

Alvaro Santiago Scardilli

Master of Science in Atmospheric Sciences



Personal data

Date of birth: 7 June 1980

Email: asscardilli@hidro.gov.ar

Home phone: +54 11 5 891 8923

LinkedIn: @alvaroscardilli

Professional Overview

Currently holding national representation positions in organizations dependent on the Intergovernmental Oceanographic Commission of UNESCO (IOC-UNESCO) and the World Meteorological Organization (WMO): IODE National Coordinator for Oceanographic Data Management, Global Ocean Observing System, Expert Team on Maritime Safety, Expert Team on Information Management, Southern Ocean Regional Panel, Ship Observations Team, and Data Buoy Cooperation Panel.

The main activities carried out in operational, technical and research tasks in the field of marine meteorology and oceanography are:

1. Directing the *Observing Together* Programme for the Ocean Decade, from 2021 to 2030. Supervision of 7 projects for the development of oceanographic observation networks in different regions of the world.
2. Expert Member of the Steering Committee of the Global Ocean Observing System (GOOS) (elected at the IOC Executive Board session in 2024).
3. Vice Chair of GOOS Regional Alliances Council, elected by representatives of the 14 Regional Alliances in March 2024.
4. Coordination for the deployment of ARGO floats in the Southern Ocean, jointly with the Woods Hole Oceanographic Institution.
5. Coordination for the deployment of drift buoys and anchoring of oceanographic instruments for research projects at Argentine institutions.
6. Organization of the Summer School in Polar Climate of the Southern Ocean Regional Panel of the CLIVAR program (CLIVA/CliC/SCAR SORP) at the International Center for Theoretical Physics (ICTP).
7. Development and production of weather forecasts for maritime, aeronautical, logistical and activity-specific operations.
8. Management of research and development projects on topics of marine and Antarctic meteorology and marine glaciology.

9. Development and implementation of the Argentine Ice Service.
10. Management and coordination of observation and measurement campaigns of oceanographic and meteorological variables.
11. Development of climate charts of the Southwest Atlantic Ocean.

Current Positions:

- Head of the Meteorology Department of the Naval Hydrographic Service, from December 2015 to the present.
- Head of the Navy Weather Service (SMARA), from December 2015 to the present.

Place of work: Meteorology Department – NAVAL HYDROGRAPHIC SERVICE.

Address: Avenida Comodoro Py 2055, Piso 15, CP 1104. Autonomous City of Buenos Aires. Argentine Republic.

Work Phone: (0054) (11) 4317-2532

International representation positions:

- Expert Member of the Steering Committee of the Global Ocean Observing System (GOOS), for the period 2024 – 2026.
- Vice-Chair of the Council of Regional Alliances of the Global Ocean Observing System (GOOS Regional Alliances), for the period 2025 – 2027.
- National Representative for Argentina in CLIVAR/CliC/SCAR Southern Ocean Regional Panel SORP, from 2023 to 2026.
- Director of the Observing Together Programme for the United Nations Decade of Ocean Science for Sustainable Development 2021 – 2030. From 2022 to the present.
- Member of the World Meteorological Organization's Expert Team on Maritime Safety (WMO ET-MS), from 2021 to the present.
- Member of the World Meteorological Organization's Expert Team on Information Management (WMO ET-IM), from 2024 to present.
- National Coordinator for Argentina for Oceanographic Information Management at the International Oceanographic Data and Information Exchange (IODE National Coordinator for Oceanographic Data Management), from 2023 to the present.
- Focal Point for Argentina in the Global Ocean Observing System (GOOS), from 2020 to the present.
- Focal Point for Argentina in the Data Buoy Cooperation Panel (DBCP), from 2019 to the present.
- Focal Point for Argentina in the Ship Observations Team (SOT), from 2019 to the present.

