

Jérôme Gourrion

Date of birth: 05/01/1972

Nationality: French

Contact

jerome.gourrion@pokapok.org

europass

WORK EXPERIENCE

POKAPOK Plouzané, France

Research engineer

10/01/2022 - Current

Development, implementation and validation of statistical method for in-situ data quality control.

Data analysis, Statistical methods applied to Ocean monitoring and operational oceanography.

POKaPOK co-founder and manager

OceanScope Brest, France

Research engineer

01/05/2018 - 13/07/2021

Development, implementation and validation of a statistical method for in-situ data quality control.

Coordination of CMEMS cross-cutting activities about Product Quality and Ocean State Report.

Coordination of a 4 persons team to setup a database system for the manipulation of big oceanic datasets.

CNRS / CORIOLIS Plouzané, France

Research Engineer

10/03/2014 - 30/04/2018

Contribution to operational and R&D tasks in the marine in-situ component of the European Commission COPERNICUS. Production of the annual release of the CORIOLIS ReAnalysed temperature and salinity dataset. Development, implementation and validation of a new non-parametric statistical approach for data quality control. In charge of CMEMS tasks on handling feedback from Mercator; coordinator of the in-situ contribution to the CMEMS Ocean State Report; contribution to cross-cutting activities on Product Quality and Multi-Year products.

CMIMA / CSIC Barcelona, Spain

Post-doctoral position

01/07/2009 - 31/12/2013

Validation of SMOS brightness temperature images. Error analysis and post-calibration of polarimetric SMOS data : characterization of spatial biases in the antenna frame, temporal and latitudinal biases based on specific data selection strategies. Validation of calibration and image reconstruction processing options. RFI detection. Total electronic content inversion. Empirical forward model improvement : roughness contribution to emissivity, bistatic celes- tial signal reflection. Salinity inversion.

CMIMA / CSIC Barcelona, Spain

Post-doctoral position

01/08/2007 - 30/06/2009

Definition of the methodologies, algorithms and auxiliary informa- tion to produce SMOS Level 3 and 4 salinity maps at CP34. Characterization of surface salinity variability scales.

CNRS Plouzané, France

Post-doctoral position

01/02/2006 - 31/07/2007

Preliminary analyses in the context of the SMOS salinity space mission. Study of spatio-temporal variability scales for ocean surface salinity from in-situ data - Preparation and validation of a high quality surface salinity dataset from ARGO profiler data

IFREMER Plouzané, France

Post-doctoral position

01/02/2004 - 31/07/2005

Development, implementation and validation of a non-orthogonal curvilinear implicit hydrodynamic code for tide and sediment coupling simulation in the nearshore and estuarial zone - application to the Marennes-Oléron bay

E.N.I.B. Plouzané, France

Contratual teaching and research position (A.T.E.R.)

01/02/2003 - 31/08/2003

Contribution to the development of a phenomenological wave model for realistic sea surface visual rendering : modelization of deep-water breaking and foam appearance - Development of a tracer transport simulation prototype through an asynchronous numerical approach using multi-agent programming tools. Co-advisor of 3 Master students in Computer Sciences

French Ministry of Research Plouzané, France

PhD student

12/1995 - 02/2003

Statistical analysis of sea state signatures from microwave nadir- looking radar roughness and buoy wave observations : study and parameterization of wave growth impact. Empirical characterization of sea state impact on TOPEX bi-frequency radar cross sections - Climatological study of wind wave energy spectrum as a function of wind speed and wave age from buoy wave data - Impact on the wave breaking spectral energy dissipation rate

EDUCATION & TRAINING

01/12/1995 - 20/02/2003 Brest, France

PhD speciality Oceanography, Meteorology and Environment Université de Bretagne Occidentale

Level in EQF: EQF level 8

01/10/1994 - 31/07/1995 Brest, France

D.E.A 'Océans' speciality Physics and Dynamics Université de Bretagne Occidentale

Level in EQF: EQF level 7

01/10/1991 - 30/09/1994 La garde, France

Engineering school I.S.I.T.V. speciality Marine technologies Université de Toulon et du Var

Level in EQF: EQF level 7

LANGUAGE SKILLS

MOTHER TONGUE(S): French
OTHER LANGUAGE(S):

