

## **M. T. Rietveld's refereed publications** (in reverse chronological order)

1. Bjoland, L. M., Y. Ogawa, C. Hall, **M. Rietveld**, U. P. Løvhaug, C. La Hoz, H. Miyaoka, Long-term variations and trends in the polar E-region, *Journal of Atmospheric and Solar-Terrestrial Physics*, [in press](#), 2017.
2. Wu, J., J. Wu, **M. T. Rietveld**, I. Haggstrom, H. Zhao, and Z. Xu, The behavior of electron density and temperature during ionospheric heating near the fifth electron gyrofrequency, *J. Geophys. Res. Space Physics*, 122, [doi:10.1002/2016JA023121](https://doi.org/10.1002/2016JA023121), 2017.
3. Borisova, T. D., N. F. Blagoveshchenskaya, A. S. Kalishin, **M. T. Rietveld**, T. K. Yeoman, and I. Haggstrom, Modification of the High-Latitude Ionospheric F Region By High-Power HF Radio Waves at Frequencies Near the fifth and Sixth Electron Gyroharmonics, *Radiophysics and Quantum Electronics*, Vol.58, No.8, (Russian Original Vol. 58, No. 8, August, 2015), [DOI 10.1007/s11141-016-9629-2](https://doi.org/10.1007/s11141-016-9629-2), 2016.
4. **Rietveld, M. T.**, A. Senior, J. Markkanen, and A. Westman, New Capabilities of the Upgraded EISCAT High-Power HF Facility, *Radio Sci.*, 51, [doi:10.1002/2016RS006093](https://doi.org/10.1002/2016RS006093), 2016.
5. Sarno-Smith, L. K., M. Kosch, T. Yeoman, **M. Rietveld**, A. Nel, and M. Liemohn, Ionospheric Electron Number Densities from CUTLASS dual-frequency Velocity Measurements using artificial backscatter over EISCAT, *J. Geophys. Res. Space Physics*, 121, [doi:10.1002/2016JA022788](https://doi.org/10.1002/2016JA022788), 2016.
6. Fu, H., W. A. Scales, P. A. Bernhardt, S. J. Briczinski, M. J. Kosch, A. Senior, **M. T. Rietveld**, T. K. Yeoman, and J. M. Ruohoniemi, Stimulated Brillouin Scattering During Electron Gyro-Harmonic Heating at EISCAT, *Annales Geophysicae*, 33, 983-990, [DOI: 10.5194/angeo-33-983-2015](https://doi.org/10.5194/angeo-33-983-2015), 2015.
7. Havnes, O., H. Pinedo, C. La Hoz, A. Senior, T. Hartquist, **M. T. Rietveld**, M. J. Kosch, A comparison of Overshoot modelling with observations of Polar Mesospheric Summer Echoes at radar frequencies 56 and 224 MHz, *Ann. Geophys.*, *Ann. Geophys.*, 33, 737-747, [doi:10.5194/angeo-33-737-2015](https://doi.org/10.5194/angeo-33-737-2015), 2015.
8. Havnes, Ove; Pinedo Nava, Henry; La Hoz, Cesar; Senior, Andrew; Hartquist, Tom; **Rietveld, Michael T**; Kosch, M. J.. Electron Heating Effects on Polar Mesospheric Clouds – A Comparison Between Observations and Modelling. Proceedings of the Cluster and Double Star Symposium - 5th Anniversary of Cluster in Space 2015. ISSN 1609-042X.s 71 - 77, 2015.
9. Borisova, T. D., N. F. Blagoveshchenskaya, A. S. Kalishin, M. Kosch, A. Senior, **M. T. Rietveld**, T. K. Yeoman, and I. Hagstrom, Phenomena in the High Latitude F-Region of the Ionosphere Induced by a HF Heater Wave at Frequencies near the Fourth Electron Gyroharmonic, *Radiophysics and Quantum Electronics*, 62, 1, [1-22](#), 2014.
10. Koloskov, A. V., Y. M. Yampolski , A. V. Zalizovsky, V. G. Galushko , A. S. Kashcheev, C. La Hoz, A. Brekke, V. Belyey, **M. T. Rietveld**, Network of Internet-controlled HF receivers for ionospheric researches, *Radiophysics and Radio Astronomy* (in Russian), in press, 2014.
11. Kosch, M. J., C. Bryers, **M. T. Rietveld**, T. K. Yeoman and Y. Ogawa, Aspect angle sensitivity of pump-induced optical emissions at EISCAT, *Earth, Planets and Space*, 66:159, [DOI: 10.1186/s40623-014-0159-x](https://doi.org/10.1186/s40623-014-0159-x), 2014.
12. Nicolls, M. J., H. Bahcivan, I. Häggström, **M. Rietveld**, Direct Measurement of Lower-Thermospheric Neutral Density using Multi-Frequency Incoherent Scattering, *Geophys. Res. Lett.*, 41, [DOI: 10.1002/2014GL062204](https://doi.org/10.1002/2014GL062204), 2014.
13. Panasenko, S. V., **M. T. Rietveld**, C. La Hoz, I. F. Domnin, Travelling Ionospheric Disturbances over Kharkiv, Ukraine, Accompanying the Operation of the EISCAT Heater Facility, *Bulletin of the National Technical University "Kharkiv Polytechnic Institute"*. Series: Radiophysics and Ionosphere, Kharkiv, 47, 92-98, 2014.

14. Pinedo, H., C. La Hoz, O. Havnes, **M. Rietveld**, Electron-ion temperature ratio estimations in the summer polar mesosphere when subject to HF radio wave heating, *Journal of Atmospheric and Solar-Terrestrial Physics*, 118, A, 106-112, <http://dx.doi.org/10.1016/j.jastp.2013.12.016>, 2014.
15. Senior, A., A. Mahmoudian, H. Pinedo, C. La Hoz, **M. T. Rietveld**, W. A. Scales, and M. J. Kosch, First modulation of high-frequency polar mesospheric summer echoes by radio heating of the ionosphere, *Geophys. Res. Lett.*, 41, 15, 5347-5353, [DOI: 10.1002/2014GL060703](https://doi.org/10.1002/2014GL060703), 2014.
16. Zabolotin, N. A., V. U. Zavorotny, **M. T. Rietveld**, Physical mechanisms associated with long range propagation of the signals from ionospheric heating experiments, *Radio Sci.*, 49, 10, 987-995, [DOI: 10.1002/2014RS005573](https://doi.org/10.1002/2014RS005573), 2014.
17. Borisova, T. D., N. F. Blagoveshchenskaya, I. M. Ivanova, and **M. T. Rietveld**, Dependence of the Pc4 Magnetic Pulsation Parameters on the Radiated Power of the EISCAT HF Heating Facility, *Geomagnetism and Aeronomy*, 53, 1, [32-42](https://doi.org/10.1002/2013JA019442), 2013.
18. Blagoveshchenskaya, N. F., T.D. Borisova, T. K. Yeoman, **M. T. Rietveld**, I. Häggström, I. M. Ivanova, Plasma modifications induced by an X-mode HF heater wave in the high latitude F region of the ionosphere, *Journal of Atmospheric and Solar-Terrestrial Physics*, 105-106, [231-244](https://doi.org/10.1016/j.jastp.2013.08.011), 2013.
19. Bryers, C., M. Kosch, A. Senior, T. Yeoman and **M. Rietveld**, DIY Northern Lights, *Astronomy and Geophysics*, 54, 6, [43-44](https://doi.org/10.1093/ajph/54.6.43), 2013.
