

Laura De Santis

Present position: Researcher at OGS, Istituto Nazionale di Oceanografia e di Geofisica Sperimentale, Trieste, Italy

Citizen: Italian

Born: 12-12-1965

Married (two sons)

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Degrees + Scientific Career

- Since 2003 Researcher with permanent position at OGS
- 1995-2003 Research contract at OGS
- 1995 PhD in Marine Geosciences at Univ. of Parma (Italy): Ross Sea (Antarctica) seismic stratigraphy
- 1993-1994 Associated guest researcher at Dept. of Geology and Geophysics - Rice University, Houston, Texas (USA).
- 1991-1992 PNRA Research fellowship at OGS, Trieste, Italy. Project ANTOSTRAT (SCAR)
- 1990 M.Sc. /Laurea in Geology at Univ. of Parma (Italy): west Mediterranean Sea seismic stratigraphy and structural analysis

Expertise: geophysics, polar marine geology

Topics: seismic facies analysis and identification of glacial-related processes in high latitude continental margins: Ross Sea and Wilkes Land, in Antarctica and west Norwegian margin

Sea-going/field experience

Participation to 5 oceanographic geophysical cruises in the Mediterranean Sea and 6 in Antarctica Ross Sea, Prydz Bay, George V Land (Antarctic Seas) between 1990 and 2018 (three of which in the George V Land, and in the Ross Sea as a PI) and to the Cape Roberts deep drilling project (1998):

- 1987, 1988, 1989, 1990: Univ. of Parma, CNR Bologna and OGS Trieste, Sardinia and Sicily Channel (western Mediterranean), R/V Bannock and R/V OGS Explora. Seismic reflection data acquisition Single channel (Sparker) and multichannel (Air gun), gravity cores
- 1994: US/National Science Foundation – PI: John B. Anderson (Rice University, Houston, Texas, USA). R/V NBP Palmer. Ross Sea. Seismic reflection data acquisition Single channel (GI gun), gravity cores
- 1996 Australian Geological Survey Organisation– PI: Peter Harris e Phil O’Brien (Geoscience Australia, Canberra). R/V Aurora Australis. Prydz Bay and Vincennes Bay. Seismic reflection data acquisition Single channel (GI gun), side scan sonar, gravity cores
- 1998: Cape Roberts drilling project-1 (NZ, USA, Italia, Germania, UK) deep sea drilling from sea ice platform (Ross Sea). PI: Prof. Peter Barrett, Victoria University of Wellington, NZ. Main resp. Sedimentology
- 2005: R/V OGS Explora, North Adriatic sea. Seismic reflection data acquisition multichannel (Air gun) and subbottom chirp

- 2006: PNRA MOGAM project - PI Laura De Santis (OGS). R/V OGS Explora. Gorge V Land margin (Antartide orientale). Multibeam, subbottom chirp and seismic reflection data acquisition multichannel (Air gun) and gravity cores
- 2016-17: PNRA WHISPERS project - PI Laura De Santis (OGS). R/V OGS Explora. Ross Sea (Antartide occidentale). Multibeam, subbottom chirp and seismic reflection data acquisition singlechannel (GI gun)
- 2018: Ross Sea West Antarctic Ice Sheet History. International Ocean Discovery Program Expedition 374 (co-chief)

Students supervised/mentored:

Co-advisor of 3 PhD thesis in Polar Science (2002-2003) Univ. TS.

Co-advisor of 1 PhD thesis in Polar Science (2016-2019) Univ. Siena.

Co-advisor of 2 PhD thesis in Science and management of the Climate Change (Univ. of Venice, CMCC, OGS consortium) (2017-2021)

Co-advisor of 1 PhD thesis in Polar Science (2012-present) Univ. of Seoul (Korea).

Advisor of 2 Master thesis in Polar Science (2013-2017) Univ. TS.

Co- Advisor of 1 Master thesis in Polar Science (2013-2014) Univ. TS.

Kingdom Software (Seismic Micro-Technology, Inc. SMT) academic and educational grant reference person at OGS since 2008.

Lecturer on:

- Antarctic marine and geophysics at Univ. of Trieste since 2012 in the frame of the annual course of Marine Geology taken by Prof. A. Camerlenghi.
- Courses on backstripping modeling, with application to polar margins to Univ. of Parma in 1998 and 2005.

Outreach activities that promote understanding and preservation of Antarctica

(e.g. in schools, with the general public, decision makers, etc)

Promoting and contributing to the Polar exhibitions in Italy (e.g. “Artide & Antartide le frontiere della ricerca” 22 Settembre-30 Ottobre 2005. Spoleto, Geoitalia Conference), in collaboration with the Antarctic National Museum.

