

### List of publications related to the project:

1. [Guineva V., I. Despirak, R. Werner, R. Bojilova, L. Raykova, Study of mid-latitude positive bays during substorms over Scandinavia – a case study](#), Proceedings of the XLIV Annual Seminar “Physics of Auroral Phenomena”, 15-19.03.2021, Apatity, Russia, pp.28-31, 2021, ISSN: 2588-0039, DOI: 10.51981/2588-0039.2021.44.006 <http://pgia.ru/seminar/archive/>
2. [Despirak I.V., N.G. Kleimenova, A.A. Lubchich, P.V. Setsko, R. Werner, Supersubstorm on 28 May 2011 – geomagnetic effects in the global scale](#), Proceedings of the XLIV Annual Seminar “Physics of Auroral Phenomena”, 15-19.03. 2021, Apatity, Russia, pp.12-15, 2021, ISSN: 2588-0039, DOI: 10.51981/2588-0039.2021.44.002, <http://pgia.ru/seminar/archive/>
3. [Любчич А.А., И.В.Дэспирак, Н.Г.Клейменова, Р.Вернер, Суперсуббурия 20 декабря 2015 года: магнитные эффекты на разных широтах](#), Proc. XLIV Annual Seminar “Physics of Auroral Phenomena”, Apatity, 2021, pp. 36-41, 2021, ISSN: 2588-0039, DOI: 10.51981/2588-0039.2021.44.008, <http://pgia.ru/seminar/archive/>
4. [Despirak I.V., P.V. Setsko, Ya.A. Sakharov, V.N. Selivanov, GICS in the main transmission line “Northern transit” in Russia in the Mäntsälä Finland pipeline: a case study](#), Proceedings of the XLIV Annual Seminar “Physics of Auroral Phenomena”, 15-19.03.2021, Apatity, Russia, pp.20-23, 2021, ISSN: 2588-0039, DOI: 10.51981/2588-0039.2021.44.004, <http://pgia.ru/seminar/archive/>
5. [Guineva V., R. Werner, I. Despirak, R. Bojilova, L. Raykova, Mid-latitude positive bays during substorms by quiet and disturbed conditions](#), C. R. Acad. Bulg. Sci., 74(8), pp.1185-1193, 2021, DOI: 10.7546/CRABS.2021.08.10, SNIP=0.353, SJR=0.244, CiteScore=0.90, IF=0.378, ISSN print:1310-1331, ISSN online: 2367-5535, [http://www.proceedings.bas.bg/index\\_old.html](http://www.proceedings.bas.bg/index_old.html)
6. [Werner, R., V. Guineva, A. Atanassov, R. Bojilova, L. Raykova, D. Valev, A. Lubchich, I. Despirak, Calculation of the horizontal power perturbations of the Earth surface magnetic field](#), Proceedings of the Thirteenth Workshop "Solar Influences on the Magnetosphere, Ionosphere and Atmosphere" Primorsko, Bulgaria, 13 - 17 September 2021, Book of proceedings, pp.159-164, doi:10.31401/WS.2021.proc, ISSN: 2367-7570, <https://www.spaceclimate.bas.bg/ws-sozopol/pdf/Proceedings2021Final.pdf>
7. [Guineva V., R. Werner, A. Atanassov, R. Bojilova, L. Raykova, D. Valev, Characteristics of the midlatitude effects of different substorms](#), Proceedings of the Thirteenth Workshop "Solar Influences on the Magnetosphere, Ionosphere and Atmosphere" Primorsko, Bulgaria, 13 - 17 September 2021, pp.135-140, doi:10.31401/WS.2021.proc , ISSN: 2367-7570, <https://www.spaceclimate.bas.bg/ws-sozopol/pdf/Proceedings2021Final.pdf>
8. [Kleimenova N.G., I.V.Despirak, L.M.Malysheva, L.I.Gromova, A.A.Lubchich, Polar Substorm, Svalbard auroras and mid-latitude positive magnetic bays: Case study](#), Proceedings of the Thirteenth Workshop "Solar Influences on the Magnetosphere, Ionosphere and Atmosphere" Primorsko, Bulgaria, 13 - 17 September 2021, pp.141-146, doi:10.31401/WS.2021.proc , ISSN: 2367-7570, <https://www.spaceclimate.bas.bg/ws-sozopol/pdf/Proceedings2021Final.pdf>
