

Curriculum vitae  
Europass**Informații personale** **MIRELA VOICULESCU**

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Naționalitate(-tăți) Romanian

**Professional Timeline**

Time interval	2014 – prezent
Job	Professor (university)
Main responsibilities/activities	Teaching, Research, Dissemination, Research management
Employer	University Dunarea de Jos Galati (UDJG), Str. Domneasca nr. 47, 800008, Galati
Type of activities	Research, High Education
Time interval	2008 – 2014
Job	Assistant Professor/Reader
Main responsibilities/activities	Teaching, Research, Dissemination, Research management
Employer	University Dunarea de Jos Galati (UDJG), Str. Domneasca nr. 47, 800008, Galati
Type of activities	Research, High Education
Time interval	1999 – 2008
Job	Lecturer
Main responsibilities/activities	Teaching, Research, Dissemination
Employer	University Dunarea de Jos Galati (UDJG), Str. Domneasca nr. 47, 800008, Galati
Type of activities	Research, High Education
Time interval	1992 – 1999
Job	Assitant
Main responsibilities/activities	Teaching, Research, Dissemination
Employer	University Dunarea de Jos Galati (UDJG), Str. Domneasca nr. 47, 800008, Galati
Type of activities	Research, High Education
Time interval	Sep 1989 - Sep 1991, Sep 1991 – Feb 1992
Job	Professor
Main responsibilities/activities	Teaching
Employer	Highschool for Forets management, Scoala gen 4 – Curtea de Arges, Scoala gen. 12 Galati
Type of activities	Teaching

**Education**

Time interval	2005-2006
Diploma	PhD in Physics, „IMF effects on sporadic E layers and F region trough”
Professional competencies	Physics of Solar-terrestrial Relationship
Institution	University of Oulu, Finlanda
Grade/Score	Eximia cum laude approbatur (Excellent)
Time interval	1997-2003
Diploma	Doctor in Fizica, „Instabilitati si fenomene ondulatorii in plasma ionosferica”
Professional competencies	Fizica atmosferei, fizica ionosferei, fizica relatiilor solar-terestre, metode de studiu la distanta si in situ, metode de analiza statistica si prelucrare date
Institution	University Al I Cuza, Iasi, Romania
Grade/Score	Magna cum Laudae
Diploma	2003
Professional competencies	Curs postuniv. „Didactica învățământului la distanță”
Course(s)	Didactica invatamantului la distanta, pagini web, arie curriculara
Diploma	Universitatea „Dunărea de Jos” Galați
Time interval	2001-2002
Professional competencies	Studii postuniv, sectia „Unde si Vibratii”

Courses Metode teoretice, Unde, vibratii, termodinamica statistica/

Institution University „Dunărea de Jos” Galați

Time interval 1985-1989

Diploma Bachelor in Physcs

Courses Physics

Institution University of Bucharest

Score/Grade 10 (out of 10), all year average 9.64 (out of 10)

## Professional/Job-related skills, Communication skills

Profesional: atmospheric physics, ionosphere, solar-terrestrial relationships, space weather, climate, remote sensing, etc  
Science for general public (British Council, Beautiful Science, 2008)  
Multitasking (simultaneous management or implementation of various projects, teaching and research)  
High adaptability to various working environments  
International experience (international grants and projects)  
Analytical skills (statistical analysis, evaluation, management)  
Dissemination skills (presentations for scientific communities, students and general public)  
Excellent scientific presentation skills, as a result of participation in international conferences  
Excellent written communication skills, gained from significant experience in scientific article writing  
Personal (one-to-one) direct communication abilities supported by project management and by handling large teams of researchers or target groups  
Rapid adaptation to inter and multi cultural teams, as a result from long periods of international mobilities  
Communication of scientific results to general public (plain language science)

## Organisation skills

- Project management (national and international grants and team projects, see below),
- Multitasking Management
- Evaluation and coordination of evaluation exercises, accrediting,
- Main **organizer of national workshops and conferences**, as e.g.
  - Conference on Modern approaches of the environment-climate change feedback, SEP 20-23, 2023, GALATI, ROMANIA and previous edition in 2022
  - Workshop *Aerosols, Clouds and Trace gases Research InfraStructure*, ROMANIA, 4-5 iun 2019, Galati, Romania
  - “Workshop on natural versus anthropogenic causes of climate variability and feedback from bio-chemical processes”, NatClimVar ICUB, București, 18-22 Oct 2016
  - Convener for several international conferences, as e.g. EGU General Assembly, Viena, 2008, 2009, 2010, 2011 (Solar-terrestrial interactions)
  - Space Climate 5-th Symposium, Oulu, 2013, Jun 12-15-th
- Member for organizing and scientific committees for various workshops and conferences.
- Coordination for undergraduate program (BA degree) in Environmental Sciences, 2009- 2018 and for graduate program (MSc degree) in Physico-chemical Analysis for Environment and Science of Materials, 2007-2012.

## Mother tongue

### Languages

Nivel european (\*)

English

French

German

### Romanian

#### UNDERSTANDING

Listening

Reading

#### SPEAKING

Spoken interaction

Spoken production

#### WRITING

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user  
Common European Framework of Reference for Languages

## Digital skills

Windows  
Microsoft Office (Word, Excel, PPT)  
MATLAB, CorelDraw, Acrobat  
TEX, LATEX

## Evaluation expertise

- Member of the National Council of Scientific Research, Leading Role for the Comitee for Earth and Atmospheric Sciences (mar 2020 – prezent, membru: oct 2011 – apr 2013), ViceChair dec 2016-mar 2017
- Member of the National Council for University Titles, Diploma and Certificates (apr 2011 – sep 2012)
- Expert evaluator National Science Foundation (USA), 2011
- Expert evaluator H2020, FP7, 2010-prezent,
- Expert national CNCIS, CNCS, PNII, PNIII, 2006-prezent
- Expert evaluator NERC (Natural Environment Research Council, UK), 2019 - prezent
- Member of the Council Faculty of Sciences, UGAL, 2004 - 2011
- Referee for numerous scientific manuscripts for various scientific journals (Journal of Atmospheric and Solar-terrestrial Sciences, Advances in Space Researches, Earth Planets and Space Letters, Journal of Geophysical Researches, Annales Geophysicae, Journal of Sensors)
- Membru/referent for doctoral theses or habilitation (2011- prezent, UDJG, Universitatea din Bucuresti, Universitatea AI I Cuza Iasi)

## Other job-related information

- **700+ citations WoS (autocitations excluded), h\_ WoS = 17; 1250+ citations Scholar, h\_ G=22**
- **ResearcherID: B-7041-2011, <http://www.researcherid.com/rid/B-7041-2011>**

**Invited Porfessor at the Research Institute of Unoversity of Bucharest: iul – dec 2016**

- Main organizer for the workshop “*Workshop on natural versus anthropogenic causes of climate variability and feedback from bio-chemical processes*”, NatClimVar ICUB, București, 18-22 Oct 2016.

**Invited presentations/lectures**

- **Velvety sway of clouds in the wake of Sun's mood**, *International Conference on Astronomy and Space Science "New horizons in space and planetary astrophysics. Honoring IAU 100, Astronomical Institute of Romanian Academy, Bucharest, 17-19 oct 2019.*
- **Solar reverberations in the terrestrial ionosphere**, *Solar System studies from the ground to in-situ observations, Astronomical Institute of Romanian Academy, Bucharest, 25-26 sep 2018.*
- **The ionosphere: plasma playing in the atmosphere**, *Astronomical Institute of Romanian Academy, Bucharest, jun 2018*
- **Possible response of cloud cover to solar variations at low and high altitudes in various datasets: Sun versus solar wind**, *7-th Workshop on Solar Influences on the Magnetosphere, Ionosphere and Atmosphere, 1-5.06.2015, Sunny Beach, Bulgaria*
- **Combined effect of CR and solar radiation on cloud cover**, *TOSCA Science Meeting, 30.09 – 4.10. 2013, Prague, Czech Republic*
- **Possible relationship between space weather and cloud cover and role of various climatic factors**, *Space Climate Symposium 5, Oulu, Finland, June 15-19, 2013*
- **Role of climatic factors in modulating a possible solar effect on cloud cover**, *Workshop on the influence of interplanetary perturbations on the Earth's atmosphere and climate, Sunny Beach, Bulgaria, 13-16 May 2013*
- **Ionospheric perturbations induced by interplanetary and solar forcing**, *International Conference on Solar and Heliospheric Influences on the Geospace, București, Romania, 1 – 6 oct 2012*
- **M. Voiculescu, Competing effects of solar radiation and cosmic rays on cloud cover variation over the last two solar cycles**, *Joint WG3 and ISSI workshop "Cosmic ray influence upon atmospheric processes", Bern, 14-15 June 2012*
- **Ionosphere-magnetosphere coupling and link to Earth phenomena**, *Institute of Geodynamics, Bucharest, Romania, 25 nov 2011*
- **Characteristics of ionospheric troughs observed in the premidnight sector; relationship with inner magnetosphere and interplanetary conditions**, *Solar-Terrestrial Research Center, Brussels, Belgium, 10 dec 2010*
- **A new type of ionospheric flows: rapid eastward drifts**, *Universitatea din Oulu, Space Physics Dept, Oulu, Finlanda, 22 oct 2008*
- **Ionospheric structures of particular magnetospheric configurations**, *Solar-Terrestrial Research Center, Brussels, Belgium, 16 sep 2008*
- Cercetator invitat, *Universitatea din Oulu, Finlanda, iul-oct 2006*
- Sept. 1999: *Max-Planck Institut für Aeronomie, Katlenburg-Lindau, Germany, Sep 1999*
- Cercetator invitat, *Universitatea din Creta, Sep 1998, Mar 1999*

**Activități de popularizare a științei:**

- Conferința invitată privind originea schimbărilor climatice actuale, organizată de British Council, 8 mar 2008

**Projects****International grants**

1. The ionospheric trough – manifestation of space weather variability University of Oulu, Finland, finanțat de Universitatea din Oulu, 1 lună, ian-feb 2014
2. Formation, development and mechanism of the pre-midnight F region trough, Universitatea din Oulu, Finlanda, finanțat de Universitatea din Oulu, 1 lună, aug 2009
3. Study of the F region trough –international S & T cooperation: post-doc fellowship, 2007-2008, 9 luni, Institute of Space Aeronomie, Bruxelles, Belgium
4. Sporadic E-layer at mid and high latitudes –Marie Curie fellowship for doctoral research, 2001-2002, Universitatea din Oulu, Finlanda

**International projects/National representative**

1. COST ES1005 "Towards a more complete assessment of the impact of solar variability on the Earth's climate"  
Rol: Membru al Comitetului de Management, 2012-2016, Reprezentant național
2. COST CA 15211 Atmospheric Electricity Network: coupling with the Earth System, climate and biological systems  
Rol: Membru al Comitetului de Management, 2016 – 2021, Reprezentant național

**National projects**

1. Valorificarea extensivă a experienței în activități de spațiu și Securitate (Valorizing the extensive experience in space and security)  
VESS, 18PCCDI/2018, 2018-2020, rol: Responsabil Partener
2. SOLar Activity and Clouds: causal or casual Effect? SOLACE, PN II, "Dunărea de Jos" University, Galați, Romania, 31.10.2011 – 31.10.2016, rol: Director proiect
3. Eco-technologies for rehabilitation and ecological reconstruction of contaminated land in urban and industrial waste, ECORES, 2008- 2011, Coordonator USAMV București, rol: Responsabil Partener
4. Researches for optimal processes and parameters for improving the remediation level of contaminated land, TERESOL, Coordonator UPB București, rol: Responsabil Partener
5. Boundary layers and spatial charge structures in circumplanetary plasmas, SAFIR, contract PN2 nr. 81009/2007, 2007 – 2011, Coordonator ISS-București, rol: Responsabil Partener

**National grants**

1. Grant mobility ETH – Davos, Elvetia, PN-III-P1-1.1-MC-2017-0918, 1-15 mar 2018
2. "Workshop on natural versus anthropogenic causes of climate variability and feedback from bio-chemical processes, NatVarClim, ICUB, Universitatea din București, iun-dec 2016

**International projects – expert (**

1. ESA GRANT, 4000118115/16/NL/FF/GP – Technical Assistance for a Romanian Atmospheric Observation System (RAMOS), Coordinator: National R&D Institute for Optoelectronics – INOE 2000, Rol: Expert
2. TEMPUS IV: Modernisation of Post-Graduate Studies in Chemistry and Chemistry Related Programmes, U2398, 511044-Tempus-1-2010-1-UK-Tempus-JPCR, Coordinator: University of Greenwich, Rol: Expert
3. Long term solar-terrestrial relations: Global changes, Academy of Sciences, Vaissala Foundation Grant, Finland, 2006, Director: dr. Ilya Usoskin, Sodankyla Geophysical Observatory, Finlanda, Rol: Expert
4. Sun, heliosphere and Earth: Long-term relations, Academy of Sciences, Vaissala Foundation, Finland Grant, 2005, Director: dr.

- Ilya Usoskin, Sodankyla Geophysical Observatory, Finlanda, Rol: Expert
5. Space weather effects, ANTARES/SWAP project, 2004, Director: prof. T. Nygrén, Universitatea din Oulu, Finlanda, Rol: Expert
  6. EISCAT project, Director: prof. T. Nygrén, Universitatea din Oulu, Finlanda, 2006, Rol: Cercetator invitat
  7. Modelling planetary wave effects on midlatitude E region ionospheric plasma (Greece), Mar 1999, Director: prof. C. Haldoupis, Universitatea din Creta, Rol: Cercetator invitat
  8. Long-term variations of coherent backscatter echoes obtained with SESCAT (Greece), Sep-Oct 1998, Director: prof. C. Haldoupis, Universitatea din Creta, Rol: Cercetator invitat

#### National projects with European Funding – expert (member of the Implementation or Management Team)

1. Integrated system for environmental research and monitoring of Danube, REXDAN, SMIS 127065 (POSCCE), 2020-2023, Rol: Responsabil raportare tehnica
2. Sustainable performance in doctoral and postdoctoral research PERFORM, POSDRU 159/1.5/S/138963, 2014-2015, Director: Universitatea Dunarea de Jos, Galati, Prof. dr. ing. L.P. Georgescu, Rol: Expert evaluare internă și performanță științifică
3. Support for gender equality and professional promotion of women PROGRES, POSDRU 144/6.3/S/129743, 2014-2015, director: Universitatea Dunarea de Jos, Galati, conf. dr. C. Iticescu, Rol: Expert corelații tehnice
4. Quality and continuity for doctoral formation, TOP ACADEMIC, POS DRU, 2010-2013, Director: Universitatea Dunarea de Jos, Galati, Prof. dr. ing. L.P. Georgescu, Rol: Manager asistent, Responsabil raportare tehnica
5. Efficiency for doctoral studies, EFICIENT, POS DRU, 2009-2012, Director: Universitatea Dunarea de Jos, Galati, Prof. dr. ing. L.P. Georgescu, Rol: Manager asistent, Responsabil raportare tehnica
6. Management of doctoral scholarships, SIMBAD, POS-DRU, 2008-2011, Director: Universitatea Dunarea de Jos, Galati, Prof. dr. ing. L.P. Georgescu, Rol: Expert, Responsabil audit

#### Proiecte naționale – expert (membru in echipa, selectie): 10+

1. Excelență și implicare în dezvoltarea inteligență bazată pe cercetare și inovare la Universitatea Dunărea de Jos din Galați (UDJG) – DINAMIC\*, 12PFE/3.01.2022, ID 536/2021, Beneficiar: Universitatea Dunarea de Jos, Galati, Rol: Responsabil coordonare activități suport, inovare și raportare
2. Excelență, performanță și competitivitate în activități CDI la Universitatea Dunărea de Jos din Galați, EXPERT, 14PFE/17.10.2018, Beneficiar: Universitatea Dunarea de Jos, Galati, Rol: Expert managementul și calitatea cercetării
3. Strategie și acțiuni pentru pregătirea participării naționale la Proiectul DANUBIUS –RI, DANS, 4/07.05.2018, Coordonator: INCSDB, Rol: expert/cercetator
4. Atmospheric studies in support of ESA's sentinel 4 and 5 products, ASSESS, 2017/2019, ROSA GRANT, STAR505/2017 Coordonator: INCAS/Andreea Boscornea, Rol: Expert

## Publications/Scientific articles

### ISI /peer reviewed international journals (65+)

1. Bostan, D.-C.; Miclaus, I.-M.; Apetroaie, C.; **Voiculescu, M.**; Timofte, A.; Cazacu, M.-M., Long-Range Transport Analysis Based on Eastern Atmospheric Circulation and Its Impact on the Dust Event over Moldavia, Romania in August 2022. *Atmosphere* 2023, 14, 1366. <https://doi.org/10.3390/atmos14091366>, 2023
2. Vaideanu, P.; Ionita, M.; **Voiculescu, M.**; Rambu, N., Deconstructing Global Observed and Reanalysis Total Cloud Cover Fields Based on Pacific Climate Modes., *Atmosphere* 2023, 14, 456. <https://doi.org/10.3390/atmos14030456>, 2023
3. Echim M, **Voiculescu M\***, Munteanu C, Teodorescu E, Voitu G, Negrea C, Condurache-Bota S and Dănilă EB (2023), On the phenomenology of magnetosheath jets with insight from theory, modelling, numerical simulations and observations by Cluster spacecraft. *Front. Astron. Space Sci.* 10:1094282, doi: 10.3389/fspas.2023.1094282, 2023
4. ROȘU A., M. ARSENI, D. -E. CONSTANTIN, B. ROȘU, Ș. -M. PETREA, **M. Voiculescu**, C. ITICESCU, L. -P. GEORGESCU, Study of air pollution level in an urban area using low-cost sensor system onboard mobile platform Scientific Papers. *Series E. Land Reclamation, Earth Observation & Surveying, Environmental Engineering* 2023,
5. Nita Ion-Andrei, L. Sfică, **M. Voiculescu**, M. V. Birsan, M. M. Micheu, Changes in the global mean air temperature over land since 1980, *Atmospheric Research*, Volume 279, 2022, 106392, ISSN 0169-8095, <https://doi.org/10.1016/j.atmosres.2022.106392>, WOS: 000848684500003, 2022
6. Nica D.C., **M. Voiculescu**, D. E. Constantin, M. Gîrțu, L. Topiceanu, D. Vasincu, I. -A. Roșu, and M. Agop Multifractality via Stochasticity in Atmospheric Dynamics De-scription Validated through Remote Sensing Data, *Mathematics* 2022, 10(6), 1004; <https://doi.org/10.3390/math10061004>, WOS: 000778256700001, 2022
7. Dima, M., Nichita, D.R., Lohmann, G., M. Ionita, **M. Voiculescu**, Early-onset of Atlantic Meridional Overturning Circulation weakening in response to atmospheric CO2 concentration. *npj Clim Atmos Sci* 4, 27 (2021). <https://doi.org/10.1038/s41612-021-00182-x>, WOS: 000645903600001, 2021
8. Roșu, A.; Constantin, D.-E., **M. Voiculescu\***; Arseni, M.; Roșu, B.; Merlaud, A.; Roozendaal, M.V.; Georgescu, P.L. Assessment of NO2 Pollution Level during the COVID-19 Lockdown in a Romanian City. *Int. J. Environ. Res. Public Health* 2021, 18, 544, <https://doi.org/10.3390/ijerph18020544>, 2021, WOS: 000611254300001, 2021
9. **Voiculescu, M.** Special Issue Atmospheric Composition and Cloud Cover Observations. *Atmosphere* 2021, 12, 56, <https://doi.org/10.3390/atmos12010056>, 2020 (Editorial)
10. Sfică L, C. Beck, A. I. Nita, **M. Voiculescu**, M. V. Birsan, A. Philipp, Cloud cover changes driven by atmospheric circulation in Europe during the last decades, *Int. Jo. Climate*, 41 (Suppl. 1): E2211– E2230, <https://doi.org/10.1002/joc.6841>, 2021 (first online 18.09.2020)
11. **Voiculescu, M.**; Constantin, D.-E.; Condurache-Bota, S.; Călmuc, V.; Roșu, A.; Dragomir Bălănică, C.M. Role of Meteorological Parameters in the Diurnal and Seasonal Variation of NO2 in a Romanian Urban Environment. *Int. J. Environ. Res. Public Health*, 17(17), 6228, <https://doi.org/10.3390/ijerph17176228>, 2020.
12. Constantin D. E., C. Bocaneala, **M. Voiculescu**, A. Rosu, A. Merlaud, Michel Van Roozendaal, P. L. Georgescu, Evolution of SO2 and NOx emissions in the context of EU policies for emission reduction from the largest EU power plants using space observations and emissions inventory during 2005-2015, *Int. J. Environ. Res. Public Health*, 17(10), 3630, <https://doi.org/10.3390/ijerph17103630>, 2020,
13. Roșu A., D. E. Constantin, **M. Voiculescu**, M. Arseni, A. Merlaud, M. van Roozendaal, L. P. Georgescu, Observations of Atmospheric NO2 Using a New Low-Cost MAX-DOAS System, *Atmosphere*, 11(2), 129, <https://doi.org/10.3390/atmos11020129>, 2020
14. Danila E., **M. Voiculescu\***, T. Raita, Identification of tomographic images of ionospheric plasma troughs using fractal analysis, *Romanian Astronomical Journal*, 29 (3), 217-234, 2019
15. Arseni, M.; **Voiculescu, M.**; Georgescu, L.P.; Iticescu, C.; Rosu, A. Testing Different Interpolation Methods Based on Single Beam Echosounder River Surveying. Case Study: Siret River. *ISPRS Int. J. Geo-Inf.* doi.org/10.3390/ijgi8110507, vol 8, pp

507, ISSN 2220-9964, 2019

16. Rosu A., B. Rosu, D. E. Constantin, M. Arseni, **M. Voiculescu**, L. P. Georgescu, G. Murariu and I. Popa, Overview of tropospheric NO<sub>2</sub> using the ozone monitoring observations instrument and human perception about air quality for the most polluting countries across the world, *Carpathian Journal of Earth and Environmental Sciences*, Vol. 14, No. 2, p. 423 - 430; DOI:10.26471/cjees/2019/014/091, 2019
17. Condurache-Bota S., G. Murariu, R. Drasovean, **M. Voiculescu**, G. Condurache-Bota, Greenhouse gases worldwide: relative changes, comparisons, variation causes, *Energy and clean technologies, issue 4.2: Recycling, Air Pollution and climate change*, art. nr. 60, 459-466, ISBN: 978-619-7408-45-4, ISSN 1314-2704, DOI: 10.5593/sgem2018/4.2, 2018
18. Sfica L., I. Iordache, **M. Voiculescu**, Solar signal on regional scale: A study of possible Solar impact upon Romania's Climate, *J. Atm. Sol.-Terr. Phys.*, 177, pp 257-265, <https://doi.org/10.1016/j.jastp.2017.09.015>, 2018
19. Vaideanu, P. M. Dima and **M. Voiculescu**, Atlantic Multidecadal Oscillation footprint on global high cloud cover, *Theor Appl Climatol.*, Vol. 134, Issue 3-4, pp 1245-1256, <https://doi.org/10.1007/s00704-017-2330-3>, 2018
20. Paraschiv, S., Constantin, D. E., Paraschiv, S. L., & **Voiculescu, M.**, OMI and Ground-Based In-Situ Tropospheric Nitrogen Dioxide Observations over Several Important European Cities during 2005-2014., *International journal of environmental research and public health*, 14(11), 1415. doi:10.3390/ijerph14111415, 2017
21. Constantin D. E., A. Merlaud, **M. Voiculescu**, C. Dragomir, L.P. Georgescu, F. Hendrick, G. Pinardi, M. Van Roozendaal, Mobile DOAS observations of tropospheric NO<sub>2</sub> using an UltraLight Trike and flux calculation, *Atmosphere*, 8, 78; doi:10.3390/atmos8040078, 2017
22. Constantin D. E., A. Merlaud, **M. Voiculescu**, M. van Roozendaal, M. Arseni, A. Rosu, L.P. Georgescu, NO<sub>2</sub> and SO<sub>2</sub> observations in southeast Europe using mobile DOAS observations, *Carpathian J. of Earth and Env. Sci.*, Vol. 12, No. 2, p. 323 - 328, 2017
23. **Voiculescu M.**, T. Nygrén, A. T. Aikio, H. Vanhamaki and V. Pierrard, Post-midnight ionospheric troughs in summer at high latitudes, *J. Geophys. Res. Space Physics*, Volume 121, Issue 12, pp. 12171-11285, SRI = 2,23/FI = 3.31, doi:10.1002/2016JA023360, 2016.
24. Vanhamäki, H., A. Aikio, **M. Voiculescu**, L. Juusola, T. Nygrén, and R. Kuula, Electrodynamic structure of the morning high-latitude trough region, *J. Geophys. Res. Space Physics*, 121, 2669-2682, doi:10.1002/2015JA022021, 2016.
25. Dima M. and **M. Voiculescu**, Global patterns of solar influence on high cloud cover, *Climate Dynamics*, 47:667-678, DOI 10.1007/s00382-015-2862-0, 2016
