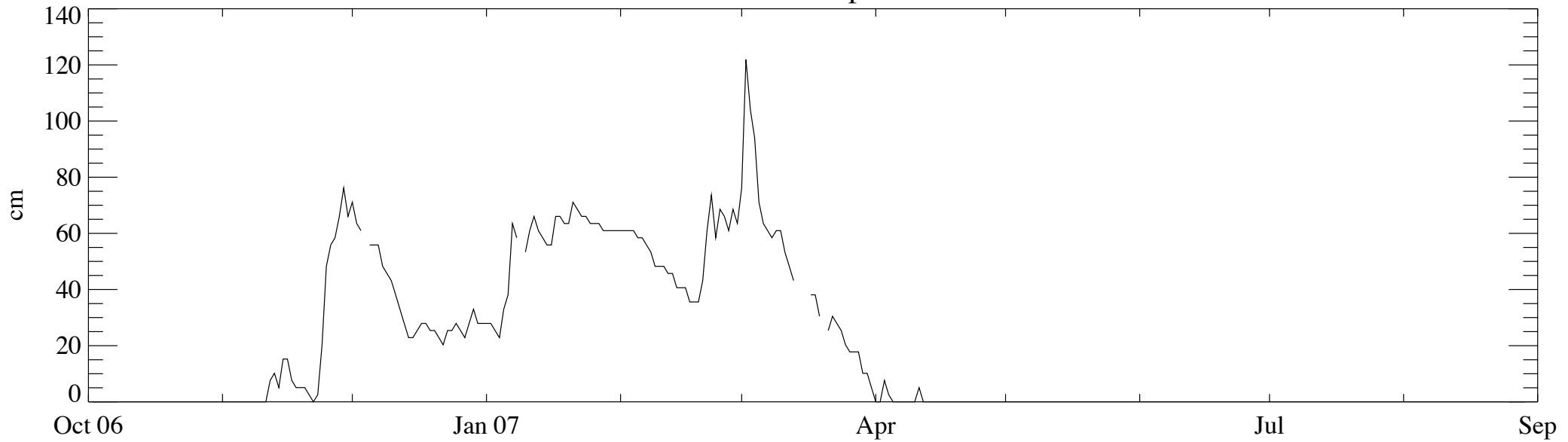
Precipitation

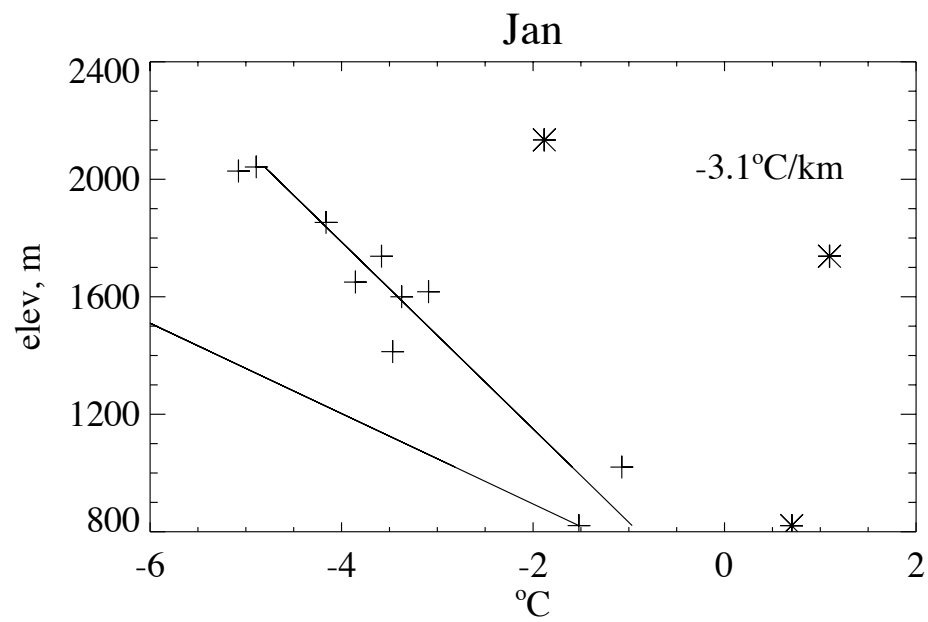
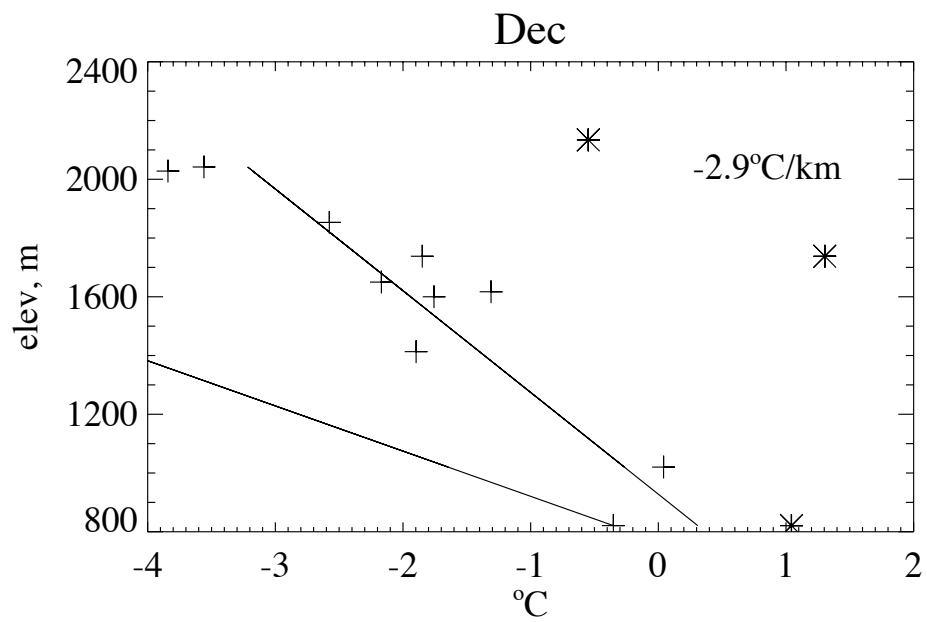
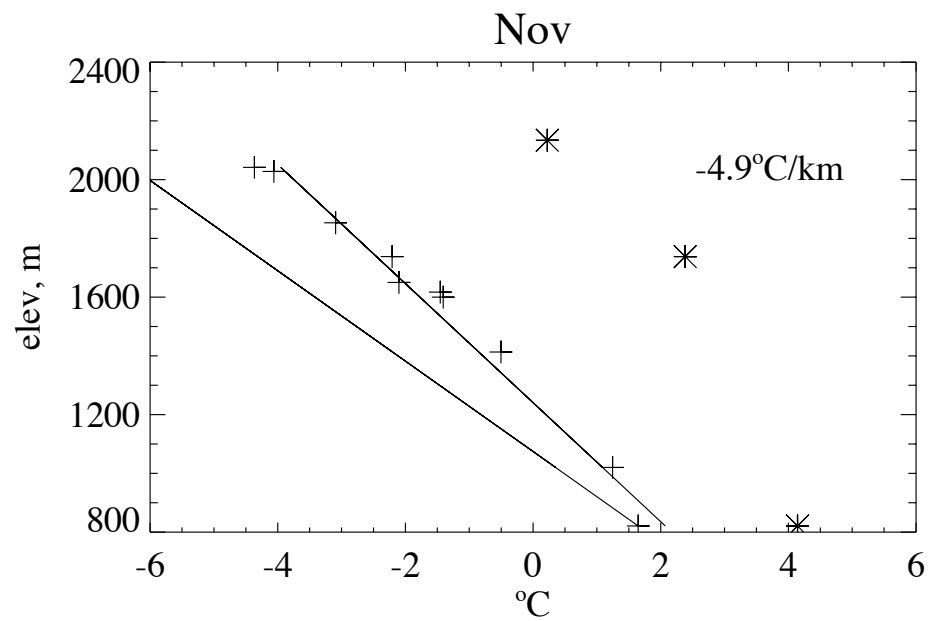
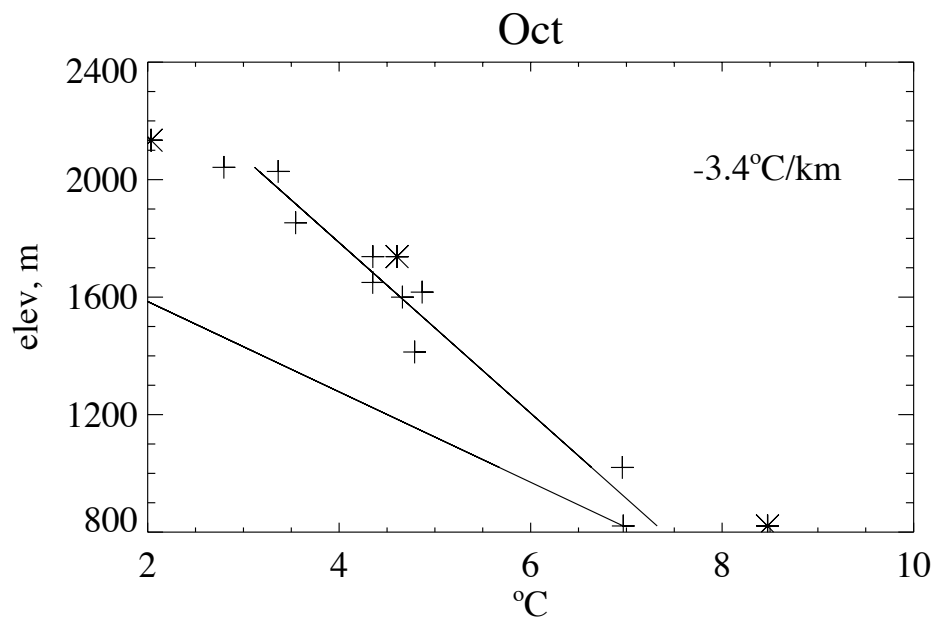


