PACIFIC REGION TECHNICAL NOTES

ANOTHER QUICK LOOK AT VERIFICATION SCORES

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Introduction

In a previous paper (Pacific Region Technical Notes 78-047), verification scores of the public forecasts for Greater Vancouver were analyzed by studying the monthly means. These means were presented in a graphical format to indicate the presence of any noticable trends. This note looks at the results of a search for some of the extreme values of the individual daily scores.

The Perfects and the Duds

The number of "perfect" forecasts (those scoring 100%) is tabulated in Figure 1. It is seen that July turns out to be the "best" month with an average of just over $3\frac{1}{2}$ perfect scores. The best individual month is July 1978 (9 perfects), which, as was seen earlier, is also the month with the highest ever mean score. The only month with not a single 100% score is December, though January, February and March come very close to this mark. An interesting situation is seen for May, where no perfect scores are recorded until 1978, when suddenly 6 show up. The month of May tends to have rather changeable pre-summer conditions, and as a consequence, it is difficult to achieve high verification scores. 1978 turned out to be an obvious exception to the preceding generalization.

Bust forecasts (or duds), were arbitrarily defined as forecasts which managed to attain scores of less than 50%. Numbers of these occurrances are tabulated in Figure 2. The figures in paretheses refer to data from the incomplete years. In terms of this data, one can say that 1973 was the worst year with 11 "duds". 1977 would seem to rate as the best, with only 4 busts during the complete year. The month with the poorest record is May followed closely by October. These can be classed a change-of-season months and are characterized quite often by rapid changes in local weather patterns.

Another perusal of the daily scores reveals that the lowest score on record is 24%. Interestingly enough this low figure has occurred twice. The first time was June 23, 1973, and the second occurrence was on December 28, 1977. This last date is a bit of a suprise, since in a previous paragraph we had rated 1977 as the best of the verified lot. Well...so goes meteorology.

It can also be seen in Figure 2, that the only month without any scores below the 50% mark, is July. Another exemplary month is September with only a single "dud" over the 7 year record. These findings, of course, mesh well with the results found in the analysis of the mean scores.

YEAR	72	73	74	75	76	77	78	AVERAGE
JAN	X	0	0	0	1	1	0	0.33
FEB	X	1	0	0	1	0	0	0.33
MAR	0	0	0	0	0	0	1	0.14
APR	0	1	1	1	0	1	0	0.44
MAY	0	0	0	0	0	0	6	0.67
JUN	2	0	2	1	0	3	1	1.28
JUL	5	1	2	1	3	4	9	3.57
AUG	3	1	1	1	0	5	3	2.00
SEP	1	0	7	5	4	3	0	2.85
OCT	5	0	2	0	2	0	0	1.28
NOV	0	0	0	0	3	0	X	0.50
DEC	0	0	0	0	0	0	X	0.00
TOTAL	(16)	4	15	9	14	17	(20)	

X=Missing Data

FIGURE 1. NUMBER OF OCCURRANCES OF 100% SCORES

NUMBER OF 'UNDER 50' SCORES BY YEARS

YEAR	72	73	74	75	76	77	78
NUMBER	(9)	11	6	8	7	4	(3)

NUMBER OF 'UNDER 50' SCORES BY THE MONTH

MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
NUMBER	(6)	(3)	4	3	8	3	0	4	1	7	(5)	(4)

FIGURE 2. NUMBER OF SCORES BELOW 50%