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PERSONAL INFORMATION

Andrea Storto

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www.researchgate.net/profile/Andrea_Storto
https://scholar.google.it/citations?user=VlWDYeUAAAAJ
https://publons.com/researcher/3285231/andrea-storto/
https://loop.frontiersin.org/people/628266/overview

WORK EXPERIENCE

07/2020–Present

Scientist

National Research Council (CNR), Institute of Marine Sciences (ISMAR), Rome, Italy

- Coupled data assimilation
- Develop climate analysis tools for the global and the Atlantic ocean and the Mediterranean region
- WP Leader of ERGO project (C3S) on ensemble data assimilation for reanalyses
- Co-chair of the NEMO working group on Machine learning and Uncertainty quantification

02/2018–02/2021

Scientist

NATO/STO Centre for Maritime Research and Experimentation (CMRE), La Spezia, Italy

- Scientist in the Environmental Knowledge (EKOE) Programme (A2), Coordination of data assimilation activities
- Develop regional oceanographic analysis and forecast systems to support observational campaigns (LOGMEC and NREP campaigns)
- Develop hybrid and multi-scale data assimilation and stochastic physics
- WP Leader of ERGO project (C3S) on ensemble data assimilation for reanalyses
- Co-chair of CLIVAR Global Synthesis and Observations Panel (GSOP)
- Participation in sea-trial planning and operations
- NATO Security Clearance

09/2009–12/2017

Scientist

Centro Euro-Mediterraneo per i Cambiamenti Climatici (CMCC), Bologna (Italy)

- Coordinate the Data Assimilation and Ocean Forecasting Unit at CMCC/ODA (www.cmcc.it/divisions/oda)
- Develop the OceanVar variational data assimilation scheme (www.cmcc.it/models/oceanvar)
- Develop, produce and assess the CMCC Eddy-permitting Global Ocean Reanalysis System (C-GLORS, www.cmcc.it/c-glors); develop data assimilation for the CMCC Historical Ocean Reanalyses (CHOR) and biogeochemical reanalyses
- Implement operational ocean predictions systems in the Mediterranean Sea (CMEMS MED-MFC), Black Sea (CMEMS BS-MFC), Global Ocean (CMCC GOFS16, 1/16 degree resolution), and North-West Pacific Ocean (NMEFC Chinese Operational Oceanography Forecasting System)
- Implement ocean data assimilation in the initialization of different seasonal and decadal Prediction Systems (CMCC SPS for C3S and JAMSTEC SINTEX-F2)
- Investigate hybrid ensemble-variational schemes and simplified strongly coupled data assimilation (ERA-CLIM2, www.era-clim.eu)
- Coordinate the CMEMS Service Evolution project on the Statistical-Dynamical Observation Operator for SST Data Assimilation (SOSSTA, www.mercator-ocean.fr/en/portfolio/sossta-2)

03/2009–08/2009

Post-doctoral Scientist

Istituto Nazionale Geofisica e Vulcanologia (INGV), Bologna (Italy)

- Post-doc on ocean data assimilation

04/2006–02/2009

Researcher

Norwegian Meteorological Institute (Met.no), Remote Sensing Division [funded by the EUMETSAT through the EUMETSAT Research Fellowship Program], Oslo (Norway)

- Research scientist on data assimilation for Numerical Weather Prediction

- Implementation of regional variational data assimilation system (HARMONIE) for the Scandinavian peninsula
- Data assimilation of satellite radiances and cloudiness observations (EUMETSAT "ABC" project)

04/2005–10/2005 **Researcher**

Centre National de Recherches Météorologiques (Météo-France), Groupe de Modélisation pour l'Assimilation et la Prévision (GMAP), Toulouse (France)

- Research activity on rapid update data assimilation for Numerical Weather Prediction
- Verification of short-term precipitation forecasts

VISITING PERIODS

03-05/2012 **Japan Agency for Marine Earth Science and Technology (JAMSTEC), Yokohama, Japan**

- Visiting Scientist for implementing an ocean data assimilation system within the JAMSTEC Seasonal Prediction System

05/2017 **Mercator Océan, Toulouse, France**

- Evaluation of multi-system ensemble global ocean reanalyses

07/2018 **European Center for Medium-Range Weather Forecasts (ECMWF), Reading, U.K.**