Snowfall

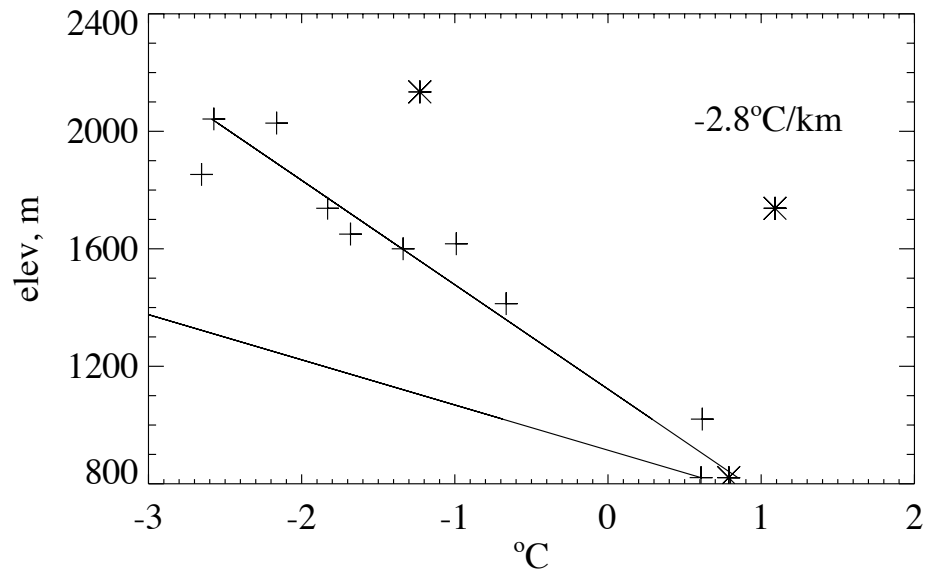


Snow depth

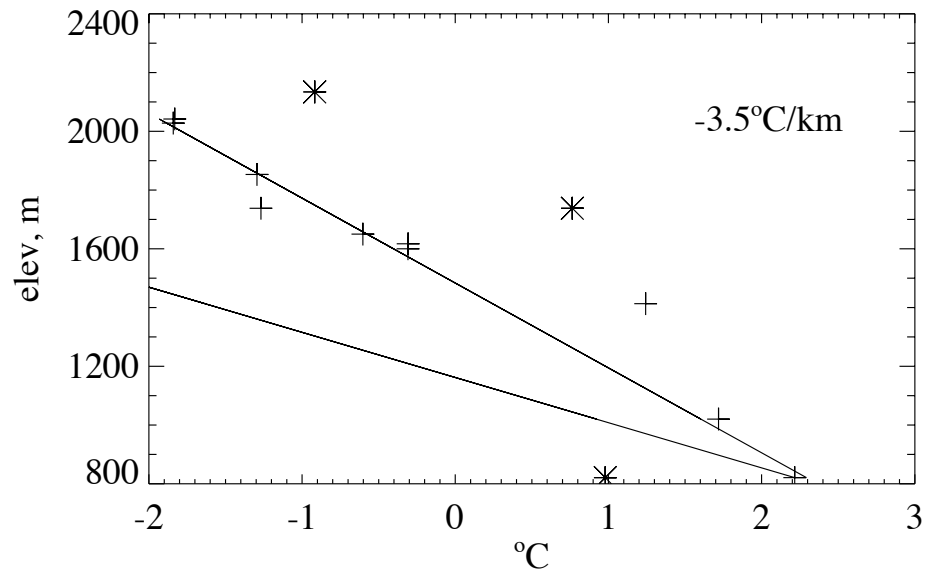




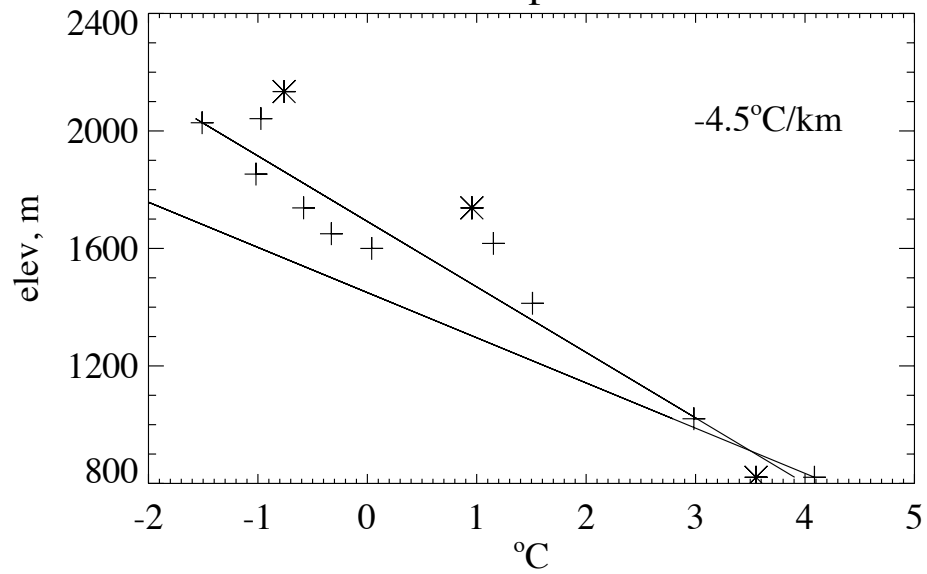
Feb



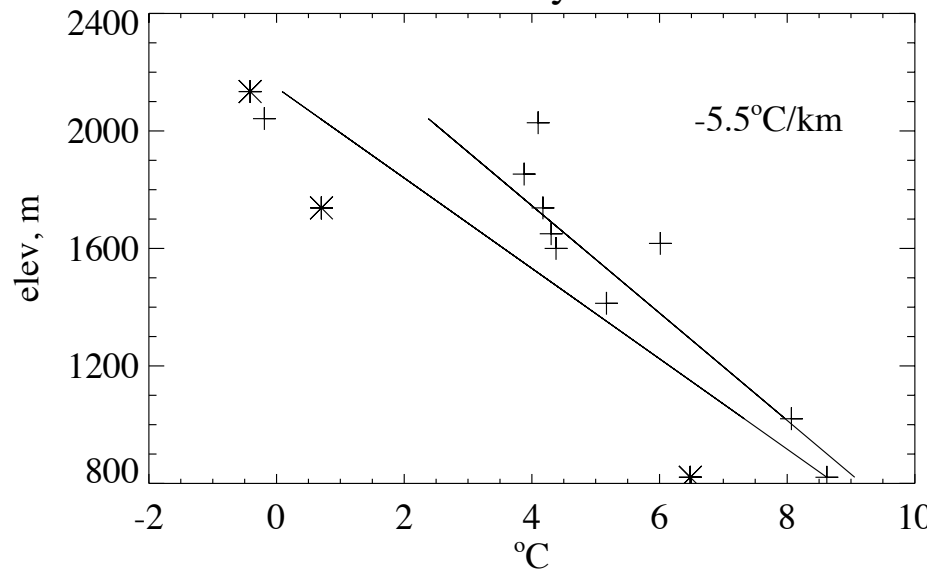
Mar



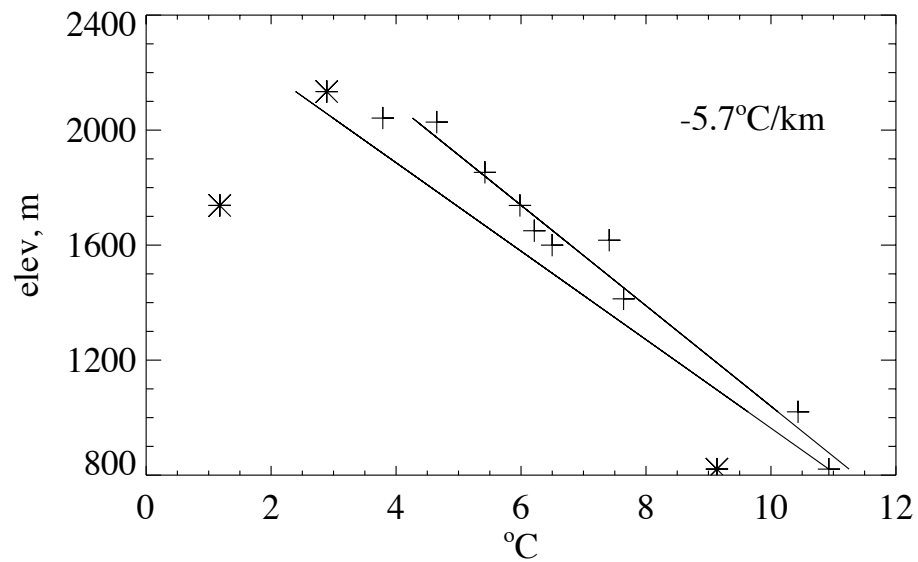
Apr



