HRD PROCESSED GPS-DROPWINDSONDE EXTERNAL DATA ARCHIVE

High-resolution, operationally-processed sonde data from NOAA aircraft hurricane season flights since 2002 currently reside on HRD's public ftp server. These are accessible via anonymous ftp by entering:

Web Clients: **ftp://ftp.aoml.noaa.gov/hrd/pub/data/dropsonde** or **ftp://ftp.aoml.noaa.gov/hrd/pub/feuer/dropsonde**
Terminal Clients: **ftp ftp.aoml.noaa.gov**
user anonymous
(enter your e-mail address as the password)
cd hrd/pub/data/dropsonde or **cd hrd/pub/feuer/dropsonde**

The operationally-processed sonde data files for each hurricane season are placed in a separate **folder** (directory), e.g., **HURR03 for 2003 sondes,** and then in an embedded folder named **"operproc**." Within these folders are **three** types of files: **catalog**, **compressed and packed full-resolution data**, and **Skew-T diagram**. Each of these is explained below. The filenames include the **flight ID**, which contains the takeoff date (year, month, and day with respect to UTC) and a letter indicating the NOAA aircraft: **h--N42RF (P-3)**, **i--N43RF (P-3)**, **n--N49RF (Gulfstream-IV)**. Multiple flights of a particular aircraft on a given date have a sequence number following the plane indicator. Example: 20040914i is the flight ID for the NOAA N43RF P-3 mission into Hurricane Ivan on 14 September 2004.

(1) Catalog Files (CAT)

These contain an **ASCII-tex**t listing of all the sondes processed for a particular flight, including each sonde's unique serial number; the date, time, location, and aircraft pressure level at launch; and any pertinent comments, such as storm region. The naming convention of the files is ***flight_id*.cat**.

Below is an example of the first few lines of a CAT file, **20040914i.cat**. For the full file see **catexample.pdf** (Adobe portable document format), **catexample.wpd** (WordPerfect format), or **catexample.doc** (Microsoft Word format).

```
------------------------------------------------------------------------
CATALOG OF PROCESSED DROPWINDSONDES FOR 20040914I
------------------------------------------------------------------------

Seq  Serial #     Date/Time      Lat     Lon   Pr   Comments
                    (UTC)        (N)     (W)   (mb)
------------------------------------------------------------------------
  1  003825014  040914/202432   25.27   85.92  694  near hurr force radius
  2  013635016  040914/204110   24.44   86.51  694  eyewall NE strong winds at 850 mb
  3  013915054  040914/204621   24.18   86.76  700  eye drop
  4  013635259  040914/205250   23.81   86.98  699  eyewall SW weak side
  5  003825021  040914/205921   23.46   87.20  697  hurr force radius SW
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(2) Full-Resolution Data Files (FRD)

These contain the processed, 2-Hz (0.5-second) resolution observations in fixed-length, long **ASCII** records for an individual dropsonde. The records can easily be imported into a **spreadsheet** program. All available full-resolution data files of sondes released during a particular flight are packed into a **Unix/Linux-tar aggregate** and stored as **GNU-zip compressed files**. The naming convention of these files is ***flight_id*.frd.tar.gz**.

To access FRD files, a flight tar aggregate must first be expanded using compatible decompression software, such as Winzip, or by entering the command **gunzip [filename]** in a Unix/Linux terminal session. The expanded tar file will then be of the form, ***flight_id*.frd.tar**. This file next needs to be unpacked, again using appropriate software, or by entering the Unix/Linux command **tar xvf [filename]**. All the individual FRD files from the flight will now be available and have the nomenclature of **g*sonde_id*.frd**, in which the **sonde ID** corresponds to a sonde's nine-digit serial number provided in the CAT file.

Each FRD file consists of **two parts**:

(A) the **header** (20 lines)

(B) the 2-Hz **processed data records** (amount varies depending on drop altitude and rate of sonde descent)

(A) Header

The header comprises **four** sections: **basic information**, **sonde processing parameters**, **comment line**, and **aircraft flight-level data**.

(1) Basic information. This contains the sonde serial number, date is was processed, date and time of launch, and aircraft from which it was deployed.