- Implementation of stochastic physics schemes in ocean models

09-10/2021 **Nansen Environmental and Remote Sensing Center (NERSC), Bergen, Norway**

- Optimal exploitation of altimetry missions at high latitudes for climate studies

06-08/2023 **National Oceanic and Atmospheric Administration, Physical Sciences Laboratory (NOAA/PSL), Boulder, CO, USA**

- Ocean and Coupled Data Assimilation for Climate applications

EDUCATION AND TRAINING

12/2004–06/2009 **Ph.D. in Hydraulic and Environmental engineering** EQF level 8

Università degli Studi di ROMA "La Sapienza", Roma (Italy)

Thesis: ASSIMILATION OF SPACE-BORNE CLOUDINESS OBSERVATIONS IN METEOROLOGICAL LIMITED AREA MODELS (prof A. Cenedese, Dr. F. Tveter)

09/1999–11/2004 **Bachelor and Master Degree ("Laurea Vecchio Ordinamento") in Environmental engineering (grade 110/110)** EQF level 7

Università degli Studi di ROMA "La Sapienza", Roma (Italy)

Thesis: "On the modelling of microphysics in meteorological models" (prof. A. Cenedese)

Post-graduate education (selected)

"Computational Fluid Dynamics", January 2005, Von Karman Institute for Fluid Mechanics, Rhode-Saint-Genese, Belgium

"Scientific Programming in Unix", March 2005, CINECA, Casalecchio di Reno, Italy

ECMWF Course on "Data assimilation and use of satellite data", April 2007, ECMWF, Reading, UK

"Summer School on Parallel Computing", July 2008, CINECA, Casalecchio di Reno, Italy

"5th Specialistic School on Parallel Computing", October 2009, CINECA, Casalecchio di Reno, Italy

"2nd Advanced School on Data Assimilation", June 2010, CMCC, Bologna, Italy

"Microwave Remote Sensing in the Ocean", September 2013, SMOS Barcelona Expert Centre,

Barcelona, Spain

PERSONAL SKILLS

Mother tongue(s): Italian

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	C1	B2	B2	C1
French	B1	C1	B2	B1	B1
Norwegian (Bokmal)	A1	A2	A1	A1	A1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user
Common European Framework of Reference for Languages

Computer skills

- Programming Languages (Fortran77/90, basics of C) and parallel computing (MPI and OpenMP).
- Long Experience with super-computer systems (IBM/Pwr6 clusters, Intel clusters, Fujitsu, NEC)
- Shell Scripting (Korn, Bash, Perl) and database (Sql, ODB).
- Operative system: Linux, Unix-like Operative Systems (AIX, HP-UX, Linux), DOS, Windows.
- Scientific and Statistical Software (R, GNU Octave, Matlab, python).
- Visualization (NCL/NCAR Graphics, GrADS, MetView, Magics++, Panoply, Diana).
- Data Format (GRIB, NetCDF, BUFR, HDF4/5).
- Meteorological Models (RAMS, WRF, ARPEGE, ALADIN, AROME, MÉSO-NH, HIRLAM).
- Ocean Models (NEMO, ROMS)
- Office software (LaTeX, Office suites) and Web Design (HTML, CSS, PHP).

Teaching, Evaluator, Editor, Organization of conferences Reviewer and community services

