

Special Evening Session: Hurricane Data: What's out there? How do we get it?

- NOAA HRD: Mark Powell
- NASA: Robbie Hood
- NCEP: Naomi Surgi
- Naval Research Lab: Jeff Hawkins
- NOAA NESDIS: Greg Gallina
- NOAA NCDC: Russ Vose
- NOAA NHC: Stacey Stewart

HRD *Data Policy*

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HRD's *Data Distribution*

Freely available Data on the Web:

- Type1:** Raw or Experimental Data Any data transmitted in near-real-time such as TEMPDROP's and Flight Level MINOBS
- Type2:** Synthesized Data HRD Near Real-Time information and products such as Mission reports and H*Wind Surface Analysis

Available on Request:

- Type3:** Original Data Specialized Processed data.

HRD scientists, and federal, university, and private sector partners who have contributed to projects affiliated with the annual Hurricane Field Program have first priority for use of processed data in their investigations. All processed data are considered "original data" subject to quality control by affiliated investigators for a period not to exceed 1 year after they are processed. **Type 3** data is available by request only. Cost may incur if processing is required, please check the linked [product matrix](#) for details on resources and time requirements.

HRD Data User Agreement

Data sets available through HRD's Web sites are freely available and can be downloaded for academic, research, or professional purposes subject to the following user terms:

- A)** User must notify the designated HRD researcher when any future work based on or derived from HRD Type 2 or Type 3 data is published.
- B)** User agrees not to redistribute original HRD data and Documentation.
- C)** User will acknowledge the support of HRD in any publications using these Data with the following citation: '*Data sets were provided by the Hurricane Research Division(HRD)...*'
- D)** If use of Type 2 or 3 data in a publication constitutes a major or fairly significant aspect of an article, co-authorship by an HRD scientist[s] is appropriate; please discuss any such planned use with the associated contact scientist listed in the metadata or information sections for the particular data type. Please check the HRD [Staff](#) and [Publication](#) pages for additional citation that may help your research. We welcome collaborations and will lend our expertise in interpretation and evaluation of the data.
- E)** User agrees to send a minimum of 2 reprints of any publications resulting from the use of the data and documentation to the following address:

Director, Hurricane Research Division
Atlantic Oceanographic and Meteorological Laboratory
4301 Rickenbacker Cswy
Miami, Florida 33149

By using or copying these data and documentation, the Data User agrees to abide by the terms of this agreement.

HRD Web site
organized by Year
and Storm

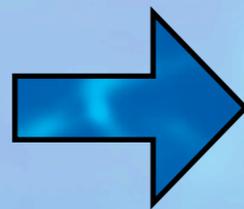
Webmaster
Neal Dorst

www.aoml.noaa.gov/hrd/data.html

register



data portal



Mission Catalog

Select a Year

Hurricane Data



The Hurricane Research Division collects a variety of data sets on tropical cyclones. Each Atlantic and East Pacific hurricane seasons we conduct a field program in which we collect these data sets from the [NOAA aircraft](#) and process them. By clicking on a year from the list above you will go to a window which

lists each storm from which we collected data.

Please note that we don't necessarily collect information on every hurricane that occurs, so the list won't be for all of the storms for that year.

2003 Hurricane Season



[2003 Atlantic Season Summary](#)

Atlantic Basin :

Bill		Satellite	H*Wind
Claudette	Missions	Satellite Sondes	H*Wind
Erika	Missions	Satellite	H*Wind
Calibration	Missions Photos		
Fabian	Missions Photos	Satellite Sondes	H*Wind
Grace			H*Wind
Henri		Satellite	H*Wind
Isabel	Missions Photos Radar	Satellite Sondes	H*Wind

NOAA Aircraft Research Missions flight- level data

Product [Format]	Description			
	Type	Availability	Typical Web Availability	Contacts
Flight-level [MINOB]	Type1	1994-Present (Online) Prior-1994 (Upon Request)	2-4 weeks after flight	hrdwebmaster
	Description:	1 minute listing for each NOAA flight we have data for.		
Flight-level [Standard Tapes]	Type2	1976-Present (Offline)*	Upon Request*	Neal Dorst Joe Griffin
	Description:	1 minute listing for each NOAA flight on standard tapes.		
Flight-level Pass Data [ASCII]	Type3	1976-2002 (Online)*	Upon Request*	Dr. Hugh Willoughby Edward Rahn
	Description:	Post Processed Radial Pass data NOAA and AFRES Flight-level data.		
NOAA Flight Mission Summaries [ASCII]	Type2	1960-2002 (Online)	1 month after flight	hrdwebmaster
	Description:	Mission summaries from individual HRD aircraft flights into Tropical Cyclones and Hurricanes.		

