



Cloud Atlas

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What is Cloud ?



Cloud: In meteorology, cloud is an aerosol consisting of a visible mass of droplets, frozen crystal or other particles suspended in the atmosphere of a planetary body or similar space.

Clouds are formed due to condensation of water vapour. Clouds play major role in the heat budget of the earth and the atmosphere as they reflect, absorb and diffuse some parts of incoming short-wave solar radiation and absorb some parts of outgoing long-wave terrestrial radiation and then re-radiate it back to the earth's surface.

Cirrus cloud (Ci)



Date: 04/08/21
Time: 17:59:32
Place: Latagram
Birbhum, West
Bengal, India

Cirrus cloud:-

- The high altitude detached cloud having fibrous or silky appearance are called cirrus clouds.
- They are composed of tiny ice crystals.
- These clouds are white in colour but have brilliant colours at sunset and sunrise.
- These white clouds are indicative of dry weather and predict fair to pleasant weather.
- These are found at the altitude of 3km-8 km in temperate regions and 5-18 km in tropical regions.

Cirro-stratus cloud (Cs)



Date: 10/03/21
Time: 16:41:14
Place: Latagram, Birbhum, West Bengal,
India

Date: 09/23/21

Time: 07:11:23

Place: Latagram, Birbhum ,West Bengal,India



Cirro-stratus cloud:-

- This clouds are a thin white veil of cirrus cloud.
- Cirro-stratus clouds are high altitude cloud.
- Generally this clouds are white in colour and spread in the sky like milky thin sheets.
- They're composed of tiny ice crystals which reflect the light of Sun and moon.
- This clouds are most commonly seen in winter season.
- Weather prediction: Rain or snow will arrive within 24 hours.
- Altitude: 600m-13000m .
- Temperature: Around -20°C .

Cirro-cumulus cloud (Cc)



Date: 09/28/21

Time: 05:29:00

Place: Latagram Birbhum ,West Bengal, India

Date:11/28/20

Time 06:12:47

Place:Latagram, Birbhum, West Bengal, India



Cirro-cumulus cloud:-

- These are not common type of clouds .
- They're also high altitude cloud.
- They generally appear as ripples similar to sand ripples in the desert.
- Cirro-cumulus clouds are white coloured having cirriform layer or patches of small white flakes.
- This cloud is also called 'Mackerel sky'.
- Weather prediction: pleasant and Calm weather.
- Altitude: 5km-12 km
- Temperature: Around -20°C .

Alto-stratus cloud (As)



Date: 10/17/21
Time:09:00:43
Place :Latagram
Birbhum, West
Bengal, India

Alto-stratus cloud:-

- A thin sheets of gray or blue colour having fibrous or uniform appearance is called Alto-stratus cloud.
- This cloud are mid-altitude cloud.
- They cover the sky partly or totally or are smoothly distributed the entire sky.
- This thin sheets the Sun and the moon are obscured and they appear as bright spots behind the cloud.They do not form halo around the sun and the moon.
- They appear gray or blue in colour.
- Altitude: 2000m-7000m .
- Temperature : -35°C to -45°C .
- Weather prediction: Heavy rain and snow or drizzle.

Alto-cumulus cloud(Ac)

Date : 10/30/21
Time:05/57/54
Place: Latagram
Birbhum, West
Bengal,India



Alto-cumulus cloud:-

- This cloud is characterized by wavy layers of globular form.
- They form fairly regular patterns of line, groups or waves.
- High globular groups of alto-cumulus cloud are some times called as 'sheep cloud' or 'wool pack cloud'.
- This clouds are also mid-altitude cloud.
- They appear white or grey in colour.
- Temperature: -35°C to -45°C
- Altitude: 2000m-7000m .
- Weather prediction: Clear humid weather.

