

READING AND PLOTTING WEATHER DATA

(Activity 2002)

a

1981 WEATHER STATION DATA	
STATION NAME	CAPE CANAVERAL
STATION NUMBER	1100
STATION TYPE	1100
STATION ELEVATION (ft)	10
STATION LOCATION	FLORIDA
STATION COORDINATES	28° 28' N, 80° 42' W
STATION OPERATOR	NOAA
STATION STATUS	ACTIVE
STATION DATE	1981
STATION TIME	0000Z
STATION COMMENTS	

Procedure: Complete the Weather Station Data (a). Then, draw a complete weather station map entry for Bermuda, Michigan, using the drawing as your guide. Use the Weather Station Model (a) as your guide. Convert the information in b to weather map symbols. The numbers of symbols on your drawing should be to the same level that as they are shown in c. For example, the symbol for type of low clouds shown just below the 1000hPa, the symbol for type of high clouds shown here and above the 500hPa and the air pressure reading appears exactly right of the circle. The wind speed and direction symbol is the only symbol found in different locations around the circle, since it indicates the direction of the wind in relation to the circle. (The direction of the wind in the example (a), is from the southwest.)

Repeat your procedure for Cape Canaveral and San Francisco.

1. What is the weather like in the three stations in (a)?
2. Why is the change in air pressure the greatest?
3. What type of change in air pressure would you find at a station where a cold front recently passed through?
4. Do you think the results of Kennedy Space Center would be happy with the weather indicated here if they had a Space Shuttle launch planned?

b

STATION	DATE	TIME	TEMPERATURE (°F)	WIND DIRECTION	WIND SPEED (MPH)	WIND GUST (MPH)	RELATIVE HUMIDITY (%)	SEA LEVEL PRESSURE (hPa)	SEA LEVEL PRESSURE (inHg)
1100	1981	0000Z	65	100	10	15	85	1013.2	29.92
1100	1981	0100Z	65	100	10	15	85	1013.2	29.92
1100	1981	0200Z	65	100	10	15	85	1013.2	29.92
1100	1981	0300Z	65	100	10	15	85	1013.2	29.92
1100	1981	0400Z	65	100	10	15	85	1013.2	29.92
1100	1981	0500Z	65	100	10	15	85	1013.2	29.92
1100	1981	0600Z	65	100	10	15	85	1013.2	29.92
1100	1981	0700Z	65	100	10	15	85	1013.2	29.92
1100	1981	0800Z	65	100	10	15	85	1013.2	29.92
1100	1981	0900Z	65	100	10	15	85	1013.2	29.92
1100	1981	1000Z	65	100	10	15	85	1013.2	29.92
1100	1981	1100Z	65	100	10	15	85	1013.2	29.92
1100	1981	1200Z	65	100	10	15	85	1013.2	29.92
1100	1981	1300Z	65	100	10	15	85	1013.2	29.92
1100	1981	1400Z	65	100	10	15	85	1013.2	29.92
1100	1981	1500Z	65	100	10	15	85	1013.2	29.92
1100	1981	1600Z	65	100	10	15	85	1013.2	29.92
1100	1981	1700Z	65	100	10	15	85	1013.2	29.92
1100	1981	1800Z	65	100	10	15	85	1013.2	29.92
1100	1981	1900Z	65	100	10	15	85	1013.2	29.92
1100	1981	2000Z	65	100	10	15	85	1013.2	29.92
1100	1981	2100Z	65	100	10	15	85	1013.2	29.92
1100	1981	2200Z	65	100	10	15	85	1013.2	29.92
1100	1981	2300Z	65	100	10	15	85	1013.2	29.92

c