(2) Sonde processing parameters. Information in this section includes:

- any bias corrections applied to the sonde's pressure (mb), temperature (°C), and relative humidity (%) observations
- any pressure baseline correction (offset) introduced prior to the sonde's launch (mb)
- the cutoff wavelengths of the low-pass time filter used to smooth the pressure, temperature, and humidity (PTH) observations and wind observations (s)
- if dynamic temperature, dynamic relative humidity, or wind shear (WSHR) corrections have been applied
- if an estimated pressure profile is used
- the computed mean GPS vertical velocity error (m/s) - -999.00 if missing
- the height correction (WGACORR) assigned to the wind observations (m)
- the anchor for the hydrostatic geopotential-height calculation--SFC - surface (upward integration), FLT - flight level (downward integration), MSG - missing
- the sonde splash pressure (mb) - -999.0 if missing
- the hydrostatically-determined surface pressure (mb) - -999.0 if missing
- any adjustment to the aircraft geopotential altitude applied when integrating heights downward (m)

(3) Comment line. This is the same as the remarks in the CAT file for the corresponding sonde.

(4) Aircraft flight-level data. The following information and flight-level measurements at launch are contained in this section (missing values are assigned -999.0):

Date	six-digit date of sonde launch (yymmdd)	RH	flight-level relative humidity (%)
Time	six-digit time of sonde launch (hhmmss)	PS	flight-level pressure (mb)
SID	sonde ID nine-digit serial number	GA	flight-level geopotential altitude
Lat	latitude of aircraft (hundreths of degrees)	WD	flight-level wind direction (°)
Lon	longitude of aircraft (hundreths of degrees)	WS	flight-level wind speed (m/s)
TA	flight-level temperature (°C)	Navaid	aircraft navigational aid system (GP for GPS)
TD	flight-level dew point (°C)		

(B) Processed Data Records

After a column header line, the processed sonde observations are provided in 0.5-s interval sequential records. Each includes the following fields (missing values are assigned -999 or -999.0):

IX	four-digit record index number (last value is the total number of observation records)
t (s)	elapsed time from launch
P (mb)	pressure
T (°C)	temperature
RH (%)	relative humidity
Z (m)	geopotential height of the thermodynamic measurements (P, T, and RH)
WD (°)	wind direction
WS (m/s)	wind speed in SI units
U (m/s)	zonal (x-axis) component of wind
V (m/s)	meridional (y-axis) component of wind
NS	number of GPS satellites used in wind computation (usually 4-8)
WZ (m/s)	vertical velocity (NOTE: this is only an estimate based on the sonde fall rate and theoretical fall rate--use with caution)
ZW (m)	geopotential height of wind measurement in SI units (usually slightly different than Z)
FP	pressure measurement flag
FT	temperature measurement flag
FH	relative humidity measurement flag
FW	wind measurement flag
LAT (N)	latitude (degrees north) of sonde location as determined by GPS
LON (E)	longitude (degrees east) of sonde location as determined by GPS
ZW (ft)	geopotential height of wind measurement in feet
WS (kt)	wind speed in knots
WS (mph)	wind speed in miles per hour
THETAE (K)	equivalent potential temperature (computed from P, T, and RH measurements)

The data flags, **FP**, **FT**, **FH**, **FW**, for pressure, temperature, humidity, and winds are respectively assigned one of the following numbers:

0 - good data value
3 - interpolated value
4 - value is doubtful or of questionable accuracy
5 - subjectively determined value
6 - ten-meter value

Below is a sample partial listing extracted from a 20040914i flight FRD file, **g013635016.frd**. For the full file see **frdexample.pdf** (Adobe portable document format), **frdexample.wpd** (WordPerfect format), or **frdexample.doc** (Microsoft Word format).