- Representative on the Steering Committee of the Global Ocean Observing System (GOOS) for South America and the Caribbean (Group III), for the period 2020 – 2023.
- Representative on the Joint WMO-IOC Collaborative Board for South America and the Caribbean (Group III) of the Intergovernmental Oceanographic Commission (IOC-UNESCO), from 2020 to 2024.
- Member of the Expert Team on Marine Climatology (JCOMM ETMC), from 2018 to 2021.
- Senior member of the Expert Team on Sea ice (JCOMM ETSI), from 2016 to 2021.
- Co-Chair of the Committee on Data, Information and User Support of the International Working Group on Ice Mapping (IICWG), from 2015 to 2018.
- Co-Chair of the Iceberg Committee of the International Working Group on Ice Mapping (IICWG), from 2015 to 2018.

University Studies

- Masters in Environmental Management. Technological Institute of Buenos Aires (ITBA). CURRENT.
- Diploma in Bases and Tools for the Comprehensive Management of Climate Change. National University of Quilmes and National University of Jujuy. 2021.
- Masters in Atmospheric Sciences. Faculty of Exact and Natural Sciences - University of Buenos Aires. From 2007 to 2013.
- Masters Degree in Naval Resources Management for Defence. Navy Faculty. National Defense University. From 1998 to 2002.

Previous professional experience

- Head of Meteorology at the ICEBREAKER A.R.A. "ALMIRANTE IRIZAR" during the 2020/2021, 2021/2022 and 2022/2023 Summer Antarctic Campaigns.
- Head of Meteorology at the TRANSPORT A.R.A. "BEAGLE CHANNEL" during the 2012/2013, 2013/2014, 2014/2015 and 2017/2018 Summer Antarctic Campaigns.
- Trainee at the GENERAL DIRECTORATE OF EDUCATION OF THE NAVY for the Bachelor's Degree in Atmospheric Sciences at the Faculty of Exact and Natural Sciences of the University of Buenos Aires. From 2007 to 2012.
- Chief of Artillery Charge at CORVETTE A.R.A. "GUERRICO". Year 2006.
- Specialization in Artillery at the NAVY OFFICERS SCHOOL. Year 2005
- Jefe Cargo Detall General at BUQUE OCEANOGRÁFICO A.R.A. "PUERTO DESEADO". Year 2004
- Assistant to the Chief of Navigation and Chief of General Detail on the DESTROYER A.R.A. "SARANDI".

- Cadet of the Naval Military Academy. From 1998 to 2002.

Participation in International Commissions

- 2nd WMO-IMO Symposium on Extreme Marine Weather Events, 23-26 September 2024, London, UK.
- XXV Meeting of the International Working Group on Ice Mapping (IICWG), from 9 to 13 September 2024. Monterey, United States of America.
- Summer School and Workshop on Polar Climate: Theoretical, Observational and Modeling Advances organized by the International Center for Theoretical Physics (ICTP), July 22-31, 2024, Trieste, Italy.
- 57th Session of the Executive Board of the Intergovernmental Oceanographic Commission (IOC) of UNESCO, 25-28 June 2024. Paris, France.
- 11th Regional Alliances Forum of the Global Ocean Observing System and the United Nations Ocean Decade Conference, 7-13 April 2024, Barcelona, Spain.
- XXIV Meeting of the International Working Group on Ice Mapping (IICWG), from 25 to 29 September 2023. Cambridge, United Kingdom.
- 15th Session of the CLIVAR/CliC/SCAR Southern Ocean Region (SORP) Panel Meeting, July 10-11, 2023. Potsdam and Berlin, Germany.
- 56th Session of the Executive Board and 32nd Assembly Session of the Intergovernmental Oceanographic Commission (IOC) of UNESCO, 20-30 June 2023. Paris, France.
- Regional workshop in support of the Third Cycle of the "Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socio-Economic Aspects". United Nations International Seabed Authority, 12-16 June 2023. Kingston, Jamaica.
- XXIII Meeting of the International Working Group on Ice Mapping (IICWG), from 26 to 30 September 2022. Buenos Aires, Argentina.
- 17th Workshop on Antarctic Meteorology and Climate and the 7th Southern Hemisphere Workshop of the Year of Polar Prediction, followed by the Collective Meeting of the American Meteorological Society that includes the 17th Conference on Meteorology and Polar Oceanography, from August 4 to 12, 2022. Madison, Wisconsin, United States of America.
- 11th Meeting of the Executive Committee of the Global Ocean Observing System (GOOS Steering Committee). From April 25 to May 3, 2022. Virtual meeting.
- XXII Meeting of the International Working Group on Ice Mapping (IICWG), from 20 to 24 September 2021. Virtual meeting.
- 10th Meeting of the Executive Committee of the Global Ocean Observing System (GOOS Steering Committee). From April 26 to 29, 2021. Virtual meeting.