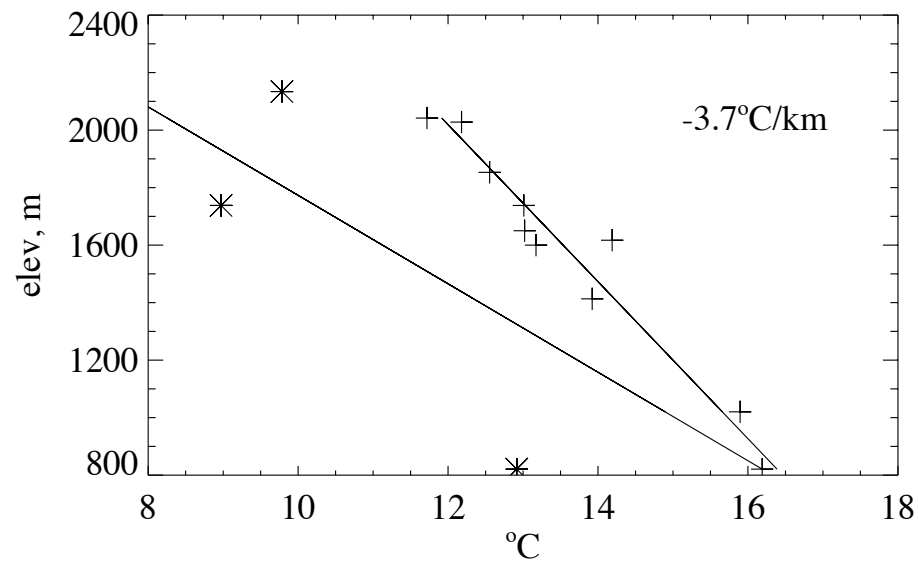
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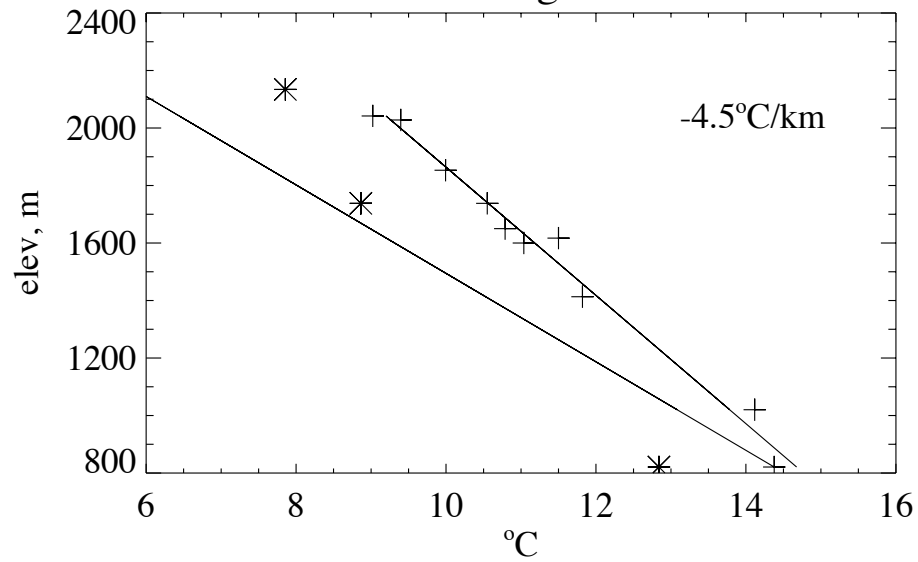
Jun



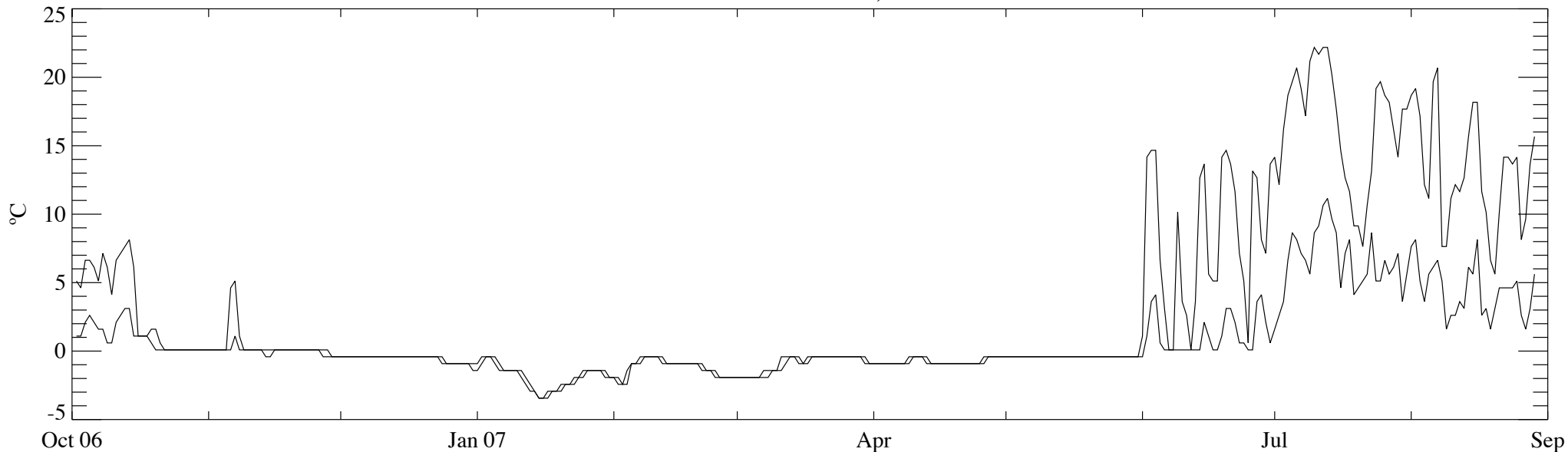
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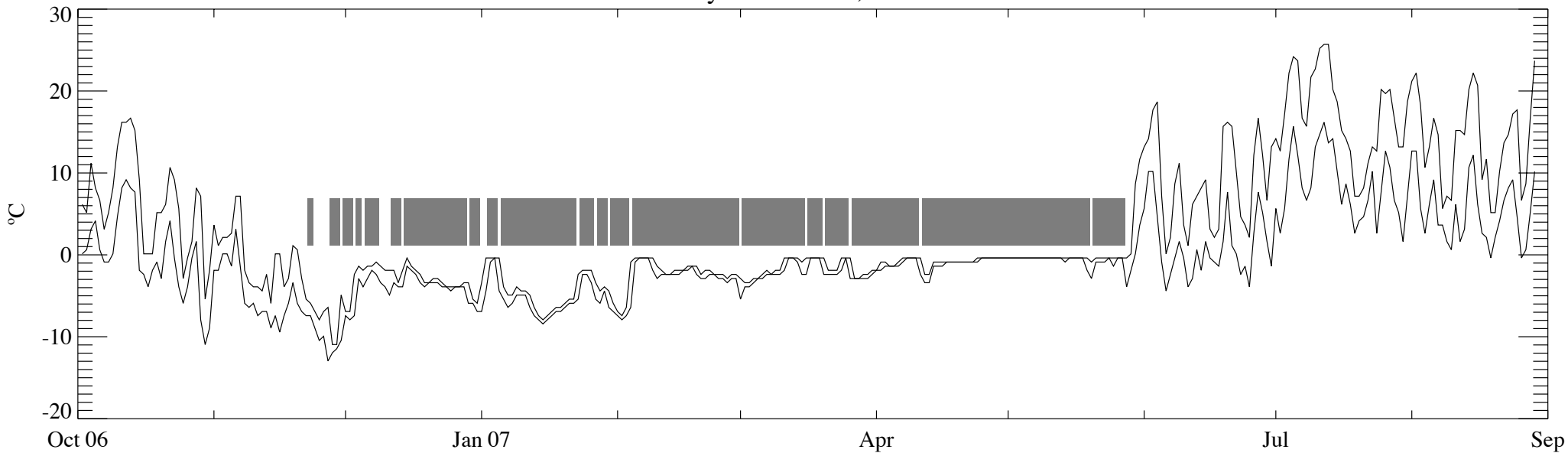
Aug



