2024-25 Annual Report



Shasta/Trinity National Forest MOUNT SHASTA AVALANCHE CENTER





Summit Sponsors























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The US Forest Service Mount Shasta Avalanche Center is proud to have safely completed its 26th season of operation. The center is unique amongst others, involving standard daily avalanche forecasts, in addition to climbing condition reports, developed recreation management, OSV motorized snow patrols and search and rescue operations. During the season, the candle burns at both ends for employees and this year was no exception. The new administration and drastic changes that took place within the agency made things extra difficult. While we were fortunate to maintain normal operations and not lose any employees, the mental impacts to work life could be felt.

The MSAC crew returned in full: Nick Meyers as MSAC Director and Mt Shasta Wilderness and Climbing Program Manager, and Sam Clairmont, Cory Beattie and Eric Falconer as forecasters and climbing rangers. Each of these fine humans brings something different to the table. This is a newer team, but with several years under the belt now, the tree roots are digging deeper and branches growing wider. We prioritize a foundation of caring for each other, and striving for excellence. There are always strikes and gutters, but through open communication, respect and trust, we get through anything. Proud we stand as employees of a small avalanche center with big heart!

Though our mental spirit was low due to agency woes, we maintained smiles with the help of Mother Nature providing an above average winter to the forecast area. On April 1st, our snow depth sensor near treeline on the mountain boasted 180 inches of snow on the ground. Unfortunately for several stints this winter, the Everitt Memorial Highway (EMH), our local winter access to the mountain, was closed. Castle Lake road was closed for most of the winter. The people were not happy. Both of these access roads are crucial to the economy of the area. Nonetheless, access to Bunny Flat was open for a decent bit of the season and as always, provided some world class winter recreation.



Snowpack & Avalanches

It all started on November 19th and came in like a lion. A strong atmospheric river event brought ~65 inches of snow over a seven day period to the mountains of the forecast area. On the fourth day of the storm, a large wet slide occurred in Avalanche Gulch and was registered on seismic data. Mind you, there was no snow on the ground prior to this avalanche. The avalanche center was not open yet. The slide mimicked the big Presidents Day and Valentine's Day slides and while was not as large, still came down below treeline in the historic Avalanche Gulch slide path. It felt like it was game on for winter and this storm set us up very well for storms that lay ahead. Sliders and riders were pumped!





Large early season avalanche that occurred in late November, Avalanche Gulch, Mount Shasta

Of course, high pressure set in after the late November walloping. It wasn't until mid-December that the storm track decided to kick back in. Beginning December 11th, a three punch storm series delivered 2 - 3 feet of fresh snow over a five day stint. Consistent snowfall occurred for the remainder of the month, ushering in a white Christmas and New year. By the end of 2024, we had 90 inches of snow on the ground at treeline on Mount Shasta. The new year brought warm temps with freezing levels rising to nearly 10,000 feet. Another foot of snow fell on January 3rd. Then, in classic California style, a nearly month long dry spell commenced. You read it right...not a lick of precipitation fell upon the area for just about the entire month of January.



Tensions were finally eased on the last day of January when a big fat storm finally entered the chat. Over a 5 day period, ~60 inches of snow fell. As the snow piled up, we suspected something big loomed. On February 3rd, our cohorts at USGS sent an email: "I'm sure it's no surprise, but just thought I'd drop a note that we saw seismic evidence of some avalanches in the last day at Shasta. Mid-afternoon (2:30 pm local?) on the west side somewhere, then late evening (8:00 pm) yesterday more likely on the south side. Maybe even another small one just now (9:30 am) on the south side also."



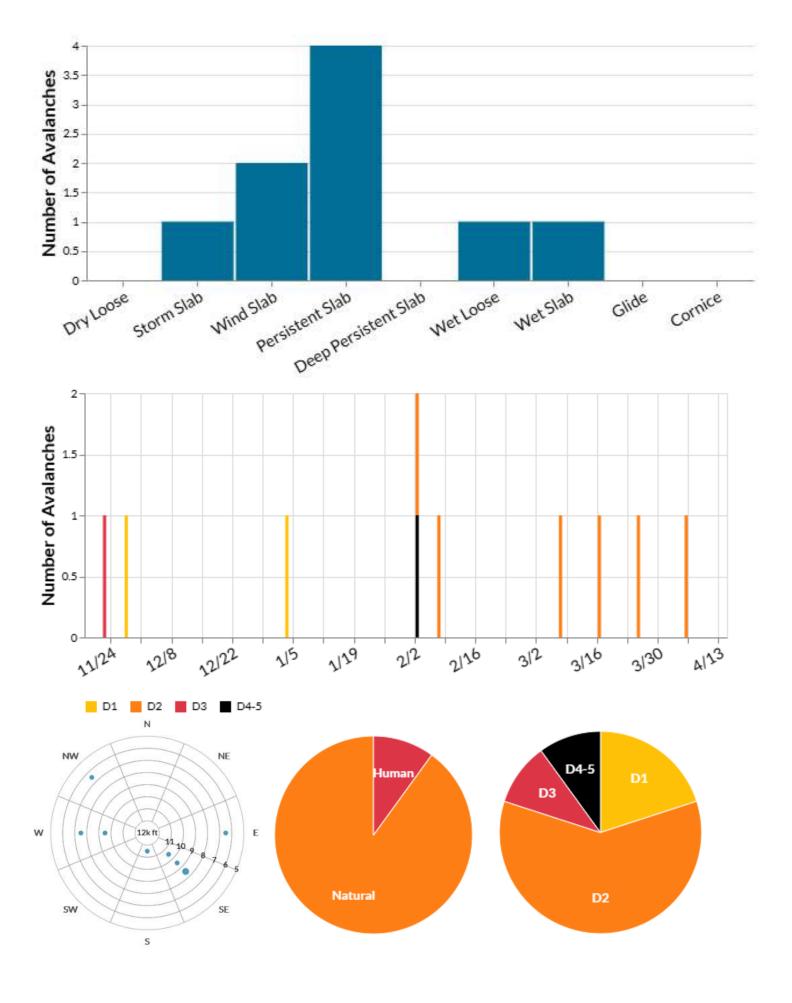
February 5th was deep and epic. The remainder of the month brought on again, off again snow. The end of February was warm, with Mt Shasta City setting a record for the warmest temp for the day, February 27th. March hosted variable conditions, mixed with snow and nice weather.



We had two persistent weak layers that produced avalanches this winter. One of those included buried surface hoar in the Eddies, as well as a graupel layer that produced avalanches on Gray Butte, and a wet slab sliding on the same layer in Powder Bowl.







