

IRF Scientific Reports 206-273

(NB: some numbers are non-consecutive)

- 206. **Witt, G.,** and **Å. Steen,** Proceedings of the 17th annual meeting on the studies of the upper atmosphere by optical methods. *IRF Scientific Report 206*, April 1991.
- 207. **Sandahl, I.,** Norrsken - budbärare från rymden. *IRF Scientific Report 207*, February 1991.
- 208. **Wahlund, J.-E.,** Ionospheric response to particle precipitation within aurora. *IRF Scientific Report 208*, March 1992. **Doktorsavhandling**
- 209. **Steen, Å.,** Proceedings of the 19th Annual European Meeting on Atmospheric Studies by Optical Methods. *IRF Scientific Report 209*, November 1992.
- 210. **Pellinen-Wannberg, A.,** Meteor impacts, sporadic E layer formation and the incoherent scatter method. *IRF Scientific Report 210*, September 1992.
- 211. **Biro, T.,** Phase-space description of plasma waves. Linear and nonlinear theory. *IRF Scientific Report 211*, November 1992. **Licentiatavhandling**
- 212. **Goodman, S.,** Problems related to stimulated electromagnetic emissions, strong turbulence and ionospheric modification. *IRF Scientific Report 212*, May 1993. **Doktorsavhandling**
- 213. **Steen, Å.,** Proceedings of the Auroral Tomography Workshop, Kiruna, Sweden, March 9-11, 1993. *IRF Scientific Report 213*, August 1993.
- 214. **André, M.,** The Freja Scientific Satellite. *IRF Scientific Report 214*, June 1993.
- 215. **Zernov, N.,** and **B. Lundborg,** The statistical theory of wave propagation and HF propagation in the ionosphere with local inhomogeneities. *IRF Scientific Report 215*, October 1993.
- 216. **Waldenvik, M.,** The dynamics of electromagnetic radiation from an HF perturbed space plasma. *IRF Scientific Report 216*, May 1994. **Doktorsavhandling**
- 217. **Eliasson, L.,** Satellite observations of auroral acceleration processes. *IRF Scientific Report 217*, August 1994. **Doktorsavhandling**
- 218. **Liszka, L.,** Causal modelling of spectral data: A new tool to study non-linear processes. *IRF Scientific Report 218*, May 1995.
- 219. **Waldemark, J., P.-O. Dovner, and J. Karlsson,** A neural network detection system for lower-hybrid cavities in electron plasma density measured by the FREJA satellite. *IRF Scientific Report 219*, March 1995.
- 220. **Eriksson, A.I.,** and **R. Boström,** Measurements of plasma density fluctuations and electric wave fields using spherical electrostatic probes, *IRF Scientific Report 220*, April 1995.

221. **Eriksson, A.I.**, Investigations of solitary wave phenomena in the near-earth space plasma using the Viking and Freja satellites, *IRF Scientific Report 221*, May 1995. **Doktorsavhandling**
222. **Lindström, R.**, Modelling of wide-band ionospheric HF channels, *IRF Scientific Report 222*, May 1995. **Licentiatavhandling**
223. **Stjernman, A.**, Design and development of a microwave multifrequency polarimetric scatterometer for biosphere remote sensing, *IRF Scientific Report 223*, May 1995. **Doktorsavhandling**
224. **Liszka, L.**, and **K. Waldemark**, High resolution observations of infrasound generated by the supersonic flights of Concorde, *IRF Scientific Report 224*, May 1995.
225. **Pellinen-Wannberg, A.**, Auroral and meteor applications of the EISCAT incoherent scatter radar, *IRF Scientific Report 225*, August 1995. **Doktorsavhandling**
226. **Waldemark, J.**, and **P. Norqvist**, In-flight calibration of satellite ion composition data using artificial intelligence methods, *IRF Scientific Report 226*, November 1995.
227. **Norqvist, P.**, Magnetospheric ion energization. Theories on observations by the Freja Satellite, *IRF Scientific Report 227*, November 1995. **Licentiatavhandling**
228. **Barabash, S.**, Satellite observations of the plasma -neutral coupling near Mars and the Earth, *IRF Scientific Report 228*, December 1995. **Doktorsavhandling**
229. **Nilsson, H.**, Ionospheric plasma studies with the EISCAT and Søndre Strømfjord radars, *IRF Scientific Report 229*, January 1996. **Doktorsavhandling**
230. **Oscarsson, T., A.Vaivads, J.H. Clemons, H. de Feraudy, and B. Holback**, On the generation of auroral electromagnetic ion cyclotron ELF waves, *IRF Scientific Report 230*, January 1996.
231. **Oscarsson, T., H. de Feraudy, and B. Holback**, On the orientation of the Freja search coil magnetometer, *IRF Scientific Report 231*, January 1996.
232. **Waldemark, J.**, Investigation of suitable computer intelligence methods for automated analysis of multivariate satellite data, *IRF Scientific Report 232*, March 1996.
233. **Persson, M.**, Coordinated radar and satellite studies of magnetospheric substorms, *IRF Scientific Report 233*, May 1996. **Doktorsavhandling**
234. **Vaivads, A.**, Auroral ion beams and ion acoustic wave generation by fan instability, *IRF Scientific Report 234*, May 1996. **Licentiatavhandling**
235. **Liszka, L.**, Reconstruction of equidistant time series using neural networks, *IRF Scientific Report 235*, December 1996.
236. **Liszka, L.**, A study of statistical properties of temporal variations of X-ray emission from NGC5548 in ROSAT PSPC observations, *IRF Scientific Report 236*, December 1996.

