

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

aQC 929
A8A8



Avalanche Notes

U.S. Forest Service
Westwide Avalanche Network

JANUARY 1991

As January ended, it brought to an end the first half of the winter of 90-91, and it's been a thoroughly forgettable half-winter over a good portion of the West. No area has been harder hit with a dose of the dries than the Sierra of California, which is in its fifth year of drought. January snows were again dismal, as the area endured its third month of chronic high pressure: Alpine Meadows recorded but 12% of normal, and in the process suffered through its driest January since records began in 1968. Mammoth Mountain reported no snow at all.

Portions of the Rockies are also limping through a minimal winter. Perhaps hardest hit is Sun Valley, ID. Only 7" fell there in January for 16% of normal, this on the heels of a very dry December.

January snows were stingy almost everywhere else, too. Here's a rundown around the West:

Alyeska, AK recorded 59" of snow on the 16th-20th, and predictably the south-central area of Alaska witnessed an avalanche cycle on the 17th-20th. Doug Fesler reports that an old 2-story mine building near Hatcher Pass was hit by an avalanche, tumbled end-over-end, and wound up in the runout still intact! Alyeska ended the month with 96% of normal snows, while Eaglecrest in southeast Alaska had very little snow all month, but ended with 17" on the 30th-31st.

In the Cascades of Washington and Oregon, sustained snow and rain fell from the 7th-16th. During this time, Mt. Rainier-Paradise recorded 88" of snow and about 15" of water, while Stevens Pass got nearly 20" of water. A cycle of avalanches rippled through the Cascades on the 7th-12th. This storm was not enough, though, to get the area to normal snowfalls: Mt. Rainier and Stevens Pass recorded 64%, Mt. Hood Meadows, 31%, and Crystal Mt., only 25%.

In the Intermountain region, Big Mountain, MT received 18" on the 1st and then got steady snows on the 7th-19th and wound up with 124% of normal. Bridger Bowl, MT was 100% of normal, but all other sites came up short. Big Sky, MT got 61%, while Jackson Hole and Teton Pass, WY, even with daily snows on the 8th-19th, got but 68%. A big storm hit the Wasatch of Utah mid-month, when Solitude got 25" on the 15th and Snowbird recorded 42" on the 14th-16th. Snowbird ended the month with 90% of normal.

In Colorado only Beaver Creek (120%) and Vail (103%) had above-par snows. It was a thoroughly unremarkable month. The northern third of the mountains received 56-90% of normal snow; the central third, 58-85%; and the southern third, 73-85%, although Wolf Creek managed only 49%, even with the benefit of 24" on the 4th-5th. Taos, NM recorded only 43% of normal -- its first dry month of the season.

Three serious avalanche incidents occurred in January. On the 20th on Teton Pass, WY, a father and son, age 13, were pausing in their ski run down a slope on Mount Glory when the snow fractured above them. Both were carried 1,200 feet vertical and were shallowly buried. Both managed to punch an airway to the surface. A second son and another skier descended the avalanche path and dug out the victims, neither of whom were injured.

The second incident occurred on the 21st at Berthoud Pass, CO. A snowboarder crossed a rope into a closed area, triggered an avalanche, and was swept about 300 feet down slope. Though only partly buried, he suffered a broken femur.

The third incident occurred on the 31st in the Hyalite area south of Bozeman, MT. Two snowmobilers were digging out their stuck machines on a steep slope and in the process triggered an avalanche. Both men and their machines were swept downslope and buried. Both men managed to get fingertips to the surface, which allowed a quick rescue by other snowmobilers who had witnessed the slide.

In January, a total of 18 incidents were reported, resulting in 20 people caught, 4 partly buried, 4 buried, 1 injured; in addition, 1 vehicle was caught and 1 building damaged. Seasonal totals are 51 incidents, 56 people caught, 11 partly buried, 10 buried, 4 injured, and 3 killed; 4 vehicles have been caught and 2 buildings damaged.

ALPINE SNOW AND AVALANCHE RESEARCH PROJECT
OM STATION FORT COLLINS, COLO.