MT. SHASTA AREA SNOW SURVEY RESULTS AS OF April 6, 2025

Sacramento, Shasta and Trinity Watersheds*

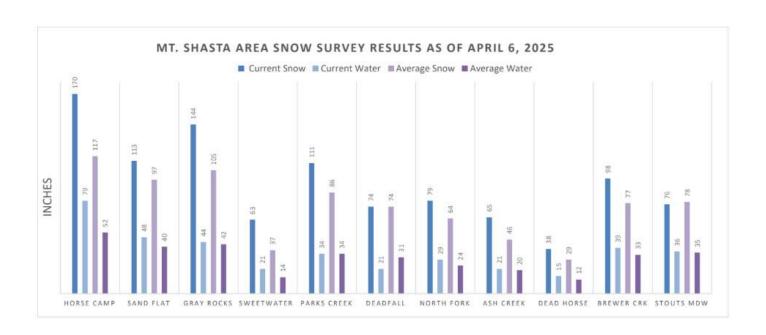
Course	Elevation(t)	Last Month Snow(in)	2025 Snow(in)	2025 Water(in)	2024 Snow(in)	2024 Water(in)	Hist. Average Snow(in)	Hist. Average Water(in)
Horse Camp	7900	100	170	79	92	27.3	117	52
Sand Flat	6800	104	113	48	100	32	97	40
Gray Rocks	6200	N/S	144	44	130	52.5	105	42
Sweetwater	5850	52	63	21	38	12	37	14
Parks Creek	6700	102	111	34	75	26	86	34
North Fork Sac	6900	N/S	79	29	72	29.6	64	24
Deadfall Lakes	7200	73	74	21	77.9	31.4	74	31
Averages of Co	urses Sampled		2025 Snow(in) 108	2025 Water(in) 39.4	2024 Snow(in) 83.56	2024 Water(in) 30.1	Hist. Average Snow(in) 82.9	Hist. Average Water(in) 33.9
	of Historic Average		130	116	101	89	1	55.5

N/S = Not Sampled

Similar Years 1999, 2004, 2019

McCloud Watershed*

Averages of Co	urses Sampled of Historic Average		120	27.8	119	30.1	57.5	25.0
			2025 Snow(in)	2025 Water(in)	2024 Snow(in)	2024 Water(in)	Hist. Average Snow(in)	Hist. Average Water(in)
Ash Creek Dead Horse	5000 4500	N/S N/S	65 38	21 15	65.2 40.1	29.6 15.9	46 29	20 12
Brewer Creek Stouts Meadow	6250 5400	83 57	98 76	39 36	96.8 72	43 32	77 78	33 35
Course	Elevation(ft)	Last Month Snow(in)	2025 Snow(in)	2025 Water(in)	2024 Snow(in)	2024 Water(in)	Hist, Average Snow(in)	Hist. Average Water(in)



Rescues

Winter rescues are not common and we typically see the lion share of search and rescue incidents during the spring, summer and fall months. This season however, we had two rescues over the winter, one of the unique, and making national news headlines.

A Social Media Success: Shasta-Trinity National Forest Climbing Rangers Rescue Unexpected Mount Shasta Visitor

The Story

When the Goose Rescue story was proposed during my weekly social media team meeting, it had first appeared on our partner organization's Instagram. I contacted my colleagues who were featured to request their permission for publication.

The team was hesitant to share their story due to some negative reactions, but we urged them to reconsider, stating that it was "PR gold."

The rangers agreed to send over a brief summary what they had recorded of the day with the condition they be able to review the finished product. Since they had taken

both photos and a short video, we decided this could be a opportunity to experiment. The video was published on X and both mediums were published with nearly identical text on Facebook simultaneously. The Facebook pieces gained immediate attention, possibly due to timing.

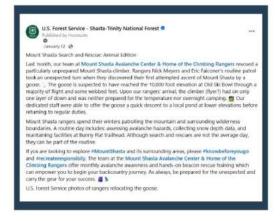
Weekdays received the best engagement on the Forest's socials, especially for educational articles. However, Sundays performed well when featuring uplifting narratives.



Considering our followers' demographics and the pleasant weather forecast, the post was scheduled for 6 PM, a time when people are finishing outdoor activities, having dinner, and relaxing.



The posts
received
immediate
attention, which
caused the
media to take
interest...



A Social Media Success: Shasta-Trinity National Forest Climbing Rangers Rescue Unexpected Mount Shasta Visitor

The Reception

Several news outlets, both local and international, reached out for more information and to request interviews. Our climbing rangers are well-versed in interacting with the media, as their roles frequently involve responding to natural disasters and search and rescue operations. They were able to conduct interviews without extensive coaching, which allowed for quick turnaround and minimal oversight.

Record Searchlight

Action News Now

Active Norcal

CBS News

Fox40

MSN

UPI

KOBI5

KPIC4

KTVZ21

SFGATE

Yahoo News (UK)

The Sacramento Bee

Unofficial Networks

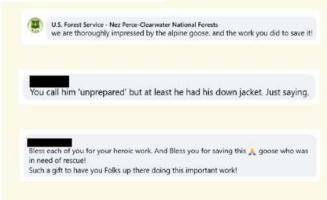
The 15 second clip was collectively watched over nine hours on Facebook and X.

Most mass media agencies regarded the piece as a straightforward, feel-good story which allowed for swift distribution. The Facebook post became the Forest's leading January article and ranks among our top five communication efforts in the last year.



The two posts reached around 170,000 viewers, with over 1,700 interactions.





Our second rescue occurred on Friday, March 7th, at approximately 6:17 p.m., when the Siskiyou County Sheriff's Office Dispatch Team received a call from a skier that had injured his leg in a skiing accident at approximately 10,000 feet on Mount Shasta.

The reporting party, a 39-year-old male, was an experienced backcountry skier from Canada and had spent the prior two days summiting and exploring the mountain. During his final descent through Avalanche Gulch Friday evening, he crashed and sustained a serious injury to his lower leg. Unable to move, the skier, who had been traveling solo, managed to call 911, prompting a rescue effort.

The Siskiyou County Search and Rescue Team (SAR) and Mount Shasta Climbing Rangers were mobilized to respond to the Bunny Flat parking lot from which they launched a series of hasty teams, including skiers, a snowmobiler team, and a snowshoe team. When rescuers reached the injured skier, they determined that he had suffered a broken tibia/fibula but was in otherwise stable enough condition to be skied down the mountain in a litter. At approximately 10:32 p.m., the Climbing Rangers and SAR team arrived back at Bunny Flat with the skier and delivered him to an awaiting ambulance.



This incident underscores a few important reminders about backcountry travel, particularly in wintertime:

First, avoid skiing, climbing, snowmobiling, or even hiking alone, especially in high consequence terrain such as the upper elevations of Mount Shasta. Having a trusted partner with you in the backcountry is critical to making sure someone can call for help, render first aid, and provide feedback regarding the potential hazards of your route.

