

# Possibility of aliens hiding in special 'terminator zones'

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**In news**— A recent study was conducted by astronomers from the University of California, suggested the possibility of aliens hiding in special 'terminator zones' on distant exoplanets, where the temperature is not too hot or cold.

## About terminator zones & planets-

- The astronomers, in their study, found that there is a band around these planets in which there is a possibility that they are harbouring liquid water which is the main ingredient for life.
- This band is called the 'terminator zone' where the terminator acts as the dividing line between the day side and night side of the exoplanet.
- **The terminator zones are the regions that could exist in that sweet spot between too hot and too cold.**
- Such planets are quite common because they exist around stars that make up about 70 percent of the stars seen in the night sky – so-called M-dwarf stars, which are relatively dimmer than our sun.
- **The dark sides of terminator planets, would mean a perpetual night and freezing temperatures,** whereas the **side facing the star could be too hot** for water to remain liquid.
- **Only recently have astronomers been able to show that such planets can sustain habitable climates** confined to this terminator region because researchers have mostly studied ocean-covered exoplanets in their search for candidates for habitability.
- How large and wide such zones are remains to be known.
- Recognising terminator zones as potential harbours for life also means that astronomers will need to adjust the

way they study exoplanet climates for signs of life, because the bio-signatures life creates may only be present in specific parts of the planet's atmosphere.