JANUARY 1991

SUMMARY OF WEATHER AND SNOW CONDITIONS

AREA	SNOWFALL		WATER EQUIVALENT		SNOW DEPTH		TEMPERATURE		WIND SPEED AND DIRECTION		
	TOTAL IN. IN.	MAX IN. IN.	MAX IN. IN.	Avg IN. IN.	NUMBER OF DAYS IN.	Avg IN. IN.	MIN IN. IN.	MAX IN. IN.	MEAN IN. IN.	MAX DEGREES F IN.	Avg FOR PERIOD 15 HRS DIR.
CENTRAL AND SOUTHERN ROCKY MOUNTAINS											
ARAPAHOE BASIN, COLO											
ASPEN HIGHLANDS, COLO											
ASPEN MOUNTAINS, COLO											
BEAR LAKE, KAN., OKA											
BEAVER CREEK, VAIL, COLO											
BLKTHORN PASS, COLO											
BUCKENRIDGE, COLO											
SKI COPPER, COLO											
COPPER Mtn., COLO											
CRESTED BUTTE, COLO											
GOTHIC, GLOUCESTER, COLO											
KEYSTONE, GLOUCESTER, COLO											
MINTURN PARK, GLOUCESTER, COLO											
MUNARCH, GLOUCESTER, COLO											
PURGATORY, GLOUCESTER, COLO											
KEDMONTAIN PASS, U.S.-550											
SUNLIGHT, COLORADO-S.550											
TAOS, NEW MEXICO											
TELLURIDE, COLORADO											
VAIL, COLORADO											
WINTER PARK, COLORADO											
WOLF CREEK, COLORADO											
WEST COAST											
ALPINE MEADOWS, CALIFORNIA											
CRYSTAL Mtn., WASH											
LAGLECREST, ALASKA											
LEAVENWORTH, WASH											
JUNE MOUNTAIN, CALIFORNIA											
MANEMOTH MOUNTAIN, CALIFORNIA											
MT. HOOD, OREGON											
MT. RAINIER, WASH											
SNOQUALMIE PASS, WASH											
SNOQUALMIE PASS, CALIFORNIA											
STEVENS PASS, WASH											
SUGAR BOWL, CALIFORNIA											
-- DATA INCOMPLETE OR MISSING											
4-TONE MORNING DAYS OF RECORDING											
1-6 MISCELLANEOUS DAYS IN WHICH RECORDING IS INTERRUPTED											
2-10 DAYS IN WHICH RECORDING IS INTERRUPTED											
10-20 DAYS IN WHICH RECORDING IS INTERRUPTED											
20-40 DAYS IN WHICH RECORDING IS INTERRUPTED											
40-60 DAYS IN WHICH RECORDING IS INTERRUPTED											
60-80 DAYS IN WHICH RECORDING IS INTERRUPTED											
80-100 DAYS IN WHICH RECORDING IS INTERRUPTED											
100-120 DAYS IN WHICH RECORDING IS INTERRUPTED											
120-140 DAYS IN WHICH RECORDING IS INTERRUPTED											
140-160 DAYS IN WHICH RECORDING IS INTERRUPTED											
160-180 DAYS IN WHICH RECORDING IS INTERRUPTED											
180-200 DAYS IN WHICH RECORDING IS INTERRUPTED											
200-220 DAYS IN WHICH RECORDING IS INTERRUPTED											
220-240 DAYS IN WHICH RECORDING IS INTERRUPTED											
240-260 DAYS IN WHICH RECORDING IS INTERRUPTED											
260-280 DAYS IN WHICH RECORDING IS INTERRUPTED											
280-300 DAYS IN WHICH RECORDING IS INTERRUPTED											
300-320 DAYS IN WHICH RECORDING IS INTERRUPTED											
320-340 DAYS IN WHICH RECORDING IS INTERRUPTED											
340-360 DAYS IN WHICH RECORDING IS INTERRUPTED											
360-380 DAYS IN WHICH RECORDING IS INTERRUPTED											
380-400 DAYS IN WHICH RECORDING IS INTERRUPTED											
