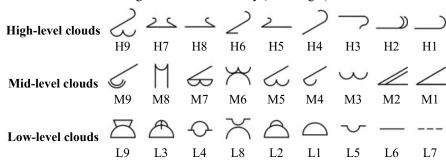
Surface Weather Plot Symbols

Cloud types | Present weather | Sky Cover | Pressure tendency | Wind Speed & Direction | Past Weather

Cloud Symbol Priority

Highest to Lowest Priority (left to right)



Often, more than one cloud type occurs in each level (low, middle, or high) in the atmosphere. However, since only one cloud type is indicated for each level, the cloud that is coded is based upon a priority list of the most predominate cloud for each particular level.

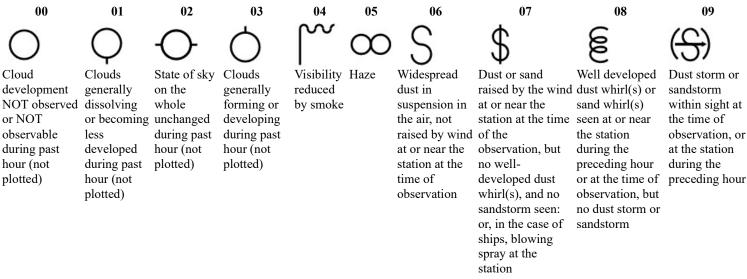
At right is a list of priority and symbol for each cloud type. Hold mouse over symbols to reveal cloud type name.

How is this list used? If more than one cloud type exits for any given level, the cloud with the highest priority is plotted. For example, an observer might see a cumulonimbus (L9) and stratocumulus (L5) at the same time. In the list of priorities, only the cumulonimbus (L9) will be plotted.

Present Weather Symbols

Following are the 99 present weather symbols used in meteorology. They are divided into groups as indicated below.

Codes 00-09 General Group: No precipitation, fog, dust storm, sandstorm, drifting or blowing snow at the station at the time of observation or, except for 09 during the preceding hour.



Codes 10-19 General Group: No precipitation at the station at the time of observation or, except 17, during the preceding hour.

10 12 14 15 16 17 19 Mist Patches of More or less Lighting Precipitation Precipitation Precipitation Thunder Squall(s) Funnel shallow visible, within sight, within sight, heard, but no continuous within sight, within cloud(s) /

fog at shallow fog at no but NOT reaching ground or reaching the precipitation sight Tornado(s) station, station, NOT thunder reaching the the surface of the ground or the at the station during during the NOT deeper than 6 heard sea, but distant, i.e. surface of the sea, past hour preceding hour ground deeper than feet on land estimated to be near to (within 3 or at time of 6 feet on more than 3 miles miles), but not at observation land from the station the station Codes 20-29 General Group: Precipitation, fog, ice fog, or thunderstorm at the station during the preceding hour but not at the time of observation. 20 21 22 23 24 25 26 27 28 29 Drizzle (not Rain (not Snow not Rain and Freezing Shower(s) Shower(s) of Shower(s) of Fog or ice Thunderstorm freezing) or freezing) not falling as snow or ice drizzle or of rain snow, or of hail, or of fog ended (with or without snow grains falling as shower(s) pellets not freezing rain ended in the rain and rain and hail in the past precipitation) not falling as shower(s) ended in the falling as not falling as past hour snow ended ended in the hour ended in the past shower(s) shower(s) shower(s) ended in the past hour in the past past hour hour ended in the past hour ended in the ended in the hour past hour past hour past hour Codes 30-39 General Group: Dust storm, sandstorm, drifting or blowing snow. 30 32 39 31 36 38 Slight or Slight or Slight or Severe dust Severe dust Severe dust Slight or Heavy Slight or Heavy moderate dust moderate dust moderate dust storm or storm or storm or moderate drifting moderate drifting drifting storm or storm or storm or sandstorm sandstorm has sandstorm snow blowing snow sandstorm sandstorm (no sandstorm has no appreciable has begun or snow (generally snow (generally appreciable (has begun or decreased change during increased (generally below eye above eye (generally change during increased during the the preceding decreased during the below eye level) above eye level) during the the preceding during the preceding hour preceding level) level) preceding hour) preceding hour hour hour) Codes 40-49 General Group: Fog at the time of observation. 43 40 41 42 44 45 46 47 48 49 Fog at a distance at Fog in Fog sky Fog sky Fog sky Fog sky Fog sky Fog sky Fog. Fog. visible (has visible (no visible (has the time of patches obscured obscured (no obscured (has depositing depositing become (has become appreciable appreciable begun or has begun or has observation, but not rime ice, rime ice, or thinner become sky visible at the station during thinner change during change during become ice fog, sky the preceding thicker the preceding hour, during during the preceding thicker obscured the fog or ice fog preceding preceding hour) hour) during the during the extending to a level hour) hour) preceding preceding above that of the hour) hour) observer Codes 50-59 General Group: Drizzle. 50 51 52 53 54 55 56 57 58 59

Drizzle, not

intermittent

freezing,

Drizzle, not

continuous

freezing,

Drizzle,

freezing,

slight

Drizzle,

freezing,

moderate

Drizzle, not

continuous

freezing,

Drizzle

moderate

and rain, and rain,

Drizzle

slight

(has

hour)

