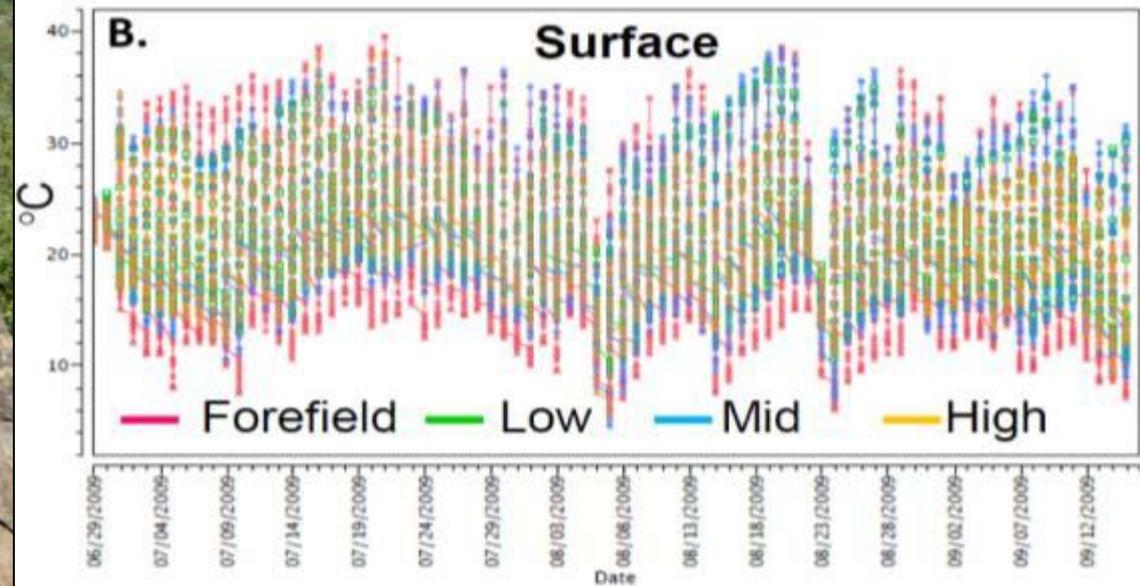
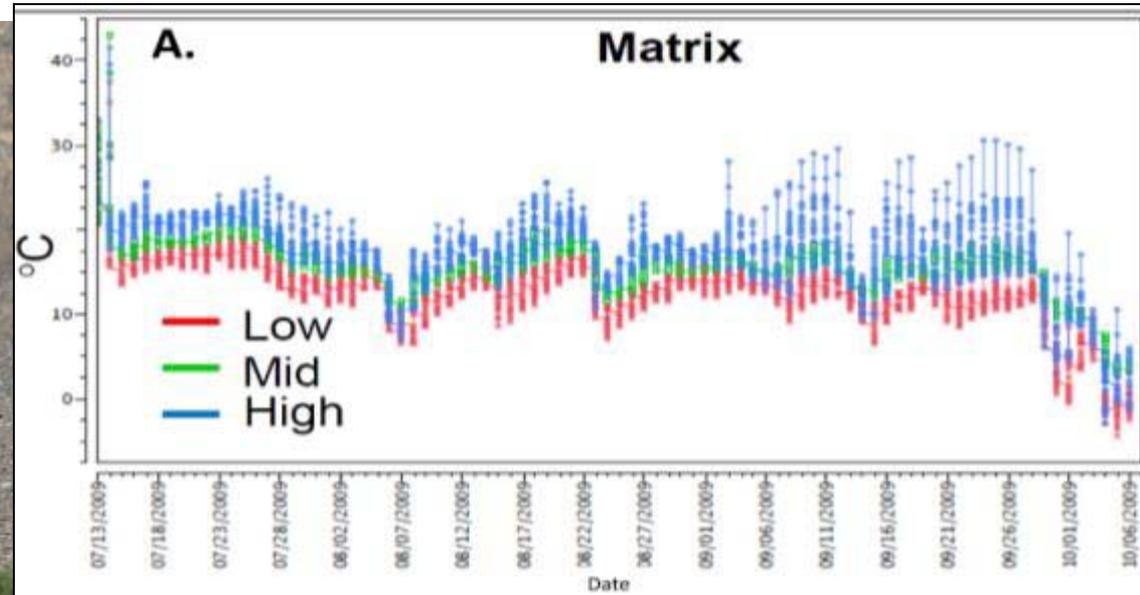
