**Program of the 2022** [**Ocean Salinity Conference**](https://cpaess.ucar.edu/meetings/ocean-salinity-conference-2022)

(6-9 June 2022, Columbia University, New York, New York, USA)

\* indicates invited talks

(v) indicates virtual (Zoom) talk

**Day 1, 6 June 2022**

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| 08:00-08:50 | Registration check-in | |
| 08:50-09:00 | Welcome and logistics | |
| 09:00-10:40 | Oral presentations | |
| 09:00-09:20 | Nadya Vinogradova-Shiffer NASA Headquarters | \*Overview of NASA Ocean Salinity Science Team activities |
| 09:20-09:40 | Roberto Sabia  European Space Agency - ESRIN, Frascati, Italy | \*Overview of ESA salinity science/technology |
| 09:40-10:00 | Susan Wijffels  Woods Hole Oceanographic Institution | \*Tracking global ocean salinity through in situ observations: achievements and challenges |
| 10:00-10:20 | Arnold Gordon  Lamont-Doherty Earth Observatory of Columbia University | \*Changing surface layer salinity, and where it matters most |
| 10:20-10:40 | Janet Sprintall  Scripps Institution of Oceanography, University of California, San Diego | \*Salinity Stratified Barrier Layers in the Upper Ocean |
| 10:40-11:00 | Break | |
| 11:00-12:30 | Oral presentations | |
| 11:00-11:20 | Jérôme Vialard  Institut de Recherche pour le Développement (IRD) | (v)\*The Bay of Bengal as a natural laboratory to study salinity variability and its impacts |
| 11:20-11:40 | Severine Fournier  Jet Propulsion Lab | \*Ocean salinity, a key parameter to study land-sea linkages and river plumes |
| 11:40-11:55 | Manon Gévaudan  LEGOS, Toulouse, France | (v) Influence of the Amazon-Orinoco discharge interannual variability on the western tropical Atlantic |
| 11:55-12:10 | Gael Alory  LEGOS, France | Coastal Upwelling Limitation by Onshore Geostrophic Flow in the Gulf of Guinea around the Niger River Plume |
| 12:10-12:25 | Shota Katsura, Scripps Institution of Oceanography, University of California, San Diego | Barrier Layers and Temperature Inversions in the Eastern Pacific Fresh Pool and Their Impact on the Heat and Freshwater Balance |
| 12:25-12:30 | Discussion | |
| 12:30-14:00 | Lunch | |
| 14:00-15:00 | Oral presentations | |
| 14:00-14:15 | Elizabeth Thompson  NOAA Physical Sciences Lab | Bridging satellite and in-situ scales of rain-induced near-surface salinity stratification |
| 15:15-14:30 | Lisa Gassen  Institute for Chemistry and Biology of the Marine Environment (ICBM), Carl von Ossietzky University of Oldenburg, Wilhelmshaven, Germany | The effect of rain on the sea surface |
| 14:30-14:45 | Suneil Iyer  University of Washington Applied Physics Laboratory and School of Oceanography | The influence of preexisting stratification and tropical rain modes on the mixed layer salinity response to rainfall |
| 14:45-15:00 | Estrella Olmedo  Insittute of Marine Sciences (CSIC-BEC) | (v?) Evidence of large areas of stratified waters in the SMOS Sea Surface Salinity maps |
| 15:00-16:30 | Poster session 1 | |
| 16:30-17:30 | Oral presentations | |
| 16:30-16:45 | Frederick Bingham University of North Carolina Wilmington, Center for Marine Science | Seasonal and Interannual Variability of the South Indian Ocean Sea Surface Salinity Maximum |
| 16:45-17:00 | Ebenezer Nyadjro, Mississippi State University | (v) Impacts of the 2019 strong IOD and monsoon events on Indian Ocean sea surface salinity |
| 17:00-17:20 (AEST 7am) | Jan Zika  University of New South Wales, Sydney | (v)\*The geographical pattern of water cycle change evident from changes in ocean water masses |
| 17:20-17:30 | Discussion | |
| 17:30-17:30 | Social and networking event | |

