# **CURRICULUM VITAE**

Miroslaw Andrejczuk miroslaw.andrejczuk@metoffice.gov.uk

### UNIVERSITY EDUCATION

Ph.D., University of Warsaw, Poland, 2004 (Physics) M.Sc., University of Warsaw, Poland, 1996 (Geophysics/major Atmospheric Physics)

### **SKILLS**

Programming: FORTRAN, Python, MPI, OpenMP, OpenACC, CUDA FORTRAN, Matlab, C, IDL, R;

Foreign languages: Polish (native), English – spoken and written, Russian - basic spoken and written;

### RECENT PROJECTS

From Performance Testing to Model Improvement: NEMO case study - http://forge.ipsl.jussieu.fr/nemo/attachment/wiki/user/andmirek/NEMO\_IO\_DIAGN.pdf

#### WORK EXPERIENCE

2015 - Present Met Office, United Kingdom

Senior Scientific Software Engineer | Oct 2016 - Present

Scientific Software Engineer | Apr.2015 – Sept 2016

Dec 2011 – Nov 2014 University of Oxford, Oxford, United Kingdom

Senior Research Computing Associate

Oct. 2008 – Nov 2011 University of Leeds, Leeds, United Kingdom

Postdoctoral Research Associate |

Feb. 2005 – Jul. 2008 Los Alamos National Laboratory, Los Alamos, NM, USA

Postdoctoral Research Associate

Mar. 2004 – Jan 2005 SUPPORT LLC, Warsaw, Poland

Analyst |

Dec 2001 – Aug 2003 Institute of Meteorology and Water Management, Warsaw, Poland

Specialist

## PEER REVIEWED PUBLICATIONS

A. A. Sellar, et. al 2020: Implementation of UK Earth system models for CMIP6., Journal of Advances in Modeling Earth Systems (JAMES), 12, e2019MS001972

**M.** Andrejczuk, A. Gadian and A. Blyth, 2014: Numerical simulations of stratocumulus cloud response to aerosol perturbation, *Atmos. Res.*, **140–141**, 76–84

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Twohy C. H., J. R. Anderson, D. W. Toohey, **M. Andrejczuk**, A. Adams, M. Lytle, R. C. George, R. Wood, P. Saide, S. Spak, P. Zuidema, and D. Leon, 2013: Impacts of aerosol particles on the microphysical and radiative properties of stratocumulus clouds over the Southeast Pacific ocean. Atmos. Chem. Phys., 13, 2541-2562

**Andrejczuk, M.,** W. W. Grabowski, A. Gadian, and R. Burton, 2012: Limited-area modelling of stratocumulus over South-Eastern Pacific, *Atmos. Chem. Phys.*, **12**, 3511-3526.

Grabowski, W. W., **M. Andrejczuk** and L.-P. Wang 2011: Representation of Activation and Early Growth of Cloud Droplets in Bin Microphysics Models. *Atmos. Res.*, **99**, 290-301.

**Andrejczuk, M.**, W. W. Grabowski, J. M. Reisner, A. Gadian 2010: Cloud-aerosol interactions for boundary-layer stratocumulus in the Lagrangian Cloud Model, *J. Geophys. Res.*, 115, D22214, doi:10.1029/2010JD014248.

**Andrejczuk M.**, W. W. Grabowski, Sz. P. Malinowski and P. K. Smolarkiewicz, 2009: Numerical simulation of cloud/clear-air interfacial mixing: Homogeneous versus inhomogeneous mixing, *J. Atmos. Sci.*, **66**, 2493–2500.

Malinowski Sz. P, **Andrejczuk M**., Grabowski W. W., Korczyk P., Kowalewski T. K. and P. K. Smolarkiewicz, 2008: Laboratory and modeling studies of cloud-clear air interfacial mixing: anisotropy of small-scale turbulence due to evaporative cooling, *New J. Phys.*, 0 (2008) 075020 (15pp).

**Andrejczuk, M.**, J. M. Reisner, B. Henson, M K. Dubey, and C. A. Jeffery (2008), The potential impacts of pollution on a nondrizzling stratus deck: Does aerosol number matter more than type?, J Geophys. Res., 113, D19204, doi:0.1029/2007JD009445. Jeffery, C. A., J. M. Reisner and **M. Andrejczuk**, 2006: Another look at stochastic condensation in clouds: Exact solutions, Fokker-Planck approximations and adiabatic evolution, *J. Atmos. Sci.*, **64**, 3949–3969.

**Andrejczuk M.**, W. W. Grabowski, Sz. P. Malinowski and P. K. Smolarkiewicz, 2006: Numerical simulation of cloud/clear-air interfacial mixing: Effects on cloud microphysics, *J. Atmos. Sci.*, **63**, 3204–3225.

**Andrejczuk M.,** W. W. Grabowski, Sz. P. Malinowski and P. K. Smolarkiewicz, 2004: Numerical simulation of cloud/clear-air interfacial mixing, *J. Atmos. Sci.* **61**, 1726-1739.

**Andrejczuk M.,** St. Moszkowicz, K. E. Haman and T. Szoplik, 2003: Radar-echo tracking by use of invariant moments, *Appl. Opt.* **42**, 5891-5896.

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