20. Schlatter, N. M., N. Ivchenko, B. Gustavsson, T. Leyser, and **M. Rietveld**, Observations of HF induced instability in the auroral E region, *Ann. Geophys.*, 31, [1103-1108](https://doi.org/10.1007/s00565-013-0811-1), doi:10.5194/angeo-31-1103-2013, 2013.
21. Senior, A., **M. T. Rietveld**, I. Haggstrom, and M. J. Kosch, Radio-Induced Incoherent Scatter Ion Line Enhancements with Wide Altitude Extents in the High-Latitude Ionosphere, *Geophys. Res. Lett.*, 40, 9, 1669-1674, [DOI: 10.1002/grl.50272](https://doi.org/10.1002/grl.50272), 2013.
22. Vierinen, J., A. Kero, **M. T. Rietveld**, High latitude artificial periodic irregularity observations with the upgraded EISCAT heating facility, *Journal of Atmospheric and Solar-Terrestrial Physics*, 105-106, [253-261](https://doi.org/10.1016/j.jastp.2013.08.011), 2013.
23. Baddeley, L. J., I. Häggström, T. K. Yeoman, and **M. T. Rietveld**, First observations of SPEAR-induced top and bottomside sporadic E-layer heating observed using the EISCAT Svalbard and SuperDARN radars, *J. Geophys. Res.*, 117, A01307, [doi:10.1029/2011JA017079](https://doi.org/10.1029/2011JA017079), 2012.
24. Bryers, C. J., M. J. Kosch, A. Senior, **M. T. Rietveld**, and T. K. Yeoman, EISCAT observations of pump-enhanced plasma temperature and optical emission excitation rate as a function of power flux, *J. Geophys. Res.*, 117, A09301, [doi:10.1029/2012JA017897](https://doi.org/10.1029/2012JA017897), 2012.
25. Isham, B., **M. T. Rietveld**, P. Guio, F. R. E. Forme, T. Grydeland, and E. Mjølhus, Cavitating Langmuir Turbulence in the Terrestrial Aurora, *Phys. Rev. Lett.*, [108, 10, 10.1103/PhysRevLett.108.105003](https://doi.org/10.1103/PhysRevLett.108.105003), 2012.
26. Senior, A., **M. T. Rietveld**, T. K. Yeoman, and M. J. Kosch, The Dependence of F-region Electron Heating on HF Radio Pump Power: measurements at EISCAT Tromso, *J. Geophys. Res.*, 117, A04309, [doi:10.1029/2011JA017267](https://doi.org/10.1029/2011JA017267), 2012.
27. Tereshchenko, E. D., R. Yu. Yurik, **M. T. Rietveld**, B. Isham, V. Belyey, The spatial features of the up- and downshifted maxima in stimulated electromagnetic emissions, *Adv. Space Res.*, 50,5, [619-622](https://doi.org/10.1016/j.asr.2012.05.011), 2012.
28. Blagoveshchenskaya, N. F., T. D. Borisova, **M. T. Rietveld**, T. K. Yeoman, D. M. Wright, M. Rother, H. Lühr, E. V. Mishin, and C. Roth, Results of Russian Experiments Dealing with the Impact of Powerful HF Radiowaves on the High-Latitude Ionosphere Using the EISCAT Facilities, *Geomagnetism and Aeronomy*, ISSN 0016-7932, 51, 8, [1109-1120](https://doi.org/10.1002/2011JA017267), 2011.

29. Blagoveshchenskaya, N. F., T. D. Borisova, T. K. Yeoman, **M. T. Rietveld**, I. M. Ivanova, and L. J. Baddeley, Artificial small-scale field-aligned irregularities in the high latitude F region of the ionosphere induced by an X-mode HF heater wave, *Geophys. Res. Lett.*, 38, L08802, [doi:10.1029/2011GL046724](https://doi.org/10.1029/2011GL046724), 2011.
30. Blagoveshchenskaya, N. F., T. D. Borisova, V. A. Kornienko, **M. T. Rietveld**, T. K. Yeoman, D. M. Wright, M. Rother, H. Lühr, E. V. Mishin and C. Roth, V.L. Frolov, M. Parot, J. L. Rauch, Modification of the high-latitude ionosphere by high-power hf radio waves. 2. Results of coordinated satellite and ground-based observations, *Radiophys. & Quant. Electr.*, 54, 2, 89-101, [DOI: 10.1007/s11141-011-9273-9](https://doi.org/10.1007/s11141-011-9273-9) 2011. (Translated from *Izvestiya Vysshikh Uchebnykh Zavedenii, Radiofizika*, 54, 2, pp. 97-112, February 2011).
31. Borisova, T. D., N. F. Blagoveshchenskaya, V. A. Kornienko, and **M. T. Rietveld**, Characteristics of Pc4-5 Pulsations Obtained Using the Method of Bistatic Backscatter of HF Radio Waves, the EISCAT HF Heating Facility, and Ground-Based Magnetometers, *Geomagnetism and Aeronomy*, ISSN 0016-7932, 51, 5, [620-632](https://doi.org/10.1007/s11141-011-9273-9), 2011.
32. Havnes, O., C. La Hoz, **M. T. Rietveld**, M. B. Kassa, G. Baroni, and A. Biebricher, Dust charging and density conditions deduced from observations of PMWE modulated by artificial electron heating, *J. Geophys. Res.*, 116, D24203, [doi:10.1029/2011JD016411](https://doi.org/10.1029/2011JD016411), 2011.
33. Kosch, M. J., E. Mjølhus, M. Ashrafi, **M. T. Rietveld**, T. Yeoman and S. Nozawa, Angular dependence of pump-induced bottom- and top-side ionospheric plasma turbulence at EISCAT, *J. Geophys. Res.*, 116, A03322, 9 PP., [doi:10.1029/2010JA016014](https://doi.org/10.1029/2010JA016014), 2011.
34. Mahmoudian, A., W. A. Scales, M. J. Kosch, A. Senior, and **M. Rietveld**, Dusty space plasma diagnosis using temporal behavior of polar mesospheric summer echoes during active modification, *Ann. Geophys.*, 29, [2169-2179](https://doi.org/10.1029/2010JA016014), 2011.
35. Ogawa, Y., S. C. Buchert, I. Häggström, **M. T. Rietveld**, R. Fujii, S. Nozawa, and H. Miyaoka, On the statistical relation between ion upflow and naturally enhanced ion-acoustic lines observed with the EISCAT Svalbard radar, *J. Geophys. Res.*, 16, A03313, 12 PP., [doi:10.1029/2010JA015827](https://doi.org/10.1029/2010JA015827), 2011.
36. Routledge, G., M. J. Kosch, A. Senior, A. J. Kavanagh, I. W. McCrea and **M. T. Rietveld**, A statistical survey of electron temperature enhancements in heater modulated polar mesospheric summer echoes at EISCAT, *J. Atmos. Solar-Terr. Phys.*, 73, 4, 472-482, [doi:10.1016/j.jastp.2010.11.004](https://doi.org/10.1016/j.jastp.2010.11.004), 2011.
37. Senior, A., **M. T. Rietveld**, F. Honary, W. Singer, and M. J. Kosch, Measurements and Modelling of Cosmic Noise Absorption Changes due to Radio Heating of the D-Region Ionosphere, *J. Geophys. Res.*, 116, A04310, [doi:10.1029/2010JA016189](https://doi.org/10.1029/2010JA016189), 2011.
