



## Sun Halo/Kaleidoscope Effect

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 [drishtiias.com/printpdf/sun-halo-kaleidoscope-effect](https://drishtiias.com/printpdf/sun-halo-kaleidoscope-effect)

### Why in News

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Recently, the **people of Bangalore** witnessed a **bright rainbow ring around the sun** for a few moments - a rare optical and atmospheric phenomenon called “**22 degree circular Halo**”.



### Key Point

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- The phenomenon **popularly known as the 22 degree circular halo of the sun or occasionally the Moon** (also called a moon ring or winter halo), **occurs when the sun's or moon's rays get deflected/refracted through the hexagonal ice crystals present in cirrus clouds.**

This is **also called the Kaleidoscopic Effect.**

- These halos **are called 22-degree halos**, as the halo or ring has an **apparent radius of 22 degrees** around the sun/moon.
- **Circular halos specifically are produced by cirrus clouds**, which are thin, detached, hair-like clouds. These clouds are formed very high up in the atmosphere, at a height of over 20,000 feet.
- 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.
  - The halo is the **brightest at the inner edge** of the circular disk, with no light inside the disk as no light is refracted at smaller angles.
  - **Red** light is **refracted less** than other colours of light, so the halo's **inner edge** is **reddish**. Other **shades** typically tend to **overlap and wash out**.

**Source: IE**