

MARCOS PORTABELLA

Birth Date: 14/10/1970

Citizenship: Spanish

Marital Status: Married with three children

Contact Information

Work address : Passeig Marítim de la Barceloneta 37-49
08003 Barcelona, Spain
Phone: +34 932309620
Email: portabella@icm.csic.es

ACADEMIC STUDIES

- Nov. 2002** **UNIVERSITY OF BARCELONA (UB)**, Barcelona, Spain.
Degree: **Doctor in Physics**.
PhD title: “Wind field retrieval from satellite radar systems”
- June 1995** **INSTITUTE OF SPACE STUDIES OF CATALONIA (IEEC)**, Barcelona, Spain.
Degree: **Master in Space Scientific and Technological Studies**.
SPECIALITY: Remote Sensing.
- June 1994** **UNIVERSITY OF BARCELONA (UB)**, Barcelona, Spain.
Degree: **Graduate in Physics**.
SPECIALITY: Physics of the Earth and Cosmos.

SPECIALIZATION COURSES

- Nov. 2001** **ROYAL NETHERLANDS METEOROLOGICAL INSTITUTE (KNMI)**
De Bilt, The Netherlands.
Course in “**SUN Server Tuning**”.
- May 2001** **EUROPEAN CENTRE FOR MEDIUM-RANGE WEATHER FORECAST (ECMWF)**
Reading, United Kingdom.
Course in “**Data Assimilation and use of Satellite Data**”.
- April 2000** **UNIVERSITY OF OXFORD**, Oxford, United Kingdom.
Course in “**Quantitative Earth Observation**”.
- June 1997** **EUROPEAN SPACE RESEARCH INSTITUTE (ESRIN)**, Frascati, Italy.
Course in “**ERS SAR and other Complementary Spaceborne Sensors for Hydrological Applications**”.
- Aug. 1995** **INTERNATIONAL SPACE UNIVERSITY (ISU)**, Stockholm, Sweden.
Summer Session Program in “**Space Studies**”.
SPECIALITY: Remote Sensing.

INFORMATICS KNOWLEDGE

OPERATING SYSTEMS: MSDOS, Unix, Windows, and VMS.

PROGRAMMING: Fortran, C, Python, IDL, PVWave, Vili and Matlab.

SOFTWARE: Microsoft Office, Open Office, Thunderbird, Adobe Acrobat, Adobe Photoshop, Explorer, Firefox, Chrome, Idrisi, ENVI, etc.

LANGUAGES

Native languages: Spanish and Catalan.

Working languages: English, French, and Italian.

WORK EXPERIENCE

Oct. 2012 – present **INSTITUT DE CIÈNCIES DEL MAR (ICM-CSIC)**
Barcelona, Spain.
Physical Oceanography Department.
Senior Scientist. Head of the Satellite Winds group.

July 2008 – Sep. 2012 **UNITAT DE TECNOLOGIA MARINA (UTM-CSIC)**
Barcelona, Spain.
Research & Development & Innovation Department.
Senior Scientist. Set up of R&D group in marine remote sensing at UTM.

Mar. 2004 – Mar. 2008 **ROYAL NETHERLANDS METEOROLOGICAL INSTITUTE (KNMI)**
De Bilt, The Netherlands.
Research & Development Division of the Weather Department.
Visiting Scientist. Development of a generic scatterometer wind inversion and geophysical noise model; characterisation of a scatterometer wind-to-stress transformation; ocean calibration of the new Advanced Scatterometer (ASCAT) during commissioning phase; development of a sea surface salinity retrieval algorithm for the Soil Moisture and Ocean Salinity (SMOS) mission.

Feb. 1999 – Nov. 2002 **KNMI**
De Bilt, The Netherlands.
R&D Observations Division of the Observations & Modelling Department.
Research fellow & Visiting Scientist. Development of a new method to improve wind retrieval accuracy (especially at nadir) and characterisation of a Quality Control procedure (including rain flag) for SeaWinds scatterometer.

Sep. 1997 – Sep. 1998

EUROPEAN SPACE RESEARCH AND TECHNOLOGY CENTRE (ESTEC), European Space Agency (ESA), Noordwijk, The Netherlands.
Ocean and Sea Ice Unit of the Earth Sciences Division.

Research fellow. Wind retrieval from Synthetic Aperture Radar (SAR) measurements: definition and implementation of a statistical approach which combines SAR and Numerical Weather Prediction (NWP) model information to produce high-resolution wind vector fields.

Sep. 1996 – Sep. 1997

EUROPEAN SPACE RESEARCH INSTITUTE (ESRIN)
ESA, Frascati, Italy.

ERS Mission Coordination and Product Assurance Section of the Earth Remote Sensing Exploitation Division.

Research fellow. Validation of NASA Scatterometer (NSCAT) wind retrieval using ERS-2 Scatterometer and ECMWF model winds.

Oct. 1995 – Sep. 1996

UNIVERSITY OF BARCELONA (UB)
Barcelona, Spain.

Astronomy and Meteorology Department.

PhD student. Collaboration in the project METEO: operational implementation of MASS (Mesoscale Atmospheric Simulation System) model.

REFEREED PAPERS (SCI)

1. Corcione, V., Grieco, G., **Portabella, M.**, Nunziata, F., and Migliaccio, M., “A novel azimuth cut-off implementation to retrieve sea surface wind speed from SAR imagery,” *IEEE Trans. Geosci. Rem. Sens.*, <https://doi.org/10.1109/TGRS.2018.2883364>, in press 2018.
2. Grieco, G., Stoffelen, A., **Portabella, M.**, Belmonte Rivas, M., Lin, W., Fabra, F., “Quality control of delay-Doppler maps for stare processing,” *IEEE Trans. Geosci. Rem. Sens.*, <https://doi.org/10.1109/TGRS.2018.2879059>, in press 2018.
3. Lin, W., **Portabella, M.**, Foti, G., Stoffelen A., Gommenginger, C., and He, Y., “Towards the Generation of a Wind Geophysical Model Function for Space-borne GNSS-R,” *IEEE Trans. Geosci. Rem. Sens.*, <https://doi.org/10.1109/TGRS.2018.2859191>, in press 2018.
4. Lin, W., Dong, X., **Portabella, M.**, Lang, S., He, Y., Yun, R., Wang, Z., Xu, X., Zhu, D., and Liu, J., “A Perspective on the Performance of the CFOSAT Rotating Fan Beam Scatterometer,” *IEEE Trans. Geosci. Rem. Sens.*, <https://doi.org/10.1109/TGRS.2018.2858852>, in press 2018.
5. Olmedo, E., Gabarró, C., González-Gambau, V., Martínez, J., Ballabrera-Poy, J., Turiel, A., **Portabella, M.**, Fournier, S., and Lee, T., “Seven years of SMOS sea surface salinity at high latitudes: variability in arctic and sub-arctic regions,” *Remote Sens.*, 10(11), 1772, <https://doi.org/10.3390/rs10111772>, 2018.
6. Hoareau, N., Turiel, A., **Portabella, M.**, Ballabrera-Poy, J., and Vogelzang, J., “Singularity Power Spectra: A method to assess geophysical consistency of gridded products - Application to sea-surface salinity remote sensing maps,” *IEEE Trans. Geosci. Rem. Sens.*, 56 (9), pp. 5525-5536, <https://doi.org/10.1109/TGRS.2018.2819240>, 2018.
7. Hoareau, N., **Portabella, M.**, Lin, W., Ballabrera-Poy, J., and Turiel, A., “Error characterization of sea surface salinity products using triple collocation analysis,” *IEEE Trans. Geosci. Rem. Sens.*, 56 (9), pp. 5160-5168, <https://doi.org/10.1109/TGRS.2018.2810442>, 2018.
8. Cardellach, E., Wickert, J., Baggen, R., Benito, J., Camps, A., Catarinho, N., Chapron, B., Fabra, F., Flato, G., Fragner, H., Gabarro, C., Gommenginger, C., Haas, C., Healy, S., Hernandez-Pajares, M., Hoeg, P., Jäggi, A., Kainulainen, J., Abbas Khan, S., Lemke, N.M.K., Li, W., Nghiem, S.V., Pierdicca, N., **Portabella, M.**, Rautiainen, K., Rius, A., Sasgen, I., Semmling, M., Shum, C.K., Soulat, F., Steiner, A.K., Tailhades, S., Thomas, M., Vilaseca, R., and Zuffada, C., “GNSS Transpolar Earth Reflectometry explorINg system (G-TERN): Mission concept,” *IEEE Access Journal*, 6, pp. 13980-14018, <https://doi.org/10.1109/ACCESS.2018.2814072>, 2018.
9. Gabarró, C., Turiel, A., Elosegui, P., Pla-Resina, J.A., and **Portabella, M.**, “New methodology to estimate Arctic sea ice concentration from SMOS combining brightness temperature differences in a maximum-likelihood estimator,” *The Cryosphere*, 11, pp. 1987-2002, <https://doi.org/10.5194/tc-11-1987-2017>, 2017.
10. Lin, W., and **Portabella, M.**, “Towards an improved wind quality control for RapidScat,” *IEEE Trans. Geosci. Rem. Sens.*, 55 (7), pp. 3922-3930, <https://doi.org/10.1109/TGRS.2017.2683720>, 2017.
11. Stoffelen, A., Aaboe, S., Calvet, J.C., Cotton, J., De Chiara, G., Figa Saldaña, J., Mouche, A., **Portabella, M.**, Scipal, K., and Wagner, W., “Scientific Developments and the EPS-SG scatterometer,” *IEEE J. Sel. Top. Appl. Earth Obs. Remote Sens.*, 10 (5), pp. 2086-2097, <https://doi.org/10.1109/JSTARS.2017.2696424>, 2017.
12. Lin, W., **Portabella, M.**, Stoffelen, A., and Verhoef, A., “Towards an improved wind inversion algorithm for RapidScat,” *IEEE J. Sel. Top. Appl. Earth Obs. Remote Sens.*, 10 (5), pp. 2156-2164, <https://doi.org/10.1109/JSTARS.2016.2616889>, 2017.

13. Olmedo, E., Martínez, J., Turiel, A., Ballabrera-Poy, J., and **Portabella, M.**, “Debiased Non-Bayesian retrieval: a novel approach to SMOS Sea Surface Salinity,” *Remote Sensing of Environment*, 193, pp. 103-126, <https://doi.org/10.1016/j.rse.2017.02.023>, 2017.
14. Grieco, G., Lin, W., Migliaccio, M., Nirchio, F., and **Portabella, M.**, “Dependency of the Sentinel-1 azimuth wavelength cut-off on significant wave height and wind speed,” *Int. J. Rem. Sens.*, **37** (21), pp. 5086–5104, <https://doi.org/10.1080/01431161.2016.1226525>, 2016.
15. Camps, A., Gabarró, C., Vall-llossera, M., Blanch, S., Aguasca, A., Torres, F., Corbella, I., Duffo, N., Turiel, A., **Portabella, M.**, Ballabrera-Poy, J., González-Gambau, V., Martínez, J., Villarino, R., Enrique, L., Monerris, A., Bosch, X., Sabia, R., Talone, M., Piles, M., Pablos, M., and Valencia, E., “From experimental campaigns to BEC - CP34 salinity products: Tribute to the Contributions of prof. Font to the SMOS Mission,” *Scientia Marina*, **80** (S1), pp. 159-172, <https://doi.org/10.3989/scimar.04285.04A>, 2016.
16. Turiel, A., Piles, M., González-Gambau, V., Ballabrera-Poy, J., Gabarró, C., Martínez, J., Olmedo, E., **Portabella, M.**, and Pérez, F., “Two thousand days of SMOS operations at Barcelona Expert Center: a tribute to Jordi Font’s task,” *Scientia Marina*, **80** (S1), pp. 173-193, <https://doi.org/10.3989/scimar.04291.15A>, 2016.
17. Lin, W., **Portabella, M.**, Turiel, A., Stoffelen, A., and Verhoef, A., “An improved singularity analysis for ASCAT wind quality control: application to low winds,” *IEEE Trans. Geosci. Rem. Sens.*, **54** (7), pp. 3890-3898, <https://doi.org/10.1109/TGRS.2016.2529700>, 2016.
18. Olmedo, E., Martínez, J., Umbert, M., Hoareau, N., **Portabella, M.**, Ballabrera-Poy, J., and Turiel, A., “Improving time and space resolution of SMOS salinity maps using multifractal fusion,” *Remote Sensing of Environment*, **180**, pp. 246-263, <https://doi.org/10.1016/j.rse.2016.02.038>, 2016.
19. González-Gambau, V., Olmedo, E., Turiel, A., Martínez, J., Ballabrera-Poy, J., **Portabella, M.**, and Piles, M., “Enhancing SMOS brightness temperatures over the ocean using the nodal sampling image reconstruction technique,” *Remote Sensing of Environment*, **180**, pp. 205-220, 2016, <https://doi.org/10.1016/j.rse.2015.12.032>, 2016.
20. Lin, W., **Portabella, M.**, Stoffelen, A., Vogelzang, J., and Verhoef, A., “On mesoscale analysis and ASCAT ambiguity removal,” *Quart. J. R. Met. Soc.*, **142** (697), pp. 1745-1756, <https://doi.org/10.1002/qj.2770>, 2016.
21. Lin, W., **Portabella, M.**, Stoffelen, A., Vogelzang, J., and Verhoef, A., “ASCAT wind quality under high subcell wind variability conditions,” *J. Geophys. Res. Oceans*, **120** (8), pp. 5804–5819, <https://doi.org/10.1002/2015JC010861>, 2015.
22. Talone, M., **Portabella, M.**, Martínez, J., and González-Gambau, V., “About the optimal grid for SMOS level 1c and level 2 products,” *IEEE Geosci. Rem. Sens. Lett.*, **12** (8), pp. 1630-1634, <https://doi.org/10.1109/LGRS.2015.2416920>, 2015.
23. Lin, W., **Portabella, M.**, Stoffelen, A., Verhoef, A., and Turiel, A., “ASCAT wind quality control near rain,” *IEEE Trans. Geosci. Rem. Sens.*, **53** (8), pp. 4165-4177, <https://doi.org/10.1109/TGRS.2015.2392372>, 2015.
24. Umbert, M., Guimbard, S., Lagerloef, G., Thompson, L., Ballabrera-Poy, J., **Portabella, M.**, and Turiel, T., “Detecting the surface salinity signature of Gulf Stream cold-core rings in Aquarius synergistic products,” *J. Geophys. Res.*, **120** (2), pp. 859-874, <https://doi.org/10.1002/2014JC010466>, 2015.
25. Lin, W., **Portabella, M.**, Stoffelen, A., Turiel, A., and Verhoef, A., “Rain identification in ASCAT winds using singularity analysis,” *IEEE Geosci. Rem. Sens. Lett.*, **11** (9), pp. 1519-1523, <https://doi.org/10.1109/LGRS.2014.2298095>, 2014.
26. Sabia, R., Cristo, A., Talone, M., Fernández, D., and **Portabella, M.**, “Impact of sea surface temperature and measurement sampling on the SMOS level 3 salinity products,” *IEEE Geosci. Rem. Sens. Lett.*, **11** (7), pp. 1245-1249, <https://doi.org/10.1109/LGRS.2013.2290710>, 2014.

27. Montuori, A., **Portabella, M.**, Guimbard, S., Gabarró, C., and Migliaccio, M., “Assessment of the SMOS inversion scheme for salinity and wind speed retrieval purposes,” *Eur. J. Remote Sens.*, **46**, pp. 855-873, <https://doi.org/10.5721/EuJRS20134651>, 2013.
28. Gourrion, J., Guimbard, S., **Portabella, M.**, and Sabia, R., “Towards an optimal estimation of the SMOS antenna-frame systematic errors,” *IEEE Trans. Geosci. Rem. Sens.*, **51** (9), pp. 4752-4760, <https://doi.org/10.1109/TGRS.2013.2271593>, 2013.
29. Gabarró, C., González, V., Corbella, I., Torres, F., Martínez, J., **Portabella, M.**, and Font, J., “Impact of the Local Oscillator calibration rate on the SMOS measurements and retrieved salinities,” *IEEE Trans. Geosci. Rem. Sens.*, **51** (9), pp. 4633-4642, <https://doi.org/10.1109/TGRS.2012.2233744>, 2013.
30. Lin, W., **Portabella, M.**, Stoffelen, A., and Verhoef, A., “On the characteristics of ASCAT wind direction ambiguities,” *Atmos. Meas. Tech.*, **6**, pp. 1053-1060, <https://doi.org/10.5194/amt-6-1053-2013>, 2013.
31. Font, J., Boutin, J., Reul, N., Spurgeon, P., Ballabrera-Poy, J., Chuprin, A., Gabarró, C., Gourrion, J., Guimbard, S., Hénocq, C., Lavender, S., Martin, N., Martínez, J., McCulloch, M., Meirold-Mautner, I., Mugerin, C., Petitcolin, F., **Portabella, M.**, Sabia, R., Talone, M., Tenerelli, J., Turiel, A., Vergely, J.L., Waldteufel, P., Yin, X., Zine, S., and Delwart, S., “SMOS first data analysis for sea surface salinity determination,” *Int. J. Rem. Sens.*, **34** (9-10) , pp. 3654-3670, <https://doi.org/10.1080/01431161.2012.716541>, 2013.
32. Font, J., Ballabrera-Poy, J., Camps, A., Corbella, I., Duffo, N., Diran, I., Emelianov, M., Enrique, L., Fernández, P., Gabarró, C., González, C., González, V., Gourrion, J., Guimbard, S., Hoareau, N., Julià, A., Kalaroni, S., Konstantinidou, A., López de Aretxabaleta, A., Martínez, J., Miranda, J., Monerris, A., Montero, S., Mourre, B., Pablos, M., Pérez, F., Piles, M., **Portabella, M.**, Sabia, R., Salvador, J., Talone, M., Torres, F., Turiel, A., Vall-llossera, M., and Villarino, R., “A new space technology for ocean observation: the SMOS mission,” *Scientia Marina*, **76** (S1), pp. 249-259, <https://doi.org/10.3989/scimar.03621.19K>, 2012.
33. **Portabella, M.**, Stoffelen, A., Lin, W., Turiel, A., Verhoef, A., Verspeek, J., and Ballabrera-Poy, J., “Rain effects on ASCAT retrieved winds: towards an improved quality control,” *IEEE Trans. Geosci. Rem. Sens.*, **50** (7), pp. 2495-2506, <https://doi.org/10.1109/TGRS.2012.2185933>, 2012.
34. Verspeek, J., Stoffelen, A., Verhoef, A., and **Portabella, M.**, “Improved ASCAT wind retrieval using NWP ocean calibration,” *IEEE Trans. Geosci. Rem. Sens.*, **50** (7), pp. 2488-2494, <https://doi.org/10.1109/TGRS.2011.2180730>, 2012.
35. Verhoef, A., **Portabella, M.**, and Stoffelen, A., “High-resolution ASCAT scatterometer winds near the coast,” *IEEE Trans. Geosci. Rem. Sens.*, **50** (7), pp. 2481-2487, <https://doi.org/10.1109/TGRS.2011.2175001>, 2012.
36. Gourrion, J., Sabia, R., **Portabella, M.**, Tenerelli, J., Guimbard, S., and Camps, A., “Characterization of the SMOS instrumental error pattern correction over the ocean,” *IEEE Geosci. Rem. Sens. Lett.*, **9** (4), pp. 793-797, <https://doi.org/10.1109/LGRS.2011.2181990>, 2012.
37. **Portabella, M.**, Stoffelen, A., Verhoef, A., and Verspeek, J., “A new method for improving scatterometer wind quality control,” *IEEE Geosci. Rem. Sens. Lett.*, **9** (4), pp. 579-583, <https://doi.org/10.1109/LGRS.2011.2175435>, 2012.
38. Camps, A., Font, J., Corbella, I., Vall-llossera, M., **Portabella, M.**, Ballabrera-Poy, J., Gonzalez, V., Piles, M., Aguasca, A., Acevo, R., Bosch, X., Duffo, N., Fernandez, P., Gabarro, C., Gourrion, J., Guimbard, S., Marin, A., Martinez, J., Monerris, A., Mourre, B., Perez, F., Rodriguez, N., Salvador, J., Sabia, R., Talone, M., Torres, F., Pablos, M., Turiel, A., Valencia, E., Martinez-Fernandez, J., Sanchez, N., Perez-Gutierrez, C., Baroncini-Turricchia, G., Rius, A., and Ribo, S., “Review of the CALIMAS Team Contributions to European Space Agency’s Soil Moisture and Ocean Salinity Mission Calibration and Validation,” *Remote Sens.*, **4** (5), pp. 1272-1309, <https://doi.org/10.3390/rs4051272>, 2012.

