

# CURRICULUM VITAE

## Personal data

- **Full name:** Habtamu Marew Alemu
- **Date and place of birth:** 05-05-1989, Debre Tabor, Ethiopia
- **Sex:** Male
- **Nationality:** Ethiopian
- **Language:** Amharic (mother tongue)  
English (professional working proficiency)
- **E-mail:** [hmarew@gmail.com](mailto:hmarew@gmail.com)
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## General educational background

- **PhD in Space physics**, Washera Geospace and Radar Science Laboratory, Bahir Dar University, Bahir Dar, Ethiopia, from November 2017 to December, 2020 (Dissertation: Excellent; CGPA: 4.0/4.0).  
Dissertation Title: Modeling equatorial and low latitude ionospheric plasma drifts.
- **M.Sc. in Space physics**, Bahir Dar University, Bahir Dar, Ethiopia, from September 2009 to July 2011 (Thesis: Excellent; CGPA: 3.5/4.0).  
Thesis title: Validation of International Reference Ionosphere (IRI-2007) model
- **B.Sc. in Physics**, Bahir Dar University, Bahir Dar, Ethiopia, from September 2006 to July 2009 (CGPA: 3.69/4.0).

## Employment

- Postdoctoral Researcher, Institute of Atmospheric Physics, Czech Academy of Sciences, Prague, Czech Republic, April 2023 – present.
- Assistant Professor of Space physics at Debre Tabor University, Debre Tabor, Ethiopia, January 2021 – March 2023.
- Lecturer at Debre Tabor University, Debre Tabor, Ethiopia, July 2011 – December, 2016.

## Leadership

- Research and community service coordinator, Faculty of Natural and Computational sciences, Debre Tabor University, Debre Tabor, Ethiopia, May, 2016 – December, 2016.
- Auditor of Ethiopian Space Science Society (ESSS) Debre Tabor branch, December 2012 – December 2015.

## Research supervision and teaching experience:

- Co-supervised a couple of undergraduate and masters students
- I taught Space plasma physics to postgraduate students and most of undergraduate physics courses

## Research interest

- Space plasma physics, Upper atmosphere electrodynamics, Solar – Terrestrial physics

## Softwares and Skills

- Matlab (Excellent), Python (Very Good), SQL/MySQL (Working knowledge)
- Data Science (Data structuring, Data cleaning, Data analysis)

## Published Journal Articles

- H. Marew, A. Agmas and T. Mersha, Performance evaluation for vertical TEC predictions over the East Africa and South America: IRI-2016 and IRI-2020 versions, *Advances in Space Research*, <https://doi.org/10.1016/j.asr.2023.09.055>.
- Marew, H., Nigussie, M., Hui, D., and Damitie, B. (2019), A method of estimating equatorial plasma vertical drift velocity and its evaluation using C/NOFS observations, *Radio Science*, Vol. 54, <https://doi.org/10.1029/2019RS006800>.
- Marew H., (2022), Seasonal Variations of Equatorial Electrojet during quiet times from 2014 to 2018 Swarm constellation observations, *SCOSTEP News letter*, Vol 31.

## Some of Conference Presentations

- Marew H., (2022), Seasonal Variations of Equatorial Electrojet during quiet times from 2014 to 2018 Swarm constellation observations, *SANSA, Hermanus, South Africa*.
- Marew, H., Nigussie, M., Hui, D., and Damitie, B. (2021), A method of estimating equatorial plasma vertical drift velocity and its performance using C/NOFS observations, *African Geophysical Society (AGS) virtual Conference 2021, Lagos, Nigeria*.
- Marew, H., Nigussie, M., Hui, D., and Damitie, B. (2019), A method of estimating equatorial plasma vertical drift velocity and its performance using C/NOFS observations, *International space weather initiative workshop-2019 (Poster presentation), ICTP, Trieste, Italy*.
- Marew, H., Nigussie, M. (2018), Investigation of the response of the Ethiopian equatorial ionosphere during the 17 march, 2013 geomagnetic storm, *6th annual science conference, Bahir Dar University, Ethiopia*.
- Marew, H., Nigussie, M. (2016), Investigation of the response of the Ethiopian equatorial ionosphere during the 17 march, 2013 geomagnetic storm, *Amhara region universities forum space science and technology contest, University of Gondar, Ethiopia*.

## Awards

- The third best paper on Amhara region universities forum space science and technology contest, University of Gondar, 2016.
- The SCOSTEP Visiting Scholar award at South African National Space Agency, June 2021.

## References

- Dr. Melessew Nigussie, Associate professor of space physics and director of Washera Geospace and Radar Science Laboratory, Bahir Dar University, Ethiopia. (PhD Supervisor)
- Prof. Bela Fejer, Professor of space physics, Utah State University, USA. (PhD external examiner)
- Dr. Tsegaye Kassa, Associate professor of space physics, Washera Geospace and Radar Science Laboratory, Bahir Dar University, Ethiopia. (PhD internal examiner)
- Dr. John Bosco Habarulema, Researcher at South African National Space Agency (SANSA), Hermanus, South Africa. (Host Supervisor for SCOSTEP SVS Program)
- Dr. Jaroslav Chum, Senior Scientist, Institute of Atmospheric Physics, CAS, Czech Republic