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10. [Guineva, V., R. Werner, A. Lubchich, A. Atanassov, R. Bojilova, L. Raykova, D. Valev, I. Despirak, Development of a substorms catalog including the MPB observed at](#)

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11. [Guineva V., R. Werner, A. Atanassov, R. Bojilova, L. Raykova, D. Valev, I. Despirak, N. Kleimenova, Construction of a catalog of the magnetic variations by data of the Bulgarian station Panagjurishte, Proceedings of the Seventeenth International Scientific conference SES2021, 20-22.10.2021](#), Sofia, Bulgaria, pp.39-44, 2021, p-ISSN: 2603-3313, e-ISSN: 2603-3321, [http://space.bas.bg/SES/archive/SES%202021\\_DOKLADI/1\\_Space%20Physics/4\\_Guineva.pdf](http://space.bas.bg/SES/archive/SES%202021_DOKLADI/1_Space%20Physics/4_Guineva.pdf)
  12. [Werner R., V. Guineva, A. Lubchich, I. Despirak, R. Bojilova, D. Valev, A. Atanassov, L. Raykova, Determination of power perturbations of the horizontal magnetic field on the Earth surface, Proceedings of the Seventeenth International Scientific conference SES2021, 20-22.10.2021](#), Sofia, Bulgaria, pp.34-38, 2021, p-ISSN: 2603-3313, e-ISSN: 2603-3321, [http://space.bas.bg/SES/archive/SES%202021\\_DOKLADI/1\\_Space%20Physics/3\\_Werner.pdf](http://space.bas.bg/SES/archive/SES%202021_DOKLADI/1_Space%20Physics/3_Werner.pdf)
  13. [Despirak I. V., N. G. Kleimenova, L. I. Gromova, A. A. Lubchich, V. Guineva, and P. V. Setsko, Spatial features of a super substorm in the main phase of the magnetic storm of April 5, 2010](#), Bulletin of the Russian Academy of Sciences: Physics, 2022, Vol. 86, No. 3, pp. 249–255, <https://doi.org/10.3103/S106287382203008X>, Russian Text published in Izvestiya Rossiiskoi Akademii Nauk, Seriya Fizicheskaya, 2022, Vol. 86, No. 3, pp. 322–328, IF=0.476, SJR=0.23, Q3, CiteScore=0.8, ISSN print: 1062-8738, ISSN on line: 1934-9432, <https://doi.org/10.31857/S0367676522030085>
  14. [Guineva V., R. Werner, R. Bojilova, A. Atanassov, L. Raykova, D. Valev, Maps of the spatial distribution of the variations in the X and Y components of the magnetic field at European midlatitudes during substorms: a case study, Proceedings of the Fourteenth Workshop "Solar Influences on the Magnetosphere, Ionosphere and Atmosphere"](#) Primorsko, Bulgaria, 06 - 10 June 2022, pp.22-28, ISSN: 2367-7570, doi: 10.31401/ws.2022.proc, <https://www.spaceclimate.bas.bg/ws-sozopol/pdf/Proceedings2022.pdf>
  15. [Kleimenova N.G., I.V. Despirak, L.M. Malysheva, L.I. Gromova, A.A., Gromov S.V., Lubchich, V. Guineva, R. Werner, Morning polar substorms and their possible mid-latitude effects: Case study](#), Proceedings of the Fourteenth Workshop "Solar Influences on the Magnetosphere, Ionosphere and Atmosphere" Primorsko, Bulgaria, 06 - 10 June 2022, pp.35-40, ISSN: 2367-7570, doi: 10.31401/ws.2022.proc, <https://www.spaceclimate.bas.bg/ws-sozopol/pdf/Proceedings2022.pdf>
  16. [Despirak I.V., A.A. Lubchich, N.G. Kleimenova, P. V. Setsko, R. Werner, Supersubstorm on 20 December 2015: spatial geomagnetic effects](#), Proceedings of the Fourteenth Workshop "Solar Influences on the Magnetosphere, Ionosphere and Atmosphere", Primorsko, Bulgaria, 06 - 10 June 2022, pp. 10-15, ISSN: 2367-7570, doi: 10.31401/ws.2022.proc, <https://www.spaceclimate.bas.bg/ws-sozopol/pdf/Proceedings2022.pdf>
