

Book

EASTERN REGION TECHNICAL ATTACHMENT
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RESULTS OF HEAVY SNOW FORECAST VERIFICATION - WINTER 1970-1971

In examining Table 1, caution should be exercised in comparing regions or WSFOs. Looking at Table 1 and 2, together, it can be seen that there is a high correlation between the size of the area observed and the threat score. It appears to be more difficult to forecast heavy snow when it is an infrequent occurrence or occurs over a small area. A valid comparison can be made between the threat scores for NMC and each WSFO since the difficulty is equal for each echelon. Some insight into the forecast performance can be gained by comparing the post agreement to the prefigurance. Heavy snow was overforecast if the PA is less than the PF and the reverse would indicate underforecasting.

TABLE 1

RESULTS OF HEAVY SNOW FORECAST VERIFICATION 1970-1971

	<u>NMC</u>			<u>FP (WSFO)</u>		
	<u>PF%</u>	<u>PA%</u>	<u>TS%</u>	<u>PF%</u>	<u>PA%</u>	<u>TS%</u>
BOS	57.1	40.1	30.8	53.9	42.6	31.2
CLE	42.3	20.9	16.2	10.7	15.9	6.8
CAE	0	0	0	100.0	23.0	23.0
DCA	51.2	38.2	28.0	50.9	32.0	24.4
NYC	54.4	30.2	24.1	46.8	47.4	30.8
PHL	68.5	39.0	33.1	53.1	57.1	38.0
PIT	72.2	55.9	46.0	13.0	15.5	7.6
RDU	60.0	8.2	7.8	60.0	4.0	3.9
Eastern Region	58.7	39.6	31.0	43.4	34.8	23.9
Southern Region	15.8	16.3	8.7	7.3	2.4	1.8
Central Region	41.7	25.0	18.5	41.9	18.5	14.7
Western Region	9.0	8.0	4.4	4.2	4.8	2.3
National	42.9	28.7	20.7	36.3	20.7	15.2

PF = Prefigurance (% of observed area correctly forecast)

PA = Post Agreement (% of forecast area correct)

TS = Threat Score

TABLE 2

BASIC VERIFICATION DATA

1970-71		NMC			FP	
		Area Observed	Area Forecast	Area Correct	Area Forecast	Area Correct
Eastern	BOS	142.5	202.6	81.4	180.1	76.9
	GLE	13.0	26.3	5.5	8.8	1.4
	CAE	1.2	.6	0	5.2	1.2
	DCA	35.1	47.1	18.0	55.9	17.9
	NYC	15.8	28.4	8.6	15.5	7.4
	PHL	14.3	25.1	9.8	13.3	7.6
	PIT	53.0	68.4	38.3	44.5	6.9
	RDU	1.5	10.9	.9	22.0	.9
Southern	ABQ	4.4	15.0	1.2	53.1	1.4
	ATL	0	0	0	0	0
	FTW	11.0	0	0	15.5	0
	OKC	8.5	1.5	1.2	9.1	0
	MEM	12.2	18.4	3.2	30.8	1.3
	MIA	0	0	0	0	0
	MSY	.4	.5	.2	0	0
	SAT	0	0	0	0	0
Central	DEN	58.1	125.0	13.3	234.4	14.3
	DTW	54.3	72.3	30.2	86.8	17.2
	CHI	48.2	93.1	25.8	86.3	27.8
	IND	3.6	13.0	1.3	8.2	1.3
	MKC	108.3	139.3	49.3	153.2	54.4
	MSP	60.3	106.7	20.0	158.8	25.5
	STL	5.7	13.7	1.4	38.2	1.4
Western	BOI	5.4	2.0	0	4.7	0
	GTF	21.1	28.4	1.3	4.0	0
	LAX	0	0	0	0	0
	PDX	6.6	7.6	0	5.5	0
	SLC	39.3	38.6	6.6	52.5	3.7
	SFO	Not verified				
	SFA	14.6	21.7	0	9.6	0
Eastern		276.4	409.4	162.5	345.4	120.2
Southern		36.5	35.4	5.8	108.5	2.7
Central		338.5	563.1	141.3	765.9	141.9
Western		87.0	98.3	7.9	76.3	3.7
National		738.4	1106.2	317.5	1296.1	268.5