

	Date/Time (2005)	Latitude (°N)	Longitude (°W)	Wind Speed (knots)	Pressure (millibars)	Status
1	08/24 00z	23.30	-75.80	30	1007	Tropical Depression
2	08/24 15z	24.70	-76.70	35	1006	Tropical Storm
3	08/25 06z	26.10	-78.40	45	1000	Tropical Storm
4	08/25 17z	26.20	-79.50	55	990	Tropical Storm
5	08/25 19z	26.20	-79.60	60	990	Tropical Storm
6	08/25 21z	26.10	-79.90	65	985	Hurricane-1
7	08/26 05z	25.40	-81.10	60	990	Tropical Storm
8	08/26 15z	25.10	-82.20	85	971	Hurricane-2
9	08/27 06z	24.40	-84.00	95	963	Hurricane-2
10	08/27 18z	24.50	-85.40	100	949	Hurricane-3
11	08/28 03z	25.00	-86.20	100	939	Hurricane-3
12	08/28 06z	25.10	-86.80	125	935	Hurricane-4
13	08/28 12z	25.70	-87.70	140	908	Hurricane-5
14	08/28 18z	26.50	-88.60	150	906	Hurricane-5
15	08/29 03z	27.60	-89.40	140	904	Hurricane-5
16	08/29 09z	28.80	-89.60	130	915	Hurricane-4
17	08/29 15z	30.20	-89.60	110	927	Hurricane-3
18	08/29 21z	31.90	-89.60	65	960	Hurricane-1
19	08/30 03z	33.50	-88.50	50	973	Tropical Storm
20	08/31 09z	41.10	-81.60	15	996	Tropical Depression

Plot the position of the storm for each date in the chart above to show the path of the hurricane. Number each position 1, 2, 3... Connect the points with a smooth curve.

1 knot = 1.15 mph. To convert a wind speed to mph multiply by 1.15. "z" time is an abbreviation for Zulu time - which is GMT time.

Answer the following questions:

1. In what state did Katrina first make landfall?
2. What is the fastest wind speed hurricane Katrina obtained in miles per hour?
3. As wind speed increases the pressure _____ (increases, decreases).
4. Why did hurricane Katrina slow down at data point 7?
5. What was the status of hurricane Katrina when it passed into New Orleans?
6. What was the local time when hurricane Katrina made landfall? (Use the Internet to help you convert from GMT (Zulu) time to local time.
7. List all the states that the hurricane/storm passed through from August 24th to August 31st.

Visit the National Hurricane Center online: <http://www.nhc.noaa.gov/> Are there any depressions, storms or hurricanes occurring now? If so, describe them.

Watch the following video online: <http://www.theatlantic.com/video/index/244300/nasa-revisits-satellite-images-of-hurricane-katrina/>

