

**Program****Physical Sciences  
May 10, 2023, Wednesday****Zoom link:**<https://us06web.zoom.us/j/86953847258?pwd=REVVVWtHSEsxc2xyUDZDcy9XMFY5QT09>**Meeting ID:** 869 5384 7258**Passcode:** 987195**Session 1. Chair – Milinevsky G.P., Zalizovski A.V. (15:00–18:30, Kyiv Time, UT+3h)**

<b>Time</b>	<b>Presenter and co-authors. Title</b>
15:00– 15:20	<u>O. V. Koloskov, A. S. Kashcheyev, O. V. Bogomaz, A. O. Sopin, A. V. Zalizovski</u> <b>Implementation of OX polarization modes separation for vertical sounding of the ionosphere at Ukrainian Antarctic Akademik Vernadsky station</b>
15:20– 15:40	<u>M.O. Reznychenko, D.V. Kotov, O.V. Bogomaz, O.V. Koloskov V.M. Lisachenko</u> <b>Ionospheric response to some moderate geomagnetic storms over Ukrainian Antarctic station and magnetically conjugate region</b>
15:40– 16:00	<u>A.I. Reznychenko, O.V. Koloskov, A.V. Zalizovski, V.M. Lisachenko, Y.M. Yampolski, M. Pozoga, O.V. Budanov, S.B. Kashcheyev, I.I. Pikulik</u> <b>Upgrading the network of internet-controlled Doppler HF receivers for geospacer research</b>
16:00– 16:20	<u>O.V. Koloskov, A.V. Zalizovski, Y.M. Yampolski, A.V. Shvets</u> <b>On the prospects of geospace observations at Ukrainian Antarctic Akademik Vernadsky station</b>
16:20– 16:40	<u>O.V. Koloskov, Y.M. Yampolski, O.V. Budanov</u> <b>Multiposition ELF observation of lightning caused by the Tonga volcanic eruption</b>
<b>16:40– 17:00</b>	<b>Coffee break (16:40–17:00)</b>
17:00 17:20	<u>V.M. Lisachenko, A.V. Zalizovski, O.V. Koloskov, Y.M. Yampolski, S.B. Kashcheyev, B.Y. Gavrylyuk, A.O. Sopin, O.V. Budanov, A.S. Kashcheyev</u> <b>Climatic changes in the ionosphere over the Antarctic Peninsula according to the data of long-term vertical sounding of the ionosphere at Akademik Vernadsky station</b>
17:20– 17:40	<u>A.V. Shvets, O. Bogomaz, O.V. Koloskov, A.A. Shvets, Yu.M. Yampolski, Y. Hobara, M. Hayakawa</u> <b>Three-position measurements of VLF atmospherics: onboard the research vessel <i>Noosfera</i>, at Vernadsky station and at an observatory in Ukraine</b>
17:40– 18:00	<u>A.V. Zalizovski, Y.M. Yampolski, O.V. Koloskov, S.B. Kashcheyev, V.M. Lisachenko, O.Shvets, A.S. Kashcheyev, O. V. Bogomaz</u> <b>RF measurements on board the Ukrainian research vessel <i>Noosfera</i></b>
18:00– 18:20	<u>Yu.M. Yampolski, O.V. Koloskov, O.V. Budanov, and V.E. Korepanov</u> <b>TWENTY YEARS OF ELF ELECTROMAGNETIC FIELD MONITORING IN ANTARCTICA AT VERNADSKY STATION (REVIEW)</b>
	<b>Poster's presentation and Discussion</b>
18:20– 18:30	<u>A.M. Gulisano, L. Alfonsi, N. Bergeot</u> <b>The proposal for a New SCAR Programme Planning Group: AGATA</b>

May 11, 2023, Thursday

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**Session 2. Chairs – Milinevsky G.P., Krakovska S. V. (09:00–13:00, Kyiv Time, UT+3h)**

