

Preliminary Report

Hurricane Hortense

23 September - 2 October 1984

Hortense originated during the period 20-22 September, when a cloud circulation was detected by satellite some 300 n. mi. east of Bermuda. This formation occurred on the west, and presumably colder, side of an extensive frontal cloud band. Tropical Storm Isidore formed in a similar manner along the same frontal zone...a few days later and several hundred miles southwest of Hortense.

By the 23rd, satellite intensity estimates and a ship report indicated that this subtropical system was producing gale force winds. It was named Tropical Storm Hortense on the 24th, when an Air Force reconnaissance aircraft confirmed the presence of a closed low level vortex with a surface pressure of 998 millibars.

Fig. 1 shows the track of Hortense. The track resembles a reverse letter "w". Over a period of seven days, The storm made three 180-degree turns, the middle turn on the 27th and 28th being a tight loop. Finally on 30 September, it accelerated northeastward across the North Atlantic shipping lanes and became extratropical on 3 October while centered a few hundred miles northwest of the westernmost Azores..

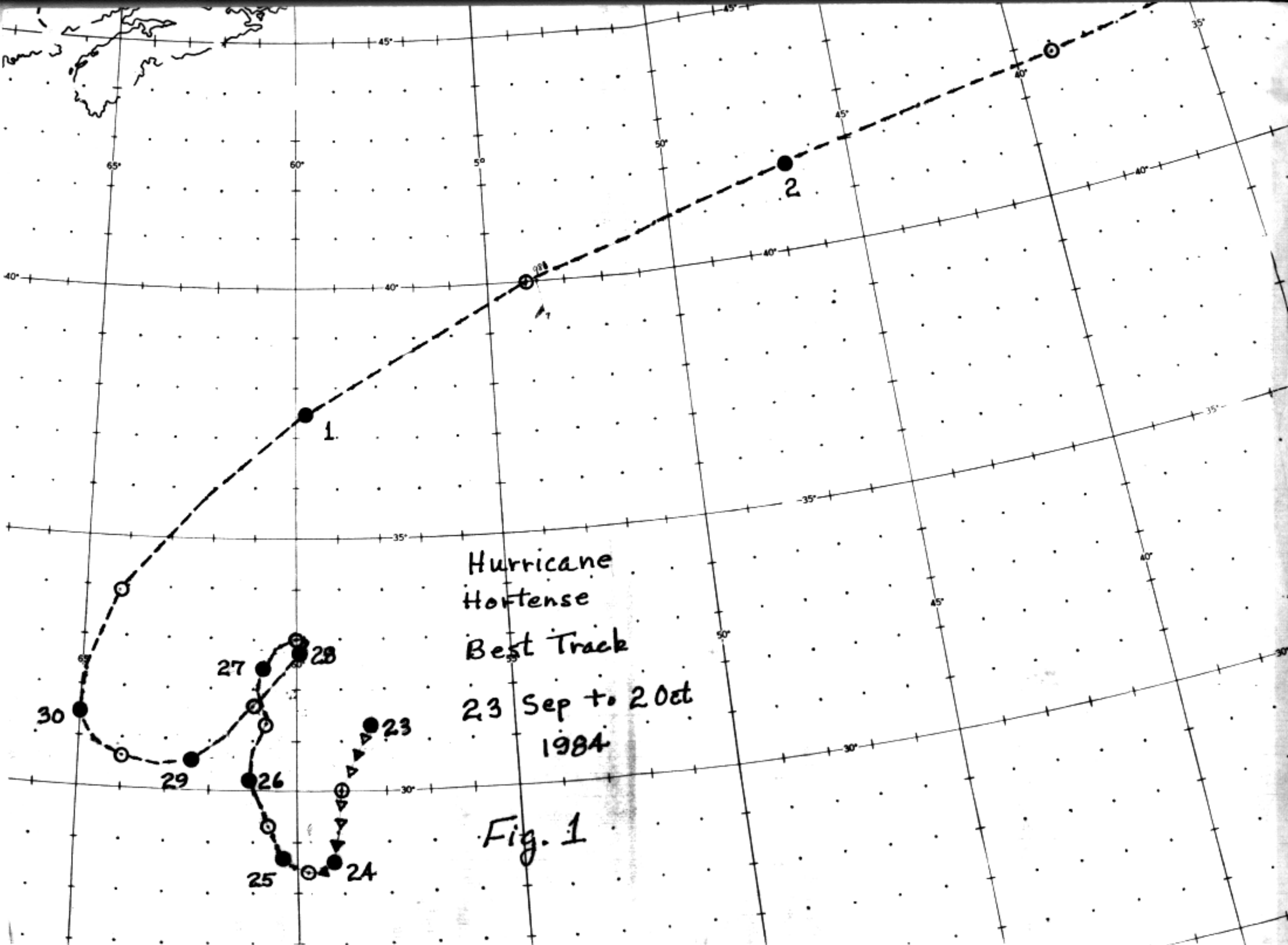
Hortense was monitored by reconnaissance from the 24th through the 26th and again on the 30th. It briefly reached hurricane status on the 25th, when an aircraft reported a maximum wind of 70 knots at 1500 feet and a surface pressure of 993 millibars. "Best track" positions and intensity are listed every six hours in Table 1 and wind and pressure curves are shown in Fig. 2.