38. Wissing, J. M., M.-B. Kallenrode, J. Kieser and H. Schmidt, **M. T. Rietveld**, A. Strømme, P. J. Erickson, Atmospheric Ionization Module OSnabruck (AIMOS) 3: Comparison of electron density simulations by AIMOS/HAMMONIA and incoherent scatter radar measurements, *J. Geophys. Res.*, 116, A08305, [doi:10.1029/2010JA016300](https://doi.org/10.1029/2010JA016300), 2011.
39. Blagoveshchenskaya N. F., T. D. Borisova, T. K. Yeoman, **M. T. Rietveld**, Modification of the high latitude ionosphere by powerful HF radio waves. 1. Results from multi-instrument ground-based observations, *Radiophys. & Quant. Electr.*, 53, 9-10, 512-531, [DOI: 10.1007/s11141-011-9247-y](https://doi.org/10.1007/s11141-011-9247-y), 2011. (Translated from *Izvestiya Vysshikh Uchebnykh Zavedenii, Radiofizika*, 53, 9-10, pp. 571-593, September-October 2010.)
40. Gustavsson, B., **M. T. Rietveld**, N. V. Ivchenko, and M. J. Kosch, The Rise and Fall of Electron Temperatures I: Ohmic Heating of Ionospheric Electrons from Under-Dense HF-radio Wave Pumping, *J. Geophys. Res.*, 115, A12332, [doi:10.1029/2010JA015873](https://doi.org/10.1029/2010JA015873), 2010.

41. Kosch, M. J., Y. Ogawa, **M. T. Rietveld**, S. Nozawa and R. Fujii, An analysis of pump-induced artificial ionospheric ion upwelling at EISCAT, *J. Geophys.*, 115, A12317, [doi:10.1029/2010JA015854](https://doi.org/10.1029/2010JA015854), 2010.
42. Senior, A., **M. T. Rietveld**, M. J. Kosch and W. Singer, Diagnosing Radio Plasma Heating in the Polar Summer Mesosphere using Cross-Modulation: Theory and Observations, *J. Geophys. Res.*, 115, A09318, [doi:10.1029/2010JA015379](https://doi.org/10.1029/2010JA015379), 2010.
43. Blagoveshchenskaya, N. F., H. C. Carlson, V. A. Kornienko, T. D. Borisova, **M. T. Rietveld**, T. K. Yeoman, and A. Brekke, Phenomena induced by powerful HF pumping towards magnetic zenith with a frequency near the F-region critical frequency and the third electron gyro harmonic frequency, *Ann. Geophys.*, 27, [131-145](https://doi.org/10.1007/s00563-009-1311-4), 2009.
44. Havnes, O., C. La Hoz, **M. T. Rietveld**, M. Kassa, G. Baroni and A. Biebricher, Observation and analysis of olar mesospheric winter echoes modulated by artificial electron heating, Proceedings of the 19th ESA Symposium on European rocket and Balloon Programmes and Related Research, 7-11 June 2009, Bad Reichenhall, Germany, Esa publication [SP-671](https://doi.org/10.1007/978-3-70-010671-1_671), 2009.
45. Kalogerakis, K. S., T. G. Slinger, E. A. Kendall, T. R. Pedersen, M. J. Kosch, B. Gustavsson, and **M. T. Rietveld**, Remote Oxygen Sensing by Ionospheric Excitation (ROSIE), *Ann. Geophys.*, 27, [2183-2189](https://doi.org/10.1007/s00563-009-2183-2), 2009.
46. Lofas, H., N. Ivchenko, B. Gustavsson, T. B. Leyser, and **M. T. Rietveld**, F-region electron heating by X-mode radiowaves in underdense conditions, *Ann. Geophysicae*, 27, [2585-2592](https://doi.org/10.1007/s00563-009-2585-2), 2009.
47. Moore, R. C., and **M. T. Rietveld**, Comment on “Geometric modulation: A more effective method of steerable ELF/VLF wave generation with continuous HF heating of the lower ionosphere” by M. B. Cohen, U. S. Inan, and M. A. Golkowski, *Geophys. Res. Lett.*, 36, L04101, [doi:10.1029/2008GL036002](https://doi.org/10.1029/2008GL036002), 2009
48. Zalozovski, A. V., S. B. Kashcheyev, Y. M. Yampolski, V. G. Galushko, V. Belyey, B. Isham, **M. T. Rietveld**, C. La Hoz, A. Brekke, N. F. Blagoveshchenskaya, and V. A. Kornienko, Self-scattering of a powerful HF radio wave on stimulated ionospheric turbulence, *Radio Sci.*, 44, RS3010, [doi:10.1029/2008RS004111](https://doi.org/10.1029/2008RS004111), 2009.
49. Belova, E., M. Smirnova, **M. T. Rietveld**, B. Isham, S. Kirkwood, and T. Sergienko, First observation of the overshoot effect for polar mesosphere winter echoes during radiowave electron temperature modulation, *Geophys. Res. Lett.*, 35, L03110, [doi:10.1029/2007GL032457](https://doi.org/10.1029/2007GL032457), 2008.
50. Blagoveschenskaya, N. F, T. D. Borisova, V. A. Kornienko, T. R. Robinson, T. K. Yeoman, V. L. Frolov, **M. T. Rietveld**, Phenomena initiated by ionosphere modification caused by powerful HF radio waves at different latitudes, *Solar-Terrestrial Physics (in Russian)*, 12, 2, 206-209, 2008.
51. Markov, G. A., A. S. Belov, V. L. Frolov , V. O. Rapoport, M. Parrot, J. L. Rauch and **M. T. Rietveld**, Electromagnetic and plasma perturbations induced by radio emission of the EISCAT high-frequency heating facility in the outer ionosphere of the earth, *Radiophysics and Quantum Electronics*, 51, 11, [doi:10.1007/s11141-009-9087-1](https://doi.org/10.1007/s11141-009-9087-1), 2008.
52. Nesse, H., D. Heinrich, B. Williams, U.-P. Hoppe, J. Stadsnes, **M. Rietveld**, W. Singer, U. Blum, M. I. Sandanger, and E. Trondsen, A Case Study of a Sporadic Sodium Layer Observed by the ALOMAR Weber Na Lidar, *Ann. Geophys.*, 26, [1071-1081](https://doi.org/10.1007/s00563-008-1071-1), 2008.
53. Rapp, M., I. Strelnikova, R. Latteck, P. Hoffmann, U.-P. Hoppe, I. Hægström and **M. T. Rietveld**, Polar Mesosphere Summer Echoes (PMSE) studied at Bragg wavelengths of 2.8 m, 67 cm, and 16 cm, *JASTP*, [doi:10.1016/j.jastp.2007.11.005](https://doi.org/10.1016/j.jastp.2007.11.005), 2008.
54. **Rietveld, M. T.**, J. W. Wright, N. Zabolotin, M. L. V. Pitteway, The Tromsø Dynasonde, *Polar Science*, 2, 1, 55-71, [doi:10.1016/j.polar.2008.02.001](https://doi.org/10.1016/j.polar.2008.02.001), 2008.

55. Senior, A., F. Honary, P. J. Chapman, **M. T. Rietveld**, T. S. Kelso, and M. J. Kosch, High-frequency magnetospheric sounding at EISCAT: some trials and their implications, *Radio Sci.*, 43,RS4009, [doi:10.1029/2007RS003779](https://doi.org/10.1029/2007RS003779), 2008.
56. Blagoveshchenskaya, N. F., T. D. Borisova, V. A. Kornienko, V. F. Frolov, **M. T. Rietveld** and A. Brekke, Some distinctive features in the behavior of small-scale artificial ionospheric irregularities at mid- and high latitudes, *Radiophysics and Quantum Electronics*, 50, 8, [619-632](https://doi.org/10.1007/s11182-007-9320-2), 2007.