39. Guimbard, S., Gourrion, J., **Portabella, M.**, Turiel, A., Gabarró, C., and Font, J., “SMOS semi-empirical ocean forward model adjustment,” *IEEE Trans. Geosci. Rem. Sens.*, **50** (5), pp. 1676-1687, <https://doi.org/10.1109/TGRS.2012.2188410>, 2012.
40. Anderson, C., Figa, J., Bonekamp, H., Wilson, J.J.W., Verspeek, J., Stoffelen, A., and **Portabella, M.**, “Validation of backscatter measurements from the Advanced Scatterometer on Metop-A,” *J. Atm. and Ocean Techn.*, **29** (1), pp. 77-88, <https://doi.org/10.1175/JTECH-D-11-00020.1>, 2012.
41. Verspeek, J., Stoffelen, A., **Portabella, M.**, Bonekamp, H., Anderson, C., and Figa Saldaña, J., “Validation and calibration of ASCAT data using ocean backscatter and CMOD5.n,” *IEEE Trans. Geosci. Rem. Sens.*, <https://doi.org/10.1109/TGRS.2009.2027896>, **48** (1), pp. 386-395, 2010.
42. Gabarró, C., **Portabella, M.**, Talone, M., and Font, J., “Towards an optimal SMOS ocean salinity inversion algorithm,” *IEEE Geosci. Rem. Sens. Lett.*, **6** (3), pp. 509-513, <https://doi.org/10.1109/LGRS.2009.2018490>, 2009.
43. **Portabella, M.**, and Stoffelen, A., “On scatterometer ocean stress,” *J. Atm. and Ocean Techn.*, **26** (2), pp. 368–382, <https://doi.org/10.1175/2008JTECHO578.1>, 2009.
44. **Portabella, M.**, and Stoffelen, A., “Scatterometer backscatter uncertainty due to wind variability,” *IEEE Trans. Geosci. Rem. Sens.*, **44** (11), pp. 3356-3362, <https://doi.org/10.1109/TGRS.2006.877952>, 2006.
45. Stoffelen, A., and **Portabella, M.**, “On Bayesian scatterometer wind inversion,” *IEEE Trans. Geosci. Rem. Sens.*, vol. 44 (6), pp. 1523-1533, <https://doi.org/10.1109/TGRS.2005.862502>, 2006.
46. **Portabella, M.**, and Stoffelen, A., “A probabilistic approach for SeaWinds data assimilation,” *Quart. J. R. Met. Soc.*, **130** (596), pp. 127-152, <https://doi.org/10.1256/qj.02.205>, 2004.
47. **Portabella, M.**, and Stoffelen, A., “Characterization of residual information for SeaWinds quality control,” *IEEE Trans. Geosci. Rem. Sens.*, **40** (12), pp. 2747-2759, <https://doi.org/10.1109/TGRS.2002.807750>, 2002.
48. **Portabella, M.**, Stoffelen, A., and Johannessen, J.A., “Toward an optimal inversion method for SAR wind retrieval,” *J. Geophys. Res.*, **107** (C8), <https://doi.org/10.1029/2001JC000925>, 2002.
49. **Portabella, M.**, and Stoffelen, A., “A comparison of KNMI quality control and JPL rain flag for SeaWinds,” *Can. Jour. of Rem. Sens.*, **28** (3), pp. 424-430, <https://doi.org/10.5589/m02-040>, 2002.
50. **Portabella, M.**, and Stoffelen, A., “Rain detection and quality control of SeaWinds,” *J. Atm. and Ocean Techn.*, **18** (7), pp. 1171-1183, [https://doi.org/10.1175/1520-0426\(2001\)018<1171:RDAQCO>2.0.CO;2](https://doi.org/10.1175/1520-0426(2001)018<1171:RDAQCO>2.0.CO;2), 2001.

CONFERENCES & PROCEEDINGS

1. Turiel, A., Olmedo, E., Martínez, J., González-Gambau, V., Gabarró, C., Isern-Fontanet, J., and **Portabella, M.**, “Remote sensing SSS in the Mediterranean: prospects and applications,” *MED 2018 Workshop*, Frascati, Italy, 11-12 December, 2018.
2. Olmedo, E., Martínez, J., González-Gambau, V., Gabarró, C., Turiel, A., **Portabella, M.**, and Isern-Fontanet, J., “Barcelona Expert Center: SMOS SSS products and beyond,” *MED 2018 Workshop*, Frascati, Italy, 11-12 December, 2018.
3. Hoareau, N., **Portabella, M.**, Lin, W., Ballabrera-Poy, J., and Turiel, A., “Error characterization of sea surface salinity products using triple collocation analysis,” *Ocean Salinity Science Conference*, Barcelona, Spain, 6-9 November, 2018.
4. Hoareau, N., Turiel, A., **Portabella, M.**, Ballabrera-Poy, J., and Vogelzang, J., “Singularity Power Spectra: A method to assess geophysical consistency of gridded products - Application to sea surface salinity remote sensing maps,” *Ocean Salinity Science Conference*, Barcelona, Spain, 6-9 November, 2018.
5. Hoareau, N., **Portabella, M.**, Lin, W., Ballabrera-Poy, J., and Turiel, A., “Error characterization of sea surface salinity products using triple collocation analysis,” *Proc. of the International Conference on Marine Data and Information Systems (IMDIS)*, Barcelona, Spain, 5-7 November, 2018.
6. Gerbert, N., Martin, A., Navarro, V., and **Portabella, M.**, “Ocean surface current airborne radar (OSCAR) demonstrator,” *Doppler Oceanography from Space*, Plouzané, France, 10-12 October, 2018.
7. Isern-Fontanet, J., Ballabrera, J., García-Ladona, E., Olmedo, E., **Portabella, M.**, and Turiel, A., “Observation of high-resolution surface currents in the North-Western Mediterranean Sea: eddies along the Iberian coast,” *Doppler Oceanography from Space*, Plouzané, France, 10-12 October, 2018.
8. Polverari, F., Lin, W., Sapp, J., **Portabella, M.**, Stoffelen, A., Mouche, A., van Zadelhoff, G.J., Verhoef, A., de Kloe, J., Chang, P., Jelenak, Z., Bidlot, J.R., and Bourassa, M., “Towards a consolidated wind reference for assessing scatterometer high and extreme-force wind capabilities,” *CFOSAT Pre-launch Workshop*, Plouzané, France, 8-9 October, 2018.
9. Lin, W., Dong, X., **Portabella, M.**, Lang, S., He, Y., Yun, R., Wang, Z., Xu, X., Zhu, D., and Liu, J., “A Perspective on the performance of the CFOSAT rotating fan beam scatterometer,” *CFOSAT Pre-launch Workshop*, Plouzané, France, 8-9 October, 2018.
10. **Portabella, M.**, Stoffelen, A., Mouche, A., Lin, W., Polverari, F., van Zadelhoff, G.J., Chang, P., Jelenak, Z., Sapp, J., Bidlot, J.R., Bourassa, M., Zhang, B., and Perrie, W., “The challenge of wind comparisons in hurricane conditions,” *2018 EUMETSAT Meteorological Satellite Conference*, Tallinn, Estonia, 17-21 September, 2018.
11. De Chiara, G., Lin, W., **Portabella, M.**, and Stoffelen, A., “Assessment of new ASCAT wind products for assimilation in global NWP,” *2018 EUMETSAT Meteorological Satellite Conference*, Tallinn, Estonia, 17-21 September, 2018.
12. Stoffelen, A., Mouche, A., **Portabella, M.**, Lin, W., Polverari, F., van Zadelhoff, G.J., Chang, P., Jelenak, Z., Sapp, J., Bidlot, J.R., and Bourassa, M., “C-band High and Extreme Force Speeds (CHEFS),” *2018 EUMETSAT Meteorological Satellite Conference*, Tallinn, Estonia, 17-21 September, 2018.
13. Lin, W., **Portabella, M.**, Stoffelen, A., Verhoef, A., and Wang, Z., “Validation of the SST-dependent Ku-band geophysical model function for SCATSAT-1 scatterometer,” *2018 EUMETSAT Meteorological Satellite Conference*, Tallinn, Estonia, 17-21 September, 2018.

14. Grieco, G., Stoffelen, A., and **Portabella, M.**, “GNSS-R ocean properties by Delay Doppler Map stare processing,” *Proc. of the 2018 EUMETSAT Meteorological Satellite Conference*, Tallinn, Estonia, 17-21 September, 2018.
15. Olmedo, E., González-Gambau, V., Turiel, A., Martínez, J., Gabarró, C., Ballabrera, J., **Portabella, M.**, Arias, M., and Sabia, R., “Empirical characterization of the SMOS brightness temperature bias and uncertainty for improving sea surface salinity,” *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS)*, Valencia, Spain, 22-27 July, 2018.
16. Corcione, V., Grieco, G., **Portabella, M.**, Nunziata, F., and Migliaccio, M., “A new azimuth cut-off procedure to retrieve significant wave height under high wind regimes,” *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS)*, Valencia, Spain, 22-27 July, 2018.
17. Lin, W., **Portabella, M.**, Stoffelen, A., Verhoef, A., and Wang, Z., “Validation of the NSCAT-5 geophysical model function for SCATSAT-1 wind scatterometer,” *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS)*, Valencia, Spain, 22-27 July, 2018.
18. Yang, X., Corcione, V., Nunziata, F., **Portabella, M.**, and Migliaccio, M., “Assimilation of SAR-derived sea surface winds into typhoon forecast model,” *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS)*, Valencia, Spain, 22-27 July, 2018.
19. King, G., **Portabella, M.**, Lin, W., and Stoffelen, A., “Correlating extremes in rain with extremes in wind & wind stress divergence,” *Second International Workshop on Regional Ocean Modeling and Observation*, Nanjing, China, 1-3 July, 2018.
20. Corcione, V., Nunziata, F., **Portabella, M.**, Grieco, G., and Migliaccio, M., “SAR azimuth cut-off to estimate wind speed under high wind regimes,” *2018 Dragon 4 Symposium*, Xi’an, China, 19-22 June, 2018.
21. Nunziata, F., Li, X., Marino, A., Shao, W., **Portabella, M.**, and Yang, X., “Microwave satellite measurements for coastal area and extreme weather monitoring,” *2018 Dragon 4 Symposium*, Xi’an, China, 19-22 June, 2018.
22. Yang, X., Duan, B., Corcione, V., Nunziata, F., and **Portabella, M.**, “On the assimilation of SAR-derived sea surface winds into typhoon forecast model,” *2018 Dragon 4 Symposium*, Xi’an, China, 19-22 June, 2018.
23. Corcione, V., Nunziata, F., **Portabella, M.**, Grieco, G., and Migliaccio, M., “A spectral based method to retrieve extreme winds from SAR imagery,” *2018 Dragon 4 Symposium*, Xi’an, China, 19-22 June, 2018.
24. **Portabella, M.**, and Lin, W., “GMF development for GNSS-R,” *Advances in Earth Observation with GNSS Reflectometry from space: TechDemoSat-1 User Workshop and ESA TGScatt Presentation*, Southampton, United Kingdom, 24 May, 2018
25. **Portabella, M.**, King, G., Lin, W., and Stoffelen, A., “Correlating extremes in rain with extremes in wind & wind stress divergence,” *ISSI-BJ/ISSI Joint Workshop on Tropical and Subtropical Cyclones with Improved Satellite Observations*, Beijing, China, 7-11 May, 2018.
26. Stoffelen, A., **Portabella, M.**, Mouche, A., Lin, W., Polverari, F., van Zadelhoff, G.J., Chang, P., Jelenak, Z., Sapp, J., Bidlot, J.R., Bourassa, M., Zhang, B., and Perrie, W., “Estimating hurricane force from satellite microwave measurements,” *ISSI-BJ/ISSI Joint Workshop on Tropical and Subtropical Cyclones with Improved Satellite Observations*, Beijing, China, 7-11 May, 2018.
27. Lin, W., **Portabella, M.**, Turiel, A., Stoffelen, A., Verhoef, A., and Vogelzang, J., “Rain effects on scatterometer wind data processing,” *ISSI-BJ/ISSI Joint Workshop on Tropical and Subtropical Cyclones with Improved Satellite Observations*, Beijing, China, 7-11 May, 2018.
28. Corcione, V., Nunziata, F., **Portabella, M.**, Grieco, G., and Migliaccio, M., “The azimuth cut-off method to estimate wind speed under extreme weather conditions,” *SeaSAR 2018 Workshop*, Frascati, Italy, 7-10 May, 2018.

29. Grieco, G., Stoffelen, A., **Portabella, M.**, Belmonte Rivas, M., and Lin, W., “GNSS-R ocean properties by Delay Doppler Map stare processing,” *International Ocean Vector Winds Science Team Workshop*, Barcelona, Spain, 24-26 April, 2018.
30. Stoffelen, A., Mouche, A., **Portabella, M.**, Lin, W., Polverari, F., van Zadelhoff, G.J., Chang, P., Jelenak, Z., Sapp, J., Bidlot, J.R., and Bourassa, M., “C-band High and Extreme Force Speeds (CHEFS),” *International Ocean Vector Winds Science Team Workshop*, Barcelona, Spain, 24-26 April, 2018.
31. Polverari, F., Lin, W., Sapp, J., **Portabella, M.**, Stoffelen, A., Mouche, A., van Zadelhoff, G.J., Verhoef, A., de Kloe, J., Chang, P., Jelenak, Z., Bidlot, J.R., and Bourassa, M., “Towards a consolidated wind reference for assessing scatterometer high and extreme-force wind capabilities,” *International Ocean Vector Winds Science Team Workshop*, Barcelona, Spain, 24-26 April, 2018.
32. King, G., **Portabella, M.**, Lin, W., and Stoffelen, A., “Correlating extremes in wind and stress divergence with extremes in rain over the Tropical Atlantic,” *International Ocean Vector Winds Science Team Workshop*, Barcelona, Spain, 24-26 April, 2018.
33. **Portabella, M.**, Corcione, V., Grieco, G., Nunziata, F., and Migliaccio, M., “A novel azimuth cut-off implementation to improve sea surface wind retrievals from SAR images,” *International Ocean Vector Winds Science Team Workshop*, Barcelona, Spain, 24-26 April, 2018.
34. Wang, Z., Stoffelen, A., Verhoef, A., He, Y., Zhang, B., Lin, W., and **Portabella, M.**, “On the development of geophysical model functions for Ku-band scatterometer wind retrievals: SCATSAT-GMF,” *International Ocean Vector Winds Science Team Workshop*, Barcelona, Spain, 24-26 April, 2018.
35. Lin, W., Dong, X., **Portabella, M.**, Xu, X., Zhu, D., Wang, Z., and He, Y., “Assessment of the CFOSAT scatterometer backscatter and wind quality,” *International Ocean Vector Winds Science Team Workshop*, Barcelona, Spain, 24-26 April, 2018.
36. Olmedo, E., Gabarró, C., Ballabrera, J., González-Gambau, V., Martínez, J., Turiel, A., and **Portabella, M.**, “Seven years of SMOS Sea Surface Salinity in the Arctic Ocean,” *EGU General Assembly*, Vienna, Austria, 8-13 April, 2018.
37. Turiel, A., Olmedo, E., Martínez, J., González-Gambau, V., Gabarró, C., Ballabrera, J., **Portabella, M.**, and Isern-Fontanet, J., “SMOS SSS at Barcelona Expert Center: a new generation of products and applications,” *EGU General Assembly*, Vienna, Austria, 8-13 April, 2018.
38. Elósegui, P., **Portabella, M.**, Sánchez, O., Bardají, R., Wilkinson, J., and Kim, J.-H., “High-precision geodesy of the Arctic marine environment,” *ICE-ARC General Assembly*, Barcelona, Spain, 27-29 November, 2017.
39. Sánchez, O., Elósegui, P., **Portabella, M.**, Bardají, R., and Rodriguez, M.A., “Deployment of an array of geodetic-quality GPS ice-drifting buoys in the Arctic Ocean,” *ICE-ARC General Assembly*, Barcelona, Spain, 27-29 November, 2017.
40. Lin, W., **Portabella, M.**, Stoffelen, A., and Wang, Z., “Recent advances in Ku-band scatterometer wind processing,” *CFOSAT Science Team Workshop*, Beijing, China, 18-20 October, 2017.
41. Stoffelen, A., Mouche, A., **Portabella, M.**, Jelenak, Z., Chang, P., and Zhang, B., “C-band High and Extreme-Force Speeds,” *CFOSAT Science Team Workshop*, Beijing, China, 18-20 October, 2017.
42. King, G., Lin, W., **Portabella, M.**, and Stoffelen, A., “Statistical characterization of small-scale wind variability in response to heavy rain events near oceanic Mesoscale Convective Systems,” *2017 EUMETSAT Meteorological Satellite Conference*, Rome, Italy, 2-6 October, 2017.
43. Lin, W., **Portabella, M.**, Stoffelen, A., and De Chiara, G., “Towards a new ASCAT wind product for assimilation in global NWP,” *2017 EUMETSAT Meteorological Satellite Conference*, Rome, Italy, 2-6 October, 2017.