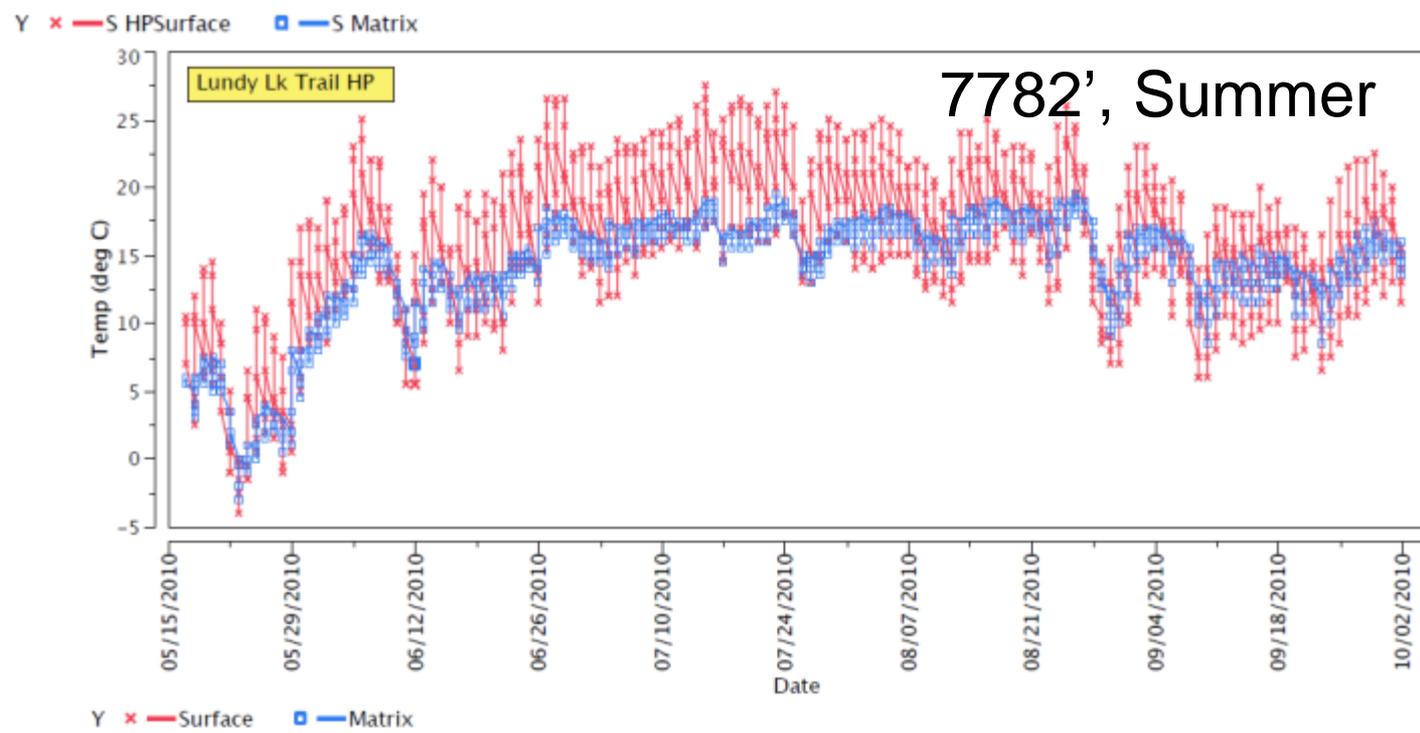
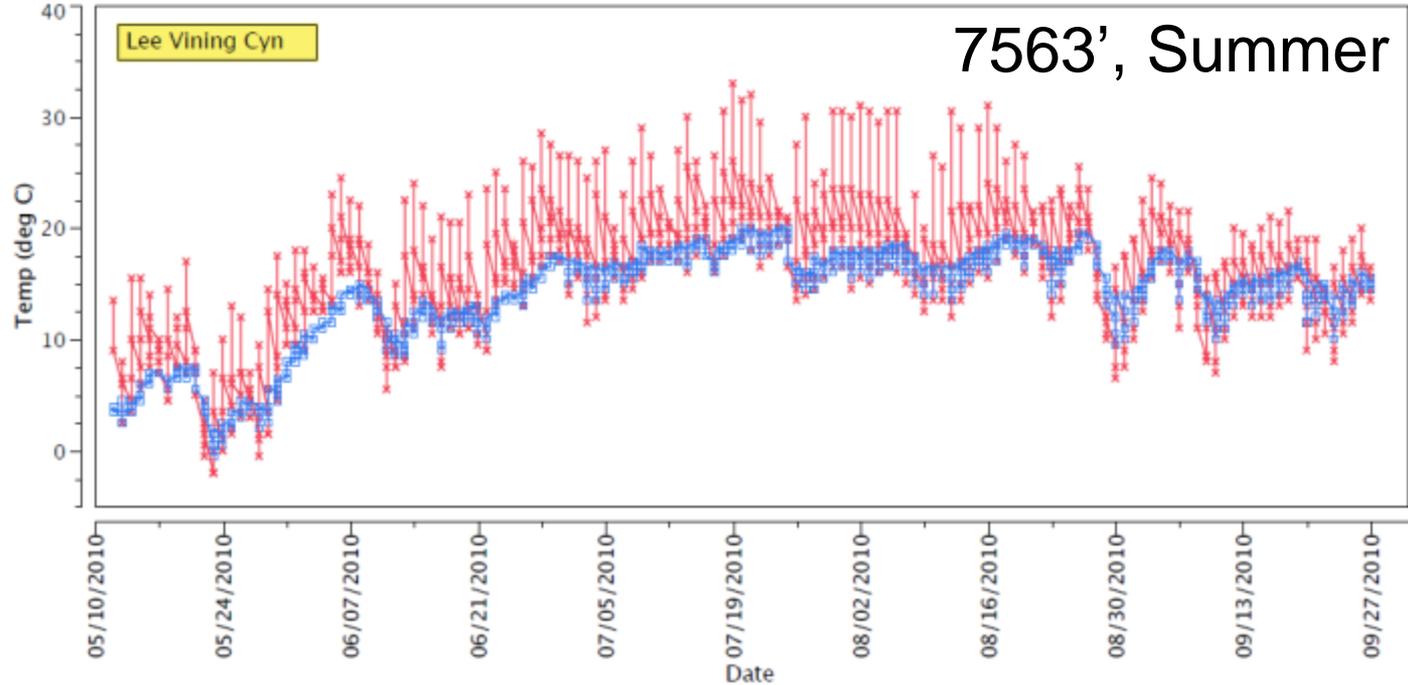