  17. [Gromova L.I., Kleimenova N.G., Despirak I.V., Gromov S.V., Lubchich A.A., Malysheva L.M. Polar geomagnetic disturbances and auroral substorms during the magnetic storm on 20 April 2020](#), Proceedings of Fourteenth Workshop "Solar influences on the magnetosphere, ionosphere and atmosphere", Primorsko, Bulgaria, 06-10 June 2022, ISSN 2367-7570, pp.16-21, DOI: 10.31401/WS.2022.proc, <https://www.spaceclimate.bas.bg/ws-sozopol/pdf/Proceedings2022.pdf>

18. [Guineva V., R. Werner, A. Atanassov, R. Bojilova, L. Raykova, D. Valev, Assessment of some substorm parameters based on the midlatitude positive bays and the MPB index maxima](#), Proceedings of the Eighteenth International Scientific conference SES2022, 19-21.10.2022, Sofia, Bulgaria, pp.33-38, 2022, p-ISSN: 2603-3313, e-ISSN: 2603-3321, [http://space.bas.bg/SES/archive/SES%202022\\_DOKLADI/1\\_Space%20Physics/5\\_Guineva.pdf](http://space.bas.bg/SES/archive/SES%202022_DOKLADI/1_Space%20Physics/5_Guineva.pdf)
19. [Despirak I.V., Kleimenova N.G., Gromova L. I., Lubchich A.A. Spatial features of electrojets development during non-storm supersubstorms: Case study](#) // Proceedings of Eighteenth international scientific conference “Space, Ecology, Safety”, 19-21 October 2022, Sofia, Bulgaria, pp.28-32, 2022, ISSN 2603-3321, [http://space.bas.bg/SES/archive/SES%202022\\_DOKLADI/1\\_Space%20Physics/4\\_Despirak.pdf](http://space.bas.bg/SES/archive/SES%202022_DOKLADI/1_Space%20Physics/4_Despirak.pdf)
20. [Werner R., V.Guineva, I.V. Despirak, A.A. Lubchich, P.V. Setsko, A. Atanassov, R. Bojilova, L. Raykova, D. Valev, Statistical studies of the auroral activity and the magnetic field variations at midlatitudes](#). Geomagnetism and Aeronomy, 2023, Vol. 63, No. 4, pp. 473–485, <https://doi.org/10.1134/S0016793223600303> (Р. Вернер, В.Х. Гинева, И.В. Дэспирак, А.А. Любчич, П.В. Сецко, А. Атанасов, Р. Божилова, Л. Райкова, Д. Валев, Статистические исследования авроральной активности и возмущений геомагнитного поля на средних широтах, Геомагнетизм и аэрномия, т. 63, № 4, 2023, сс. 520-533
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22. [Kleimenova N.G., Despirak I.V., Malysheva L.M., Gromova L.I., A.A. Lubchich A.A., Gromov S.V., Morning polar magnetic bays and their mid-latitude effects:case study](#) // “Physics of Auroral Phenomena”, Proc. XLV Annual Seminar, Apatity, P.20-23, 2022, DOI: 10.51981/2588-0039.2022.45.004, ISSN 2588-0039, <http://pgia.ru/seminar/archive/>
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25. Despirak, I.V., Kleimenova, N.G., Lyubchich, A.A., Setsko P.V., Gromova L.I., Werner R., Global Development of the Supersubstorm of May 28, 2011. Geomagn. Aeron. **62**, 199–208, 2022. <https://doi.org/10.1134/S0016793222030069> (Дэспирак И.В., Клейменова Н.Г., Любчич А.А., Сецко П.В., Громова Л.И., Вернер Р. Глобальное развитие суперсуббури 28 мая 2011 года // Геомагнетизм и Аэрномия, Т.62, №3, С.325–335, 2022. <https://doi.org/10.31857/S0016794022030063>
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  31. [Bojilova, R., & Mukhtarov, P. Investigation of Dst variations in X component at mid-latitudes during three geomagnetic stormsonFebruary 2022, submitted to Proceedings of Science \(PoS\), presented at BPU11](#)