Second, always wrap up your outdoor recreation activities when there is still plenty of daylight to hike or ski out of the backcountry. Nighttime not only makes snow travel and navigation more difficult, but it can complicate or delay rescue efforts. For instance, the skier in this incident did not begin his decent until twilight, so by the time his accident occurred, a swift air rescue was no longer possible.

Third, always check the avalanche forecast and snow conditions for the area in which you plan to recreate. Although this skier's injuries were not caused by an avalanche, that critical information should always factor into your wintertime trip planning and route-finding. Ensuring that your group is carrying avalanche beacons, probes, and shovels is a must if you plan to travel through avalanche terrain.

Education

The Mount Shasta Avalanche Center delivered 26 avalanche presentations this season, reaching over 500 people throughout northern California and southern Oregon. Offered to all public, the MSAC provided free avalanche awareness and companion rescue clinics the first Saturday and Sunday of December, January, February, and March.

Event	Date	Location	Staff	# of Attendees	Season Total
KBYG	12/04	Virtual - school group	Casey	25	500
KBYG	12/04	Virtual - school group	Casey	23	
KBYG	12/6	Golden Eagle	Casey	5	
Comp Rescue	12/06	Golden Eagle (SnowMan Hill)	Sam, Cory	5	
KBYG	12/07	Thrive Bar	Casey, Cory, Sam, Eric	25	
Comp Rescue	12/08	Sisson Ballfields	Casey, Eric	10	
KBYG	01/04	Deadwood	Casey, Cory	25	
Comp Rescue	01/05	Bunny Flat	Casey, Eric	12	
Snow Class	01/21	Bunny Flat	Casey, Eric	25	

Snow Class	01/23	Nordic Center	Sam	25
KBYG	02/01	Deadwood	Casey	35
Comp Rescue	02/02	Bunny Flat	Eric, Cory	5
Snow Class	02/06	Nordic Center	Sam	25
Moto Class	02/08	Deer Mountain	Casey, Cory	3
KBYG	02/11	Redding Sports LTD	Casey	40
Snow Class	02/12	Nordic Center	Sam	25
Snow Class	02/13	Nordic Center	Sam	25
KNF SnowMo Class	02/19	4-Corners SnowMo Park	Casey, Sam	22
KBYG and Movie Night	02/22	Grange - Callahan	Sam, Cory, Eric	20
Snow Class	02/27	Nordic Center	Eric	19
Avy Safety - AmeriCore	02/27	Bunny Flat	Sam	12
Field Rescue 0 Golden Eagle Class	02/28	Bunny Flat	Casey, Cory, Sam	9
KBYG	03/01	Deadwood	Casey	22
Comp Rescue	03/02	Bunny Flat	Casey, Eric	3
Youth Seminar	03/09	Mountain Medics/Bunny Flat	Casey, Nick, Cory	20

Spring Kickoff Event	03/27	Virtual - school group	Nick, Casey	35	

Website/Social Media/Email

Number of MSAC Avalanche Advisories: 133

Number of Active Users: 25,000Total Number of Sessions: 72,000

• Views: 133,000

Social Media / Email

Number of Facebook Followers: 9,614
Number of Instagram Followers: 9,436
Number of Advisory Email Subscribers:

• Total of Advisory Emails Sent:

Education

• Number of People Reached: 500+

• Number of Avalanche Presentations Delivered: 26

Avalanches 2024-25 Season

Number of U.S. avalanche fatalities: 22

Number of fatalities in the MSAC Forecast Area: 0

Number of people caught in avalanches in the MSAC Forecast Area: 0

Friends of the Mount Shasta Avalanche Center

The Friends group is a nonprofit group that was created in 2002 and is an essential component of the avalanche center. The Friends fund and operate the MSAC website and all our remote weather stations. They also organize all fundraising events, as well as organizing and running the education and outreach components of the avalanche center.

FMSAC is a volunteer group with one paid position, the Executive Director, Casey Glaubman. FMSAC board members include the president Hanne Meyers, Clayton Coles, Sean Malee, Dave Brown, Stacia Anderson, Cody Markelz and Justi Hansen.

The group represents the soul of adventure and passion for backcountry mountain recreation in the greater Mount Shasta area. We extend a huge thank you for all their effort and support this season.

This season, the FMSAC put on a Giving Tuesday party, two movie nights, the ever popular Snow Ball bash, the Mt. Shasta Ascension Backcountry Ski Race and a community appreciation party at the end of the season.



Snowpack and Weather History Log 2024/25

This is our internal, daily avalanche, snow, and weather log. We don't typically share it, but thought we would include it in the report this year for anyone interested. You can count on misspellings, typos, poor punctuation and other non-standard notation!

Nov 19th - **Incoming atmospheric river**. Snow began to fall around 10am, continuing into the night. Mount Shasta and the Eddy's picked up 15 inches of new snow. Temperatures stayed below freezing, with SE-S-SW winds blowing at light to moderate speeds. OSB picked up about 4 inches of snow.

Nov 20th - **Storm event.** Heavy snowfall at all elevations. OSB picked up 30 inches of new snow. The Eddy's picked up 19 inches. Moderate to strong SE-S-SW winds, with extreme gusts. Temperatures stayed in the high teens to mid-twenties. EMH and Castle Lake roads snowed in. No mountain access.

Nov 21st - **Storm event.** Both OSB and the Eddy's picked up 7 inches of new snow. Temperatures increased to above freezing levels, causing a **rain on snow event** for elevations below 7,500 feet. Winds blew at moderate to strong speeds out of the S-SW. EMH and Castle Lake roads remain closed. No avalanches observed yet!