DROPWINDSONDE PROCESSING RECORD — Sonde: 013635016
PDS file written Sep 14, 2004. — Format: V5.12
Aircraft: N43RF — Date: 040914 — Time: 204110 UTC

Bias corrections: PR = .0 mb TE = .0 C RH = .0 % PRB = .0 mb
Filters (LPF): PTH = 10 s WIND = 10 s Hyd anchor = SFC
Dyn RH correction = N WSHR COR = Y Splash PR = 941.5 mb
Estimated PR used = N GPS VERR = .75 m/s HYD SFCP = 943.3 mb
Dyn T correction = Y WGACORR = .0 m AC GA ADJ = .0 m

COMMENTS: eyewall NE strong winds at 850 mb

Date: 040914 Lat: 24.44 N TA: 14.6 C PS: 694.6 mb WD: 136 deg
Time: 204110 Lon: 86.51 W TD: -999.0 C GA: 2651 m WS: 54.7 m/s
SID: 013635016 RH: -999.0 % Navaid: GP

IX	t (s)	P (mb)	T (C)	RH (%)	Z (m)	WD	WS (m/s)	U (m/s)	V (m/s)	NS	WZ (m/s)	ZW (m)	FP	FT	FH	FW	LAT (N)	LON (E)	ZW (ft)	WS (kt)	WS (mph)	THETAE (K)
0001	.2	695.1	14.64	-999.0	2635	136	54.73	-38.04	39.35	-999	-999.0	2635	3	3	0	4	24.4407	-86.5147	8646	106.17	122.59	-999.00
0002	.7	695.7	14.69	-999.0	2629	136	54.84	-38.18	39.36	-999	-999.0	2629	3	3	0	4	24.4409	-86.5149	8624	106.38	122.83	-999.00
0003	1.2	696.2	14.74	-999.0	2622	136	54.86	-38.22	39.36	-999	-999.0	2622	3	3	0	4	24.4410	-86.5151	8603	106.44	122.90	-999.00
0004	1.7	696.8	14.79	-999.0	2615	136	54.89	-38.26	39.37	-999	-999.0	2615	3	3	0	4	24.4412	-86.5153	8581	106.49	122.96	-999.00
0005	2.2	697.3	14.84	-999.0	2609	136	54.92	-38.29	39.37	-999	-999.0	2609	3	3	0	4	24.4414	-86.5155	8559	106.55	123.02	-999.00
0006	2.7	697.8	14.89	-999.0	2602	136	54.95	-38.33	39.37	-999	-999.0	2602	3	3	0	4	24.4416	-86.5156	8538	106.60	123.09	-999.00
0007	3.2	698.4	14.94	-999.0	2596	136	54.98	-38.37	39.38	-999	-999.0	2596	3	3	0	4	24.4417	-86.5158	8516	106.66	123.15	-999.00
0008	3.7	698.9	14.98	-999.0	2589	136	55.01	-38.41	39.38	-999	-999.0	2589	3	3	0	4	24.4419	-86.5160	8495	106.72	123.22	-999.00
0009	4.2	699.5	15.03	-999.0	2583	136	55.04	-38.45	39.38	-999	-999.0	2583	3	3	0	4	24.4421	-86.5162	8473	106.77	123.28	-999.00
0010	4.7	700.0	15.08	-999.0	2576	136	55.07	-38.49	39.39	-999	-999.0	2576	3	3	0	4	24.4423	-86.5164	8452	106.83	123.35	-999.00
0011	5.2	700.5	15.13	-999.0	2570	136	55.10	-38.52	39.39	-999	-999.0	2570	3	3	0	4	24.4425	-86.5166	8430	106.89	123.41	-999.00
0012	5.7	701.1	15.18	-999.0	2563	136	55.12	-38.56	39.39	-999	-999.0	2563	3	3	0	4	24.4426	-86.5168	8409	106.94	123.48	-999.00
0013	6.2	701.6	15.22	-999.0	2557	136	55.15	-38.60	39.39	-999	-999.0	2557	3	3	0	4	24.4428	-86.5170	8388	107.00	123.54	-999.00
0014	6.7	702.2	15.27	-999.0	2550	136	55.18	-38.64	39.40	-999	-999.0	2550	3	3	0	4	24.4430	-86.5172	8366	107.05	123.61	-999.00
0015	7.2	702.7	15.32	-999.0	2543	136	55.21	-38.68	39.40	-999	-999.0	2543	3	3	0	4	24.4432	-86.5174	8345	107.11	123.67	-999.00
0016	7.7	703.2	15.37	-999.0	2537	136	55.24	-38.71	39.40	-999	-999.0	2537	3	3	0	4	24.4433	-86.5176	8323	107.17	123.74	-999.00
