europass

Jérôme Gourrion

Nationality: French **Date of birth:** 05/01/1972

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Work: 115, rue Claude Chappe, 29280 Plouzané (France)

WORK EXPERIENCE

Research engineer

POKAPOK [10/01/2022 – Current]

City: Plouzané

Country: France

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

Research engineer

OceanScope [01/05/2018 – 13/07/2021]

City: Brest

Country: France

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.

Research Engineer

CNRS / CORIOLIS [10/03/2014 – 30/04/2018]

Address: Plouzané (France)

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.

Post-doctoral position

CMIMA / CSIC [01/07/2009 – 31/12/2013]

Address: Barcelona (Spain)

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.

Post-doctoral position

CMIMA / CSIC [01/08/2007 – 30/06/2009]

Address: Barcelona (Spain)

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.

Post-doctoral position
CNRS [01/02/2006 – 31/07/2007]

Address: Plouzané (France)

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

Post-doctoral position
IFREMER [01/02/2004 – 31/07/2005]

Address: Plouzané (France)

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

Contratual teaching and research position (A.T.E.R.)
E.N.I.B. [01/02/2003 – 31/08/2003]

Address: Plouzané (France)

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

PhD student
French Ministry of Research [12/1995 – 02/2003]

Address: Plouzané (France)

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 AND TRAINING

PhD speciality Oceanography, Meteorology and Environment
Université de Bretagne Occidentale [01/12/1995 – 20/02/2003]

Address: Brest (France)
Level in EQF: EQF level 8

D.E.A 'Océans' speciality Physics and Dynamics
Université de Bretagne Occidentale [01/10/1994 – 31/07/1995]

Address: Brest (France)
Level in EQF: EQF level 7

Engineering school I.S.I.T.V. speciality Marine technologies
Université de Toulon et du Var [01/10/1991 – 30/09/1994]

Address: La garde (France)
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 **READING** C1 **WRITING** B2

SPOKEN PRODUCTION C1 **SPOKEN INTERACTION** C1

Catalan

LISTENING B1 **READING** B1 **WRITING** A1

SPOKEN PRODUCTION A2 **SPOKEN INTERACTION** A2

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. Pelegrí, 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. Pelegrí, 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.