57. Borisova, T. D., N. F. Blagoveshchenskaya, V. A. Kornienko, and **M. T. Rietveld**, Determining the ionospheric irregularity velocity vector based on Doppler measurements in the artificially modified F2 region of the polar ionosphere, ISSN 0016-7932, *Geomagnetism and Aeronomy*, 47, 1, 76-84, 2007.
58. Kero, A., C.-F. Enell, Th. Ulich, E. Turunen, **M. T. Rietveld**, and F.H. Honary, Statistical signature of active D-region HF heating in IRIS riometer data from 1994-2004, *Ann. Geophys.*, 25, [407-415](https://doi.org/10.1007/s00563-007-0115-1), 2007.
59. Kosch, M. J., T. Pedersen, **M. T. Rietveld**, B. Gustavsson, S. M. Grach and T. Hagfors, Artificial optical emissions in the high-latitude thermosphere induced by powerful radio waves: An observational review, *Adv. Space. Res.*, 40, 365-376, [doi:10.1016/j.asr.2007.02.061](https://doi.org/10.1016/j.asr.2007.02.061), 2007.
60. Blagoveshchenskaya, N. F., T.D. Borisova, V. A. Kornienko, T. B. Leyser, **M. T. Rietveld**, and B. Thide, Artificial Field-Aligned Irregularities in the Nightside Auroral Ionosphere, *Adv. Space Res.*, 38,11, [2503-2510](https://doi.org/10.1016/j.asr.2006.09.010), 2006.
61. Blagoveshchenskaya, N. F., V.A. Kornienko, T.D. Borisova, **M. T. Rietveld**, T. Bosinger, B. Thide, T.B. Leyser, and A. Brekke, Heater-Induced Phenomena in a Coupled Ionosphere-Magnetosphere System, *Adv. Space Res.*, 38, 11, [2495-2502](https://doi.org/10.1016/j.asr.2006.09.010), 2006.
62. Blagoveshchenskaya, N.F., T.D. Borisova, V.A. Kornienko, I.V. Moskvina, **M. T. Rietveld**, V.L. Frolov, V.P. Uryadov, L.M. Kagan, Yu M. Yampolski, V.L. Galushko, A.V. Koloskov, S.B. Kashev, A.V. Zalizovski, G.G. Vertogradov, V.G. Vertogradov, M.C. Kelley, Probing of medium-scale travelling ionospheric disturbances using HF-induced scatter targets, *Ann. Geophys.*, 24, [2333-2345](https://doi.org/10.1007/s00563-006-0233-3), 2006.
63. Gustavsson, B., T. B. Leyser, M. Kosch, **M. T. Rietveld**, A. Steen, B. U. E. Brandstrom, and T. Aso, Electron gyroharmonic effects in ionization and electron acceleration during HF pumping in the ionosphere, *Phys. Res. Lett.*, 97, [190052](https://doi.org/10.1063/1.190052), 2006.
64. Havnes O., C. La Hoz, A. Aylward, E. Belova, T.W. Hartquist, M.J. Kosch, G. Morfill, G.O.L. Jones, L.I. Naesheim, **M. T. Rietveld**, M. Rubin-Zuzic and F. Sigernes, Observations of the overshoot effect during the 2004 EISCAT PMSE campaign, *Adv. Space Res.*, 38, 11, [2344-2352](https://doi.org/10.1016/j.asr.2006.09.010), 2006.
65. Holma H., K. Kaila, M.J. Kosch and **M. T. Rietveld**, Recognising the blue emission in artificial aurora, *Adv. Space Res.*, 38, 11, [2653-2658](https://doi.org/10.1016/j.asr.2006.09.010), 2006.
66. Kavanagh, A.J., F. Honary, **M. T. Rietveld**, and A. Senior, First observations of the artificial modulation of polar mesospheric winter echoes, *Geophys. Res. Lett.*, 33, L19801, [doi:10.1029/2006GL027565](https://doi.org/10.1029/2006GL027565), 2006.
67. Kirkwood, S., P. Chilson, E. Belova, P. Dalin, I. Häggström, **M. Rietveld**, W. Singer, Infrasound – the cause of strong Polar Mesosphere Winter Echoes ? *Annales Geophysicae*, 24, [475-491](https://doi.org/10.1007/s00563-006-0475-4), 2006.
68. **Rietveld, M. T.**, and P. Stubbe, Comment on “The magnetic response of the ionosphere to pulsed HF heating” by K. Papadopoulos, T. Wallace, G. M. Milikh, W. Peter, and M. McCarrick, *Geophys. Res. Lett.*, 33, L07102, [doi:10.1029/2005GL024853](https://doi.org/10.1029/2005GL024853), 2006.
69. Senior, A., Kosch, M. J. , Yeoman, T. K., **Rietveld, M. T.**, and McCrea, I. W., Effects of high-latitude atmospheric gravity wave disturbances on artificial HF radar backscatter, *Ann. Geophys.*, 24, [2347-2361](https://doi.org/10.1007/s00563-006-0234-4), 2006.

70. Stolle, C., J. Liliensten, S. Schlüter, Ch. Jacobi, **M. Rietveld**, and H. Lühr, Observing the north polar ionosphere on 30 October 2003 by GPS imaging and IS radars, *Annales Geophysicae*, 24, [107 - 113](#), 2006.
71. Tereshchenko, E. D., R. Yu. Yurik, B. Z. Khudukon, **M. T. Rietveld**, B. Isham, V. Belyey, A. Brekke, T. Hagfors, and M. Grill, Directional features of the downshifted peak observed in HF-induced stimulated electromagnetic emission spectra obtained using an interferometer, *Ann. Geophys.*, 24, [1819 - 1827](#), 2006.
72. Tereshchenko, E.D., B. Z. Khudukon, **M. T. Rietveld**, B. Isham, T. Hagfors, A. Brekke, The relationship between small-scale and large-scale ionospheric electron density irregularities generated by powerful HF electromagnetic waves at high latitudes, *Ann. Geophys.*, 24,11, [2901-2909](#), 2006.
73. Belova, E. , S. Kirkwood, J. Ekeberg, A. Osepian, I. Häggström, H. Nilsson, H. and **M. Rietveld**, The dynamical background of polar mesosphere winter echoes from simultaneous EISCAT and ESRAD observations, *Annales Geophysicae*, 23, [1239-1247](#), 2005.
74. Blagoveshchenskaya, N. F., T. D. Borisova, V. A. Kornienko, B. Thidé, **M. T. Rietveld**, M. J. Kosch, T. Bösinger, Phenomena in the ionosphere-magnetosphere system induced by injection of powerful HF radio waves into nightside auroral ionosphere, *Annales Geophysicae*, 23, [87-100](#), 2005.
75. Borisova, T.D., N.F. Blagoveshchenskaya, V.A. Kornienko, **M. T. Rietveld**, B. Thidé, and T.B. Leyser, Ionospheric Effects Observed when the Tromsø HF Heating Facility Was Turned on/off, *Geomag. Aeron.*, 45, 3, 2005, 390-397, 2005.
76. Fernandez, J. R., R. D. Palmer, P. B. Chilson, I. Häggström, **M. T. Rietveld**, Range imaging observations of PMSE using the EISCAT VHF radar: Phase calibration and first results, *Annales Geophysicae*, Vol. 23, [pp 207-220](#), 2005.