0017	8.2	703.8	15.42	-999.0	2530	135	55.27	-38.75	39.41	-999	-999.0	2530	3	3	0	4	24.4435	-86.5177	8302	107.22	123.80	-999.00
0018	8.7	704.3	15.47	-999.0	2524	135	55.30	-38.79	39.41	-999	-999.0	2524	3	3	0	4	24.4437	-86.5179	8281	107.28	123.87	-999.00
0019	9.2	704.8	15.52	-999.0	2517	135	55.33	-38.83	39.41	-999	-999.0	2517	3	3	0	4	24.4439	-86.5181	8259	107.34	123.93	-999.00
0020	9.7	705.4	15.56	-999.0	2511	135	55.36	-38.87	39.42	-999	-999.0	2511	3	3	0	4	24.4440	-86.5183	8238	107.39	124.00	-999.00
0021	10.2	705.9	15.61	-999.0	2504	135	55.39	-38.91	39.42	-999	-999.0	2504	3	3	0	4	24.4442	-86.5185	8217	107.45	124.06	-999.00
0022	10.7	706.5	15.66	-999.0	2498	135	55.41	-38.94	39.42	-999	-999.0	2498	3	3	0	4	24.4444	-86.5187	8195	107.50	124.13	-999.00
0023	11.2	707.0	15.71	-999.0	2491	135	55.44	-38.98	39.43	-999	-999.0	2491	3	3	0	4	24.4446	-86.5189	8174	107.56	124.19	-999.00
0024	11.7	707.5	15.76	-999.0	2485	135	55.47	-39.02	39.43	-999	-999.0	2485	3	3	0	4	24.4448	-86.5191	8153	107.62	124.26	-999.00
0025	12.2	708.1	15.81	-999.0	2479	135	55.50	-39.06	39.43	-999	-999.0	2479	3	3	0	4	24.4449	-86.5193	8132	107.67	124.33	-999.00
0026	12.7	708.6	15.85	-999.0	2472	135	55.53	-39.10	39.43	-999	-999.0	2472	3	3	0	4	24.4451	-86.5195	8111	107.73	124.39	-999.00
0027	13.2	709.1	15.90	-999.0	2466	135	55.56	-39.14	39.44	-999	-999.0	2466	3	3	0	4	24.4453	-86.5197	8089	107.79	124.46	-999.00
0028	13.7	709.7	15.95	-999.0	2459	135	55.59	-39.18	39.44	-999	-999.0	2459	3	3	0	4	24.4455	-86.5198	8068	107.85	124.52	-999.00
0029	14.2	710.2	15.99	-999.0	2453	135	55.62	-39.21	39.44	-999	-999.0	2453	3	3	0	4	24.4456	-86.5200	8047	107.90	124.59	-999.00
0030	14.7	710.8	16.04	-999.0	2446	135	55.65	-39.25	39.45	-999	-999.0	2446	3	3	0	4	24.4458	-86.5202	8025	107.96	124.65	-999.00
0031	15.2	711.3	16.08	-999.0	2440	135	55.68	-39.29	39.45	-999	-999.0	2440	0	0	0	4	24.4460	-86.5204	8004	108.02	124.72	-999.00
0032	15.7	711.9	16.13	-999.0	2433	135	55.71	-39.33	39.45	-999	1.2	2433	0	0	0	4	24.4462	-86.5206	7982	108.07	124.79	-999.00
0033	16.2	712.4	16.17	-999.0	2426	135	55.74	-39.37	39.46	-999	1.2	2426	0	0	0	4	24.4464	-86.5208	7960	108.13	124.85	-999.00
0034	16.7	713.0	16.21	-999.0	2420	135	55.77	-39.41	39.46	-999	1.1	2420	0	0	0	4	24.4465	-86.5210	7939	108.19	124.92	-999.00
0035	17.2	713.5	16.26	-999.0	2413	135	55.80	-39.45	39.46	-999	1.0	2413	0	0	0	4	24.4467	-86.5212	7917	108.25	124.98	-999.00
0036	17.7	714.1	16.30	-999.0	2406	135	55.83	-39.48	39.47	-999	1.0	2406	0	0	0	4	24.4469	-86.5214	7895	108.30	125.05	-999.00
0037	18.2	714.7	16.34	-999.0	2400	135	55.86	-39.52	39.47	-999	.9	2400	0	0	0	4	24.4471	-86.5216	7873	108.36	125.12	-999.00
0038	18.7	715.2	16.38	-999.0	2393	135	55.89	-39.56	39.47	-999	.9	2393	0	0	0	4	24.4472	-86.5218	7850	108.42	125.18	-999.00