- XXI Meeting of the International Working Group on Ice Mapping (IICWG), from 21 to 25 September 2020. Virtual meeting.
- 9th Meeting of the Executive Committee of the Global Ocean Observing System (GOOS Steering Committee). From 14 to 17 and from 20 to 23 April 2020. Virtual meeting.
- Marine Meteorology Workshop for the operational use of EUMETSAT Copernicus data, 2-6 December 2019. Lisbon, Portugal.
- Regional Workshop for the South Atlantic in the framework of the preparatory phase for the United Nations Decade of Ocean Science for Sustainable Development, from 25 to 27 November 2019. Rio de Janeiro, Brazil.
- XX Meeting of the International Working Group on Ice Mapping (IICWG), from 23 to 27 September 2019. Copenhagen, Denmark.
- Ninth Regional Partnership Session of the Global Ocean Observing System on 5-7 August 2019, Tokyo, Japan.
- 9th International Working Group on Ice Mapping, Data Assimilation and Sea Ice Verification Workshop, 17-19 June 2019, Bremen, Germany.
- VII Meeting of the Sea Ice Expert Group (JCOMM ETSI), 13-15 May 2019. World Meteorological Organization. Geneva, Switzerland.
- VII Meeting of the Marine Climatology Expert Group (JCOMM ETMC), from 6 to 10 May 2019. German Meteorological Institute. Hamburg, Germany.
- VI Meeting of the Sea Ice Expert Group (JCOMM ETSI), from 28 February to 3 March 2017. Finnish Meteorological Institute. Helsinki, Finland.
- Antarctic Sea Ice and Iceberg Analyst Training, May 9-27, 2016. U.S. Naval Ice Center. Suitland, Maryland. United States of America.
- XVI Meeting of the International Working Group on Ice Mapping (IICWG), from 19 to 23 October 2015. Rostock, Germany.
- XV Meeting of the International Working Group on Ice Mapping (IICWG), from 20 to 24 October 2014. Punta Arenas, Republic of Chile.
- Operation Solid Step, aboard the DESTROYER A.R.A. "SARANDI" incorporated into the Destroyer Squadron 18th belonging to the Aircraft Carrier Enterprise Strike Group. Year 2003.

Participation in Research Projects

- **Multi-SAR Operational Intercomparison Project.** International Ice Charting Working Group. Project Leader.
- **AO SAOCOM OCEAN Project.** Title: "Operational use of SAR information for sea ice monitoring and support to ships in navigation in Antarctica". Director: Dr. Héctor Salgado. Degree of Participation: Researcher.

- **Project FONCYT Agency PICT-2012-1507.** Title: "Risks of coinciding climatic extremes in regions with similar cultural uses in the world. Emphasis on precipitation, temperature and atmospheric circulation". Director: María Paula Llano. Degree of Participation: Collaborating Member.
- **UBA Project** (2011-2014). Title: "Climatology of precipitation sequences and monthly and daily flows". Director: Dr. Walter Mario Vargas. Degree of Participation: Collaborating Student.