As the storm was moving northward on 30 September, the center passed very close to Bermuda, where the sustained surface wind veered from east at 9 knots to west at 16 knots during the period 0400-1000 GMT. The minimum surface pressure at Bermuda was 1006 millibars at 0600 GMT...within one millibar of a reconnaissance pressure of 1007 millibars a few hours later. The time 0600 GMT is assumed to be the time of closest approach to Bermuda.

There have been no reports of deaths or damages in association with Hortense.

Table 1.
Preliminary best track
Hurricane Hortense
23 September to 2 October, 1984

date/time (GMT)	position		pressure (mb.)	wind speed (kt.)	stage
	lat.	lon.			
23/0000	31.3	58.3	1009	30	subtropical dep.
0600	30.7	58.7	1007	30	"
1200	30.0	59.0	1005	30	"
1800	29.2	59.1	1002	35	subtropical storm
24/0000	28.6	59.2	1000	35	"
0600	28.4	59.4	999	35	"
1200	28.4	59.8	999	40	"
1800	28.5	60.1	999	40	tropical storm
25/0000	28.7	60.3	999	45	"
0600	28.9	60.4	998	55	"
1200	29.3	60.6	997	60	"
1800	29.7	60.8	996	65	hurricane
26/0000	30.2	61.1	993	65	"
0600	30.8	61.0	994	60	tropical storm
1200	31.3	60.7	995	50	"
1800	32.0	60.9	996	45	"
27/0000	32.4	60.8	996	40	"
0600	32.8	60.5	995	40	"
1200	33.0	60.0	995	35	"
1800	32.9	59.8	995	35	"
28/0000	32.7	59.9	995	35	"
0600	32.3	60.2	996	35	"
1200	31.7	61.0	996	40	"
1800	31.1	61.7	997	40	"
29/0000	30.6	62.4	998	45	"
0600	30.5	63.2	999	45	"
1200	30.6	64.0	1001	45	"
1800	30.9	64.7	1002	40	"
30/0000	31.4	65.0	1004	40	"
0600	32.3	64.9	1006	35	"
1200	33.9	64.2	1007	35	"
1800	35.8	62.2	1006	35	"
01/0000	37.4	59.8	1004	40	"
0600	38.8	57.0	1001	45	"
1200	40.0	54.0	998	50	"
1800	40.9	50.4	996	50	"
02/0000	41.7	46.8	995	50	"
0600	42.3	43.0	995	50	"
1200	42.8	39.0	995	50	"
1800	43.2	35.0	996	45	"
03/0000					extratropical



