

List of Publications

Thesis:

1. Ph.D. Thesis: Cycle of Solar Activity in the Corona, - 1998, Astronomical Institute, Slovak Academy of Sciences, Tatranska Lomnica, Slovakia (in Slovak)
2. Graduate Thesis: Five-minute Oscillations in the Solar Photosphere - 1987, Comenius University, Bratislava, Slovakia, Faculty of Mathematics and Physics (in Slovak).

Books (author)

1. Proceedings of the Coimbra Solar Physics Meeting on Ground-based Solar Observations in the Space Instrumentation Era - Ivan Dorotovic, Catherine Fischer, manuela Temmer, eds., ASP Conference Series, Vol. 504, 2016
2. Proceedings of the Coimbra Solar Physics Meeting on The Physics of Chromospheric Plasmas - Petr Heinzel, Ivan Dorotovič and Robert J. Rutten, eds., ASP Conference Series, Vol. 368., 2007
3. Proceedings of the National Solar Physics Meetings No. 15 - 24 (in Slovak), editor
4. Observation of the Solar Photosphere - guidebook, 1993, Hurbanovo, Slovakia (in Slovak)

Papers in refereed journals:

23. I. Dorotovic, A. Coelho, J. Rybak, A. Mora, R. Ribeiro, W. Kusa, 2018, Solar differential rotation profile estimation using coronal bright points data derived from the SDO/AIA images, Sun and Geosphere, Vol. 13, No. 2, accepted.
22. Dorotovic I., Coelho A., Rybák J., Mora A., Ribeiro R., 2018, Gradient Path Labelling method and tracking method for calculation of solar differential rotation using coronal bright points, Astronomy and Computing, Vol. 25, p. 168-175.
21. Barata T., Carvalho S., Dorotovic I., Pinheiro F. J. G., Garcia A., Fernandes J., Lourenço A. M., 2018, Software tool for automatic detection of solar plages in the Coimbra Observatory spectroheliograms, Astronomy and Computing, Vol. 24, p. 70-83.
20. Freij N., Dorotovic I., Morton R. J., Ruderman M. S., Karlovsky V., Erdelyi R., 2016, On the Properties of Slow MHD Sausage Waves within Small-scale Photospheric Magnetic Structures, Astrophysical J., Vol. 817, article id. 44, 10 pp.
19. E. Shahamatnia, I. Dorotovic, J.M. Fonseca, R.A. Ribeiro, 2016. An evolutionary computation based algorithm for calculating solar differential rotation by automatic tracking of coronal bright points. Journal of Space Weather and Space Climate, Journal of Space Weather and Space Climate 6 (27), A16.
18. E. Shahamatnia, I. Dorotovic, A. Mora, R.A. Ribeiro, and J.M. Fonseca, 2014. Data inconsistency in sunspot detection, Intelligent Systems'2014, Advances in Intelligent Systems and Computing, Vol. 323, 2015, pp 567-577.
17. Dorotovic I., Louzada J.L., Rodrigues J.C., Karlovsky V.: 2014, Impact of solar activity on the growth of pine trees, International Journal of Forest Research, 133, 639.
16. Dorotovic, I., Minarovjeh, M., Lorenc, M., Rybansky, M.: 2014, Modified Homogeneous Data Set of Coronal Intensities, Solar Physics, Vol. 289, 2697-2703. DOI: 10.1007/s11207-014-0501-2.
15. Pinter, T., Rybansky, M., Dorotovic, I.: 2014, The polar belts of prominence occurrence as an indicator of the solar magnetic field reversal, In: Proceedings of the International Astronomical Union, IAU Symposium „Nature of Prominences and their role in Space Weather“, Brigitte Schmieder, Jean-Marie Malherbe and S.T Wu. (eds.), Vol. 300, 456-457.
14. Dorotovic, I., Shahamatnia, E., Lorenc, M., Rybanský, M., Ribeiro, R.A. & Fonseca, J.M.: 2013, Sunspots and Coronal Bright Points Tracking using a Hybrid Algorithm of PSO and Active Contour Model, Sun and Geosphere, 9 (2), 81-84.
13. Gonçalves E., Mendes-Lopes N., Dorotovic I., Fernandes J. M., Garcia A.: 2013, North and South Hemispheric Solar Activity for Cycles 21?–?23: Asymmetry and Conditional Volatility of Plage Region Areas, Solar Physics, accepted, DOI: 10.1007/s11207-013-0448-8.
12. Lorenc M., Rybansky M., Dorotovic I.: 2012, On Rotation of the Solar Corona, Solar Physics, Vol. 281, 611.