- Nov 22nd **Storm event.** Wet slide in Avalanche Gulch. (Estimate to have occurred on this date). The storm is tapering off and rain is falling at mid and lower elevations. Partial patches of sunny, clear weather were sporadic throughout the day. Mountain temperatures rose to above freezing levels. Winds blew at moderate to strong speeds out of the S-SW-W. Five inches of snowpack settlement at OSB. Rain melted most snow at lower elevations. EMH and Castle Lake roads are still closed. Incoming storm Sunday/Monday.
- Nov 23 Temperatures below freezing. Trace snow accumulation. M G S WSW wind.
- Nov 24 Temperatures below freezing. HN24: 2 inches. M G S south wind.
- Nov 25 Temperatures below freezing. HN24: 11 inches. L G S SW wind.
- Nov 26 Temperatures below freezing. No new snow. L G M WNW wind.
- Nov 27 Temperatures below freezing. M G S ENE wind.
- Nov 28 Temperatures 30-40° F. L G M ENE wind becoming WNW.
- Nov 29 High pressure. Warming trend continues, with freezing levels as high as 11k. Calm to light wind
- Nov 30 High pressure and valley inversion up to 7,000 feet. Warming trend maintaining. Freezing level at 11,400 feet. Calm NW wind.
- Dec 1 High pressure and valley inversion up to 7,000 feet. Partly cloudy. Warming trend maintaining. Freezing level at 11,400 feet. Calm NW wind.
- Dec 2 High pressure continues, with valley inversions. Freezing levels around 10k. 10 cm of wet/damp snow surfaces on steep southerly aspects near and above. High Cirrus clouds aloft.Calm NE winds.
- Dec 3 High pressure continues, with clear skies and light gusting moderate east winds. Freezing levels hanging around 10k or so. South aspect snow surfaces above 7k remain wet. No natural or human triggered wet loose avalanches observed.
- Dec 4 More of the same, sunny and clear, cold valley inversions, warm mid and upper mtn temps,. Snow on the ground: OSB-55"/Castle-36"/Eddy-39" Everitt and Castle roads still closed. Snowmobile access via 31 road and power lines good.
- Dec 5 High pressure continues. Slightly cooler temps from previous few days. Valley inversions were slightly lighter as well/ Freezing level climbed to 11k. Calm wind, clear skies.
- Dec 6 High pressure. Sunny skies. Slightly cooler temperatures then day before. Freezing level around 10k. Calm wind.
- Dec 7 Overcast skies. Mountain high temperatures in the upper 30s to mid 40s. NW wind. Wet snow surfaces on the east side up to 7,500 feet on all aspects. Dense, dry snow on N, NE, and E aspects above 7,500 feet. 109 cm at ACB Bowl Station (7,200 feet); 60 cm at 5,600 feet on 19 road.
- Dec 8 Clear skies on the mountain with lingering low clouds in valleys. Northerly wind. Snow surface undergoing diurnal melt freeze cycle below and near the treeline-crusts becoming stout. Still finding dry snow beneath the surface crust down to 5,000 feet.

- Dec 9 Clear and stable weather persists with calm winds. Melt freeze crust found on all aspects, being most pronounced on southerly aspects. Still finding dry snow beneath the surface crust down to 5,000 feet.
- Dec 10 Sunny and clear, wintry weather expected tomorrow after a long dry spell since late November storm. Existing surfaces firm and crusty. Snow depths at OSB/Castle/Eddy: 51/34/37
- Dec 11 Increasing clouds, incoming storm. 2-4 inches overnight. Mellow wind. Were sitting on the front end of a 3 punch storm series, the second round fri/sat will be biggest hit. Feet of snow likely by end of weekend. Very strong wind expected tomorrow. New snow resting on old, crusty surfaces. Roads still closed. Vans off the hill though yesterday.
- Dec 12 Cold, snowy, obscured skies. 2 inches of fresh snow in town. 4-5 inches of snow at 8k. Calm winds with minimal effect on snow surfaces. Skies cleared for about 30 minutes midday for the upper mountain, before obscuring once again. On and off precipitation through teh day
- Dec 13 Heavy snow. Wind increased throughout the day, moderate-strong out of the southwest. Forecast calling for 3 inches of water in the next 30 hrs.
- Dec 14 As of 7 am, 24 inches of new snow at OSB. 2.5 inches of water at MSC.
- Dec 15 Morning snowfall tapered off and skies cleared in the afternoon as southwest wind became northwest. Snow level 4,100 feet. 72 hour storm total 20 to 27 inches.
- Dec 16 Clear then mostly cloudy. Increasing wind speeds as direction shifted from NW to SW. increasing stability below and near the treeline. Stubborn results in CT, ECT, and PST at 7,000 feet on the Southside of Mount Shasta. Though healing well, the current layer of concern is approx. 45 to 65 cm down from the surface.
- Dec 17 Another quick hitting storm delivered 3 7 inches of snow, with moderate to strong SW winds near and above treeline. North and east aspects hold deepest drifts. Stability tests were unremarkable on a NE aspect near treeline. Snowpack is settling no alarming instabilities have have been observed.
- Dec 18 Semi stormy day. No additional precip. Low clouds and valley fog. Moderate to strong W-NW winds. Wind loaded slopes on N-E-S aspects being most pronounced on all N-E aspects. Storm snow/slab problem gone.
- Dec 19 Warm and still. Valley temperature inversion in the morning. GB recorded 46 degrees F at 1 pm. Clouds built and winds increased in the afternoon. In the evening, wind shifted to the south
- Dec 20 Overcast. Windy, especially above treeline. Storm approaching but no precipitation through the 24 hrs. Wind primarily out of the south.
- Dec 21 Obscured skies. Moderate to strong southerly wind. Active snowfall throughout the day totaling 6 to 8 inches near treeline. Snow level 5,000 feet. Small skier-triggered dry loose avalanche on NW aspect of Gray Butte near 7,000 feet.
- Dec 22 Pea soup and rain up to 8,000 feet. No signs of instability. No snow available for transport BTL or NTL. Reports of AST ATL. Southwest to west and occasionally NW wind. EMH re-opened to vehicle traffic.
- Dec 23 An inch of new snow at OSB. Incoming storm tonight. Weather and conditions were nasty. Rain crust up to 9k, with variable surfaces above. Heavy wind effect on the upper mountain. Blowing snow from south-southeast winds, most being sublimated. Overcast skies with above freezing temperatures.

