



Briefing Sheet: Hurricane Team

Practice Data Answers

Instructions

- Before the Mission Begins, your team should practice analysing hurricane data. You should be able to:
- Receive real-time data for the storm and predict its movement and strength.
 - Plot latitude and longitude coordinates on the tracking map.
 - Calculate speed of the storm and estimated time to the Island of Montserrat.
 - Predict danger to the Island and advise the evacuation team.
 - Prepare a report form every five minutes to be read to Mission Control by the Communicator.

The information and tools you will need:

- Hurricane Tracking Work Sheet
- Hurricane Tracking Map
- Calculator, Ruler, Compass

Practice with sample data

In the table below we give you some sample data. The first three rows are an example. Using the tools above you should fill in the rest of the sheet. For detailed instructions, refer to the "Hurricane Tracking Instructions"

Hurricane Practice Data from Aug 28th

This data is fictitious. However, it represents the types of data that you will be receiving on Mission Day. Assume the radius of the storm is 240 km (150 mi) when you are drawing it on your Tracking Map.

Hurricane Tracking Data Sheet

	A	B	C	D	E	F	G	H	I	J	K	L
	OBS	Lat. North	Lon. West	Time GMT	Wind kph* (mph)	Pressure (mbar)	Saffir-Simpson Hurricane Scale	Distance travelled km (mi)	Speed kph (mph)	Direction of Hurr.	Distance to Island km (mi)	ETA Montserrat (Hours till arrival.)
Practice Data	1	16.40	47.2	28/08: 0300	72 (45)	1025	Trop Storm	n/a	n/a	n/a	1315 (816)	n/a
	2	16.50	48.0	28/08: 0900	96 (60)	1032	Trop Storm	85 (53)	14.2 (8.8)	W	1225 (760)	86.4
	3	16.70	49.0	28/08: 1500	120 (75)	1009	Hurricane-1	100 (62)	16.7 (10.4)	W	1130 (701)	67.4
	4	16.70	49.7	28/08: 2100	144 (90)	988	Hurricane-1	80 (50)	13.3 (8.3)	W	1040 (645)	77.7
	5	16.60	50.6	29/08: 0300	140 (87)	982	Hurricane-1	82 (51)	13.7 (8.5)	W	960 (596)	70.1
	6	16.60	51.4	29/08: 0900	125 (78)	983	Hurricane-1	80 (50)	13.3 (8.3)	W	880 (546)	65.8
	7	16.70	51.9	29/08: 1500	144 (90)	974	Hurricane-1	49 (30)	8.2 (5.1)	NW	830 (515)	100.9
	8	16.90	52.5	29/08: 2100	161 (100)	968	Hurricane-2	71 (44)	11.8 (7.4)	W	760 (471)	63.6
	9	16.90	52.9	30/08: 0300	175 (109)	963	Hurricane-1	35 (22)	5.8 (3.6)	W	725 (450)	125.0
	10	16.80	53.1	30/08: 0900	128 (80)	995	Hurricane-1	22 (14)	3.7 (2.3)	SW	700 (434)	188.7

*Note: Most weather stations and meteorologists measure wind speed in "knots". Popular media converts this to "kilometres per hour" (kph), or "miles per hour" (mph).

Winds	Category	Severity
Less Than 118 kph (74 mph)	Tropical Storm	very weak
119-152 kph (74-95 mph)	1	weak
153-177 kph (96-110 mph)	2	moderate
178-209 kph (111-130 mph)	3	strong
210-248 kph (131-155 mph)	4	very strong
above 248 kph (155 mph)	5	devastating