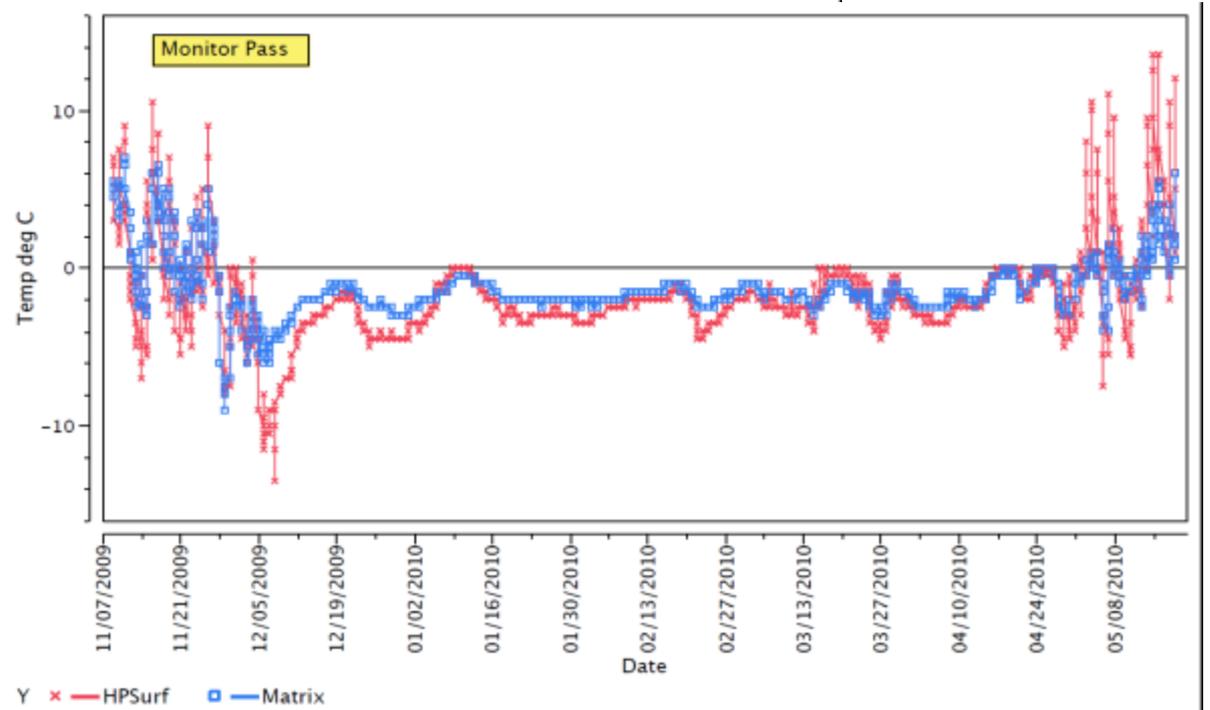
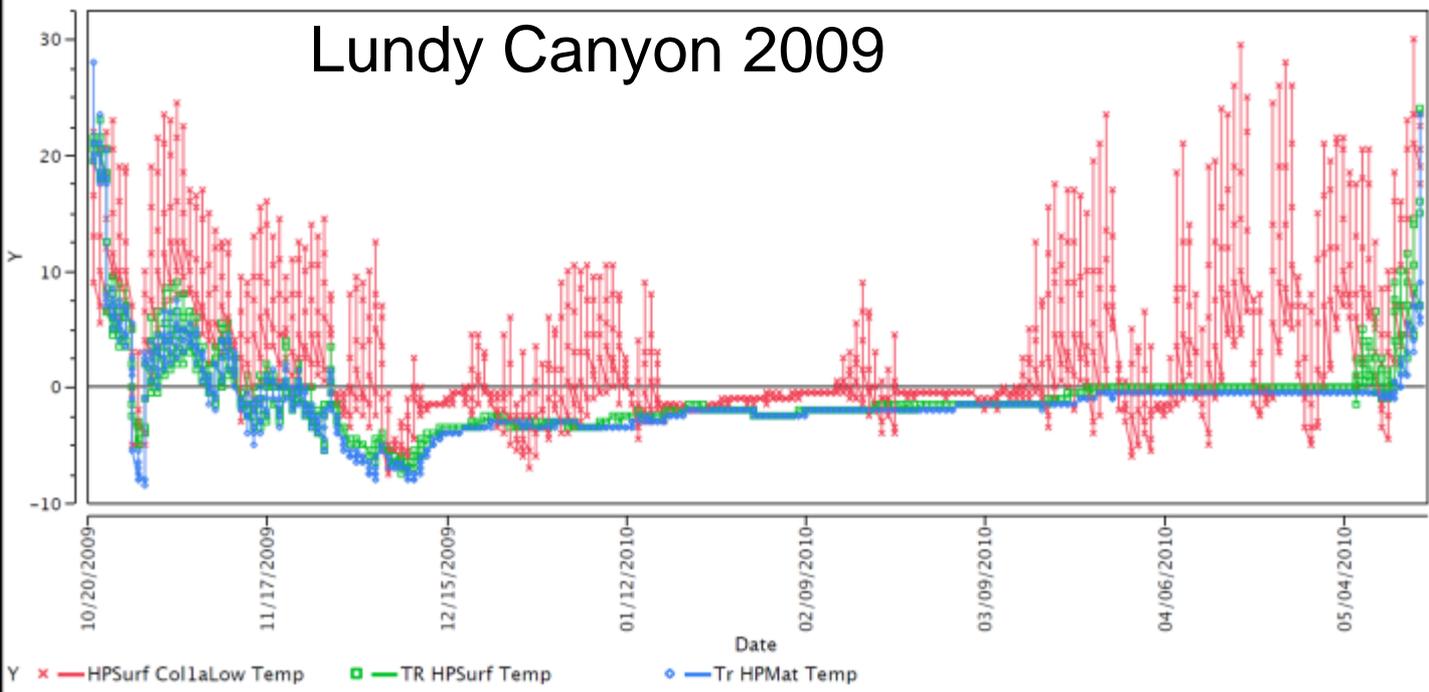
# Micro-Scale Processes Important: Talus Thermal Dynamics