Stratus cloud (St)



Date:09/22/21

Time:16:56:57

Place:Latagram, Birbhum,
West Bengal ,India

Stratus cloud:-

- This clouds are composed of several uniform layers.
- This clouds are dense, low-lying, fog like cloud and seldom close to the ground surface.
- This clouds are dark or grey in colour.
- This clouds are low-altitude cloud.
- Altitude: 0-2000m.
- Temperature: -35°C to -45°C.
- Stratus clouds are usually accompanied by little to on rainfall and it can produce light drizzle.

Nimbo-stratus(Ns)



Date: 09/29/21

Time: 13:31:58

Place :Latagram,
Birbhum, West
Bengal, India

Nimbo-stratus cloud:-

- This clouds are low-altitude cloud and very close to ground surface.
- This clouds are so compact and thik.
- This clouds are dark in colour.
- Altitude: 500m-5500m
- Temperature: Around -80°C
- 'Nimbo' is from Latin word 'Nimbus' meaning thereby rainstorm.
- They are associated with rain, snow, and sleet but are not accompanied by lightning,thunder or hail-storm.

Strato-cumulus cloud (Se)



Date 10/17/21

Time:13:58:50

Place:Latagram, Birbhum, West Bengal,
India



Date: 10/17/21

Time: 13:57:45

Place: Latagram Birbhum, West Bengal, India

Strato-cumulus cloud:-

- Strato-cumulus clouds are grey or whitish colour..
- This clouds are found rounded patches between the height of 2500m-3000m
- They are composed of globular masses or rolls.
- Temperature: -5°C to -10°C .
- Weather prediction: Clear or fair weather but occasionally rain or snow arrive.

Cumulus cloud (Cu)



Date: 09/26/21

Time: 17:06:49

Place : Latagram Birbhum, West Bengal,
India

Cumulus cloud:-

- Cumulus clouds are dense, widespread and dome-shaped and have flat bases.
- They are white woolpack cloud masses.
- These clouds are white coloured.
- Altitude: 200m-2000m.
- Temperature: Around -10°C .
- Cumulus cloud indicates fair weather but some times they become thunder clouds.

Cirrus vertebratus cloud



Date: 19/03/21

Time: 16:41

Place: Latagram, Birbhum,
West Bengal, India

Cirrus vertebratus cloud:-

- Cirrus vertebratus is a type of cirrus cloud.
- The name cirrus vertebratus is derived from Latin, meaning “jointed, articulated, vertebrated”.
- Like cirrus intortus, the vertebratus species is exclusive to the cirrus genus. Cirrus vertebratus gives the impression of vertebrae in a spinal column, ribs, or a fish skeleton.
- Altitude: Above 6,000 m

Cumulonimbus Capillatus Incus Cloud



Date:10/17/21

Time: 13:58

Place: Latagram, Birbhum,
West Bengal, India

Cumulonimbus Capillatus Incus Cloud:-

- This is a cumulonimbus cloud with dense cirrus clouds which makes the clouds top appear to contain hair-like structures.
- This cloud also known as an anvil cloud.
- When cumulonimbus cloud has reached the level of stratospheric stability and has formed the characteristics flat, anvil-top shape.
- Weather prediction: very common rain, snow, snow pellets or hail heavy at times.
- Altitude: Ground to 23000m.

Alto-cumulus stratiformis translucidus undulatus cloud



Date: 09/22/21
Time: 16:57
Place: Latagram,
Birbhum, West Bengal,
India

Alto-cumulus stratiform translucidus undulatus cloud:-

- Alto-cumulus stratiform translucidus undulatus cloud is composed of girly large elements having the appearance of irregular rolls.
- This cloud is mid-altitude cloud.
- Colour: Grey or white.
- The presence of this cloud may indicate precipitation within the next 20 hours .
- Altitude: 2000m to 6000m .

Smoke layers



Date: 03/20/21

Time: 17:52

Plac: Latagram,
Birbhum, West Bengal,
India

Smoke layers:-

Smoke from sugar cane fires is spreading across the horizon after sunset, so that the smoke of relatively large particles distinguished by the colours of light scattered from the general small particles haze aloft in the humid air.