- Habilitation: National Scientific Qualification ("Abilitazione Scientifica Nazionale") for 04/A4 Sector (Geophysics), 2022-2035, and 02/C1 Sector (Earth's Physics) as **Full Professor** (1st Cat.), 2023-2033
- Habilitation: National Scientific Qualification ("Abilitazione Scientifica Nazionale") for 04/A4 Sector (Geophysics) and 02/C1 Sector (Earth's Physics) as Associate Professor (2nd Cat.), 2017-2026
- Adjunct Professor for Data Assimilation Course, Doctoral School on Climate Change, University of Venice "Ca' Foscari" and CMCC, Academic years 2014-2015, 2015-2016, 2016-2017 and 2017-2018.
- Horizon 2020 Expert Evaluator (Call H2020-SPACE-2020)
- Expert Evaluator for the Italian Ministry of Economic Development - Space Economy Innovation Call
- Reviewer for PRACE and EuroHPC (Call 21st and 22nd, 2020-2022; EuroHPC call 2023)
- Evaluation Board Member for the Malta Council for Science and Technology (MCST) since 2020
- Participation to several selection boards as president and member, Research fellowships at CNR ISMAR since 2021; Fixed-term Researcher calls (PNRR) since 2023
- Co-supervisor of Ph.D. thesis at University of Venice Ca' Foscari (XXXI Cycle): "A modelling framework for EBUS: from seasonal to decadal time scales ", PhD candidate Giulia Bonino
- Reviewer for PhD Thesis - University of Bologna
- Lecturer and organizer of the EOS-COST School on Data Assimilation and Data Analysis (Lecture: "Modelling of errors in data assimilation"), Lecce, April 2016
- Lecturer at the 3rd Advanced Summer School on Data Assimilation ("Applications of data assimilation: global reanalyses"), Bologna, June 2013
- Lecturer of "Computational Fluid Dynamics", University of Rome La Sapienza, 2004-2005
- Academic Editor of *PLOS ONE* (IF 2.7) since 2019 and *PLOS Climate* since 2020
- Associate Editor of *Frontiers in Environmental Science* - Interdisciplinary Climate Studies (IF 4.6)
- Associate Editor of *Remote Sensing* (IF 4.1) and *Oceans* (MDPI) since 2019
- Review Editor in Ocean observations and Interdisciplinary climate studies for Frontiers journals
- Guest Editor of the Topics "Past Reconstruction of the Physical and Biogeochemical Ocean State" in Frontiers in Earth Science, Frontiers in Environmental Science, Frontiers in Marine Science (https://www.frontiersin.org/research-topics/16497/past-reconstruction-of-the-physical-and-biogeochemical-ocean-state)

- Guest Editor of the Ocean Sciences Special Issue "Data assimilation techniques and applications in coastal and open seas" https://os.copernicus.org/articles/special_issue1211.html
- Guest Editor of the Journal of Marine Science and Engineering Special Issue "State-of-Art in Physical Oceanographic Instrumentation and Operational Oceanography" https://www.mdpi.com/journal/jmse/special_issues/0J4PDVD91P
- Reviewer for Nature Climate Change, Nature Communications, Geophysical Research Letters, Scientififc Reports, Journal of Climate, Climate Dynamics, Ocean Modelling, Monthly Weather Review, and others
- Organization and coordination of the COST/CLIVAR Ocean Reanalysis Workshop, Toulouse 29-30/6/2017
- Committee member of the 50th International Liege Colloquium
- Co-Chair of "Tracking Ocean Heat Content" session at AGU/OS2018
- Chair of Ocean Modelling and Data Assimilation Session at OceanObs19, 16-20/09/2019, Honolulu, Hawaii, USA.
- Co-Convener of the Joint ECMWF/OceanPredict workshop on Advances in Ocean Data Assimilation, 17-20/05/2021, ECMWF, Reading, UK
- Co-convener of the EGU 2022 and 2023 session on Data assimilation techniques in coastal and open seas
- Co-convener of the EGU 2023 session on "The Copernicus Marine Service"
- Organizer of the WCRP OSC2023 cluster session on "Monitoring and Modeling Earth System Change: Integrating Models and Observations"
- Organising Committee of the 2nd GCOS-WCRP Climate Observations Conference 2020-2022
- Organizer of the OceanPredict Data Assimilation workshop, Rome (Italy), 9-11/May/2023
- Convener of the Ocean Modelling and Data assimilation Session, WCRP Open Science Conference "Advancing climate science for a sustainable future", Kigali, Rwanda, 23-27/10/2023