**Day 2, 7 June 2022**

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| 09:00-10:40 | Oral presentations | |
| 09:00-09:20 | Lisan Yu  Woods Hole Oceanographic Institution | \*Increase of the Atlantic-Pacific Salinity Contrast as the Ocean Water Cycle Intensifies |
| 09:20-09:35 | Carol Anne Clayson  Woods Hole Oceanographic Institution | Trends and Variability in Tropical Ocean Evaporation, Freshwater Flux, and Salinity |
| 09:35-09:55 | Ray Schmitt  Woods Hole Oceanographic Institution and Salient Predictions, Inc. | (v?) \*Predicting Terrestrial Precipitation with Ocean Salinity |
| 09:55-10:10 | Laifang Li  Pennsylvania State University | Skillful long-lead prediction of summertime heavy rainfall in the US Midwest from sea surface salinity |
| 10:10-10:25 | Nicolas Reul  IFREMER | (v?) Surface Salinity interactions with Storms |
| 10:25-10:40 | Lauren Hoffman  Scripps Institution of Oceanography | Ocean Surface Salinity Response to Atmospheric River Precipitation in the California Current System |
| 10:40-11:00 | Break | |
| 11:00-12:30 | Oral presentations | |
| 11:00-11:20 | Léon Chafik  National Oceanography Centre | (v) \*Ocean circulation causes the largest freshening event for 120 years in eastern subpolar North Atlantic |
| 11:20-11:35 | Gilles Reverdin  LOCEAN | (v) Sea water isotopes, salinity and the freshwater cycle, lessons from a LOCEAN database |
| 11:35-11:50 | Aqeel Piracha  ICM-CSIC | (v) A material approach to the traditional water mass transformation framework |
| 11:50-12:05 | Léa Olivier  LOCEAN-IPSL, Sorbonne Université-CNRS-IRD-MNHN, Paris, France | Impact of North Brazil Current rings on surface salinity and air-sea CO2 fluxes variability in winter 2020 in the north-western tropical Atlantic |
| 12:05-12:20 | Cristina González-Haro Institute of Marine Sciences, CSIC and Barcelona Expert Center | SMOS derived Carbon Dissolved Organic Matter product from in the Black Sea |
| 12:20-12:30 | Discussion | |
| 12:30-14:00 | Lunch | |
| 14:00-15:35 | Oral presentations | |
| 14:00-14:20 | Eric Hackert  NASA/GMAO | (v?) \*Effect of rain-adjusted Aquarius and SMAP satellite sea surface salinity on ENSO Predictions from the GMAO S2S Forecast System |
| 14:20-14:35 | Maya Chung  Atmospheric and Oceanic Sciences Program, Princeton University, Princeton, NJ | The role of sea surface salinity in extreme El Niño events |
| 14:35-14:50 | Maofeng Liu  Rosenstiel School of Marine and Atmospheric Science, University of Miami | (v) The spread of ocean heat uptake efficiency in CMIP6 models traced to ocean salinity |
| 14:50-15:05 | Allison Hogikyan  Princeton University Atmospheric and Oceanic Sciences Program | Coupling of global water and carbon cycles |
| 15:05-15:20 | Subrahmanyam Bulusu  School of the Earth, Ocean and Environment, University of South Carolina | Identifying Tidally-generated Internal Waves in Salinity in the Bay of Bengal |
| 15:20-15:35 | Sujata Murty  State University of New York at Albany | Drivers of multi-decadal upper-ocean thermal and haline structure in the Indonesian Seas – a synthesis of coral δ18O and ocean model simulations |
| 15:35-16:00 | Discussion | |
| 16:00-17:30 | Poster session 2 | |