- Interior talus colder than surface
- Summer/winter processes
- Internal ventilation; lower is cooler
- Groundwater storage & seepage



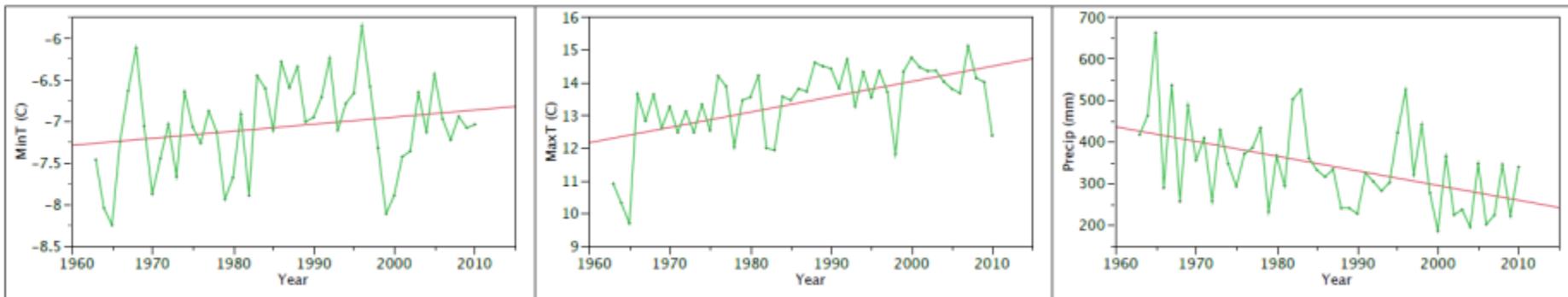


# Lundy Canyon 2009



Haypile  
Temps,  
Winter

# Bodie, CA Max- and Min Temps; Precip



## BODIE, CALIFORNIA (040943)

8370'

### Monthly Climate Summary

Period of Record : 2/ 1/1895 to 7/31/2010

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (F)	39	40	43	49	60	69	77	76	69	59	48	40	56
Average Min. Temperature (F)	6	8	12	18	25	31	35	33	27	20	13	7	19
Average Total Precipitation (in.)	2	2	1	1	1	1	1	1	1	1	1	2	13
Average Total SnowFall (in.)	21	16	15	8	4	1	0	0	1	3	10	18	97
Average Snow Depth (in.)	15	20	19	10	1	0	0	0	0	0	2	8	6

## ELLERY LAKE, CALIFORNIA (042756)

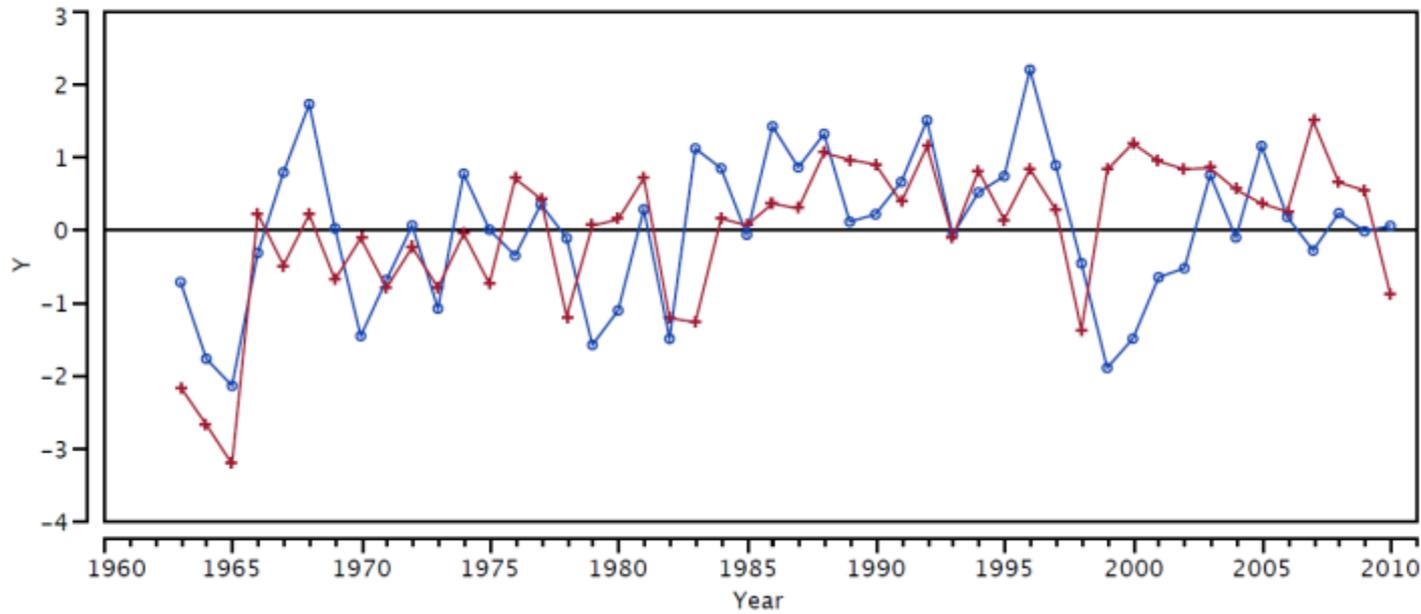
9645'

Period of Record : 11/1/1924 to 9/30/2009

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (F)	35	36	40	44	50	58	68	67	60	50	42	37	49
Average Min. Temperature (F)	11	11	14	19	26	34	42	42	35	28	20	14	25
Average Total Precipitation (in.)	4	4	3	2	1	1	1	1	1	1	3	4	25
Average Total SnowFall (in.)	38	44	35	22	6	3	0	0	1	8	17	41	214
Average Snow Depth (in.)	40	57	59	51	24	5	0	0	0	1	8	20	22

