

Summary of Flight Level Data Processing by Storm

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The following table provides a summary of the availability of flight data for each storm in the **Extended Flight Level Dataset**, one of the deliverables of a project at NCAR that is funded by the **Risk Prediction Initiative (RPI2.0)**.

The Hurricane Research Division's flight data catalog has been used as the starting point for the catalog below. Any storm that appears in their data catalog have been listed here (including some storms for which there are no flight data). Then this list was cross-checked against the Vortex Data Message archive to determine if there are any storms with flight data missing from HRD's catalog. A number of such storms have been identified – such storms are highlighted in yellow shading in the table below. These represent storms for which further data rescue efforts are needed. Storms for which there are no evidence that flights were taken are shaded out in grey.

The creation of this dataset involves four steps of data processing:

1. Step 1: Standardization of the 20+ ASCII text and NetCDF formats for all of the flights for each storm into one Common Data Format (Level 1 NetCDF file) per storm
2. Step 2: Creation of Earth-relative plots of all of the flights for each storm, and each individual flight, for 5 different variables
3. Step 3: Translation into a frame of reference relative to the storm center (lat/lon -> x/y) and then parsing to determine the beginning and end points of each "good" radial leg; the resulting parsing metadata is written into a Level 2 NetCDF file
4. Step 4: Radial binning of the resulting good legs into radial profiles, then writing all of this out to the final Level 3 output NetCDF file

The current status of data processing is indicated for each storm. Since Step 1 is very intensive and complicated process, the revision number of the code has been included, as well as the initials of the person who processed it, the platform it has been processed on ("caldera" = the data processing visualizations nodes of NCAR's main supercomputer), and the version number of the NCAR Command Language instance that was used in the processing. Green indicates that the processing is deemed to be successful, while orange indicates that the processing for that storm should be redone if better data become available.

"ERP" indicates that the Earth-relative plots have been made and have been visually checked (Step 2). "Parsed" indicates that the Step 3 processing has been completed. "Radials" indicates that the Step 4 processing has been completed. Note that for storms missing .trak files, it is not possible to do the Step 3 and Step 4 processing, so these storms have these boxes shaded out.

The color coding used below is as follows:

Red – Used to indicate that a given processing step did not successfully complete. In the 'Notes' column, items in bold red denote specific data files that have known defects, but that are still included in the data set products. Examples include:

- A NetCDF data file contains one or more bad values that are currently included in the data product.
- Artifacts or other issues have been noted on the earth-relative plots, but these flights are still included in the data product.
- A .trak file has not yet been generated, preventing radial legs from being computed (applies to years prior to 1999).

Orange – Used to indicate that a given processing step was successfully completed, but that opportunities for data rescue have been identified. If the missing data files are found, or higher resolution/higher quality data files become available, the data product for this storm will be updated. The data in the current version of the data product should still be of good quality and therefore usable. If a storm is missing a .trak file and we anticipate one may become available, the plotting/parsing/radial output steps will be indicated in orange, as we plan to rerun the processing once the .trak file has been provided by HRD.

Black - In the 'Notes' column, items in black text denote informational messages about issues that do not affect the quality of the data set products. Examples include:

- A .trak file of wind centers is not available and is not anticipated to be available in the future.
- A 1-sec ASCII listing has been substituted for a NetCDF file that had an issue. The substitution has no impact on the quality of the resulting data product.

Green – Used to indicate that a given processing step was successfully completed and that there is no evidence to suspect that the resulting data product has any defects. In the 'Notes' column, items in bold green denote specific data files that have had corrective action taken to remedy known defects. The nature of the remedy is described. Edited data files have been sent to HRD to update their data catalog.

Additional documentation on the Extended Flight Level Dataset will be made available in time on the [Flight Dataset](#) section of the [Tropical Cyclone Data Project website](#).

NOTE: some of the individual storm pages for 1997-1998 and 2014-2015 have not been updated yet. In the event of discrepancies, the table on this page reflects the most accurate information.

[illegible]

Ana	AL021997	HRD has now provided a .trak file 19970702U1.10sec.txt - flight duration ~32 hours	USAFR only	.10sec.txt	2	L1 - r1400	ERP			
Bill	AL031997	HRD has now provided a .trak file	USAFR only	.10sec.txt	2	L1 - r1400	ERP			
Claudette	AL041997	HRD has now provided a .trak file	USAFR only	.10sec.txt	4	L1 - r1400	ERP			
Danny	AL051997	HRD has now provided two .trak files – the NOAA .trak file has been used 19970719U2.10sec.txt - bad lat/ion value - sent edited file to HRD	USAFR and NOAA	.1sec.txt .10sec.txt	11	L1 - r1400	rerun			
TD05	AL051997	HRD has now provided a .trak file *It seems highly probable that these TD05 flights are a part of Danny – will check the plots	USAFR and NOAA	.1sec.txt .10sectxt	10	L1 - r1400	ERP			
Erika	AL071997	HRD has now provided a .trak file 19970907U2.10sec.txt - 100.3 ms ⁻¹ max wind speed - sent edited file to HRD 19970907U4.10sec.txt - bad lat/ion value - sent edited file to HRD data files currently include 1 synoptic surveillance flight	USAFR and NOAA	.10sec.txt .min	17	L1 - r1400	rerun			
Misc		no .trak file 19970601U1.10sec.txt - 100.8 ms ⁻¹ max wind speed near SC coastline - sent edited file to HRD	USAFR only	.10sec.txt	5	L1 - r1400	rerun			
1997 Eastern Pacific Storms						ALL L1 PROCESSING DONE				
Guillermo	EP091997	HRD has now provided two .trak files – the NOAA42 .trak file has been used data files currently include 4 ferry flights	USAFR and NOAA	.1sec.txt .10sec.txt	8	L1 - r1400	ERP			
Linda	EP141997	VDMS indicate AFRES flights; no data files on HRD server								
1998 Atlantic Storms						ALL L1 PROCESSING DONE				
Alex	AL011998	HRD has now provided a .trak file	USAFR only	.ten	3	L1 - r1400	ERP			

Bonnie	AL021998	<p>HRD has now provided a .trak file and some 1-sec data files</p> <p>980820H.txt – renamed to 19980820H.txt</p> <p>980821H.txt – renamed to 19980821H.txt</p> <p>980823H.txt – renamed to 19980823H.txt</p> <p>980823I.txt – renamed to 19980823I.txt</p> <p>980824H.txt – renamed to 19980824H.txt</p> <p>980824I.txt – renamed to 19980824I.txt</p> <p>980826H.txt – renamed to 19980826H.txt</p> <p>980826I.txt – renamed to 19980826I.txt</p> <p>No listing for 19980820I</p> <p>No listings for 'N'-flights</p> <p>19980820U1.min – truncated file</p> <p>19980821U2.min – file had a bunch of extra 1's in a column right after the date – hand edited</p> <p>19980827U1.min - bad lat/ion values and max wind speed is 341.0 ms⁻¹ - needs followup</p> <p>3 flights had incorrect ferry leg masking</p>	USAFR and NOAA	.ten .txt .min	32	L1 - r1400	rerun			
Charley	AL031998	<p>HRD has now provided a .trak file</p> <p>19980821U1.min - bad lat/ion value and max wind speed is 149.0 ms⁻¹ - sent edited file to HRD</p> <p>19980821U2.ten - max wind speed is 94.1 ms⁻¹ - sent edited file to HRD</p> <p>19980822U1.ten – this file is empty</p>	USAFR only	.ten .min	5	L1 - r1400	rerun			
Danielle	AL041998	<p>HRD has now provided a .trak file and some 1-sec data files</p> <p>980829H.txt – renamed to 19980829H.txt</p> <p>980829I.txt – renamed to 19980829I.txt</p> <p>980830H.txt – renamed to 19980830H.txt</p> <p>980830I.txt – renamed to 19980830I.txt</p> <p>This storm also had missions from the NASA DC-8 – these are not included here.</p>	USAFR and NOAA	.ten .txt .min	19	L1 - r1400	ERP			
Earl	AL051998	<p>HRD has now provided a .trak file</p> <p>980902I.txt – renamed to 19980902I.txt but then excluded because there appears to be 1sec listing for this flight</p>	USFAR and NOAA	.1sec.txt .ten .min	7	L1 - r1400	ERP			
Frances	AL061998	<p>VDMs indicate AFRES flights; no data files on HRD server</p> <p>no .trak file</p>								
Georges	AL071998	<p>HRD has now provided a .trak file</p> <p>Had to download all of the NOAA flights "by hand"</p> <p>19980925H1.ten – the file contents are blank</p>	USFAR and NOAA	.ten	25	L1 - r1400	ERP			
Hermine	AL081998	<p>HRD has now provided a .trak file</p>	USAFR only	.ten	6	L1 - r1400	ERP			