English

Listening B2
Reading B2
Writing B2
Spoken production B1
Spoken interaction B2

Spanish

Listening C1
Spoken production C1

Reading C1 **Spoken interaction** C1

Writing B2

Catalan

Listening B1 **Spoken production** A2

Reading B1 **Spoken interaction** A2

Writing A1

MAIN PUBLICATIONS

Main Publications

- Gourrion, J., Szekely, T., Killick, R., Owens, B., Reverdin, G., & Chapron, B. (2020). Improved statistical method for quality control of hydrographic observations. *Journal of Atmospheric and Oceanic Technology*, *37*(5), 789-806.
- Szekely, T., Gourrion, J., Pouliquen, S., & Reverdin, G. (2019). The CORA 5.2 dataset for global in situ temperature and salinity measurements: data description and validation. *Ocean Science*, *15*(6), 1601-1614.
- Zonal jets in the equatorial Atlantic Ocean, M. Rosell-Fieschi, J. Gourrion, J.L. Pelegrî, in P. in O., 130, p.1-18, jan. 2015.
- The Tasman Leakage of intermediate waters as inferred from Argo floats, M. Rosell-Fieschi, S.R. Rintoul, J. Gourrion, J.L. Pelegrî, in Geophys. Res. Letters, 40(20), p.5465-5460, 2013.
- Towards an optimal estimation of the SMOS antenna-frame systematic errors, J. Gourrion, S. Guimbard, M. Portabella, R. Sabia, in Trans. Geosci. Remote Sens., 51(9), p.4752-4760, 2013.
- Characterization of the SMOS Instrumental Error Pattern Correction Over the Ocean, J. Gourrion, R. Sabia, M. Portabella, J. Tenerelli, S. Guimbard, A. Camps, in Geosci. Remote Sens. Letters, 9(4), p.793-797, 2012.
- SMOS semi-empirical ocean forward model adjustment, S. Guimbard, J. Gourrion, M. Portabella, A. Turiel, C. Gabarró, J. Font, in Trans. Geosci. Remote Sens., 50, p.1676-1687, 2012.
- Error covariance matrices characterization in the ocean salinity retrieval cost function within the SMOS mission, M. Talone, C. Gabarró, A. Camps, R. Sabia, J. Gourrion, M. Vall-llossera, J. Font, in. J. Atmosph. Ocean. Technol., 28(9), p.1155-1166, 2011.
- Radio-Frequency Interference Detection and Mitigation Algorithms for Synthetic Aperture Radiometers, A. Camps, J. Gourrion, J.M. Tarongi, M. Vall-Llossera, A. Gutierrez, J. Barbosa, R. Castro, in Algorithms, 4(3), p.155-182, 2011.
- Les états de mer : un état de l'art ; le marin, l'océanographe et l'infographiste, M. Parenthoen, J. Gourrion, J. Tisseau, proceedings AFIG'03, Paris, 3-4-5 dec. 2003.
- Investigation of C-band altimeter cross section dependence on wind speed and sea state, J. Gourrion, D. Vandemark, S. Bailey, B. Chapron, Canad. Jour. of Rem. Sens., vol.28, No.3, pp. 1-6, 2002.
- A two parameter wind speed algorithm for Ku-band altimeters, J. Gourrion, D. Vandemark, S. Bailey, B. Chapron, J. Atmos. Ocean. Tech., vol.19, pp. 2030-2048, 2002.
- Sea level anomalies measured by TOPEX/Poseidon and derived from an ocean model forced by scatterometer wind-stress fields, Y. Quilfen, A. Bentamy, P. Delecluse, K. Katsaros, J. Gourrion, N.Grima, Trans. Geosc. Rem. Sensing, 38, 1871-1884, 2000.
- Global ERS-1/2 and NSCAT observations : Upwind/Crosswind and Upwind/Downwind measurements, Y. Quilfen, B. Chapron, A. Bentamy, J. Gourrion, T. Elfouhaily, D. Vandemark, J. Geophys. Res., May 15, 104(C5), 11459-11469, 1999.
- Estimation of wind stress using dual-frequency TOPEX data, T. Elfouhaily, D. Vandemark, J. Gourrion, B. Chapron, J. Geophys. Res., October 15, 103, 25101-25108, 1998.