237. **Liszka, L.**, Decomposition of particle energy spectra using the principal component method, *IRF Scientific Report 237*, January 1997.
238. **Liszka, L.**, Filtering of multivariate time series in the principal component space, *IRF Scientific Report 238*, January 1997.
239. **Liszka, L.**, A study of short-term temporal variations of photon counts recorded by the ROSAT X-ray satellite, *IRF Scientific Report 239*, January 1997.
240. **Olsson, A.**, Studies of Magnetosphere-Ionosphere Coupling in Auroral Substorms using Radar and Satellite Techniques, *IRF Scientific Report 240*, May 1997.
Doktorsavhandling
241. **Västberg, A.**, Investigations of the Ionospheric HF Channel by Ray Tracing, *IRF Scientific Report 241*, April 1997.
Doktorsavhandling
244. **Barabash, S.**, Proceedings of the Mercury Workshop, Kiruna, Sweden, April 28-29, 1997, *IRF Scientific Report 244*, April 1997.
245. **Barabash, S.**, Extra-heliospheric energetic neutral atoms, Proceedings of the Workshop, Kiruna, Sweden, May 5-6, 1997, *IRF Scientific Report 245*, April 1997.
246. **Westman, A.**, Development of high resolution radar measurements techniques for studies of transient phenomena in the ionospheric E and F layers, *IRF Scientific Report 246*, November 1997.
Doktorsavhandling
247. **Norberg, O.**, Hot plasma measurements in the Earth and Mars environments, *IRF Scientific Report 247*, September 1998.
Doktorsavhandling
248. **Barabash, S.**, and **R. Lundin**, conveners, Workshop on Energetic Neutral Atom Imaging of the Martian Environment, Program and abstract book, Kiruna, Sweden, September 2-3, 1998, *IRF Scientific Report 248*, August 1998.
249. **Eklund, U.**, High altitude cusp and magnetosheath in-situ measurements, *IRF Scientific Report 249*, December 1998.
Licentiatavhandling
250. **Eliasson, B.**, Theoretical and numerical study of non-linear interactions between electromagnetic waves and space plasma, *IRF Scientific Report 250*, February 1999.
Examensarbete
251. **Wahlund, J.-E., L.J. Wedin, A.I. Eriksson, B. Holback, and L. Andersson**, Analysis of Freja charging events: Charging events identification and case study, *IRF Scientific Report 251*, March 1999.
252. **Eriksson, A.I., L. Wedin, J.-E. Wahlund, and B. Holback**, Analysis of Freja charging events: Modelling of Freja observations by spacecraft charging codes, *IRF Scientific Report 252*, January 1999.
253. **Wahlund, J.-E., L.J. Wedin, T. Carrozi, A.I. Eriksson, B. Holback, L. Andersson, and H. Laakso**, Analysis of Freja charging events: Statistical occurrence of charging events, *IRF Scientific Report 253*, February 1999.

254. **Kjus, S. H.**, Lower hybrid wave cavities - a statistical study, *IRF Scientific Report 254*, March 1999. **Licentiatavhandling**
255. **Ormö, J.**, Geological constraints and objectives for a spaceborne ground penetrating radar study of the Moon: The GPR mode of the REX proposal for LunARSat, *IRF Scientific Report 255*, June 1999.
256. **ReVelle, D. O.**, and **L. Liszka**, Thermistor measurements of temperature oscillations during the arctic summer: Potential coupling between severe convective thunderstorms and the surface Prandtl layer, *IRF Scientific Report 256*, May 1999.
257. **Liszka, L., M. Öieroset**, and **B. Hultqvist**, Variability in Viking ion and electric field observations detected by a wavelet filtering technique, *IRF Scientific Report 257*, May 1999.
258. **Frenning, G.**, Radio wave propagation and linear resonance absorption in an inhomogeneous, cold, unmagnetised plasma, *IRF Scientific Report 258*, April 1999.
259. **Brandt, P. C:son**, ENA imaging of planetary magnetospheres, *IRF Scientific Report 259*, October 1999. **Doktorsavhandling**
260. **Karlsson, S. B. P.**, and **N. A. Tsyganenko**, The tail lobe revisited: Magnetic field modeling based on plasma data, *IRF Scientific Report 260*, June 1999.
261. **Karlsson, S. B. P.**, and **N. A. Tsyganenko**, Solar wind control of the tail lobe magnetic field based on ISEE-1/2 and IMP-8 data, *IRF Scientific Report 261*, June 1999.
265. **Narita, Y.**, Plasma domain observed by ASTRID-2, *IRF Scientific Report 265*, March 2000. **Examensarbete**
267. **Gustavsson, B.**, Three dimensional imaging of aurora and airglow, *IRF Scientific Report 267*, September 2000. **Doktorsavhandling**
(text available on web page <http://www.irf.se/~bjorn/thesis/thesis.html>)
269. **Bergman, J.**, A relativistic approach to wave dispersion in Vlasov plasma, *IRF Scientific Report 269*, September 2000. **Licentiatavhandling**
270. **Andersson, L.**, Acceleration processes in auroral region, *IRF Scientific Report 270*, November 2000. **Doktorsavhandling**
272. **Carozzi, T.**, Radio waves in the ionosphere: Propagation, generation, and detection, *IRF Scientific Report 272*, August 2000. **Doktorsavhandling**
273. **Olofsson, M.**, Towards a covariant formulation of electromagnetic wave polarization, *IRF Scientific Report 273*, January 2001. **Examensarbete**