Sun halo phenomenon

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In news- The people in Bengaluru recently witnessed a rare optical and atmospheric phenomenon called '22 degree circular halo'.

About the phenomenon-

- Sun Halo, also known as '22 degree halo', is an optical phenomenon that occurs due to sunlight reflecting and refracting in millions of hexagonal ice crystals suspended in the atmosphere and may split into colours because of dispersion.
- It takes the form of a ring with a radius of approximately 22 degrees around the sun or the moon.
- The halos were used as part of weather lore, which was an empirical means of weather forecasting before meteorology was developed.
- They often indicate that rain will fall within the next 24 hours, since the cirrus and cirrostratus clouds in the upper troposphere (5-10 km) that cause them can signify an approaching frontal system.
- Many of these appear near the Sun or Moon, but others occur elsewhere or even in the opposite part of the sky.
- Among the best known halo types are the circular halo, light pillars, and sun dogs.
- In cold weather they can also **float near the ground**, in which case they are referred to as **diamond dust**.
- Just like a rainbow, a halo is visible when viewed from the right angle, sometimes appearing just white but often with colours of the spectrum also clearly present.
- Halos can have many forms, ranging from colored or white rings to arcs and spots in the sky.