Hurricane
Hortense
Best Track
23 Sep to 20 Oct
1984

Fig. 1

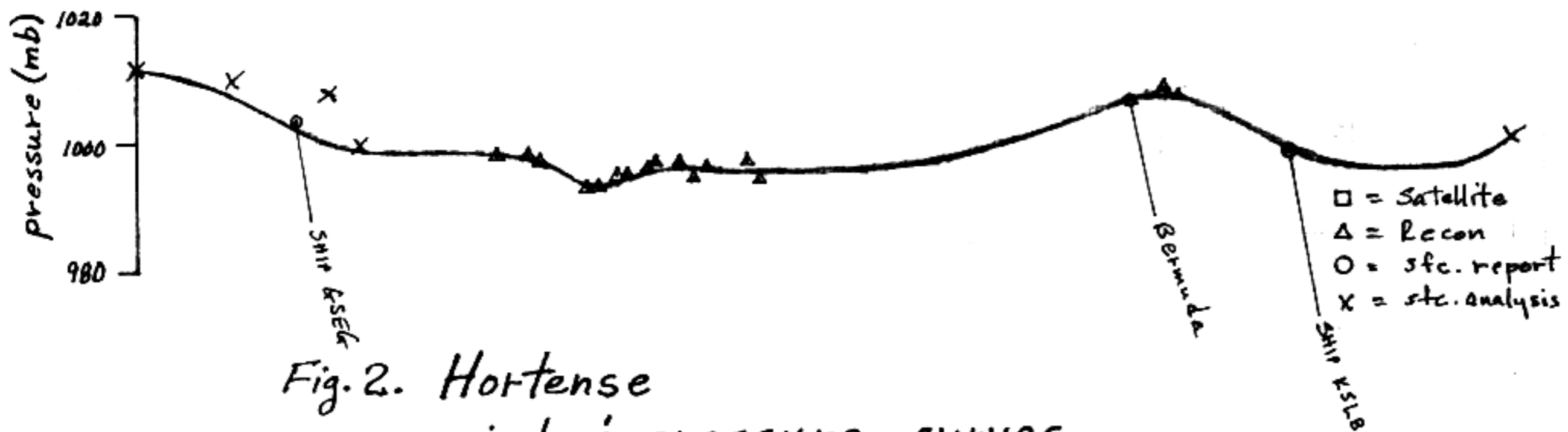
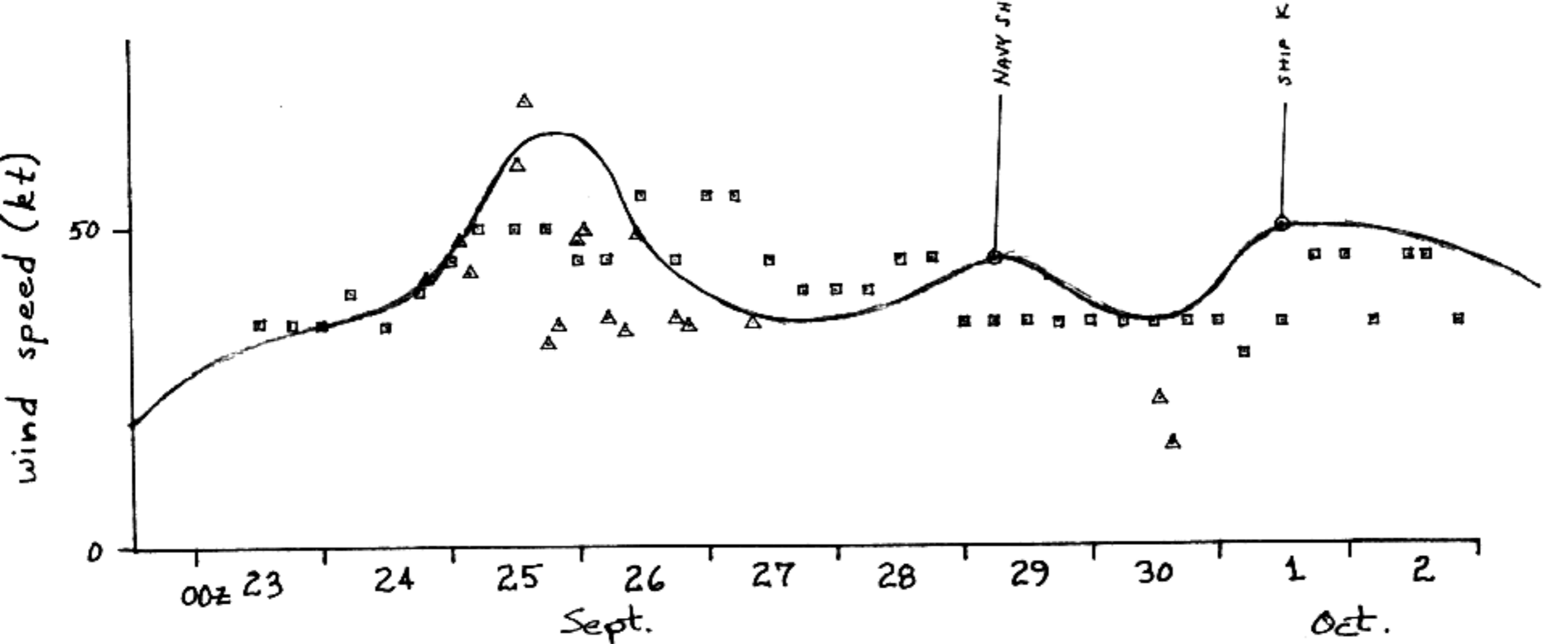


Fig. 2. Hortense
wind & pressure curves.

□ = Satellite
 △ = Recon
 ○ = sfc. report
 × = stc. analysis