0039	19.2	715.8	16.41	-999.0	2386	135	55.92	-39.60	39.48	-999	.8	2386	0	0	0	4	24.4474	-86.5220	7828	108.48	125.25	-999.00
0040	19.7	716.4	16.45	-999.0	2379	135	55.95	-39.64	39.48	-999	.7	2379	0	0	0	4	24.4476	-86.5222	7806	108.53	125.32	-999.00
0041	20.2	716.9	16.48	-999.0	2372	135	55.97	-39.68	39.48	-999	.7	2372	0	0	0	4	24.4478	-86.5224	7784	108.59	125.38	-999.00
0042	20.7	717.5	16.52	-999.0	2366	135	56.00	-39.72	39.48	-999	.6	2366	0	0	0	4	24.4480	-86.5226	7761	108.65	125.45	-999.00
0043	21.2	718.1	16.55	-999.0	2359	135	56.03	-39.76	39.49	-999	.5	2359	0	0	0	4	24.4481	-86.5228	7738	108.70	125.51	-999.00
0044	21.7	718.7	16.58	-999.0	2352	135	56.06	-39.79	39.49	-999	.5	2352	0	0	0	4	24.4483	-86.5230	7716	108.76	125.58	-999.00
0045	22.2	719.3	16.61	-999.0	2345	135	56.09	-39.83	39.49	-999	.4	2345	0	0	0	4	24.4485	-86.5232	7693	108.82	125.65	-999.00
0046	22.7	719.9	16.63	-999.0	2338	135	56.13	-39.87	39.50	-999	.3	2338	0	0	0	4	24.4487	-86.5234	7670	108.88	125.72	-999.00

0047	23.2	720.4	16.66	-999.0	2331	135	56.16	-39.91	39.51	-999	.2	2331	0	0	0	4	24.4488	-86.5236	7647	108.95	125.79	-999.00
0048	23.7	721.0	16.68	-999.0	2324	135	56.19	-39.95	39.51	-999	.2	2324	0	0	0	4	24.4490	-86.5238	7624	109.01	125.87	-999.00
0049	24.2	721.6	16.70	-999.0	2317	135	56.22	-39.99	39.52	-999	.1	2317	0	0	0	4	24.4492	-86.5240	7600	109.07	125.94	-999.00
0050	24.7	722.2	16.72	-999.0	2309	135	56.26	-40.03	39.53	-999	.1	2309	0	0	0	4	24.4494	-86.5242	7577	109.14	126.01	-999.00
0051	25.2	722.9	16.74	-999.0	2302	135	56.29	-40.07	39.53	-999	.0	2302	0	0	0	4	24.4496	-86.5244	7553	109.19	126.08	-999.00
0052	25.7	723.5	16.76	-999.0	2295	135	56.31	-40.11	39.52	-999	.0	2295	0	0	0	4	24.4497	-86.5246	7530	109.24	126.14	-999.00
0053	26.2	724.1	16.78	-999.0	2288	135	56.33	-40.15	39.51	-999	.1	2288	3	3	0	4	24.4499	-86.5247	7506	109.28	126.18	-999.00
0054	26.7	724.7	16.79	96.8	2281	135	56.34	-40.18	39.49	-999	.1	2281	0	0	0	4	24.4501	-86.5249	7483	109.31	126.21	369.61
0055	27.2	725.3	16.80	96.9	2274	134	56.35	-40.22	39.47	-999	.2	2274	0	0	0	4	24.4503	-86.5251	7459	109.32	126.23	369.59
0056	27.7	725.9	16.81	96.8	2267	134	56.36	-40.25	39.45	-999	.3	2267	0	0	0	4	24.4504	-86.5253	7436	109.33	126.24	369.43
0057	28.2	726.5	16.81	96.6	2260	134	56.36	-40.28	39.43	-999	.4	2260	0	0	0	4	24.4506	-86.5255	7413	109.34	126.25	369.19
0058	28.7	727.1	16.82	96.5	2253	134	56.37	-40.30	39.41	-999	.6	2253	0	0	0	4	24.4508	-86.5257	7391	109.35	126.26	369.03
0059	29.2	727.6	16.82	96.5	2246	134	56.38	-40.33	39.39	-999	.7	2246	0	0	0	4	24.4510	-86.5259	7368	109.37	126.29	368.93
0060	29.7	728.2	16.83	96.6	2239	134	56.40	-40.36	39.39	-999	.9	2239	0	0	0	4	24.4512	-86.5261	7346	109.41	126.33	368.85
0061	30.2	728.8	16.83	96.6	2232	134	56.43	-40.40	39.39	-999	1.1	2232	0	0	0	4	24.4513	-86.5263	7324	109.47	126.40	368.77