11. Pinter, T. and Rybansky, M. and Kudela, K. and Dorotovic, I.: 2011, Peculiarities in Evolutions of Cosmic Radiation Level after Sudden Decreases, Sun and Geosphere, vol. 6, p. 23.
10. Shahamatnia E., Dorotovič I., Ribeiro R.A., and Fonseca J.M.: Towards an Automatic Sunspot Tracking: Swarm intelligence and snake model hybrid, *Acta Futura* 5 (2012), ESA-ACT, 153-161, DOI: 10.2420/AF05.2012.153 (published as poster in the 22nd International Joint Conference on Artificial Intelligence (IJCAI)' 16-22 July, Barcelona, Spain).
9. Pintér T., Rybanský M., Kudela K., Dorotovič I.: 2011, Peculiarities in Evolutions of Cosmic Radiation Level after Sudden Decreases, *Sun and Geosphere*, Vol.6, no.1, p.23-26.
8. Firoz K.A., Hwang J., Dorotovič I., Pinter T., and Subhash C. Kaushik: 2011, Relationship of ground level enhancements with solar, interplanetary and geophysical parameters, *Astrophysics and Space Science*, Volume 331, No. 2, p. 469-484.
7. Dorotovič I., Kudela K., Lorenc M., Rybansky M.: 2008, On 17 - 22 January 2005 Events in Space Weather, *Solar Physics*, 250, 339.
6. Rybak J. and Dorotovič I.: 2002, Temporal Variability of the Coronal Green Line Index (1947 – 1998), *Solar Phys.*, 205, 177.
5. Dorotovič I., Sobotka M., Brandt P.N., Simon G.W.: 2002, „Evolution and Motions of Small-scale Photospheric Structures near a Large Solar Pore“, *Astronomy and Astrophysics*, 387, 665.
4. Dorotovič I., Lukac B., Minarovjeh M., Pinter T., Rybansky M. and Sykora J.: 1999, Total Solar Eclipse – Guadeloupe 1998, *Contrib. Astron. Obs. Skalnaté Pleso*, Vol. 128, No. 3, 224.
3. Dorotovič I., Minarovjeh M. and Rybanský M.: 1996, On the Rotation of the Solar Corona, *Astron. Lett. and Communications*, 34, 199.
2. Dorotovič I. and Rybanský M. : 1997, What should be the Colour of the Solar Corona?, *Solar Phys.*, 172, 207.
1. Dorotovič I. : 1996, Area of Polar Coronal Holes and Sunspot Activity: Years 1939 – 1993, *Solar Phys.*, 167,419.

Papers in proceedings of conferences and meetings - published in English:

