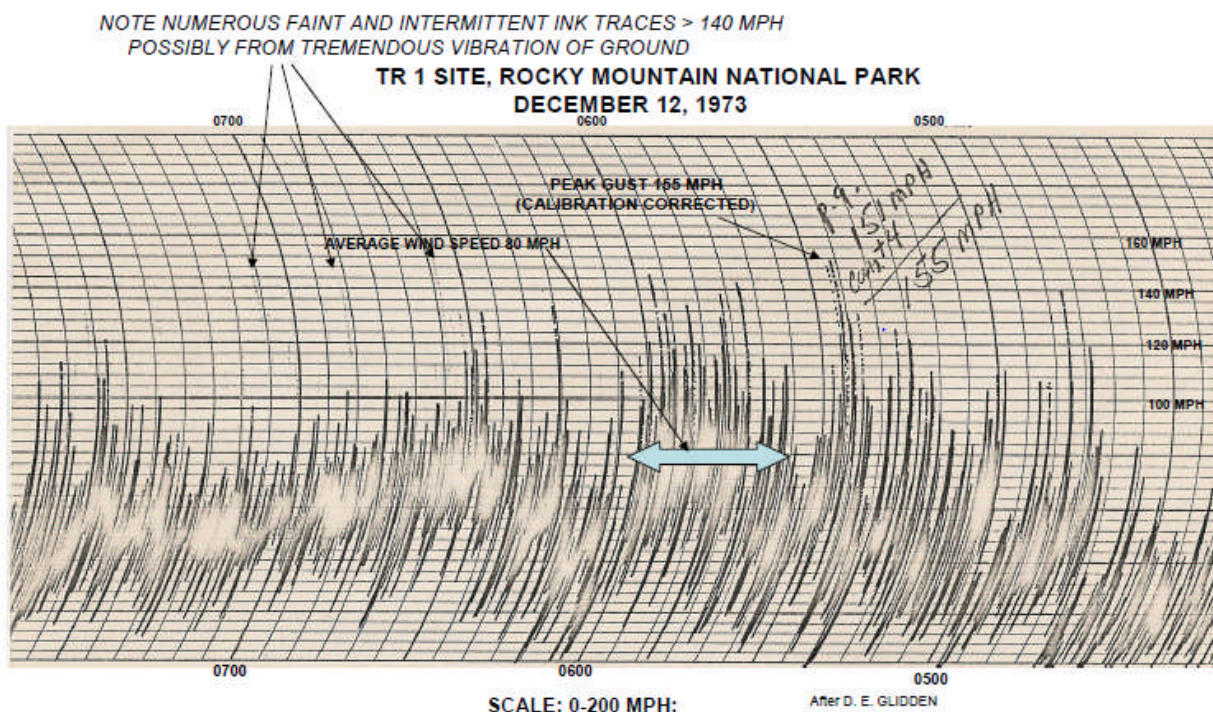


Selected Alpine and Subalpine Wind Research Summaries, 1973-74, Rocky Mountain National Park, Estes Park, CO

Excerpts from Glidden, D. E., 1982, *Winter Wind Studies in Rocky Mountain National Park*, National Park Service



ANEMOGRAPH FROM TR 1 SITE (ABOVE FOREST CANYON OVERLOOK) ON DECEMBER 12TH, 1973
NOTE RANGE OF TURBULENCE AND HIGH GFs WITH NUMEROUS GUSTS > 140 MPH

Table 6. The maximum recorded windspeeds (peak gusts) for
all sites, RMNP, Winter 1973-74. (MPH)

	O	N	D	J	F	M	A	M	PERIOD
TR 1									
Peak Gust	105	90	155	-	-	-	-	-	155
Days With Data	16	17	2	-	-	-	-	-	35
TR 2									
Peak Gust	88	99	114	139	105	98	104	75	139
Days With Data	11	30	31	31	28	31	30	10	202
TR 3									
Peak Gust	-	-	98	122	108	115	113	111	122
Days With Data			16	24	28	31	25	28	152
TR 5									
Peak Gust	-	-	-	126	114	108	100	75	126
Days With Data	-	-	-	14	28	31	30	3	106
TR 6									
Peak Gust	-	-	-	64	77	81	88	65	88
Days With Data	-	-	-	9	28	31	30	30	128
TR 7									
Peak Gust	-	-	85	78	74	78	61	66	85
Days With Data	-	-	7	28	28	31	30	18	142