**Day 3, 8 June 2022**

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| 09:00-10:40 | Oral presentations | |
| 09:00-09:15 | David Le Vine  Goddard Space Flight Center | (v?) Models for the Dielectric Constant of Sea Water for Remote Sensing of Salinity: A Perspective |
| 09:15-09:30 | Thomas Meissner  Remote Sensing Systems | The NASA/RSS SMAP Salinity Version 5 Release |
| 09:30-09:50 | Jacqueline Boutin  LOCEAN-IPSL/CNRS | \*Satellite-based Time-Series of Sea Surface Salinity designed for Ocean and Climate Studies: SMOS and CCI SSS |
| 09:50-10:05 | Julian Schanze  Earth and Space Research, Seattle, WA, USA | Matching up Satellite and In-Situ Measurements of Surface Salinity: Challenges and Solutions |
| 10:05-10:25 | Sebastien Guimbard OceanScope | \*Multi-mission satellite salinity evaluation and exploitation platform |
| 10:25-10:40 | Nina Hoareau  Institute of Marine Science (ICM-CSIC) Barcelona, Spain | (v) Sea surface salinity variability and error maps of satellite observations in the Inter Tropical Convergence Zone |
| 10:40-11:00 | Break | |
| 11:00-12:30 | Oral presentations | |
| 11:00-11:20 | Kyla Drushka  Applied Physics Laboratory, University of Washington | \*Arctic salinity processes and NASA’s upcoming SASSIE experiment |
| 11:20-11:35 | Camille Lique  LOPS - Ifremer | (v) Water Mass Properties Derived From Satellite Observations in the Barents Sea |
| 11:35-11:50 | Carolina Gabarro  Institute of Marine Science & BEC CSIC | (v) Satellite salinity to monitor the freshwater fluxes in the Arctic Ocean |
| 11:50-12:05 | Marta Umbert  ICM-CSIC | (v) Using remotely observed SSS and colored detrital matter to characterize freshened surface layers in the Kara and Laptev seas during the ice-free season |
| 12:05-12:20 | Alexandre Supply University of Brest, LOPS Laboratory, IUEM, UBO–CNRS–IRD–Ifremer, Plouzané, France /// CNES, Paris, France | Surface salinity drawdown observed with satellite L-Band radiometers when sea ice melts |
| 12:20-12:30 | Discussion | |
| 12:30-14:00 | Lunch | |
| 14:00-15:30 | Oral presentations | |
| 14:00-14:15 | Ichiro Fukumori  Jet Propulsion Laboratory, California Institute of Technology | Causal Mechanism of Freshwater Content Change in the Beaufort Sea |
| 14:15-14:30 | Scott Durski  Oregon State University, College of Earth, Ocean and Atmospheric Sciences | Salinity Variability influenced by shelf-interior ocean interactions in the Northeast Pacific and Bering Sea |
| 14:30-14:45 | Jorge Vazquez,  Jet Propulsion Laboratory/California Institute of Technology | Using Saildrones to Validate Arctic Sea-Surface Salinity from the SMAP Satellite: A use case applied to the Y-K Delta |
| 14:45-15:00 | Sarah Hall  School of the Earth, Ocean and Environment, University of South Carolina, Columbia, SC 29208, USA. | Comparison of Surface and Subsurface Salinity within the Arctic and Beaufort Gyre using in situ, satellite and model simulations |
| 15:00-15:15 | Oleg Melnichenko International Pacific Research Center, School of Ocean and Earth Science and Technology, University of Hawaii, Honolulu, Hawaii | Aquarius/SMAP OISSS: Global Patterns of SSS Variability from Ten Years of Satellite Data |
| 15:15-15:30 | Daling Li Yi  International Pacific Research Center, University of Hawai’i | (v) Time and length scales of sea surface salinity variability from satellite observations and high-resolution thermosalinograph data |
| 15:30-16:00 | Discussion | |
| 16:00-17:30 | Poster session 3 | |

**Day 4, 9 June 2022**

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| 09:00-10:40 | Oral presentations | |
| 09:00-09:20 | Eric Bayler NOAA/NESDIS/Center for Satellite Applications & Research (STAR) | \*Exploitation of Satellite Sea-surface Salinity Observations at NOAA |
| 09:20-09:35 | Pingping Xie NOAA/NWS/NCEP Climate Prediction Center | Operational Monitoring of the Global Sea-Surface Salinity and Fresh Water Flux with In Situ and Satellite Observations |
| 09:35-09:50 | Elisabeth Remy  Mercator Ocean | Ocean surface salinity estimation in Mercator Ocean global analysis: accuracy and plan for future improvements |
| 09:50-10:05 | Lee-Lueng Fu  Jet Propulsion Laboratory, California Institute of Technology | Potential applications of the SWOT mission to salinity science and applications |
| 10:05-10:20 | Nemesio Rodriguez-Fernandez  CESBIO | Enhanced spatial resolution of satellite salinity measurements: the SMOS High-resolution mission |
| 10:20-10:40 | Shannon Brown  Jet Propulsion Laboratory | \*SMOS, Aquarius, SMAP... What's Next? |
| 10:40-11:00 | Break | |
| 11:00-12:30 | Discussion and closing | |

**Posters**

(Total 59, approximate even split for in-person and virtual presentation; a web tool will be provided for virtual presentation - instruction forthcoming)