35. A. Mora, I. Dorotovic, A. Coelho, R. Pires, R. Ribeiro, J. Rybak, 2018, Gradient Path Labeling method used to refine the solar corona differential rotation profile, Proceedings of the 24th National Solar Meeting, ed. I. Dorotovic, Hurbanovo, published on DVD, 26.pdf.
34. T. Barata, S. Carvalho, I. Dorotovic, F. J. G. Pinheiro, A. Garcia, J. Fernandes, A. M. Lourenço, 2018, Automatic detection of chromospheric plages in the Coimbra Observatory spectroheliograms, Proceedings of the 24th National Solar Meeting, ed. I. Dorotovic, Hurbanovo, published on DVD, 25.pdf.
33. I. Dorotovic, J. Rybak, E. Shahamatnia, J. M. Fonseca, R. A. Ribeiro, A. Falcão, S. Carvalho, A. Garcia, T. Barata, J. Fernandes, 2016, Evolution of Solar Activity over a Solar Cycle – Work in Progress, Proceedings of the 23rd National Solar Meeting, ed. I. Dorotovic, Hurbanovo, published on DVD, 10.pdf.
32. A. Falcão, J. da Silva, I. Dorotovic, 2014, Visualization and assisted detection of correlations in solar time-series, Proceedings of the 22nd National Solar Meeting, ed. I. Dorotovic, Hurbanovo, published on CD, 9.pdf.
31. Dolinský P., Dorotovič I., Vidovenec M., 2014, Report on radio observation of meteors (Iža, Slovakia), Proceedings of the International Meteor Conference, Giron, France, 18-21 September 2014; Rault, J.-L. and Roggemans, P. (eds.), IMO, pp. 207-210.
30. Dorotovič I. Rybak J., Garcia A., Journoud P.: 2010, North-south asymmetry of Ca II K regions determined from OAUC spectroheliograms: 1996 – 2006, in Proceedings of the 20th Slovak National Solar Physics Meeting, ed. I. Dorotovič, Hurbanovo, published on DVD, p. 58.
29. P. Surový, I. Dorotovič, V. Karlovsky, J. L. Lousada, J. C. Rodrigues, M. Rybansky, P. Fleischer: 2010, Impact of solar activity on the growth of pine trees (*Pinus cembra*: 1610 – 1970; *Pinus pinaster*: 1910 – 1989), in Proceedings of the 20th Slovak National Solar Physics Meeting, ed. I. Dorotovič, Hurbanovo, published on DVD, p. 184.
28. Dorotovič I., Kudela K., Lorenc M., Pinter T., Rybansky M.: 2009, Evolution of several space weather events connected with Forbush decreases, in Proceedings of the IAU Symposium “*Universal Heliophysical Processes*”, Cambridge Univ. Press, Volume 257, p. 57.
27. Pinter T., Dorotovič I., Rybansky M.: 2009, The heliosphere mass variations: 1996-2006, in

Proceedings of the IAU Symposium “Universal Heliophysical Processes”, Cambridge Univ. Press, Volume 257, p. 291.