Mitch	AL131998	HRD has now provided a .trak file and some 1-sec data files 19981104I1.min - max wind speed 359.9 ms ⁻¹ ; bad lat/lon values? - sent edited file to HRD 19981024U2.ten - flight duration is 35.36 hrs - sent edited file to HRD	USAFR and NOAA	.ten .min	25	L1 - r1400	rerun			
Invest		no .trak file	USAFR only	.ten	4	L1 - r1400	ERP			
1998 Eastern Pacific Storms						ALL L1 PROCESSING DONE				
Lester	EP141998	no .trak file	USAFR only	.ten	3	L1 - r1400	ERP			
Madeline	EP151998	no .trak file	USAFR only	.ten	2	L1 - r1400	ERP			
1999 Atlantic Storms						ALL L1 PROCESSING DONE		L2 DONE	L3 DONE	
Arlene	AL011999	HRD has now provided a .trak file HRD has now provided data for this storm	USAFR only	.10sec.txt	4	L1 - r1400		PARSED	23	14
TD02	AL021999	No evidence that any flights were taken								
Bret	AL031999	HRD has now provided a .trak file HRD has provided higher resolution data for this storm Aug 18 - USAF 963 (0103A) – no file linked from HRD web page 19990822I1.1sec.txt – this file had an extra '9' in the filename - renamed to 19990822I1.1sec.txt - notified HRD 19990819U1.10sec.txt - max FL wind speed 130.2 m s ⁻¹ - sent edited file to HRD 1 flight had incorrect ferry leg masking	USAFR and NOAA	.1sec.txt .10sec.txt	11	L1 - r1400		PARSED	158	90
Cindy	AL041999	No evidence that any flights were taken for this storm – a previous file designated as Cindy was actually for Dennis								
Dennis	AL051999	HRD has now provided a .trak file HRD has provided higher resolution data for this storm 19990829U1.10sec.txt - max FL wind speed 137.4 m s ⁻¹ - sent edited file to HRD 2 flights had incorrect ferry leg masking data files currently include 3 synoptic surveillance flights	USAFR and NOAA	.1sec.txt .10sec.txt	31	L1 - r1400		PARSED	310	155
Emily	AL061999	HRD has now provided a .trak file HRD has now provided data for this storm	USAFR only	.10sec.txt	6	L1 - r1400		PARSED	35	16
TD07	AL071999	No evidence that any flights were taken								

Floyd	AL081999	<p>HRD has now provided a .trak file</p> <p>HRD has provided higher resolution data for this storm</p> <p>Sep 16 - USAF 977 (2608A) – no file linked from HRD web page</p> <p>19990914U1.10sec.txt - max FL wind speed 140.1 m s-1 - sent edited file to HRD</p> <p>19990915I1.1sec.txt - max FL wind speed 338.2 m s-1 and bad lat/lon value - sent edited file to HRD</p> <p>19990915U1.10sec.txt - max FL wind speed 107.5 m s-1 - sent edited file to HRD</p> <p>1 flight had incorrect ferry leg masking</p> <p>data files currently include 5 synoptic surveillance flights</p>	USAFR and NOAA	.1sec.txt .10sec.txt	23	L1 -L1 - r1400 r1400		PARSED	246	146
Gert	AL091999	<p>HRD has now provided a .trak file</p> <p>HRD has now provided data for this storm</p> <p>19990917U1.10sec.txt - max FL wind speed 81.8 m s-1 - sent edited file to HRD</p>	USAFR only	.10sec.txt	6	L1 - r1400		PARSED	52	23
Harvey	AL101999	<p>HRD has now provided a .trak file</p> <p>HRD has now provided data for this storm</p>	USAFR only	.10sec.txt	5	L1 - r140L1 - r1400		PARSED	50	27
TD11	AL111999	<p>HRD has now provided a .trak file</p> <p>HRD has now provided data for this storm</p> <p>data files currently include 2 air-sea flights</p> <p>19991003U2.10sec.txt - max FL wind speed 94.1 m s-1 - sent edited file to HRD</p>	USAFR and NOAA	.1sec.txt .10sec.txt	10	L1 - r1400		PARSED	60	23
Irene	AL131999	<p>HRD has now provided a .trak file</p> <p>HRD has provided higher resolution data for this storm</p> <p>19991016U2.10sec.txt – this file contains no data, so falling back to 19991016U2.min</p> <p>19991016U1.10sec.txt - this flight duration is 0.05 hrs</p> <p>19991017U1.10sec.txt - this flight duration is 0.18 hrs</p> <p>19991017U2.10sec.txt - this flight duration is 0.05 hrs</p> <p>19991017U3.10sec.txt - this flight duration is 0.02 hrs</p> <p>data files currently include 1 air-sea flight</p> <p>1 flight had incorrect ferry leg masking</p>	USAFR and NOAA	.1sec.txt .10sec.txt .min	13	L1 - r1400 L1 - r1400		PARSED	103	54
Jose	AL141999	<p>HRD has now provided a .trak file</p> <p>HRD has now provided data for this storm</p> <p>19991018U2.minob – only available in minob format, not currently read</p>	USAFR only	.min	9	L1 - r1400		PARSED	32	27

Katrina	AL151999	<p>HRD has now provided a .trak file</p> <p>HRD has now provided data for this storm</p> <p>19991028U2.minob – only available in minob format, not currently read</p> <p>19991029U2.minob – only available in minob format, not currently read</p> <p>NOTE: There were no radial legs in this storm.</p>	USAFR only	.10sec.txt	1	L1 - r1400		PARSED	0	0
Lenny	AL161999	<p>HRD has now provided a .trak file</p> <p>HRD has provided higher resolution data for this storm</p> <p>19991118U2.min contained two listings – according to the header, the first listing was actually for 19991118U1.min – this other listing has been put into a separate file</p> <p>19991110U1.minob – only available in minob format, not currently read</p> <p>Several of the .10sec.txt files do not have enough padding to separate the columns when the plane was flying above 10,000 m altitude:</p> <ul style="list-style-type: none"> 19991116U3.10sec.txt - currently excluded, falling back to 19991116U3.min 19991117U3.10sec.txt - currently excluded, falling back to 19991117U3.min 19991117U4.10sec.txt - currently excluded, falling back to 19991117U4.min <p>1 flight had incorrect ferry leg masking</p>	USAFR and NOAA	.1sec.txt .min	18	L1 - r1400		PARSED	86	67
Invest		no .trak file	USAFR only	.10sec.txt	1	L1 - r1400				
1999 Eastern Pacific Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Dora	EP071999	<p>HRD has provided higher resolution data for this storm</p> <p>HRD has now provided a .trak file</p>	USAFR only	.10sec.txt	6	L1 - r14L1 - r1400		PARSED	54	32
Eugene	EP081999	<p>HRD has now provided data for this storm</p> <p>HRD has now provided a .trak file</p>	USAFR only	.10sec.txt	5	L1 - r1400		PARSED	36	25
2000 Atlantic Storms		NOTE: all of the *.min files in this year had an extra blank line at the top of the header – these have been hand edited				L1 PROCESSING DONE		L2 DONE	L3 DONE	
TD01	AL012000	HRD has now provided a .trak file	USAFR only	.10sec.txt	1	L1 LL1L1 - r14001 - r140000L1 - r14001L1 - r1400 - r1400L1 - r14L1 - r1400		PARSED	8	2
Alberto	AL032000	No evidence that any flights were taken								
TD04	AL042000	HRD has now provided a .trak file	USAFR only	.10sec.txt	3	L1 - r1400		PARSED	18	11
Beryl	AL052000	HRD has now provided a .trak file	USAFR only	.10sec.txt	5	L1 - r1400		PARSED	35	13
Chris	AL062000	HRD has now provided a .trak file	USAFR only	.10sec.txt	2	L1 - r1400		PARSED	12	6
Debby	AL072000	<p>HRD has now provided a .trak file</p> <p>HRD has provided higher resolution data for flight 20000824H1 (was .min previously)</p>	USAFR and NOAA	.10sec.txt	10	L1 - r1400		PARSED	98	47

