

7. Acknowledgement

This study is supported by the National Center for Antarctic and Ocean Research, Goa under the Ministry of Earth Sciences, Govt. of India. Authors thank the staffs of Maitri, Antarctica for their scientific and logistic support. The author Prakash Khatarkar (PK) is thankful to UGC, New Delhi, India for awarding Rajeev Gandhi National Fellowship. We also thank National Geophysical Data Center (NGDC) for providing various data sets particularly those of geomagnetic activities.

Author Profile



Prakash Khatarkar received the Ph. D. degrees in Electronics from Barkatullah University, Bhopal, India in 2013. During 2009-2010 he stayed in Indian Base Polar Station Maitri, Antarctica as a winter team member of 29th scientific expedition to Antarctica.

References

- [1] A. Mikhailov, and K. Schlegel "Physical mechanism of strong negative storm effects in the daytime ionospheric F2 region observed with EISCAT". *Annales Geophysicae* pp.,16, 602-608, 1998.
- [2] B.O. Adebesein, "F2 region response to the magnetic storm of January 10, 1976 at American sector". *African Physical Review* (2), pp.136-142, 2008.
- [3] D.R. Laxmi, S. Agrawal, P.K. Pasricha, and B.M. Reddy, *Indian J. Radio and space physics*. 8, 101, 1979.
- [4] G.W. Prolss, "Common origin of positive ionospheric storms at mid latitudes and the geomagnetic activity effect at low latitudes". *Journal of Geophysical Research* 98, pp., 5981- 5991, 1993b:.
- [5] G.W. Prolss, "On explaining the local time variation of ionospheric storm effect". *Annales Geophysicae*, pp., 11, 1-9, 1993a
- [6] H. Rishbeth, "The Effect of Winds on the Ionospheric F2 Peak," *J. Atmos. Terr. Phys.* 29 (1), pp.225–238, 1967.
- [7] J.C. Foster, P.J. Erickson., A.J. Coster, J. Goldstein, F.J. Rich, "Ionospheric signatures of plasmaspheric tails" *Geophys,Res.,Lett.*29(13) .2002doi:10.1029/2002GL015067.
- [8] M. Condreanu, T.J. Fuller-Rowell, and I.S. Kutiev, "Modelling the F layer during specific geomagnetic storms". *Journal of Geophysical Research* 102 (A7), pp. 14,315- 14,329, 1997
- [9] N.A. Kilifurska, "Longitudinal effects in the ionosphere during geomagnetic storms". *Advances in Space Research* 8 (4), pp. 23-26, 1988.
- [10] N.K. Sethi, N.K.. Geol, N. Mahajan, K.K., *Ann. Geophys.* 20 1677, 2002.
- [11] N.P. Ben'kova, M.G. Deminov, and N.A. Kalifarska, *IZMIRAN (Institute of Terrestrial Magnetism, Ionosphere, and Radiowave Propagation, Russian Academy of Sciences, Preprint* 17(631), 1986.
- [12] R.P.Kane,; *space science review* 18, 413, 1976.
- [13] R.W. Schunk, F.A. Nagy, "Ionospheres. Cambridge University Press, Cambridge, UK, 2000.
- [14] S. Sitnov Yu, V.N. Shubin and S.K. Annakuliev, "Approximation of the Electron Density and Altitude of the F2 Layer Maximum in the Daytime Midlatitude Ionosphere Using Simple Analytical Formulas". *Geomagn. Aeron.* 32 (4), 128–130, 1992.