44. Lin, W., **Portabella, M.**, Stoffelen, A., De Chiara, G., Martínez, J., and Xu, X., “On the improvement of ASCAT wind data assimilation in global NWP,” *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS)*, Fort Worth, USA, 23-28 July, 2017.
45. Trindade, A., **Portabella, M.**, Stoffelen, A., and Lin, W., “On the development of a scatterometer-based correction for NWP wind forcing systematic errors: impact of satellite sampling,” *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS)*, Fort Worth, USA, 23-28 July, 2017.
46. Yang, X., Yu, Y., and **Portabella, M.**, “Assimilation of Sentinel-1 SAR winds in the forecasting of typhoon Lionrock,” 2017 Dragon 4 Symposium, Copenhagen, Denmark, 26-30 June, 2017.
47. Nunziata, F., Li, X., Marino, A., Shao, W., **Portabella, M.**, and Yang, X., “Microwave satellite measurements for coastal area and extreme weather monitoring,” 2017 Dragon 4 Symposium, Copenhagen, Denmark, 26-30 June, 2017.
48. **Portabella, M.**, Corcione, V., Yang, X., Jelenak, Z., Chang, P., Grieco, G., Mouche, A., Nunziata, F., and Lin, W., “Analysis of the SAR-derived wind signature over extra-tropical storm conditions,” 2017 Dragon 4 Symposium, Copenhagen, Denmark, 26-30 June, 2017.
49. Corcione, V., **Portabella, M.**, Yang, X., Jelenak, Z., Chang, P., Grieco, G., Mouche, A., Nunziata, F., and Lin, W., “On the use of synthetic aperture radar for hurricanes applications,” 2017 Dragon 4 Symposium, Copenhagen, Denmark, 26-30 June, 2017.
50. Lin, W., **Portabella, M.**, Stoffelen, A., and Grieco, G., “A wind geophysical model function for the TDS-1 GNSS-Reflectometry observations,” *GNSS+R 2017 Workshop*, Ann Arbor, USA, 23-25 May, 2017.
51. Grieco, G., Stoffelen, A., Belmonte, M., Lin, W., and **Portabella, M.**, “GOODIE: GNSS-R observation operator development and impact evaluation,” *GNSS+R 2017 Workshop*, Ann Arbor, USA, 23-25 May, 2017.
52. Olmedo, E., González-Gambau, V., Martínez, J., Turiel, A., Ballabrera-Poy, J., and **Portabella, M.**, “Improvements in SMOS SSS: Retrieval in Marginal Seas, Coastal Areas and River Discharges,” *Global Ocean Salinity and the Water Cycle Workshop*, Woods Hole, USA, 22-25 May, 2017.
53. **Portabella, M.**, Lin, W., Stoffelen, A., and De Chiara, G., “Towards a new ASCAT wind product for assimilation in global NWP,” *International Ocean Vector Winds Science Team Workshop*, San Diego, USA, 2-4 May, 2017.
54. Lin, W., and **Portabella, M.**, “A wind geophysical model function for the TDS-1 GNSS-reflectometry observations,” *International Ocean Vector Winds Science Team Workshop*, San Diego, USA, 2-4 May, 2017.
55. Lin, W., and **Portabella, M.**, “Towards an improved wind quality control for RapidScat,” *International Ocean Vector Winds Science Team Workshop*, San Diego, USA, 2-4 May, 2017.
56. Stoffelen, A., Trindade, A., De Kloe, J., and **Portabella, M.**, “Ocean state diagnostics from scatterometers,” *International Ocean Vector Winds Science Team Workshop*, San Diego, USA, 2-4 May, 2017.
57. **Portabella, M.**, Trindade, A., Stoffelen, A., Lin, W., and Belmonte-Rivas, M., “ERA*: An eddy-scale ocean forcing product,” *EGU General Assembly*, Vienna, Austria, 24-28 April, 2017.
58. Sánchez, O., Elósegui, P., **Portabella, M.**, Bardají, R., Rodríguez, M.A., and Gabarró, C., “On the deployment of an array of geodetic-quality GPS ice-drifting buoys in the Arctic Ocean,” *Arctic Science Summit Week (Mosaic Workshop)*, Prague, Czech Republic, 1-7 April, 2017.
59. Olmedo, E., Turiel, A., Isern-Fontanet, J., González-Gambau, V., Ballabrera-Poy, J., Martínez, J., **Portabella, M.**, Robins, L., and Brook, A., "Advances in SMOS SSS retrievals in marginal seas: limitations and capabilities," *EOS-COST Workshop on the use of models, reanalyses and observations to assess the health of the ocean environment*, Liege, Belgium, 17 March, 2017.

60. Lin, W., **Portabella, M.**, and Stoffelen, A., “Satellite scatterometer-derived sea surface wind vectors and wind variability,” *Xiamen Symposium on Marine Environmental Sciences*, Xiamen, China, 9-11 January, 2017.
61. Stoffelen, A., Vogelzang, J., Verhoef, A., Belmonte, M., Verspeek, J., de Kloe, J., Lin, W., **Portabella, M.**, and King, G., “Scatterometer winds, the tropics and the ECMWF model,” *ECMWF/ESA Workshop on tropical modelling, observations and assimilation*, Reading, United Kingdom, 7-10 November, 2016.
62. Sánchez, O., Elósegui, P., **Portabella, M.**, Bardají, R., and Rodriguez, M.A., “Towards a RUDICS open solution,” *ICE-ARC General Assembly*, Tromso, Italy, 18-20 October, 2016.
63. Turiel, A., Olmedo, E., Martínez, J., González-Gambau, V., Gabarró, C., Ballabrera, J., and **Portabella, M.**, “Six years of SMOS operations at Baelone Expert Center: the challenge of retrieving Sea Surface Salinity from space. A tribute to Jordi Font’s task,” *XXXII Trobades Científiques de la Mediterrània – Josep Miquel Vidal*, Menorca, Spain, 5-7 October, 2016.
64. King, G., Lin, W., **Portabella, M.**, Stoffelen, A., Turiel, A., and Verhoef, A., “Statistics of small-scale convective structures near oceanic Mesoscale Convective Systems using ASCAT winds and MSG rain,” *2016 EUMETSAT Meteorological Satellite Conference*, Darmstadt, Germany, 26-30 September, 2016.
65. Lin, W., **Portabella, M.**, Stoffelen, A., Verhoef, A., Lang, S., Lin, M., and Zhang, Y., “Assessment of the Ku-band scatterometer wind quality,” *2016 EUMETSAT Meteorological Satellite Conference*, Darmstadt, Germany, 26-30 September, 2016.
66. Lin, W., De Chiara, G., **Portabella, M.**, Stoffelen, A., Vogelzang, J., and Verhoef, A., “Towards an improved assimilation of ASCAT winds,” *2016 EUMETSAT Meteorological Satellite Conference*, Darmstadt, Germany, 26-30 September, 2016.
67. Turiel, A., González-Gambau, V., Olmedo, E., Martínez, J., Piles, M., Isern-Fontanet, J., **Portabella, M.**, and Ballabrera-Poy, J., “Remote sensing of the water cycle in the Mediterranean,” *MedCLIVAR 2016 Conference*, Athens, Greece, 26-30 September, 2016.
68. Lin, W., **Portabella, M.**, Stoffelen, A., Vogelzang, J., and Verhoef, A., “Improved mesoscale analyses with 2DVAR,” *Wind Profiles and Mesoscale Data Assimilation Workshop*, Ljubljana, Slovenia, 19-20 September, 2016.
69. Trindade, A., **Portabella, M.**, Stoffelen, A., Lin, W., de Kloe, J., Ballabrera-Poy, J., and Turiel, A., “Can scatterometer winds improve the quality and resolution of the current NWP-based ocean forcing?,” *IV Encuentro de la Oceanografía Física Española*, Alicante (Spain), 20-22 July, 2016.
70. Olmedo, E., Martínez, J., Turiel, A., Ballabrera-Poy, J., and **Portabella, M.**, “Enhanced retrieval of the geophysical signature of SMOS SSS maps,” *IV Encuentro de la Oceanografía Física Española*, Alicante (Spain), 20-22 July, 2016.
71. Lin, W., De Chiara, G., **Portabella, M.**, Stoffelen, A., Vogelzang, J., and Verhoef, A., “On the assimilation of ASCAT winds,” *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS)*, Beijing, China, 11-15 July, 2016.
72. Lin, W., **Portabella, M.**, Stoffelen, A., Verhoef, A., Lang, S., Zhang, Y., and Lin, M., “On the improvement of the HY-2A scatterometer wind quality control,” *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS)*, Beijing, China, 11-15 July, 2016.
73. Turiel, A., González-Gambau, V., Olmedo, E., Martínez, J., Ballabrera-Poy, J., and **Portabella, M.**, “On the enhancement of the SMOS salinity products at CP34-BEC: from L0 to L4,” *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS)*, Beijing, China, 11-15 July, 2016.
74. Olmedo, E., Turiel, A., Martínez, J., Ballabrera-Poy, J., **Portabella, M.**, González-Gambau, V., Gabarró, C., Pérez, F., Hoareau, N., Piles, M., and Font, J., “New SMOS salinity products at CP34-BEC in Barcelona,” *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS)*, Beijing, China, 11-15 July, 2016.

75. Grieco, G., Lin, W., Migliaccio, M., and **Portabella, M.**, “Assessment of the azimuth wavelength cut-off dependence on the ocean state and on the surface wind speed for Sentinel-1 SAR images,” *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS)*, Beijing, China, 11-15 July, 2016.
76. Stoffelen, A., Marseille, G.J., Vogelzang, J., Lin, W., and **Portabella, M.**, “Mesoscale scatterometer assimilation,” *13th International Winds Workshop*, Monterey, USA, 27 June – 1 July, 2016.
77. Lin, W., De Chiara, G., **Portabella, M.**, Stoffelen, A., Verhoef, A., and Vogelzang, J., “Towards an improved assimilation of ASCAT-derived winds into global NWP,” *International Ocean Vector Winds Science Team Workshop*, Sapporo, Japan, 17-19 May, 2016.
78. Trindade, A., **Portabella, M.**, Stoffelen, A., Lin, W., and de Kloe, J., “Towards a scatterometer-based high resolution ocean wind forcing,” *International Ocean Vector Winds Science Team Workshop*, Sapporo, Japan, 17-19 May, 2016.
79. King, G., Lin, W., **Portabella, M.**, Stoffelen, A., Turiel, A., and Verhoef, A., “A strategy to quantify characteristics of updraft and downdraft events associated with oceanic Mesoscale Convective Systems using ASCAT winds and MSG rain,” *International Ocean Vector Winds Science Team Workshop*, Sapporo, Japan, 17-19 May, 2016.
80. **Portabella, M.**, Lin, W., Stoffelen, A., Turiel, A., King, G., and Verhoef, A., “Singularity analysis: A powerful technique for scatterometer wind data processing,” *International Ocean Vector Winds Science Team Workshop*, Sapporo, Japan, 17-19 May, 2016.
81. Grieco, G., Migliaccio, M., Montuori, A., Lin, W., and **Portabella, M.**, “Dependency of the Sentinel-1 SAR azimuth wavelength cut-off on significant wave height and wind speed,” *International Ocean Vector Winds Science Team Workshop*, Sapporo, Japan, 17-19 May, 2016.
82. Lin, W., **Portabella, M.**, Stoffelen, A., Verhoef, A., Lang, S., Lin, M., and Zhang, Y., “An improved wind quality control for Ku-band scatterometers,” *International Ocean Vector Winds Science Team Workshop*, Sapporo, Japan, 17-19 May, 2016.
83. Stoffelen, A., Verhoef, A., Reimer, C., Moroni, D., Long, D., Rodriguez, E., Ticconi, F., Wentz, F., Figa Saldana, J., **Portabella, M.**, Bourassa, M., and Neyt, X., “NetCDF-CF Standard Name Proposal for Sigma-0 Datasets,” *International Ocean Vector Winds Science Team Workshop*, Sapporo, Japan, 17-19 May, 2016.
84. Lin, W., **Portabella, M.**, Stoffelen, A., Verhoef, A., and King, G., “Improvement of RapidScat and HSCAT wind quality control,” *ESA Living Planet Symposium*, Prague, Czech Republic, 9-13 May, 2016.
85. Grieco, G., Migliaccio, M., Montuori, A., and **Portabella, M.**, “Use of the azimuth wavelength cut-off to retrieve the sea surface wind speed from Sentinel 1 and COSMO-SkyMed SAR data,” *Proc. of the ESA Living Planet Symposium*, ESA SP-740, Prague, Czech Republic, 9-13 May, 2016.
86. King, G., Lin, W., **Portabella, M.**, Stoffelen, A., Turiel, A., and Verhoef, A., “Ocean winds in Mesoscale Convective Systems using ASCAT winds and MSG rain,” *ESA Living Planet Symposium*, Prague, Czech Republic, 9-13 May, 2016.
87. Olmedo, E., Gabarró, C., Ballabrera-Poy, J., Martínez, J., González-Gambau, V., Turiel, A., and **Portabella, M.**, “Sea surface salinity for cold waters with SMOS,” *ESA Living Planet Symposium*, Prague, Czech Republic, 9-13 May, 2016.
88. Trindade, A., Stoffelen, A., **Portabella, M.**, and de Kloe, J., “High resolution ocean wind forcing product,” *ESA Living Planet Symposium*, Prague, Czech Republic, 9-13 May, 2016.
89. Lin, W., **Portabella, M.**, Vogelzang, J., Stoffelen, A., Verhoef, A., and Trindade, A., “Impact of the structure function definition on ASCAT variational ambiguity removal,” *ESA Living Planet Symposium*, Prague, Czech Republic, 9-13 May, 2016.

90. Gabarró, C., Pla-Resina, J., Turiel, A., **Portabella, M.**, Martínez, J., Olmedo, E., and González-Gambau, V., “Arctic sea ice concentration estimation with SMOS data,” *ESA Living Planet Symposium*, Prague, Czech Republic, 9-13 May, 2016.
91. Ballabrera-Poy, J., Font, J., Gabarró, C., González-Gambau, V., Hoareau, N., Isern-Fontanet, J., Martínez, J., Olmedo, E., Pérez, F., Piles, M., **Portabella, M.**, Turiel, A., and Umbert, M., “New BEC SMOS products: improvements and performances from Level 1 to Level 4,” *ESA Living Planet Symposium*, Prague, Czech Republic, 9-13 May, 2016.
92. Gabarró, C., Olmedo, E., Turiel, A., Ballabrera, J., Martínez, J., and **Portabella, M.**, “SMOS sea surface salinity maps of the Arctic Ocean,” *EGU General Assembly*, Vienna, Austria, 17-22 April, 2016.
93. Olmedo, E., Isern-Fontanet, J., Turiel, A., **Portabella, M.**, and Ballabrera, J., “Monitoring the mesoscale circulation of the Western Mediterranean Sea using SSS derived from SMOS,” *EGU General Assembly*, Vienna, Austria, 17-22 April, 2016.
94. Ballabrera, J., Olmedo, E., Turiel, A., **Portabella, M.**, Martínez, J., and Hoareau, N., “Daily sea surface salinity variability in the tropical Pacific Ocean derived from satellite remote sensing data,” *EGU General Assembly*, Vienna, Austria, 17-22 April, 2016.
95. Gabarró, C., Turiel, A., **Portabella, M.**, Olmedo, E., and Elósegui, P., “SMOS sea surface salinity maps of the Arctic Ocean,” 7th IICWG Data Assimilation and PPP Ice Verification Workshop, Frascati, Italy, 5-7 April, 2016.
96. Trindade, A., **Portabella, M.**, Stoffelen, A., Lin, W., and de Kloe, J., “Towards a scatterometer-based high resolution ocean wind forcing,” *EOS-COST Workshop on the use of new satellite datasets in marine climate applications*, Porto, Portugal, 30 March – 1 April, 2016.
97. Verhoef, A., Belmonte, M., de Kloe, J., Verspeek, J., Vogelzang, J., Stoffelen, A., and **Portabella, M.**, “Development of stress and wind climate data records from scatterometers,” *EOS-COST Workshop on the use of new satellite datasets in marine climate applications*, Porto, Portugal, 30 March – 1 April, 2016.
98. Gabarró, C., Turiel, A., **Portabella, M.**, and Elósegui, P., “Assessment of SMOS measurements of Arctic sea ice concentration,” *EOS-COST Workshop on the use of new satellite datasets in marine climate applications*, Porto, Portugal, 30 March – 1 April, 2016.
99. Olmedo, E., Gabarró, C., Turiel, A., Ballabrera, J., and **Portabella, M.**, “Enhanced SMOS SSS products: applications for the monitoring of freshwater fluxes at high latitudes from satellite remote sensing data,” *EOS-COST Workshop on the use of new satellite datasets in marine climate applications*, Porto, Portugal, 30 March – 1 April, 2016.
100. Gabarró, C., Olmedo, E., Ballabrera, J., Turiel, A., and **Portabella, M.**, “Using SMOS data to monitor sea surface salinity in high latitudes region,” Arctic Observing Summit, Fairbanks, USA, 14-18 March, 2016.
101. Stoffelen, A., Trindade, A., de Kloe, J., and **Portabella, M.**, “Scatterometer-based ocean forcing fields,” *GCOS Science Conference*, Amsterdam, The Netherlands, 2-4 March, 2016.
102. Trindade, A., Stoffelen, A., **Portabella, M.**, and de Kloe, J., “Scatterometer-based high resolution ocean wind forcing,” *Ocean Sciences Meeting*, New Orleans, USA, 11-16 February, 2016.
103. **Portabella, M.**, Lin, W., Stoffelen, A., Turiel, A., King, G., and Verhoef, A., “Singularity analysis: A powerful technique for scatterometer wind data processing,” *EUMETSAT/ESA Scatterometer Science Conference*, Noordwijk, The Netherlands, 2-4 February, 2016.
104. King, G., Lin, W., **Portabella, M.**, Stoffelen, A., Turiel, A., and Verhoef, A., “Characterizing ocean winds near precipitation events in Mesoscale Convective Systems using ASCAT winds and MSG rain,” *EUMETSAT/ESA Scatterometer Science Conference*, Noordwijk, The Netherlands, 2-4 February, 2016.

105. Trindade, A., Stoffelen, A., **Portabella, M.**, and de Kloe, J., “High resolution ocean wind forcing product,” *EUMETSAT/ESA Scatterometer Science Conference*, Noordwijk, The Netherlands, 2-4 February, 2016.
106. Lin, W., **Portabella, M.**, Stoffelen, A., Verhoef, A., and King, G., “Improvement of RapidScat and HSCAT wind quality control,” *EUMETSAT/ESA Scatterometer Science Conference*, Noordwijk, The Netherlands, 2-4 February, 2016.
107. Lin, W., **Portabella, M.**, Vogelzang, J., Stoffelen, A., Verhoef, A., and Trindade, A., “Impact of the structure function definition on ASCAT variational ambiguity removal,” *EUMETSAT/ESA Scatterometer Science Conference*, Noordwijk, The Netherlands, 2-4 February, 2016.
108. Trindade, A., Stoffelen, A., **Portabella, M.**, and de Kloe, J., “High Resolution Ocean Wind Forcing Product,” *IEEE Young Professionals Remote Sensing Conference*, Barcelona, Spain, 3-4 December, 2015.
109. Stoffelen, A., Trindade, A., de Kloe, J., and **Portabella, M.**, “Scatterometer-based ocean wind forcing fields,” *Globcurrent User Consultation Meeting*, Brest, France, 4-6 November, 2015
110. **Portabella, M.**, Sánchez, O., Sitjar, R., Bardají, R., Rodriguez, M.A., and Elósegui, P., “SATICE high-precision GPS buoys,” *ICE-ARC General Assembly*, Bologna, Italy, 20-22 October, 2015.
111. Hoareau, N., **Portabella, M.**, Vogelzang, J., Ballabrera, J., and Turiel, A., “On the geophysical consistency of Sea Surface Salinity products,” *Salinity and Freshwater Changes in the Ocean Conference*, Hamburg, Germany, 12-15 October, 2015.
112. Lin, W., **Portabella, M.**, Vogelzang, J., Stoffelen, A., Verhoef, A., and Trindade, A., “Improvement of the ASCAT ambiguity removal scheme for mesoscale analysis,” *2015 EUMETSAT Meteorological Satellite Conference*, Toulouse, France, 21-25 September, 2015.
113. Lin, W., **Portabella, M.**, Stoffelen, A., Vogelzang, J., Verhoef, A., and King, G., “Assessment of the ASCAT sub-cell wind variability,” *2015 EUMETSAT Meteorological Satellite Conference*, Toulouse, France, 21-25 September, 2015.
114. Verhoef, A., Verspeek, J., Vogelzang, J., Stoffelen, A., Lin, W., and **Portabella, M.**, “RapidScat winds from the OSI SAF,” *2015 EUMETSAT Meteorological Satellite Conference*, Toulouse, France, 21-25 September, 2015.
115. **Portabella, M.**, Lin, W., Stoffelen, A., Verhoef, A., Zhang, Y., Lin, M., Lang, S., and Zou, J., “Towards an improved wind quality control for Ku-band scatterometer,” *2015 EUMETSAT Meteorological Satellite Conference*, Toulouse, France, 21-25 September, 2015.
116. **Portabella, M.**, King, G., Lin, W., Stoffelen, A., Turiel, A., and Verhoef, A., “Mesoscale Convective System wind variability as depicted by satellite scatterometers: a valuable source of air-sea interaction information,” *SOOS-WCRP-ESA Air-Sea Fluxes Workshop*, Frascati, Italy, 21-23 September, 2015
117. **Portabella, M.**, Lin, W., Vogelzang, J., Stoffelen, A., Verhoef, A., and Trindade, A., “On the improvement of ASCAT-derived cyclone winds,” *International Geoscience and Remote Sensing Symposium (IGARSS)*, Milan, Italy, 27-31 July, 2015.
118. Turiel, A., Martínez, J., Piles, M., Ballabrera, J., Olmedo, E., Umbert, M., González, V., **Portabella, M.**, Gabarró, C., Pérez, F., Isern-Fontanet, J., Hoareau, N., and Font, J., “Products and services at CP34-BEC in Barcelona,” *International Geoscience and Remote Sensing Symposium (IGARSS)*, Milan, Italy, 27-31 July, 2015.
119. **Portabella, M.**, Lin, W., Stoffelen, A., and Verhoef, A., “Assessment of RapidScat wind quality,” *International Geoscience and Remote Sensing Symposium (IGARSS)*, Milan, Italy, 27-31 July, 2015.
120. Lin, W., **Portabella, M.**, Stoffelen, A., Verhoef, A., Zhang, Y., Lin, M., Lang, S., and Zou, J., “Toward an improved HY-2A scatterometer wind product,” *International Geoscience and Remote Sensing Symposium (IGARSS)*, Milan, Italy, 27-31 July, 2015.