Publications in scientific journals

- **Argentina's Sea-Ice Concentration Model: Towards the Understanding of Daily and Monthly Sea-Ice Variability and Its Forecast.** Barreira S and Scardilli A (2024) CLIVAR Exchanges. Special Issue: Advances in Emerging Antarctic Research Programs. DOI: 10.36071/clivar.83.2024
- **Southern Ocean ice charts at the Argentine Naval Hydrographic Service and their impact on safety of navigation.** Alvaro S. Scardilli, Constanza Salvó and Ludmila Gomez Saez. *Frontiers in Marine Science* (2022). DOI: 10.3389/FMARS.2022.971894
- **Recent drift and evolution of large icebergs in the Southern Ocean.** Alvaro S. Scardilli, F. Claus, C.A. Shuman and T. Scambos. In "State of the Climate in 2018" *Bull. Amer. Meteor. Soc.*, 100(9), S181–S182 (2019), doi:10.1175/2019BAMSStateoftheClimate.1.
- **Temporal analysis of precipitation and rain spells in Argentinian centenary reference stations.** Alvaro S. Scardilli, María P. Llano and Walter M. Vargas. *Theoretical and Applied Climatology* 127, 339-360 (2017). <https://doi.org/10.1007/s00704-015-1631-7>.

Papers presented at conferences

- **A. Scardilli and F. López:** "Forecasts of Mesoscale Cyclogenetic Events Over the Antarctic Peninsula and its Impact in Maritime Operations". 17th Workshop on Antarctic Meteorology and Climate. University of Wisconsin. Madison, Wisconsin, United States of America. From 4 to 6 August 2022.
- **A. Scardilli, F. López, C. Basso, M. P. Llano, B. Matarazzo and J. Arce:** "Climatological analysis of data from ships in the Southwest Atlantic". XIV CONGREGMET (Argentine Congress of Meteorology). Buenos Aires, Argentina. From November 7 to 11, 2022.
- **A. Scardilli, F. Claus, R. Miño, C. Salvó and H. Salgado:** "Charts of ice and icebergs in Antarctica from the analysis of remote sensors and observations of the Naval Hydrographic Service". IX Congress of Cartographic Science. Buenos Aires, Argentina. From 24 to 26 October 2018. Minutes of the 9CCC, p. 357-369 ISSN 2618-3765.
- **A. Scardilli and María Paula Llano:** "Analysis of the atmospheric conditions associated with the extreme sequences of precipitation in the city of Buenos Aires". Exhibited at the XIII CONGREGMET (Argentine Congress of Meteorology). Rosario, Argentina. From 16 to 19 October 2018.

- C. Salvó, H. Salgado, B. Lorenzo, **A. Scardilli** and F. Claus: **"Concentration of floating ice in the Weddell Sea by means of SAR images"**. Exhibited at the XIII CONGREMET (Argentine Congress of Meteorology). Rosario, Argentina. From 16 to 19 October 2018.
- **A. Scardilli**, F. Carballo, H. Salgado, B. Lorenzo, F. Claus, C. Salvó, R. Miño and I. Ferreyra. **"Use of SAR images for analysis of sea ice and icebergs in search and rescue operations and oil spills"**. Presented at the Regional Conference for Disaster Risk Reduction in the Americas. Organized by NASA and CONAE. Buenos Aires, Argentina. From 3 to 8 September 2017.
- Salgado, H.; F. Carballo; S. Masuelli; B. Lorenzo; **A. Scardilli**; R. Miño and S. Barreira **"Application of microwave systems for the detection of sea ice in Antarctica"**. Presented at the XVII SELPER International Symposium 2016. Puerto Iguazú, Misiones, Argentina. From 7 to 11 November 2016.
- B. Lorenzo, **A. Scardilli**, R. Miño, I. Ferreyra, H. Salgado and F. Carballo **"Use of satellite images for the elaboration of ice charts for glaciological support of ships in waters with the presence of ice"**. Presented at the XVII SELPER International Symposium 2016. Puerto Iguazú, Misiones, Argentina. From 7 to 11 November 2016.
- Alvaro **Scardilli** and María Paula Llano **"Precipitation sequences in southeastern South America. Long-term impact and variability"**. Presented at the XX Conference of Young Researchers of the AUGM (Association of Universities Montevideo Group). Curitiba, Brazil. From 3 to 5 October 2012.
- Alvaro **Scardilli**, María Paula Llano and Walter Vargas **"Precipitation sequences as a climatic parameter in South American seasons"**. Exhibited at the XI CONGREMET (Argentine Congress of Meteorology). Mendoza, Argentina. From May 28 to June 1, 2012.