26. Surovy P., Ribeiro N. A., Pereira J.S., Dorotovič I.: 2008, Influence of solar activity cycles on cork oak production – a hypothesis, in Proceedings of the 19th National Solar Meeting, ed. I. Dorotovič, Hurbanovo, published on CD, p. 67.
25. Dorotovič I., Pantoquilha M., Viana N. and Moura-Pires J.: 2005, Space Environment Information System for Mission Control Purposes - a Decision Support System for space weather services, in Proceedings of the 17th National Solar Meeting, ed. I. Dorotovič, Hurbanovo, 197.
24. Dorotovič, I., Kudela, K., Lorenc, M., Pinter, T., Rybansky, M., 2009, Forbush decreases of cosmic radiation and connected space weather events, CD Proceedings of the 21st ECRS, 9 – 12 September, 2008, Košice, Slovakia, P. Király, K. Kudela, M. Stehlík, A.W. Wolfendale (eds.), paper No. 3.25, 284.
23. Pinter, T., Dorotovič, I. Rybansky, M.: 2009, The heliosphere mass variations: 1996-2006, in Proc. IAU Symposium No. 257, Universal Heliophysical Processes, N. Gopalswamy, D. F. Webb (eds.), Cambridge Univ. Press, Vol. 257, p. 291.
22. Dorotovič, I., Kudela, K., Lorenc, M., Pinter, T., Rybansky, M.: 2009, Evolution of several space weather events connected with Forbush decreases, in Proc. IAU Symposium No. 257, Universal Heliophysical Processes, N. Gopalswamy, D. F. Webb (eds.), Cambridge Univ. Press, Vol. 257, p. 57.
21. Dorotovič I., Erdelyi R., Karlovský V.: 2008, Identification of Linear Slow Sausage Waves in Magnetic Pores, in Proc. IAU Symposium No. 247, Waves & Oscillations in the Solar Atmosphere: Heating and Magneto-Seismology, R. Erdélyi and C.A. Mendoza-Briceno (eds.), Cambridge Univ. Press, Vol. 247, p. 351.
20. I. Dorotovič, P. Journoud, J. Rybak, J. Sykora: 2007, North-South Asymmetry of Ca II K Plages, in Proc. Coimbra Solar Physics Meeting on The Physics of Chromospheric Plasmas - Petr Heinzel, Ivan Dorotovič and Robert J. Rutten, eds., ASP Conference Series, Vol. 368, 527.
19. I. Dorotovič, J. Fernandes, J.M. Fonseca, A. Mora, C. Moreira, R.A. Ribeiro: 2007, COSIS: Coimbra Solar Information System, in Proc. Coimbra Solar Physics Meeting on The Physics of Chromospheric Plasmas - Petr Heinzel, Ivan Dorotovič and Robert J. Rutten, eds., ASP Conference Series, Vol. 368, 523.
18. T. Pinter, M. Rybansky, I. Dorotovič: 2007, Chromospheric Filament Network and Coronal Streamers, in Proc. Coimbra Solar Physics Meeting on The Physics of Chromospheric Plasmas - Petr Heinzel, Ivan Dorotovič and Robert J. Rutten, eds., ASP Conference Series, Vol. 368, 355.
17. Dorotovič I. and Vörös Z.: 2006, Magnetic turbulence in the solar wind and the Earth's plasma sheet, in Proc. of the 15th portuguese National Meeting "2005 Past Meets Present in Astronomy and Astrophysics", World Scientific, 13.
16. Dorotovič I. and Vörös Z.: 2005, On the Earth's plasma sheet response to the magnetic turbulence in the solar wind, in Proceedings of the 11th European Solar Physics Meeting - The Dynamic Sun: Challenges for Theory and Observations, 11-16 September 2005, Leuven, Belgium (ESA SP-600), eds. D. Danesy, S. Poedts, A. De Groof and J. Andries, 148.1.
15. Dorotovič I., Pantoquilha M., Viana N. and Moura-Pires J.: 2004, Space Environment Information System for Mission Control Purposes - a Decision Support System based on an architecture for space weather services, in Multi-Wavelength Investigations of Solar Activity, Proceedings IAU Symposium No. 223, eds. A.V. Stepanov, E.E. Benevolenskaya and A.G. Kosovichev, DOI: 10.1017 /S1743921304006799, 545.
14. Dorotovič I. and Vörös Z.: 2004, Examining the role of turbulence in the solar wind – magneto-sphere interaction processes, in Multi-Wavelength Investigations of Solar Activity, Proceedings IAU Symposium No. 223, eds. A.V. Stepanov, E.E. Benevolenskaya and A.G. Kosovichev, DOI: 10.1017 /S1743921304006763, 537
13. Voros, Z., Pastorek, L., Dorotovič I.: 2003, „Multi-scale aspects of solar cycle variability“, in Solar variability as an input to the Earth's environment. International Solar Cycle Studies (ISCS) Symposium, ESA SP-535, ed. A. Wilson, 173.
12. Simon G.W., Dorotovič I., Sobotka M., Brandt P.N.: 2002, „Evolution of Filamentary Structures in and around a large Solar Pore“, American Astronomical Society Meeting 200, 38.03.
11. Pastorek L., Pinter T. and Dorotovič I.: 1996, „125 Years from the First Sunspot Observation in Hurbanovo“, in JOSO Annual Report 1996, ed. M. Saniga, Tatranská Lomnica, 72.