121. Lin, W., **Portabella, M.**, Stoffelen, A., Vogelzang, J., Verhoef, A., and King, G., “Assessment of the ASCAT sub-cell wind variability,” *International Geoscience and Remote Sensing Symposium (IGARSS)*, Milan, Italy, 27-31 July, 2015.
122. Umbert, M., Guimbard, Ballabrera, J., **Portabella, M.**, and Turiel, A., “Surface salinity signature of western boundary current rings in L-band synergistic products,” *International Geoscience and Remote Sensing Symposium (IGARSS)*, Milan, Italy, 27-31 July, 2015.
123. **Portabella, M.**, “SMOS-MODE overview,” *2nd SMOS Science Workshop*, Madrid, Spain, 25-29 May, 2015.
124. Gabarró, C., Pla, Q., Elosegui, P., Turiel, A., Martinez, J., Gonzalez, V., **Portabella, M.**, and Slominska, E., “Investigating SMOS data for Arctic melt ponds and sea ice concentration determination,” *2nd SMOS Science Workshop*, Madrid, Spain, 25-29 May, 2015.
125. Turiel, A., Martínez, J., Piles, M., Ballabrera, J., Olmedo, E., Umbert, M., González, V., **Portabella, M.**, Gabarró, C., Pérez, F., Isern-Fontanet, J., Hoareau, N., and Font, J., “Products and services in CP34-BEC,” *2nd SMOS Science Workshop*, Madrid, Spain, 25-29 May, 2015.
126. Trindade, A., **Portabella, M.**, Lin, W., Stoffelen, A., Verhoef, A., and de Kloe, J., “Towards the characterization and removal/mitigation of scatterometer wind sampling errors,” *International Ocean Vector Winds Science Team Workshop*, Portland, USA, 19-21 May, 2015.
127. King, G., Lin, W., **Portabella, M.**, Stoffelen, A., and Verhoef, A., “Relating MSG rain over the Tropical Atlantic with ASCAT derived surface divergence and vorticity,” *International Ocean Vector Winds Science Team Workshop*, Portland, USA, 19-21 May, 2015.
128. Lin, W., **Portabella, M.**, Stoffelen, A., Verhoef, A., Zhang, Y., Lin, M., Lang, S., and Zou, J., “On the quality of HY-2A scatterometer winds,” *International Ocean Vector Winds Science Team Workshop*, Portland, USA, 19-21 May, 2015.
129. **Portabella, M.**, Lin, W., Vogelzang, J., Stoffelen, A., and Verhoef, A., “An improved 2DVAR ambiguity removal for ASCAT wind retrieval,” *International Ocean Vector Winds Science Team Workshop*, Portland, USA, 19-21 May, 2015.
130. **Portabella, M.**, Lin, W., Vogelzang, J., Stoffelen, A., and Verhoef, A., “Impact of sub-cell wind variability on ASCAT wind quality,” *International Ocean Vector Winds Science Team Workshop*, Portland, USA, 19-21 May, 2015.
131. **Portabella, M.**, Lin, W., Stoffelen, A., Verhoef, A., Zhang, Y., Lin, M., Lang, S., and Zou, J., “Intercomparison between ASCAT, HY-2A and RapidScat,” *RapidScat Cal/Val Workshop*, Portland, USA, 18 May, 2015.
132. Trindade, A., **Portabella, M.**, Lin, W., Stoffelen, A., Verhoef, A., and de Kloe, J., “Towards the characterization and removal/mitigation of scatterometer wind sampling errors,” *47th International Liege Colloquium on Marine Environmental Monitoring, Modelling and Prediction*, Liege, Belgium, 4-8 May, 2015.
133. Stoffelen, A., Verhoef, A., Lin, W., **Portabella, M.**, Verspeek, J., de Kloe, J., and Vogelzang, J., “Wind processing and cal/val for the CFOSAT scatterometer,” *CFOSAT Open Scientific Workshop*, Guangzhou, China, 3-5 February, 2015.
134. King, G., Lin, W., **Portabella, M.**, Bunn, P., Stoffelen, A., Verhoef, A., and Vogelzang, J., “Rain-induced sea surface winds: what can we learn from satellite scatterometer data?,” *AGU Fall Meeting*, San Francisco, USA, 15-19 December, 2014.
135. Umbert, M., **Portabella, M.**, Guimbard, S., Ballabrera, J., and Turiel, A., “Synergy between remote sensing variables: Level 4 research products of sea surface salinity,” *Ocean Salinity Science and Salinity Remote Sensing Workshop*, Exeter, United Kingdom, 26-28 November, 2014.

136. Ballabrera, J., Hoareau, N., **Portabella, M.**, García-Ladona, E., and Turiel, A., “Meridional variability of SSS in the North Atlantic Ocean from satellite and in-situ data,” *Ocean Salinity Science and Salinity Remote Sensing Workshop*, Exeter, United Kingdom, 26-28 November, 2014.
137. **Portabella, M.**, Olmedo, E., Martínez, J., Ballabrera, J., and Turiel, A., “Revealing geophysically-consistent spatial structures in SMOS surface salinity derived maps,” *Ocean Salinity Science and Salinity Remote Sensing Workshop*, Exeter, United Kingdom, 26-28 November, 2014.
138. Sánchez, O., Elósegui, P., Olsson, M., **Portabella, M.**, Ramos, J., and Sitjar, R., “Arctic sea ice geodesy using SATICE-type GPS ice drifters,” *ICE-ARC General Assembly*, Barcelona, Spain, 19-21 November, 2014.
139. **Portabella, M.**, “Geophysical noise versus measurement noise over ocean,” *ASCAT High Resolution Workshop*, Darmstadt, Germany, 17 November, 2014.
140. **Portabella, M.**, Lin, W., Stoffelen, A., Turiel, A., Verhoef, A., Trindade, A., and Ballabrera, J., “Scatterometer-derived sea surface wind variability associated with convective systems: a valuable source of air-sea interaction information,” *Earth Observation for Ocean-Atmosphere Interactions Science Conference*, Frascati, Italy, 28-30 October, 2014.
141. Ballabrera, J., Umbert, M., Guimbard, S., **Portabella, M.**, and Turiel, A., “Tracking cold core rings with high resolution salinity fields derived from satellite,” *Earth Observation for Ocean-Atmosphere Interactions Science Conference*, Frascati, Italy, 28-30 October, 2014.
142. Stoffelen, A., Vogelzang, J., Verhoef, A., de Kloe, J., Lin, W., **Portabella, M.**, and Trindade, A., “Do differences between NWP model and EO winds matter?,” *Earth Observation for Ocean-Atmosphere Interactions Science Conference*, Frascati, Italy, 28-30 October, 2014.
143. **Portabella, M.**, Lin, W., Stoffelen, A., Turiel, A., and Verhoef, “mall-scale wind variability as depicted by satellite scatterometers: a valuable source of air-sea interaction information,” *The Climate Symposium 2014*, Darmstadt, Germany, 13-17 October, 2014.
144. Turiel, A., Umbert, M., Guimbard, S., Ballabrera, J., **Portabella, M.**, and Martínez, J., “Towards ocean remote sensing based synergistic products for climate applications,” *The Climate Symposium 2014*, Darmstadt, Germany, 13-17 October, 2014.
145. Turiel, A., Font, J., Gabarró, C., Ballabrera, J., **Portabella, M.**, Piles, M., Martínez, J., Olmedo, E., and Pérez, F., “SMOS sea surface salinity and soil moisture products developed and distributed by the Barcelona Expert Center,” *The Climate Symposium 2014*, Darmstadt, Germany, 13-17 October, 2014.
146. Boutin, J., Font, J., Lagerloef, G., Lee, T., **Portabella, M.**, and Reul N., “Scientific applications of ocean salinity from space for ocean and climate research,” *The Climate Symposium 2014*, Darmstadt, Germany, 13-17 October, 2014.
147. Verspeek, J., Stoffelen, A., Verhoef, A., **Portabella, M.**, and Vogelzang, J., “QUIKSCAT NWP ocean calibration for wind product improvement,” *Proc. of the 2014 EUMETSAT Satellite Conference*, EUMETSAT P.64, Geneva, Switzerland, 22-26 September, 2014.
148. Lin, W., **Portabella, M.**, Stoffelen, A., and Verhoef, A., “Characterization of ASCAT backscatter uncertainty under rainy conditions: Toward an improved wind product,” *2014 EUMETSAT Meteorological Satellite Conference*, Geneva, Switzerland, 22-26 September, 2014.
149. Panfilova, M., Kanevsky, M., Balandina, G.N., Karaev, V.Yu., **Portabella, M.**, and Stoffelen A., “Empirical wind retrieval model based on SAR spectrum measurements,” *40th COSPAR Scientific Assembly*, Moscow (Russia), 2-10 August, 2014.
150. **Portabella, M.**, Lin, W., Stoffelen, A., Turiel, A., Verhoef, A., Trindade, A., Ballabrera, J., and Vogelzang, J., “Small-scale wind variability as depicted by satellite scatterometers: a valuable source of air-sea interaction information,” *17th Session of the Ocean Observations Panel for Climate (OOPC)*, Barcelona, Spain, 21-23 July, 2014.

151. Lin, W., **Portabella, M.**, Stoffelen, A., Vogelzang, J., Verhoef, A., Turiel, A., and V. Gonzalez "Towards an improved ambiguity removal for ASCAT-derived winds," *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS)*, Quebec, Canada, 13-18 July, 2014.
152. Stoffelen, A., Verhoef, A., Lin, W., **Portabella, M.**, Bunn, P., de Kloe, J., Vogelzang, J., and Verspeek, J., "Scatterometer winds for mesoscale dynamics," *12th International Winds Workshop*, Copenhagen, Denmark, 15-20 June 2014.
153. Umbert, M., Guimbard, S., Ballabrera, J., **Portabella, M.**, and Turiel, A., "Synergy between remote sensing variables: Level 4 research products of Sea Surface Salinity and Chlorophyll-a," *Encuentro de la Oceanografía Física Española*, Las Palmas de Gran Canaria, Spain, 11-13 June, 2014.
154. Hoareau, N., Gómez, L., Ballabrera, J., **Portabella, M.**, and Turiel, A., "Towards a North Atlantic SMOS SSS product using a numerical model of the North Atlantic Ocean," *Encuentro de la Oceanografía Física Española*, Las Palmas de Gran Canaria, Spain, 11-13 June, 2014.
155. Vogelzang, J., Stoffelen, A., Lin, W., and **Portabella, M.**, "Improvements in ambiguity removal of scatterometer winds," *International Ocean Vector Winds Science Team Workshop*, Brest, France, 2-4 June, 2014.
156. **Portabella, M.**, Lin, W., Stoffelen, A., Turiel, A., and Verhoef, A., "Assessment of the impact of large sub-cell wind variability on ASCAT wind data quality," *International Ocean Vector Winds Science Team Workshop*, Brest, France, 2-4 June, 2014.
157. Lin, W., **Portabella, M.**, Stoffelen, A., and Verhoef, A., "Towards ASCAT Backscatter Correction in Rain," *International Ocean Vector Winds Science Team Workshop*, Brest, France, 2-4 June, 2014.
158. Lin, W., **Portabella, M.**, Stoffelen, A., Verhoef, A., Turiel, A., Song, Q., Jiang, X., and Chelton D. B., "Evaluation of the HY-2A scatterometer wind quality," *International Ocean Vector Winds Science Team Workshop*, Brest, France, 2-4 June, 2014.
159. Chelton, D.B., Song, Q., O'Neill, L.W., **Portabella, M.**, Lin, W., and Stoffelen, A., "Measurements of Air-Sea Interaction from the HY-2A Scatterometer," *International Ocean Vector Winds Science Team Workshop*, Brest, France, 2-4 June, 2014.
160. Guimbard, S., Umbert, M., Turiel, A., and **Portabella, M.**, "Towards an optimal fusion of SMOS and Aquarius SSS data," *EGU General Assembly*, Vienna, Austria, 28 April – 2 May, 2014.
161. Hoareau, N., **Portabella, M.**, García, E., Turiel, A., and Ballabrera J., "Sea Surface Salinity spectra: a validation tool for satellite, numerical simulations and in-situ data," *EGU General Assembly*, Vienna, Austria, 28 April – 2 May, 2014.
162. Piles, M., Vall-llossera, M., Camps, A., Pablos, M., Chaparro, D., Martínez, J., González, V., Rodríguez, M.A., Turiel, A., **Portabella, M.**, Gabarró, C., Pérez, F., Fuentes, J., and Font, J., "High resolution SMOS-derived soil moisture maps provided by the Barcelona Expert Center," *Eurisy - Aplicaciones satelitales para la gestión multinivel de riego: capitalización de experiencias para impulsar la innovación regional*, Badajoz, Spain, 31 October, 2013.
163. Weissman, D., Johnson, T., Wolf, J., **Portabella, M.**, Lin, W., Stoffelen, A., and Verhoef, A., "Coincident, high resolution measurements of ocean surface rain in support of improved ASCAT-retrieved winds," *Proc. of the OCEANS'13 Conference*, San Diego, USA, 23-26 September, 2013.
164. Lin, W., **Portabella, M.**, Stoffelen, A., Verhoef, A., Weissman, D., Johnson, T., and Wolf, J., "Towards a correction of ASCAT ocean measurements for rain effect," *2013 Joint EUMETSAT/AMS Satellite Conference*, Vienna, Austria, 16-20 September, 2013.
165. Lin, W., **Portabella, M.**, Stoffelen, A., Verhoef, A., and Turiel, A., "Application of singularity analysis on ASCAT wind quality control," *2013 Joint EUMETSAT/AMS Satellite Conference*, Vienna, Austria, 16-20 September, 2013.

166. Verspeek, J., Stoffelen, A., Verhoef, A., **Portabella, M.**, and Vogelzang, J., “ASCAT-B ocean calibration and wind product results,” *Proc. of the 2013 Joint EUMETSAT/AMS Satellite Conference*, EUMETSAT P.62, Vienna, Austria, 16-20 September, 2013.
167. Isern-Fontanet, J., Turiel, A., and **Portabella, M.**, “Characterization of Ocean Turbulence Regimes from Satellite Observations of Sea Surface Temperatures,” *ESA Living Planet Symposium*, Edinburgh, United Kingdom, 9-13 September, 2013.
168. **Portabella, M.**, Lin, W., Stoffelen, A., Verhoef, A., and Turiel, A., “Application of Singularity Analysis on ASCAT Wind Quality Control,” *ESA Living Planet Symposium*, Edinburgh, United Kingdom, 9-13 September, 2013.
169. Lin, W., **Portabella, M.**, Stoffelen, A., Verhoef, A., Weissman, D., Johnson, T., and Wolf, J., “Towards a Correction of ASCAT Ocean Measurements for Rain Effects,” *ESA Living Planet Symposium*, Edinburgh, United Kingdom, 9-13 September, 2013.
170. Font, J., Ballabrera, J., Umbert, M., Piles, M., Martínez, J., Turiel, A., Gabarró, C., Pérez, F., **Portabella, M.**, Hoareau, N., and Olmedo, E., “SMOS Level 3 and Level 4 Research Products Provided by the Barcelona Expert Center,” *ESA Living Planet Symposium*, Edinburgh, United Kingdom, 9-13 September, 2013.
171. Sabia, R., Marconcini, M., Katagis, T., Fernández-Prieto, D., and **Portabella, M.**, “On the assessment of SMOS salinity retrieval by using support vector regression (SVR),” *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS)*, pp. 1555-1558, <https://doi.org/10.1109/IGARSS.2013.6723085>, Melbourne, Australia, 21-26 July, 2013.
172. Weissman, D., Johnson, T., Wolf, J., **Portabella, M.**, Lin, W., Stoffelen, A., and Verhoef, A., “Coincident, high resolution measurements of ocean surface rain in support of improved ASCAT-retrieved winds,” *International Geoscience and Remote Sensing Symposium (IGARSS)*, Melbourne, Australia, 21-26 July, 2013.
173. Turiel, A., Umbert, M., Hoareau, N., Martinez, J., Olmedo, E., Ballabrera-Poy, J., **Portabella, M.**, Font, J., and Piles, M., “Noise removal on ocean scalars by means of singularity-based fusion,” *International Geoscience and Remote Sensing Symposium (IGARSS)*, Melbourne, Australia, 21-26 July, 2013.
174. **Portabella, M.**, Lin, W., Stoffelen, A., Turiel, A., Verhoef, A., and Weissman, D., “Towards an improved ASCAT wind product under rain conditions,” *International Ocean Vector Winds Science Team Workshop*, Kona, USA, 6-8 May, 2013.
175. Lin, W., **Portabella, M.**, Stoffelen, A., and Verhoef, A., “On the characteristics of ASCAT wind direction ambiguities,” *International Ocean Vector Winds Science Team Workshop*, Kona, USA, 6-8 May, 2013.
176. Weissman, D., Johnson, T., Wolf, J., **Portabella, M.**, Lin, W., Stoffelen, A., and Verhoef, A., “Coincident, high resolution measurements of ocean surface rain in support of improved ASCAT-retrieved winds,” *International Ocean Vector Winds Science Team Workshop*, Kona, USA, 6-8 May, 2013.
177. Isern-Fontanet, J., Turiel, A., **Portabella, M.**, Martin-Puig, C., and Gonzalez-Haro, C., “Reconstruction of ocean velocities from the synergy between SSH and SST measurements,” *Ocean Surface Currents Workshop*, Noordwijk, The Netherlands, 6-8 May, 2013.
178. Montuori, A., **Portabella, M.**, Guimbard, S., Gabarró, C., and Migliaccio, M., “Towards an optimal SMOS Bayesian-based inversion scheme for salinity and wind speed retrieval purposes,” *SMOS Aquarius Science Workshop*, Brest, France, 15-17 April, 2013.
179. Martínez, J., Gabarró, C., Olmedo, E., **Portabella, M.**, and Font, J., “Towards an optimal quality control of L2 SMOS data,” *SMOS Aquarius Science Workshop*, Brest, France, 15-17 April, 2013.
180. Font, J., Ballabrera, J., Umbert, M., Martínez, J., Turiel, A., Gabarró, C., Pérez, F., **Portabella, M.**, Hoareau, N., and Olmedo, E., “SMOS Level 3 and Level 4 Research Products Provided by the Barcelona Expert Center,” *SMOS Aquarius Science Workshop*, Brest, France, 15-17 April, 2013.

181. González, V., Olmedo, E., Martínez, J., Gabarró, C., **Portabella, M.**, Turiel, A., and Font, J., “SMOS brightness temperature enhancement in coastal areas,” *SMOS Aquarius Science Workshop*, Brest, France, 15-17 April, 2013.
182. Gabarró, C., Martínez, J., Ballabrera, J., Umbert, M., Pérez, F., Turiel, A., Font, J., **Portabella, M.**, Hoareau, N., and Olmedo, E., “SMOS Level 3 and Level 4 Research Products Provided by the Barcelona Expert Center,” *EGU General Assembly*, Vienna, Austria, 7-12 April, 2013.
183. Lin, W., **Portabella, M.**, Stoffelen, A., Turiel, A., Verhoef, A., and Weissman, D., “Towards an improved ASCAT wind product under rain conditions”, *EGU General Assembly*, Vienna, Austria, 7-12 April, 2013.
184. Montuori, A., **Portabella, M.**, Guimbard, S., Gabarró, C., and Migliaccio, M., “Operational SMOS Bayesian-based inversion scheme for the optimal retrieval of salinity and wind speed at sea,” *VII Riunione Annuale CeTeM-AIT sul telerilevamento a Microonde: sviluppi scientifici ed implicazioni tecnologiche*, Bari, Italy, 4-5 December, 2012.
185. Stoffelen, A., Driesenaar, T., Verhoef, A., **Portabella, M.**, and Lin, W., “Towards eddy-scale wind forcing,” *MyOcean Science Days 2012 Workshop*, Geesthacht, Germany, 19-21 November, 2012.
186. Verspeek, J., Stoffelen, A., Verhoef, A., **Portabella, M.**, and Vogelzang, J., “ASCAT-B ocean calibration and wind product,” *Proc. of the 2012 EUMETSAT Meteorological Satellite Conference*, EUMETSAT P.61, Sopot, Poland, 3-7 September, 2012.
187. Vogelzang, J., Stoffelen, A., Verhoef, A., Verspeek, J., **Portabella, M.**, and Lin, W., “Scatterometer wind products – An overview,” *2012 EUMETSAT Meteorological Satellite Conference*, Sopot, Poland, 3-7 September, 2012.
188. Lin, W., **Portabella, M.**, Stoffelen, A., Turiel, A., Verhoef, A., Verspeek, J., Ballabrera, J., and Vogelzang, J., “Rain effects on ASCAT retrieved winds,” *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS)*, pp. 2801-2804, <https://doi.org/10.1109/IGARSS.2012.6350850>, Munich, Germany, 22-27 July, 2012.
189. Turiel, A., Umbert, M., Hoareau, N., Ballabrera, J., and **Portabella, M.**, “Singularity Analysis on salinity maps: how geophysically consistent are SSS products?,” *International Geoscience and Remote Sensing Symposium (IGARSS)*, Munich, Germany, 22-27 July, 2012.
190. Sabia, R., Marconcini, M., Katagis, T., Fernández-Prieto, D., Martínez, J., and **Portabella, M.**, “Preliminary results of SMOS salinity retrieval by using support vector regression (SVR),” *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS)*, pp. 2629-2632, <https://doi.org/10.1109/IGARSS.2012.6350389>, Munich, Germany, 22-27 July, 2012.
191. Gabarró, C., González, V., Martínez, J., Guimbard, S., Gourrion, J., Piles, M., **Portabella, M.**, and Font, J., “Impact of the local oscillator calibration on the SMOS sea surface salinity maps,” *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS)*, pp. 2613-2616, <https://doi.org/10.1109/IGARSS.2012.6350940>, Munich, Germany, 22-27 July, 2012.
192. Guimbard, S., Gourrion, J., **Portabella, M.**, González, V., Turiel, A., Ballabrera, J., Gabarró, C., Pérez, F., and Martínez, J., “SSS retrieval from space: an intercomparison study using smos and aquarius data,” *International Geoscience and Remote Sensing Symposium (IGARSS)*, Munich, Germany, 22-27 July, 2012.
193. Gourrion, J., Guimbard, S., Sabia, R., **Portabella, M.**, González, V., Turiel, A., Ballabrera, J., Gabarró, C., Pérez, F., and Martínez, J., “Improving SMOS retrieved salinity: characterization of systematic errors in measured and modelled brightness temperature images,” *International Geoscience and Remote Sensing Symposium (IGARSS)*, Munich, Germany, 22-27 July, 2012.
194. **Portabella, M.**, Lin, W., Stoffelen, A., Verhoef, A., Turiel, A., Ballabrera, J., and Verspeek, J., “Rain-induced wind variability depicted by scatterometers,” *International Ocean Vector Winds Science Team Workshop*, Utrecht, The Netherlands, 12-14 June, 2012.

195. Lin, W., **Portabella, M.**, Turiel, A., Stoffelen, A., Verhoef, A., and Vogelzang, J., “Singularity analysis for the estimation of rain impact on ASCAT winds,” *International Ocean Vector Winds Science Team Workshop*, Utrecht, The Netherlands, 12-14 June, 2012.
196. Cristo, A., Sabia, R., Talone, M., Fernández-Prieto, D., and **Portabella, M.**, “Geophysical effects at increasing latitudes in the SMOS L3 salinity products,” *Proc. of the IEEE GOLD Remote Sensing Conference*, Rome, Italy, 4-5 June, 2012.
197. Umbert, M., Hoareau, N., Turiel, A., Ballabrera-Poy, J., and **Portabella, M.**, “Turbulence-inspired fusion methods for ocean remote sensing data,” *44th International Liege Colloquium on Ocean Dynamics*, Liege, Belgium, 7-11 May, 2012.
198. Hoareau, N., Umbert, M., Turiel, A., Ballabrera-Poy, J., and **Portabella, M.**, “Data assimilation and data fusion in a regional simulation,” *44th International Liege Colloquium on Ocean Dynamics*, Liege, Belgium, 7-11 May, 2012.
199. Guimbard, S., Gourrion, J., **Portabella, M.**, Ballabrera, J., Turiel, A., Gabarró, C., González, V., Pérez, F., and Martínez, J., “SSS retrieval from space: a comparison study using SMOS and Aquarius data,” *44th International Liege Colloquium on Ocean Dynamics*, Liege, Belgium, 7-11 May, 2012.
200. **Portabella, M.**, Lin, W., Stoffelen, A., Turiel, A., Verhoef, A., Verspeek, J., Ballabrera, J., and Vogelzang, J., “Coastal and rain-induced wind variability depicted by scatterometers”, *EGU General Assembly*, Vienna, Austria, 22-27 April, 2012.
201. Gourrion, J., Guimbard, S., Sabia, R., **Portabella, M.**, González, V., Turiel, A., Ballabrera, J., Gabarró, C., Pérez, F., and Martínez, J., “Improving SMOS retrieved salinity: characterization of systematic errors in reconstructed and modelled brightness temperature images,” *EGU General Assembly*, Vienna, Austria, 22-27 April, 2012.
202. Turiel, A., Umbert, M., Hoareau, N., Ballabrera-Poy, J., and **Portabella, M.**, “Singularity Analysis: a powerful image processing tool in remote sensing of the oceans,” *EGU General Assembly*, Vienna, Austria, 22-27 April, 2012.
203. Umbert, M., Hoareau, N., Turiel, A., Ballabrera-Poy, J., and **Portabella, M.**, “Turbulence-inspired fusion methods for ocean remote sensing data,” *EGU General Assembly*, Vienna, Austria, 22-27 April, 2012.
204. Hoareau, N., Umbert, M., Turiel, A., Ballabrera-Poy, J., and **Portabella, M.**, “Data assimilation and data fusion in a regional simulation,” *EGU General Assembly*, Vienna, Austria, 22-27 April, 2012.
205. Font, J., Boutin, J., Reul, N., Spurgeon, P., Delwart, S., Ballabrera, J., Chuprin, A., Gabarró, C., Gourrion, J., Guimbard, S., Hénocq, C., Lavender, S., Martin, N., Martínez, J., McCulloch, M., **Portabella, M.**, Sabia, R., Talone, M., Tenerelli, J., Turiel, A., Vergely, J.L., and Yin, X., “SMOS ocean salinity: improvements and issues after two years of operations,” *EGU General Assembly*, Vienna, Austria, 22-27 April, 2012.
206. Guimbard, S., Font, J., Ballabrera, J., Turiel, A., Martínez, J., **Portabella, M.**, Gourrion, J., and Pérez, F., “Spatio-temporal SSS analysis using SMOS and Aquarius data,” *Aquarius/SAC-D Science Team Meeting*, Buenos Aires, Argentina, 11-13 April 2012.
207. **Portabella, M.**, Font, J., Gabarró, C., Piles, M., Ballabrera, J., Turiel, A., Martínez, J., González, V., Camps, A., Vall-Ilossera, M., Gourrion, J., Guimbard, S., Hoareau, N., Umbert, M., and Pérez, F., “Status of L3-L4 SSS products at CP34,” *1st SMOS-MODE Annual Workshop*, Frascati, Italy, 30 March, 2012.
208. Rius, A., Camps, A., Cardellach, E., Ribó, S., Elgered, G., Haas, R., Soulat, F., Wickert, J., Beyerle, G., Chapron, B., Isern-Fontanet, J., Ballabrera, J., Turiel, A., Astafyeva, E., Roca, M., Lowe, S.T., Zavorotny, V., Macelloni, G., **Portabella, M.**, Guerriero, L., Pierdicca, N., Lopez-Baeza, E., and Guillamón, J., “PARIS-IOD: a research view,” *ESA GSTS on In-Orbit Demonstration Workshop*, Noordwijk, The Netherlands, 19-20 Marc, 2012.

209. Gourrion, J., Guimbard, S., Sabia, R., **Portabella, M.**, González, V., Gabarró, C., Ballabrera, J., Pérez, F., Martínez, J., Ballabrera, J., and Turiel, A., “SMOS sea surface salinity retrieval improvement and systematic errors,” *12th Specialist Meeting on Microwave Radiometry and Remote Sensing of the Environment MicroRad*, Tor Vergata, Italy, 5-9 March, 2012.
210. Font, J., Gabarró, C., Piles, M., Ballabrera, J., Turiel, A., Martínez, J., **Portabella, M.**, Camps, A., Valllosera, M., Gourrion, J., Hoareau, N., and Umbert, M., “SMOS level 3 and level 4 research products at the SMOS Barcelona Expert Center,” *12th Specialist Meeting on Microwave Radiometry and Remote Sensing of the Environment MicroRad*, Tor Vergata, Italy, 5-9 March, 2012.
211. Font, J., Gabarró, C., Piles, M., Ballabrera, J., Turiel, A., Martínez, J., **Portabella, M.**, Camps, A., Valllosera, M., Gourrion, J., Hoareau, N., and Umbert, M., “SMOS CP34 soil moisture and ocean salinity maps,” *Proc. of the 12th Specialist Meeting on Microwave Radiometry and Remote Sensing of the Environment MicroRad*, <https://doi.org/10.1109/MicroRad.2012.6185236>, Tor Vergata, Italy, 5-9 March, 2012.
212. Sabia, R., Talone, M., **Portabella, M.**, Fernández-Prieto, D., Gourrion, J., Camps, A., and Font, J., “SMOS L3 salinity performances at decreasing sea surface temperature,” *Proc. of the 12th Specialist Meeting on Microwave Radiometry and Remote Sensing of the Environment MicroRad*, <https://doi.org/10.1109/MicroRad.2012.6185232>, Tor Vergata, Italy, 5-9 March, 2012.
213. Ballabrera, J., Font, J., Gabarró, C., González, V., Gourrion, J., Guimbard, S., Martínez, J., **Portabella, M.**, and Turiel, A., “Development of SMOS levels 3 and 4 sea surface salinity maps,” *Ocean Sciences Meeting*, Salt Lake City, USA, 20-24 February, 2012.
214. Ballabrera, J., Font, J., Gabarró, C., Gourrion, J., Hoareau, N., Martínez, J., **Portabella, M.**, Umbert, M., and Turiel, A., “SMOS: Improvements in CP34 sea surface salinity maps,” *AGU Fall Meeting*, San Francisco, USA, 5-9 December, 2011.
215. Stoffelen, A., Verhoef, A., Lin, W., **Portabella, M.**, Verspeek, J., and Vogelzang, J., “High-resolution ASCAT scatterometer winds near the coast,” *Earth Observation for Ocean-Atmosphere Interactions Science Conference*, Frascati, Italy, 29 November – 2 December, 2011.
216. **Portabella, M.**, Ballabrera, J., Gourrion, J., Gabarró, C., Guimbard, S., Sabia, R., González, V., García, D., Martínez, J., Pérez, F., Turiel, A., and Font, J., “SMOS sea surface salinity products: potential for ocean-atmosphere interaction studies,” *Earth Observation for Ocean-Atmosphere Interactions Science Conference*, Frascati, Italy, 29 November – 2 December, 2011.
217. Ballabrera, J., **Portabella, M.**, Umbert, M., and Hoareau, N., “Impact of sea surface salinity data assimilation in air-sea heat fluxes,” *Earth Observation for Ocean-Atmosphere Interactions Science Conference*, Frascati, Italy, 29 November – 2 December, 2011.
218. Gabarró, C., González, V., Martínez, J., Gourrion, J., Guimbard, S., **Portabella, M.**, and Font, J., “Assessment of the SMOS local oscillator calibration frequency impact on the retrieved salinity,” *Proc. of the SMOS Science Workshop*, Arles, France, 27-29 September, 2011.
219. Gourrion, J., Guimbard, S., Sabia, R., **Portabella, M.**, González, V., Gabarró, C., García, D., Pérez, F., Martínez, J., and Turiel, A., “SMOS brightness temperature and salinity over the ocean: systematic errors,” *SMOS Science Workshop*, Arles, France, 27-29 September, 2011.
220. Sabia, R., Talone, M., **Portabella, M.**, Fernandez-Prieto, D., Gourrion, J., Gabarró, C., Ballabrera, J., Spurgeon, P., Camps, A., and Font, J., “SMOS salinity retrieval updated trade-off between increased temporal sampling and degraded sensitivity to cold waters,” *Proc. of the SMOS Science Workshop*, Arles, France, 27-29 September, 2011.
221. Guimbard, S., Gourrion, J., Vendrell, L., **Portabella, M.**, and Font, J., “SMOS ocean forward model: roughness models improvement,” *Proc. of the SMOS Science Workshop*, Arles, France, 27-29 September, 2011.
222. Font, J., Boutin, J., Reul, N., Spurgeon, P., Ballabrera, J., Chuprin, A., Gabarró, C., Gourrion, J., Guimbard, S., Hénocq, C., Lavender, S., Martin, N., Martínez, J., McCulloch, M., Meirold-Mautner, I.,

- Mugerin, C., Petitcolin, F., **Portabella, M.**, Sabia, R., Talone, M., Tenerelli, J., Turiel, A., Vergely, J.L., Waldteufel, P., Yin, X., Zine, S., and Delwart, S., "Status of sea surface salinity product provided by SMOS," *Proc. of the SMOS Science Workshop*, Arles, France, 27-29 September, 2011.
223. Gourrion, J., Guimbard, S., Sabia, R., Gabarró, C., González, V., Montero, S., Talone, M., **Portabella, M.**, Turiel, M., Pérez, F., and Martínez, J., "Reducing systematic errors on SMOS retrieved salinity: calibration of brightness temperature images and forward model improvement," *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS)*, pp. 2397-2400, <https://doi.org/10.1109/IGARSS.2011.6049693>, Vancouver, Canada, 24-29 July, 2011.
224. Ballabrera, J., Font, J., Garcia-Alvarez, D., and **Portabella, M.**, "Sea surface salinity measurement from space," *Conference on Fluctuations and Coherence: from Superfluids to Living Systems*, Lancaster, United Kingdom, 13-16 July, 2011.
225. **Portabella, M.**, Stoffelen, A., Verhoef, A., Verspeek, J., Vogelzang, J., and Turiel, A., "Effects of rain in ASCAT backscatter measurements," *EUMETSAT/ESA Scatterometer Science Conference*, Darmstadt, Germany, 11-13 April, 2011.
226. Verspeek, J., Stoffelen, A., **Portabella, M.**, Verhoef, A., and Vogelzang, J., "Improved ASCAT wind retrieval using NWP ocean calibration," *EUMETSAT/ESA Scatterometer Science Conference*, Darmstadt, Germany, 11-13 April, 2011.
227. Soisuvarn, S., Jelenak, Z., Zhu, Q., Ahmad, K., Chang, P.S., Stoffelen, A., Verhoef, A., Vogelzang, J., Verspeek, J., and **Portabella, M.**, "Validation of the advanced scatterometer (ASCAT) high wind geophysical model function," *EUMETSAT/ESA Scatterometer Science Conference*, Darmstadt, Germany, 11-13 April, 2011.
228. Gabarró, C., Martínez, J., González, V., Sabia, R., Gourrion, J., Talone, M., Montero, S., Guimbard, S., Pérez, F., **Portabella, M.**, and Font, J., "Assessment of the impact on the SSS of the calibration frequency of the Local Oscillators of SMOS," *EGU General Assembly*, Vienna, Austria, 3-8 April, 2011.
229. Umbert, M., Hoareau, N., Ballabrera, J., and **Portabella, M.**, "Multivariate statistical model for the air-sea heat fluxes," *EGU General Assembly*, Vienna, Austria, 3-8 April, 2011.
230. Gourrion, J., Ballabrera-Poy, J., Sabia, R., Talone, M., Gabarró, C., Montero, S., Turiel, A., **Portabella, M.**, Hoareau, N., Martínez, J., and Pérez, F., "Validation of SMOS salinity at Level 3," *SMOS Validation and Retrieval Team Workshop*, Frascati, Italy, 29-30 November, 2010.
231. Font, J., Boutin, J., Reul, N., Spurgeon, P., Ballabrera-Poy, J., Chuprin, A., Gabarró, C., Gourrion, J., Hénoq, C., Lavender, S., Martin, N., Martínez, J., McCulloch, M., Meirold-Mautner, I., Mugerin, C., Petitcolin, F., **Portabella, M.**, Sabia, R., Talone, M., Tenerelli, J., Turiel, A., Vergely, J.L., Waldteufel, P., Yin, X., Zine, S., and Delwart, S., "SMOS ocean salinity validation overview," *SMOS Validation and Retrieval Team Workshop*, Frascati, Italy, 29-30 November, 2010.
232. **Portabella, M.**, Stoffelen, A., Turiel, A., and Ballabrera, J., "Satellite ocean vector wind observations," *I Encuentro de la Oceanografía Física Española*, Barcelona, Spain, 13-15 October, 2010.
233. Turiel, A., Mourre, B., Gourrion, J., Ballabrera, J., **Portabella, M.**, Solé, J., and García-Ladona, E., "Advanced methods for the inference of dynamic information applied to remote sensing maps of the ocean," *I Encuentro de la Oceanografía Física Española*, Barcelona, Spain, 13-15 October, 2010.
234. Gabarró, C., Martínez, J., Sabia, R., Gourrion, J., Talone, M., Turiel, A., **Portabella, M.**, and Font, "Derivation of ocean salinity observations from SMOS measurements," *I Encuentro de la Oceanografía Física Española*, Barcelona, Spain, 13-15 October, 2010.
235. **Portabella, M.**, Stoffelen, A., Verhoef, A., and Verspeek, J., "ASCAT scatterometer wind quality control," *Proc. of the 2010 EUMETSAT Meteorological Satellite Conference*, EUMETSAT P.57, Córdoba, Spain, 20-24 September, 2010.

236. Stoffelen, A., Verhoef, A., Vogelzang, J., Verspeek, J., Belmonte-Rivas, M., and **Portabella, M.**, “High-resolution ASCAT scatterometer winds near the coast,” *2010 EUMETSAT Meteorological Satellite Conference*, Córdoba, Spain, 20-24 September, 2010.
237. **Portabella, M.**, Ballabrera-Poy, J., Elósegui, P., Font, J., García-Ladona, E., and Turiel, A., “Technologies for a sustainable development,” *The Ocean of Tomorrow Info Day*, Brussels, Belgium, 9 September 2010.
238. Sabia, R., Gourrion, J., **Portabella, M.**, Gabarró, C., Talone, M., Ballabrera, J., Turiel, A., Martinez, J., Camps, A., Aretxabaleta, A.L., Monerris, A., and Font, J., “SMOS measurements preliminary validation against modelled brightness temperatures and external-source salinity data,” *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS)*, pp. 3166-3169, <https://doi.org/10.1109/IGARSS.2010.5651336>, Honolulu, USA, 25-30 July, 2010.
239. Font, J., Boutin, J., Reul, N., Spurgeon, P., Ballabrera, J., Chuprin, A., Gabarró, C., Gourrion, J., Hénoq, C., Lavender, S., Martin, N., Martinez, J., McCulloch, M., Meirold-Mautner, I., Petitcolin, F., **Portabella, M.**, Sabia, R., Talone, M., Tenerelli, J., Turiel, A., Vergely, J.L., Waldteufel, P., Yin, X., and Zine, S., “Overview of SMOS level 2 ocean salinity processing and first results,” *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS)*, pp. 3146-3149, <https://doi.org/10.1109/IGARSS.2010.5654294>, Honolulu, USA, 25-30 July, 2010.
240. **Portabella, M.**, Stoffelen, A., Verhoef, A., and Verspeek, “ASCAT scatterometer wind quality control,” *Proc. of the ESA Living Planet Symposium*, ESA SP-686, Bergen, Norway, 28 June – 2 July, 2010.
241. Stoffelen, A., Verhoef, A., Vogelzang, J., **Portabella, M.**, and Figa, J., “On high-resolution scatterometer winds near the coast,” *Proc. of the ESA Living Planet Symposium*, ESA SP-686, Bergen, Norway, 28 June – 2 July, 2010.
242. Sabia, R., Gourrion, J., Gabarró, C., Talone, M., **Portabella, M.**, Ballabrera, J., Turiel, A., Martinez, J., Aretxabaleta, A.L., Camps, A., Monerris, A., and Font, J., “Preliminary cross-validation of the SMOS measurements against modelled brightness temperatures and external salinity data,” ,” *Proc. of the ESA Living Planet Symposium*, ESA SP-686, Bergen, Norway, 28 June – 2 July, 2010.
243. Sabia, R., Muñoz-Sabater, J., Talone, M., De Rosnay, P., Gourrion, J., **Portabella, M.**, Spurgeon, P., Font, J., Vall-llossera, M., Takay, Y., and Balmaseda, M., “The SMOS brightness temperature ocean monitoring: preliminary results,” ,” *Proc. of the ESA Living Planet Symposium*, ESA SP-686, Bergen, Norway, 28 June – 2 July, 2010.
244. Gabarró, C., Turiel, A., Martinez, J., **Portabella, M.**, Gourrion, J., Talone, M., Sabia, R., and Font, J., “Improvement of the empirical roughness-induced emissivity model: for the SMOS mission,” *Proc. of the ESA Living Planet Symposium*, ESA SP-686, Bergen, Norway, 28 June – 2 July, 2010.
245. Font, J., Boutin, J., Reul, N., Spurgeon, P., Ballabrera, J., Chuprin, A., Gabarró, C., Gourrion, J., Hénoq, C., Lavender, S., Martin, N., Martinez, J., McCulloch, M., Meirold-Mautner, I., Petitcolin, F., **Portabella, M.**, Sabia, R., Talone, M., Tenerelli, J., Turiel, A., Vergely, J.L., Waldteufel, P., Yin, X., Zine, S., and Delwart, S., “SMOS: objectives and approach for ocean salinity observations,” *Proc. of the ESA Living Planet Symposium*, ESA SP-686, Bergen, Norway, 28 June – 2 July, 2010.
246. **Portabella, M.**, Stoffelen, A., Verhoef, A., and Verspeek, “ASCAT scatterometer quality control,” *International Ocean Vector Winds Science Team Workshop*, Barcelona, Spain, 18-20 May, 2010.
247. Turiel, A., Mourre, B., Gourrion, J., Ballabrera-Poy, J., and **Portabella, M.** “Role of point-wise scale invariance in geophysical turbulence: applications in oceanography,” *International Ocean Vector Winds Science Team Workshop*, Barcelona, Spain, 18-20 May, 2010.
248. Sabia, R., Gourrion, J., Gabarró, C., Talone, M., **Portabella, M.**, Ballabrera, J., Martinez, J., Aretxabaleta, A.L., Camps, A., Monerris, A., and Font, J., “SMOS measurements preliminary validation: objectives and approach,” *EGU General Assembly*, Vienna, Austria, 2-7 May, 2010.

249. Sabia, R., Gourrion, J., Gabarró, C., Talone, M., **Portabella, M.**, Ballabrera, J., Turiel, A., Font, J., Camps, A., Martinez, J., Aretxabaleta, A.L., and Moneris, “SMOS salinity retrieval: post-launch first assessment,” *Proc. of the IEEE GOLD Remote Sensing Conference*, Livorno, Italy, 29-30 April, 2010.
250. Font, J., Boutin, J., Reul, N., Spurgeon, P., Chuprin, A., Gabarró, C., Gourrion, J., Hénocq, C., Lavender, S., Martin, N., McCulloch, M., Meirold-Mautner, I., Petitcolin, F., **Portabella, M.**, Sabia, R., Talone, M., Tenerelli, J., Vergely, J.L., Yin, X., and Zine, S., “Retrieving sea surface salinity from SMOS measurements: first assessment,” *11th Specialist Meeting on Microwave Radiometry and Remote Sensing of the Environment MicroRad*, Washington DC, USA, 1-4 March, 2010.
251. Stoffelen, A., **Portabella, M.**, Verhoef, A., Verspeek, J., Vogelzang, J., and Belmonte, M., “Verification of scatterometer winds,” *10th International Winds Workshop*, Tokyo, Japan, 22-26 February 2010.
252. **Portabella, M.**, Stoffelen, A., Belmonte, M., Verhoef, A., Verspeek, J., and Vogelzang, J., “ASCAT scatterometer wind data processing,” *Proc. of the third International Workshop on Marine Technology (Martech)*, ISBN 978-84-692-5896-5, Barcelona, Spain, 19-20 November 2009.
253. Sabia, R., Camps, A., **Portabella, M.**, Talone, M., Ballabrera, J., Gourrion, J., Aretxabaleta, A.L., Gabarró, C., and Font, J., “Issues in the balancing of the SMOS ocean salinity retrieval cost function,” *Proc. of the third International Workshop on Marine Technology (Martech)*, ISBN 978-84-692-5896-5, Barcelona, Spain, 19-20 November 2009.
254. Bourassa, M., Bonekamp, H., Chang, P., Chelton, D., Edson, R., Fraklin, J., He, Y., Hersbach, H., Hilburn, K., Lee, T., Liu, W., Long, D., Kelly, K., Knabb, R., Lehner, S., Perrie, W., **Portabella, M.**, Powell, M., Rodriguez, E., Smith, D., Stoffelen, A., Swail, V., Wentz, F., and Courtney, J., “Remotely sensed winds and wind stresses for marine forecasting and ocean modeling,” *Proc. of the OceanObs’09 Conference*, Vol. 2, Venice, Italy, 21-25 September 2009.
255. **Portabella, M.**, Stoffelen, A., Verhoef, A., and Vogelzang, J., “Development of an ASCAT coastal wind product,” *Proc. of the 2nd EPS/MetOp RAO Workshop*, ESA SP-675, Barcelona, Spain, 20-22 May 2009.
256. **Portabella, M.**, Stoffelen, A., Verspeek, J., and Verhoef, A., “Analysis of the ASCAT 3-dimensional measurement space,” *Proc. of the 2nd EPS/MetOp RAO Workshop*, ESA SP-675, Barcelona, Spain, 20-22 May 2009.
257. **Portabella, M.**, Font, J., Sabia, R., Camps, A., and Reul, N., “SMOSops secondary payload assessment: optimal FPIR radiometer configuration for sea surface roughness characterization at L-band”, *NASA Ocean Vector Winds Science Team Workshop*, Boulder, USA, 18-20 May, 2009.
258. Stoffelen, A., **Portabella, M.**, Verhoef, A., Verspeek, J., Vogelzang, J., and Belmonte, M., “A careful comparison of scatterometer wind products,” *NASA Ocean Vector Winds Science Team Workshop*, Boulder, USA, 18-20 May, 2009.
259. Stoffelen, A., Belmonte, M., Verhoef, A., Verspeek, J., Vogelzang, J., **Portabella, M.**, and Bentamy, A., “Scatterometer wind services in Europe,” *NASA Ocean Vector Winds Science Team Workshop*, Boulder, USA, 18-20 May, 2009.
260. **Portabella, M.**, “Scatterometer wind data processing,” *2nd Workshop in Signal Processing for Marine and Seismic Data (ProSeDaMS)*, Barcelona, Spain, 27-28 April, 2009.
261. Sabia, R., Camps, A., **Portabella, M.**, Talone, M., Ballabrera, J., Gourrion, J., Gabarró, C., Aretxabaleta, A.L., and Font, J., “On the Balancing of the SMOS Ocean Salinity Retrieval Cost Function,” *EGU General Assembly*, Vienna, Austria, 19-24 April, 2009.
262. **Portabella, M.**, Stoffelen, A., Belmonte, M., Verhoef, A., Verspeek, J., and Vogelzang, J., “Analysis of the ASCAT wind inversion residual: towards an improved C-band geophysical model function,” *NASA Ocean Vector Winds Science Team Workshop*, Seattle, USA, 19-21 November, 2008.
263. Stoffelen, A., Verhoef, A., and **Portabella, M.**, “High resolution scatterometer winds near the coast,” *NASA Ocean Vector Winds Science Team Workshop*, Seattle, USA, 19-21 November, 2008.

264. Stoffelen, A., **Portabella, M.**, Verhoef, A., Verspeek, J., Vogelzang, J., and Belmonte M., “EUMETSAT SAF wind services,” *NASA Ocean Vector Winds Science Team Workshop*, Seattle, USA, 19-21 November, 2008.
265. **Portabella, M.**, Stoffelen, A., Belmonte, M., Verhoef, A., Verspeek, J., and Vogelzang, J., “High resolution ASCAT scatterometer winds near the coast,” *Proc. of the 2008 EUMETSAT Meteorological Satellite Conference*, EUMETSAT P.52, Darmstadt, Germany, 8-12 September, 2008.
266. Vogelzang, J., Stoffelen, A., Belmonte, M., **Portabella, M.**, Verhoef, A., and Verspeek, J., “Quality of high resolution ASCAT wind fields,” *Proc. of the 2008 EUMETSAT Meteorological Satellite Conference*, EUMETSAT P.52, Darmstadt, Germany, 8-12 September, 2008.
267. Vogelzang, J., Stoffelen, A., Belmonte, M., **Portabella, M.**, Verhoef, A., and Verspeek, J., “The SeaWinds data processor,” *Proc. of the 2008 EUMETSAT Meteorological Satellite Conference*, EUMETSAT P.52, Darmstadt, Germany, 8-12 September, 2008.
268. Stoffelen, A., **Portabella, M.**, Verhoef, A., Verspeek, J., and Volgelzang, J., “High resolution ASCAT scatterometer winds near the coast,” *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS)*, Boston, Massachusetts, USA, 7-11 July 2008.
269. Verspeek, J., Stoffelen, A., **Portabella, M.**, Verhoef, A., and Volgelzang, J., “ASCAT scatterometer ocean calibration,” *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS)*, Boston, Massachusetts, USA, 7-11 July 2008.
270. Stoffelen, A., **Portabella, M.**, Verhoef, A., and Volgelzang, J., “On high resolution coastal winds,” *Proc. of the European Global Ocean Observing System (EuroGOOS) Conference*, Exeter, United Kingdom, 20-22 May, 2008.
271. Stoffelen, A., **Portabella, M.**, Verhoef, A., Verspeek, J., and Volgelzang, J., “Advancements in Scatterometer Wind Processing,” *Proc. of the 9th International Winds Workshop*, EUMETSAT P.51, Annapolis, Maryland, USA, 14-18 April, 2008.
272. Camps, A., Ballabrera-Poy, J., Fernández-Ríos, A., Rius, A., Lavín, A., **Portabella, M.**, Hernández-Guerra, A., García-Ladona, E., Mallorquí, J., Vall-llossera, M., Corbella, I., and Font, J., “CALIMAS: Overview and current status of the Spanish Contribution to the SMOS CAL/VAL Activities,” *10th Specialist Meeting on Microwave Radiometry and Remote Sensing of the Environment MicroRad*, Florence, Italy, March 2008.
273. Camps, A., Font, J., Corbella, I., Vall-llossera, M., Marllorquí, J., García, E., Hernández-Guerra, A., **Portabella, M.**, Lavín, A., Rius, A., Fernandez, A., and Ballabrera-Poy, J., “CALIMAS: Calibration-validation of Interferometric Microwave and Salinity products. Overview and current status,” *7th SMOS Science Workshop*, Frascati, Italy, October 2007.
274. Stoffelen, A., **Portabella, M.**, Verhoef, A., Verspeek, J., and Volgelzang, J., “OSI SAF and higher level wind products,” *Joint NASA Ocean Vector Winds Science Team and ESA ASCAT Science Advisory Group Workshop*, Amsterdam, The Netherlands, 28-29 September, 2007.
275. Stoffelen, A., **Portabella, M.**, Verhoef, A., Verspeek, J., and Volgelzang, J., “KNMI SAF effort,” *Joint NASA Ocean Vector Winds Science Team and ESA ASCAT Science Advisory Group Workshop*, Amsterdam, The Netherlands, 28-29 September, 2007.
276. Stoffelen, A., **Portabella, M.**, Verhoef, A., Verspeek, J., and Volgelzang, J., “Status and validation of the OSI SAF wind,” *Third Ocean and Sea Ice SAF Workshop*, Amsterdam, The Netherlands, 27 September, 2007.
277. **Portabella, M.**, Stoffelen, A., Verhoef, A., Verspeek, J., and Vogelzang, J., “Towards a high-resolution gridded ocean forcing,” *Proc. of the Joint 2007 EUMETSAT Meteorological Satellite Conference and the 15th American Meteorological Society (AMS) Satellite Meteorology & Oceanography Conference*, EUMETSAT P.50, Amsterdam, The Netherlands, 24-28 September, 2007.
278. Verspeek, J., Stoffelen, A., **Portabella, M.**, Verhoef, A., and Vogelzang, J., “ASCAT scatterometer cal/val and winds,” *Proc. of the Joint 2007 EUMETSAT Meteorological Satellite Conference and the*

15th American Meteorological Society (AMS) Satellite Meteorology & Oceanography Conference, EUMETSAT P.50, Amsterdam, The Netherlands, 24-28 September, 2007.

279. Vogelzang, J., Stoffelen, A., **Portabella, M.**, Verhoef, A., and Verspeek, J., “Mesoscale winds over the oceans,” *Proc. of the Joint 2007 EUMETSAT Meteorological Satellite Conference and the 15th American Meteorological Society (AMS) Satellite Meteorology & Oceanography Conference, EUMETSAT P.50, Amsterdam, The Netherlands, 24-28 September, 2007.*
280. Verhoef, A., Stoffelen, A., **Portabella, M.**, Verspeek, J., and Vogelzang, J., “Overview of OSI SAF and EARS scatterometer wind services at KNMI,” *Proc. of the Joint 2007 EUMETSAT Meteorological Satellite Conference and the 15th American Meteorological Society (AMS) Satellite Meteorology & Oceanography Conference, EUMETSAT P.50, Amsterdam, The Netherlands, 24-28 September, 2007*
281. **Portabella, M.**, Stoffelen, A., Vogelzang, J., Verhoef, A., and Verspeek, J., “Towards a high-resolution ASCAT scatterometer wind product,” *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS), Barcelona, Spain, 23 – 27 July 2007.*
282. **Portabella, M.**, Stoffelen, A., Verspeek, J., Verhoef, A., and Vogelzang, J., “ASCAT scatterometer ocean calibration,” *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS), Barcelona, Spain, 23 – 27 July 2007.*
283. Gabarró, C., **Portabella, M.**, Talone, M., and Font, J., “Analysis of the SMOS ocean salinity inversion algorithm,” *Proc. of the International Geoscience and Remote Sensing Symposium (IGARSS), Barcelona, Spain, 23 – 27 July 2007.*
284. Stoffelen, A., **Portabella, M.**, Verhoef, A., Verspeek, J., Vogelzang, J., and Burgers, G., “The first ASCAT scatterometer winds,” EGU General Assembly, Vienna, Austria, 15-20 April, 2007.
285. Stoffelen, A., Vogelzang, J., de Kloe, J., **Portabella, M.**, Verhoef, A., and Verspeek, J., “High resolution scatterometer winds; a compromise of signal and noise,” *International Geoscience and Remote Sensing Symposium (IGARSS), Denver, CO, USA, 30 July – 4 August 2006.*
286. **Portabella, M.**, Stoffelen, A., Vogelzang, J., Verhoef, A., and Verspeek, J., “OSI SAF ASCAT level 2 products,” *NASA Ocean Vector Winds Science Team Workshop, Salt Lake City, USA, July 2006.*
287. Vogelzang, J, Stoffelen, A., **Portabella, M.**, Verhoef, A., and Verspeek, J., “High resolution scatterometer wind processing,” *Proc. of the EUMETSAT Meteorological Satellite Conference, EUMETSAT P.48, Helsinki, Finland, 12-16 June, 2006.*
288. **Portabella, M.**, Stoffelen, A., and Roca, M., “Development of an ASCAT coastal wind product,” *Proc. of the 1st EPS/MetOp RAO workshop, ESA SP-618, Frascati, Italy, 15-17 May 2006.*
289. **Portabella, M.**, Stoffelen, A., and Roca, M., “Analysis of the ASCAT 3-dimensional measurement space,” *Proc. of the 1st EPS/MetOp RAO workshop, ESA SP-618, Frascati, Italy, 15-17 May 2006.*
290. Stoffelen, A., Vogelzang, J., de Kloe, J., **Portabella, M.**, Verhoef, A., and Verspeek, J., “EUMETSAT SAF scatterometer activities,” *Proc. of the 8th International Winds Workshop, EUMETSAT P.47, Beijing, China, 24-28 April, 2006.*
291. Van Oldenborgh, G.J., Stoffelen, A., **Portabella, M.**, De Kloe, J., and Verhoef, A., “SOS: a re-analysis of ERS wind stress observations,” European Geosciences Union (EGU) General Assembly, Vienna, Austria, 2-7 April, 2006.
292. Vogelzang, J, **Portabella, M.**, Stoffelen, A., De Kloe, J., and Verhoef, A., “A probabilistic approach for SeaWinds data assimilation,” EMS/ ECAM Conference, Utrecht, The Netherlands, 12-16 September, 2005.
293. **Portabella, M.**, Stoffelen, A., Verhoef, A., and Bonekamp, H., “A statistical approach for SeaWinds data assimilation,” *Proc. of the 4th WMO International Symposium on Assimilation of Observations in Meteorology and Oceanography, WMO/TD-No. 1316, Prague, Czech Republic, 18-22 April 2005.*

294. **Portabella, M.**, and Stoffelen, A., "On Bayesian scatterometer wind inversion," *Proc. of the 4th WMO International Symposium on Assimilation of Observations in Meteorology and Oceanography*, WMO/TD-No. 1316, Prague, Czech Republic, 18-22 April 2005.
295. **Portabella, M.**, Stoffelen, A., Bonekamp, H., and Verhoef, A., "A probabilistic approach for SeaWinds data assimilation," *NASA Ocean Vector Winds Science Team Workshop*, Seattle, USA, March 2005.
296. **Portabella, M.**, and Stoffelen, A., "A proposed generic scatterometer wind inversion," *NASA Ocean Vector Winds Science Team Workshop*, Seattle, USA, March 2005.
297. Stoffelen, A., Bonekamp, H., de Kloe, J., **Portabella, M.**, and Verhoef, A., "OSI SAF scatterometer wind products," *Proc. of the 2nd OSI SAF User Workshop*, EUMETSAT P.45, Perros-Guirec, France, 15-17 March 2005.
298. Verhoef, A., Stoffelen, A., Bonekamp, H., de Kloe, J., and **Portabella, M.**, "Improved Scatterometer Wind Retrieval using a Multiple Solution Scheme," *2nd OSI SAF User Workshop*, Perros-Guirec, France, 15-17 March 2005.
299. Gabarró, C., Font, J., Camps, A., Vall-llossera, M., and **Portabella, M.**, "A new semi-empirical model of sea surface microwave emissivity used to retrieve salinity, wind speed and wave height," *5th SMOS Workshop*, Frascati, Italy, November 2004.
300. **Portabella, M.**, and Stoffelen, A., "Towards an objective performance measure of spaceborne wind sensors: ERS test case," *Proc. of the Envisat & ERS Symposium*, ESA SP-572, Salzburg, Austria, 6-10 September, 2004.
301. Stoffelen, A., Bonekamp, H., Beysens, J., de Kloe, J., **Portabella, M.**, Verhoef, A., and Verspeek, J., "Towards a high-resolution scatterometer wind product," *Proc. of the 7th International Winds Workshop*, EUMETSAT P.42, Helsinki, Finland, 14-17 June, 2004.
302. Gabarró, C., Font, J., Camps, A., Vall-llossera, M., and **Portabella, M.**, "A new semi-empirical model of sea surface microwave emissivity used to retrieve salinity, wind speed and wave height," *Aquarius-SMOS-Hydros Joint Science Workshop*, NOAA/AOML, Miami, USA, April 2004.
303. Gabarró, C., Font, J., Camps, A., Vall-llossera, M., and **Portabella, M.**, "A new empirical model of sea surface microwave emissivity for salinity remote sensing," *European Geosciences Union (EGU) First General Assembly*, Nice, France, April 2004.
304. Gabarró, C., Font, J., Camps, A., Vall-llossera, M., and **Portabella, M.**, "A new empirical model of sea surface microwave emissivity for salinity remote sensing," *Microwave Radiometry and Remote Sensing Applications (MICRORAD)*, Rome, Italy, 24-27 February, 2004.
305. **Portabella, M.**, Stoffelen, A., and De Vries, J., "Development of a SeaWinds wind product for weather forecasting," *Proc. of International Geoscience and Remote Sensing Symposium (IGARSS)*, vol. III, pp. 1076-1078, Sydney, Australia, July 2001.
306. **Portabella, M.**, and Stoffelen, A., "KNMI Quality Control versus JPL Rain Flag," *NASA Oceanography Scientific Conference*, Miami, USA, April 2001.
307. **Portabella, M.**, and Stoffelen, A., "Characterization of Residual Information for Quality Control," *NASA Oceanography Scientific Conference*, Miami, USA, April 2001.
308. **Portabella, M.**, and Stoffelen, A., "Towards a QuikSCAT quality control indicator: rain detection," *Proc. of EOS/SPIE symposium on Remote Sensing of the Ocean and Sea Ice*, vol. 4172, pp. 177-180, Barcelona, Spain, September 2000.
309. **Portabella, M.**, and Stoffelen, A., "Towards high-resolution and time-continuous ocean-surface stress fields," *EOS/SPIE symposium on Remote Sensing of the Ocean and Sea Ice*, Barcelona, Spain, September 2000
310. **Portabella, M.**, and Stoffelen, A., "QuikSCAT quality control: rain flag," *Proc. of Ocean Winds Workshop*, IFREMER, scientific topic no. 21, Brest, France, June 2000.

311. **Portabella, M.**, "SAR Wind Retrievals versus HIRLAM Output : A two way Validation-by-Comparison," *Ocean Winds Workshop*, IFREMER, Brest, France, June 2000.
312. Stoffelen, A., **Portabella, M.**, and Voorrips, A., "Towards the use of QuikSCAT winds in numerical weather prediction", *5th International Winds Workshop*, Lorne, Australia, February 2000.
313. **Portabella, M.**, Stoffelen, A., and Voorrips, A., "Preliminary results in Qscat quality control: rain detection," *Proc. of QuikSCAT Cal/Val Workshop*, Pasadena/Arcadia, USA, November 1999.
314. Stoffelen, A., **Portabella, M.**, and Voorrips, A., "Contributions to the QuikSCAT cal/val and science meetings", *QuikSCAT Cal/Val Workshop*, Pasadena/Arcadia, USA, November 1999.
315. **Portabella, M.**, "ERS-2 SAR Wind Retrievals," *ESA-ESTEC SAR Workshop*, Noordwijk, The Netherlands, March 1999.
316. Lecomte, P., Femenias, P., Saavedra, L., **Portabella, M.**, and Crapolicchio, R., "NSCAT post-launch sigma nought calibration: a comparison with ERS-2 scatterometer," *Proc. of NSCAT Calibration/Validation Workshop*, Honolulu, USA, January 1997.

OTHER PUBLICATIONS

1. Lin, W., and **Portabella, M.**, “Scientific assessment of TDS-1 GNSS-R scatterometric measurements. Technical Note 5 on the evaluation of SGR-ReSI Level 2 wind quality: triple collocation analysis”, *ESA progress report*, ESA Contract No. AO 1-8365/15/NL/CT, available at <http://www.icm.csic.es/articles>, May 2018.
2. Lin, W., and **Portabella, M.**, “Scientific assessment of TDS-1 GNSS-R scatterometric measurements: Technical note 3 on the generation of geophysical model functions for GNSS-R”, *ESA progress report*, ESA Contract No. AO 1-8365/15/NL/CT, available at <http://www.icm.csic.es/articles>, November 2017.
3. Lin, W., **Portabella, M.**, Stoffelen, A., Verhoef, A., and Wang, Z., “Preliminary validation of the NSCAT-5 Geophysical model function,” *Associated Scientist report for the EUMETSAT OSI SAF*, SAF/OSI/CDOP3/KNMI/SCI/RP/313, available at <http://www.icm.csic.es/articles>, November 2017.
4. King, G.P., **Portabella, M.**, Lin, W., and Stoffelen, A., “Correlating extremes in wind and stress divergence with extremes in rain over the Tropical Atlantic,” *Associated Scientist report for the EUMETSAT OSI SAF*, SAF/OSI/CDOP3/KNMI/SCI/RP/312, available at <http://www.icm.csic.es/articles>, November 2017.
5. Polverari, F., **Portabella, M.**, García Pereda, J. Calbet, X., Rípodas, P., “Intercomparison of ASCAT sea surface winds and NWC/GEO-HRW Atmospheric Motion Vectors,” *Associated Scientist report for the EUMETSAT NWC SAF*, NWC/CDOP2/SAF/AEMET/SCI/VSP/12, available at <http://www.icm.csic.es/articles>, September 2017.
6. Lin, W., **Portabella, M.**, Stoffelen, A., Vogelzang, J., and De Chiara, G., “Optimization of ASCAT data assimilation in global NWP,” *Associated Scientist report for the EUMETSAT NWP SAF*, NWPSAF-KN-VS-017, available at <http://www.icm.csic.es/articles>, December 2016.
7. Olmedo, E., Turiel, A., **Portabella, M.**, González, V., Martínez, J., Ballabrera, J., and Font, J. “Task 3.2: New approaches to SMOS L2 SSS retrieval algorithm,” *SMOS BEC Technical Note*, BEC-TN.2015.01 v1, available at <http://www.icm.csic.es/articles>, 2015.
8. Lin, W., **Portabella, M.**, Vogelzang, J., Stoffelen, A., and Verhoef, A., “On mesoscale analysis and ASCAT ambiguity removal,” *Associated Scientist report for the EUMETSAT NWP SAF*, NWPSAF-KN-VS-014, available at <http://www.icm.csic.es/articles>, August 2015.
9. **Portabella, M.**, Lin, W., Stoffelen, A., Verhoef, A., and Turiel, A., “ASCAT quality control near rain,” *Associated Scientist report for the EUMETSAT OSI SAF*, SAF/OSI/CDOP2/KNMI/SCI/RP/213, available at <http://www.icm.csic.es/articles>, May 2014.
10. Johannessen, J.A., Chapron, B., Alpers, W., Collard, F., Cipollini, P., Liu, A., Horstmann, J., Da Silva, J.C.B., **Portabella, M.**, Robinson, I.S., Holt, B., Wackerman, C., and Vachon, P., “Satellite oceanography from the ERS synthetic aperture radar and radar altimeter: A brief review,” *European Space Agency*, ESA SP-1326, pp. 201-224, available at <http://www.icm.csic.es/articles>, 2013.
11. Stoffelen, A., Verhoef, A., Verpeek, J., Vogelzang, J., Driesenaar, T., Risheng, Y., De Chiara, G., Payan, C., Cotton, J., Bentamy, A., and **Portabella, M.**, “Research and development in Europe on the global application of the Oceansat-II scatterometer,” *Final report of the Oceansat-2 Cal/Val Announcement of Opportunity*, *NWP SAF report* NWPSAF-KN-TR-022, and *OSI SAF report* SAF/OSI/CDOP2/KNMI/TEC/RP/196, available at <http://www.icm.csic.es/articles>, March 2013.
12. **Portabella, M.**, Stoffelen, A., Lin, W., Verhoef, A., and Verspeek, J., “Analysis of the ASCAT inversion residual for quality control and forward modelling improvement,” *Associated Scientist report for the EUMETSAT OSI SAF*, SAF/OSI/CDOP/KNMI/TEC/TN/193, available at <http://www.icm.csic.es/articles>, April 2012.

13. Turiel, A., **Portabella, M.**, Lin, W., and Ballabrera, J., “Quality assessment of ASCAT wind vector maps through singularity analysis,” *SMOS BEC Technical Note*, BEC-TN.2012.02 v1, available at <http://www.icm.csic.es/articles>, 2012.
14. Font, J., Boutin, J., Reul, N., Spurgeon, P., Delwart, S., Ballabrera-Poy, J., Chuprin, A., Gabarró, C., Gourrion, J., Hénocq, C., Lavender, S., Martin, N., Martínez, J., McCulloch, M., Meirold-Mautner, I., Petitcolin, F., **Portabella, M.**, Sabia, R., Talone, M., Tenerelli, J., Turiel, A., Vergely, J.L., Waldteufel, P., Yin, X., and Zine, S., “SMOS: An Earth Explorer mission to observe ocean salinity with a novel technology,” *Mercator Ocean Q. Newsl.*, 42, pp. 3-11, available at <http://www.icm.csic.es/articles>, 2011.
15. Gabarró, C., Martínez, J., **Portabella, M.**, and González, V., “Impact of the Local Oscillator calibration frequency on the SMOS retrieved salinity,” *SMOS BEC Technical Note*, BEC-TN.2011.01 v.1, available at <http://www.icm.csic.es/articles>, 2011.
16. Gourrion, J., Gabarró, C., Turiel, A., and **Portabella, M.**, “Development of a fully empirical geophysical model function for SMOS ocean measurements,” *SMOS BEC Technical Note*, BEC-TN.2010.03 v1.2, available at <http://www.icm.csic.es/articles>, 2010.
17. **Portabella, M.**, Sabia, R., Font, J., Camps, A., and Reul, N., “SMOSops scientific support study. Task 2: secondary payloads science assessment,” *ESA-ESTEC final report*, ESTEC contract No. 20946/07/NL/FF, available at <http://www.icm.csic.es/articles>, 2009.
18. Anderson, C., Bonekamp, H., Figa, J., Wilson, J., Smet, A., Duff, C., Stoffelen, A., Verhoef, A., **Portabella, M.**, and Verspeek, J., “MetOp-A ASCAT commissioning quality report,” *EUMETSAT report*, EUM/MET/REP/08/0525, available at <http://www.icm.csic.es/articles>, 2009.
19. **Portabella, M.**, Verhoef, A., and Stoffelen, A., “Contribution to the development of a high-resolution ASCAT coastal wind product,” *Visiting Scientist report for the EUMETSAT NWP SAF*, NWPSAF-KN-VS-007, available at <http://projects.knmi.nl/scatterometer/publications>, 2008.
20. Verhoef, A., **Portabella, M.**, and Stoffelen, A., “Stability in SeaWinds quality control,” *Report for the EUMETSAT OSI SAF*, SAF/OSI/CDOP/KNMI/TEC/RP/167, available at <http://projects.knmi.nl/scatterometer/publications>, 2008.
21. Verhoef, A., **Portabella, M.**, Stoffelen, A., and Hersbach, H., “CMOD5.n – the CMOD5 GMF for neutral winds,” *Report for the EUMETSAT OSI SAF*, SAF/OSI/CDOP/KNMI/TEC/TN/165, available at <http://projects.knmi.nl/scatterometer/publications>, 2008.
22. Vogelzang, J., de Kloe, J., **Portabella, M.**, Stoffelen, A., Verhoef, A., and Verspeek, J., “SDP User Manual and Reference Guide,” *Report for the EUMETSAT NWP SAF*, NWPSAF-KN-UD-002, available at <http://projects.knmi.nl/scatterometer/publications>, 2007.
23. Verspeek, J., **Portabella, M.**, Stoffelen, A., and Verhoef, A., “ASCAT calibration and validation,” *Report for the EUMETSAT OSI SAF*, SAF/OSI/KNMI/TEC/TN/163, available at <http://projects.knmi.nl/scatterometer/publications>, 2007.
24. **Portabella, M.**, and Stoffelen, A., “Development of a global scatterometer validation and monitoring,” *Visiting Scientist report for the EUMETSAT OSI SAF*, SAF/OSI/KNMI/SCI/RP/141, available at <http://projects.knmi.nl/scatterometer/publications>, 2007.
25. Stoffelen, A., van Oldenborgh, G.J., de Kloe, J., **Portabella, M.**, and Verhoef, A., “Development of a scatterometer ocean stress product,” *Report for the EUMETSAT CM SAF*, available at <http://projects.knmi.nl/scatterometer/publications>, 2007.

26. De Kloe, J., **Portabella, M.**, Stoffelen, A., Verhoef, A., Verspeek, J., and Vogelzang, J., “SDP Test Report,” *Report for the EUMETSAT NWP SAF*, NWPSAF-TV-002, available at <http://projects.knmi.nl/scatterometer/publications>, 2007.
27. **Portabella, M.**, and Stoffelen, A., “Study on an objective performance measure for spaceborne wind sensors: Figure of Merit,” *ESA-ESTEC external progress report*, ESTEC contract No. 18041/04/NL/AR, available at <http://projects.knmi.nl/scatterometer/publications>, 2006.
28. **Portabella, M.**, and Stoffelen, A., “A probabilistic approach for SeaWinds data assimilation: an improvement in the nadir region,” *Visiting Scientist report for the EUMETSAT NWP SAF*, NWPSAF-KN-VS-002, available at <http://projects.knmi.nl/scatterometer/publications>, 2002.
29. **Portabella, M.**, and Stoffelen, A., “Quality control and wind retrieval for SeaWinds,” *KNMI scientific report*, WR-2002-01, Koninklijk Nederlands Meteorologisch Instituut, De Bilt, The Netherlands, available at <http://projects.knmi.nl/scatterometer/publications>, 2002.
30. **Portabella, M.**, “ERS-2 SAR wind retrievals versus HIRLAM output: a two way validation-by-comparison,” *ESA-ESTEC internal report*, EWP-1990, European Space Research and Technology Centre, Noordwijk, The Netherlands, 1998.
31. **Portabella, M.**, “ESA contribution to NSCAT wind validation : a comparison with ERS-2 winds,” *ESA-ESRIN internal report*, European Space Research Institute, Frascati, Italy, 1997.
32. **Co-author** of “Earth's Polar Regions: Observation, Protection, and Use,” *International Space University (ISU)*, summer session program, Stockholm, Sweden, 1995.

LECTURES

1. **Portabella, M.**, “Microwave Remote Sensing Activities at the Barcelona Expert Center,” Nanjing University of Information, Science, and Technology (NUIST), Nanjing (China), June 2018.
2. **Portabella, M.**, Seminar on “Satellite-derived wind R&D activities at ICM-CSIC”, National Satellite Meteorological Centre (NSMC), Chinese Meteorological Administration (CMA), October 2017.
3. **Portabella, M.**, Seminar on “Microwave satellite measurements for extreme weather monitoring”, Institute of Remote Sensing and Digital Earth (RADI), Chinese Academy of Sciences (CAS), October 2017.
4. **Portabella, M.**, Course on “Sensors remots en oceanografia: dispersòmetres de vent”, Màster en Ciències del Mar: Oceanografia i Gestió del Medi Marí, University of Barcelona (Spain), January 2017.
5. **Portabella, M.**, Seminar on “Dispersómetros de viento: procesamiento de datos y aplicaciones meteorológicas,” Agencia Estatal de Meteorología (AEMET), Madrid (Spain), May 2016.
6. **Portabella, M.**, Course on “Sensors remots en oceanografia: dispersòmetres de vent”, Màster en Ciències del Mar: Oceanografia i Gestió del Medi Marí, University of Barcelona (Spain), January 2016.
7. **Portabella, M.**, Seminar on “Dispersòmetres de vent: processament de dades i aplicacions meteorològiques,” Servei Meteorològic de Catalunya, Barcelona (Spain), December 2015.
8. **Portabella, M.**, and Lin, W., “Overview of the scatterometer wind data processing with a focus on quality control,” National Space Science Centre (NSSC), Beijing (China), June 2015.
9. **Portabella, M.**, and SMOS-BEC Team, “Overview of the SMOS sea surface salinity data processing at the Barcelona Expert Centre: from Level 1 to Level 4,” National Space Science Centre (NSSC), Beijing (China), June 2015.
10. **Portabella, M.**, and Lin, W., Seminar on “Assessment of the HY-2A scatterometer wind retrieval quality,” National Satellite Ocean Application Service (NSOAS), Beijing (China), June 2015.
11. **Portabella, M.**, and Payan, C., Seminar on “Near-real-time applications of scatterometer winds,” National Satellite Ocean Application Service (NSOAS), Beijing (China), June 2015.
12. **Portabella, M.**, Course on “El mar vist de l’espai. Què ens ensenyen els satèl·lits”, as part of the so-called “El CSIC en el aula” plan of activities within the Teacher’s Training Programme in Science, Technology and Mathematics, from the Education Department of the Generalitat de Catalunya, Institut de Ciències del Mar (ICM-CSIC), March 2015.
13. **Portabella, M.**, Course on “Sensors remots en oceanografia: dispersòmetres de vent”, Màster en Ciències del Mar: Oceanografia i Gestió del Medi Marí, University of Barcelona (Spain), January 2015.
14. **Portabella, M.**, Course on “Sensors remots en oceanografia: dispersòmetres de vent”, Màster en Ciències del Mar: Oceanografia i Gestió del Medi Marí, University of Barcelona (Spain), January 2014.
15. **Portabella, M.**, Course on “Ocean Vector Winds”, 2013 Microwave Ocean Remote Sensing Training School, SMOS Barcelona Expert Centre, Barcelona (Spain), October 2013.
16. **Portabella, M.**, Seminar on “Non-linear inversion in satellite ocean remote sensing,” Instituto de Magnetismo Avanzado (IMA), Madrid (Spain), May 2013.

17. Talone, M., Gourrion, J., Ballabrera-Poy, J., and **Portabella, M.**, Course on “Earth observation understanding of the water cycle,” Fundação Cearense de Meteorologia e Recursos Hídricos (FUNCEME), Fortaleza (Brasil), November 2010.
18. **Portabella, M.**, Ballabrera-Poy, J., and Turiel, A., Seminar on “Remote sensing and data assimilation in oceanography,” University of Barcelona (Spain), October 2010.
19. **Portabella, M.**, course on “Satellite ocean vector wind observations: retrievals and applications,” Institut Français pour l’Exploitation de la Mer (IFREMER), Brest (France), April 2010.
20. **Portabella, M.**, “Teledetección por satellite en la Unidad de Tecnología Marina”, Centre Mediterrani d’Investigacions Marines i Ambientals, Barcelona (Spain), December 2008.
21. **Portabella, M.**, “Una mirada a la teledetección satelital y la asimilación de datos a través de los dispersómetros,” *Seminar on hot topics in meteorology*, University of Barcelona (Spain), 21-23 November 2005.
22. **Portabella, M.**, Seminar on “Observacions de la rugositat del mar i del vent en superfície: importància d’aquestes dades en assimilació,” Institut de Ciències del Mar – CSIC, Barcelona (Spain), October 2003.
23. **Portabella, M.**, Seminar on “Winds from SeaWinds,” European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), February 2002.
24. **Portabella, M.**, Seminar on “How to differentiate SeaWinds from sea rain,” European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), September 2000.
25. **Portabella, M.**, Seminar on “ERS-2 SAR wind retrievals,” *Meeting of the Dutch National Group for Wind, Water and Transport*, Koninklijk Nederlands Meteorologisch Instituut (KNMI), De Bilt (The Netherlands), March 1999.
26. **Portabella, M.**, Seminar on “ERS-2 SAR wind retrievals versus HIRLAM output: a two way validation-by-comparison,” Institut de Ciències del Mar – CSIC, Barcelona (Spain), December 1998.
27. **Portabella, M.**, Seminar on “ERS-2 SAR wind retrievals versus HIRLAM output: a two way validation-by-comparison,” University of Barcelona (Spain), November 1998.
28. **Portabella, M.**, Seminar on “ERS-2 SAR wind retrievals versus HIRLAM output: a two way validation-by-comparison,” European Space Agency (ESA-ESTEC), August 1998.

PROJECTS

- *PROJECT TITLE:* Open Surface Current Airborne Radar Demonstrator (OSCAR)
FINANCIAL ENTITY: European Space Agency (ESA, 4000116410/16/NL/BJ); 8.000 €(CSIC subproject)
LENGTH *FROM:* Apr. 2018 *TO:* Mar. 2019
PI: **Marcos Portabella** (CSIC subproject)
- *PROJECT TITLE:* On the continuity of L-band satellite missions: new paradigms and applications (L-BAND)
FINANCIAL ENTITY: *Plan Nacional Espacio (ESP2017-89463-C3-1-R); 574.500 € (CSIC subproject)*
LENGTH *FROM:* Jan. 2018 *TO:* Dec. 2020
PI: **Marcos Portabella**, Antonio Turiel (Coordinated Project)
- *PROJECT TITLE:* C-band High and Extreme-Force Winds (CHEFS)
FINANCIAL ENTITY: European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT); 40.585 €(CSIC subproject)
LENGTH *FROM:* Oct. 2017 *TO:* Dec. 2018
PI: **Marcos Portabella** (CSIC subproject)
- *PROJECT TITLE:* Extension of the validation of the NSCAT-5 geophysical model function
FINANCIAL ENTITY: European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT, OSI_AVS_17_04); 24.282 €
LENGTH *FROM:* Aug. 2017 *TO:* Dec. 2017
PI: **Marcos Portabella**
- *PROJECT TITLE:* Validation of the NSCAT-5 geophysical model function
FINANCIAL ENTITY: European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT, OSI_AVS_17_01); 6.400 €
LENGTH *FROM:* Apr. 2017 *TO:* Sep. 2017
PI: **Marcos Portabella**, Wenming Lin
- *PROJECT TITLE:* Intercomparison of ASCAT sea surface winds and NWC/GEO-HRW atmospheric motion vectors
FINANCIAL ENTITY: European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT, NWC_AVS17_11); 4.675 €
LENGTH *FROM:* Apr. 2017 *TO:* Sep. 2017
PI: **Marcos Portabella**
- *PROJECT TITLE:* Scientific Assessment of TDS-1 GNSS-R Scatterometric Measurements (TGSCATT)
FINANCIAL ENTITY: European Space Agency (ESA, 4000116699/16/NL/CT); 70.000 €(CSIC subproject)
LENGTH *FROM:* May 2016 *TO:* Jan. 2018
PI: **Marcos Portabella** (CSIC subproject)

- *PROJECT TITLE:* PROMISES. Productos y servicios innovadores para Observación de la Tierra con sensores de microondas, SMOS y Sentinels – Part CSIC
FINANCIAL ENTITY: Plan Nacional Espacio (ESP2015-67549-C3-2-R); 350.900 €
LENGTH
FROM: Jan. 2016 *TO:* Dec. 2017
PI: Antonio Turiel, **Marcos Portabella**
- *PROJECT TITLE:* Optimization of ASCAT data assimilation in global NWP (ASSIM_WINDS)
FINANCIAL ENTITY: European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT, NWP_AS16_P02); 31.733 €
LENGTH
FROM: Jan 2016 *TO:* Sept. 2016
PI: **Marcos Portabella**, Wenming Lin
- *PROJECT TITLE:* Moist convection by two ASCATs and MSG rain (MOIST_WINDS)
FINANCIAL ENTITY: European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT, OSI_AVS_15_02); 45.730 €
LENGTH
FROM: Oct. 2015 *TO:* Jan. 2017
PI: **Marcos Portabella**, Gregory P. King
- *PROJECT TITLE:* Grup d'Oceanografia Física i Tecnològica
FINANCIAL ENTITY: Agència de Gestió d'Ajuts Universitaris i de Recerca, Generalitat de Catalunya (2014SGR1166); 63.000 €
LENGTH
FROM: July 2014 *TO:* Dec. 2016
PI: Josep Lluís Pelegrí
- *PROJECT TITLE:* Improvement of the ASCAT ambiguity removal scheme for mesoscale analysis (AMBREM-ASCAT)
FINANCIAL ENTITY: European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT, NWP-AS14-02); 36.000 €
LENGTH
FROM: June 2014 *TO:* May 2015
PI: **Marcos Portabella**
- *PROJECT TITLE:* Research for the development of a Wave Buoy (WAVEBUOY)
FINANCIAL ENTITY: SAMS Research Services LTD; 19.916 €
LENGTH
FROM: May 2014 *TO:* Dec. 2015
PI: Pedro Elosegui (2014); **Marcos Portabella** (2014-2015)
- *PROJECT TITLE:* Ice, Climate, and Economics . Arctic Research on Change (ICE-ARC)
FINANCIAL ENTITY: EU FP7 (C-ENVIR/3274); 720.954 €(CSIC subproject)
LENGTH
FROM: Jan. 2014 *TO:* Dec. 2017
PI: Pedro Elosegui (2014); **Marcos Portabella** (2014-2017) (CSIC subproject)
- *PROJECT TITLE:* Sponsorship of the 2013 SMOS-MODE COST Action Training School
FINANCIAL ENTITY: European Space Agency (ESA); 5.000 €
LENGTH
FROM: Jun. 2013 *TO:* Oct. 2013
PI: **Marcos Portabella**

- *PROJECT TITLE:* ASCAT quality control (ASCAT-SA)
FINANCIAL ENTITY: European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT, OSI_AVS12_04); 35.645 €
LENGTH *FROM:* Mar. 2013 *TO:* Mar. 2014
PI: **Marcos Portabella**
- *PROJECT TITLE:* MIDAS-7. Advanced products and applications for SMOS and future missions – Part CSIC
FINANCIAL ENTITY: Plan Nacional Espacio (AYA2012-39356-C05-03); 1.388.790 €
LENGTH *FROM:* Jan. 2013 *TO:* Dec. 2015
PI: Antonio Turiel
- *PROJECT TITLE:* EU/FP7 COST Action - SMOS Mission Oceanographic Data Exploitation (SMOS-MODE)
FINANCIAL ENTITY: European Commission (ES1001); 400.000+ €
LENGTH *FROM:* Jan. 2011 *TO:* May 2015
PI: Antonio Turiel (2011-2014); **Marcos Portabella** (2015)
- *PROJECT TITLE:* Analysis of the ASCAT inversion residual for quality control and forward modelling improvement (MLESIGN)
FINANCIAL ENTITY: European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT, CDOP-SG06-VS03); 35.775 €
LENGTH *FROM:* Jan. 2011 *TO:* Dec. 2011
PI: **Marcos Portabella**
- *PROJECT TITLE:* MIDAS-6. SMOS ocean salinity and soil moisture products. Improvements and applications demonstration - Part CSIC
FINANCIAL ENTITY: Plan Nacional Espacio (AYA2010-22062-C05-01); 2.359.500 €
LENGTH *FROM:* Jan. 2011 *TO:* Dec. 2012
PI: Jordi Font
- *PROJECT TITLE:* International ocean Vector Winds Science Team workshop (IOVWST'10)
FINANCIAL ENTITY: Plan Nacional Acciones Complementarias (CTM2009-08641-E); 5.000 €
LENGTH *FROM:* Feb. 2010 *TO:* Sep. 2010
PI: **Marcos Portabella**
- *PROJECT TITLE:* Grup d'Oceanografia Física
FINANCIAL ENTITY: Agència de Gestió d'Ajuts Universitaris i de Recerca, Generalitat de Catalunya (2009SGR378); 52.000 €
LENGTH *FROM:* July 2009 *TO:* Dec. 2013
PI: Jordi Font
- *PROJECT TITLE:* Puesta en marcha de actividades I+D en teledetección por satélite en la Unidad de Tecnología Marina
FINANCIAL ENTITY: Consejo Superior de Investigaciones Científicas (CSIC, 200830I111); 30.000 €
LENGTH *FROM:* Oct. 2008 *TO:* Dec. 2009
PI: **Marcos Portabella**

- *PROJECT TITLE:* SMOSops scientific support study
FINANCIAL ENTITY: European Space Agency (ESA, CCN ECE-C0-B-08-505 to ESTEC
Contract 20946/07/NL/FF); 20.000 €
LENGTH *FROM:* July 2008 *TO:* Oct. 2008
PI: Jordi Font
- *PROJECT TITLE:* MIDAS-5. Validación de productos, explotación de datos y Centro Experto
para la misión SMOS - Parte CSIC
FINANCIAL ENTITY: Plan Nacional Espacio (ESP2007-65667-C04-01); 517.880 €
LENGTH *FROM:* June 2007 *TO:* June 2010
PI: Jordi Font
- *PROJECT TITLE:* Continuous Development and Operations Phase of the Ocean & Sea Ice
SAF (CDOP OSI-SAF)
FINANCIAL ENTITY: European Organisation for the Exploitation of Meteorological
Satellites (EUMETSAT); 5.202.156 €
LENGTH: *FROM:* Mar. 2007 *TO:* Feb. 2012
PI: Ad Stoffelen (KNMI subproject)
- *PROJECT TITLE:* Continuous Development and Operations Phase of the Numerical Weather
Prediction SAF (CDOP NWP-SAF)
FINANCIAL ENTITY: European Organisation for the Exploitation of Meteorological
Satellites (EUMETSAT); 5.004.930 €
LENGTH: *FROM:* Mar. 2007 *TO:* Feb. 2012
PI: Ad Stoffelen (KNMI subproject)
- *PROJECT TITLE:* Towards a high-resolution ASCAT coastal wind product
FINANCIAL ENTITY: European Organisation for the Exploitation of Meteorological
Satellites (EUMETSAT, VS-007); 20.915 €
LENGTH *FROM:* Mar. 2007 *TO:* Dec. 2007
PI: **Marcos Portabella**
- *PROJECT TITLE:* Contribution to the analysis of the ASCAT 3-dimensional measurement
space
FINANCIAL ENTITY: European Organisation for the Exploitation of Meteorological
Satellites (EUMETSAT, IOP-SG08-VS03/CDOP-SG03-VS01); 25.521 €
LENGTH *FROM:* Oct. 2006 *TO:* Mar. 2008
PI: **Marcos Portabella**
- *PROJECT TITLE:* MIDAS-4. Calibración de las medidas obtenidas por el radiómetro MIRAS
de la misión SMOS y generación de mapas de salinidad y humedad del
suelo. Parte CSIC
FINANCIAL ENTITY: Plan Nacional Espacio (ESP2005-06823-C05-1); 4.188.800 €
LENGTH *FROM:* Dec. 2005 *TO:* Dec. 2008
PI: Jordi Font
- *PROJECT TITLE:* Development of a global scatterometer validation and monitoring
FINANCIAL ENTITY: European Organisation for the Exploitation of Meteorological
Satellites (EUMETSAT, IOP-SG07-VS05); 15.251 €
LENGTH *FROM:* Oct. 2005 *TO:* Feb. 2006
PI: Ad Stoffelen

- *PROJECT TITLE:* MIDAS-3. Contribución de España al segmento de tierra de la misión SMOS de la ESA durante 2004-05
FINANCIAL ENTITY: Plan Nacional Espacio (ESP2004-00671); 1.159.800 €
LENGTH *FROM:* Dec. 2004 *TO:* Sep. 2006
PI: Jordi Font
- *PROJECT TITLE:* Derivation of a scatterometer ocean stress product
FINANCIAL ENTITY: Royal Netherlands Meteorological Institute (KNMI) and European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT); 165.000 €
LENGTH *FROM:* Nov. 2004 *TO:* Sep. 2006
PI: Ad Stoffelen
- *PROJECT TITLE:* Study of an objective performance measure for spaceborne wind sensors
FINANCIAL ENTITY: European Space Agency (ESA, 18041/04/NL/AR); 100.000 €
LENGTH *FROM:* Mar. 2004 *TO:* Dec. 2007
PI: Ad Stoffelen
- *PROJECT TITLE:* Initial Operations Phase of the Numerical Weather Prediction SAF (IOP NWP-SAF)
FINANCIAL ENTITY: European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT); 2.537.652 €
LENGTH *FROM:* Mar. 2004 *TO:* Feb. 2007
PI: Ad Stoffelen (KNMI subproject)
- *PROJECT TITLE:* Initial Operations Phase of the Ocean & Sea Ice SAF (IOP OSI-SAF)
FINANCIAL ENTITY: European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT); 3.691.050 €
LENGTH *FROM:* Jul. 2002 *TO:* Feb. 2007
PI: Ad Stoffelen (KNMI subproject)
- *PROJECT TITLE:* A probabilistic approach for SeaWinds data assimilation
FINANCIAL ENTITY: European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT, VS-002); 12.200 €
LENGTH *FROM:* June 2002 *TO:* Oct. 2002
PI: Ad Stoffelen
- *PROJECT TITLE:* Quality control and wind retrieval for SeaWinds
FINANCIAL ENTITY: European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT); 150.000 €
LENGTH *FROM:* Feb. 1999 *TO:* Jan. 2002
PI: Ad Stoffelen

EXTERNAL REPRESENTATIONS

- ESA/MOST-China Dragon-4 programme (project “Microwave satellite measurements for coastal area and extreme weather monitor”), **co-PI** subtopic 3 (SHENLONG), since 2016.
- EU/FP7 COST Action SMOS-MODE, **Chair**, 2015.
- ESA/EUMETSAT SCA Science Advisory Group, **Member**, since 2014.
- EU/FP7 COST Action SMOS-MODE, **Working Group Leader**, 2012-2015.
- EU/FP7 COST Action SMOS-MODE, **Member of the Management Committee**, 2011-2015.
- International Ocean Vector Winds Science Team, **Member**, since 2010.
- SMOS Barcelona Expert Centre, **Member of the Steering Committee**, since 2009.
- ESA/EUMETSAT ASCAT Science Advisory Group, **Member**, 2009-2013.
- ISRO Oceansat-2 Announcement of Opportunity (AO), **Co-Investigator**, 2008-2013.
- ESA SMOS Data Exploitation AO, **Co-Investigator**, 2007-2012.
- ESA SMOS Cal/Val AO, **Co-Investigator**, 2005-2012.
- ESA/EUMETSAT EPS/MetOp Research AO, **Principal Investigator**, 2005-2009.
- NASA Ocean Vector Winds Science Team, **Member**, 2001-2009.
- NASA SeaWinds scatterometer Cal/Val Science Working Team, **Member**, 1999-2000.
- NASA NSCAT scatterometer Cal/Val Science Working Team, **Member**, 1996-1997.

TECHNOLOGY TRANSFER ACTIVITIES

Within the framework of the Initial Operations Phase (IOP) of EUMETSAT's Ocean & Sea Ice (OSI) Satellite Application Facilities (SAF) and Numerical Weather Prediction (NWP) SAF and the Continuous Development and Operations Phase (CDOP) of the OSI and NWP SAFs (see Research Projects Section), as a member of KNMI scatterometer group, I actively participated in the development of scatterometer level 2 products (sea surface wind fields and wind stress fields) and processors (software). Both the products and the processors are freely available through the OSI SAF (<http://www.osi-saf.org/>) and the NWP SAF (<http://www.metoffice.gov.uk/research/interproj/nwpsaf/>) web sites, respectively. Moreover, daily global wind field maps and different instrument monitoring pages are available at <http://www.knmi.nl/scatterometer>. The main goal for these technology transfer activities is to stimulate both R&D activities in the public sector and added-value production in the private sector.

The SAF scatterometer products and processors have about 130 registered users, including international organizations, oceanographic centres, national meteorological centres, universities, private companies, and private users all around the world. The KNMI web page receives an average of about 30,000 visits per month.

My research on new methods for quality control, error modelling, and wind field retrievals from scatterometer data has not only been implemented in the NWP SAF level 2 scatterometer wind data processors but also been adopted in scatterometer data assimilation schemes of several European Numerical Weather Prediction (NWP) models, such as the European Centre for Medium-Range Weather Forecast (ECMWF), the UK Met Office, or the High Resolution Limited Area model (HIRLAM).

Since I started working at CSIC (2008), I've been strongly collaborating with the KNMI scatterometer team through the EUMETSAT SAF's Associated Scientist scheme. These R&D activities, carried out during the IOP, CDOP, and CDOP-2 phases, are currently developed within CDOP-3 (2017-2022).

Finally, since December 2004 and in the framework of the Spanish National Program MIDAS-3, MIDAS-4, MIDAS-5, MIDAS-6, MIDAS-7, and PROMISES projects, I've been involved in the European Space Agency's (ESA's) Soil Moisture and Ocean Salinity (SMOS) mission (in orbit since November 2009). In particular, I've collaborated in the instrument's calibration/validation and the improvement of the sea surface salinity retrieval algorithms. Such activities have been carried out in the Barcelona Expert Centre (BEC), with the aim at contributing to the development of operational level 3 and 4 ocean salinity products. In the framework of the current L-BAND project, such activities are ensured until the end of 2020.