Lectures presented

- **Master's Degree in Antarctic Studies**. Presentation on the operational and scientific activities of the Department of Meteorology in Antarctica, at the National University of Tierra del Fuego. Virtual modality. November 2024.
- **"The South Atlantic in Times of Global Competition"** Seminar. Presentation on Sea Ice Variability and its Impact on Nautical Safety, at the UNDEF Naval War College. Buenos Aires, Argentina. October 2024.
- **9th Conference on Marine Sciences "With Science in the Sea"**. Presentation on Severe Marine Meteorology and Nautical Safety, at the School of Marine Sciences. Buenos Aires, Argentina. October 2024
- **"Antarctic Meteorology for Naval and Aeronaval Operations"**. Weather and Climate in Antarctica and Southern Oceans. Postgraduate Course of the Department of Atmospheric and Ocean Sciences. Faculty of Exact and Natural Sciences. University of Buenos Aires. November 2022.
- **"Ice Observations in the Southern Oceans"**. Side event: Polar Regions in a Changing Climate – Ocean Solutions from Science to Services. United Nations Ocean Conference. Lisbon, Portugal. June 2022.

- **"Use of SAR images for nautical safety in waters with the presence of sea ice and icebergs"** XXVII Course on Synthetic Aperture Radar and its Applications. Remote Sensing Center of the Argentine Air Force. October 2019.
- **"Applications in the use of satellite images in the detection and monitoring of sea ice and icebergs"**. Postgraduate Course in Satellite Oceanography. Department of Atmospheric and Ocean Sciences. Faculty of Exact and Natural Sciences. Buenos Aires, Argentina. Years 2017, 2018 and 2019.
- **"Operational and R+D activities in the Meteorology Department"**. Colloquiums of the Department of Atmospheric and Ocean Sciences / Centre for Marine and Atmospheric Research. Year 2017.
- **"Climate Studies in Antarctica"**. International Symposium Argentina 2017 – Science, Technology and Culture in the face of Climate Change. Year 2017.
- **"Antarctic Meteorology applied to Operations"**. XXVI Antarctic Navigation Course "Captain Vicente Manuel Federici". School of Marine Sciences – Naval University Institute. Autonomous City of Buenos Aires, Argentina. Editions: 2015, 2016 and 2017.
- **"Cartas de hielo y deriva de témpanos"**. First Regional Conference on Oceanography and Meteorology, October 8, 2015. Navy Non-Commissioned Officer School, Puerto Belgrano Naval Base – Argentina.

Postgraduate Courses and Seminars

- **First IICWG Ice Forecaster Workshop**. World Meteorological Organization. Virtual mode. From October 21 to 25, 2024.
- **17th Workshop on Antarctic Meteorology and Climate**. University of Wisconsin. Madison, Wisconsin, United States of America. From 4 to 6 August 2022.
- **Virtual Training in Satellite Applications for WMO RA-III**. ESPOL Faculty of Engineering, Maritime and Marine Sciences. Guayaquil, Ecuador. November 2020.
- **Remote Sensing of Coastal Ecosystems**. NASA's Applied Remote Sensing Training Program. Course in virtual format. August and September 2020.
- **Marine Meteorology Course for the operational use of EUMETSAT Copernicus data**, Portuguese Institute of the Sea and Atmosphere. Lisbon, Portugal. From 2 to 6 December 2019.
- **Postgraduate course "Weather and climate in Antarctica and the Southern Oceans"**. Department of Atmospheric and Ocean Sciences. Faculty of Exact and Natural Sciences. Buenos Aires, Argentina. Second half of 2018.
- **12th Workshop on Antarctic Meteorology and Climate**. National Center for Atmospheric Research. Boulder, Colorado, United States of America. From 26 to 28 June 2017.
- **Year of Polar Prediction in the Southern Hemisphere Meeting**. National Center for Atmospheric Research. Boulder, Colorado, United States of America. From 28 to 29 June 2017.