10. Lorenc M. and Dorotovič I.: 2002, „Correlation between Some Irradiance Indices during the Rising Phase of the Solar Cycle 23“, in *Solar Variability: From Core to Outer Frontiers*, ESA SP-506, ed. A. Wilson, 165.
9. Dorotovič I., Sobotka M., Brandt P.N., Simon G.W.: 2002, „Evolution of Small-scale in and around a Large Solar Pore“, in *Solar Variability: From Core to Outer Frontiers*, ESA SP-506, ed. A. Wilson, 435.
8. Dorotovič I. and Rybak J.: 2003, „Green corona versus photospheric magnetic flux: solar cycle dependence“, in *Solar variability as an input to the Earth's environment. International Solar Cycle Studies (ISCS) Symposium*, ESA SP-535, ed. A. Wilson, 87.
7. Dorotovič I., Pinter T. and Rybansky M.: 2003, „Polarization of the Solar Corona in the 530.3 nm Emission Line“, in *ASP Conf. Series*, eds. J. Trujillo Bueno and J. Sánchez Almeida, Vol. 307, 493.
6. Dorotovič I., Lukac B., Pinter T. and Rybansky M.: 1997, „A New Station of Patrol Prominence Observations in Slovakia, in *New Perspectives on Solar Prominences*, ed. D. Webb, Astron. Soc. of the Pacific Conf. Series, Vol. 150, IAU Colloquium 167, 499.
5. Dorotovič I., Lukac B., Minarovjech M. and Rybansky M.: 1998, „Attempts to Determine the Colour of Solar Corona during the 1994, 1995 & 1997 Eclipses“, in *Solar Jets and Coronal Plumes*, ed. T.-D. Guyenne, ESA SP-421, 263.
4. Dorotovič I., Lukac B., Minarovjech M. and Rybansky M.: 1996, „The Indication of Neutral Hydrogen in the Solar Corona“, in *Theoretical and Observational Problems related to Solar Eclipses*, ed. Z. Mouradian, M. Stavinschi, NATO ASI Series, Kluwer Academic Publishers, Dordrecht, 494, 189.
3. Dorotovič I., Lukac B. and Pinter T.: 1997, „Green Corona and Geomagnetic Activity in Solar Cycles 18 - 22“, in *Correlated Phenomena at the Sun, in the Heliosphere and in Geospace*, ed. A. Wilson, ESA SP-415, 419.
2. Dorotovič I., Lukac B. and Pinter T.: 1997, „Solar Prominences and Geomagnetic Activity Over the Period 1967 – 1996“, in *Correlated Phenomena at the Sun, in the Heliosphere and in Geospace*, ed. A. Wilson, ESA SP-415, 413.
1. Dorotovič I. and Voros Z.: 1996, „On Self-organized Criticality Approach to the Solar Activity edit Periodicities“, in *JOSO Annual Report 1996*, ed. M. Saniga, Tatranska Lomnica, 59.

Portuguese National Astronomy and Astrophysics Meetings - published in English:

XXI ENAA, Coimbra, 7 – 10 September, 2011

6. Dorotovič I., Rybák J., Garcia A., Journoud P.: North-south asymmetry of Ca II K regions determined from OAUC spectroheliograms: 1996 – 2006, Proceedings published on CD.

XV. ENAA, Lisbon, 28 - 30 July, 2005

5. Dorotovič I.; Voros, Z.: Magnetic Turbulence in the solar wind and the earth's plasma sheet, 2005: in: "Past Meets Present in Astronomy and Astrophysics". Proceedings of the 15th Portuguese National Meeting, 2006, WSPC, p. 13.