- Dec 24 Overnight storm delivered 3-5 inches of new snow below treeline and 5-8 above. Temps were below freezing and ski cover was variable. Overnight, winds had affected many surfaces and formed drifts and wind deposits on leeward terrain features near and above treeline. Blowing snow was observed throughout the day from west-northwest winds. Wind lips, drifts, and cornices were reactive to snowmobiles, causing small (<D1) avalanches on test slopes. A natural avalanche was observed off Green Butte Ridge into the Old Ski Bowl.
- Dec 25 no precip, incoming storm, pea soup above 9k on mtn, no avy activity, reactive cornices and small slabs from yesterday diminished. Windy, lots of scouring, icy morain tops
- Dec 26 ~6-8 inches of new snow. Moderate-strong westerly wind, with extreme speeds above treeline. Poor visibility. Scoured and icy slopes. Small, hollow wind slabs easy to find in near treeline terrain
- Dec 27 6-8 inches of fresh snow. Mod-strong west wind, shifting SW by end of day. Fluxing cloud cover all day, with moments of blue sky, and moments of dense fog.
- Dec 28 Four inches of wet, new snow at Bunny Flat. Transition to rain up to 7,900 feet by 10:00 AM. Low visibility. Moderate to strong southwest wind BTL and NTL. No red flags other than rapid loading by wind and precipitation.
- Dec 29 Morning snowfall tapered off by midday with intermittent cloud cover. Wind became northwesterly, transporting large amounts of snow above 8,000 feet. HN24= 10-24 CM
- Dec 30 Firm and variable surface conditions were left in wake of previous strong west-southwest winds. Surfaces scoured down to ice exist on windward ridges and moraine tops. Wind board is the primary surface texture. Cloudy skies faded to mostly sunny by the day's end.
- Dec 31 Pre storm day. Soft snow below treeline. Hard/firm snow near and above treeline. Many slick bed surfaces. No old snow available for transport. Temps were cold and below freezing with gnarly wind chill. Overcast sky.
- Jan 1 Happy New Year! Obscured skys on mt shasta. Light precip, less than 1 inch new snow accumulation. Gusty westerly wind. Warm storm on the doorstep, maybe .25 inches of water over next 24 hours. High snow levels, 8-9k ft
- 91 inches of snow at old ski bowl, 65 at eddy and castle lake. Road still closed to Castle
- Jan 2 Wet and soggy. Warm up with freezing level climbing to 9,500 feet. Rain-on-snow for most of the forecast area. Wet-loose avalanches were easy to trigger around the Cliff Lake area. Natural wet-loose (D1.5) witnessed. Wind shifted from west to southwest
- Jan 3 10-12 inches of new snow through the day. Obscured skies in the morning, clearing in the late afternoon. Wind shifted to NW by end of day. Wind slab avalanche reported in Sun Bowl.
- Jan 4 HN24= 3-5 cm. WNW wind. Intentional skier triggered avalanche in Sun Bowl D1R1. Moderate wind transporting small amount of snow. Snow level near 5,000 feet.
- Jan 5 Less than two-tenths of rain overnight. Light to moderate WNW wind. Below and near treeline elevations warmed to above freezing yesterday. Wind slabs bonding well to the rain crust below. Above treeline may harbor isolated wind slabs in extreme terrain. Snow level 7,400 feet.

- Jan 6 Building high pressure. Developing **wet-loose** problem near and below treeline. Small <D1 size human triggered. Five inches of wet surface snow above rain crust. Above treeline, signs of wind slab instabilities are isolated and extremely stubborn. Took **wind slab problem** down. Calm to light east-northeast winds. Stronger speeds up high. Temps reached 38 degrees F.
- Jan 7 Isolated wet-loose snow on steep, southerly aspects. Inversion line settled around 7,000 feet. Above freezing temps over the last 24hrs, with one hour below. Sunny skies grew mostly cloudy by evening. Strong north-east winds above 12k.
- Jan 8 High and dry. Clear skies, mild temps, cooling trend into the weekend. Northerly wind pattern in place. No notable avalanches to speak of so far this season. 90 inches of snow on the ground at OSB. Castle lake road still closed.
- Jan 9 High pressure continues. Max temps for the week, Gay Butte reached 45 degrees F midday. Light wind in variable direction. Small wet loose instability on the most solar aspects at lower elevations
- Jan 10 Changes in weather. Cooling temperatures through the 24 hrs. Building clouds, and 0.02 SWE in the form of rain. North wind, cranking strong-extreme above treeline overnight
- Jan 11 Clear skies, below freezing with extreme northerly winds. Snow sublimation above 11,000 feet. Widespread firm, scoured surfaces. No recent avalanches or signs of instability.
- Jan 12 Clear skies, slightly warmer. NTL and ATL scoured and under extreme wind. BTL slightly warmed with breakable crusts. No recent avalanches or signs of instability.
- Jan 13 Mostly clear skies. Mountain temps peaking into the mid 40s. High elevation winds ripping hard from N-NE, with calm to light speeds at mid and lower elevations. Surfaces mostly hard and variable at all elevations. Softening occurred on solar aspects NTL by 1130
- Jan 14 A tranquil day. High pressure!. Widespread firm and variable surfaces are present. Slide-for-life conditions exist. Pretected, heavily sun-lit slopes offer the best snow quality. Above freezing temps and light E-NE winds.
- Jan 15 High and dry. Went to Rainbow Mtn With Eric and Sam. Icy sheen on snow surfaces, crusts, wind battered. Some soft, corn like snow on sunny slopes. 85 inches at old ski bowl, 60 inches at Castle and Eddy. Castle road still closed. High pressure in the forecast for future. Slide for life conditions and rime ice main hazards. Couldn't buy an avalanche!
- Jan 16 High pressure continued. Clear and sunny. Light wind below 10,000 feet. Moderate WNW wind above 10,500 feet. Very firm surfaces virtually everywhere. No soft snow available for transport.
- Jan 17 High pressure. Cooler temps compared to previous days. Nw wind, light to moderate. No observed wind transported snow.
- Jan 18 High pressure. Moderate northerly wind. Widespread crusts and slide-for-life surfaces above 9,000 feet. BTL and NTL softening by late afternoon.
- Jan 19 High pressure. Moderate NNE wind gusting strong ATL. Widespread crusts and slide-for-life crust above 9,000 feet. Reports of dry, soft snow on northerly aspects (Darin ob).

