

Ronan McAdam (PhD, MSci)

CURRENT POSITION

Post-doctoral Researcher, Ocean Modelling and Data Assimilation (ODA) Division, Euro-Mediterranean Centre on Climate Change, Italy

October 2019 – present

- Validation of ECVs/EOVs in the Seasonal Prediction System (SPS3)
 - Development of user-relevant products derived from ocean variables in the framework of the EuroSea H2020 project
 - Contributing to sea ice analysis in the GLORAN project
 - Assisting the Division with public communications and website content
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EDUCATION

PhD Researcher in Physical Oceanography, Grantham Institute of Climate Change and Environment, Imperial College London, UK

October 2015 – March 2019

- Thesis title: *“The Connected Ocean: comparing inter-ocean transport at the surface and at depth”* with the supervision of Dr. Erik van Sebille & Dr Arnaud Czaja
- Part of the Science and Solution for a Changing Planet Doctoral Training Program (SSCP DTP) and the Space and Atmospheric Physics group (SPAT) in the Department of Physics
- Researched the physical drivers and dynamical boundaries of inter-basin transport
- Performed global plastic pollution tracking simulations with Markov Chain models
- Media exposure via radio, magazine and filmed interviews, on topic of plastic pollution

MSci Geophysics, Dept of Earth Science & Engineering, Imperial College London, UK

October 2011 – July 2015

- Achieved a 1st Class Honours
 - Undertook a summer research placement which transitioned into a Masters Project, with work published in the Journal of Meteoritics and Planetary Science, 2017
 - Topics studied include Advanced Engineering Mathematics, Numerical Modelling, Thermodynamics, Planetary Mechanics, Geophysical Fluid Dynamics, and Natural Hazards
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OTHER WORK EXPERIENCE

Unqualified Teacher, Turves Green Boys School, Birmingham, UK

January 2019 – June 2019

- Full-time member of Maths Department leading targeted classes and tutor-style revision sessions in a challenging, inner-city secondary school in a deprived area (11-16 years old)
- Dealing with a wide range of behaviour, discipline and student safety issues

Policy Researcher & Magazine Correspondent, Royal Statistical Society, UK

May 2017 – July 2017

- Wrote briefing documents on local government data and science education funding
 - Contributed articles to Significance Magazine and website: “How much plastic is in our oceans?” & “Plastic bag charge: measuring success”
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AWARDS

October 2016

Presidents Awards: The Achievement Award for Societal Engagement, “*Plastic not fantastic in our oceans*” team, Imperial College London

September 2016

Best Student Speaker, Challenger Society: Ocean Modelling Group Meeting

SKILLS

Languages: English (first language), French (fluent), Italian (intermediate)

Computing Skills: Windows 10, Linux, Office 365, LaTeX, Inkscape & GIMP image processing software, Slack, GitHub version control, CDO, Python, C++ and Matlab

Ocean Models and Dataset experience: NEMO ORCA025 configurations, OceanParcels Lagrangian toolkit, GlobCurrent products, AVISO ADT, NOAA Global Drifter Program, netCDF files

PUBLICATIONS

McAdam, R. and van Sebille, E., 2018. Surface Connectivity and Interocean Exchanges From Drifter-Based Transition Matrices. *Journal of Geophysical Research: Oceans*, 123(1), pp.514-532.

Van Sebille, E et al, 2018. Lagrangian ocean analysis: Fundamentals and practices. *Ocean Modelling*, 121, pp.49-75.

McAdam R, 2017, Plastic in the ocean: How much is out there?, *Significance*, Vol:14, ISSN:1740-9705, Pages:24-27

Collins, G.S., Lynch, E., McAdam, R. and Davison, T.M., 2017. A numerical assessment of simple airblast models of impact airbursts. *Meteoritics & Planetary Science*, 52(8), pp.1542-1560.

SUMMER SCHOOLS

Deutsche Physikalische Gesellschaft (DOG), Bad Honnef, Physics of the Ocean, 2017

CONFERENCES AND SEMINARS

2019

EuroSea Kick-Off Meeting, Royal Belgian Institute of Natural Sciences, Belgium, November

World Climate Justice Forum, Glasgow Caledonian University, UK, June

2018

Challenger Society Ocean Modelling Group Meeting, University of Newcastle, UK, September

Challenger Society Conference, University of Newcastle, UK, September

Graph Theory and Physics Institute of Physics Meeting, Imperial College London, UK, May

AGU Ocean Sciences, Portland, USA, February

Seminar, Institute for Marine and Atmospheric Sciences, Utrecht, Netherlands, May

2017

Challenger Society Ocean Modelling Group Meeting, UK Met Office, UK, September

2016

Challenger Society Ocean Modelling Group Meeting, University of Liverpool, UK. September

Challenger Society Conference, University of Liverpool, UK, September

MICRO 2016: Fate and Impact of Microplastics in Marine Ecosystems - From the Coastline to the Open Sea, Lanzarote, Spain