Data Table=Bodie climate data

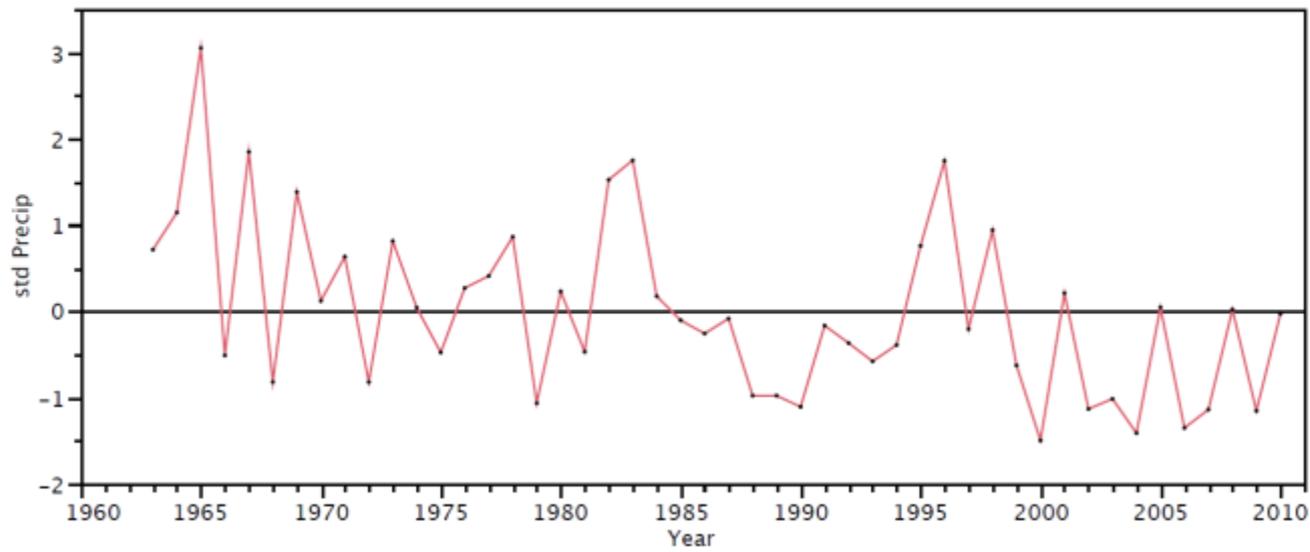
### Overlay Plot



Y ○ — std MinT + — std MaxT

Data Table=Bodie climate data

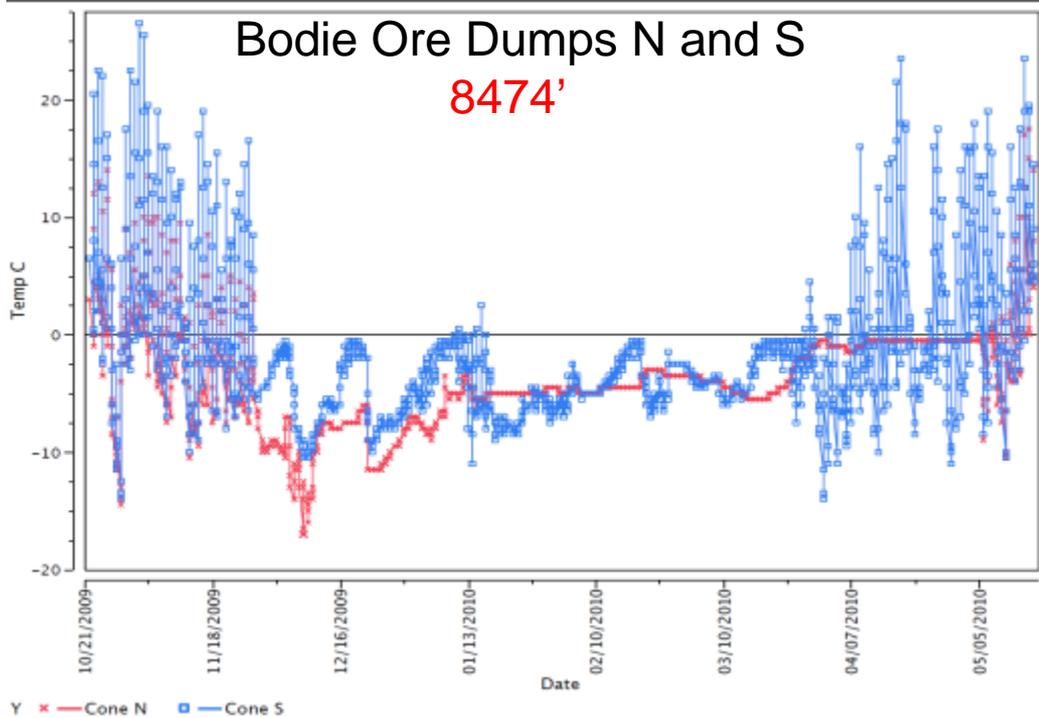
### Overlay Plot



Bodie Trends in  
Max- and Min  
Temps and  
Precip

# Bodie Ore Dumps N and S

8474'

