

**Beacon Satellite Symposium 2019 (BSS2019), University of Mazury and Olsztyn, 19-23 August 2019, Poland**

## **Updates on ionospheric research in Ethiopia**

Tsegaye Kassa (Ph.D.)

Bahir Dar University, College of Science, Department of Physics

Washera Geospace and Radar Science Research Laboratory

### Abstract

The aim of this report is to present recent developments in ionospheric research in Ethiopia. Findings on ionospheric modeling, ionospheric mapping and equatorial electrojet have compiled to give a brief picture of the developments in ionospheric research. Data of GPS networks and magnetometer has been used to illustrate the findings. We have modelled the linear combination of ionospheric total electron (TEC) content variations as well as mapped ionospheric irregularities using GPS data. Besides, we have obtained a clear linear correlation between equatorial electrojet and ionospheric TEC over the Ethiopian ionospheric regions.

Keywords: TEC, irregularities, electrojet