Organizing conferences and events to inform the public and the press about marine geophysics and drilling projects in polar regions and about the National and European marine infrastructures and networks (e.g. “the new research drilling icebreaker Aurora Borealis: scientific, technology and geopolitical impact”. Festival della Scienza di Genova 2010 www.festivalscienza.it) Organization of the meeting and round table. Genova, 5 nov 2010 17.30-19.30, Galata Museo del Mare, <http://festival2010.festivalscienza.it/site/Home/Programma2010/Giornopergiorno/5Novembre/articolo10009535.html>

“Trieste e le esplorazioni polari: dalla Admiral Tegetthoff alla OGS Explora”. Trieste, MNA 19-28 Febr 2010. With funds from the Friuli Venezia Region. Direzione centrale istruzione e formazione 2009

“Segni glaciali: Le impronte che rivelano la storia del clima” Science Festival, Genova www.festivalscienza.it Organization of the meeting and round table. Genova, Domenica 30 ottobre dalle 15.00 alle 17.00 Museo di Storia Naturale Giacomo Doria

Contributing to 2 historical books and 1 film on the first International Polar Year and its development, e.g. “Carl Weyprecht and his scientific project: the International Polar Year”. Lead

author: Enrico Mazzoli. Edited by Milano, Biblion Edizioni, 2008 (Collana Circolo Polare. 3), 313 p. The book has been included in the IPY Polar Books collection

<http://www.unep.org/Publications/polarbooks/books/1037.aspx>

<http://www.biblionedizioni.it/prodotto/dai-ghiacci-allo-spazio/>

<http://lucepolare.blogspot.it/2007/12/la-nostra-casa-in-antartide.html>

Providing several lectures in primary, secondary and high schools in Italian and in public conferences on Antarctic science, Deep Sea drilling, the International Polar Year legacy.

Research Projects

(Grants and fellowships received)

PI of research grants projects funded by MIUR-PNRA, MAE Italy-USA bilateral projects, FP7-EU :

1991-1995: Programma Nazionale delle Ricerche in Antartide – PNRA/Ross Sea Atlas maps, under the ANTOSTRAT (Antarctic Offshore Acoustic Stratigraphy) SCAR Geoscience project. Coordinated by A. Cooper (USGS, USA), G. Brancolini (OGS,I), P. Barker (BAS, UK).

Partners: USA, Italy, Russia, Japan, France, Germany.

Aim of the project: compilation of 22 plates with depth contour and isopach contour maps of 8 main, Cenozoic stratigraphic seismic sequences of the Ross Sea.

Role: Map compiler

Funds received: ca. 40 kEuro.

1999-2001: Programma Nazionale delle Ricerche in Antartide - PNRA CAPE ROBERTS PROJECT CRP (Ross Sea, Antarctica). Deep Drilling project from fast ice, Coordinated by P. Barrett (Victoria Univ., Wellington, NZ).

Partners: Australia, Germany, Italy, New Zealand, UK, USA.

Aim of the project: to study the stratigraphic and structural evolution of the western Ross Sea and the Transantarctic Mountain uplift.

Role: Partner (seismic stratigraphy, sediment grain size analysis and backstripping modelling)

Funds received: 10 kEuro.

1999-2001: Programma Nazionale delle Ricerche in Antartide - PNRA. Joint project AUS-Italy/WEGA - Wilkes Basin Glacial History

Aim of the project: investigate the George V Land margin (East Antarctica) to reconstruct the Cenozoic depositional and structural evolution of the ice sheet by collecting geophysical, geological and oceanographic data from the shelf and slope. Provide the site survey for IODP Exp. 318 (Escutia et al., 2010).

Coordinated by OGS (Trieste, Italy) and Geoscience Australia.

Partners: Univ. Parma, Siena, INGV Roma, CNR-ISMAR Bologna, OGS Trieste, Geoscience Australia.

Role: PI of the project and responsible for the seismic stratigraphic data work.

Funds received: 90 kEuro (and 28 days of ship time in 1999/2000 for a value of ca. 3 MEuro, co-funded by PNRA and Australian National Antarctic Research Expedition, ANARE)

28 days ship time (RV Tangaroa, NZ), cruise 1999/2000 at ca. 3 MEuro split in two nations (Italy and Australia)

2002-2004: PNRA (2002-2004). MOGAM - MORphology and Geology of Antarctic Margins.