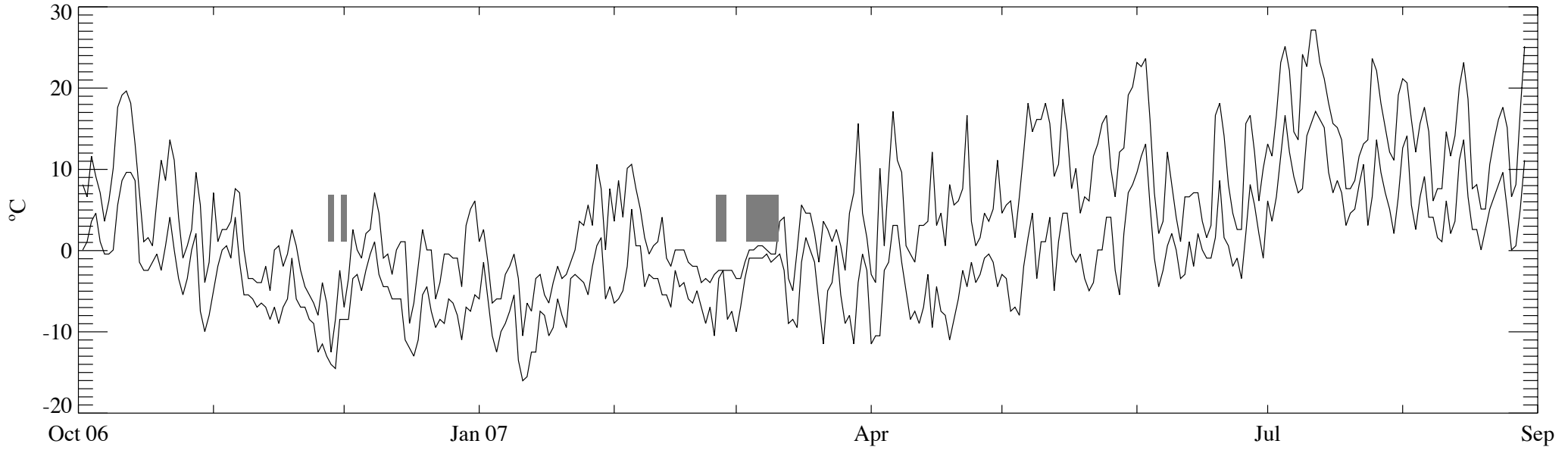
Pebble Cr Tr in soil, 2134m



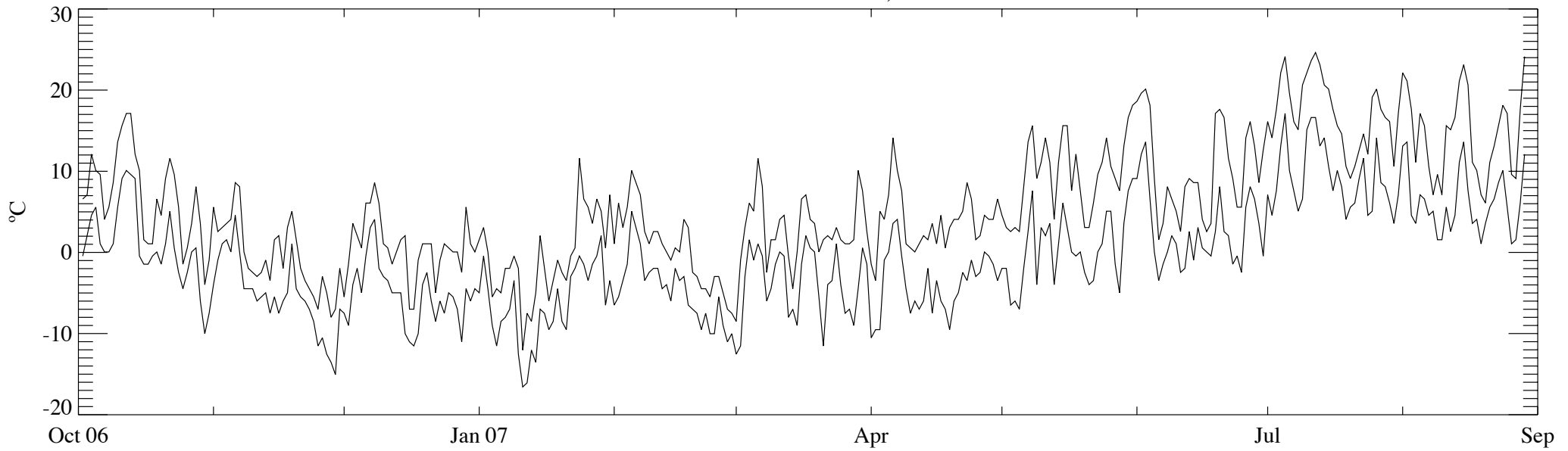
Skyline Tr +2m, 2042m



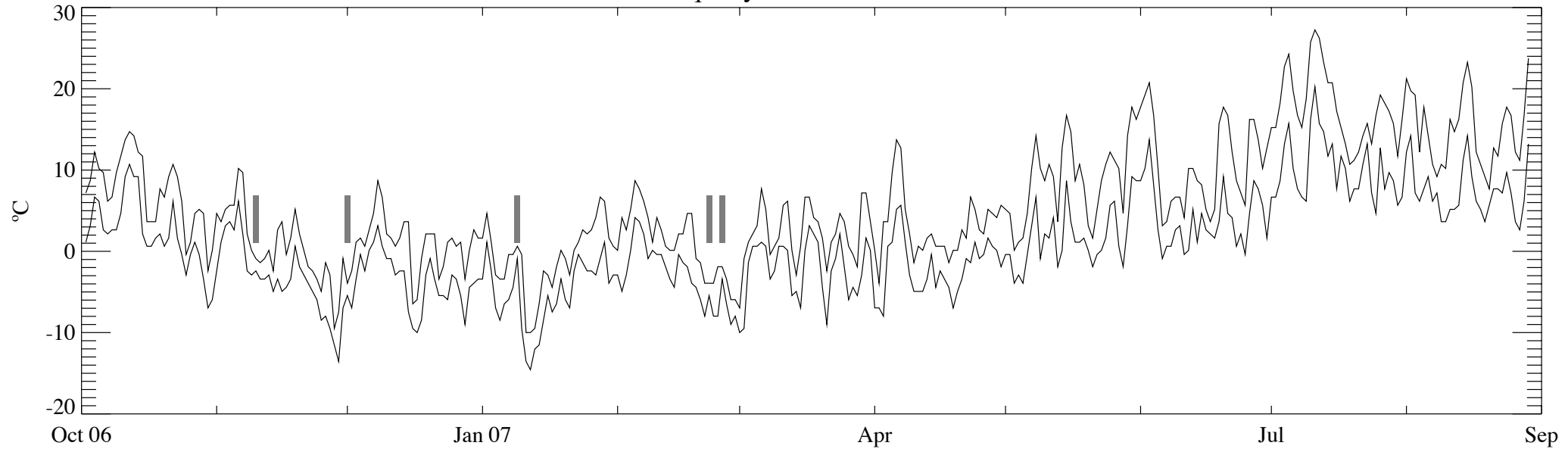
SW of Panorama Pt +4m, 2028m



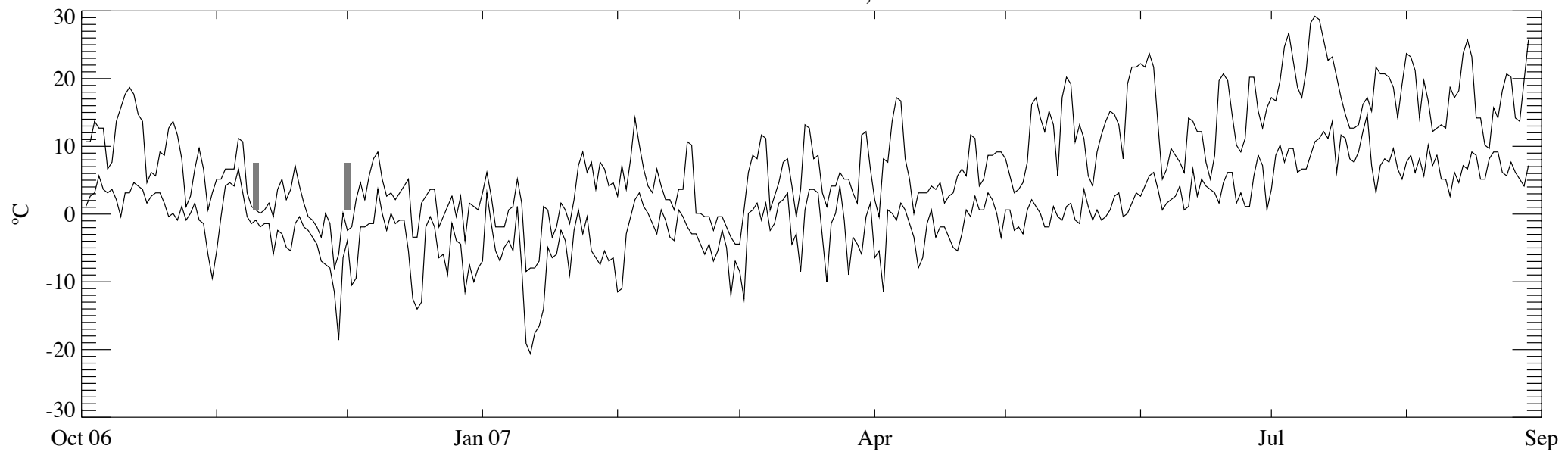
Deadhorse Cr Tr +4m, 1853m