400-420 DAYS IN WHICH RECORDING IS INTERRUPTED											
420-440 DAYS IN WHICH RECORDING IS INTERRUPTED											
440-460 DAYS IN WHICH RECORDING IS INTERRUPTED											
460-480 DAYS IN WHICH RECORDING IS INTERRUPTED											
480-500 DAYS IN WHICH RECORDING IS INTERRUPTED											
500-520 DAYS IN WHICH RECORDING IS INTERRUPTED											
520-540 DAYS IN WHICH RECORDING IS INTERRUPTED											
540-560 DAYS IN WHICH RECORDING IS INTERRUPTED											
560-580 DAYS IN WHICH RECORDING IS INTERRUPTED											
580-600 DAYS IN WHICH RECORDING IS INTERRUPTED											
600-620 DAYS IN WHICH RECORDING IS INTERRUPTED											
620-640 DAYS IN WHICH RECORDING IS INTERRUPTED											
640-660 DAYS IN WHICH RECORDING IS INTERRUPTED											
660-680 DAYS IN WHICH RECORDING IS INTERRUPTED											
680-700 DAYS IN WHICH RECORDING IS INTERRUPTED											
700-720 DAYS IN WHICH RECORDING IS INTERRUPTED											
720-740 DAYS IN WHICH RECORDING IS INTERRUPTED											
740-760 DAYS IN WHICH RECORDING IS INTERRUPTED											
760-780 DAYS IN WHICH RECORDING IS INTERRUPTED											
780-800 DAYS IN WHICH RECORDING IS INTERRUPTED											
800-820 DAYS IN WHICH RECORDING IS INTERRUPTED											
820-840 DAYS IN WHICH RECORDING IS INTERRUPTED											
840-860 DAYS IN WHICH RECORDING IS INTERRUPTED											
860-880 DAYS IN WHICH RECORDING IS INTERRUPTED											
880-900 DAYS IN WHICH RECORDING IS INTERRUPTED											
900-920 DAYS IN WHICH RECORDING IS INTERRUPTED											
920-940 DAYS IN WHICH RECORDING IS INTERRUPTED											
940-960 DAYS IN WHICH RECORDING IS INTERRUPTED											
960-980 DAYS IN WHICH RECORDING IS INTERRUPTED											
980-1000 DAYS IN WHICH RECORDING IS INTERRUPTED											
1000-1020 DAYS IN WHICH RECORDING IS INTERRUPTED											
1020-1040 DAYS IN WHICH RECORDING IS INTERRUPTED											
1040-1060 DAYS IN WHICH RECORDING IS INTERRUPTED											
1060-1080 DAYS IN WHICH RECORDING IS INTERRUPTED											
1080-1100 DAYS IN WHICH RECORDING IS INTERRUPTED											
1100-1120 DAYS IN WHICH RECORDING IS INTERRUPTED											
1120-1140 DAYS IN WHICH RECORDING IS INTERRUPTED											
1140-1160 DAYS IN WHICH RECORDING IS INTERRUPTED											
1160-1180 DAYS IN WHICH RECORDING IS INTERRUPTED											
1180-1200 DAYS IN WHICH RECORDING IS INTERRUPTED											
1200-1220 DAYS IN WHICH RECORDING IS INTERRUPTED											
1220-1240 DAYS IN WHICH RECORDING IS INTERRUPTED											
1240-1260 DAYS IN WHICH RECORDING IS INTERRUPTED											
1260-1280 DAYS IN WHICH RECORDING IS INTERRUPTED											
1280-1300 DAYS IN WHICH RECORDING IS INTERRUPTED											
1300-1320 DAYS IN WHICH RECORDING IS INTERRUPTED											
1320-1340 DAYS IN WHICH RECORDING IS INTERRUPTED											
1340-1360 DAYS IN WHICH RECORDING IS INTERRUPTED											
