CLOUD ATLAS · AFTER WMO

The ten cloud genera

Every cloud belongs to exactly one of ten genera. They are sorted by the height of their base. Heights for Central Europe – in summer clouds are higher, in winter lower.

Height

13

12

Tropopause (about 10–13 km in Central Europe) – the upper limit of the weather. Only strong thunderstorm tops briefly overshoot it.

10

8

6

4

2

0 km

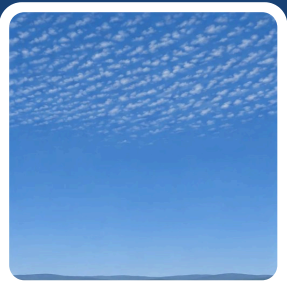
HIGH CLOUDS about 5–13 km · ice crystals



Cirrus

Ci · mares' tails

Fine white fibres of ice. No shadows.



Cirrocumulus

Cc · mackerel sky

Tiny grains, narrower than the little finger.



Cirrostratus

Cs · high veil

Milky veil, often with a ring around the sun.

MID-LEVEL CLOUDS about 2–7 km · water and ice



Altocumulus

Ac · mid-level cloudlets

Cloudlets one to three fingers wide, with shading.



Altostratus

As · mid-level grey sheet

Grey sheet, sun as if behind frosted glass.

Rule of thumb

Stretch out your arm and compare the cloudlets with your fingers:
narrower than one finger – *Cirrocumulus*
one to three fingers – *Altocumulus*
wider – *Stratocumulus*

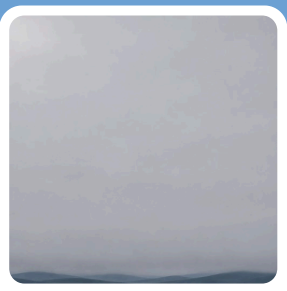
LOW CLOUDS 0–2 km · water droplets



Stratocumulus

Sc · low lumpy layer

Large grey lumps or rolls, close together.



Stratus

St · low grey layer

Low, uniform grey layer like fog.

What the names mean

cirrus – curl, fibre
cumulus – heap
stratus – spread out
nimbus – rain cloud
alto – high (here: mid-level)

SPANNING SEVERAL LEVELS

up to the tropopause

up to about 7 km

up to about 7 km



Cumulus

Cu · heap cloud

Separate heaps, flat below, cauliflower on top.



Nimbostratus

Ns · rain cloud layer

Dark, thick layer with steady rain or snow.



Cumulonimbus

Cb · thunderstorm cloud

Huge tower up to the tropopause, often with an anvil.

Clouds Online

Cloud atlas with over 500 photos · www.clouds-online.com
Identify a cloud yourself: www.clouds-online.com/identify

Pictures: drawings (made with AI, checked by experts), not photos.
Free to copy for teaching, courses and personal use.