

Cirrostratus cloud

Cirrostratus /ˌsɪroʊˈstrɑːtəs/ is a high-level, very thin, generally uniform *stratiform* genus-type of cloud, composed of ice-crystals. It is difficult to detect and is capable of forming halos when the cloud takes the form of thin cirrostratus nebulosus.^[1] The cloud has a fibrous texture with no halos if it is thicker cirrostratus fibratus. On the approach of a frontal system, the cirrostratus often begins as nebulosus and turns to fibratus. If the cirrostratus begins as fragmented fibratus it often means the front is weak. Cirrostratus is usually located above 5.5 km (18,000 ft). Its presence indicates a large amount of moisture in the upper atmosphere.^[2]



Cirrostratus at night causing a moon halo

Cirrostratus clouds sometimes signal the approach of a warm front if they form after cirrus and spread from one area across the sky, and thus may be signs that precipitation might follow in the next 12 to 24 hours^[3] or as soon as 6–8 hours if the front is fast moving. If the cirrostratus is broken fibratus, it can mean that the front is weak and that stratus rather than nimbostratus will be the precipitating cloud (meaning drizzle or snow grains instead of moderate rain or snow). Cumulus humilis or stratocumulus clouds are often found below cirrostratus formations, due to the stable air associated with cirrostratus creating an inversion and restricting convection, causing cumuliform clouds to become flattened. Contrails also tend to spread out and can be visible for up to an hour in cirrostratus.

The phrase "milky sunshine" is often, as well as referring to haze or light mist, used to refer to the milky look of the sky when cirrostratus is present.

- **Species:** Cirrostratus *fibratus* (Cs fib) is a high fibrous sheet similar to cirrus but with less detached semi-merged filaments. It is reported in the SYNOP code as C_H8 or as C_H5 or 6 (depending on the amount of sky covered) if increasing in amount. If the high cloud covers the entire sky and takes on the form of a featureless veil, it is classified as cirrostratus of the species *nebulosus* (Cs neb)^[4] and is coded C_H7.
- **Varieties:** Cirrostratus species have no opacity-based varieties as they are always translucent. Two pattern-based varieties are sometimes seen with the species fibratus. These are the closely spaced *duplicatus* and wavy *undulatus* types similar to those seen with cirrus fibratus.^[5] Pattern-based varieties are not commonly associated with the species nebulosus due to its lack of features.

Cirrostratus cloud	
Cirrostratus with mock sun	
Abbreviation	Cs
Genus	Cirrus- " <i>Wisp like</i> " and -stratus " <i>layered</i> "
Altitude	5,500 - 13,000 m (18,000 - 42,000 ft)
Appearance	white veil
Precipitation cloud?	No, but usually signal the approach of a warm front.

- Supplementary features: Cirrostratus produces no precipitation or virga, and is not accompanied by any accessory clouds.^[6]
- Genitus mother clouds: Cirrostratus fibratus *cirrocumulogenitus* sometimes appears as the latter cloud flattens and loses some of its stratocumuliform structure. Cirrostratus fibratus *cumulonimbogenitus* may form if the cirriform top of a mature thundercloud spreads and flattens sufficiently to become a high stratiform cloud.^[7]
- Mutatus mother clouds: Cirrostratus fibratus *cirromutatus* or *cirrocumulomutatus* are the result of a complete transformation from cirrus and cirrocumulus genus types. Cirrostratus nebulosis *altostratomutatus* results when a high grey nebulous altostratus layer thins out into a whitish layer of featureless high cloud.^[7]

Code No.	CH	Description (Abridged From International Code)	3
1		Filaments of Ci, or "mares tails," scattered and not increasing	
2		Dense Ci in patches or twisted sheaves, usually not increasing, sometimes like remains of Cb; or towers or tufts	
3		Dense Ci, often anvil-shaped, derived from or associated with Cb	
4		Ci, often hook-shaped, gradually spreading over the sky and usually thickening as a whole	
5		Ci and Cs, often in converging bands, or Cs alone; generally overspreading and growing denser; the continuous layer not reaching 45° altitude	
6		Ci and Cs, often in converging bands, or Cs alone; generally overspreading and growing denser; the continuous layer exceeding 45° altitude	
7		Veil of Cs covering the entire sky	
8		Cs not increasing and not covering entire sky	
9		Cc alone or Cc with some Ci or Cs, but the Cc being the main cirriform cloud	

High cloud weather map symbols.

See also

- Stratus cloud
- Altostratus cloud
- Nimbostratus cloud
- Cirrostratus nebulosus
- Altostratus undulatus cloud
- Fractus cloud

References

- World Meteorological Organization, ed. (1975). *Cirrostratus, International Cloud Atlas* (http://library.wmo.int/pmb_ged/wmo_407_en-v1.pdf) (PDF). I. pp. 29–31. ISBN 92-63-10407-7. Retrieved 26 August 2014.
- Ludlum, D. (1991). New York: Alfred A. Knopf. ISBN 0-679-40851-7.
- Vekteris, Donna (2004). *Scholastic Atlas of Weather*. Scholastic Inc. p. 14. ISBN 0-439-41902-6.
- World Meteorological Organization, ed. (1975). *Species, International Cloud Atlas* (http://library.wmo.int/pmb_ged/wmo_407_en-v1.pdf) (PDF). I. pp. 17–20. ISBN 92-63-10407-7. Retrieved 26 August 2014.
- World Meteorological Organization, ed. (1975). *Varieties, International Cloud Atlas* (http://library.wmo.int/pmb_ged/wmo_407_en-v1.pdf) (PDF). pp. 20–22. Retrieved 26 August 2014.
- World Meteorological Organization, ed. (1975). *Features, International Cloud Atlas* (http://library.wmo.int/pmb_ged/wmo_407_en-v1.pdf) (PDF). I. pp. 22–24. ISBN 92-63-10407-7. Retrieved 26 August 2014.
- World Meteorological Organization, ed. (1995). "WMO cloud classifications" (http://www.weatheranswer.com/public/CLOUDS_WMO.pdf) (PDF). Retrieved 1 February 2012.

External links

- International Cloud Atlas – Cirrostratus (<http://nephology.eu/cirrostratus>)

Retrieved from "https://en.wikipedia.org/w/index.php?title=Cirrostratus_cloud&oldid=838941348"

This page was last edited on 30 April 2018, at 08:03.

Text is available under the [Creative Commons Attribution-ShareAlike License](#); additional terms may apply. By using this site, you agree to the [Terms of Use](#) and [Privacy Policy](#). Wikipedia® is a registered trademark of the [Wikimedia Foundation, Inc.](#), a non-profit organization.