Coordinated by OGS (Trieste, Italy)

Partners: Univ. Siena, INGV, Geoscience Australia.

Aim of the project: investigate the modern and Quaternary geomorphology of the George V Land

slope and rise to provide clues for understanding ocean bottom circulation changes during glacial and interglacial cycles. Provide the site survey for the IPY-CEAMAR (Collaborative East Antarctic Marine Census) survey 2007-08 (Post et al., 2010, 2012).

Role: PI of the project, PI of the cruise (2006) and responsible for the geomorphology and seismic stratigraphic data work.

Funds received: 52 kEuro (and in addition 10 days ship time in 2006 with OGS Explora, Italy, for a value of ca. 1 MEuro funded by PNRA).

2000-2003: Energy Environment and Sustainable Development EU 5th

Framework (2000-2003), STRATAGEM Stratigraphical Development of the Glaciated European Margin. Coordinated by Dan Evans (BGS-UK).

Partners: BGS -UK (Martyn Stoker), GEUS-DK (Tove Nielsen, Antoon Kuijpers), NIOZ-NL (Tjeerd van Weering), OGS-I (Laura De Santis), UCD-IRL (Pat Shannon), UiB-N (Hans Petter Sejrup, Haflidi Haflidason), UiT-N (Tore Vorren, Jan Sverre Laberg), Sub-contractor: Svitzer -UK (Richard Salisbury, Zara Harrison).

Aim of the project: 1) completing stratigraphy correlation of north Atlantic margin, and provide a depositional and structural model for its Cenozoic evolution.

Role: partner (seismic stratigraphy and backstripping modelling)

Funds received: 140 kEuro.

2006-2007: EU-Marie Curie European Re-Integration Grant (ERG). “HoloSed”

HOLOocene SEDdiment record of Antarctic deep water production project linked to the IMAGES X° – CADO (Coring Adélie Diatom Oozes) 2003 project. Coordinated by E. Michel (LSCE, Paris, France) and X. Crosta (Univ. of Bordeaux, France).

Partners: Australia, Italy.

Aim of the HoloSed project: paleoclimatic reconstruction of the George V Land and Adelie Land margin (East Antarctica), by collecting multibeam and Calipso cores, for geochemical and biostratigraphic studies (Marion Dufresne cruise 2003).

Role: Scientific Responsible and supervisor and seismic stratigraphic data interpretation

Funds received: 40 k Euro.. http://cordis.europa.eu/project/rcn/82553_en.html

2016-2018: Italy-USA bilateral projects (Foreigner Affair Minister funding agency) – GSLAISS Global Sea Level Rise and Antarctic Ice Sheet stability prediction: guessing future by learning from past.

Role: PI

Partners: CNR-ISMAR (Venice), CMCC (Bologna), LSU (Baton Rouge, Louisiana, USA), Univ. of Santa Barbara (CA, USA), Univ. of Massashustets

Funds received: 59 k Euro (for the first and second year) <https://www.researchitaly.it/innovitalia/news/italia-e-stati-uniti-firmano-la-joint-declaration-2016-2017/>

2008-2012: Research Infrastructures EU 7th Framework (2008-2012), 3 yrs duration. European Polar Research Icebreaker Consortium (ERICON) - AURORA BOREALIS Project. Coordinated by the European Science Foundation, Polar Board (EPB). Partners: Alfred Wegener Institute for Polar and Marine Research in the Helmholtz Association (AWI), Germany; Consiglio Nazionale delle Ricerche (CNR), Italy; Programma Nazionale delle Ricerche in Antartide (PNRA), Italy; Centre National de la Recherche Scientifique-Institut National des sciences L'Univers (CNRS-INSU) as European Consortium for Ocean Research Drilling (ECORD) Managing Agency ; Arctic and Antarctic Research Institute (AARI), Saint-Petersburg, RUSSIA; Institut Polaire Français Paul Emile Victor (IPEV) ; Finnish Environment Institute, Marine Research Center (SYKE); The Netherlands Organisation for Scientific Research (NWO), The Netherlands; University of Bergen,

Norway; (BMBF), Bundesministerium für Bildung und Forschung); (FNRS), Fonds National de la Recherche Scientifique (Belgium) ; Bulgarian Antarctic Institute (BAI), Sofia, Bulgaria; Romanian Polar Research Institute, President of the Romanian Antarctic Foundation, Bucharest, Romania; (AARC), Aker Arctic Technology Inc

Aim of the project: preparing all necessary frameworks and documents for policymakers, funding entities and stakeholders to decide on the future implementation of a multi-national research icebreaker and deep-sea drilling vessel for the international science community. Results from the ERICON-AB project are being published and comprise reports on the long-term strategic science and operational planning objectives, proposals for on- and offshore science support infrastructures, recommended scientific governance modes, as well as financial engineering, cost calculations and the legal aspects of operating a multi-national marine research infrastructure.