Florence	AL102000	<p>HRD has now provided a .trak file</p> <p>20000913U2.10sec.txt - max wind speed 116.8 ms^-1 - sent edited file to HRD</p> <p>No data is available for the following AFRES flights:</p> <ul style="list-style-type: none"> Sep 15 - USAF 866 (0710A) – no file linked from HRD web page Sep 15 - USAF 980 (0810A) – no file linked from HRD web page Sep 16 - USAF 866 (0910A) – no file linked from HRD web page 	USAFR only	.10sec.txt	6	L1 - r1400		PARSED	38	27
Gordon	AL112000	<p>HRD has now provided a .trak file</p> <p>No data is available for the following AFRES flights:</p> <ul style="list-style-type: none"> Sep 15 - USAF 968 (0611A) – no file linked from HRD web page Sep 15 - USAF 861 (0711A) – no file linked from HRD web page Sep 16 - USAF 985 (0811A) – no file linked from HRD web page Sep 16 - USAF 861 (1011A) – no file linked from HRD web page Sep 17 - USAF 968 (1111A) – no file linked from HRD web page Sep 17 - USAF 966 (1211A) – no file linked from HRD web page <p>20000914U2.10sec.txt - max wind speed 113.2 ms^-1 - sent edited file to HRD</p>	USAFR and NOAA	.10sec.txt .min	4	L1 - r1400		PARSED	14	3
Helene	AL122000	<p>HRD has now provided a .trak file</p> <p>HRD has provided higher resolution (1-sec) data files for the 3 NOAA flights</p> <p>No data is available for the following AFRES flights:</p> <ul style="list-style-type: none"> Sep 16 - USAF 980 (0112A) – no file linked from HRD web page Sep 16 - USAF 866 (0212A) – no file linked from HRD web page Sep 18 - USAF 980 (0312A) – no file linked from HRD web page Sep 21 - USAF 967 (0612A) – no file linked from HRD web page Sep 21 - USAF 866 (0712A) – no file linked from HRD web page Sep 22 - USAF 966 (0812A) – no file linked from HRD web page <p>1 flight had incorrect ferry leg masking</p>	NOAA only	.1sec.txt	3	L1 - r1400		PARSED	44	9
Joyce	AL142000	<p>HRD has now provided a .trak file</p>	USAFR only	.10sec.txt	3	L1 - r1400		PARSED	1	1

Keith	AL152000	<p>HRD has now provided a .trak file</p> <p>No data are available for the following AFRES flights:</p> <ul style="list-style-type: none"> Sep 28 - USAF 977 (0115A) – no file linked from HRD web page Sep 29 - USAF 968 (0215A) – no file linked from HRD web page Sep 30 - USAF 968 (0315A) – no file linked from HRD web page Sep 30 - USAF 966 (0415A) – no file linked from HRD web page <p>Removed 20001003I1.min and 20001004I1.min from the collection for Keith – these flights were in Leslie</p> <p>20001001H1.1sec.txt - Neal Dorst reports that this was an Ocean Heat study flown in in the Gulf of Mexico prior to Keith</p>	USAFR and NOAA	.1sec.txt .10sec.txt .min	10	L1 - r1400		PARSED	68	47
Leslie	AL162000	<p>HRD has now provided a .trak file</p> <p>HRD has provided higher resolution (1-sec) data files for the 3 NOAA flights</p>	USAFR and NOAA	.1sec.txt .10sec.txt	6	L1 - r1400		PARSED	76	35
Michael	AL172000	<p>HRD has now provided a .trak file</p> <p>HRD has provided high resolution data for 20001018H1</p>	USAFR only	.10sec.txt .1sec.txt	4	L1 - r1400		PARSED	32	24
ST01	AL192000	<p>HRD has now provided a .trak file</p> <p>HRD has now created a mission page and links to the data in their mission catalog</p>	USAFR only	.10sec.txt	2	L1 - r1400		PARSED	24	4
Disturbance	??	<p>no .trak file</p> <p>Note: currently this storm does not have a missions page on the HRD website</p>	USAFR only	.10sec.txt	3	L1 - r1400	ERP			
2000 Eastern Pacific Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Carlotta	EP032000	<p>HRD has now provided a .trak file</p> <p>20000620U1.10sec.txt - max FL wind speed 125.0 m s⁻¹ - sent edited file to HRD</p>	USAFR only	.10sec.txt	1	L1 - r1400		PARSED	7	5
Daniel	EP062000	HRD has now provided a .trak file	USAFR only	.10sec.txt	6	L1 - r1400		PARSED	48	37
Rosa	EP192000	HRD has now provided a .trak file	USAFR only	.10sec.txt	1	L1 - r1400		PARSED	5	4
2001 Atlantic Storms		<p>Most of the AFRES files in this year had ^M-style carriage returns at the end of each line. Ran 'dos2unix' to fix this.</p> <p>HRD provided AFRES data for a number of storms that were not present in their flight catalog</p>				L1 PROCESSING DONE		L2 DONE	L3 DONE	
Allison	AL012001	HRD has now provided a .trak file	USAFR only	.TEN	2	L1 - r1400		PARSED	17	5
Barry	AL032001	<p>HRD has now provided a .trak file</p> <p>20010805H1.1sec.txt – was previously missing - HRD has now provided this file</p> <p>No data are available for the following AFRES flights:</p> <ul style="list-style-type: none"> Aug 3 - USAF 866 (0503A) -- no file linked from HRD webpage Aug 5 - USAF 963 (0803A) -- no file linked from HRD webpage 	USAFR and NOAA	.1sec.txt .TEN	6	L1 - r1400		PARSED	79	40

Chantal	AL042001	EXCLUDED: 20000820H.min – the first line of data is bad (appears to be a width specification line) - hand edited – also, this file has mostly the same data as 20010820H1.1sec so that file has been used instead 20000819_AF861_0604A_chantal.TEN – the last line is blank - hand edited 20010820_AF980_0904A_chantal.TEN - flight duration is 28.73 hrs - hand edited and sent to HRD 1 flight had incorrect ferry leg masking	USAFR and NOAA	.1sec .TEN	11	L1 - r1400		PARSED	117	37
Dean	AL052001		USAFR only	.TEN	4	L1 - r1400		PARSED	24	4
Erin	AL062001	20010909_AF980_0706A_ERIN.TEN - max FL wind speed 95.7 m s-1 - sent edited file to HRD	USAFR and NOAA	.1sec .TEN	9	L1 - r1400		PARSED	81	44
Gabrielle	AL082001	.trak file had bad values at the end – hand edited and sent edited file to HRD 20010914_AF984_0508A_GABRIELLE.TEN - flight duration 33.6 hrs - removed second block of data with duplicate times for 4:52:50 to 4:54:0 - sent edited file to HRD 20010915H.min - Contains mistranslated lat/lon values - flight appears in eastern hemisphere 20010916H.min - Contains mistranslated lat/lon values - flight appears in eastern hemisphere	USAFR and NOAA	.TEN .min	10	L1 - r1400		PARSED	105	46
Humberto	AL102001		USAFR and NOAA	.1sec .TEN	10	L1 - r1400	ERP	PARSED	75	43
Iris	AL112001	HRD has now provided a .trak file 20011008_AF967_0711A_IRIS.TEN - max FL wind speed 111.6 m s-1 - sent edited file to HRD	USAFR and NOAA	.TEN .min	6	L1 - r1400		PARSED	85	52
Jerry	AL122001	HRD has now provided a .trak file	USAFR only	.TEN	2	L1 - r1400		PARSED	19	4
Karen	AL132001	Dropsondes exist from Oct 15 flight with the notation: Canada								
Michelle	AL152001	data files currently include 1 synoptic surveillance flight 20011105_AF861_1715A_MICHELLE.TEN - max FL wind speed 115.7 m s-1 - sent edited file to HRD 20011103H1.1sec - max FL wind speed 359.9 m s-1 and bad lat/lon value – sent edited file to HRD 20011104H2.1sec - max FL wind speed 360.0 m s-1 and bad lat/lon value – sent edited file to HRD 20011105_AF861_1715A_MICHELLE.TEN - max FL wind speed 115.7 m s-1 - sent edited file to HRD	USAFR and NOAA	.1sec .TEN	14	L1 - r1400		PARSED	132	81
2001 Eastern Pacific Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Barbara	EP022001	No evidence that any flights were taken								
Juliette	EP112001	HRD has now provided a .trak file 20010924_AF968_0211E_JULIETTE.TEN - max FL wind speed 97.2 m s-1 - sent edited file to HRD	USAFR only	.TEN	3	L1 - r1400		PARSED	23	12
Lorena	EP132001	HRD has now provided data for this storm no .trak file - due to lack of a closed circulation, it was not possible to make a .trak file	USAFR only	.TEN	1	L1 - r1400				

2002 Atlantic Storms		Most of the AFRES files in this year had ^M-style carriage returns at the end of each line. Ran 'dos2unix' to fix this.				L1 PROCESSING DONE		L2 DONE	L3 DONE	
Bertha	AL022002		USAFR only	.ten	1	L1 - r1400	ERP	PARSED	11	4
Cristobal	AL032002	20020806U1.ten - max FL wind speed 96.7 m s-1 - sent edited file to HRD	USAFR only	.ten	3	L1 - r1400		PARSED	23	6
Edouard	AL052002		USAFR and NOAA	.ten .min	12	L1 - r1400	ERP	PARSED	124	57
Fay	AL062002	Not present in VDM archive 20020905U2.ten - odd flight duration (54.7 hrs) - sent edited file to HRD	USAFR only	.ten	5	L1 - r1400		PARSED	54	13
Gustav	AL082002	20020908U1.ten - max FL wind speed 134.8 m s-1 - sent edited file to HRD 20020911U2.ten - bad lat/lon value - sent edited file to HRD	USAFR and NOAA	.ten .min	8	L1 - r1400		PARSED	66	33
Hanna	AL092002		USAFR and NOAA	.ten .min	8	L1 - r1400	ERP	PARSED	71	41
Isidore	AL102002	20020915U1.ten - odd flight duration (55.45 hrs) - sent edited file to HRD 4 flights had incorrect ferry leg masking data files currently include 3 pre-storm air-sea flights	USAFR and NOAA	.ten .min	30	L1 - r1400		PARSED	272	149
Kyle	AL122002	20021011U2.ten - bad lat/lon value - sent edited file to HRD	USAFR only	.ten .min	5	L1 - r1400		PARSED	45	27
Lili	AL132002	20020928U2.ten - max FL wind speed 86.9 m s-1 - sent edited file to HRD 20021002U1.ten - max FL wind speed 85.4 m s-1 - sent edited file to HRD 3 flights had incorrect ferry leg masking data files currently include 1 post-storm ocean survey flight	USAFR and NOAA	.ten .min	27	L1 - r1400		PRSEPARSED	75	167
TD14	AL142002	20021016U1.ten - odd flight duration (28.98 hrs) - sent edited file to HRD data files currently include 1 aborted flight	USAFR only	.ten	6	L1 - r1400		PARSED	49	14
2002 Eastern Pacific Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Douglas	EP052002	No evidence that any flights were taken								
Elida	EP062002	No evidence that any flights were taken								
TD07	EP072002	No evidence that any flights were taken								
Kenna	EP142002		USAFR only	.ten	2	L1 - r1400	ERP	PARSED	15	8
2003 Atlantic Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Bill	AL032003	Had to download the data by hand	USAFR only	.ten	2	L1 - r1400	ERP	PARSED	27	16
Claudette	AL042003	20030712U1.ten - max FL wind speed 123.5 m s-1 - sent edited file to HRD 20030714U1.ten - max FL wind speed 103.4 m s-1 - sent edited file to HRD	USAFR and NOAA	.1sec .ten	17	L1 - r1400		PARSED	192	98
TD07	AL072003	VDMs indicate AFRES flights; no data files on HRD server								
Erika	AL082003		USAFR only	.ten	8	L1 - r1400	ERP	PARSED	51	28

Fabian	AL102003	.trak file had bad dates for the first three time points - sent edited file to HRD 20030901U1.ten – bad values at beginning of file - sent edited file to HRD Contains 6 *.std files that also have 60-sec ASCII listings 2 flights had incorrect ferry leg masking	USAFR and NOAA	.ten .min	16	L1 - r1400	ERP	PARSED	132	64
Grace	AL112003		USAFR only	.ten	3	L1 - r1400	ERP	PARSED	21	9
TD09	AL092003	Not present in VDM archive broken links to data files on HRD web page – now fixed 20030822U1.ten – the header lines were in reversed order, with an extra line – sent edited files to HRD 20030823U1.ten – the header lines were in reverse order, with an extra line – sent edited files to HRD no .trak file	USAFR only	.ten	2	L1 - r1400				
Henri	AL122003	Had to download the data by hand HRD has now provided a .trak file 20030906U3.txt - max wind speed of 139.9 m s ⁻¹ - sent edited file to HRD 20030907U2.txt - bad max wind speed of 55.7 m s ⁻¹ - sent edited file to HRD	USAFR only	.ten	10	L1 - r1400		PARSED	103	43
Isabel	AL132003	20030913U1.ten - bad lat/lon values at beginning of file - hand edited and sent to HRD 20030918U1.ten - max FL wind speed 91.6 m s ⁻¹ - sent edited file to HRD	USAFR and NOAA	.1sec .min	21	L1 - r1400		PARSED	316	119
Juan	AL152003	Dropsondes exist from Sep 28,29 flights with the notation: Canada; Not present in VDM archive								
Larry	AL172003	Had to download the data by hand HRD has now provided a .trak file 20031002U1.ten - max FL wind speed 108.0 m s ⁻¹ - sent edited file to HRD	USAFR only	.ten	8	L1 - r1400		PARSED	88	42
Mindy	AL182003	HRD has now provided a .trak file 20031011U1.txt - max wind speed of 127.1 m s ⁻¹ - sent edited file to HRD data files currently include 1 ferry flight	USAFR only	.ten	6	L1 - r1400		PARSED	37	24
Odette	AL202003	20031205I1.min – had an extra line right underneath the header - sent edited file to HRD 20031206I1.min – file contains a character in the first line that causes text editors to think that it is a binary file – contains "Binary file 20031206I1.min matches" – deleted the non-printable character using vi and sent to HRD 20031207I1.min - same problem as 20031206I1 – deleted the non-printable character using vi and sent to HRD data files currently include 1 aborted flight	USAFR and NOAA	.ten .min	8	L1 - r1400	ERP	PARSED	42	17
2003 Eastern Pacific Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Jimena	EP102003	Had to download the data by hand HRD has now provided a .trak file	USAFR only	.ten	4	L1 - r1400		PARSED	40	20

Matthew	AL142004	data files currently include 1 aborted flight 20041007u1.ten - max FL wind speed 123.5 m s-1 - sent edited file to HRD	USAFR only	.ten	5	L1 - r1400		PARSED	36	16
2004 Eastern Pacific Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Estelle	EP072004		USAFR only	.ten	1	L1 - r1400	ERP	PARSED	7	3
Lester	EP152004	Not present in VDM archive no .trak file – Neal Dorst reports: One USAF flight found system had dissipated by time of mission. No wind centers nor track.	USAFR only	.ten	1	L1 - r1400	ERP			
2005 Atlantic Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Arlene	AL012005	20050608U1ARLENE.TXT – file has many extra carriage returns – fixed using filter_bad_newlines.ncl and sent to HRD 20050610I1_RbX.nc?	USFAR and NOAA	.TXT	7	L1 - r1400	ERP	PARSED	78	37
Bret	AL022005	Not present in VDM archive Not linked from HRD's storm catalog – this has now been fixed 20050628U1BRET.TXT – file has many extra carriage returns – fixed using filter_bad_newlines.ncl and sent to HRD 20050625U1BRET.TXT – file has many extra carriage returns – fixed using filter_bad_newlines.ncl and sent to HRD .trak file had one bad line - hand edited and sent to HRD	USAFR only	.TXT	2	L1 - r1400	ERP	PARSED	9	4
Cindy	AL032005	20050703U1CINDY.TXT – file has many extra carriage returns – fixed using filter_bad_newlines.ncl and sent to HRD .trak file had one bad line - hand edited and sent to HRD 1 flight had incorrect ferry leg masking	USAFR and NOAA	.1sec .TXT	5	L1 - r1400	ERP	PARSED	41	28
Dennis	AL042005	20050706I2.nc – file is missing many meteorological variables – file has been excluded 20050706I1.1sec – file had an extraneous column in the 2nd part of the file - fixed using 'clean_bad_columnb.ncl' and sent to HRD 2 flights had incorrect ferry leg masking data files currently include 2 synoptic surveillance flights	USAFR and NOAA	.1sec .TXT	21	L1 - r1400	ERP	PARSED	187	121
Emily	AL052005	20050717H1.nc – file is missing many meteorological variables – file has been excluded 20050715U1EMILY.TXT - file has bad GPS altimeter values between 03:26:20 - 03:28:50 that destroy the padding - added padding - sent updated file to HRD 20050718U1EMILY.TXT - file has bad GPS altimeter values between 23:48:10 - 23:49:10 that destroy the padding - added padding - sent updated file to HRD data files currently include 1 synoptic surveillance flight	USAFR and NOAA	.1sec .TXT	15	L1 - r1400	ERP	PARSED	157	120
Franklin	AL062005	20050721U1FRANKLIN.TXT – file has many extra carriage returns – fixed using filter_bad_newlines.ncl and sent to HRD	USAFR only	.TXT	5	L1 - r1400	ERP	PARSED	49	35