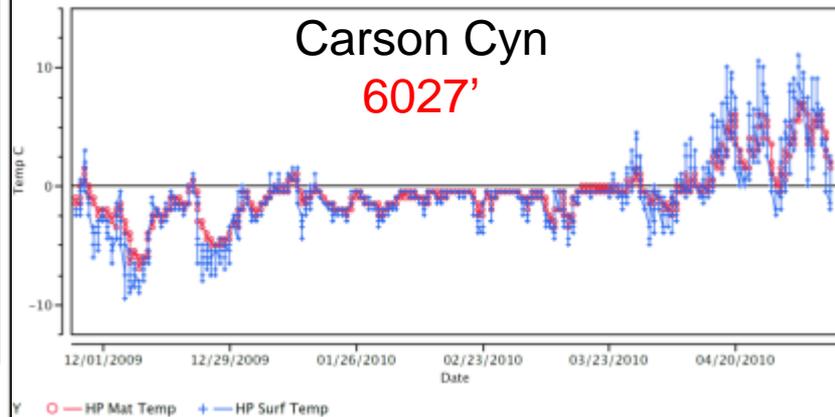


Y x Cone N    □ Cone S

# Winter Temperatures, Pika Haypile Sites, 2010

## Carson Cyn

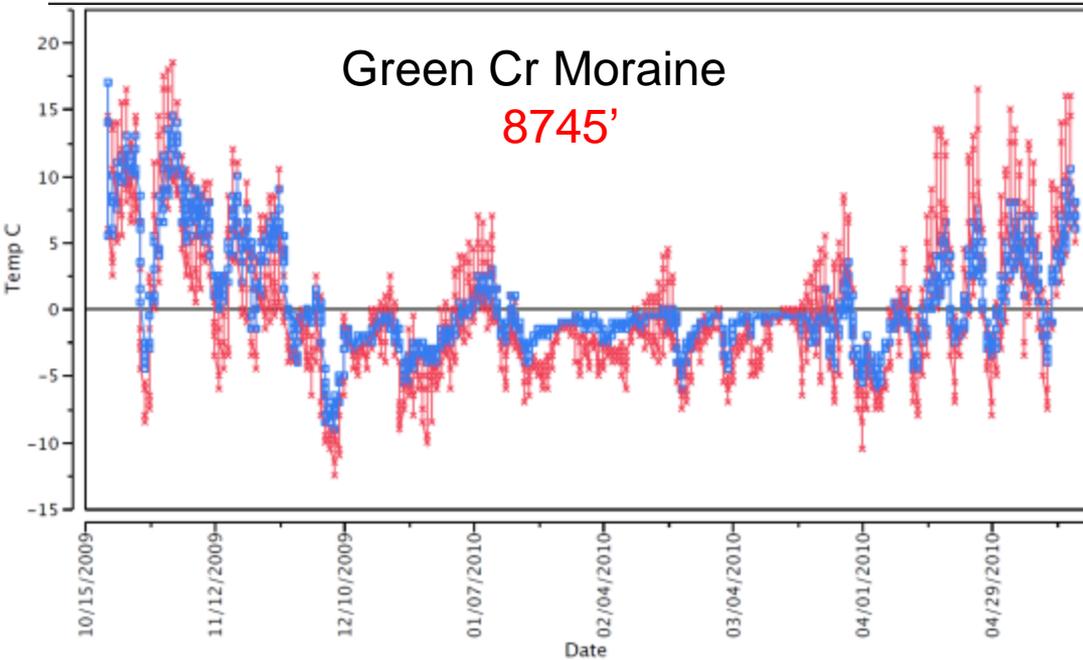
6027'



Y ○ HP Mat Temp    + HP Surf Temp

# Green Cr Moraine

8745'

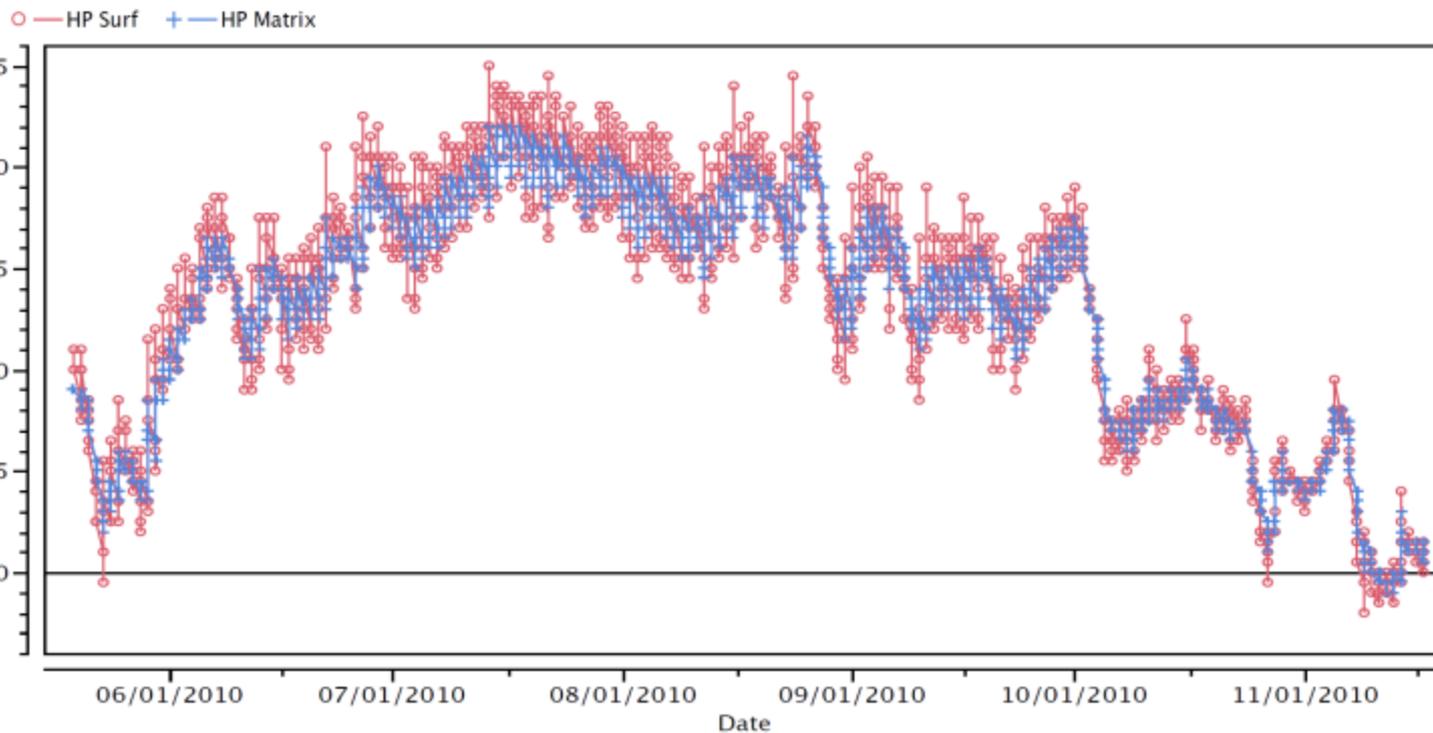
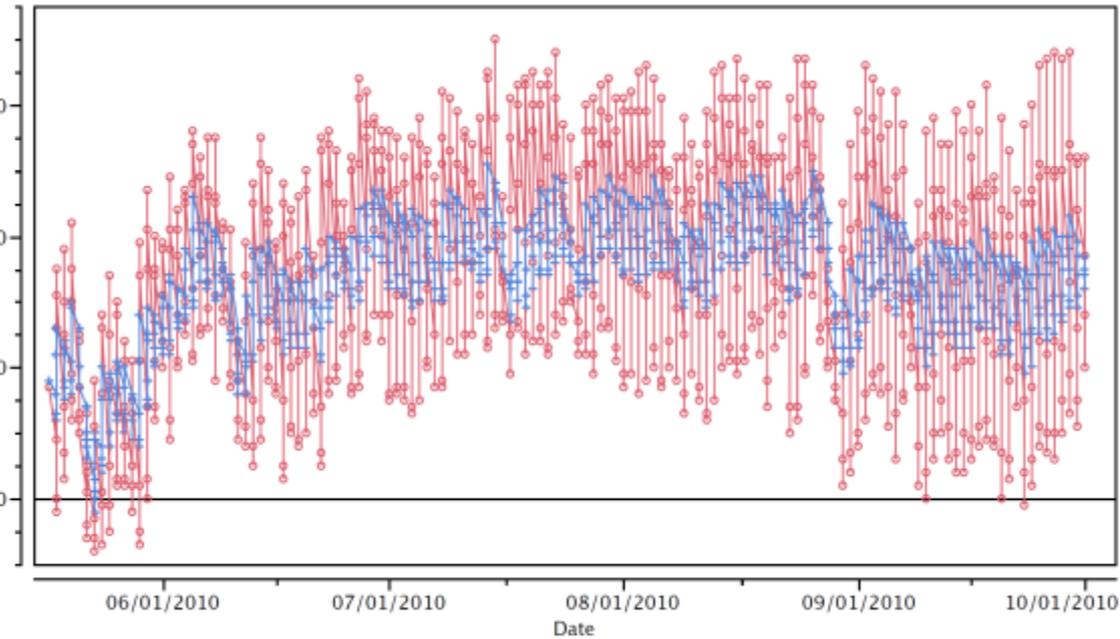