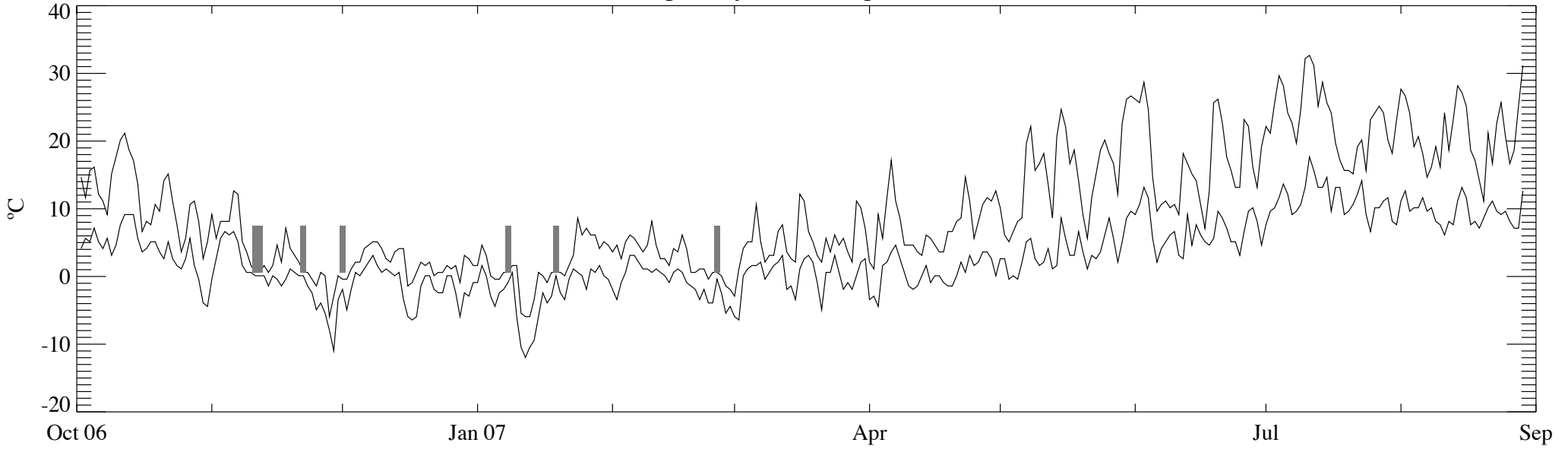
Nisqually Vista +4m, 1600m



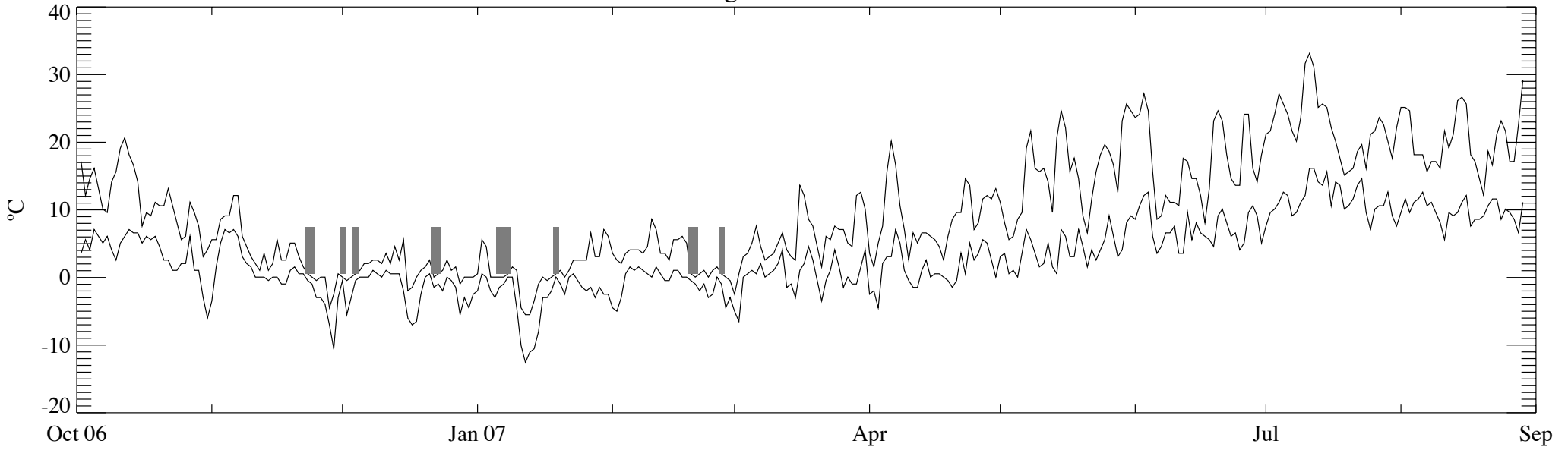
Louise Lake +5m, 1413m



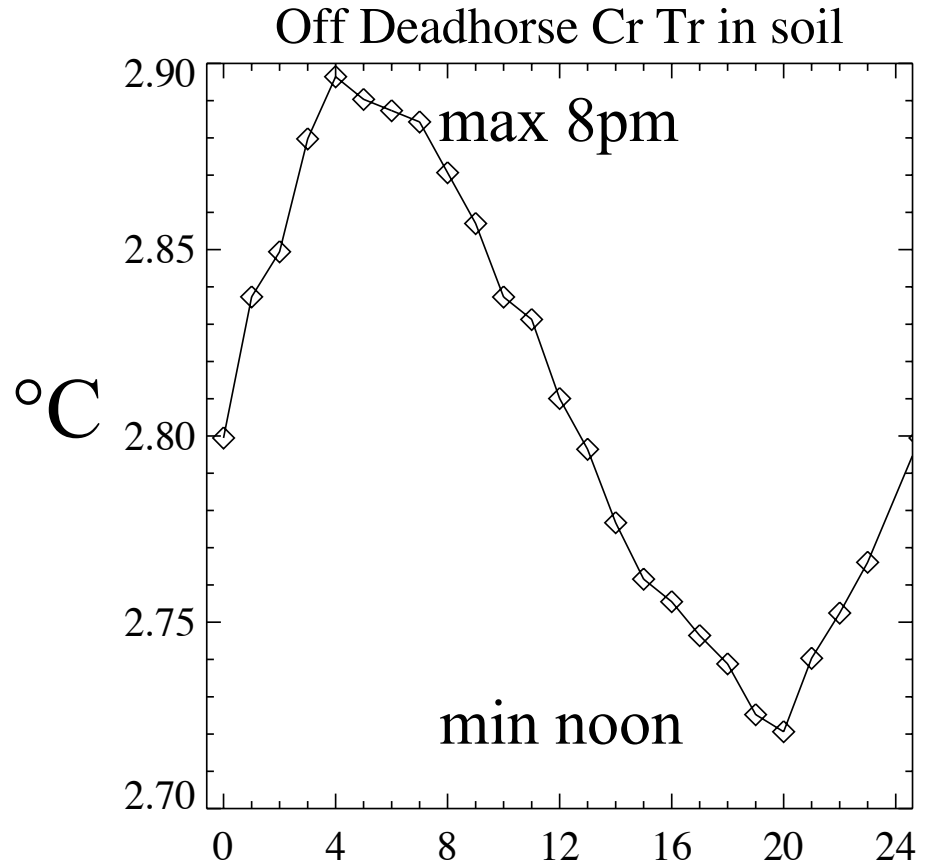
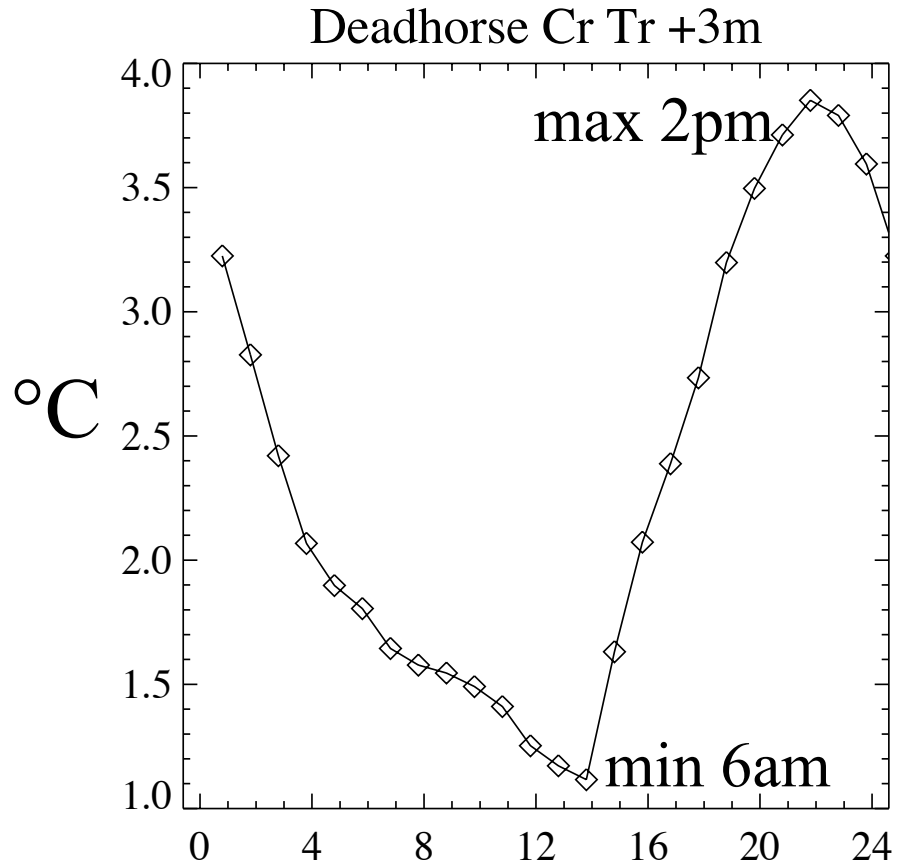
few miles upvalley from Longmire +2m, 1020m



