

Publication list – Rikard Slapak

- 1) Yamauchi. M., T. Sergienko. C-F. Enell, A. Schillings, **R. Slapak**, M. Gullikstad, A. Tjulin, and H. Nilsson, *Ionospheric response observed by EISCAT during the September 2017 space weather event: overview*, AGU Special Edition (*under review*)
- 2) Schillings. A., H. Nilsson, **R. Slapak**, P. Wintoft, M. Yamauchi, M. Wik, I. Dandouras, and C. Carr, *O⁺ escape during the extreme space weather event of September 4-10, 2017*, AGU Special Edition (*under review*)
- 3) Gunell. H., R. Maggiolo, H. Nilsson, G. Stenberg Wieser, **R. Slapak**, J. Lindkvist, M. Hamrin, and J. de Keyser, *Why an intrinsic magnetic field does not protect a planet against atmospheric escape*, Nature Astronomy, (*under review*)
- 4) Yamauchi. M., and **R. Slapak**, *Cusp current system: an energy overview*, in “Electric Currents in Geospace and Beyond”, AGU Geophys. Monogr., 235, eds A. Keiling, O. Marghitu, and M. Wheatland, Chapter 20, 339-358. doi: 10.1002/9781119324522.ch20, 2018
- 5) Yamauchi. M., and **R. Slapak**, *Energy conversion through mass loading of escaping ionospheric ions for different K_p values*, Ann. Geophys., 36, 1–12, 2018
- 6) Schillings, A., H. Nilsson, **R. Slapak**, M. Yamauchi, and L. G. Westerberg, *Relative outflow enhancements during major geomagnetic storms – Cluster observations*, Ann. Geophys., 35, 1341–1352, 2017
- 7) **Slapak R.**, M. Hamrin, T. Pitkänen, M. Yamauchi, H. Nilsson, T. Karlsson, and A. Schillings, *Quantification of the total ion transport in the near-Earth plasma sheet*, Ann. Geophys., 35, 869–877, 2017
- 8) **Slapak R.**, A. Schillings, H. Nilsson, M. Yamauchi, L. G. Westerberg, and I. Dandouras, *Atmospheric loss from the dayside open polar region and its dependence on geomagnetic activity: Implications for atmospheric escape on evolutionary time scales*, Ann. Geophys., 35, 721–731, 2017
- 9) **Slapak, R.**, H. Gunell, and M. Hamrin, *Observations of multiharmonic ion cyclotron waves due to inverse ion cyclotron damping in the northern magnetospheric cusp*, Geophys. Res. Lett., 44, 22–29, 2017
- 10) Nilsson. H., M. Hamrin, T. Pitkänen, T. Karlsson, **R. Slapak**, L. Andersson, H. Gunell, A. Schillings, and A. Vaivads, *Oxygen ion response to proton bursty bulk flows*, J. Geophys. Res., 121, 7535–7546, 2016
- 11) Barghouthi, I. A., H. A. Abudayyeh, **R. Slapak**, and H. Nilsson, *O⁺ and H⁺ above the polar cap: Observations and semikinetic simulations*, J. Geophys. Res., 121, 459–474, 2016

- 12) Abudayyeh, H. A., I. A. Barghouthi, **R. Slapak**, and H. Nilsson, *Centrifugal acceleration at high altitudes above the polar cap: A Monte Carlo simulation*, J. Geophys. Res., 120, 6409–6426, 2015
- 13) **Slapak, R.**, H. Nilsson, L. G. Westerberg, and R. Larsson, *O⁺ transport in the day-side magnetosheath and its dependence on the IMF direction*, Ann. Geophys., 33, 301–307, 2015
- 14) **Slapak, R.**, H. Nilsson, and L. G. Westerberg, *A statistical study on O⁺ flux in the dayside magnetosheath*, Ann. Geophys., 31, 1005–1010, 2013
- 15) Nilsson. H., I. A. Barghouthi, **R. Slapak**, A. I. Eriksson, and M. André, *Hot and cold ion outflow: observations and implications for numerical models*, J. Geophys. Res., 118, 105–117, 2013
- 16) Nilsson. H., I. A. Barghouthi, **R. Slapak**, A. I. Eriksson, and M. André, *Cluster observations of hot and cold ion outflow: spatial distribution of heating*, J. Geophys. Res., 117, A11201, 2012
- 17) Waara, M., H. Nilsson, **R. Slapak**, M. André, and G. Stenberg, *Statistical evidence for ion energization by waves in the high altitude cusp and mantle*, Ann. Geophys., 30, 1309–1314, 2012
- 18) **Slapak R.**, H. Nilsson, L. G. Westerberg, and A. I. Eriksson, *Observations of oxygen ions in the dayside magnetosheath associated with southward IMF*, J. Geophys. Res., 117, A07218, 2012
- 19) Horak, J., M. Abramowicz, L. Levin, **R. Slapak**, and O. Straub, *Alpha-viscosity effects in slender tori*, accepted for publication in Publ. Astron. Soc. Japan, 64, 76.1–9, 2012
- 20) **Slapak, R.**, H. Nilsson, M. Waara, M. André, G. Stenberg, and I. A. Barghouthi, *O⁺ heating associated with strong wave activity in the high altitude cusp and mantle*, Ann. Geophys., 29, 931–944, 2011
- 21) Waara, M., **R. Slapak**, H. Nilsson, G. Stenberg, M. André, and I. A. Barghouthi, *Statistical evidence of for O⁺ energization and outflow caused by wave-particle interaction in the high altitude cusp and mantle*, Ann. Geophys., 29, 945–954, 2011
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