Y x HPSurf Temp    □ HPMatrix Temp



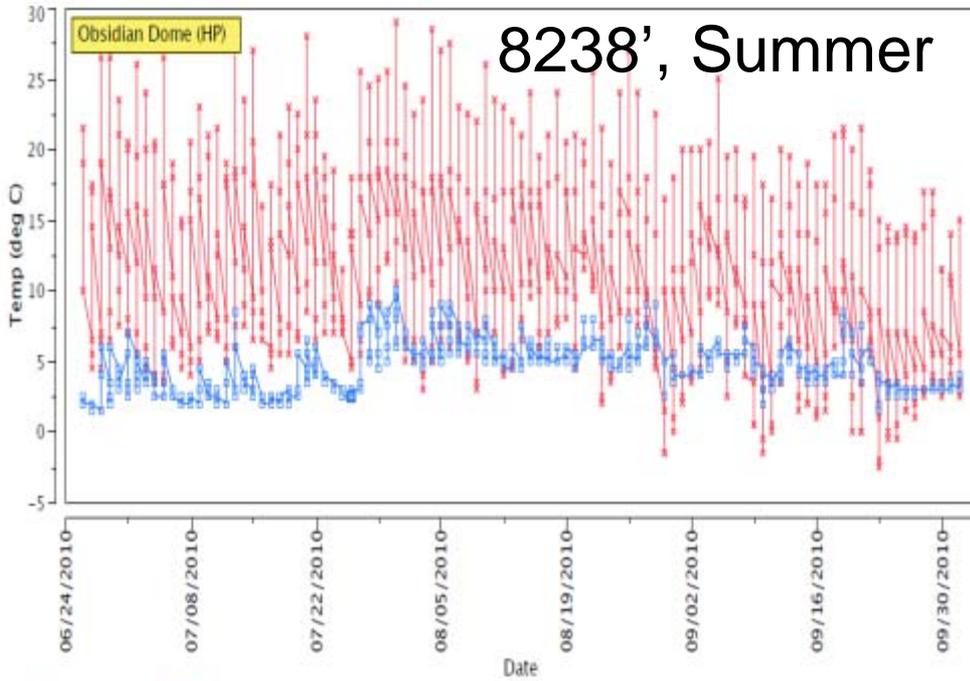
Bodie HP  
Extirpated site?  
SR 270  
Summer, 2010  
7226'