Drizzle, not

intermittent

freezing,

Drizzle, not

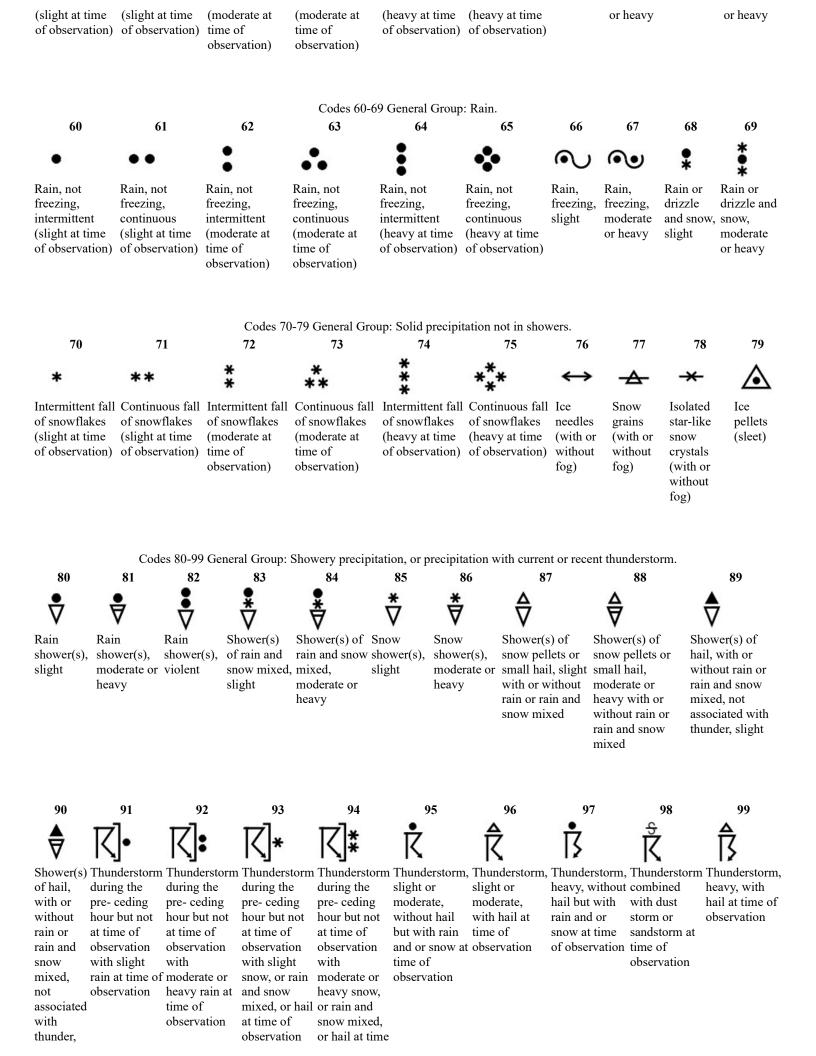
continuous

freezing,

Drizzle, not

intermittent

freezing,



Sky Cover Symbols

These are the ten symbols that represent the total amount of sky cover at the time of the observation (reported in eights).





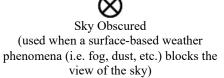












Pressure tendency symbols

	Code	Symbol	Description				
	0	^	Rising, the falling				
Pressure higher than three hours ago	1	_	Rising, then steady; or rising, then rising more slowly				
	2	/	Rising steadily, or unsteadily				
	3	✓	Falling or steady, then rising; or rising, then rising more quickly				
Pressure the same as three hours ago	4	_	Steady, same as 3 hours ago				
	5	\vee	Falling, then rising, same or lower than 3 hours ago				
Pressure lower than three hours ago	6	\	Falling, then steady; or falling, then falling more slowly				
	7	\	Falling steadily, or unsteadily				
	8	^	Steady or rising, then falling; or falling, then falling more quickly				

These symbols show the pressure trend during the past three hours. It is useful for determining motion of front. For example, a typical pressure pattern for a cold front that has passed a station would be code 3, falling or steady, then rising; or rising, then rising more quickly.

The steady or falling pressure will be the change in pressure before the front passes over the location. After frontal passage, higher pressure moves over the station as indicated by the pressure rising more quickly.

Wind Speed & Direction

Wind speed. A combination of long/short barbs and pennants indicate the speed of the wind in station weather plots rounded to the nearest 5 knots. Calm wind is indicated by a large circle drawn around the skycover symbol.

One long barb is used to indicate each 10 knots with the short barb representing 5 knots. At 50 knots, the barbs changes to a pennant. For wind speeds higher than 50 knots, long and short barbs are used again in combination with the pennant(s). (See examples below.)

Observed wind speed	0-2 kts (0-2 mph)	3-7 kts (3-8 mph)	8-12 kts (9-14 mph)	13-17 kts (15-20 mph)	18-22 kts (21-25 mph)	23-27 kts (26-31 mph)	28-32 kts (32-37 mph)	33-37 kts (38-43 mph)	48-52 kts (55-60 mph)	53-57 kts (61-66 mph)	58-62 kts (67-71 mph)	63-67 kts (73-77 mph)	98-102 kts (113-117 mph)	102-107 kts (119-123 mph)
Rounded to the nearest 5	0 kts	5 kts	10 kts	15 kts	20 kts	25 kts	30 kts	35 kts	50 kts	55 kts	60 kts	65 kts	100 kts	105 kts
Plotted as	\bigcirc			<u></u>	<u></u>	L	W	Ш		<u> </u>		\ _	L	



The wind direction is indicated by the long shaft. The shaft will point to the direction FROM which the wind is blowing. The direction is based upon a 36-point compass.

Past Weather Symbols

These symbols represent the most significant weather within the past six hours of the observation but not during the most recent hour.

0	1	2	3	4	5	6	7	8	9
N/A	N/A	N/A	S	\equiv	•	•	*	∇	K
	Partly cloudy (scattered) or variable sky (not plotted)	Cloudy (broken) or overcast (not plotted)	Sandstorm or dust storm, or drifting or blowing snow	smoke, or	Drizzle	Rain	Snow, or rain and snow mixed, or ice pellets (sleet)	Shower(s)	Thunderstorm, with or without precipitation