1360-1380 DAYS IN WHICH RECORDING IS INTERRUPTED											
1380-1400 DAYS IN WHICH RECORDING IS INTERRUPTED											
1400-1420 DAYS IN WHICH RECORDING IS INTERRUPTED											
1420-1440 DAYS IN WHICH RECORDING IS INTERRUPTED											
1440-1460 DAYS IN WHICH RECORDING IS INTERRUPTED											
1460-1480 DAYS IN WHICH RECORDING IS INTERRUPTED											
1480-1500 DAYS IN WHICH RECORDING IS INTERRUPTED											
1500-1520 DAYS IN WHICH RECORDING IS INTERRUPTED											
1520-1540 DAYS IN WHICH RECORDING IS INTERRUPTED											
1540-1560 DAYS IN WHICH RECORDING IS INTERRUPTED											
1560-1580 DAYS IN WHICH RECORDING IS INTERRUPTED											
1580-1600 DAYS IN WHICH RECORDING IS INTERRUPTED											
1600-1620 DAYS IN WHICH RECORDING IS INTERRUPTED											
1620-1640 DAYS IN WHICH RECORDING IS INTERRUPTED											
1640-1660 DAYS IN WHICH RECORDING IS INTERRUPTED											
1660-1680 DAYS IN WHICH RECORDING IS INTERRUPTED											
1680-1700 DAYS IN WHICH RECORDING IS INTERRUPTED											
1700-1720 DAYS IN WHICH RECORDING IS INTERRUPTED											
1720-1740 DAYS IN WHICH RECORDING IS INTERRUPTED											
1740-1760 DAYS IN WHICH RECORDING IS INTERRUPTED											
1760-1780 DAYS IN WHICH RECORDING IS INTERRUPTED											
1780-1800 DAYS IN WHICH RECORDING IS INTERRUPTED											
1800-1820 DAYS IN WHICH RECORDING IS INTERRUPTED											
1820-1840 DAYS IN WHICH RECORDING IS INTERRUPTED											
1840-1860 DAYS IN WHICH RECORDING IS INTERRUPTED											
1860-1880 DAYS IN WHICH RECORDING IS INTERRUPTED											
1880-1900 DAYS IN WHICH RECORDING IS INTERRUPTED											
1900-1920 DAYS IN WHICH RECORDING IS INTERRUPTED											
1920-1940 DAYS IN WHICH RECORDING IS INTERRUPTED											
1940-1960 DAYS IN WHICH RECORDING IS INTERRUPTED											
1960-1980 DAYS IN WHICH RECORDING IS INTERRUPTED											
1980-2000 DAYS IN WHICH RECORDING IS INTERRUPTED											
2000-2020 DAYS IN WHICH RECORDING IS INTERRUPTED											
2020-2040 DAYS IN WHICH RECORDING IS INTERRUPTED											
2040-2060 DAYS IN WHICH RECORDING IS INTERRUPTED											
2060-2080 DAYS IN WHICH RECORDING IS INTERRUPTED											
2080-2100 DAYS IN WHICH RECORDING IS INTERRUPTED											
2100-2120 DAYS IN WHICH RECORDING IS INTERRUPTED											
2120-2140 DAYS IN WHICH RECORDING IS INTERRUPTED											
2140-2160 DAYS IN WHICH RECORDING IS INTERRUPTED											
2160-2180 DAYS IN WHICH RECORDING IS INTERRUPTED											
2180-2200 DAYS IN WHICH RECORDING IS INTERRUPTED											
2200-2220 DAYS IN WHICH RECORDING IS INTERRUPTED											
2220-2240 DAYS IN WHICH RECORDING IS INTERRUPTED											
2240-2260 DAYS IN WHICH RECORDING IS INTERRUPTED											
2260-2280 DAYS IN WHICH RECORDING IS INTERRUPTED											
2280-2300 DAYS IN WHICH RECORDING IS INTERRUPTED											
2300-2320 DAYS IN WHICH RECORDING IS INTERRUPTED											