- Jan 20 High pressure! Slide for life conditions and variable surfaces remain the primary threat. Moderate NNE wind gusting strong ATL.Widespread crusts and slide-for-life crust above 9,000 feet. Sunny and clear weather prevailed.
- Jan 21 High pressure! Stong NE winds aloft moving snow around. Potential for isolated wind slabs. The snowpack is locked up tight near and above treeline on Mount Shasta. Majority of surfaces have not softened. Clear, sunny, and calm weather for the most part, with strong valley inversions.
- Jan 22 High and dry, clear and sunny, temperatures will cool, northerly wind event for the weekend. Slide for life conditions persist. 80 inches at OSB/60" on west side. Gearing up for ascension race and snowball! Ops normal, just need snow! A few climbers on mtn, but no reported summits.
- Jan 23 High pressure. Sunny, and war. Heavy temperature inversion. GB recorded a max temp of 51 degrees F at 2 pm. Light to moderate E trending N wind. No wind transport of snow observed.
- Jan 24 Weather shift. Wind switched north, slowly shifting easterly. Cooler temperatures started entering the region. Partly cloudy. No precip.
- Jan 25 Cold and windy, E/NE strong winds. Mostly clear skies. Faceting snow observed at and near the surface on shaded, northerly, or otherwise protected slopes above 6,000 feet in the Parks Creek and Deadfall Lakes areas.
- Jan 26 Cold and partly sunny. Light to moderate NE wind appeared strong above 12,000 feet. No red flags.
- Jan 27 Stable, sunny weather. Calm to light east winds, stronger above 9k. Mostly firm and variable surfaces at all elevations. The only semi-soft snow found was faceted surface snow in shady location near treeline.
- Jan 28 very nice January weather, with calm NE winds, and temperatures in the mid-40s. Firm surfaces on all but the most southerlies above 8,000 feet. The only semi-soft snow found was faceted surface snow in shady location near treeline.
- Jan 29 second to last day of of nice weather, storm approaching friday, over 4" of water expected from weekend fx period from CNRFC model. Snow levels near 5k. Today, storm approaches. Ice skating has been amazing on Hammonds pond. Strong inversions. 78 inches of snow at OSB, 61 at Castle, 58 at Eddy. Near surface facets are notable, could see widespread avy cycle
- Jan 30 Last day of high pressure. Sunny, warm, light and variable wind. Freezing level climbed to 11k. Variable snow surface condition including firm ice, facets, and solar sun crust. Wide spread natural cycle possible tomorrow.
- Jan 31 Storm day. Snow and mod-strong W/SW wind. Snow level around 4,000 feet, lifting to 5,000 feet by end of day. Storm slab and wind slab instability observed on GB. By the next morning, Castle has recorded 22 in, OSB has 12, Eddy has 11.
- Feb 1 Snow, slightly warmer. High of 32° at Bunny Flat. Mod to Strong WSW wind. Snow level 5,000 feet. Slabs still setting up. Shooting cracks and sloughing in steep tree wells, otherwise no red flags observed.
- Feb 2 Rain up to 6,500 feet. Heavy wet snow above. PWL (facets from the January drought) woke up yesterday in the Crystal Ballroom with a large natural avalanche. Nick observed several large cracks and

collapses in the Eddy's. Eric and I found moderately sensitive propagation in the new snow on the Southside of Mount Shasta: most notably an interface about 20 cms above the old snow (melt-freeze crust)

- Feb 3 The storm continues, with a deluge of new snow, strong southwest winds, and below freezing temps. 20 inchs of new snow at OSB and 15 in the Eddy's. Faceted weak layer contines to result in ustable test results, and interfaces within the strom snow are reactive. Winds have been observed blowing and trasnporting snow near treeline. Red Flags have been observed. **USGS emailed this morning and noted possible large avalanches recorded on seismic stations: "I'm sure it's no surprise, but just thought I'd drop a note that we saw seismic evidence of some avalanches in the last day at Shasta. Mid-afternoon (2:30 pm local?) on the west side somewhere, then and late evening (8:00 pm) yesterday more likely on the south side. Maybe even another small one just now (9:30 am) on the south side also."
- Feb 4 The storm continues. 15" of 25 hr new. A foot in on the ground in Weed. No observed red flags or avalanches. Stability tests are stubborn and trending stable.*take that with a grain of salt. Near and above treeline have not been properly observed since start of storm. Active SW winds trending NW last night. More snow and southwest flow today.
- Feb 5 So DEEP. Eric and Nick sledded to bunny via powerlines. Dug out bunny, Everitt is closed since two days ago. Storm train continues with another foot plus of new snow today/tonight. Yesterday was shit viz. No red flags below treeline, but plenty of loose snow out there. Elevated avalanche hazard, deep snow travel, man eating tree wells exist. Full value winter conditions. Only a trace of new snow in past 24, but another round coming today, winter storm warning in effect. Snow levels near 2k ft. and staying cold.
- Feb 6 5-10 inches new snow in last 24 hrs. SW/W wind shifting to NW. End of storm, looking at 5 or so days of clear weather. Northwesterly wind picking up. Storm total since Jan 31, 65 inches. Visibility and access has been tough, still havn't seen big avalanches that were apparently recorded on seismographs earlier in the week (feb 2 or 3)during high danger. Everitt still closed.
- Feb 7 Storm door closing, clearing sky for next 4-5 days. No red flags, access roads still closed. Cold air moving in, full sun today though. Snowmobile avy awareness class today. Cory scoped out large AG slide that occurred on feb 2. Impressive as always. Sam still surfing waves in Nicaragua, but were surfing frozen waves here!:) Still deep out there, but things are settling out. Have not been able to get good feel for ATL terrain, but today will offer good viz.
- Feb 8 Cold with light northerly wind, gusting moderate ATL. Received several observations of avalanches one to two feet deep from Cascade Gulch to Castle Lake to Parks Creek. Despite the cold temperatures, the sun is creating a thin melt-freeze crust BTL. Otherwise, there's plenty of dry powder to enjoy for days to come. EMH and Castle are closed.
- Feb 9 More cold and light to moderate northerly wind. No new avalanches. Snow is still hanging in the trees and melt has been marginal. Riding still soft and excellent 5,000 to 8,000 feet. ATL is slightly firmer but still soft in OSB.
- Feb 10 More cold and light to moderate northerly wind. Widespread surface hoar observed in the Eddy Mountians on all aspects and elevations, 1-2 cm. Crown of recent avalanche in Crystal Ball Room confirmed to have failed o PWL. Clear skies, calm to light NE winds. Freezing temps.

- Feb 11 Clear, cold weather, with active northwest winds up high. Incoming storm.
- Feb 12 clear and cold, last day of clear weather, incoming storm tonight, winter storm warning in effect through friday, 1-2 ft expected with strong southerly wind, snow levels near 4k ft. / 2-4 inches of snow on the ground as of this morning (feb 13). Considerable danger on the board.
- Feb 13 Storm day. South flow with moderate to strong wind. 12+ inches of new snow through the day. 15 inches at OSB by the next morning. Storm slab activity with failure on the buried surface hoar. Snow level around 3k lifting to 4.5k.
- Feb 14 Snow trickled off quickly. Skies began to clear by midday, staying broken for most of the day. New snow is settling quickly. One natural avalanche identified in PeeWees. Wind transport could be seen on Mount Shasta
- Feb 15 No signs of instability. Warm temperatures, above freezing up to 9,000 feet. Moderate amounts of dry snow is available for transport above 9,000 feet. Strong to extreme W/NW wind near and above the treeline.
- Feb 16 HN24= 3-5 inches. Light west wind gusting moderate BTL and NTL. ATL not observed. Small, reactive cornices. Near ridgelines, small, D0.5 skier triggered wind slab avalanches running no more than 50 feet of vertical; 30 feet wide; 5 inches deep. Crust beneath new snow most prevalent on southerly aspects though present on all up to 8,000 feet.
- Feb 17 Variable weather: low viz, moderate NW winds, and freezing temps. Found dense wind slabs on east and south aspects near treeline, resting atop a reactive interface. Stability tests were touchy ECTP-3 ECTP-1. However, no other alarming sings of instability were observed. The surface slab is so dense, penetrating deep enough is unlikely and difficult. Light amounts of snow transport were observed throughout the day onto east and south.
- Feb 18 More variable weather with mixed visibility, strong westerly winds, and flurries of precipitation. A light amount of blowing snow was observed onto east and south aspects. Surface slab instabilities were not observed. Snow surfaces below 9k became dampish upon exiting the backcountry, resulting in a possible overnight crust.
- Feb 19 Quick hitting storm brought 3-7 inches of fresh snow above 6k feet. Snow was dry, with up to a foot in some areas. Westerly wind, reactive wind lips and cornices, entraining dry snow below. Larger avalanches not observed. Clear weather expected for foreseeable future. Warming trend.
- Feb 20 Clear skies and warm. Wind was mostly calm at elevations below 8,000 feet. Snow could be seen blowing off of ridge tops above 10k. The snowpack has surely stabilized a ton with the sun. The recent storm has deposited 7-8 inches of snow.
- Feb 21 Sunny, warm. Light to moderate wind out of the west. Clouds were forecasted to build, but never did. Freezing level climbed to 10k. No precip.
- Feb 22 Warm, subtle overnight refreeze. Increasing cloud cover. Moderate to Strong westerly wind. Roller balls the only sign of instability. Light rain began at 1600. Snow levels near 8,000 feet.
- Feb 23 Warm and wet. 0.46 inches of SWE. Moderate to Strong west wind. Rain/snow line near 8,200 feet. Poor visibility. NO signs of instability.