<b>Time</b>	<b>Presenter and co-authors. Title</b>
09:00– 09:20	<u>A. Chyhareva</u> , S. Krakovska <b>Year of Polar Prediction in the Southern Hemisphere at Vernadsky station: preliminary results on cloud characteristics from the radiosounding measurements and modelling</b>
09:20– 09:40	<u>S. González-Herrero</u> , F. Vasallo, J. Bech4, I. Gorodetskaya, B. Elvira, A. Justel <b>Synoptic conditions of the extreme precipitation records in Antarctica</b>
09:40– 10:00	<u>V.M. Komorin</u> , Yu.I. Popov, Yu.M. Dikhanov, V.M. Bolshakov, A.V. Matveev <b>Hydrological structure of water areas adjacent to Akademik Vernadsky station</b>
10:00– 10:20	<u>S.V. Krakovska</u> , A.Yu. Chyhareva <b>Rain fraction of precipitation during the 21<sup>st</sup> century as an indicator of climate change in the Antarctic Peninsula region</b>
10:20– 10:40	V.E. Tymofeyev, <u>Ya.V. Kykhtenko</u> <b>On the role of geophysical and atmospheric factors in the climate of the western Antarctic region</b>
<b>10:40– 11:00</b>	<b>Coffee break (10:40–11:00)</b>
11:00 11:20	<u>Y. Andrienko</u> , G. Milinevsky, J. Shanklin, A. Grytsai, O. Evtushevsky, Y. Shi, O. Ivaniha <b>Umkehr ozone altitude profiles before and during ozone hole times over Faraday/Vernadsky Antarctic station</b>
11:20– 11:40	Y. Shi, O. Ivaniha, <u>G. Milinevsky</u> , O. Evtushevsky, A. Grytsai, W. Han, A. Klekociuk, Y. Wang, X. Wang <b>The Rossby wave 2000-2021 climatology in the Arctic during sudden stratospheric warmings</b>
11:40– 12:00	<u>A.V. Paznukhov</u> , Yu. M. Yampolsky <b>Temperature trends for high-latitude regions of Europe and Antarctica</b>
12:00– 12:20	<u>K. Terletska</u> , V. Maderich <b>Transformation of the internal solitary waves beneath ridged ice</b>
12:20 12:40	<u>M. Savenets</u> , L. Pysarenko, S. Krakovska, D. Pishniak, A. Evchun, I. Parnikoza <b>Differences and similarities in local temperatures at a microscale in the maritime Antarctica</b>
12:40– 13:00	<u>A. Grytsai</u> , G. Milinevsky, O. Ivaniha <b>Large-area ozone holes over Antarctica in the last three years: morphology and possible causes</b>
<b>13:00– 14:00</b>	<b>Launch break (13:00–14:00)</b>

**Zoom link:**

<https://us06web.zoom.us/j/85700744680?pwd=bHkyVGlyNGlvUkduVHhkOXNVTkdDZz09>

**Meeting ID:** 857 0074 4680

**Passcode:** 337135

**Session 3. Chairs – Milinevsky G.P., Grytsai A.V. (14:00–17:20, Kyiv Time, UT+3h)**

14:00-14:20	<a href="#">A.V. Soina</a> , Yu. M. Yampolski, G.P. Milinevsky, A.V. Zalizovski <b>Comparison of the dynamics and manifestation of the weekend effect of atmospheric aerosols in industrially developed regions and in the Antarctic</b>
14:20-14:40	<a href="#">K.Yu. Tkachenko</a> , D.V. Oranskii, S.G. Shchepochiev <b>The study of the role of the electric phenomena in the initiation of the free-radical reaction of toluene bromination at the snow/air interface</b>
14:40-15:00	<a href="#">K. Tkachenko</a> , D. Pishniak, S. Razumnyi <b>Arctic and Antarctic parallel field experiment to check the role of electric phenomena in snow-air interactions</b>
15:00-15:20	<a href="#">V.E. Tymofeyev</a> , S.V. Klok <b>On the state of the ocean-atmosphere system and regional climate change at the Antarctic Peninsula</b>
15:20-15:40	<a href="#">J. Wille</a> , and The East Antarctic Heatwave Team <b>Case study of the extraordinary March 2022 East Antarctic heat wave</b>
15:40-16:00	<a href="#">J.F. Carrasco</a> , R.R. Cordero <b>An extraordinary deep synoptic-scale cyclone affected the Bellingshausen sea sector, west of the Antarctic Peninsula</b>
16:00-16:20	<b>Coffee break (16:00–16:20)</b>
16:20-16:40	<a href="#">Andrew Orr</a> ; Pranab Deb, Kyle R. Clem, Ella Gilbert, David H. Bromwich, Fredrik Boberg, Steve Colwell, Nicolaj Hansen, Matthew A. Lazzara, Priscilla A. Mooney, Ruth Mottram, Masashi Niwano, Tony Phillips, Denys Pishniak, Carleen H. Reijmer, Willem Jan van de Berg, Stuart Webster, and Xun Zou <b>Characteristics of surface “melt potential” over Antarctic ice shelves based on regional atmospheric model simulations of summer air temperature extremes from 1979/80 to 2018/19</b>
16:40-17:00	<a href="#">K.M. Hines</a> , D.H. Bromwich, M.F. Litell, S.-H. Wang <b>Simulating the impact of atmospheric river on the clouds and meteorology of coastal Antarctica</b>
17:00-17:20	<b>Poster’s presentation and Discussion</b>
17:00-17:10	<a href="#">R. Bezhenar</a> , V. Maderich <b>Lagrangian analysis of circulation under the Filchner-Ronne ice shelf and in the Weddell sea</b>
17:10-17:20	<a href="#">Ella Gilbert</a> , Andrew Orr, Denis Pishniak, Kristiina Verro, Willem Jan van de Berg, Ruth Mottram <b>Characteristics of extreme accumulation events in west Antarctica</b>

Each presentation: 15 min talk, 5 min questions. Shortening of presentation is welcome.