Funds received: 160 kEuro.

Role: member of the technical steering committee and Science support unit and PNRA delegate with the task of providing information on: 1) National capabilities and the catalytic role of a multi-national vessel and its potential usage by Stakeholder Nations, 2) Access to the Polar Research Icebreaking facility by non – stakeholder third country parties, 3) Planning of decision-making structures and associated advisory bodies of the managing Agency, 4) The contribution of a new joint European research icebreaker capacity to environmental monitoring and policy relevant research in Polar Regions with special emphasis on the Arctic.

2012-2016: Marine National Facility, Australian Program, “Interactions of the Totten Glacier with the Southern Ocean through multiple glacial cycles” 30 days cruise project. Cruise approved and scheduled for 2017 with the R/V Investigator.

Coordinated by Leanne Armand, Dept Biological Sciences Macquarie University (Australia)

Partners: USA, Spain, Germany, Italy.

Aim: geomorphology and shallow seismic stratigraphy of slope sediments of the continental margin of Totten Glacier, to understand its Quaternary dynamics of past ice advance and retreat.

Role: partner for seismic stratigraphy

Funds: 30 days cruise scheduled for 2017 with the R/V Investigator.

2014: EU FP7/EUROFLEETS-2 –Antarctic ice Sheet Stability from continental Slope process investigation ANTSSS project.

Coordinated by Paolo Stocchi (NIOZ, NL)

Partners: UK, Spain, Germany, Norway, Italy, rep. of Korea, NZ, USA.

Aim: seismic stratigraphy of slope sediments of the continental margin of eastern Ross Sea to understand the Cenozoic dynamics of past ice advance and retreat and to collect site survey for the IODP prop. 751-full2.

Role: partner for seismic stratigraphy

The cruise is scheduled for 2017 with the R/V OGS Explora in the Ross Sea.

2016-2018: PNRA/WHISPERS (West Antarctic Ice Sheet HIStory from Slope Processes – Eastern Ross Sea)

Coordinated by OGS (Trieste, Italy)

Partners: CMCC, Bologna; CNR-ISMAR Venezia, Univ. Pisa, INGV, Geoscience Australia, Univ. of Victoria, NZ Korean Polar Research Institute, US Universities of Norfolk, Virginia, of Massachusetts, of Louisiana State and Rice; NOC, UK

Aim of the project: investigate the modern and Quaternary geomorphology of the Eastern Ross Sea slope and rise to provide clues for understanding ocean bottom circulation changes during glacial and interglacial cycles.

Role: PI of the project, PI of the cruise (2017) and responsible for the geomorphology and seismic stratigraphic data work.

Funds received: 158 kEuro (and in addition 6 days ship time in 2017 for a value of ca. 1 MEuro funded by PNRA).

Service on Boards/Committees

Since 2016: SCAR Geoscience program PAIS (Past Antarctic Ice Sheet dynamics).

Role: co-chief officer <http://www.scar.org/pais/>

Since 2013: SCAR Geoscience program PAIS (Past Antarctic Ice Sheet dynamics).

Role: member of steering committee.

Since 2013: SCAR/PAIS sub-committees “Paleoclimate Records from the Antarctic Margin and Southern Ocean” (PRAMSO)” and CircumAntarctic Stratigraphy and Paleobathymetry (CASP).

Role: member of steering committee. Organization of international workshops (2009, 2012, 2014) with funds from the SCAR/ACE and PAIS Geoscience Programs.

http://www.scar.org/researchgroups/geoscience/GeoReach_May13.pdf

2008-2015: PNRA/CSNA Antarctic National Research Program scientific and strategy advisory board for the Italian Ministry of Research. Role: member with expertise on geophysics and marine geology <http://www.csna.it/composizione.html>

2008-2017: EU-FP7/Eurofleets 1 and 2 projects,

Role: member of the scientific review panel, and chair of the Polar regional call 2013.

2008-2012: EU-FP7/ERICON-AB (European Polar Research Icebreaker Consortium (ERICON) - AURORA BOREALIS) project.

https://en.wikipedia.org/wiki/Aurora_Borealis_%28icebreaker%29

Role: PNRA representative. Member of the technical steering committee and Science support unit

Since 2014: Italian delegate (head officer in 2016) for the SCAR Standing Scientific Group on Geosciences.