NOAA Aircraft Research Missions

Video and Radar

NOAA Flight Video [SVHS]	Type2	1994-Present (Offline)*	Upon Request*	Neal Dorst
	Description:	In-Flight forward, downward, and side looking video of NOAA Flights.		
NOAA Flight Films [SVHS]	Description: 16mm films of NOAA Missions prior to 1994.			
	Type2	Prior-1994 (Offline)*	Upon Request*	Neal Dorst
NOAA RADAR Operational Composites [Images]	Description: These radar composites were made on-board the NOAA P3 research aircraft and sent via satellite to the National Hurricane Center for operational use.			
	Type2	1994-Present (Online) Prior-1994 (Upon Request)*	2-3 days after flight	Dr. John Gamache Dr. Frank Marks
NOAA RADAR Research Composites [Images]	Description: These more detailed radar composites were made after the NOAA P3 flights for research purposes.			
	Type2	1994-Present (Online) Prior-1994 (Upon Request)*	Upon Request*	Dr. John Gamache Dr. Frank Marks

NOAA Aircraft Research Missions

Radar and GPS Dropsondes

NOAA RADAR Analysis [Graphics/Animations]	Description: Vertical incidences cross sections, Short-interval center-pass composites, Single sweeps every n minutes, and animations.			
	Type3	1989-Present (Offline)*	Upon Request*	Dr. John Gamache Dr. Frank Marks
GPS Dropsondes [TEMPDROP]	Description: Operationally Processed TEMPDROP messages sent off aircraft in real-time.			
	Type1	1996-Present (Online)	1 week from end of flight	hrdwebmaster
GPS Dropsondes TEMPDROP [ASCII HSA]	Description: TEMPDROP messages in HSA format + PDF plot.			
	Type2	1996-Present (Online)	3 months from end of season	Michael Black
GPS Dropsondes Raw AVAPS [ASCII AVAPS]	Description: Raw ASCII AVAPS (Airborne Vertical Atmospheric Profiling System) files, 5sec listings + sonde logs.			
	Type2	1996-Present (Online)	3 months from end of season	Michael Black
GPS Dropsondes Post Processed [ASCII]	Description: Post Processed GPS Dropsondes ASCII spreadsheet ready.			
	Type3	1996-Present (Offline)*	Upon Request*	Michael Black

H*Wind Analyses

Microphysical cloud and precip data

H*Wind Surface Analysis [MIXED]	Description: HRD Surface Winds Analyzes, including analysis graphic, data coverage plot, gridded field and GIS Shapefiles.		
	Type2	1994-Present (Online)*	Upon Request*
H*Wind Swath Product [MIXED]	Description: H*Wind Swath products: graphics, gridded field and GIS Shapefiles.		
	Type3	1994-Present (Online)*	Upon Request*
Cloud Microphysical Particle Image Data [Image]	Description: 2-D images of microphysical cloud and precipitation particle data.		
	Type2	1992-Present (Offline)*	Upon Request*
Analyzed Microphysical Precipitation Particle Data [ASCII]	Description: Analyzed size distribution of microphysical precipitation particle data. Max particle size 6.4mm/9.6mm (monochrome/grey).		
	Type3	1992-Present (Offline)*	Upon Request*
Analyzed Microphysical Cloud Particle Data [ASCII]	Description: Analyzed size distribution of microphysical cloud particle data. Max particle size 1.6mm/1.92mm (monochrome/grey).		
	Type3	1992-Present (Offline)*	Upon Request*

Microphysical cloud and precip data

AXBT

Stepped frequency microwave radiometer

Analyzed FSSP (Forward Scattering Spectrometer Probe) [ASCII]	Description: Analyzed size distribution of cloud and precipitation data from the Forward Scattering Spectrometer Probe. Max particle size 45 μ m.		
	Type3	1992-Present (Offline)*	Upon Request*
AXBT [ASCII]	Description: Airborne eXpendable BathyThermograph quality controlled profiles.		
	Type2	1997-Present (Online)	1 year from end of season
SFMR Analyzed Time Series [ASCII]	Description: ASCII time series of winds, rain rates, and brightness temperatures(at this time only winds are available).		
	Type2	1998-Present (Online)	1 year from end of season
SFMR Raw data [Standard Tape]	Description: On Flight-level standard tapes see above.		
	Type2	1998-Present (Offline)*	Upon Request*