- Feb 24 A quick round of stromy weather delivered strong to extreme southwest winds, an inch or two of snow, below freezing temps, and poor viz. Blowing snow was abserved near treeline. Wet-loose instabilities have been reliquished by freezing surfaces.
- Feb 25 Strong northwest winds near and above treeline. Scoured surfaces mostly. Potential for isolated pockets of wind slabs above treeline. Superficial softening surfaces on southerlies. Clear, warm, and clam weather otherwise.
- Feb 26 Warmest day yet! Mountain temps climbed into the high 40s, with no overnight re-freeze. Winds were primarily calm near and below treeline. No signs of natural wet-loose instabilities. Still firm and hard above treeline.
- Feb 27 Even warmer day. Mt Shasta City set a record for warmest temp on this day. Light wind out of the west. Clear skies. No significant signs of warming instability.
- Feb 28 Warmest day of the week. 51 degrees F at Gray Butte at 4 pm. Light wind. No signs of wet loose instability.
- March 1 Warm and sunny with high clouds building in the afternoon. Above freezing mountain temperatures. Light to moderate southwest wind. No signs of instability. All MSAC weather stations down as of 1400 on 3/1.
- March 2 Heavy snow overnight and into the morning brought 5-10 inches of new snow between BTL and ATL on the Southside of Mount Shasta. Moderate NW wind drifted snow onto SE aspects. Small avalanches were easily triggered with skis. Dry in the morning, wet in the afternoon. Snow level near 5,000 feet.
- March 3 Recent wet loose point releases were observed on west south and east aspects near treeline. Likely from the afternoon of March 2nd. Skies were clear with blowing snow present over higher terrain from NW winds. New snow has settled and no signs of wind slabs were observed.
- March 4 Poor visibility persisted. Calm to light winds. No blowing snow or wind slab development was observed. Temps remained below freezing. Variable surface conditions exist. Some exposed areas held upwards of five inches of snow.
- March 5 Poor viz, variable conditions, couple inches fresh snow, increasing northerly wind, warming and clearing trend into the weekend, but then a significant low pressure system setting up for next week.
- March 6 Snow tapered off quickly. Skies began to clear, but came and went throughout the day. Small wind slab pockets triggered on the NW face of Gray Butte on cross loaded features. North wind blew light, with strong gusts on the upper mountain. Warming started. Wet loose avalanche at the top of Powder Bowl
- March 7 Clear and sunny. Temperatures climbed, reaching 34 degrees F at Gray Butte. Wet loose activity on all elevation bands. Wet-wind slab triggered by a skied on Shastarama. Light wind. SAR skier, 9k ft, AG, broken tib/fib, solo, night rescue, nick/sam/cory/SAR. 4 hours from first call to last off mtn. First rescue of season.AAR- how to effectively move people from position of rest to toboggan, putting together toboggan, helmets, communication amongst team members. Rescue went smooth, used snowmobiles in wilderness.
- March 8 More sunshine. Warmest day of this high pressure period. Gray Butte weather station recorded a high temperature of 44 and was above 40 from 1100 to 1700. Wind calm to light becoming southerly in the latter half of the day. Observed roller balls, small wet loose avalanches in sun bowl, and warm snow surfaces

up to 9,500 feet. Dry snow lingers above. Identified layer of facets less than 40 cm down from the surface on a south aspect above the treeline in the Old Ski Bowl.

March 9 - Mostly cloudy then partly cloudy. Strong to extreme southwest wind gusts NTL and ATL. No signs of red flags, though finished tour before heat of day. Firm conditions ATL. Softening near and below the treeline with <2 inch boot penetration.

March 10- Mostly clear, scattered clouds, wind westerly, 5-10, G30, last day of quiet weather, incoming storm tonight. Low danger today, expected to rise tomorrow. 1-2 ft of snow possible, snow levels near 3500-4k. Some soft snow beneath wind slabs in some areas, not evenly distributed. Will monitor. Snow surfaces are variable.

March 11 - Clear skies, turning cloudy in the afternoon. Precipitation started around 8 pm at night. Light northerly wind. Transition weather

March 12 - Full storm day, snowing and blowing, 2+ inches per hour, 1-2 ft of new snow in past 24 hours, sam and nick sledded to OSB, couldn't see shit, full value storm conditions. Heavy snow and wind major red flags, but couln't see any avalanches. Stormy period continuing, brief respite then more friday.

March 13 - Break in precipitation. Obscured skies and light snowfall, cleared into the afternoon. Light westerly wind, with moderate gusts. Obvious wind loaded slopes on northerly aspects. Identified graupel weak layer below the new snow.

March 14 - 10+ inches of new snow at treeline through the day. Moderate SW wind, shifting W in the afternoon. Dry Loose avalanche activity on Gray Butte. No activity on graupel yet. Pit tests yielded ECTP22 and PST 25/100. Snowfall slowed in the evening

March 15 - Light snow during the day, intensifying overnight. Strong WSW wind with extreme gusts. Stability tests on 3/12 weak layers produced stubborn propagation on northerly aspects in the Castle Lake Creek drainage.

March 16 - Heavy, wet snowfall BTL and NTL, up to 2 inches/hour; 40 to 50 cm of HN24 by noon. No recent avalanches; Cracking in new snow. 3/12 weak layers are buried over a meter deep and not producing results. Weak layer of cold snow trapped beneath a new warm slab.