0062	30.7	729.3	16.84	96.7	2226	134	56.47	-40.44	39.42	-999	1.2	2226	0	0	0	4	24.4515	-86.5265	7303	109.56	126.50	368.71
0063	31.2	729.9	16.84	96.7	2219	134	56.54	-40.49	39.46	-999	1.4	2219	0	0	0	4	24.4517	-86.5267	7282	109.69	126.65	368.66
0064	31.7	730.4	16.85	96.8	2213	134	56.63	-40.55	39.52	5	1.5	2213	0	0	0	0	24.4519	-86.5269	7261	109.86	126.84	368.63
0065	32.2	731.0	16.87	96.9	2207	134	56.74	-40.62	39.61	5	1.7	2207	0	0	0	0	24.4520	-86.5271	7240	110.07	127.09	368.61
0066	32.7	731.5	16.88	97.0	2201	134	56.87	-40.70	39.71	5	1.8	2201	0	0	0	0	24.4522	-86.5273	7220	110.32	127.38	368.61
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0444	221.7	933.3	24.71	100.0	85	82	65.53	-64.91	-9.01	5	1.4	85	0	0	0	0	24.5093	-86.6411	279	127.14	146.80	368.37
0445	222.2	933.9	24.75	100.0	79	81	65.37	-64.63	-9.84	5	1.5	79	0	0	0	0	24.5092	-86.6414	260	126.83	146.44	368.48
0446	222.7	934.5	24.80	100.0	74	80	65.19	-64.28	-10.85	5	1.7	74	0	0	0	0	24.5092	-86.6417	242	126.46	146.02	368.61
0447	223.2	935.1	24.84	100.0	68	79	64.98	-63.87	-11.99	5	1.8	68	0	0	0	0	24.5091	-86.6420	224	126.07	145.56	368.76
0448	223.7	935.6	24.89	100.0	63	78	64.78	-63.44	-13.09	5	1.8	63	0	0	0	0	24.5091	-86.6423	206	125.67	145.10	368.91
0449	224.2	936.2	24.94	100.0	57	78	64.64	-63.15	-13.79	5	1.8	57	0	0	0	0	24.5090	-86.6426	188	125.40	144.79	369.07
0450	224.7	936.8	24.99	100.0	52	78	64.83	-63.36	-13.72	5	1.7	52	0	0	0	0	24.5089	-86.6430	171	125.77	145.22	369.24
0451	225.2	937.3	25.05	100.0	47	79	65.40	-64.17	-12.64	4	1.7	47	0	0	0	0	24.5089	-86.6433	153	126.88	146.50	369.42
0452	225.7	937.9	25.10	100.0	41	81	65.34	-64.47	-10.64	4	1.8	41	0	0	0	0	24.5088	-86.6436	135	126.77	146.37	369.62
0453	226.2	938.5	25.17	100.0	35	82	63.68	-63.05	-8.98	5	1.8	35	0	0	0	0	24.5088	-86.6439	116	123.54	142.65	369.87
0454	226.7	939.1	25.24	100.0	30	82	59.89	-59.28	-8.47	5	1.6	30	0	0	0	0	24.5087	-86.6442	97	116.18	134.14	370.15
0455	227.2	939.7	25.32	100.0	24	-999	-999.00	-999.00	-999.00	-999	1.5	24	0	0	0	0	24.5087	-86.6445	79	-999.00	-999.00	370.47
0456	227.7	940.3	25.41	100.0	19	-999	-999.00	-999.00	-999.00	-999	1.4	19	0	0	0	0	24.5087	-86.6448	63	-999.00	-999.00	370.85
0457	228.2	940.8	25.51	100.0	14	-999	-999.00	-999.00	-999.00	-999	1.5	14	0	0	0	0	24.5086	-86.6451	45	-999.00	-999.00	371.31
0458	228.7	941.5	25.58	100.0	7	-999	-999.00	-999.00	-999.00	-999	1.6	7	0	0	0	0	24.5086	-86.6454	24	-999.00	-999.00	371.54

(3) Skew-T Diagram Files

These contain skew-T, log-P diagram graphics for all the sondes processed from a particular flight in **Adobe portable document format (PDF)**. Each sounding is plotted separately and depicts a sonde's vertical profile during its descent. The naming convention of the files is ***flight_id*_skewt.pdf**.

Any **questions** regarding this data archive may be directed to either:

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