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| Santha Akella  NASA GSFC | Modeling near-surface SST and SSS variability for Data Assimilation and improved Seasonal Predictions |
| Gael Alory LEGOS, France | The French Sea Surface Salinity Observation Service : 50 Years of Global Observations from Ships of Opportunity |
| Giuseppe Aulicino  Università degli Studi di Napoli Parthenope, Italy | Sea Surface Salinity and Temperature in the Pacific sector of the Southern Ocean during the last two decades |
| Dhruba Banerjee, Swami VIvekananda  Institute of Science and Technology, Kolkata, India | The scenario of Sea surface salinity, Cyclone and the mangrove barrier of Sundarban and the costal part of Bay of Bengal in North India Ocean in last decades |
| Eric Bayler NOAA/NESDIS/Center for Satellite Applications & Research (STAR) | Satellite Sea-surface Density |
| Jacqueline Boutin  LOCEAN-IPSL/CNRS | SMOS salinity retrieved from new seawater dielectric constant models at L-band |
| James Boyle  Western Connecticut State University | Comparison of in-situ measured near-surface salinity and temperature with satellite-derived data products during three North Atlantic Ocean partial transits on vessels of opportunity |
| Jessica Caughtry  ESA | Temporal evolution and scaling properties of Water Mass formation from space |
| Nan-Hsun Chi  Independent Researcher | Joint Analysis of Spatio-Temporal Variability of Salinity and Precipitation in the Eastern Pacific Fresh Pool |
| Oksana Chkrebtii  The Ohio State University | Detecting rainfall from sea surface salinity in the eastern tropical Pacific |
| Rinku Das  Assistant Teacher, Baruipur Girls High School, South 24 Parganas, West Bengal , India | The effect of tidal influence on the surface water salinity profile which is a potential indicator of climate change in Sagar Island : An important part of Indian Sundarban area |
| Annette deCharon,  ODYSEA LLC | What's New on the "NASA Salinity" Website |
| Alina Dossa  UFPE, Brazil & LEGOS, France | Global Analysis of Coastal Gradients of Sea Surface Salinity |
| Severine Fournier  Jet Propulsion Lab | Quantification of Aquarius, SMAP, SMOS and Argo-based gridded sea surface salinity products sampling errors |
| Aina García  Institut de Ciències del Mar, CSIC, Barcelona, Spain | [On the optimal data processing of the Soil Moisture and Ocean Salinity measurements](https://meet.google.com/foa-rzbm-gbf) |
| Verónica González-Gambau Barcelona Expert Center & Institute of Marine Sciences, CSIC | [Oceanographic added-value of the first regional SMOS Sea Surface Salinity products over the Baltic Sea](https://meet.google.com/zxv-ntrt-mgs) |
| Cristina González-Haro  Institute of Marine Sciences, CSIC. and Barcelona Expert Center | Exploring synergies between remote sensing products developed under the framework of ESA Baltic+ initiative: Sea Surface Salinity and Sea Level |
| Virendra Goswami  Indian Institute of Technology (IIT) & Environment and Peace Foundation | Physicochemical and spectroscopic methods for Remediation of Water Pollution by Catalytic Oxidants & Development of Climate and Ocean Forecasts Models (COFM). |
| Semyon Grodsky  University of Maryland | [Eastward surface salinity features in the Atlantic](https://umd.zoom.us/j/96828024669) |
| Odilon Joël Houndegnonto University of Brest, IRD, CNRS, Ifremer, Laboratoire d'Océanographie Physique et Spatiale (LOPS, UMR 6523), Brest, France | On the formation of thermohaline stratification off Congo River plume |
| Maria Jacob  Central Florida Remote Sensing Lab - University of Central Florida | First Results of the Parametrized Rain Impact Model (PRIM) |
| Yibo Jiang  Jet Propulsion Lab | PODAAC Cloud Support for the NASA Satellite and In-situ Oceanographic Data |
| Hsun-Ying Kao  Earth & Space Research | Validation for SMAP RSS V5.0 Salinity and Salinity Fronts |
| Yoonji Kim  Department of Statistics, The Ohio State University | Comparison of Sea Surface Salinity and Freshwater Forcing accounting for Phase Variability |
| Nicolas Kolodziejczyk  University of Brest, LOPS Laboratory | Variability of the Polar Front in the Barents Sea from L-Band radiometers measurements |
| Alexander Kurapov  NOAA Coast Survey Development Laboratory (NOAA/NOS/OCS/CSDL) | Sea surface salinity (SSS) variability in the offshore waters along the US and Canadian West Coasts |
| Tong Lee  Jet Propulsion Laboratory, California Institute of Technology | Global pattern of regional decadal trends from SMOS and in-situ SSS during the 2010s |
| Julia Levin  Rutgers University | Modeling study of surface salinity anomalies in the Gulf of Maine using backward dye release experiments. |
| Xinfeng Liang  University of Delaware | Interannual Variability of the Mediterranean Overflow Water from 2005 to 2016 |
