

NATIONAL HURRICANE CENTER
OFFICIAL TROPICAL CYCLONE VERIFICATION
1972



DESCRIPTION OF VERIFICATION PROCEDURE

The following tables contain the verification scores the National Hurricane Center tropical cyclone track forecasts (designated 'OFFICIAL' in tables) together with those for all operationally available objective techniques.

The forecast errors, expressed in terms of nautical miles, are computed in the following way. The magnitude of the vector difference (along a great circle) between the forecast displacement for a given time period and the actual displacement taken from the 'best track' is computed

each forecast. All forecasts for which a given system maintains tropical storm or hurricane intensity are verified. These results are then averaged and tabulated

The errors in the initial positioning of storms are also computed. For a given forecast, this is simply the magnitude of the great circle distance between the operational initial position and the corresponding 'best track' position

In the tables the number of forecasts included in each sample is given below the mean displacement error for each category.

The first set of tables contains scores for all operationally available forecasts. The second set is a homogeneous sample of OFFICIAL, NHC-72, HURRAN and CLIPER forecasts. Other homogeneous sample groupings are omitted due to limited sample sizes.

1972 TROPICAL CYCLONE FORECAST VERIFICATION

PART I: ALL STORMS, ALL FORECASTS

STORM (cases)	OFFICIAL					NHC-67				
	I.P.	12HR	24HR	48HR	72HR	I.P.	12HR	24HR	48HR	72HR
AGNES	28 17	40 17	55 13	142 7	291 4	28 17	37 15	68 11	210 7	480 8
BETTY	17 16	78 16	178 14	406 10	873 6	0 0	0 0	0 0	0 0	0 0
CARRIE	24 8	37 8	82 8	190 4	219 1	24 9	45 9	94 9	214 5	324 1
DAWN	24 23	71 23	179 20	488 15	769 12	23 22	90 22	227 20	660 16	1093 12
ALL	24 64	60 64	135 55	365 36	689 23	25 48	64 46	154 40	468 28	823 21

STORM (cases)	CLIPER					SANBAR				
	I.P.	12HR	24HR	48HR	72HR	I.P.	12HR	24HR	48HR	72HR
AGNES	27 18	45 16	83 12	208 8	276 9	22 9	55 8	84 6	110 4	24 4
BETTY	24 11	71 11	177 9	500 6	919 4	15 1	18 1	183 1	449 1	44 1
CARRIE	24 9	49 9	101 9	265 5	294 1	28 4	41 4	86 4	206 2	0 0
DAWN	24 23	69 23	188 21	480 17	762 13	30 11	67 11	139 11	390 9	57 5
ALL	25 61	60 59	146 51	393 36	606 27	26 25	57 24	117 22	301 16	43 10

PART I, continued

STORM (cases)	NHC-72					HURRAN					
	I.P.	12HR	24HR	48HR	72HR	I.P.	12HR	24HR	48HR	72HR	
AGNES	28 17	46 15	71 11	161 7	291 8	28 14	47 12	84 8	166 4	193 6	
BETTY	24 11	72 11	157 9	393 6	754 4	11 1	145 1	304 1	716 1	810 1	
CARRIE	24 9	40 9	101 9	281 5	836 1	24 5	38 5	109 5	403 4	472 1	
DAWN	23 22	76 22	197 20	503 16	789 12	31 9	90 9	202 9	481 8	691 8	
	25 59	62 57	143 49	381 34	626 25	28 29	63 27	145 23	402 17	498 16.	
STORM (cases)	MODIFIED										
			I.P.	12HR	24HR						
AGNES						15 5	59 5	16 4			
BETTY						28 9	72 9	17 7			
CARRIE						27 6	71 6	16 6			
DAWN						24 6	89 6	25 5			
						24 26	74 26	18 22			

PART II: HOMOGENEOUS SAMPLE OF OFFICIAL, NHC-72,
HURRAN, AND CLIPER FORECASTS

STORM (cases)	OFFICIAL					NHC-72			
	I.P.	12HR	24HR	48HR	72HR	12HR	24HR	48HR	72HR
AGNES	30 12	41 12	5 8	131 2	169 1	49	76	128	277
BETTY	11 1	90 1	181 1	500 1	1057 1	124	158	396	739
CARRIE	24 5	27 5	72 5	191 4	219 1	15	78	296	836
DAWN	26 8	71 8	178 8	452 7	671 7	93	191	369	638
ALL	27 26	50 26	108 22	335 14	614 10	59	122	316	632

STORM (cases)	HURRAN				CLIPER			
	12HR	24HR	48HR	72HR	12HR	24HR	48HR	72HR
AGNES	47	84	111	111	47	80	149	180
BETTY	145	304	716	810	101	167	408	885
CARRIE	38	109	403	472	28	75	264	294
DAWN	92	212	508	696	92	224	538	805
ALL	63	146	436	624	59	135	395	699