XIV ENAA, Angra do Heroísmo, Terceira, Açores, 22 – 23 July, 2004 - in Proc. of the 14th Portuguese National Meeting on Astronomy and Astrophysics, 2004, published on CD:

4. Dorotovič I., Pantoquilha M., Viana N.: Space Environment Information System for Mission Control Purposes - a Decision Support System based on an architecture for space weather services.
3. Dorotovič I., Journoud P.: N-S Asymmetry of the Solar Activity – Area of Polar Coronal Holes and Chromospheric Plages
2. Dorotovič I., Journoud P.: Horizontal Plasma Motions around a Solar Pore
1. Dorotovič I.: Space Weather – Effects and Services (review)

Papers in proceedings of conferences and meetings - published in Slovak:

36. I. Dorotovic, L. Pastorek, 2018, Total solar eclipse 2017 – Columbia (MO, USA), Proceedings of the 24th National Solar Meeting, ed. I. Dorotovic, Hurbanovo, published on DVD, 29.pdf.
35. I. Dorotovic, M. Rybansky: Differential rotational profile of the solar corona determined using the cross-correlation method, Proceedings of the 24th National Solar Meeting, ed. I. Dorotovic, Hurbanovo, published on DVD, 27.pdf.
34. I. Dorotovic, J. Karlovsky, V. Karlovsky, 2018, Selected solar radio bursts in the years 2016-2017 registered by radio spectrometers in Hurbanovo and Hlohovec, Proceedings of the 24th National Solar Meeting, ed. I. Dorotovic, Hurbanovo, published on DVD, 18.pdf.