Gert	AL072005	Not present in VDM archive 20050724lb1_R.nc – file is missing many meteorological variables – excluded	USAFR and NOAA	.1sec .TXT	5	L1 - r1400		PARSED	27	9
Harvey	AL082005	Not present in VDM archive 20050729U1HARVEY.TXT -- file has many extra carriage returns – fixed using filter_bad_newlines.ncl - sent updated file to HRD 20050804U1HARVEY.TXT - file has bad GPS altimeter values between 11:27:10 - 11:27:40 that destroy the padding - added padding - sent updated file to HRD	USAFR only	.TXT	3	L1 - r1400	ERP	PARSED	13	8
Irene	AL092005		USAR only	.TXT	7	L1 - r1400	ERP	PARSED	82	40
TD10	AL102005	Not linked from HRD's web page – this has now been fixed Contains a file that may be belong to Bret – this has been moved to Bret's directory no .trak file - Neal Dorst reports: "One USAF flight found system had dissipated by time of mission. No wind centers nor track" 1 flight had incorrect ferry leg masking	USAFR only	.TXT	1	L1 - r1400	ERP			
Jose	AL112005		USAFR only	.TXT	1	L1 - 1400	ERP	PARSED	9	7
Katrina	AL122005	20050823U1KATRINA.TXT – file has many extra carriage returns – fixed using filter_bad_newlines.ncl and sent to HRD data files currently include 1 aborted flight data files currently include 1 synoptic surveillance flight data files currently include 1 post-storm air-sea flight	USAFR and NOAA	RXC.nc final.nc .1sec .TXT .ten	18	L1 - r1400	ERP	PARSED	234	105
Nate	AL152005		USAFR only	.TXT	1	L1 - r1400	ERP	PARSED	5	4
Ophelia	AL162005	20050910U1OPHELIA.TXT - - file has a bad GPS altimeter values at 12:26:00 that destroys the padding - added padding - sent updated file to HRD 20050906H1_final.nc - the lat/lon in this file were all constant – this file has been excluded, reverting back to 20050906H1.1sec	USAFR and NOAA	RXC.nc final.nc .1sec .TXT	31	L1 - r1400	ERP	PARSED	370	182
Philippe	AL172005		USAFR only	.TXT	3	L1 - r1400	ERP	PARSED	16	11
Rita	AL182005	20050922I1.1sec - the file contained the entire listing twice - sent updated file to HRD 20050923I1a.nc - this file is missing many of the key variables - excluded and reverting back to the 1-sec file 20050923I1b.nc - this file is missing many of the key variables - excluded and reverting back to the 1-sec file 20050924U1RITA.TXT - file has bad GPS altimeter values between 06:22:00 - 06:24:00 that destroy the padding - added padding - sent updated file to HRD data files currently include 1 post-storm ocean heat flight 2 flights had incorrect ferry leg masking	USAFR and NOAA	RXC.nc final.nc .1sec .TXT	20	L1 - r1400	ERP	PARSED	258	123
Stan	AL202005		USAFR only	.TXT	4	L1 - r1400	ERP	PARSED	39	28
Tammy	AL222005		USAFR only	.TXT	1	L1 - r1400	ERP	PARSED	9	6

Wilma	AL252005	20051019U1WILMA.TXT - most of the beginning of this flight is missing because the data were written into two different files, one at 1-sec and the other at 10-sec; data rescue efforts are under way by Neal Dorst and Richard Henning	USAFR and NOAA	.nc .1sec .TXT	22	L1 - r1400	ERP	PARSED	190	117
Beta	AL272005		USAFR only	.TXT	2	L1 - r1400	ERP	PARSED	11	7
Gamma	AL282005	20051117U1GAMMA.TXT – file has many extra carriage returns – fixed using filter_bad_newlines.ncl and sent to HRD 20051118U1GAMMA.TXT – file has many extra carriage returns – fixed using filter_bad_newlines.ncl and sent to HRD	USAFR only	.TXT	5	L1 - r1400	ERP	PARSED	46	18
Invest	??	no .trak file Not linked from HRD's web site 20050625U1BRET.TXT – file has many extra carriage returns – fixed using filter_bad_newlines.ncl, moved to Bret's folder	USAFR only	.TXT	2	L1 - r1400	ERP			
2005 Eastern Pacific Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Adrian	EP012005		USAFR only	.TXT	1	L1 - r1400	ERP	PARSED	5	4
2006 Atlantic Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Alberto	AL012006		USAFR only	.ten	6	L1 - r1400	ERP	PARSED	71	37
Beryl	AL032006		USAFR only	.ten	6	L1 - r1400	ERP	PARSED	63	44
Chris	AL042006	20060804U1.ten - bad data at lines 08:07:20, 08:19:20, and 08:39:20 - removed these lines - sent updated file to HRD 20060802U2.ten - file has bad GPS altimeter values between 22:28:40 - 222:28:50 that destroy the padding - added padding - sent updated file to HRD	USAFR only	.ten	6	L1 - r1400	ERP	PARSED	67	48
Debby	AL052006	HRD's website indicates that 2 SAL missions were flown by NOAA 49 (plus a ferry) flight), but no data are present								
Ernesto	AL062006	20060826U1.ten - file has bad GPS altimeter values between 08:30:40 - 08:31:50 that destroy the padding - added padding - sent updated file to HRD 20060829U1.ten - one line had an extra digit in the time group - sent updated file to HRD 20060829U2.ten - file has a bad GPS altimeter value at 18:18:40 that destroy the padding - added padding - sent updated file to HRD 1 flight had incorrect ferry leg masking data files currently include 1 ocean winds flight data files currently include 2 synoptic surveillance flights	USAFR and NOAA	RC.nc .ten	19	L1 - r1400	ERP	PARSED	212	98
Florence	AL072006	20060910U2.ten - file has bad GPS altimeter values between 20:37:00 - 20:37:10 that destroy the padding - added padding and reran processing, plotting, and parsing - sent updated file to HRD	USAFR only	.ten	5	L1 - r1400	ERP	PARSED	40	28
Gordon	AL082006		USAFR only	.ten	1	L1 - r1400	ERP	PARSED	6	6