March 17- Lingering snow showers BTL and NTL, emerging sunshine ATL. HN24= 15cm. Report of day old storm slab avalanche on Gray Butte (J. Barr). No propagation on any weak layers. Large settlement cones on trees. Cold snow trapped beneath warmer snow is consolidating nicely.

March 18- sunny and clear, nick did snowmo tour of eddies, observed two small natural wind slabs below ridges, NTL and ATL. Monster cornices lace ridges. Tested wind slabs, unreactive to trigger. Small storm incoming, strong winds in valleys.

March 19 - Obscured skies, incoming storm, precipitation began about dark and 2-4" fell overnight paired with strong westerly wind. Lingering showers, otherwise clearing into weekend and warming trend coming. Found big slab avalanche on west aspect of Gray Butte, failed on buried layer of graupel (Sam did Insta video on this). Slide occurred likely on the 16th sometime, layer of graupel buried over the weekend when we received feet of snow. Def an eye opener.

- March 20 Obscured skies. Lenticular on upper Mount Shasta. No precipitation. Westerly flow brought light westerly wind. Nick and Sam went to further investigate persistent slab on Gray Butte
- March 21 Obscured skies and light snowfall in the morning. Mostly cloudy in the afternoon. Warming temperatures and a bit of green housing. Light-moderate wind out of the west. Strong-extreme wind 10k and above.
- March 22 Warm. Obscured skies and fog. Calm to light west to north wind. No result PST on PWL (132cm down) east aspect 8,000 feet; Green Butte; one data point. Roller balls up to 8,000 feet. Trees drippin'
- March 23 Warmer and sunny. Calm to light north wind. Natural wet loose in sun bowl. Rider-triggered wet loose on east Green Butte. Roller balls everywhere and the tree drips continue.
- March 24 Even warmer and sunny. Widespreaad roller balls. Natural wet loose on north face of mount Eddy. Calm wind.
- March 25- Warm and sunny, with high Cirrus clouds aloft. Temps reaching the high 40s. Calm to light SE winds.
- March 26- Gradually increasing clouds, wind and precipitation. Robust storm building, precip started at 2300. Southerly wind, strong at low elevations. Large wet slab in Powder Bowl, reported by Uschi Hill this morning, MSSP ski patrol. Danger was forecast Low. A surprise occurrence. Likely slid on buried graupel PWL layer buried ~march 11. Been warm, but cooling, reasonable snow levels expected 4-6k ft.Could see 1-2 ft out of storm.
- March 27 Snow all day, with a snow/rain line of 5,000 feet. 15 inches of new snow showing on the OSB wx station. Snow accumulation is more significant at 7,000 feet. Below that, the snow is heavy and wet. Moderate to strong wind out of the southwest. Extreme speeds above treeline.
- March 28 15 inches of new snow at treeline from the previous system. Snow tapered off quickly, no significant accumulation through the day. Partly cloudy in the afternoon, with warming temps above freezing. Roller balls and pinwheels on west and southerly aspects. Light wind for most of the day
- March 29 Sunny with increasing afternoon clouds. Temperatures ranged from 18 in the morning to 32 in the afternoon. Wind became southeast. Observed recent natural wind slab avalanche (D1) on a NE aspect of Green Butte near 9,000 feet. Soft, right-side-up new snow to old snow interface above treeline. Riders testing steep slopes on all aspects did not reveal any instability. Overnight temperatures dipped to the 20s.
- March 30 Snow and blowing snow. Nine to 13 inches of HN24. South to southwest wind loading northerlies. Minor cracking and dry loose activity. Moderate reactivity on 3/29 MF crust; no propagation.
- March 31 Another round of stormy weather arrived in the early afternoon. Large amount of snow available for transport. Dry unconsolidated quality. No sings of avalanches or instabilities. Winds and precip increased through the evening and night.
- April 1 **Strom day.** Shasta classic! Southwest flow transitioning to norhtwest. 8 inches new snow. Inverted snowpack. Reactive storm slabs failing on new snow/old snow interface near and above treeline. Light to moderate wind transport. Below freezing temps gradually warming.

April 2 - Overcast and cool, though precipitation ended and marked transition to spring. Rainbow mtn adventure via deer mtn with sam, eric, barr and scott a.

Light wind, no precip, clearing. Recent avalanche in Antelope Creek Lakes area, maybe two days old. No red flags observed otherwise. All weather stations down. Not sure what is up, maybe Gray Butte visit.

April 3 - clear and sunny, snow survey completed. Weather stations still down, not sure of issue, something at GB perhaps. No recent avys, getting warmer but still seasonably cool. Clear and calm weather, small disturbance on Sun/Mon coming. 170-180 inches of snow on the ground at treeline on the mtn. One more week of forecasts! April 13 last day. Everitt Memorial still closed. Could be another 1-2 weeks. New blower being shipped.

April 4 - Sunny and warm. Decent overnight refreeze across the fx area. Light to unnoticeable wind up to 10k. No significant signs of warming instability. Beautiful weather

April 5 - Sunny and warmer. Widespread wet loose activity BTL and NTL. Isolated ATL. Long running slide in upper Avalanche Gulch 1,500-2,000 feet long.

April 6 - Building clouds and SW wind. Wet loose avalanches on west aspect of Yellow Butte. Snow surfaces soft up to 10,000 feet; no refreeze. Rain-on-snow up to 8,000 feet beginning at 2200. Estimated six to 10 inches of new snow above 8,000 feet.

April 7 - Bad weather. Snow line of 8K. Roughly one inch of new snow near treeline. Rain fell on snow for short periods of time near and below. Winds were clam, but could be heard howling above treeline. Wet,unsupportable surfaces exist near and below.

April 8 - Increasing nice weather, with clearing skies. Met-freeze crust across all aspects near treeline, with wet snow underneath. Soggy snow exists below treeline, with firmer wind effected snow above treeline. No sings of wet loose instability. Light amount of wind transport observed on the upper mountain. Falling rime-ice hazard.

April 9 - Sunny and clear, light southerly wind. Nick and Sam big snowmo ride in Eddy Mtns. Lots of collapsing cornices. Parks, Cement Bluff, High Camp Pass, Cabin Mdws, Cory Peak, Robbers Mdws, Bull Lake and loop back around. No major signs of avy danger, but warm with wet, saturated snow surfaces. Everitt still closed.

April 10 - Warm and sunny. Steady westerly wind. No significant signs of warming instability. No freeze overnight at Gray Butte

April 11 - Another night of no freeze. Mostly cloudy during the day. Light wind out of the NW. No notable activity. Soft and mushy conditions at MSSP.

April 12 -