

Appendix 1 – PROCEEDINGS FROM IST-056 SYMPOSIUM

To provide a forum for interested parties to present and discuss their research, the technical committee of IST-051 organised a symposium addressing the subject of characterising the ionosphere. The symposium was a natural extension to the work of the task group sponsored by NATO. To broaden the scope, the relevant group from URSI was invited to participate and they kindly accepted. The symposium was held at the Geophysical Institute, University of Alaska Fairbanks, from 12th to 16th June 2006.

The following are the papers which were presented. A link to a copy of the proceedings is provided below; alternatively the proceedings are available under ISBNs 92-837-0078-3 / 978-92-837-0078-4.

Paper 1 – Studies of Ionospheric Processes in the Atmosphere and the Laboratory

Slanger, T.G.

Paper 2 – Investigating the Auroral Thermosphere with N₂⁺ Lidar

Collins, R.L.; Su, L.; Lummerzheim, D.; Doe, R.A.

Paper 3 – Polar Ionospheric Imaging at Storm Time

Yin, P.; Mitchell, C.; Bust, G.

Paper 4 – Morphology of Southern Hemisphere Riometer Auroral Absorption

Foppiano, A.J.

Paper 5 – An Investigation into the Relationship between Ionospheric Scintillation and Loss of Lock in GNSS Receivers

Meggs, R.W.; Mitchell, C.N.; Smith, A.M.

Paper 6 – Morphological Characteristics of L-Band Scintillations and their Impact on GPS Signals – A Quantitative Study on the Precursors for the Occurrence of Scintillations

Rama Rao, P.V.S.; Tulasi Ram, S.; Gopi Krishna, S.; Niranjana, K.; Prasad, D.S.V.V.D.

Paper 7 – Observations of the Tongue of Ionization with GPS TEC and SuperDARN

Coster, A.; Colerico, M.; Foster, J.C.; Ruohoniemi, J.M.

Paper 8 – VLF Phase Perturbations Produced by the Variability in Large (V/m) Mesospheric Electric Fields in the 60 – 70 km Altitude Range

Manson, A.H.; Meek, C.E.; Martynenko, S.I.; Rozumenko, V.T.; Tyrnov, O.F.

Paper 9 – Withdrawn Paper 10 – Ionospheric F-region Storms: Unsolved Problems

Prölls, G.W.

Paper 11 – Space Weather Applications of the UAF Eulerian Parallel Polar Ionosphere Model (EPPIM)

Maurits, S.; Kulchitsky, A.; Watkins, B.

Paper 12 – Theoretical and Observational Studies of Meteor Interactions with the Ionosphere

Colestock, P.; Close, S.; Zinn, J.

Paper 13 – European Space Weather Activities

Jansen, F.

Paper 14 – High Latitude Ionospheric Structures

MacDougall, J.

Paper 15 – Large-Scale Plasma Structure in the Polar and Auroral Ionosphere: Experimental Observations and Modelling

Pryse, S.E.; Middleton, H.R.; Dewis, K.L.; Wood, A.G.; Whittick, E.L.; Balthazor, R.L.

Paper 16 – Direction Finding Errors Induced by Plasmawaves of the Ionosphere

Hawlitshka, S.

Paper 17 – Characterisation of Narrowband HF Channels in the Mid and Low Latitude Ionosphere

Harris, T.J.; Scholz, M.L.

Paper 18 – Quasi-Analytic Models for Density Bubbles and Plasma Clouds in the Equatorial Ionosphere

Bernhardt, P.A.

Paper 19 – Modeling of Ionospheric Refraction of UHF Radar Signals at High Latitudes

Watkins, B.; Maurits, S.; Kulchitsky, A.

Paper 20 – Mitigation of Ionospheric Effects on High Frequency Surface Wave Radar

Riddolls, R.J.

Paper 21 – Ground-Based Radar Detection of the Inner Boundary of the Ion Plasma Sheet and its Response to the Changes in the Interplanetary Magnetic Field

Jayachandran, P.T.; MacDougall, J.W.; Moorcroft, D.R.; Donovan, E.F.

Paper 22 – The European Server for Ionospheric Specification and Forecasting: Final Results from DIAS Project

Behlaki, A.; Cander, Lj.; Zolesi, B.; Bremer, J.; Juren, C.; Stanislawska, I.; Dialetis, D.; Hatzopoulos, M.

Paper 23 – A Digital Radio Receiver for Ionospheric Research

James, H.G.

Paper 24 – Not released for publishing**Paper 25 – What Can We Learn About the Ionosphere Using the EISCAT Heating Facility?**

Rietveld, M.T.

Paper 26 – GPS Sounding of the Ionosphere Onboard CHAMP

Jakowski, N.; Mayer, C.; Wilken, V.

Paper 27 – Real-Time Imaging of the Ionosphere over the United Kingdom – Preliminary Results

Meggs, R.W.; Mitchell, C.N.; Watson, R.J.; Dear, R.M.

Paper 28 – Characterization of the Ionosphere over the South Atlantic Ocean by Means of Ionospheric Tomography using Dual Frequency GPS Signals Received on Board a Research Ship

Cilliers, P.J.; Mitchell, C.N.; Opperman, B.D.L.

Paper 29 – GPS Users Positioning Errors during Disturbed Near-Earth Space Conditions

Afraimovich, E.L.; Demyanov, V.V.; Tatarinov, P.V.; Astafieva, E.I.; Zhivetiev, I.V.

Paper 30 – Withdrawn**Paper 31 – Review of the Current Status of Four-Dimensional Ionospheric Imaging**

Bust, G.S.; Mitchell, C.N.

Paper 32 – The International Reference Ionosphere – Climatological Standard for the Ionosphere

Bilitza, D.

Paper 33 – Withdrawn**Paper 34 – Modeling of Sporadic-E Structures from Wind-Driven Kelvin-Helmholtz Turbulence**

Bernhardt, P.A.; Werne, J.; Larsen, M.F.

To obtain a copy of the RTO-MP-IST-056 proceedings, click on the link below: