

## Listă publicații articole științifice

1. **Deaconu, L.-T.**; Mereuță, A.; Radovici, A.; Ștefănie, H.I.; Botezan, C.; Ajtai, N. Consistency of Aerosol Optical Properties between MODIS Satellite Retrievals and AERONET over a 14-Year Period in Central–East Europe. *Remote Sens.* **2024**, *16*, 1677. <https://doi.org/10.3390/rs16101677>
2. Regayre, L. A., **Deaconu, L.**, Grosvenor, D. P., Sexton, D. M. H., Symonds, C., Langton, T., Watson-Paris, D., Mulcahy, J. P., Pringle, K. J., Richardson, M., Johnson, J. S., Rostron, J. W., Gordon, H., Lister, G., Stier, P., and Carslaw, K. S.: Identifying climate model structural inconsistencies allows for tight constraint of aerosol radiative forcing, *Atmos. Chem. Phys.*, *23*, 8749–8768, <https://doi.org/10.5194/acp-23-8749-2023>, 2023.
3. Carzon, J., Abreu, B., Regayre, L., Carslaw, K., **Deaconu, L.**, Stier, P., . . . Kuusela, M. (2023). Statistical constraints on climate model parameters using a scalable cloud-based inference framework. *Environmental Data Science*, *2*, E24. [doi:10.1017/eds.2023.12](https://doi.org/10.1017/eds.2023.12)
4. Che, H., Stier, P., Watson-Parris, D., Gordon, H., and **Deaconu, L.**: Source attribution of cloud condensation nuclei and their impact on stratocumulus clouds and radiation in the south-eastern Atlantic, *Atmos. Chem. Phys.*, *22*, 10789–10807, <https://doi.org/10.5194/acp-22-10789-2022>, 2022.
5. Mereuță, A., Ajtai, N., Radovici, A. T., Papagiannopoulos, N., **Deaconu, L. T.**, Botezan, C. S., Ștefănie, H. I., Nicolae, D., and Ozunu, A.: A novel method of identifying and analysing oil smoke plumes based on MODIS and CALIPSO satellite data, *Atmos. Chem. Phys.*, *22*, 5071–5098, <https://doi.org/10.5194/acp-22-5071-2022>, 2022.
6. Kasim, M.; Watson-Parris, D.; **Deaconu, L.**; Oliver, S.; Hatfield, P.; D. H. Froula, G. Gregory, Jarvis, M.; Khatiwala, S.; Korenaga, J.; Topp-Mugglestone; Viezzer, E.; Vinko, S., Building high accuracy emulators for scientific simulations with deep neural architecture search, *Machine Learning: Science and Technology*, Volume 3, number 1, 015013; DOI 10.1088/2632-2153/ac3ffa, 2022.
7. Watson-Parris, D., Williams, A., **Deaconu, L.**, and Stier, P.: Model calibration using ESEm v1.1.0 – an open, scalable Earth system emulator, *Geosci. Model Dev.*, *14*, 7659–7672, <https://doi.org/10.5194/gmd-14-7659-2021>, 2021.
8. Che, H., Stier, P., Gordon, H., Watson-Parris, D., and **Deaconu, L.**: Cloud adjustments dominate the overall negative aerosol radiative effects of biomass burning aerosols in UKESM1 climate model simulations over the south-eastern Atlantic, *Atmos. Chem. Phys.*, *21*, 17–33, <https://doi.org/10.5194/acp-21-17-2021>, 2021;

9. Watson-Parris, D., Bellouin, N., **Deaconu, L. T.**, Schutgens, N. A. J., Yoshioka, M., Regayre, L. A., et al.: Constraining uncertainty in aerosol direct forcing. *Geophysical Research Letters*, 47, e2020GL087141. <https://doi.org/10.1029/2020GL087141>, 2020
10. **Deaconu, L. T.**, Ferlay, N., Waquet, F., Peers, F., Thieuleux, F., & Goloub, P.: Satellite inference of water vapour and above-cloud aerosol combined effect on radiative budget and cloud-top processes in the southeastern Atlantic Ocean. *Atmospheric Chemistry and Physics*, 19(17), 11613–11634, 2019.
11. Cornet, C., C.-Labonnote, L., Waquet, F., Szczap, F., **Deaconu, L.**, Parol, F., Vanbauce, C., Thieuleux, F., and Riédi, J.: Cloud heterogeneity on cloud and aerosol above cloud properties retrieved from simulated total and polarized reflectances, *Atmos. Meas. Tech.*, 11, 3627–3643, <https://doi.org/10.5194/amt-11-3627-2018>, 2018.
12. **Deaconu, L. T.**, Waquet, F., Josset, D., Ferlay, N., Peers, F., Thieuleux, F., Ducos, F., Pascal, N., Tanré, D., Pelon, J., & Goloub, P. (2017). Consistency of aerosols above clouds characterization from A-Train active and passive measurements. *Atmospheric Measurement Techniques*, 10(9), 3499–3523, <https://doi.org/10.5194/amt-10-3499-2017>, 2017.
13. Marmureanu L., **Deaconu L.**, Vasilescu J., Ajtai N., Talianu C.: Combined optoelectronic methods used in the monitoring of SO<sub>2</sub> emissions and imissions, *Environmental Engineering and Management Journal*, 12 (2), pp. 277 - 282, 2013.

#### **Teza de doctorat:**

Deaconu, L.-T., and Goloub, P., Waquet, F.; Ferlay, N.: Study on multi-layer "aerosol" situations and of "aerosol-cloud" interactions, Teză de doctorat, domeniul Fizică, Universitatea Lille1; 2017LIL10165, 2017, <http://www.theses.fr/2017LIL10165/document>

#### **Cursuri:**

Educator cu normă parțială la Universitatea Oxford:

“Atmospheric science and climate change impact”,

\* Pregătirea și predarea unui curs de fizică atmosferică și schimbări climatice globale și regionale la Universitatea Yangon din Myanmar, în cadrul proiectului TIDE (Transformation by Innovation in Distance Education Project Residential School)

## Membru în proiecte finanțate național/internațional

- A-CURE (Aerosol-Cloud Uncertainty REduction) - proiect de cercetare-dezvoltare la Universitatea Oxford, în colaborare cu Universitatea Leeds, Marea Britanie; finanțat de NERC (National Environmental Research Council) (AEROS (grant no. NE/G006172/1), ACID-PRUF (grant no. NE/I020059/1), GASSP (grant no. NE/J024252/1), A-CURE (grant no. NE/P013406/1)) și Uniunea Europeană (ACTRIS-2 proiect (grant no. 262254)).
- Proiect POC/78/1/2/107596 CONSOLIDAREA PARTICIPARII CONSORTIULUI ACTRIS-RO LA INFRASTRUCTURA PAN-EUROPEANA DE CERCETARE ACTRIS; finanțat prin fonduri structurale;

## Listă participări la conferințe:

1. **Deaconu L.**, Watson-Parris D., Stier P., Constraining direct radiative forcing of aerosols using remote sensing and in-situ observations, AeroCom/AeroSat, the 2024 annual [AeroCom \(23th\)](#) and [AeroSAT \(12th\)](#) meeting held at LOA, Villeneuve d'Ascq, France, Oct 14-18, 2024 (on-site, poster)
2. **Deaconu L.**, Mereuță A., Radovici A., Ștefănie H., Botezan C., Ajtai N., MODIS versus AERONET Aerosol Optical Properties in Central-East Europe, Simpozion Environment and Progress, Cluj-Napoca, 13 iunie 2024 (poster)
3. A. Mereuță, A. Radovici, N. Ajtai, C. Botezan, **L. Deaconu**, A. Ozunu, Oil Smoke Plumes as Seen Through Satellite Remote Sensing, The 30th International Laser Radar Conference, 26 June – 1 July 2022 (virtual presentation).
4. A. Mereuță, A. Radovici, N. Ajtai, C. Botezan, H. Stefanie, **L. Deaconu**, A. Ozunu, Earth observations as support tools for disaster response, The 12th International Conference of the International Society for the INTEGRATED DISASTER RISK MANAGEMENT (IDRiM2022), 21-23 September 2022 (Oral).
5. Philip Stier, **Lucia Deaconu**, Duncan Watson-Parris, Towards observationally constrained estimates of global aerosol absorption and aerosol-radiative effects, American Meteorological Society, The 101st Annual Meeting, 10-15 January 2021;
6. Leighton Regayre, **Lucia Deaconu**, Tom Langton, Daniel P. Grosvenor, Duncan Watson-Paris, Phillip Stier and Ken S. Carslaw, Constraining aerosol forcing uncertainty using satellite data, AeroCom/AeroSat 2021, 11-15 October 2021;
7. **Deaconu L.**, Watson-Parris D., Stier P., Lee L., Constraining direct aerosol radiative forcing using remote sensing and in-situ constraints, ORACLES 2020 Science Team Meeting, 14 May 2020 (oral - virtual presentation);

8. **Deaconu L.,** Watson-Parris D., Stier P., Lee L., Constraining direct aerosol radiative forcing using remote sensing and in-situ constraints, EGU, Vienna, 4-8 May 2020 (oral - virtual presentation) (oral);
9. **Deaconu L.,** Watson-Parris D., Stier P., Regayre L., Johnson J., Yoshioka M., Carslaw K., Investigating the impact of regional and global constraints on reducing the uncertainty in aerosol effective radiative forcing, AGU Fall Meeting 2019, San Francisco, 9-13 December 2019 (poster);
10. **Deaconu L.,** Watson-Parris D., Stier P., Constraining aerosol radiative forcing using aerosol absorption, AEROCOM/AEROSAT, Barcelona, Spain, 23-28 September 2019;
11. **Deaconu L.,** Watson-Parris D., Regayre L., Yoshioka M., Carslaw K., Stier. P., Exploiting Aerosol Absorption to Quantify and Constrain the Uncertainty on the Effective Radiative Forcing due to Aerosol Radiation Interactions, GRC, Lewiston, MA, 20-26 July 2019 (poster);
12. **Deaconu L.,** Watson-Parris D., Regayre L., Carslaw K., Stier P., Bounding aerosol properties and radiative effects using observations, AEROCOM-AEROSAT Workshop, Washington DC, 15-19 October 2018 (poster);
13. **Deaconu L.,** Ferlay N., Waquet F., Peers F., Thieuleux F., Goloub P., Synergy POLDER/CALIOP for the study of aerosol-above-cloud properties and their radiative impacts off the coast of Angola, EGU Conference, Vienna, AUS, 9-14 April 2018 (oral);
14. **Deaconu L.,** Waquet F., Josset D., Ferlay N., Pascal N., Peers, F., Ducos F., Thieuleux F., Tanré D., Pelon J., Goloub P.: Consistency of aerosols above clouds characterization from active and passive A-Train sensors, A-Train Symposium, 18-23 April 2017, Pasadena, CA (oral).

#### **Școli de vară și workshop-uri științifice:**

**The International Climate Informatics Conference 2020 (CI 2020);** - organizat virtual la Universitatea Oxford din 23-25 Septembrie 2020; A inclus de asemenea un hackathon de jumătate de zi în 22 Septembrie 2020.

**ACTRIS Summer School 2021-** Organizat ca școală virtuală în 3-10 May 2021.

**Școala de Vara INOE 2012:** ARS (Aerosol Remote Sensing) a fost organizat la centrul RADO in Magurele, 21- 31 August 2012