Projects

- Coordinator (P.I.) of SOSSTA ("Statistical-Dynamical Observation Operator for SST Data Assimilation", 2016-2018) - CMEMS Service Evolution (21-SE-Call) www.mercator-ocean.fr/en/portfolio/sossta-2
- Coordinator (P.I.) of DYNAMOL ("Observation-aware DYNAMical downscaling of sub-seasonal to seasonal predictions Onto the Mediterranean region and Lazio area), granted by Lazio region under the E.U. Regional Operational Programmes (2021-2023)
- Coordinator (P.I.) of CMEMS Global Ocean Reanalysis Assessment (21003-COP-GLORAN-Lot8, 2022-2024)
- co-P.I. of Copernicus Marine Service WAMBOR ("Evaluation of the WAter Mass Balance in Ocean Reanalyses with space geodetic measurements") project (2022-2024)
- Member of the Steering Committee (2022-2024) of PNRR National Center on HPC - Spoke 4 (Earth and Climate), Work Package 2 leader ("Exploit Earth observations for next generation ESMs"), and responsible of the Spoke for CNR ISMAR
- Scientific coordinator of CMEMS Global Ocean Reanalysis Production (CMEMS 23-GLO-RAN, 2015-2018)
- Work Package 1 Leader for "ERGO2 project" (Ensemble Reanalysis for the Global Ocean) C3S2_620 (2022-2025)
- Participation and responsible for CNR ISMAR of Horizon Europe ACCIBERG project (Arctic Cross-Copernicus forecast products for sea Ice and iceBERGs) (2023-2025)
- Participation and responsible for CNR ISMAR of ESA CCI+ Sea Level Budget (2023-2025)
- Work package 2 Leader and Management committee member of COST Action ES1402 EOS: "Evaluation of ocean syntheses" 2014-2018 (www.eos-cost.eu)
- Work Package 5 leader for "ERGO project" (Ensemble Reanalysis for the Global Ocean), ECMWF service contract C3S_321b (2019-2021)
- Participation in ERA-CLIM2 (FP7, 2014-2018) project and CMCC Scientific responsible
- Participation in AtlantOS (H2020, 2015-2018) project.
- Participation in MED-MFC CMEMS Project (Med. Sea) (as Data assimilation expert) funded by CMEMS
- Participation in BS-MFC CMEMS Project (Black Sea) (as Reanalysis Expert) funded by CMEMS
- Participation in C3S_SEASONAL project (Implementation of Ocean Data Assimilation in the CMCC C3S Seasonal Prediction System) funded by C3S

- Contribution to the ORA-IP project (Ocean Reanalyses Intercomparison Project, WCRP, 2013-2018) and coordinator of the steric sea level intercomparison
- P.I. for ECMWF Special project "Optimization of the OceanVar oceanographic data assimilation system for high-resolution applications" (2015-2017, www.ecmwf.int/en/research/special-projects/spitstor-2015);
- P.I. for ECMWF Special Project "Enhancing regional ocean data assimilation in high and mid latitude European seas" (ERODS, 2019-2021 https://www.ecmwf.int/en/research/special-projects/spitstor-2019) granted for a total of 3 000 000 CPU hours
- P.I. for PRACE Preparatory Access Call 2021 "Efficient data assimilation-forecast model coupling towards the accurate reconstruction of the XX century ocean climate", granted with 100 000 CPU hours on the Barcellona Supercomputing Center
- P.I. for ARGOF Special project ("Assessing the impact of the horizontal Resolution of data assimilation on Global Ocean eddy-resolving Forecasts") at CINECA
- Participation in Ens4Ocean (2012-2013) and ROMEO (2018) projects granted by PRACE (http://www.prace-ri.eu/)

Memberships and international commettes

- Co-chair of CLIVAR Panel on Global Synthesis and Observations Panel (CLIVAR/GSOP) 2018-2021 and Member since 2015 (www.clivar.org/panels-and-working-groups/gsop/gsop.php)
- Co-chair of the NEMO Working Group on Machine Learning and Uncertainty Quantification, 2022-2025 (https://forge.nemo-ocean.eu/wgs/ml-mu/home)
- Member of the Copernicus Marine Service Scientific and Technical Advisory Committee (STAC) (2023-) (https://marine.copernicus.eu/about/stac)
- Member of the WCRP Explaining and Predicting Earth System Change (EPESC) "Observing and Modelling of Earth System Change" Working Group (WG1) (https://www.wcrp-climate.org/epesc-wg/epesc-wg1)
- Facilitator of the Climate Task Team for the UN-Decade Regional Programme SciNMeet "The Mediterranean Sea We Need for the Future We Want", 2022
- Member of the WMO TIRA Team (Task Team for Intercomparison of ReAnalyses) (https://reanalyses.org/atmosphere/wcrp-task-team-intercomparison-reanalyses-tira) (2017-2021)
- Member of OceanPredict Data Assimilation Task Team (https://oceanpredict.org/science/task-team-activities/data-assimilation/#section-introduction) since 2015
- Member of the NEMO Eddy Closure Working Group (ECWG, 2022-)
- CMEMS Expert on "Ensemble Forecasting" for the SST TAC
- Member of the Mercator Ocean International Expert team on Ocean Forecasting (2020-)
- Member of the Mercator Ocean International Expert team on Data Assimilation (2021-)
- Member of the WCRP Regional Focal Point (RFP) for Region 5, Europe, on representation of CLIVAR (2020-)
- Member of the NEMO System Team (www.nemo-ocean.eu/About-Us) 2012-2016 and Representative for CMCC (2016)
- Member of the NEMO-ASSIM Working Group 2012-2016
- Member of the GEWEX group for the assessment of the Earth Energy Imbalance (2021-)
- Invited Expert at the WCRP Data Advisory Council (WDAC), 8th session, 2019