26. Nygrén T., A. T. Aikio, **M. Voiculescu**, and L. Cai, Radar observations of simultaneous traveling ionospheric disturbances and atmospheric gravity waves. *J. Geophys. Res. Space Physics*, 120, 3949-3960. doi: 10.1002/2014JA020794, 2015
27. Dragomir C. M., D. E. Constantin, **M. Voiculescu**, L. P. Georgescu, A. Merlaud, M. Van Roozendaal, Modeling results of atmospheric dispersion of NO<sub>2</sub> in an urban area using METI-LIS and comparison with coincident mobile DOAS measurements, *Atmosph. Poll. Res.* 6:503-510, DOI: 10.5094/APR.2015.056, 2015
28. Sfica L., **M. Voiculescu** and R. Huth, The influence of solar activity upon the position of North-Atlantic centers of action, *Ann. Geophys.*, 33, 207-215, 2015, doi:10.5194/angeo-33-207-2015, 2015
29. Sfica L. and **M. Voiculescu**, Possible effects of atmospheric teleconnections and solar variability on tropospheric and stratospheric temperatures in the Northern Hemisphere, *J. Atm. Sol.-Terr. Phys.*, 109, 7-14, 10.1016/j.jastp.2013.12.021, 2014
30. **Voiculescu M.**, I. G. Usoski and S. Bota-Condurache, Clouds blown by solar wind, *Environ. Res. Lett.* 8, 045032, doi:10.1088/1748-9326/8/4/045032, 2013
31. Constantin D. E., **M. Voiculescu**, L. P. Georgescu, Satellite Observations Of No<sub>2</sub> Trend Over Romania, *The ScientificWorld Journal*, vol. 2013, Article ID 261634, 10 pages, doi.org/10.1155/2013/261634, 2013
32. Markkanen J., T. Nygren, M. Markkanen, **M. Voiculescu**, and A. Aikio, High-precision measurement of satellite range and velocity using the EISCAT radar, *Ann. Geophys.*, 31, 859-870, 2013, doi:10.5194/angeo-31-859-2013
33. Constantin D. E, A. Merlaud, M. Van Roozendaal, **M. Voiculescu**, C. Fayt, F. Hendrick, G. Pinardi and L. Georgescu, Measurements of Tropospheric NO<sub>2</sub> in Romania Using a Zenith-Sky Mobile DOAS System and Comparisons with Satellite Observations, *Sensors*, 13, 3922-3940; doi:10.3390/s130303922, 2013
34. Nygrén T., J. Markkanen, A. Aikio, and **M. Voiculescu**, High-precision measurement of satellite velocity using the EISCAT radar, *Annales Geophysicae*, 30, 1555-1565, doi:10.5194/angeo-30-1555-2012, 2012.
35. **Voiculescu M.** and I. G. Usoskin, Persistent solar signatures in cloud cover: spatial and temporal analysis, *Environ. Res. Lett.* 7 (2012) 044004 (11pp), doi:10.1088/1748-9326/7/4/044004, 2012
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2. **M. Voiculescu**, Ionospheric structures: sporadic E layers and F region trough (editie revăzută și adăugită a lucrării IMF effects on sporadic E layers and F region trough), Galati University Press, 2008, 70 pag.
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#### Non indexed journals (non ISI/clarivate), Proceedings: 55+

#### International conferences: 100+

#### National conferences: 25+