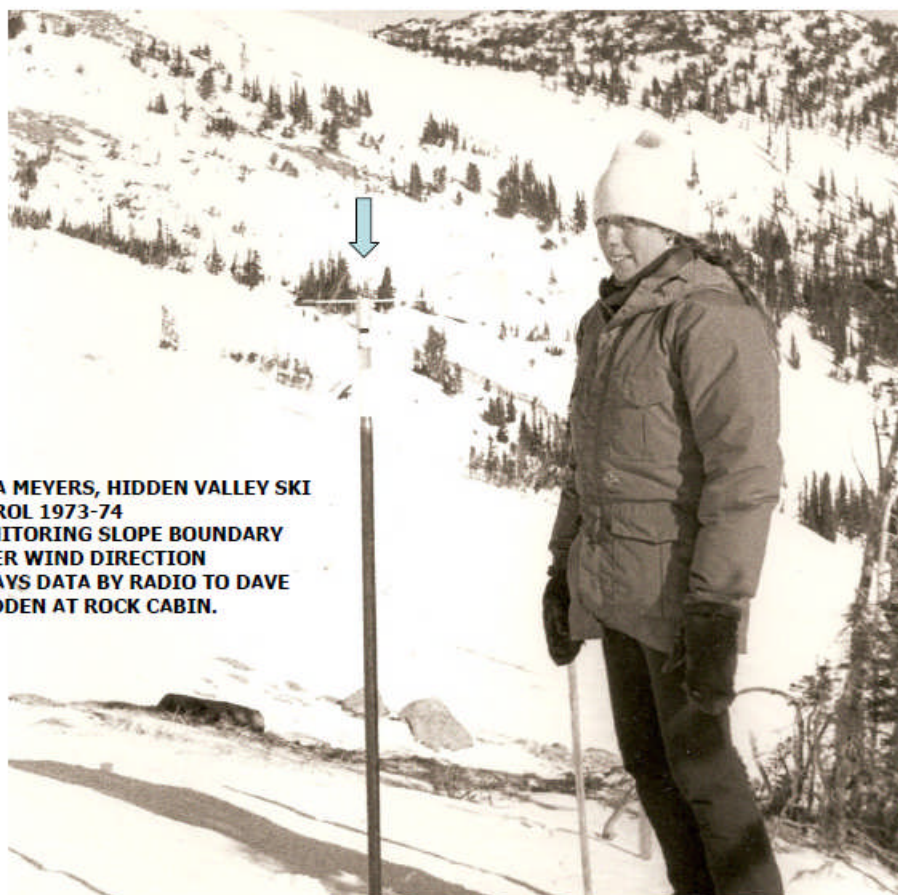
Table 7. The frequency of occurrence of daily wind maxima ≥ 74 mph (33 m/s) and ≥ 100 mph (45 m/s) at TR 3, October 1973-May 1974.

	O-N ¹	J ²	F	M	A	M	PERIOD
No. Days ≥ 74 mph	18	15	11	17	5	9	75
% Days ≥ 74 mph	60	62	39	61	20	32	46
No. Days ≥ 100 mph	3	4	4	4	1	3	19
% Days ≥ 100 mph	10	17	14	14	4	11	12
Days With Data	24	24	28	28	25	28	157

1. Data from TR 1

2. January daily peak gust data for 24 days

The number of days with maxima ≥ 100 mph (45 m/s) is included in Table 7. These severe winds ranged from 17% of the days in January to 4% in April, occurring on 19 days (or 12% of the days) of the winter period.



**GINA MEYERS, HIDDEN VALLEY SKI
PATROL 1973-74
MONITORING SLOPE BOUNDARY
LAYER WIND DIRECTION
RELAYS DATA BY RADIO TO DAVE
GLIDDEN AT ROCK CABIN.**

Data Summary

Table 4 presents the wind regime summary by month for TR 3 (alpine) and TR 6 (subalpine), January-May 1974.

Table 4. The wind regime summary for TR 3 and TR 6, RMNP, January-May 1974. (MPH)

	J	F	M	A	M	PERIOD
Peak Gust						
TR 3	122	108	115	113	111	122
TR 6	64	77	81	88	65	88
Average Daily Maximum						
TR 3	80.4	67.4	76.3	57.0	63.5	68.9
TR 6	M	51.3	52.1	43.6	39.5	46.6
No. Peak Gusts ≥ 74 mph						
TR 3	392	68	1,014	158	367	1,999
TR 6	M	1	20	4	0	25
No. Peak Gusts ≥ 100 mph						
TR 3	322	35	79	67	22	525
TR 6	M	0	0	0	0	0
Maximum One-hour Average						
TR 3	90	80	80	87	72	90
TR 6	M	26	36	30	24	36
Maximum Daily Average						
TR 3	65.7	50.0	53.1	42.7	47.6	65.7
TR 6	M	M	13.6	11.1	9.8	13.6

Selected References:

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<https://irma.nps.gov/DataStore/Reference/Profile/2237704>