Grants and prizes

- Bourse de Recherche (Research Fellowship) "Egide" (2005)
- EUMETSAT Research Fellowship (2006-2009)
- Winner of ENEA public Call for Researchers (Rif 05/2010)
- JAMSTEC Visiting Fellowship (2012)
- EU COST Visiting Fellowships (2017, 2018)
- NERSC/Norway Visiting Fellowship (2020-2021)
- NOAA Visiting Fellosphip (2023)
- IMarEST Denny Medal for the paper "The Ocean Reanalyses Intercomparison Project (ORA-IP)", 2015 (doi:10.1080/1755876X.2015.1022329)
- GRL Editor's Highlight for the article: "Constraining the global ocean heat content through assimilation of CERES derived TOA Energy Imbalance Estimates, *Geophys. Res. Letters*, 44, doi:10.1002/2017GL075396 (2017)"

- Editor's Featured and Invited Article on Steric sea level changes from reanalyses (doi:10.3390/w11101987).

Invited talks and participation to conferences (selected)

- Storto A., Assimilation of cloudiness observations. 2008 Eumetsat Meteorological Satellite Conference, 8 – 12 September 2008, Darmstadt, Germany.
- Storto A., Dobricic S., Masina S., Di Pietro P., Global oceanographic variational data assimilation of in-situ observations and space-borne altimeter data for reanalysis applications. 5th WMO Symposium on Data Assimilation, 5 – 9 October 2009, Melbourne, Australia.
- Storto A., Dobricic S., Masina S., Di Pietro P., Assimilating space-borne observations in a global ocean variational assimilation system. 4th Oceans from Space Symposium, 26 – 29 April 2010, Venice, Italy.
- Storto, A.. The CMCC Eddy-Permitting Global Ocean Reanalysis. 4th WCRP International Conference on Reanalyses (ICR4), 7-11 May 2012, Silver Spring, MA, USA.
- Ferry N, Parent L, Garric G, Barnier B, Molines JM, Guinehut S, Mulet S, Haines K, Valdivieso M, Masina S, Storto A. (2012). MYOCEAN EDDY-PERMITTING GLOBAL OCEAN REANALYSIS PRODUCTS: DESCRIPTION AND RESULTS. In: Proceedings of the Symposium on "20 Years of Progress in Radar Altimetry". Venice, Italy, 24-29 Sept 2012
- Storto A. (2013). Comparison of Steric Sea Level from an Ensemble of Ocean Reanalyses and Objective Analyses. In: WGOMD/SOP Workshop on Sea Level Rise, Ocean/Ice Shelf Interactions and Ice Sheets. Hobart, Australia, 18-20 February 2013. Present in CLIVAR EXCHANGES, vol. 18; p. 25-27, ISSN: 1026-0471.
- Storto A. (2014), Toward a hybrid ensemble variational assimilation system for the global ocean. MyOcean Science Days 2014, Tolouse, France, 22-24/9/2014
- Storto A. (2014), A comparison of steric sea level from ocean reanalyses and objective analyses, Climate Symposium 2014. Darmstadt, Germany, 13-17/10/2014
- Storto A. (2015), An overview of data assimilation activities at CMCC, GODAE DA-TT Meeting. Exeter, UK, 20-22/5/2015.
- Storto A. (2015), Accuracy and uncertainties of global ocean reanalyses in reproducing ocean heat content, CONCEPT-HEAT Workshop 2015, Exeter, UK, 28/9-1/10/2015
- Storto A. (2016), OceanVar: an improved variational data assimilation system with variational quality control of observations, Joint GODAE DA-TT & MEAP-TT Workshop, Santa Cruz, CA, 11-13/7/2016
- Storto A. (2017), The CMCC Global Ocean Reanalysis System (C-GLORS): a multi-purpose family of eddy permitting ocean reanalyses, International conference on Reanalyses (ICR5), Rome, 13-17/11/2017
- Storto A. (2017), Coupled data assimilation methods (Invited talk), ERA-CLIM2 Symposium on Climate Reanalyses, Bern, 14/12/2017
- Storto A. (2018), Strongly coupled data assimilation experiments (Invited talk), CEN/CliSAP Climate Data Assimilation Workshop, University of Hamburg (Germany)
- Storto A. (2019), Ocean regional prediction systems at CMRE: status and perspectives. Talk at the National Conference on Forecasts, 17-18 June 2019, Bologna, Italy.
- Storto A. (2019) Ocean observation datasets: perspective from the reanalysis community. Invited talk at IQuOD Workshop, Ifremer, Brest (France), 29-31/10/2019
- Storto A. (2020), The Arctic sea-ice decline. Invited talk at Ocean Space Venice, 14/10/2020
- Storto A. (2021), The Global Deep Ocean warming Invited talk at Euro-Argo 2021 Workshop, 27/9-1/10/2021
- Storto A. (2022), Multiplatform Analysis of the Global Energy Budget, Invited Talk at AGU Fall Meeting 2022, Session The Flows of Energy Through the Climate System I, 13/12/2022, Chicago, USA