33. I. Dorotovic, J. Karlovsky, V. Karlovsky, 2016, Solar radio spectrometers in Slovakia - report on the status of registration of solar radio bursts, Proceedings of the 23rd National Solar Meeting, ed. I. Dorotovic, Hurbanovo, published on DVD, 41.pdf.
32. I. Dorotovic, M. Rybansky, 2016, Variations of the solar EUV radiation in the range of wavelengths from 26 nm to 34 nm (1944 – 2015), Proceedings of the 23rd National Solar Meeting, ed. I. Dorotovic, Hurbanovo, published on DVD, 8.pdf.
31. I. Dorotovic, M. Rybansky, 2016, On rotation of the solar surface, Proceedings of the 23rd National Solar Meeting, ed. I. Dorotovic, Hurbanovo, published on DVD, 7.pdf.
30. I. Dorotovic, M. Lorenc, M. Rybansky, 2014, Variations of the EUV radiation of the Sun during a solar activity cycle, Proceedings of the 22nd National Solar Meeting, ed. I. Dorotovic, Hurbanovo, published on CD, 22.pdf.
29. I. Dorotovic, M. Lorenc, M. Rybansky, 2014, Solar rotation and flows in the solar corona, Proceedings of the 22nd National Solar Meeting, ed. I. Dorotovic, Hurbanovo, published on CD, 21.pdf.
28. I. Dorotovic, J. L. Lousada, J. C. Rodrigues, V. Karlovsky, 2014, Influence of solar activity on the growth and wood density of pine trees, Proceedings of the 22nd National Solar Meeting, ed. I. Dorotovic, Hurbanovo, published on CD, 8.pdf.
27. I. Dorotovic, T. Pinter, 2012, SID monitoring in Slovakia, Proceedings of the 21st National Solar Meeting, ed. I. Dorotovic, Hurbanovo, published on CD, 29.pdf.
26. I. Dorotovic, T. Pinter, 2012, Solar radio spectrometer CALLISTO in Hurbanovo – first results, Proceedings of the 21st National Solar Meeting, ed. I. Dorotovic, Hurbanovo, published on CD, 28.pdf.
25. M. Rybansky, I. Dorotovic, M. Lorenc, E. Shahamatnia, R. A. Ribeiro, J. M. Fonseca, 2012, Searching for a jet stream, Proceedings of the 21st National Solar Meeting, ed. I. Dorotovic, Hurbanovo, published on CD, 19.pdf.
24. I. Dorotovic, J. Rybak, A. Garcia, P. Journoud, 2012, North-south asymmetry of the Ca II K3 regions as estimated from the spectroheliograms, Proceedings of the 21st National Solar Meeting, ed. I. Dorotovic, Hurbanovo, published on CD, 10.pdf.
23. Dorotovič I., Trigo I., 2010, Influence of solar activity on modes of tropospheric circulation variability, in Proceedings of the 20th Slovak National Solar Physics Meeting, ed. I. Dorotovič, Hurbanovo, published on DVD, p. 180.
22. M. Rybansky, I. Dorotovič, T. Pinter, K. Kudela, 2010, Peculiarities of the level of cosmic radiation after sudden decreases, in Proceedings of the 20th Slovak National Solar Physics Meeting, ed. I. Dorotovič, Hurbanovo, published on DVD, p. 169.
21. Lorenc M., Karlovsky V., Dorotovič I.: 2008, Variations of solar radiation versus CME in the 23rd solar cycle, in Proceedings of the 19th National Solar Meeting, ed. I. Dorotovič, Hurbanovo, published on CD, p. 53.
20. Karlovsky V., Lorenc M., Dorotovič I.: 2008, Wavelet analysis of variations of solar radiation in the 23rd solar cycle, in Proceedings of the 19th National Solar Meeting, ed. I. Dorotovič, Hurbanovo, published on CD, p. 57.
19. Dorotovič I.: 2008, Space weather: solar wind and Earth's magnetosphere (review paper), in Proceedings of the 19th National Solar Meeting, ed. I. Dorotovič, Hurbanovo, published on CD, p. 120.
18. Dorotovič I., Lorenc M., Kudela K., Rybansky M.: 2008, Strong space weather events in January 2005, in Proceedings of the 19th National Solar Meeting, ed. I. Dorotovič, Hurbanovo, published on CD, p. 131.
17. Dorotovič I., Erdelyi R., Karlovsky V.: 2008, On identification of magneto-acoustic gravitational waves in solar pores, in Proceedings of the 19th National Solar Meeting, ed. I. Dorotovič, Hurbanovo, published on CD, p. 16.
16. Dorotovič I. and Voros Z.: 2006, Statistical study of turbulent processes in the solar wind and the Earth's magnetosphere, in Proceedings of the 18th National Solar Meeting, ed. I. Dorotovič, Hurbanovo, published on CD, 25.pdf.
15. Dorotovič I., Fernandes J., Fonseca J.M., Moreira C., Ribeiro R.A.: 2006, COSIS: Coimbra Observatory Solar Information System, in Proceedings of the 18th National Solar Meeting, ed. I. Dorotovič, Hurbanovo, published on CD, 37.pdf.
14. Pastorek L., Lukac B., Dorotovič I. and Garcia A.: 2005, Impulse of the solar activity October –

