

Cloud amount

The unit of measurement of cloud amount is the octa. This is one eighth of the sky.

- The amount of cloud is recorded as 0, if the sky is completely cloudless, without even a trace.
- The code figure 8 is used only when the sky is completely overcast, i.e. there are no openings or gaps on any kind.
- "Traces" of cloud should be indicated under code figure 1. This code figure is used for amounts up to 1/8
- "Overcast but with openings" should be included under code figure 7.
- This figure should be used for amounts down to 7/8.

The amount of cloud should be estimated by supposing the clouds present to be brought together in a continuous sheet. First divide the sky into four quadrants by means of diameters at right angles. Estimate the amount of each quadrant separately and then add the four amounts together.

It is also necessary to estimate the amount of cloud of a specified form or type, such as low cloud. In doing so, the area occupied by every other form or type visible at the time should be regarded as if it were blue sky.

If the sun or stars can be seen through fog, dust, smoke, etc., and there is no evidence of the cloud above, the code figure 0 is used. When clouds are observed through fog and other phenomena, the cloud amount should be estimated in so far as circumstances permit.

Total cloud cover and cloud amount

(a) cloudatlas.wmo.int/total-cloud-cover-and-cloud-amount.html

(Section 2.7.3)

Total cloud cover is the fraction of the sky covered by all the visible clouds. Cloud amount refers to the fraction of the sky covered by clouds of a particular type or combination. It can refer to a genus, species, variety, layer, or a certain combination of clouds.

Always make an estimate of the total cloud cover and also of the cloud amounts of the various genera present. Cloud amounts of the different species or varieties of clouds belonging to the same genus, and of the different layers, should also be noted.

The estimate should be made from an open area from which the whole sky can be seen. When the sky is partially hidden, for example, by mountains, or by haze, fog or smoke, total cloud cover and the cloud amounts should be estimated from the visible fraction. Also, when the sky is partly veiled by precipitation, this part should be considered covered by the precipitating cloud.

It may be difficult to estimate cloud amounts if some clouds are only partly visible or temporarily concealed. This is often the case when the clouds occur in superposed layers or patches. In this situation, it may be possible to estimate the cloud amount(s) by observing the sky over time, because previously hidden clouds may become visible. When clouds are layered or otherwise superposed, the sum of the observed cloud amounts may exceed the total cloud cover.

Gaps between clouds near the horizon may not be visible to the observer. Only gaps that are visible from the observer's position should be considered when estimating cloud cover or cloud amount.

On dark nights, only the total cloud cover can be determined. This should be based on the proportion of the sky in which the stars are dimmed or completely hidden by clouds.