77. Gustavsson B., T. Sergienko, M.J. Kosch, **M. T. Rietveld**, A. Steen, B.U.E. Brandstrom, T.B. Leyser, B. Isham, P. Gallop, T. Aso, M. Ejiri, K. Kaila, J. Jussila and H. Holma, The electron distribution during HF pumping – a picture painted in all colours, *Annales Geophysicae*, Vol. 23, [pp 1747-1754](#), 2005.
78. Isham, B., T. Hagfors, B. Khudukon, R. Yu. Yurik, E. D. Tereshchenko, **M. T. Rietveld**, V. Belyey, M. Grill, C. La Hoz, A. Brekke, C. Heinselman, An interferometer experiment to explore the aspect angle dependence of stimulated electromagnetic emission spectra, *Annales Geophysicae*, 23, [55-74](#), 2005.
79. Liliensten, J., Lj. R. Cander, **M. T. Rietveld**, P. S. Cannon, M. Barthélémy, Comparison of EISCAT and ionosonde electron densities: application to a ground-based ionospheric segment of a space weather programme, *Annales Geophysicae*, 23, [183-189](#), 2005.
80. Djuth, F. T., B. Isham, **M. T. Rietveld**, T. Hagfors, C. La Hoz, The First One Hundred Milliseconds of HF Modification at Tromsø, Norway, *J. Geophys. Res.*, 109, A11307, doi:10.1029/2003JA010236, 2004.
81. Kosch M.J., **M. T. Rietveld**, A. Senior, I.W. McCrea, A. J. Kavanagh, B. Isham and F. Honary, Novel artificial optical annular structures in the high latitude ionosphere, *Geophysical Research Letters*, 31, art. No. L12805, 2004.
82. **Rietveld M. T.**, M.J. Kosch, N.F. Blagoveschenskaya, V.A. Kornienko, T.B. Leyser and T.K. Yeoman, Correction to 'Ionospheric electron heating, optical emissions and striations induced by powerful HF radio waves at high latitudes', *J. Geophys. Res.*, 109, Art. No. A040306, 2004.
83. Senior A., N.D. Borisov, M.J. Kosch, T.K. Yeoman, F. Honary and **M. T. Rietveld**. Multi-frequency HF radar measurements of artificial F-region field-aligned irregularities, *Ann. Geophys.*, 22, 3503-3511, 2004.
84. C. Stolle, N. Jakowski, K. Schlegel, and **M. Rietveld**, Comparison of high latitude electron density profiles obtained with the GPS radio occultation technique and EISCAT measurements, *Ann. Geophys.*, 22(6), 2015–2022, 2004.

85. Zalizovski, A. V., S. B. Kashcheyev, Yu. M. Yampolsky, V. G. Galushko, V. S. Beley, B. Isham, **M. T. Rietveld**, C. La Hoz, A. Brekke, N. F. Blagoveschenskaya, and V. A. Kornienko. Spectral features of HF signals from the EISCAT heating facility in Europe and in Antarctica, *Radiofizika I Radioastronomiya (Radiophysics and Radio Astronomy, in Russian)*, Vol. 9, No.3, pp. 261-273, 2004.
86. Belova, E., P. B. Chilson, S. Kirkwood, **M. T. Rietveld**, The Response Time of PMSE to Ionospheric Heating, *J. Geophys. Res. (Atmosph.)*, 108, D8, 8446, doi:10.1029/2002JD002385, 2003.
87. Belova, E., S. Kirkwood, P. B. Chilson, **M. T. Rietveld**, Reply to comment by M. Rapp and F.-J. Lübken on "The response time of PMSE to ionospheric heating", *J. Geophys. Res. (Atmosph.)*, 108, D23, 4728, doi:10.1029/2003JD004167, 2003.
88. Havnes, O., C. La Hoz, L. I. Naesheim, **M. T. Rietveld**, First observations of the PMSE overshoot effect and its use for investigating the conditions in the summer mesosphere, *Geophys Res. Lett.* 30, 23, 2229, doi:10.1029/2003GL018429, 2003.
89. Nielsen, E., and **M. T. Rietveld**, Observations of backscatter autocorrelation functions from 1.07-m ionospheric irregularities generated by the European Incoherent Scatter Heater Facility, *J. Geophys. Res.*, 109, A5, 1166, doi:10.1029/2002JA009537, 2003.
90. **Rietveld, M. T.**, M. J. Kosch, N. F. Blagoveshchenskaya, V. A. Kornienko, T. B. Leyser, T. K. Yeoman, Ionospheric electron heating, optical emissions and striations induced by powerful HF radio waves at high latitudes: aspect angle dependence, *J. Geophys. Res.*, 108, A4, SIA 2-1 to SIA 2-16, doi:10.1029/2002JA009543, 2003.
91. Wright, D. M., J. A. Davies, T. K. Yeoman, T. Robinson, S. R. Cash, E. Kolesnikova, M. Lester, P. J. Chapman, R. J. Strangeway, R. B. Horne, **M. T. Rietveld**, C. W. Carlson, Detection of artificially generated ULF waves by the FAST spacecraft and its application to the "tagging" of narrow flux tubes, *J. Geophys. Res.*, 108, A2, SIA 16-1 to SIA 16-14, doi:10.1029/2002JA009483, 2003.
92. Borisova, T. D., N.F. Blagoveshchenskaya, I.V. Moskvina, **M. T. Rietveld**, M. J. Kosch, B. Thide, Doppler shift simulation of scattered HF signals during the Tromsø HF pumping experiment on 16 February, 1996, *Ann. Geophys.*, 20, 9, 1479-1486, 2002.