- November 2003, in Proceedings of the 17th National Solar Meeting, ed. I. Dorotovič, Hurbanovo, 212.
13. Dorotovič I. and Voros Z.: 2005, Geomagnetic response and cosmic rays: October – November 2003, in Proceedings of the 17th National Solar Meeting, ed. I. Dorotovič, Hurbanovo, 216.
 12. Dorotovič I. and Voros Z.: 2005, On the relation of the intermittency of turbulence in the solar wind and the Earth's magnetosphere, in Proceedings of the 17th National Solar Meeting, ed. I. Dorotovič, Hurbanovo, 179.
 11. Dorotovič I. and Rybak J.: 2005, On the variability of relation of the green line coronal intensity and the photospheric magnetic flux, in Proceedings of the 17th National Solar Meeting, ed. I. Dorotovič, Hurbanovo, 146.
 10. Dorotovič I., Sobotka M., Brandt P.N., Simon G.W.: 2002, „Temporal Evolution and Motions of Small-scale Structures near a Solar Pore“, in Proceedings of the 16th National Solar Meeting, ed. I. Dorotovič, Hurbanovo, 82.
 9. Dorotovič I., Lukac B., Minarovjech M. and Rybansky M.: 1996, „Colour and Degree of Ionization of the Corona“, in Proceedings of the 13th National Solar Meeting, ed. B. Lukac, Hurbanovo, 88.
 8. Dorotovič I. and Voros Z.: 1996, „Alternative Method of Estimation of Periodicities of the Solar and the Geomagnetic Activity“, in Proceedings of the 13th National Solar Meeting, ed. B. Lukac, Hurbanovo, 144.
 7. Dorotovič I. and Lukac B.: 1999, „Intensity of the Green Corona and Geomagnetic Activity in Cycles 18 - 22“, in Proceedings of the 14th National Solar Meeting, ed. B. Lukáč, Hurbanovo, 199.
 6. Dorotovič I. and Lukac B.: 1999, „Occurrence of Solar Prominences and Geomagnetic Activity in Years 1967 – 1996“, in Proceedings of the 14th National Solar Meeting, ed. B. Lukac, Hurbanovo, 196.
 5. Dorotovič I. and Lukac B.: 1992, „Local Oscillations in the Solar Photosphere“, in Proceedings of the 10th National Solar Meeting, ed. B. Lukac, Hurbanovo, 21.
 4. Dorotovič I. and Lorenc M.: 2002, „Variations of the Solar Irradiance in Selected Spectral Regions during the Rising Phase of the Solar Cycle 23“, in Proceedings of the 16th National Solar Meeting, ed. I. Dorotovič, Hurbanovo, 82.
 3. Dorotovič I. and Lorenc M.: 1995, „Daily Variations of Parameters of Telluric Lines of O₂“, in Proceedings of the 12th National Solar Meeting, ed. B. Lukac, Hurbanovo, 28.
 2. Dorotovič I.: 1999, „N-S Asymetry of the Area of Polar Coronal Holes in the Green Corona“, in Proceedings of the 14th National Solar Meeting, ed. B. Lukac, Hurbanovo, 180.
 1. Dorotovič I.: 1996, „Area of Polar Coronal Holes and Prediction of the Solar Activity“, in Proceedings of the 13th National Solar Meeting, ed. B. Lukac, Hurbanovo, 135.

Unpublished contributions in meetings:

Conference OPTIMIZATION 2011, Departamento de Matemática da FCT/UNL, Monte de Caparica, Portugal:

8. Shahamatnia E., Dorotovič I., Ribeiro R.A., Fonseca J.M.: Particle Swarm Optimization Hybrid: A Case study of Sunspot Studies.

JENAM, The European Week of Astronomy and Space Science, 6 - 10 September, 2010, Lisbon, Portugal:

6. I. Dorotovič, J. Rybák, A. Garcia, P. Journoud: North-south asymmetry of Ca II K regions determined from OAUC spectroheliograms: 1996 - 2006
5. I. Dorotovič, I. Trigo: Solar activity and atmospheric circulation fields
4. P. Surový, I. Dorotovič, V. Karlovský, J. C. Rodrigues, M. Rybanský, P. Fleischer: Solar activity versus growth of the cembra pine (*Pinus cembra*)

European Geosciences Union, General Assembly, Vienna, Austria, 2-7 May 2010:

3. Dorotovič I., Trigo I.: Influence of solar activity on modes of tropospheric circulation variability

XVI Encontro Nacional de Astronomia e Astrofísica, Espinho, Portugal, 21 – 22 July 2006:

2. Dorotovič, I., Fernandes, J., Fonseca, J. M., Mora, A., Moreira, C., Ribeiro, R. A., 2007, COSIS: Coimbra Observatory Solar Information System

5th International conference on optimization (Optimization 2004), Lisbon, Portugal, 25 – 28 July 2004:

1. Dorotovič I., Pereira A., Viana N., Kovačević J., Ribeiro R.A., Varas F.J., Donati A.: Solar Array Degradation: A Monitoring and Predictive Tool