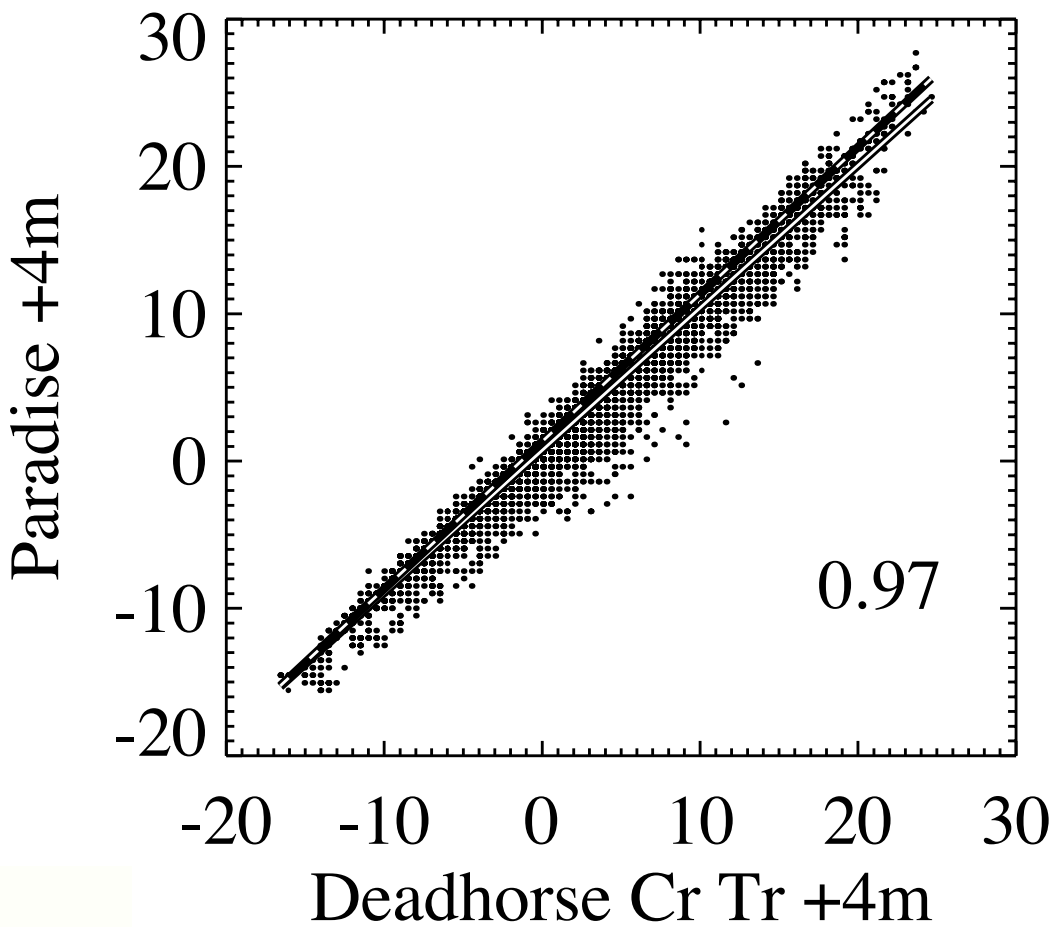
Longmire +2m, 821m



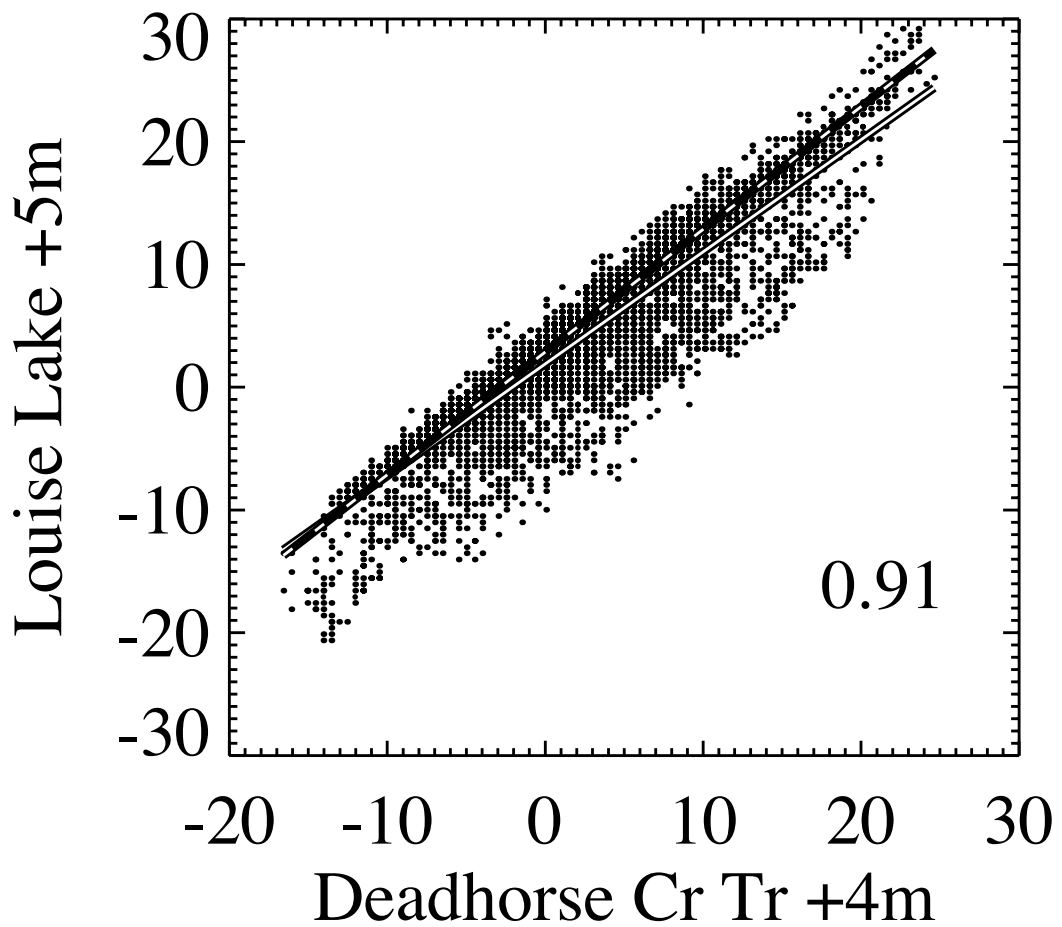
mean diurnal cycle



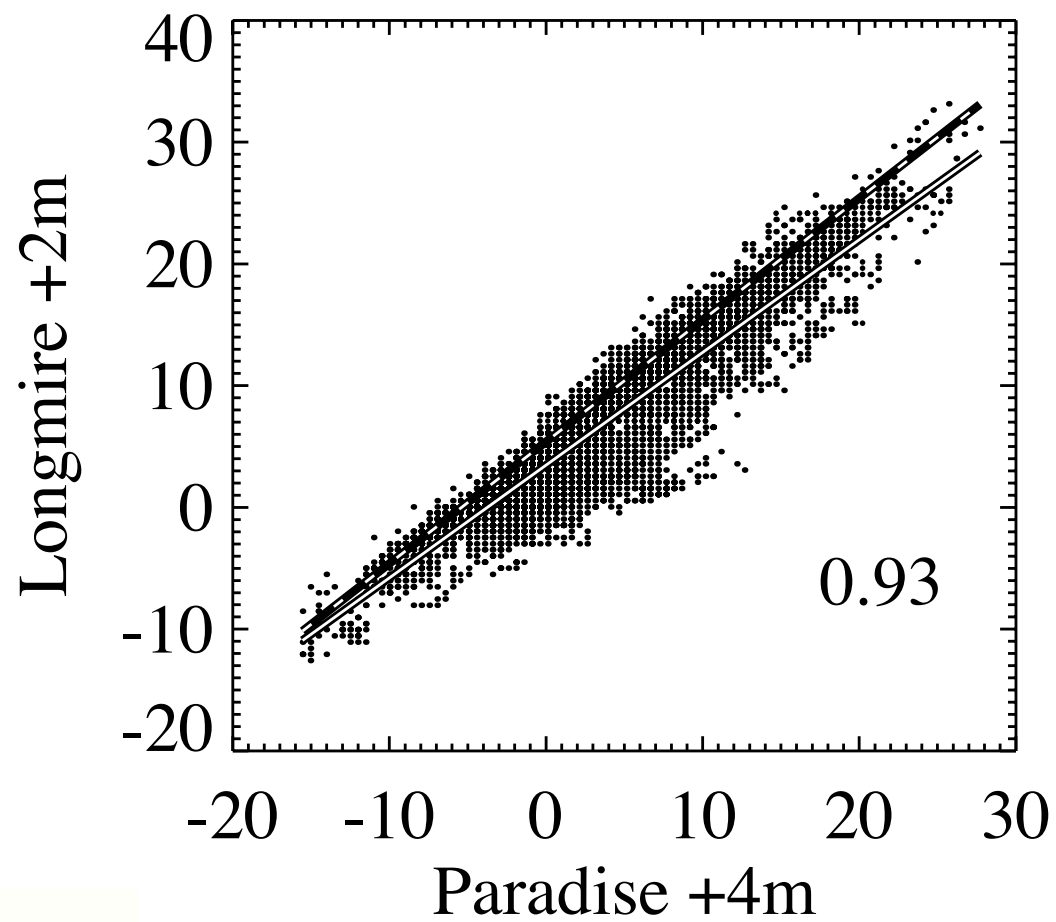
corr= 0.98



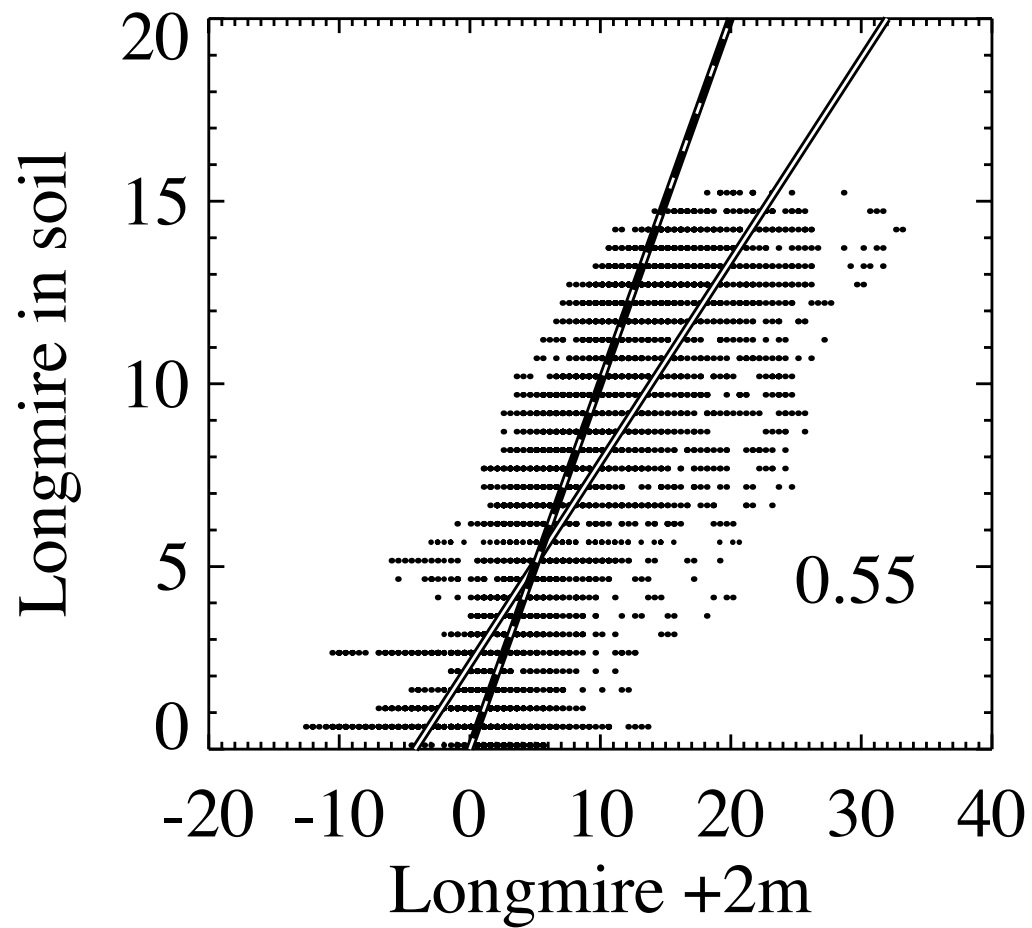
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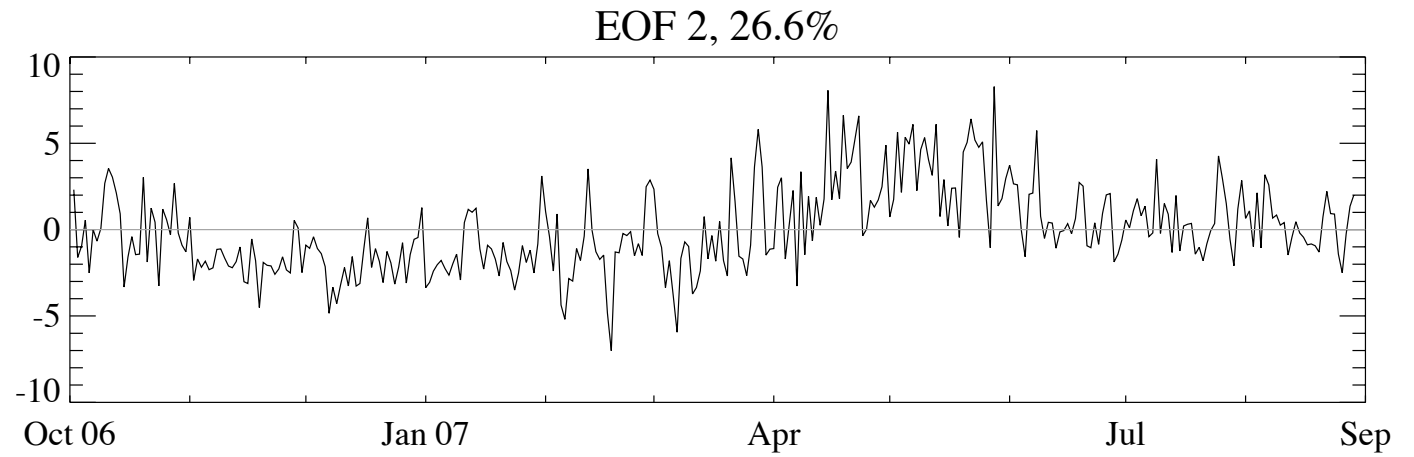