International Ocean Discovery Program (IODP)

Co-chief of IODP Expedition 374 (2018) Ross Sea (Antarctica)

2015-2018: Italian delegate (Alternate) at the European Consortium for Ocean Drilling ECORD Council

<http://www.ecord.org/c/council.php>

2004-2018: member of the International Ocean Discovery Program (IODP), Italian Coordination Group

Since 1995: co-proponent and seismic site survey data manager of the IODP, full2-proposal 751 “Ocean-ice sheet interactions and West Antarctic Ice Sheet vulnerability: clues from the Neogene and Quaternary record of the outer Ross Sea continental margin”. Last proposal submission, Oct. 2013 by R. McKay (NZ), L. De Santis (I), P. Bart (USA), A. Shevenell (USA), T. Williams (USA), R. Levy (NZ), L. Bartek (USA), C. Sjunneskog (USA), A. Orsi (USA), S. Warny (USA), R. DeConto (USA), D. Pollard (USA), Y. Suganuma (Japan), J. Hong (Korea). The proposal has been approved and scheduled for 2018. <http://www.iodp.org>

Since 2000: co-proponent and seismic site survey data manager of the IODP, full-proposal 482 “Cenozoic Glacial History and Sea Level Change of the Wilkes Land Margin, Antarctica” proposal, The proposal has been achieved with IODP Exp. 318, 2010, Co-chief Carlota Escutia (SP) e Henk Brinkuis (NL). <http://www.iodp.org>

Since 2013: co-proponent and seismic site survey data manager of the IODP, Mission Specific Platform MSP full-proposal 813 “Greenhouse to Icehouse Antarctic paleoclimate and ice history from George V Land and Adélie Land shelf sediments”. Co-proponents: Trevor Williams (USA), Carlota Escutia (S), Laura De Santis, Philip O’Brien (AUS), Stephen Pekar (USA), Henk Brinkhuis (NL), and Eugene Domack (USA). The proposal has been scheduled by ECORD for implementation in early 2018. <http://www.iodp.org>

Convenor of scientific international meetings on Antarctic Science

Geoitalia Conference 2005. Spoleto (PG, Italy). Workshop “Cenozoic onshore and offshore stratigraphic record from the East Antarctic margin: recent results and future directions”. Co-Chair. Carlota Escutia (Univ. di Granada, Spagna). 20 attendants from different world countries.

SCAR/ACE symposium 2008. Granada (Spain). Workshop on “Developing an integrated strategy to recover paleoclimate records from the Antarctic Margin and Southern Ocean”, 12-13 September. Co-chairs: Tim Naish, Antarctic Research Centre, Victoria University of Wellington; Frank Rack, ANDRILL Science Management Office, University of Nebraska – Lincoln, Lincoln, NE, USA. 50 attendants from different world countries.

SCAR/ACE Workshop Antarctic and Southern Ocean drilling, Portland (Oregon, USA) 13rd - 14th of July 2012, just prior to the SCAR Open Science Conference. 50 attendants from different world countries.

SCAR/PAIS - PRAMSO workshop on Antarctic drilling, Auckland (NZ) August 23rd 2014. just prior to the SCAR Open Science Conference. Expected 20 attendants from different world countries. Co-chairs: Tim Naish (NZ); D. Harwood (USA)

ISAES XI - International Symposium on Antarctic Earth Sciences, Edinburgh, 10-16 July 2011, Convenor of session: “Geological controls on the modern and past Antarctic bottom water and marine environment”. other convenor: Philip E O’Brien, Geoscience Australia and Guy Williams, LOCEAN, University of Pierre and Marie Curie, Paris, France; ACE CRC, University of Tasmania, Hobart, Australia

ISAES XII - International Symposium on Antarctic Earth Sciences, Goa (India), 13-19 July 2015, Convenor of session: “Palaeoclimate Records from Antarctic Drilling Projects” Other convenors: Carlota Escutia, Univ. of Granada, Spain and Barbara Stenni Univ. of Venice, Italy