93. Gustavsson, B., B. U. E. Brändström, Å. Steen, T. Sergienko, T. B. Leyser, **M. T. Rietveld**, T. Aso and M. Ejiri, Nearly simultaneous images of HF-pump enhanced airglow at 6300 Å and 5577 Å, *Geophys. Res. Lett.*, 29, 24, doi:10.1029/2002GL015350-2220, 2002
94. Kosch, M. J., **M. T. Rietveld**, T. Yeoman, K. Cierpka, and T. Hagfors, The high-latitude artificial aurora of 21 February 1999: An analysis, *Adv. Polar Upper Atmos. Res.*, 16, 1-12, 2002
95. Kosch, M. J., **M. T. Rietveld**, A. J. Kavanagh, C. Davis, T. Yeoman, F. Honary and T. Hagfors, High-latitude pump-induced optical emissions for frequencies close to the third electron gyro-harmonic, *Geophys. Res. Lett.*, 29, 2112-doi:10.1029/2002GL015744, 2002
96. **Rietveld, M. T.**, B. Isham, T. Grydeland, C. la Hoz, T. B. Leyser, F. Honary, H. Ueda, M. Kosch and T. Hagfors, HF-Pump-Induced Parametric Instabilities in the Auroral E-Region, *Adv. Space Res.*, 29, 9, 1363-1368, 2002
97. Blagoveschenskaya, N. F., V. A. Kornienko, T. D. Borisova, B. Thide, and M. J. Kosch, **M. T. Rietveld**, E. V. Mishin, R. Y. Luk'yanova, O. A. Troschichev, Ionospheric HF pump wave triggering of local auroral activation, *J. Geophys. Res.*, 106, A12, 29071-29090, 2001
98. Gustavsson, B., T. Sergienko, **M. T. Rietveld**, F. Honary, Å. Steen, B. U. E. Brändström, T. B. Leyser, A. L. Aruliah, T. Aso, M. Ejiri and S. Marple, First tomographic estimate of volume distribution of HF-pump enhanced airglow emission, *J. Geophys. Res.*, 106, A12, 29105-29124, 2001

99. Kosch, M.J., K. Cierpka, **M.T. Rietveld**, T. Hagfors, and K. Schlegel, High-latitude ground-based observations of the thermospheric ion-drag time constant, *Geophysical Research Letters*, 28, 1395-1398, 2001
100. Tokarev, Yu. V., V. A. Alimov, G. P. Komrakov, G. N. Boiko, **M. T. Rietveld**, P. Rodriguez, J.-L. Bougeret, M. L. Kaiser and K. Goetz, The Sura-EISCAT-WIND Experiments: Ionospheric Influence on the Response of a Decameter Interferometer with a Superlong Baseline, *Radiophysics & Quantum electronics*, 44, 751-762, 2001
101. Bösinger, T., A. Kero, P. Pollari, A. Pashin, P. Belyaev, **M. Rietveld**, T. Turunen, and J. Kangas, Generation of artificial magnetic pulsations in the Pc1 frequency range by periodic heating of the Earth's ionosphere: indications of Alfvén resonator effects, *J. Atmos. Solar Terr. Physics*, 62, 4, 277-297, 2000
102. Chilson, P. B., E. Belova, **M. T. Rietveld**, S. Kirkwood, and U.-P. Hoppe, First artificially induced modulation of PMSE using the EISCAT heating facility, *Geophys. Res. Lett.*, 27, 23, 3801-3804, 2000
103. Cierpka, K., M. J. Kosch, **M. Rietveld**, K. Schlegel, and T. Hagfors, Ion-neutral coupling in the high-latitude F-layer from incoherent scatter and Fabry-Perot interferometer measurements, *Ann. Geophysicae*, 18, 9, 1145-1153, 2000
104. Kero, A., T. Bösinger, P. Pollari, E. Turunen, and **M. T. Rietveld**, First EISCAT measurement of electron-gas temperature in the artificially heated D-region ionosphere, *Ann. Geophysicae*, 18, 9, 1210-1215, 2000
105. Kosch, M., **M. T. Rietveld**, T. Hagfors, and T. B. Leyser, High-latitude HF-induced airglow displaced equatorwards of the pump beam, *Geophys. Res. Lett.*, 27, 17, 2817-2820, 2000
106. Leyser, T. B., B. U. E. Brändström, B. Gustavsson, Å. Steen, F. Honary, **M. T. Rietveld**, T. Aso and M. Ejiri, Simultaneous measurements of high-frequency pump-enhanced airglow and ionospheric temperatures at auroral latitudes, *Advances in Polar Upper Atmosphere Research*, 14, 1-11, 2000
107. **Rietveld, M. T.**, B. Isham, H. Kohl, C. La Hoz, and T. Hagfors, Measurements of HF-enhanced plasma and ion lines at EISCAT with high altitude resolution, *J. Geophys. Res.*, 105, A4, 7429-7439, 2000
108. Robinson, T. R., R. Strangeway, D.M. Wright, J.A. Davies, R.B. Horne, T.K. Yeoman, A.J. Stocker, **M.T. Rietveld**, I.R. Mann, C.W. Carlson, and J.P. McFadden, FAST observations of ULF waves injected into the magnetosphere by means of modulated RF heating of the auroral electrojet, *Geophys. Res. Lett.*, 27, 19, 3165-3168, 2000
109. Tereshchenko, E. D., M. O. Kozlova, O. V. Evstafiev, B. Z. Khudukon, T. Nygren, **M. T. Rietveld** and A. Brekke, Irregular structures of the F layer at high latitudes during ionospheric heating, *Ann. Geophysicae*, 18, 9, 1197-1209, 2000
110. Tereshchenko, E. D., B.Z. Khudukon, M.O. Kozlova, O.V. Evstafiev, T. Nygren, **M.T. Rietveld** and A. Brekke, Comparison of the orientation of small scale electron density irregularities and F region plasma flow direction, *Ann. Geophysicae*, 18, 8, 918-926, 2000
111. Barr, R., P. Stubbe, and **M. T. Rietveld**, ELF wave generation in the ionosphere using pulse modulated HF heating: initial tests of a technique for increasing ELF wave generation efficiency, *Ann. Geophysicae*, 17, 759-769, 1999
112. Blagoveschenskaya, N. F., V.A. Kornienko, A. Brekke, **M. T. Rietveld**, M. Kosch, T.D. Borisova and M.V. Krylov, Phenomena observed by HF long-distance diagnostic tools in the HF modified auroral ionosphere during magnetospheric substorm, *Radio Sci.*, 34, 3, 715-724, 1999
113. Brändström U., T. Leyser, Å. Steen, **M. T. Rietveld**, B. Gustavsson, T. Aso and M. Ejiri, Unambiguous evidence of HF pump-enhanced airglow at auroral latitudes, *Geophys. Res. Lett.*, 26, 23, 3561-3564, 1999



114. Honary, F., T. R. Robinson, D. M. Wright, A.J. Stocker, and **M. T. Rietveld**, First direct observations of the reduced striations at pump frequencies close to the electron gyroharmonics, *Ann. Geophysicae*, 17, 9, 1235-1238, 1999
115. Isham, B., **M. T. Rietveld**, T. Hagfors, C. LaHoz, E. Mishin, W. Kofman, T. B. Leyser and A. P. van Eyken, Aspect angle dependence of HF enhanced incoherent backscatter, *Adv. Space. Res.*, 24/8, 1003-1006, 1999
116. Isham, B., T. Hagfors, E. Mishin, **M. T. Rietveld**, C. LaHoz, W. Kofman and T. Leyser, A search for the location of the HF excitation of enhanced ion acoustic and Langmuir waves with EISCAT and the Tromsø heater, *Radiophysics & Quantum electronics*, 42, 7, 607-618, 1999
117. Isham, B., C. La Hoz, **M. T. Rietveld**, T. Hagfors, and T. B. Leyser, Cavitating Langmuir turbulence observed during EISCAT high latitude ionospheric interaction experiments, *Phys. Rev. Lett.*, 83, 2576-2579, 1999
118. Barr, R., P. Stubbe, **M. T. Rietveld**, and E. Nielsen, Enhanced ELF wave generation efficiency using 'O' mode HF heating in the ionosphere: An instrumental explanation, *Geophys. Res. Lett.*, 25, 18, 3489, 1998
119. Blagoveschenskaya, N. F., V. A. Kornienko, A. V. Petlenko, A. Brekke, and **M. T. Rietveld**, Geophysical phenomena during an ionospheric modification experiment at Tromsø, Norway, *Ann. Geophysicae*, 16, 10, 1212-1225, 1998
120. Blagoveschenskaya, N. F., V. A. Kornienko, **M. T. Rietveld**, B. Thide, A. Brekke, I. V. Moskvina and S. Nozdrachev, Stimulated emissions around second harmonic of Tromsø heater frequency observed by long-distance diagnostic HF tools, *Geophys. Res. Lett.*, 25, 6, 873-876, 1998