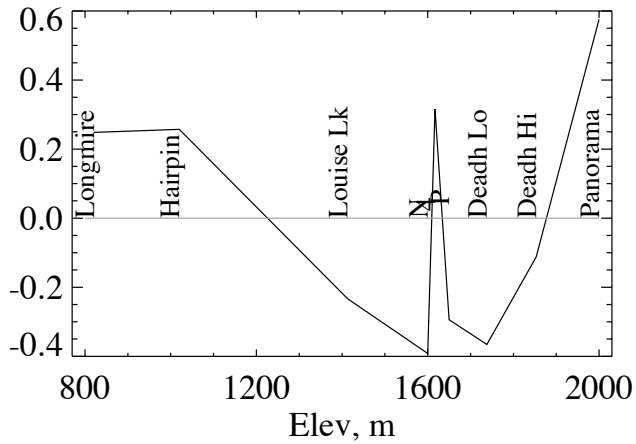
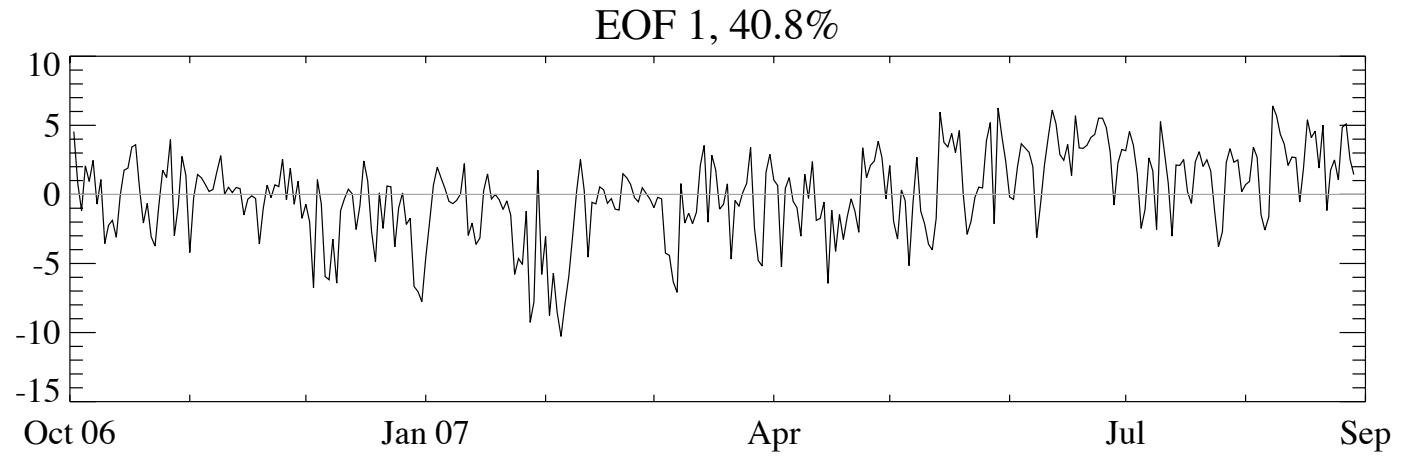
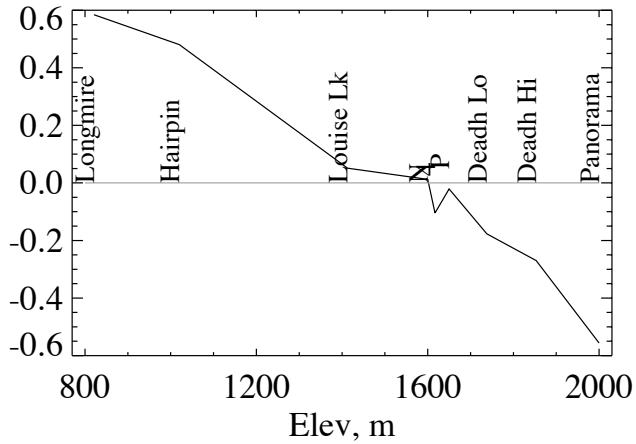
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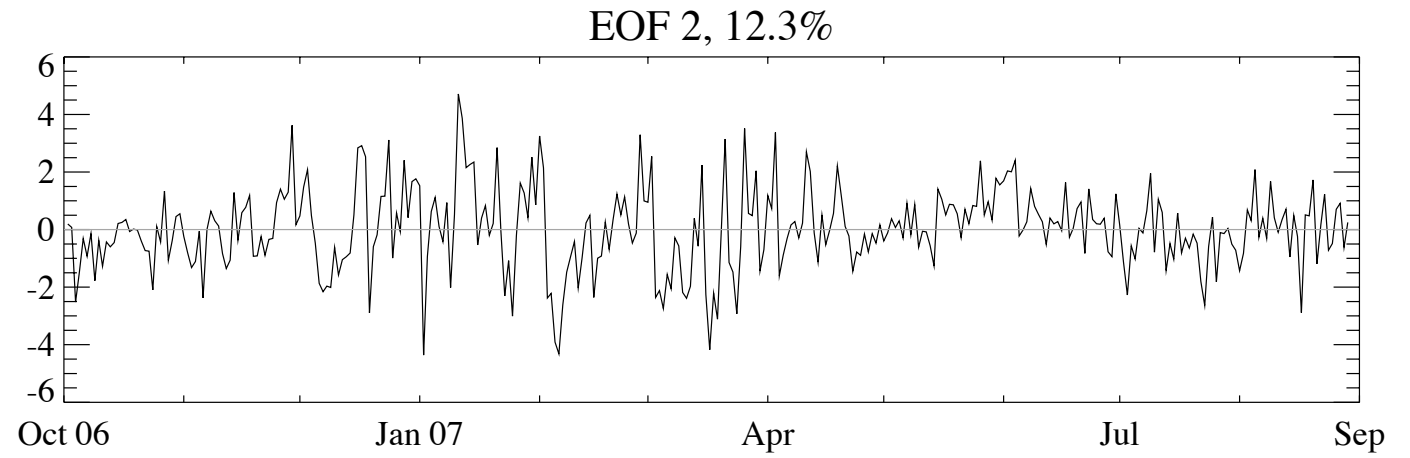
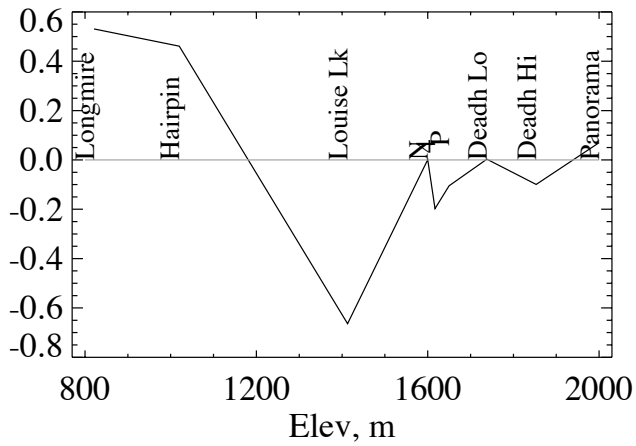