Helene	AL092006	20060917H1.1sec - file had a -999 on the last line - hand edited 20060918H1.1sec - file had a -999 on the last line - hand edited 20060919H1.1sec - file had a -999 on the last line - hand edited 20060920H1.1sec - file had a -999 on the last line - hand edited	NOAA only	.1sec	4	L1 - r1400	ERP	PARSED	54	32
Invest		no .trak file Flights are from two different invests 20060831U1.ten – Neal Dorst said that this flight was aborted on the runway. It is currently still included in the dataset. data files currently include 1 aborted flight	USAFR only	.ten	5	L1 - r1400	ERP			
Eastern Pacific Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
John	EP112006	20060830U1.ten - file has bad values between 13:59:20 - 13:59:30 - removed these data and reran processing, plotting, and parsing - sent updated file to HRD	USFAR only	.ten	3	L1 - r1400	ERP	PARSED	18	13
Lane	EP132006		USFAR only	.ten	2	L1 - r1400	ERP	PARSED	11	8
Paul	EP172006		USFAR only	.ten	1	L1 - r1400	ERP	PARSED	5	4
2007 Atlantic Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Andrea	AL012007		USAFR only	.TXT	2	L1 - r1400	ERP	PARSED	16	8
Barry	AL022007		USAFR only	.TXT	2	L1 - r1400	ERP	PARSED	18	6
Chantal	AL032007	No evidence that any flights were taken								
Dean	AL042007	Sent edited .trak file to HRD 20070817U2.TXT - file contains a section with negative gps altimeter readings - hand edited file to remove data between 01:32:20 and 01:37:50, sent to HRD 20070822U1.TXT - file contains bad (large negative) values for gps altimeter, resulting in insufficient padding and variable registration error - hand edited to remove data with large negative values of gps altimeter, sent to HRD data files currently include 1 aborted flight 2 flights have incorrect ferry leg masking 1 flights have odd flight patterns	USAFR only	.ONE .TXT	14	L1 - r1400	ERP	PARSED	131	87
Erin	AL052007	20070815U2.TXT - at time 23:20:40 there are two lines stuck together with a <cr>; there is also an empty line at end, as well as a couple misaligned lines - hand edited and sent to HRD	USAFR and NOAA	RC.nc .TXT	3	L1 - r1400	ERP	PARSED	40	14

Felix	AL062007	<p>20070901U1.TXT - the header of this file was split across two lines - hand edited and sent to HRD</p> <p>20070902U2.ONE - one line was missing the seconds in the time, a couple other lines were misaligned - hand edited and sent to HRD</p> <p>20070902H1_RXC.nc - this file has an artifact on the earth-relative plot</p> <p>20070902I1_RC.nc - this file needs to be checked, as it's time coordinate doesn't seem to fit with the storm period (there are also strange artifacts visible on the earth-relative plot)</p> <p>data files currently include 1 ferry flight</p> <p>1 flight had incorrect ferry leg masking</p>	USAFR and NOAA	RXC.nc RC.nc .ONE	13	L1 - r1400	ERP	PARSED	99	40
Gabrielle	AL072007	<p>20070905U1 19302 01GGA2 GABRIELLE.ONE - excluded since this is a subset of 20070905U1.ONE</p> <p>20070909U2.TXT - max FL wind speed 251.0 m s-1 - hand edited and sent to HRD</p>	USAFR only	.ONE .TXT	7	L1 - r1400		PARSED	57	34
Ingrid	AL082007	<p>data files currently include 2 ferry flights</p> <p>Four of these flights had odd flight patterns that result in a low number of good radial legs</p>	NOAA only	RXC.nc	8	L1 - r1400	ERP	PARSED	49	2
Humberto	AL092007	One flight had incorrect ferry leg masking	USAFR only	.TXT	3	L1 - r1400	ERP	PARSED	18	13
TD10	AL102007		USAFR and NOAA	RXC.nc RC.nc .TXT	4	L1 - r1400	ERP	PARSED	47	8
Karen	AL122007	<p>20070926I1_R_windsXC.nc - is a duplicate of 20070926I1_RXC.nc so it has been excluded</p> <p>L2: Bad center-finding results in no good legs</p> <p>data files currently include 2 ferry flights</p>	NOAA only	RXC.nc	4	L1 - r1400	ERP	PARSED	11	0
Lorenzo	AL132007	Not present in VDM archive	USFR only	.TXT	6	L1 - r1400	ERP	PARSED	42	24
Noel	AL162007	<p>20071031I1.1sec.txt - empty lines at end of file - hand edited</p> <p>20071031U3.TXT - empty line at end of file - hand edited</p> <p>1 flight had incorrect ferry leg masking</p> <p>2 plots had inconsistent dates with storm time period</p>	USAFR and NOAA	RXC.nc RC.nc .1sec.txt .TXT	13	L1 - r1400	ERP	PARSED	96	42
Olga	AL172007	<p>Not present in VDM archive</p> <p>no .trak file – Neal Dorst reports: "One USAF flight found storm was overland. No follow up missions. No wind centers nor track."</p>	USAFR only	.TXT	1	L1 - r1400	ERP			
Invest		<p>Not linked from HRD catalog</p> <p>20070802U2 16303 02DDA2 INVEST.TXT - strange filename, but appears to be okay</p> <p>no .trak file</p> <p>1 flight had incorrect ferry leg masking</p>	USAFR only	.TXT	4	L1 - r1400	ERP			
2007 Eastern Pacific Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Flossie	EP092007	Not present in VDM archive	USAFR only	.ONE .TXT	5	L1 - r1400	ERP	PARSED	31	25

2008 Atlantic Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Bertha	AL022008		USAFR only	.TXT	4	L1 - r1400	ERP	PARSED	21	16
Cristobal	AL032008		USAFR only	.TXT	4	L1 - r1400	ERP	PARSED	38	29
Dolly	AL042008	<p>Couldn't find a variable for 'Radar Altitude' in the NetCDF files</p> <p>5 flights had incorrect ferry leg masking</p> <p>20080731H1 - excluded this flight since it was a calibration flight</p>	USAFR and NOAA	RXC.nc RC.nc .TXT	12	L1 - r1400	ERP	PARSED	110	52
Edouard	AL052008		USAFR only	.TXT	3	L1 - r1400	ERP	PARSED	24	18
Fay	AL062008	<p>Couldn't find a variable for 'Radar Altitude' in the NetCDF files</p> <p>20080814H1_RXC.nc - max FL wind speed of 75.5 m s⁻¹</p> <p>20080815I1_RC.nc - there are artifacts on the earth-relative plot</p> <p>data files currently include 2 ferry flights</p> <p>2 flights had odd flight patterns</p> <p>5 flights had incorrect ferry leg masking</p>	USAFR and NOAA	RXC.nc RC.nc .TXT	23	L1 - r1400	ERP	PARSED	171	70
Gustav	AL072008	<p>Couldn't find a variable for 'Radar Altitude' in the NetCDF files</p> <p>4 flights had incorrect ferry leg masking</p> <p>2 air-sea flights (1 poststorm)</p>	USAFR and NOAA	RXC.nc RC.nc .TXT	24	L1 - r1400	ERP	PARSED	233	102
Hanna	AL082008	1 flight had incorrect ferry leg masking	USAFR and NOAA	RXC.nc .TXT	9	L1 - r1400	ERP	PARSED	99	54
Ike	AL092008	<p>20080917I1.1sec - deleted from 15:13:10 to the end of the file, as the remaining values were bad lat/lon, sent edited file to HRD</p> <p>2 flights had incorrect ferry leg masking</p> <p>1 SFMR calibration flight</p> <p>data files currently include 1 synoptic surveillance flight</p> <p>2 air-sea flights (1 poststorm)</p>	USAFR and NOAA	RXC.nc RC.nc .1sec .TXT	27	L1 - r1400		PARSED	283	113
Kyle	AL112008	2 flights had incorrect ferry leg masking	USAFR and NOAA	RXC.nc .1sec	17	L1 - r1400	ERP	PARSED	182	32
Marco	AL132008	HDOBS indicate that flights were taken; no other data on HRD server								
Omar	AL152008		USAFR only	.TXT	5	L1 - r1400	ERP	PARSED	53	27
TD16	AL162008		USAFR only	.TXT	1	L1 - r1400	ERP	PARSED	10	4
Paloma	AL172008	1 flight had incorrect ferry leg masking	USAFR and NOAA	RXC.nc .TXT	9	L1 - r1400	ERP	PARSED	99	38
Invest	??	<p>Not present in VDM archive, several invests</p> <p>no .trak file</p>	USAFR only	.1sec.txt	10	L1 - r1400	ERP			
July Wave	??	<p>Not present in VDM archive</p> <p>no .trak file</p>	USAFR only	.TXT	4	L1 - r1400	ERP			
August Wave	??	<p>Not present in VDM archive</p> <p>no .trak file</p>	USAFR only	.TXT	3	L1 - r1400	ERP			
2008 Eastern Pacific Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Alma	EP012008	No evidence that any flights were taken								