Name: _____

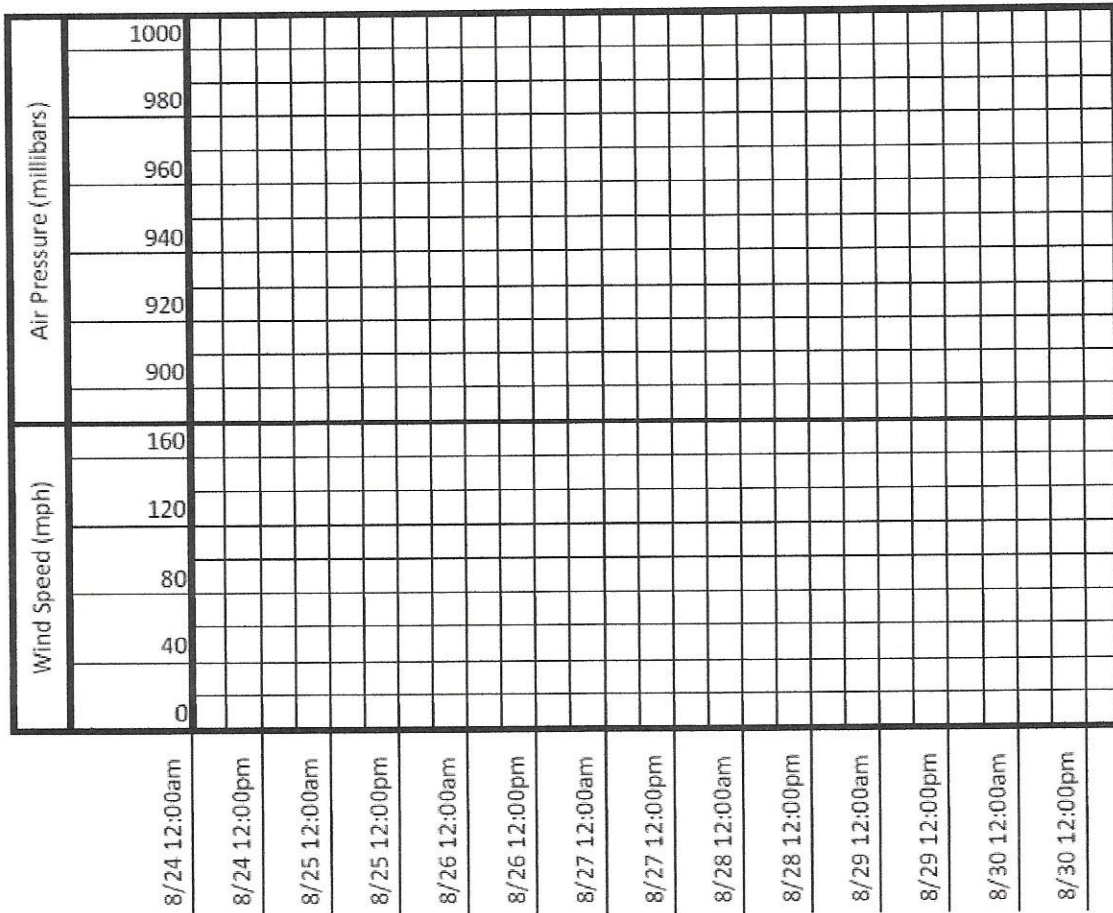
Irene 2011						
Date	Time	Location		Wind Speed (mph)	Pressure (millibars- mb)	Category
		Latitude N	Longitude W			
8/21	3:00 AM	16	60.4	50	1006	Tropical Storm
8/21	11:00 AM	17	63.2	50	1007	Tropical Storm
8/21	7:00 PM	17.8	64.9	60	995	Tropical Storm
8/22	3:00 AM	18.3	66.1	70	989	Tropical Storm
8/22	11:00 AM	19.2	67.5	80	988	Hurricane 1
8/22	7:00 PM	19.7	68.7	100	981	Hurricane 2
8/23	3:00 AM	20.1	69.7	100	978	Hurricane 2
8/23	11:00 AM	20.5	71	100	980	Hurricane 2
8/23	7:00 PM	21.1	71.8	90	969	Hurricane 1
8/24	3:00 AM	21.3	72.6	100	966	Hurricane 2
8/24	11:00 AM	22.4	73.9	115	956	Hurricane 3
8/24	7:00 PM	23.5	75	120	954	Hurricane 3
8/25	3:00 AM	24.2	76	115	950	Hurricane 3
8/25	11:00 AM	25.9	76.8	115	951	Hurricane 3
8/25	7:00 PM	27.7	77.4	115	946	Hurricane 3
8/26	3:00 AM	28.7	7.3	115	942	Hurricane 3
8/26	11:00 AM	30.7	77.3	105	946	Hurricane 2
8/26	7:00 PM	32.1	77.2	100	950	Hurricane 2
8/27	3:00 AM	33.7	76.5	90	952	Hurricane 1
8/27	11:00 AM	35.2	76.4	85	952	Hurricane 1
8/27	7:00 PM	36.5	75.8	80	950	Hurricane 1
8/28	3:00 AM	38.1	75	80	958	Hurricane 1
8/28	11:00 AM	41.4	73.7	60	966	Tropical Storm
8/28	7:00 PM	44.1	72.1	50	978	Tropical Storm

Name: _____

Part 3: Plotting hurricane air pressure and wind speed

Below are two graphs one on top of the other line up by date.

- 1.) Using the data from Hurricane Katrina chart given from the first hurricane plot the air pressure on the top graph and wind speed on the bottom graph below.





Atlantic Basin Hurricane Tracking Chart

National Hurricane Center, Miami, Florida