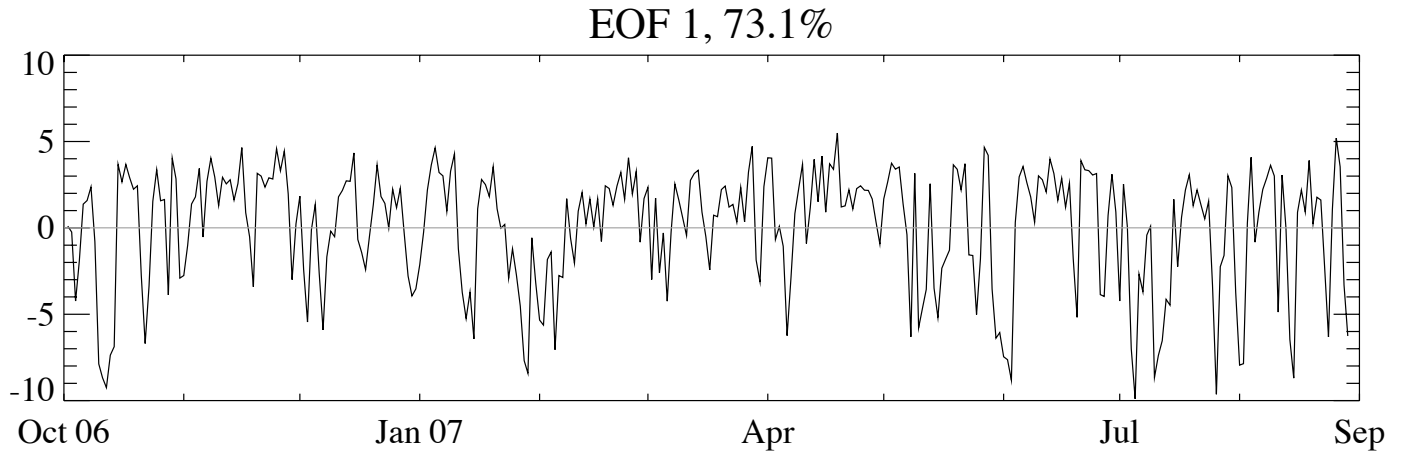
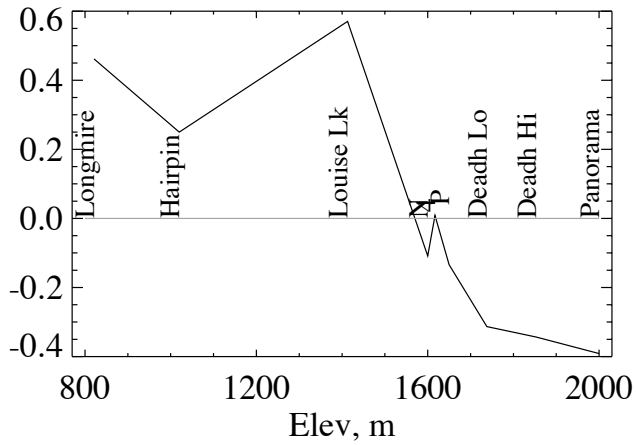
corr= 0.83



Tmax EOFs



Tmin EOFs



Conclusions

- i-Buttons very useful for such studies
- lapse rate rather small esp. minima
- cold air drainage a big factor esp. at Louise Lake, Longmire