121. Blagoveschenskaya, N. F., V.A. Kornienko, A. Brekke, **M. T. Rietveld**, M. Kosch, T.D. Borisova, and M. V. Krylov, Phenomena observed by HF long-distance diagnostic tools in the HF modified auroral ionosphere during magnetospheric substorm, *Radio Sci.*, 34, 715-724, 1998
122. Collis, P. N., and **M. T. Rietveld**, Mesospheric observations with the EISCAT UHF radar during polar cap absorption events: 3. Comparison with simultaneous EISCAT VHF measurements, *Ann. Geophysicae*, 16, 10, 1355-1366, 1998
123. Eglitis, P., T. R. Robinson, **M. T. Rietveld**, D. M. Wright, and G. E. Bond, The phase speed of artificial field-aligned irregularities observed by CUTLASS during HF modification of the auroral ionosphere, *J. Geophys. Res.*, 103, A2, 2253-2259, 1998
124. **Rietveld, M. T.**, and N. P. Goncharov, Artificial Periodic Irregularities from the Tromsø Heating facility, *Adv. Space Res.*, 21, 5, 693-696, 1998
125. Robinson, T. R., A. Stocker, G. Bond, P. Eglitis, D. Wright, T. B. Jones and **M. Rietveld**, First CUTLASS-EISCAT Heating results, *Adv. Space Res.*, 21, 5, 663-666, 1998
126. Robinson, T. R., G. Bond, P. Eglitis, F. Honary, and **M. Rietveld**, RF heating in a strong auroral electrojet, *Adv. Space Res.*, 21, 5, 689-692, 1998
127. Sedgemore, K. J. F., J. W. Wright, P. J. S. Williams, G. O. L. Jones, and **M. T. Rietveld**, Plasma drift estimates from the Dynasonde: Comparison with EISCAT measurements, *Ann. Geophysicae*, 16, 10, 1138-1143, 1998
128. Tereshchenko, E. D., B. Z. Khudukon, **M. T. Rietveld**, and A. Brekke, Spatial structure of auroral day-time ionospheric electron density irregularities generated by a powerful HF-wave, *Ann. Geophysicae*, 16, 812-820, 1998
129. Barr, R., P. Stubbe, **M. T. Rietveld**, and E. Nielsen, Enhanced ELF wave generation efficiency using 'O' mode HF heating, *Geophys. Res. Lett.*, 24, 11, 1403-1406, 1997
130. Bond, G. E., T. R. Robinson, P. Eglitis, D. M. Wright, **M. T. Rietveld**, and T. B. Jones, CUTLASS spatial observations of the artificially modified ionosphere, *Ann. Geophysicae*, 5, 11, 1412-1421, 1997

131. Yeoman, T. K., D. M. Wright, T. R. Robinson, J. A. Davies, and **M. T. Rietveld**, High spatial and temporal resolution observations of an impulse-driven field line resonance in radar backscatter artificially generated with the Tromsø heater, *Ann. Geophysicae*, 15, 6, 634-644, 1997
132. Isham, B., C. La Hoz, H. Kohl, T. Hagfors, T. B. Leyser, and **M. T. Rietveld**, Recent EISCAT heating results using chirped ISR, *J. Atmos. Terr. Phys.*, 58, 369-383, 1996
133. Kohl, H., and **M. T. Rietveld**, Harmonics of the ion acoustic frequency in the heater induced ion spectrum, *J. Geophys. Res.*, 101, A32, 5391-5395, 1996
134. **Rietveld, M. T.**, P.N. Collis, A. P. van Eyken, and U. P. Løvhaug, Coherent echoes during UHF Common Programmes, *J. Atmos. Terr. Phys.*, 58, 161-174, 1996
135. **Rietveld, M. T.**, E. Turunen, H. Matveinen, N. P. Goncharov, and P. Pollari, Artificial Periodic Irregularities in the Auroral Ionosphere, *Ann. Geophysicae*, 14, 1437-1453, 1996
136. Westman, A., T. B. Leyser, G. Wannberg, and **M. T. Rietveld**, Tristatic EISCAT-UHF measurements of the HF modified ionosphere for low background electron temperature, *J. Geophys. Res.*, 100, A6, 9717-9728, 1995
137. Collis, P. N., **M. T. Rietveld**, and A. P. van Eyken, Dual-beam observations by the EISCAT radars during PMSE conditions, *Adv. Space Res.*, 14, 9, 149 -152, 1994
138. Djuth, F., P. Stubbe, M. P. Sulzer, H. Kohl, **M. T. Rietveld**, J. H. Elder, Altitude characteristics of plasma turbulence excited with the Tromsø superheater, *J. Geophys. Res.*, 99, A1, 333-339, 1994
139. Kimura, I., P. Stubbe, **M. T. Rietveld**, R. Barr, K. Ishida, Y. Kasahara, S. Yagitane and I. Nagano, Collaborative experiments by Akebono satellite, Tromsø ionospheric heater, and European incoherent scatter radar, *Radio Sci.*, 29, 1, 23-37, 1994
140. Kohl, H., H. Kopka, P. Stubbe, and **M. T. Rietveld**, Introduction to ionospheric heating experiments at Tromsø Part 2: Scientific problems, *J. Atmos. Terr. Phys.*, 55, 601-603, 1993
141. **Rietveld, M. T.**, H. Kohl, H. Kopka, and P. Stubbe, Introduction to ionospheric heating experiments at Tromsø Part 1: Experimental overview, *J. Atmos. Terr. Phys.*, 55, 577-599, 1993
142. **Rietveld, M. T.**, and P. N. Collis, Mesospheric observations with the EISCAT UHF radar during polar cap absorption events: 2. Spectral measurements, *Ann. Geophysicae*, 11, 9, 797-808, 1993
143. Collis, P. N., **M. T. Rietveld**, J. Röttger, and W. K. Hocking, Turbulence scattering layers in the middle-mesosphere observed by the EISCAT 224 MHz radar, *Radio Sci.*, 27, 2, 97-107, 1992
144. **Rietveld, M. T.**, P. N. Collis, and J. Röttger, Observations of atmospheric dynamics in the low- and middle-mesosphere with the EISCAT incoherent scatter radar during solar proton events, *Adv. Space Res.*, 12, 10, (10)81-(10)84, 1992
145. Stubbe, P., H. Kohl, and **M. T. Rietveld**, Reply to comment by DuBois et al., *J. Geophys. Res.*, 97, A10, 15067-15071, 1992
146. Stubbe, P., H. Kohl, and **M. T. Rietveld**, Langmuir turbulence and ionospheric modification, *J. Geophys. Res.*, 97, A5, 6285-6297, 1992
147. Svenes, K. R., B. N. Mæhlum, U. P. Løvhaug, **M. T. Rietveld**, and C. Hall, An investigation of two different electron heating events in the ionospheric F-layer, *Adv. Space Res.*, 12, 6, (6)241-(6)245, 1992
148. Svenes, K. R., B. N. Mæhlum, J. Trøim, G. Holmgren, R. L. Arnoldy, U. P. Løvhaug, **M. T. Rietveld** and C. Hall, Combined rocket and ground observations of electron heating in the ionospheric F-layer, *Planet Space Sci.*, 40, 7, 901-912, 1992
149. Collis, P. N., I. Häggström, K. Kaila, and **M. T. Rietveld**, EISCAT radar observations of enhanced incoherent scatter spectra: their relation to red aurora and field-aligned currents, *Geophys. Res. Lett.*, 18, 1031-1034, 1991

150. Dowden, R. L., C. D. D. Adams, **M. T. Rietveld**, P. Stubbe, and H. Kopka, Phase and amplitude perturbations on subionospheric signals produced by a moving patch of artificially heated ionosphere, *J. Geophys. Res.*, 96, A1, 239-248, 1991
151. **Rietveld, M. T.**, P. N. Collis, and J.-P. St.-Maurice, Naturally enhanced ion-acoustic waves in the auroral ionosphere observed with the EISCAT 933 MHz radar, *J. Geophys. Res.*, 96, A11, 19291-19305, 1991
152. Collis, P. N., and **M. T. Rietveld**, Mesospheric observations with the EISCAT UHF radar during polar cap absorption events: 1. Electron densities and negative ions, *Ann. Geophysicae*, 8, 12, 809-824, 1990
153. James, H.G., U. S. Inan, and **M. T. Rietveld**, Observations on the DE-1 spacecraft of ELF/VLF waves generated by an ionospheric heater, *J. Geophys Res.*, 95, A8, 12187-12195, 1990.