Peer-reviewed publications in ISI journals (with 2018 JCR IF)

Google Scholar: Citations: 4810 H-index: 29 i10-index: 61

1. **Storto A**, F Tveter (2009), Assimilating humidity pseudo-observations derived from the cloud profiling radar aboard CloudSat in ALADIN 3D-Var, *Meteorological Applications* 16, 461–479, doi:10.1002/met.144 **(IF: 1.7)**
2. **Storto A**, R Randriamampianina (2010), The relative impact of meteorological observations in the Norwegian Regional Model as determined using an energy norm-based approach, *Atmospheric Science Letters* 11, 51–58, doi:10.1002/asl.257 **(IF: 1.8)**
3. **Storto A**, R Randriamampianina (2010), Ensemble variational assimilation for the representation of background-error covariances in a high-latitude regional model, *Journal of Geophysical Research - Atmospheres*, 115, D17204, doi:10.1029/2009JD013111. **(IF: 3.6)**
4. **Storto A**, S Dobricic, S Masina, P Di Pietro (2011), Assimilating Along-Track Altimetric Observations Through Local Hydrostatic Adjustment in a Global Ocean Variational Assimilation System, *Monthly Weather Review*, 139, 738-754, doi:10.1175/2010MWR3350.1 **(IF: 3.1)**
5. **Storto A**, R Randriamampianina (2010), A New Bias Correction Scheme for Assimilating GPS Zenith Tropospheric Delay Estimates, *Időjárás – Quarterly Journal of the Hungarain*