Norbert	EP152008	Not present in VDM archive data files currently include 1 aborted flight	USAFR only	.TXT	3	L1 - r1400	ERP	PARSED	8	5
Odile	EP162008	Not present in VDM archive	USAFR only	.TXT	1	L1 - r1400	ERP	PARSED	3	2
2008 Western Pacific Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Jangmi	WP192008	Not present in VDM archive	USAFR only	.1sec.txt	3	L1 - r1400	ERP	PARSED	60	16
Nuri	WP132008	Not present in VDM archive	USAFR only	.1sec.txt	2	L1 - r1400	ERP	PARSED	12	7
Sinlaku	WP152008	Not present in VDM archive	USAFR only	.1sec.txt	8	L1 - r1400	ERP	PARSED	53	26
2009 Atlantic Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Ana	AL022009	Not present in VDM archive	USAFR and NOAA	RXC.nc .10sec	3	L1 - r1400	ERP	PARSED	20	4
Bill	AL032009	data files currently include 1 synoptic surveillance flight 2 flights had incorrect ferry leg masking	USAFR and NOAA	RXC.nc .10sec	15	L1 - r1400	ERP	PARSED	108	44
Claudette	AL042009	.trak file is not linked from HRD web page - notified HRD	USAFR only	.10sec	1	L1 - r1400	ERP	PARSED	5	3
Danny	AL052009		USAFR and NOAA	RXC.nc .10sec	12	L1 - r1400	ERP	PARSED	55	23
Erika	AL062009	Sent edited .trak file to HRD	USAFR only	.10sec	5	L1 - r1400	ERP	PARSED	54	28
Ida	AL112009	2009110811.1sec - file had a -999 on the last line - hand edited 2009110811.1sec - bad lat/lon value and max FL wind speed 117.9 m s-1 - hand edited and sent to HRD data files currently include 1 synoptic surveillance flight	USAFR and NOAA	.1sec .10sec	8	L1 - r1400		PARSED	61	43
Invest - 2009	???	Not present in VDM archive – but has one SFMR data file								
2009 Eastern Pacific Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Andres	EP022009	HRD has now provided a .trak file	USAFR only	.10sec	1	L1 - r1400		PARSED	6	3
Felicia	EP082009	20090809U2.10sec - file is truncated - no useful data - HRD has provided an HDOB replacement 20090810U1.10sec - file is truncated - no useful data - HRD has provided an HDOB replacement These HDOB files are not yet included in the dataset.	USAFR only	.10sec	5	L1 - r1400	ERP	PARSED	27	20
Jimena	EP132009		USAFR only	.10sec	2	L1 - r1400	ERP	PARSED	12	8
Rick	EP202009	Not present in VDM archive	USAFR only	.10sec	2	L1 - r1400	ERP	PARSED	10	7
2010 Atlantic Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Alex	AL012010	Sent edited .trak file to HRD 1 flight had incorrect ferry leg masking	USAFR and NOAA	RXC.nc .1sec.txt	11	L1 - r1400	ERP	PARSED	146	67
TD02	AL022010	Not present in VDM archive 1 flight had incorrect ferry leg masking	USAFR and NOAA	RXC.nc .1sec.txt	4	L1 - r1400	ERP	PARSED	44	2
Bonnie	AL032010	Not present in VDM archive Sent edited .trak file to HRD	USAFR and NOAA	RXC.nc .1sec.txt	7	L1 - r1400	ERP	PARSED	136	25
Colin	AL042010	HRD has now provided a .trak file 1 flight had incorrect ferry leg masking	USAFR only	.1sec.txt	5	L1 - r1400		PARSED	49	14

TD05	AL052010		USAFR and NOAA	RXC.nc .1sec.txt	5	L1 - r1400	ERP	PARSED	39	8
Danielle	AL062010		USAFR only	.1sec.txt	2	L1 - r1400	ERP	PARSED	19	8
Earl	AL072010	data files currently include 2 ferry flights 2 flights had incorrect ferry leg masking data files currently include 1 synoptic surveillance flight	USAFR and NOAA	RXC.nc .1sec.txt	26	L1 - r1400	ERP	PARSED	245	84
Fiona	AL082010		USFAR only	.1sec.txt	5	L1 - r1400	ERP	PARSED	104	22
Gaston	AL092010	Not present in VDM archive Gaston was not listed on the HRD storm page for 2010 - HRD has now linked it HRD has now provided a .trak file	USFAR only	.1sec.txt	1	L1 - r1400		PARSED	15	5
Hermine	AL102010	Sent edited .trak file to HRD data files currently include 1 aborted flight	USFAR only	.1sec.txt	2	L1 - r1400	ERP	PARSED	18	10
Igor	AL112010	HRD has now provided a .trak file	USAFR only	.1sec.txt	6	L1 - r1400		PARSED	53	28
Karl	AL132010	1 air-sea (ocean survey) flight data files currently include 1 ferry flight 1 flight had incorrect ferry leg masking	USAFR and NOAA	RXC.nc RC.nc .1sec.txt	11	L1 - r1400	ERP	PARSED	111	50
Matthew	AL152010		USAFR only	.1sec.txt	3	L1 - r1400	ERP	PARSED	49	8
Nicole	AL162010	Not present in VDM archive	USAFR only	.1sec.txt	3	L1 - r1400	ERP	PARSED	36	8
Otto	AL172010	1 flight had incorrect ferry leg masking	USAFR only	.1sec.txt	1	L1 - r1400	ERP	PARSED	11	6
Paula	AL182010	20101015U1.txt – file contained no useful data - Neal wrote and said that this flight was aborted at engine start. This file has been removed from HRD's website and updated with the notation: 'No Data'. It is currently still included in the dataset. data files currently include 1 aborted flight	USAFR only	.1sec.txt	7	L1 - r1400	ERP	PARSED	100	43
Richard	AL192010	Sent edited .trak file to HRD	USAFR and NOAA	RXC.nc .1sec.txt	10	L1 - r1400	ERP	PARSED	114	39
Shary	AL202010	VDMs indicate AFRES flights; no data files on HRD server								
Tomas	AL212010	5 flights had incorrect ferry leg masking 1 flight may have been truncated or aborted	USAFR only	RXC.nc .1sec.txt	18	L1 - r1400	ERP	PARSED	232	74
2010 Western Pacific Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Lionrock (Invest)		no .trak file	USAFR only	.1sec.txt	1	L1 - r1400	ERP			
Fanapi	WP122010	20100921U1.1sec.txt - this flight includes a pass through Malakas, so this part of the file has been removed from the Fanapi flight file. data files include 5 flights with odd flight patterns	USAFR only	.1sec.txt	9	L1 - r1400		PARSED	22	13
Malakas	WP132010	The final flight from Fanapi included a pass through Malakas, so this part of the file has now been added to the collection of data for Malakas. data files include 2 flights with odd flight patterns	USFAR only	.1sec.txt	6	LL1 - r14001 L1- r1400L1L1 - r1400 - r1400L1 - r1400		PARSED	47	17
Kompasu	WP082010	no .trak file – Neal Dorst reports: "One USAF flight found one fix. No wind centers nor track"	USFAR only	.1sec.txt	1	L1 - r1400				