154. Maul, A.-A., **M. T. Rietveld**, P. Stubbe, and H. Kopka, Excitation of periodic magnetic field oscillations in the ULF range by amplitude modulated HF waves, *Ann. Geophysicae*, 8, 11, 765-780, 1990
155. Röttger, J., **M. T. Rietveld**, C. La Hoz, T. Hall, M. C. Kelley, W. E. Swartz, Polar mesosphere summer echoes observed with the EISCAT 933-MHz radar and the CUPRI 46.9-MHz radar, Their similarity to 224-MHz radar echoes and their relation to turbulence and electron density profiles, *Radio Sci.*, 25(4), 671-687, 1990
156. Derblom, H., B. Thide, T. B. Leyser, J. A. Nordling, A. Hedberg, P. Stubbe, H. Kopka, and **M. Rietveld**, Tromsø Heating Experiments: Stimulated Emission at HF Pump Harmonic and Subharmonic Frequencies, *J. Geophys. Res.*, 94, A8, 10111-10120, 1989
157. **Rietveld, M. T.**, P. Stubbe, and H. Kopka, On the frequency dependence of ELF/VLF waves produced by modulated ionospheric heating, *Radio Sci.*, 24, 3, 270-278, 1989
158. Barr, R., **M. T. Rietveld**, P. Stubbe, and H. Kopka, Ionospheric heater beam scanning: A realistic model of this mobile source of ELF/VLF radiation, *Radio Sci.*, 23, 3, 379-388, 1988
159. Nordling, J. A., A. Hedberg, G. Wannberg, T. B. Leyser, H. Derblom, H. J. Opgenoorth, H. Kopka, H. Kohl, P. Stubbe, **M. T. Rietveld**, and C. LaHoz, Simultaneous bistatic European Incoherent Scatter UHF, 145-MHz radar and stimulated electromagnetic emission observations during HF ionospheric modification, *Radio Sci.*, 23, 5, 809-819, 1988
160. **Rietveld, M. T.**, H. Kopka, and P. Stubbe, Pc 1 ionospheric electric field oscillations, *Ann. Geophysicae*, 6, 4, 381-388, 1988
161. Barr, R., **M. T. Rietveld**, P. Stubbe, and H. Kopka, Ionospheric heater beam scanning: A mobile source of ELF radiation, *Radio Sci.*, 22, 6, 1073-1083, 1987
162. **Rietveld, M. T.**, and P. Stubbe, Ionospheric demodulation of powerful pulsed radio waves: A potential new diagnostic for radars suggested by Tromsø heater results, *Radio Sci.*, 22, 6, 1084-1090, 1987
163. **Rietveld, M. T.**, H.-P. Mauelshagen, P. Stubbe, H. Kopka, and E. Nielsen, The Characteristics of Ionospheric Heating-Produced ELF/VLF Waves Over 32 Hours, *J. Geophys. Res.*, 92, A8, 8707-8722, 1987
164. Schlegel, K., **M. Rietveld**, and A. Maul, A modification event of the auroral E region as studied with EISCAT and other diagnostics, *Radio Sci.*, 22, 6, 1063-1072, 1987
165. Barr, R., P. Stubbe, **M. T. Rietveld**, and H. Kopka, ELF and VLF Signals Radiated by the 'Polar Electrojet Antenna': Experimental Results, *J. Geophys. Res.*, 91, A4, 4451-4459, 1986
166. **Rietveld, M. T.**, H. Kopka, and P. Stubbe, D-region characteristics deduced from pulsed ionospheric heating under auroral electrojet conditions, *J. Atmos. Terr. Phys.*, 48, 4, 311-326, 1986

167. Barr, R., **M. T. Rietveld**, P. Stubbe, and H. Kopka, The Diffraction of VLF Radio Waves by a Patch of Ionosphere Illuminated by a Powerful HF Transmitter, *J. Geophys. Res.*, 90, A3, 2861-2875, 1985
168. Barr, R., **M. T. Rietveld**, H. Kopka, P. Stubbe, and E. Nielsen, Extra-low-frequency radiation from the polar electrojet antenna, *Nature*, 317, 6033, 155-157, 1985
169. **Rietveld, M. T.**, Ground and in situ excitation of waves in the ionospheric plasma, *J. Atmos. Terr. Phys.*, 47, 12, 1283-1296, 1985
170. Stubbe, P., H. Kopka, **M. T. Rietveld**, A. Frey, and P. Hoeg, H. Kohl, E. Nielsen, G. Rose, C. La Hoz, R. Barr, H. Derblom, Å. Hedberg, B. Thidé, T.B. Jones, T. Robinson, A. Brekke, T. Hansen and O. Holt, Ionospheric modification experiments with the Tromsø heating facility, *J. Atmos. Terr. Phys.*, 47, 12, 1151-1163, 1985
171. Barr, R., **M. T. Rietveld**, H. Kopka, and P. Stubbe, The effect of a heated patch of auroral ionosphere on VLF radio wave propagation, *Nature*, 309, 5968, 534-536, 1984
172. James, H. G., R. L. Dowden, **M. T. Rietveld**, P. Stubbe, and H. Kopka, Simultaneous Observations of ELF waves from an Artificially Modulated Auroral Electrojet in Space and on the Ground, *J. Geophys. Res.*, 89, A3, 1655-1666, 1984
173. **Rietveld, M. T.**, R. Barr, H. Kopka, E. Nielsen, P. Stubbe, R. L. Dowden, Heater Beam Scanning: A new Technique for ELF Studies of the Auroral Ionosphere, *Radio Sci.*, 19, 4, 1069-1077, 1984
174. Hibberd, F. H., E. Nielsen, P. Stubbe, H. Kopka, and **M. T. Rietveld**, Production of Auroral Zone E Region Irregularities by Powerful HF Heating, *J. Geophys. Res.*, 88, A8, 6347-6351, 1983
175. **Rietveld, M. T.**, H. Kopka, E. Nielsen, P. Stubbe, and R. L. Dowden, Ionospheric Electric Field Pulsations: A Comparison Between VLF Results From an Ionospheric Heating Experiment and STARE, *J. Geophys. Res.*, 88, A3, 2140-2146, 1983
176. Stubbe, P., H. Kopka, **M. T. Rietveld**, and R. L. Dowden, ELF and VLF wave generation by modulated heating of the current carrying lower ionosphere, *J. Atmos. Terr. Phys.*, 44, 12, 1123-1135, 1982
177. Stubbe, P., H. Kopka, H. Lauche, **M. T. Rietveld**, A. Brekke, O. Holt, T. B. Jones, T. Robinson, A. Hedberg, B. Thide, B. Crochet and H.-J. Lotz, Ionospheric modification experiments in northern Scandinavia, *J. Atmos. Terr. Phys.*, 44, 12, 1025-1041, 1982
178. **Rietveld, M. T.**, Monochromatic Precursor Starts, *J. Geophys. Res.*, 85, 2027-2036, 1980
179. **Rietveld, M. T.**, R. L. Dowden, and L. E. S. Amon, Micropulsations observed by whistler-mode transmissions, *Nature*, 276, 165-167, 1978