Meteorological Service, 110, 237-250. **(IF: 0.6)**

6. Randriamampianina R, T Iversen, **A Storto** (2011), Exploring the assimilation of IASI radiances in forecasting polar lows, *Quarterly Journal of the Royal Meteorological Society*, 137, 1963-1974, doi:10.1002/qj.838 **(IF: 3.2)**
7. Masina S, P Di Pietro, **A Storto**, A Navarra (2011), Global ocean re-analyses for climate applications, *Dynamics of Atmospheres and Oceans*, 52, 341-366, doi:10.1016/j.dynatmoce.2011.03.006 **(IF: 1.4)**
8. Bellucci A, S Gualdi, S Masina, **A Storto**, E Scoccimarro, C Cagnazzo, P Fogli, E Manzini, A Navarra (2013), Decadal Climate Predictions with a coupled OAGCM initialized with oceanic reanalyses, *Climate Dynamics*, 40, 1483-1497, doi 10.1007/s00382-012-1468-z **(IF: 4.0)**
9. **Storto A**, S Masina, S Dobricic (2012), Ensemble spread-based assessment of observation impact: Application to a Global Ocean analysis system, *Quarterly Journal of the Royal Meteorological Society,* 139, 1842-1862, doi:10.1002/qj.2071. **(IF: 3.2)**
10. **Storto A**, S Masina, S Dobricic (2014), Estimation and Impact of Non-Uniform Horizontal Correlation Length-Scales, 2014, *Journal of Atmospheric ad Ocean Technology*, 31, 2330-2349, doi:10.1175/JTECH-D-14-00042.1 **(IF: 2.2)**
11. McKiver J, M Vichi, T Lovato, **A Storto**, S Masina (2014), Impact of increased grid resolution on global marine biogeochemistry. *J. Marine Systems*, 147, 153-168, doi:10.1016/j.jmarsys.2014.10.003 **(IF: 2.5)**
12. Farina R, S Dobricic, **A Storto,** S Masina, S Cuomo (2015), A Revised Scheme to Compute Horizontal Covariances in an Oceanographic 3D-VAR Assimilation System. *J. Comput. Phys.*, 284, 631-647, doi:10.1016/j.jcp.2015.01.003 **(IF: 2.8)**
13. Balmaseda M, F Hernandez, **A Storto**, M Palmer, O Alves, et al. (2016), The Ocean Reanalyses Intercomparison Project (ORA-IP). *J. Operational Oceanography,* 8, s80-s97, doi:10.1080/1755876X.2015.1022329. **(IF: 1.7)**
14. **Storto A**, S. Masina, M. Balmaseda, S. Guinehut, Y. Xue, T. Szekely, I. Fukumori, G.Forget, Y.-S. Chang, S. A. Good, A. Köhl, G. Vernieres, N. Ferry, K. A. Peterson, D. Behringer, M. Ishii, S. Masuda, Y. Fujii, T. Toyoda, Y. Yin, M. Valdivieso, B. Barnier, T. Boyer, T. Lee, J. Gourrion, O. Wang, P. Heimbach, A. Rosati, R. Kovach, F. Hernandez, M. J. Martin, M. Kamachi, T. Kuragano, K. Mogensen, O. Alves, K. Haines, X. Wang (2017), Steric sea level variability (1993–2010) in an ensemble of ocean reanalyses and objective analyses, *Climate Dynamics*, 49: 709-729, doi:10.1007/s00382-015-2554-9. **(IF: 4.0)**
15. Masina S, **Storto A,** Ferry N, Valdivieso M, Haines K, Balmaseda M, Zuo H, Drevillon M, Parent L. 2015. An ensemble of eddy-permitting global ocean reanalyses from the MyOcean project. *Climate Dynamics*, 49, 813-841, doi:10.1007/s00382-015-2728-5 **(IF: 4.0)**
16. Toyoda t., Y. Fujii, T. Kuragano, M. Kamachi, Y. Ishikawa, S. Masuda, K. Sato, T. Awaji, F. Hernandez, N. Ferry, S. Guinehut, M.J. Martin, K.A. Peterson, S.A. Good, M. Valdivieso, K. Haines, **A. Storto**, S. Masina, A. Köhl, H. Zuo, M. Alonso Balmaseda, Y. Yin, L. Shi, O. Alves, Gregory Smith, Y.-S. Change, G. Verniers, X.L. Wang, G. Forget, P. Heimbach, O. Wang, I. Fukumori, T. Lee (2017), Intercomparison and validation of the mixed layer depth fields of global ocean syntheses. *Climate Dynamics*, 49, 753-773, doi:10.1007/s00382-015-2637-7 **(IF: 3.8)**
17. **Storto A**, S Masina, A Navarra (2015), Evaluation of the CMCC eddy-permitting global ocean physical reanalysis system (C-GLORS, 1982-2012) and its assimilation components, *Q. J. R. Meteorol. Soc.*, 142, 738-758, doi:10.1002/qj.2673 **(IF: 3.2)**
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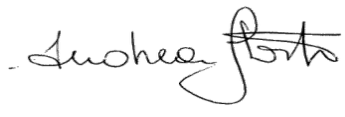

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