

Title: Geomagnetic Indices

Speaker: Shubhangi Lagad (1st year JRF)

Abstract:

The Sun-Earth interaction system is mesmerizing. Geomagnetic storms and substorms are manifestations of such interaction that drive space weather. To quantify the level of geomagnetic activity at different locations, we need some indicators that represent the signatures of the solar response. These indicators are geomagnetic indices. They are calculated from ground magnetic field data recorded at different geomagnetic observatories.

In today's talk, I will briefly discuss different geomagnetic indices like Dst, SYM-H, ASYM-H, AE, K, K_p , and A_p and their applications. Furthermore, the background calculations and methods involved in obtaining these geomagnetic indices will be discussed.