6027'; Winter



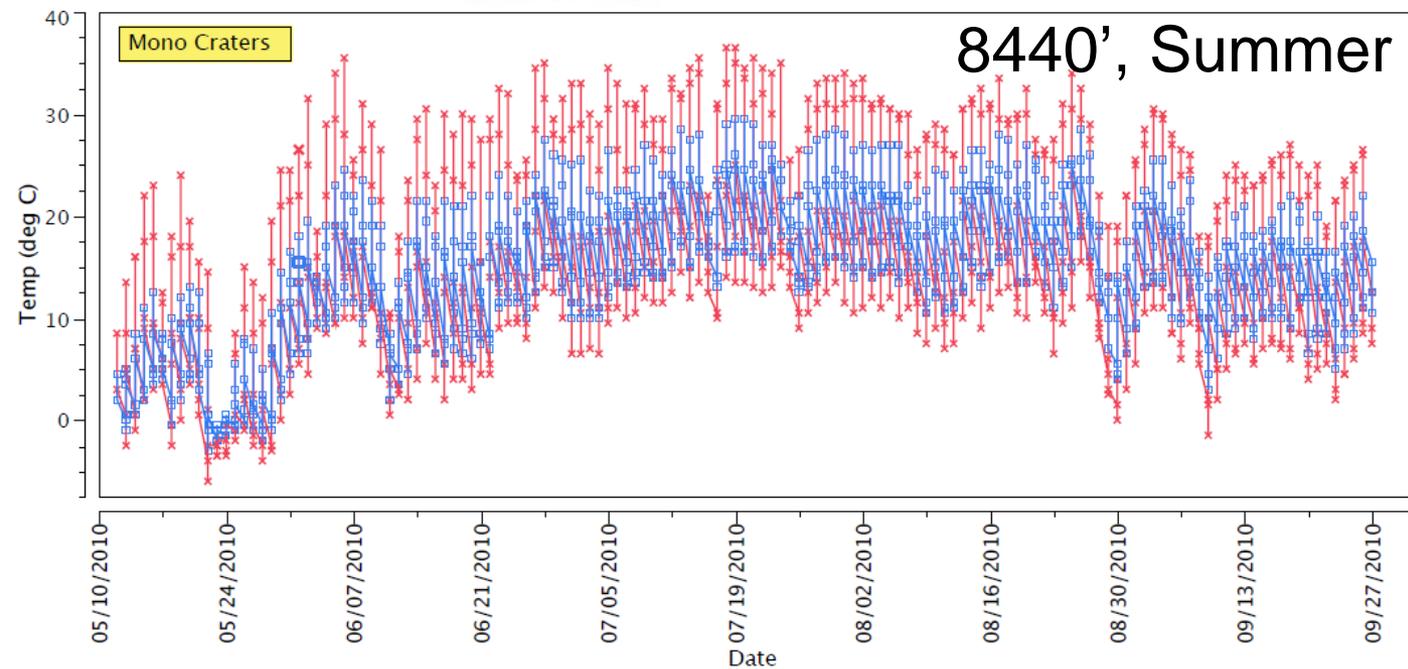
Carson Cyn  
HP  
Summer, 2010  
6027

○ — Carson HP Surf + — Carson HP Matrix



Haypiles  
Summer 2010

**Mono-Inyo  
Craters**



# Relationship of Grazing and Haypile Location

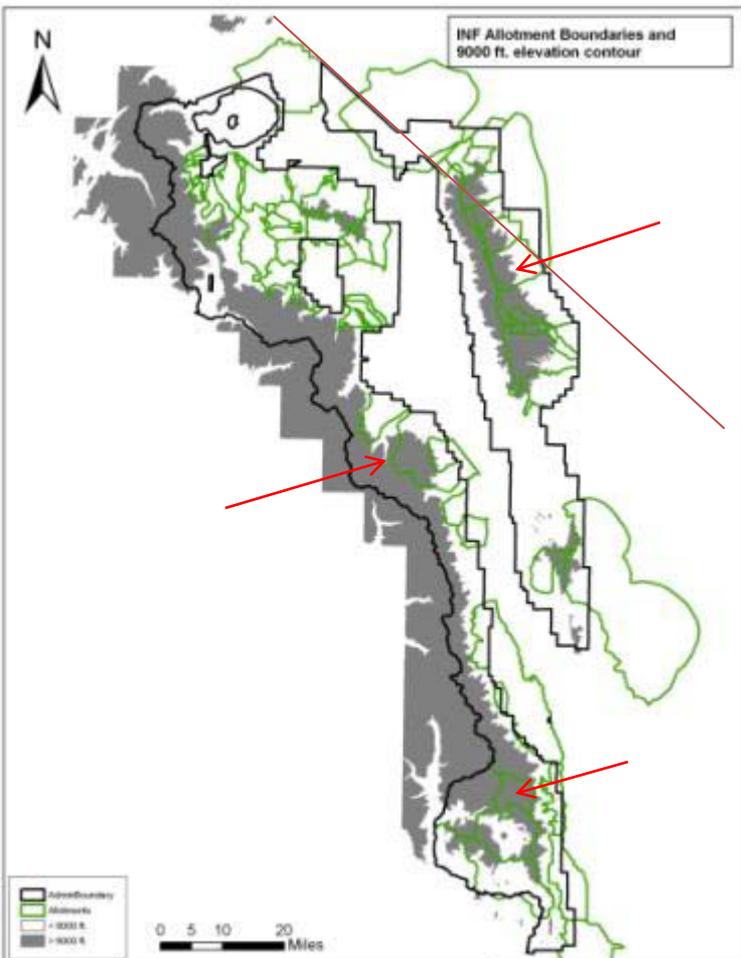
35 Areas, 85 Haypiles (only 1 sheep; other cattle)

Mountain Range	State	N Sampling Areas	Elev Range (m)	N Haypiles	Mean (& SD) distance haypile to talus edge (m)	Haypile source T or FF
<b><u>Grazed</u></b>						
Sierra Nevada	CA	4	2835-2940	6	11.7 (3.0)	FF
Sweetwater	CA	3	3080-3510	5	51.8 (23.1)	T
Toiyabe	NV	1	2985-3000	3	28.0 (4.4)	T
Toquima	NV	4	3140-3430	10	32.5 (15.1)	T
White Mtns	CA, NV	2	2490-3020	3	23.0 (13.7)	T
<b>Total Grazed</b>		<b>14</b>		<b>27</b>	<b>30.1 (18.9)</b>	
<b><u>Ungrazed</u></b>						
Bodie Hills	CA	2	2520-2680	9	1.8 (0.7)	FF
Sierra Nevada	CA	7	2800-3290	21	2.4 (0.5)	FF
Sweetwater	CA	3	3100-3290	3	3.1 (1.1)	FF
Wassuk	NV	5	3000-3390	12	1.5 (1.1)	FF
White Mtns	CA, NV	5	3025-3525	12	1.4 (0.9)	FF
<b>Total Ungrazed</b>		<b>21</b>		<b>57</b>	<b>1.8 (0.9)</b>	

Locations included, SN: Burt Cyn, Molybdenite Cyn, Green Cr Cyn, Virginia Cyn; Sweetwater: Belfort, Frying Pan Cyn, Mt Wheeler, Mt Patterson, Lobdell Lake; Toiyabe: N and S Fks Twin River Cyn; Toquima: S and Mid Fks Pine Cr, Mt Jefferson Plateau; White Mtns: Crooked Cr Cyn, Wyman Cyn, Mt Barcroft, Cottonwood Cyn, Trail Cyn; Bodie Hills: Bodie State Historic Park, Masonic; Wassuk: Cottonwood Cyns, Dutch Cr Cyn, Rose Cr Cyn, Big Indian Mtn.

*In review,  
WNAN*

Humboldt Toiyabe NF administers much high-elevation terrain in NV; widespread active allotments



Inyo NF active allotments >9000' are only in E White Mtns, and Wheeler Crest, Kern Plateau (SN)

Might widespread livestock grazing in the GB influence pika status there?  
→ More work (exclosures, surveys)