| Chao Liu  University of Delaware | [Variability and Changes in Ocean Salinity from Multiple Objective Analysis Products During the Argo Period](https://udel.zoom.us/j/8719096138)  AND  [Interannual Variability of the Mediterranean Overflow Water from 2005 to 2016](https://udel.zoom.us/j/8719096138) |
| Maofeng Liu  Rosenstiel School of Marine and Atmospheric Science, University of Miami | The linkages between the hydrological cycle, ocean salinity and transient climate change |
| Christophe Maes  IRD-LOPS | [River freshwater fluxes and mesoscale dynamics in the South East Asia region](https://us06web.zoom.us/j/3719931347) |
| Andrew Manaster  Remote Sensing Systems | SMAP Salinity Retrievals Near the Sea-Ice Edge Using Multi-Spectral Information from AMSR2 |
| Andrew Manaster  Remote Sensing Systems | RSS Salinity Continuity Processing System |
| Marie Montero  LOPS (IFREMER/CNRS/IRD/UBO), Brest, France | Towards long-term (2002-present) reconstruction of northern Indian Ocean Sea Surface Salinity based on AMSR-E and L-band Radiometer data |
| Xunwei Nie  First Institute of Oceanography, Ministry of Natural Resources | Decadal Variability in Salinity of the Indian Ocean Subtropical Underwater During the Argo Period |
| Estrella Olmedo  Insittute of Marine Sciences (CSIC-BEC) | Ten years of dedicated SMOS Sea Surface Salinity maps in the Black Sea |
| Xavier Perrot  LOCEAN | Sea surface salinity signature of an Agulhas ring from satellite data. |
| Luc Rainville  University of Washington | Quantifying Variability and Errors in satellite and in-situ Ocean Salinity Estimates in Highly Dynamical Regions |
| Katrin Schroeder  CNR-ISMAR, Venezia, Italy | Long term thermohaline changes at depth: examples from two Mediterranean Channels |
| Taimoor Sohail  School of Mathematics and Statistics, University of New South Wales, Sydney, Australia | Amplification of historical poleward freshwater transport underestimated by climate reconstructions |
| Alexander Soloviev  Physical Oceanography Laboratory, Nova Southeastern University, Dania Beach, FL 33004, USA | Remote Sensing, In-Situ Observations, and High-Resolution Modeling of Low-Salinity Lenses in the Presence of Oil Slicks |
| Richard Justin Small  National Center for Atmospheric Research | The Role of Salinity in the Subantarctic Mode Water Formation and Variability |
| Jingru Sun  Princeton University | Influence of vertical wind shear on the ocean response to tropical cyclones |
| Alexandre Supply  University of Brest, LOPS Laboratory, IUEM, UBO–CNRS–IRD–Ifremer, Plouzané, France and CNES, Paris, France | Sea ice variability and stratification over the Arctic Ocean |
| R Dwi Susanto  University of Maryland | Land-sea linkage of peatland soils moisture and salinity in the Indonesian seas |
| Simon Yueh  Jet Propulsion Laboratory | An Empirical Algorithm for Mitigating the Sea Ice Effect in SMAP Radiometer for Sea Surface Salinity Retrieval in the Arctic Seas |
| Clovis Thouvenin-Masson LOCEAN-IPSL, CNES, ACRI-ST | Salinity variability in satellite subpixels: toward an interpretation of SMOS – Argo residuals. |
| Sandra Tippenhauer  Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research, Am Handelshafen 12 27570 Bremerhaven, Germany | High-precision calibration of salinity measurements |
| David Trossman  Louisiana State University, DOCS and CCT | (Revised title) [An Algorithm to Bias-Correct and Transform Arctic Satellite-Derived Skin Salinities into Bulk Surface Salinities](https://lsu.zoom.us/j/6768708321) |
| Vardis Tsontos  NASA Jet Propulsion Laboratory, California Institute of Technology | Web-based Tools and Services for Integrated Support of NASA Satellite Salinity and Field Campaigns |
| Antonio Turiel  Institute of Marine Sciences, CSIC/Barcelona Expert Center | SO FRESH: The relevance of satellite SSS for the study of freshwater fluxes in the Southern Ocean |
| Marta Umbert  Institute of Marine Sciences (ICM-CSIC), Barcelona, Spain | The contribution of the Vendée Globe Race to improved ocean surface information. A validation of the remotely sensed salinity in the sub-Antarctic zone |
| Cristofer Vargas  Chaffey College, 5885 Haven Ave, Rancho Cucamonga, CA, 91737 | Spatial Distributions of Ocean Salinity Along the Indian Coasts Using Satellite and In-situ data. |
| Zhankun Wang  Northern Gulf Institute, Mississippi State University; NOAA's National Centers for Environmental Information | NCEI Surface Underway Marine Database (SUMD) Initiative |
| Oliver Wurl  University of Oldenburg, Insitute of Chemistry and Biology of the Marine Environment | The North Sea from space: Using explainable artificial intelligence to improve satellite observations of salinity and temperature |