Title: Ionosondes Unraveled: Exploring Different Types

The ionosphere, a region of the Earth's upper atmosphere, plays a vital role in various radio communication and navigation systems. The study of ionospheric variability is of utmost importance due to its dynamic nature, which can significantly affect signal propagation and satellite-based technologies. Ionosonde, serves as an indispensable tool for investigating ionospheric variability. By transmitting radio waves into the ionosphere and receiving the reflected signals, ionosondes can provide valuable electron density profiles at different altitudes. This session will explore the different types of ionosondes available, each equipped with distinct measurement principles. Furthermore, real height analysis methods to extract electron density information from the ionograms will be discussed.