U.S. FOREST SERVICE
ALPINE SNOW AND AVALANCHE RESEARCH PROJECT
RA STATION FORT COLLINS, COLO.

JANUARY 1991
AVALANCHE SUMMARY

AREA	THIS MONTH NO.	TOTAL	TOTAL # OF	NUMBER OF DAYS WITH	TYPE OF AVALANCHE	FRACTURE LINES HEIGHTS IN FEET	VERTICAL DESCENT IN FEET	AVALS ACROSS MAJOR ROADS NO.
CENTRAL AND SOUTHERN ROCKY MOUNTAINS								
MARSHALL BASIN, COLO	23	41	1	1	SLAB	GEOS	GE	00000000000000000000
ASPEN HIGHLANDS, COLO	22	47	1	1	SLAB	GEOS	GE	00000000000000000000
ASPEN MOUNTAIN, COLO	22	23	1	1	SLAB	GEOS	GE	00000000000000000000
CAVER CREEK, COLO	20	46	1	1	SLAB	GEOS	GE	00000000000000000000
SHERTHOUD PASS, U.S. 40	43	67	1	1	SLAB	GEOS	GE	00000000000000000000
BRECKENRIDGE, COLO	40	57	1	1	SLAB	GEOS	GE	00000000000000000000
COPPER MT., COLO	30	151	1	1	SLAB	GEOS	GE	00000000000000000000
CUKESTED BUTTE, COLO	30	152	1	1	SLAB	GEOS	GE	00000000000000000000
KEYSTONE, COLO	31	152	1	1	SLAB	GEOS	GE	00000000000000000000
LOVELAND PASS, U.S. 6	32	152	1	1	SLAB	GEOS	GE	00000000000000000000
WINTER PARK, COLO	34	152	1	1	SLAB	GEOS	GE	00000000000000000000
MONARCH, COLORADO	23	60	1	1	SLAB	GEOS	GE	00000000000000000000
MEAD MT. PASS, U.S. 550	43	102	1	1	SLAB	GEOS	GE	00000000000000000000
TAOS, NEW MEXICO	147	705	1	1	SLAB	GEOS	GE	00000000000000000000
TELURIDE, COLO	30	45	1	1	SLAB	GEOS	GE	00000000000000000000
URAD MINE, COLO	30	45	1	1	SLAB	GEOS	GE	00000000000000000000
VAIL, COLO	30	45	1	1	SLAB	GEOS	GE	00000000000000000000
WOLF CREEK, COLO	30	45	1	1	SLAB	GEOS	GE	00000000000000000000
INTERMOUNTAIN								
SIG MOUNTAIN, MONT	79	321	1	1	SLAB	GEOS	GE	00000000000000000000
SIG SKY, MONT	79	124	1	1	SLAB	GEOS	GE	00000000000000000000
SIG JESSEN HOLLOW, WYO	116	213	1	1	SLAB	GEOS	GE	00000000000000000000
SARL KHIST, UTAH	114	219	1	1	SLAB	GEOS	GE	00000000000000000000
SOLITUDE PASS, UTAH	160	160	1	1	SLAB	GEOS	GE	00000000000000000000
TETON PASS, WYO	22	20	1	1	SLAB	GEOS	GE	00000000000000000000
SNOBIRD, UTAH	260	328	8	21	SLAB	GEOS	GE	00000000000000000000
WEST COAST								
ALPINE MEADOWS, CAL	7	15	1	1	SLAB	GEOS	GE	00000000000000000000
ALYESKA, ALASKA	360	17	1	1	SLAB	GEOS	GE	00000000000000000000
CRYSTAL Mtn., WASH	100	34	1	1	SLAB	GEOS	GE	00000000000000000000
MT. HOOD, MEGALOUS	44	41	1	1	SLAB	GEOS	GE	00000000000000000000
SNOWHALMIE PASS, U.S. 10	59	59	1	1	SLAB	GEOS	GE	00000000000000000000
SQUAW VALLEY, CALIF	1	14	1	1	SLAB	GEOS	GE	00000000000000000000
STEVEENS PASS, WASH	44	150	1	1	SLAB	GEOS	GE	00000000000000000000
STEVENS PASS, U.S. 2	60	121	1	1	SLAB	GEOS	GE	00000000000000000000

--- = DATA INCORRECT THAN EQUAL TO
* = ALSO OCCURRED ON OTHER DATES