

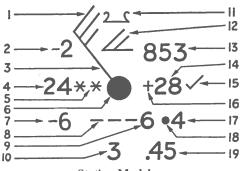
STATION MODEL

Weather stations are indicated on weather maps by a ball or circle, called the Station Circle. This circle is also used to indicate the cloudiness of the sky — black being completely overcast, white, clear, and the percentage of cloudiness between these two extremes being represented by a corresponding percentage of black and white.

The letter "M" in the station circle means that the weather report for the station is missing that day.

The direction of the wind is indicated by a line radiating from the ball, and the force of the wind is indicated by "barbs" or "feathers".

Around the Station Circle numbers and symbols are arranged to indicate all the various elements of the weather which have been observed at the station at map making time. The complete diagram is known as a STATION MODEL.



Station Model

1. Wind Force (23 to 27 kts.). 2. Temperature in degrees Celsius. 3. Direction of Wind (320°). 4. Visibility in code (24 = 1½ miles). 5. Present State of Weather (Continuous light snow). 6. Cloudiness of Sky (completely overcast). 7. Dewpoint, in degrees Celsius. 8. Low Clouds (Fractocumulus)*. 9. Amount of Cloud, in code (6 = 7 or 8 tenths). 10. Height of Lower Cloud, in code (3 = 600 - 999 feet). 11. High Cloud (Cirrostratus)*. 12. Middle Cloud (Altostratus)*. 13. Barometric Pressure MSL (985.3 mb.) See "Sea Level Pressure". 14. Amount of Barometric Change in past 3 hrs., in 10ths of millibars (2.8 mb.). 15. Barometric Tendency in past 3 hrs. (Falling or steady, then rising — or, rising, then rising more quickly)*. 16. Plus or Minus indicates Pressure higher or lower than 3 hrs. ago. 17. Time precipitation began or ended, in code (4 = 3 to 4 hrs. ago)*. 18. Past Weather (Rain). 19. Precipitation in hundredths of inches (.45 inches).

* Omitted when not observed or recorded.

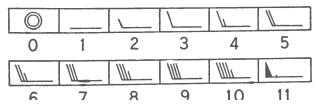
WEATHER MAP SYMBOLS

The various symbols and code figures which are grouped around the Station Model are shown in the following tables:

SKY COVER

0	0	Absolutely no clouds	5	•	5/8
1	1	1/8 or less	6	•	6/8
2	•	2/8	7	0	7/8
3	•	3/8	8		8/8 (overcast)
4	•	4/8	9	\otimes	sky obscured

Wind Force





0: Calm. 1: 1-2 kts. 2: 3-7 kts. 3: 8-12 kts. 4: 13-17 kts. 5: 18-22 kts. 6: 23-27 kts. 7: 28-32 kts. 8: 33-37 kts. 9: 38-42 kts. 10: 43-47 kts. 11: 48-52 kts. 12: 53-57 kts. 13: 58-62 kts. 14: 63-67 kts. 15: 68-72 kts. 16: 73-77 kts. 17: 103-107 kts.

FRONT SYMBOLS

On Printed Charts		On Weather Map
	Cold Front	Continuous blue line
	Cold Front (aloft)	Broken blue line
	Warm Front	Continuous red line
00000	Warm Front (aloft)	Broken red line
	Stationary Front	Alternate red and blue line
	Stationary Front (aloft)	Alternate red and blue line (broken)
	Occluded Front	Continuous purple line
	Occluded Front (aloft)	Broken purple line

Frontogenesis

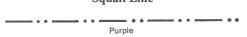
Symbols

On Printed Charts Or			On \	On Weather Map					
_	_	_	_	Cold Front	•	•	•	•	Blue
				Warm Front	0	0	0	0	Red
•	•	•	•	Stationary Front	•	0	•	0	Blue and Red

Frontolysis

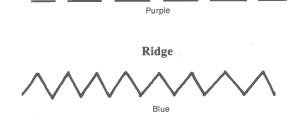
	3ympois		
On Printed Charts		On Weather I	Map
A - A - A	Cold Front	/////////	Blue
	Warm Front	/////////	Red
A-A-A-A	Occluded Front	/////////	Purple
	Stationary Front	////////	Blue and Red

Squall Line



Trowal/Trough

Symbols indicate the position of a trough of warm air aloft.



Centre of Pressure Movements

Symbols indicate the position of high or low centres of pressure — generally at 12 hr. intervals.

Air Masses

cA—Continental Arctic mA—Marine Arctic

mP—Maritime Polar mT—Maritime Tropical

Precipitation and Obstructions to Vision on Surface Weather Maps

Because surface weather maps provide a complete picture of actual surface conditions, they must, in addition to indicating pressure patterns, air masses, and frontal systems, show areas and types of precipitation and obstructions to vision These features, like those already described, are depicted symbolically.

To fully interpret surface weather maps, you must be able to recognize and decode the symbols shown on the table below. Be sure to STUDY THE TABLE CAREFULLY and learn each symbol.

SYMBOL	DESCRIPTION OF SYMBOL	TRANSLATION
1.	green shading	continuous rain
2.	green hatching	intermittent rain
3.	green comma	drizzle
4.	green triangle with green period in centre	ice pellets
5. X	green star	snow
6. ∼	green curved line (used with comma or period	freezing rain (with period) freezing drizzle (with comma)
7.	green period over green inverted triangle	rain shower
8. *	green star over green inverted triangle	snow shower
9. لا	green T with green lightning symbol	thunderstorm
10.	yellow shading	fog

SIGNIFICANT WEATHER PROGNOSTIC CHARTS — WEATHER SYMBOLS