Malou	WP102010	HRD has now provided a .trak file	USAFR only	.1sec.txt	2	L1LL1 - r1400L1 - r14001 - r1400		PARSED	12	3
Megi	WP152010	data files currently include 2 (1) synoptic surveillance (buoy deploy) flights 20101014U3.1sec.txt - odd flight duration (31.68 hrs) - hand edited and sent to HRD	USAFR only	.1sec.txt	8	L1 - r1400		PARSED	164	25
2011 Atlantic Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Arlene	AL012011		USAFR only	.1sec.txt	3	L1 - r1400	ERP	PARSED	28	8
Bret	AL022011		USAFR only	.1sec.txt	7	L1 - r1400	ERP	PARSED	65	36
Don	AL042011		USAFR and NOAA	RXC.nc .1sec.txt	6	L1 - r1400	ERP	PARSED	95	30
Emily	AL052011	data files currently include 3 synoptic surveillance flights	USAFR and NOAA	AXC.nc AC.nc .1sec.txt	14	L1 - r1400	ERP	PARSED	153	48
Gert	AL072011	Sent edited .trak file to HRD	USAFR only	.1sec.txt	1	L1 - r1400	ERP	PARSED	29	10
Harvey	AL082011	Sent edited .trak file to HRD	USAFR only	.1sec.txt	4	L1 - r1400	ERP	PARSED	49	21
Irene	AL092011	20110822U2.1sec.txt - there appeared to be one non-float somewhere in this file - was able to continue processing - need to check 20110828U1.1sec.txt - odd flight duration (31.43 hrs) - hand edited and sent to HRD data files currently include 1 ferry flight data files currently include 5 synoptic surveillance flights 1 flight had incorrect ferry leg masking	USAFR and NOAA	RXC.nc AXC.nc ABC.nc .1sec.txt	30	L1 - r1400		PARSED	381	139
Katia	AL122011		USAFR and NOAA	AC.nc .1sec.txt	3	L1 - r1400	ERP	PARSED	13	4
Lee	AL132011	HRD has now provided a .trak file 20110901H1_RXC.nc - max FL wind speed 77.8 m s-1 (seems very isolated)	USAFR and NOAA	RXC.nc .1sec.txt	4	L1 - r1400		PARSED	14	1
Maria	AL142011	1 flight had incorrect ferry leg masking	USAFR only	.1sec.txt	7	L1 - r1400	ERP	PARSED	43	15
Nate	AL152011		USAFR only	.1sec.txt	6	L1 - r1400	ERP	PARSED	43	28
Ophelia	AL162011		USAFR and NOAA	RC.nc .1sec.txt	7	L1 - r1400	ERP	PARSED	82	28
Rina	AL182011	20111026H1.1sec.txt - file contains a number of points with asterisks – hand edited and sent to HRD data files currently include 2 synoptic surveillance flights 1 flight had incorrect ferry leg masking	USAFR and NOAA	RXC.nc BC.nc AC.nc .1sec.txt	14	L1 - r1400	ERP	PARSED	145	49
Sean	AL192011	Not present in VDM archive	USAFR only	.1sec.txt	1	L1 - r1400	ERP	PARSED	6	4
2011 Eastern Pacific Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Beatriz	EP022011		USAFR only	.1sec.txt	1	L1 - r1400	ERP	PARSED	9	4

Dora	EP042011	L2: Bad center-finding results in no good legs	NOAA only	RXC.nc RC.nc	3	L1 - r1400	ERP	PARSED	18	0
Hilary	EP092011		NOAA only	RC.nc	2	L1 - r1400	ERP	PARSED	38	5
Jova	EP102011		USAFR only	.1sec.txt	3	L1 - r1400	ERP	PARSED	21	14
2012 Atlantic Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Alberto	AL012012		USAFR only	.1sec.txt	2	L1 - r1400	ERP	PARSED	23	10
Beryl	AL022012		USAFR only	.1sec.txt	3	L1 - r1400	ERP	PARSED	25	13
Chris	AL032012	No evidence of any flights								
Debby	AL042012		USAFR only	.1sec.txt	6	L1 - r1400	ERP	PARSED	91	36
Ernesto	AL052012	data files currently include 6 ferry flights one flight has a strange issue with the ERP	USAFR only	.1sec.txt	18	L1 - r1400	ERP	PARSED	204	74
Helene	AL072012	data files currently include 1 ferry flight	USAFR only	.1sec.txt	2	L1 - r1400	ERP	PARSED	23	7
Isaac	AL092012	20120828H2.1sec.txt - the query function can't seem to find the file type - was able to process using the NOAA NetCDF file Bad lat/lon values were noted in the NOAA ASCII file 20120827N1.1sec.txt - implemented an additional QC measure to set all data values to missing when the pressure is missing 20120826H1_AC.nc - renamed this file to 20120826H1a_AC.nc so that it will have a unique flightID since it is the first part of the full flight 20120826H1_BC.nc - renamed this file to 20120826H1b_BC.nc so that it will have a unique flightID since it is the first second of the full flight 20120827N1.1sec.txt is a duplicate of 20120827H2 - it has been excluded and notified HRD data files currently include 6 synoptic surveillance flights data files currently include 1 post-storm air-sea flight 3 flights had incorrect ferry leg masking	USAFR and NOAA	AXC.nc BXC.nc DXC.nc AC.nc BC.nc .1sec.txt	34	L1 - r1400	ERP	PARSED	566	167
Leslie	AL122012	Bad lat/lon values were noted in one or more of the NOAA NetCDF files: The bad lat value was 3.65104 deg, while the bad longitude value was -8.86944 deg - expanded the lat/lon check to screen out all points beyond 4.0 degN and -10.0 degE data files currently include 1 synoptic surveillance flight	NOAA only	AXC.nc EXC.nc AC.nc	4	L1 - r1400	ERP	PARSED	25	12
Michael - 2012	AL132012	VDMs indicate AFRES flights; no data files on HRD server								
Patty	AL162012		USFAR only	.1sec.txt	1	L1 - r1400	ERP	PARSED	8	3
Rafael	AL172012	20121016H1_AC.nc - max FL wind speed 227 m s-1 data files currently include 4 ferry flights	USAFR and NOAA	AXC.nc AC.nc .1sec.txt	14	L1 - r1400	ERP	PARSED	163	57

Sandy	AL182012	Bad lat/lon values were noted in the NOAA NetCDF file for 20121025H1OAA: The bad lat value was 1.671 deg, while the bad longitude value was -3.591 deg. I implemented a lat/long check to screen out all points beyond 2.0 degN and -4.0 degE. data files currently include 2 aborted flights data files currently include 4 ferry flights	USAFR and NOAA	AXC.nc AC.nc .1sec.txt	28	L1 - r1400	ERP	PARSED	329	159
2012 Eastern Pacific Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Bud	EP022012		USAFR only	.1sec.txt	2	L1 - r1400	ERP	PARSED	17	10
Carlotta	EP032012		USAFR only	.1sec.txt	1	L1 - r1400	ERP	PARSED	12	5
2013 Atlantic Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Andrea	AL012013		USAFR only	.1sec.txt	3	L1 - r1400	ERP	PARSED	42	9
Barry	AL022013		USAFR only	.1sec.txt	1	L1 - r1400	ERP	PARSED	15	5
Chantal	AL032013	data files currently include 3 ferry flights 4 flights had incorrect ferry leg masking	USAFR only	.1sec.txt	11	L1 - r1400	ERP	PARSED	44	17
Dorian	AL042013	Not present in VDM archive no .trak file - HRD reports that no .trak file will be made because the storm degenerated to an open wave data files currently include 6 ferry flights	USAFR only	.1sec.txt	8	L1 - r1400	ERP			
Invest	AL922013	no .trak file - HRD reports that no .trak file will be made for this system	USAFR only	.1sec.txt	2	L1 - r1400	ERP			
Fernand	AL062013	Not present in VDM archive	USAFR only	.1sec.txt	1	L1 - r1400	ERP	PARSED	15	3
Gabrielle	AL072013	data files currently include 14 ferry flights 2 ocean flights	USAFR and NOAA	AXC.nc BXC.nc AC.nc BC.nc CC.nc .1sec.txt	26	L1 - r1400	ERP	PARSED	116	20
TD08	AL082013		USAFR only	.1sec.txt	1	L1 - r1400	ERP	PARSED	12	5
Ingrid	AL102013	20130915H1_AXC.nc appears to contain a large number of bad values – file has been excluded and reverted back to the 1-sec file, HRD has been notified	USAFR and NOAA	.AXC.nc .AC.nc .1sec.txt	17			PARSED	143	62
Karen	AL122013	data files currently include 2 ferry flights data files currently include 1 synoptic surveillance flight	USAFR and NOAA	.AXC.nc .AC.nc .1sec.txt	14	L1 - r1400	ERP	PARSED	149	49
2013 Eastern Pacific Storms						L1 PROCESSING DONE		L2 DONE	L3 DONE	
Raymond	EP172013	20131022U1.1sec.txt - bad lat/lon value - hand edited and sent to HRD	USAFR only	.1sec.txt	1	L1 - r1400	ERP	PARSED	6	4

Asterisk indicates provisional ATCF Storm ID. This may change once NHC completes their post-season analysis.

Data provenance for 2014 onward can be found here:

https://docs.google.com/spreadsheets/d/11Z_XnN0bYxIUhEUajHjMQxIX4dPoJnlyj2KDEnBYFak/edit?usp=sharing