- **Southern Ocean Regional Panel Meeting.** National Center for Atmospheric Research. Boulder, Colorado, United States of America. From 29 to 30 June 2017.
- **1st International Workshop for the SOOS West Antarctic Peninsula Working Group.** British Antarctic Survey. Cambridge, United Kingdom. From 15 to 16 May 2017.
- **3rd Eumetrain Marine Course.** Online Marine Meteorology Course. EUMETRAIN – International training Project sponsored by EUMETSAT. March, April and May 2017.
- **5th International Ice Analyst Workshop.** U.S. National Ice Center. Suitland, Maryland. United States of America. From 16 to 20 May 2016.
- **Second Workshop on Forecasts of High Impact Meteorological Events.** National University of Córdoba. Cordoba, Argentina. From December 1 to 3, 2015.
- **Dual Polarization Radars: Principles and Applications.** Department of Atmospheric and Ocean Sciences. Faculty of Exact and Natural Sciences. Buenos Aires, Argentina. From 30 March to 28 April 2015.
- **Forecasts in Space Weather.** Department of Atmospheric and Ocean Sciences. Faculty of Exact and Natural Sciences. Buenos Aires, Argentina. From 9 to 13 June 2014.
- **Training Workshop on Nowcasting Techniques.** Department of Atmospheric and Ocean Sciences. Faculty of Exact and Natural Sciences. Buenos Aires, Argentina. From 5 to 16 August 2013.
- **Training in Practical Applications for Climate Variability Studies.** Department of Atmospheric and Ocean Sciences. Faculty of Exact and Natural Sciences. Buenos Aires, Argentina. May – June 2011. Course.
- **Fundamentals of Radar Meteorology.** Department of Atmospheric and Ocean Sciences. Faculty of Exact and Natural Sciences. Buenos Aires, Argentina, September 7, 8 and 10, 2012.
- **Short Introductory Course to Atmospheric Electricity.** Department of Atmospheric and Ocean Sciences. Faculty of Exact and Natural Sciences. Buenos Aires, Argentina. September 14, 2012.
- **Symposium on Radarization and Hydrometeorological Alert System of the Southern Cone.** Ministry of Foreign Affairs and Worship. Buenos Aires, Argentina. From 11 to 13 September 2012.

Teaching

- **Director** of the Meteorology Training Course for Non-Commissioned Officer Personnel. School of Marine Sciences. Navy Faculty. National Defense University. From 2020 to the present.
- **Director** of the Meteorology Training Course for Officers. School of Marine Sciences. Navy Faculty. National Defense University. From 2016 to 2022.

- **Professor** of the subject Oceanography and Meteorology Applied in the Specialization in Maritime Interests. Navy Faculty. National Defense University. From 2018 to 2020.
- **Professor** of Marine Meteorology in the Meteorology Training Course for Non-Commissioned Officer Personnel. School of Marine Sciences. Navy Faculty. National Defense University. From 2020 to the present.
- **Professor** of the subject Applications of Meteorology in the Meteorology Training Course for Non-Commissioned Officer Personnel. School of Marine Sciences. Navy Faculty. National Defense University. From 2020 to the present.
- **Professor** of the subject Military Meteorology in the Meteorology Training course for Officers. School of Marine Sciences. Navy Faculty. National Defense University. During the years 2014, 2015, 2016, 2018, 2019 and 2023.
- **Professor** of the subject Meteorology in the Bachelor's Degree in Administration of Naval Resources for Defense. Navy Faculty. National Defense University. During the years 2016, 2017 and 2018.

Languages

- Spanish (Native).
- English (written and oral proficiency). Studies completed for 9 years at the Institute for the Active Teaching of the English Language. Rosario, Santa Fe.
- Italian (written and oral proficiency). Complete 4-year course at the Italian Association Alcara Li Fusi. Rosario, Santa Fe.

Buenos Aires, February 2025