USSSP – ANZIC - MagellanPlus workshop: “Antarctica’s Cenozoic ice and climate history: New Science and new challenges of drilling in Antarctic waters” IODP-Texas A&M University, College Station, Texas 9-11 May 2016. Aim: The purpose of the workshop was to ensure coordination among active Antarctic drilling proposals, to constrain the response of different sectors of the ice sheets to a range of warm climates and to establish best practices for drilling in Antarctic waters. The workshop and US participation was funded by USSSP. MagellanPlus

supported for 15 European lead/co-proponents of IODP proposals, early and mid career scientists and PhD students. Role: PI of ECORD-MagellanPlus funds and USSSP proposal co-proponent. EU Partners: University of Granada (Spain), Alfred Wegener Institute (AWI), Bremerhaven, Germany, British Antarctic Survey (BAS), Cambridge, UK, Institute of Geology and Mineralogy, Univ. of Cologne, Germany, Imperial College, London, UK, National Oceanography Center, NERC, Southampton, UK

PAIS (Past Antarctic Ice Sheet dynamics) conference. Trieste (Italy) September 10-15 2017. <http://pais-conference-2017.inogs.it/> The scope is to present recent results that address still open questions in understanding the sensitivity of the Antarctic Ice Sheet and its contribution to past and future sea level and climate change (<http://www.scar.org/horizonscan>). An important development in understanding and predicting Antarctic ice-sheet behavior has been the validation and testing of ice sheet models on past climates with boundary conditions that are relevant to future projections. Role: principal organizer.

Summary of all Publications:

- a. Total number of publications: 40
- b. Total number of Journal publications: 34
- c. Total number of Books edited : 2
- d. Total book chapters published: 7 = 1 paper in 1 book + 2 papers in 1 DSR II special volume + 2 papers in 2 special volumes (Terra Ant. CRP projects) + 1 chapter in 1 ESF publication.
- e. Total number of Oral/posters in Conferences: 60

<http://www.scopus.com/authid/detail.url?authorId=7006005434>

Proceeding of conferences and International reports

Jansen E., Cita M.B., De Santis L., Solheim A., Busetti M., Camerlenghi A. and Albaek K. Jensen "*Ocean History Group Report*" from IV ECOD workshop, Rungstedgaard, Denmark, May 6-8, pp. 9-36, 1992.

De Santis L., Brancolini G. & Busetti M. *Methodology for the Ross Sea MCS data Interpretation and Compilation of the OGS contour maps*, Workshop Report for Ross Sea Regional Working Group Meeting, Gradisca d'Isonzo (Gorizia), Italy, May 31 to June 2, p. 28-29, 1993.

Brancolini G., De Santis L. and Busetti M. *Structural Evolution across a section south of the Drygalski Ice Tongue (Victoria Land Basin)*. In Landscape evolution in the Ross Sea Area, Antarctica. Rijks Geologische Dienst RGD. Ed. F.M. van der Wateren, A.L.L.M. Verbers, F. Tessensohn, pp. 69-75, 1994

Anderson J.B., Banfield L., Bart P., Bartek L., De Santis L. and Shipp S. *Seismic Expression of Glaciation on the Antarctic Continental Shelf*, in Terra Antarctica, vol. 1, n. 2, pp. 411-412, 1994.

Cochrane G. R., De Santis L., Cooper A. K. *Continuity of Glacial Sequences in the Ross Sea from Sonobuoy Seismic Refraction Data* in Terra Antarctica, vol. 1, n. 2, pp. 350-352, 1994.

- De Santis L., Anderson J. B., Shipp S. S., Brancolini G. & Zayatz I. *Integration of High- and Intermediate-resolution Seismic Data Sets with MCS Data to examine the Glacial Record of Eastern Basin (Ross Sea)*, in *Terra Antarctica*, vol. 1, n. 2, pp. 359-361, 1994.
- Shipp S.S., Anderson J. B., De Santis L., Bartek L., Alonso B. & Zayatz I. *High- to Intermediate-Resolution Seismic Stratigraphic Analysis of Mid- Late-Miocene to Pleistocene Strata in Esatern Ross Sea: Implications for Changing Glacial/Climatic Regime* in *Terra Antarctica*, vol. 1, n. 2, pp. 382-384, 1994.
- De Santis L., Brancolini G., Busetto M., Marchetti A., *Seismic Sequences and Late Cenozoic Glacial History in The Ross Sea*. In Ricci C.A., (Ed.) *The Antarctic region: Geological evolution and processes*, Terra Antarctica Publication, vol. 4, n. 1, 781-790, 1997.
- Brancolini G., De Santis L., Lovo M., Prato S.. *Cenozoic Glacial History in the Ross Sea (Antarctica)*. 1997 EUG Proceeding Volume. *Terra Antarctica* vol. 4, n. 1, 57-60.
- De Santis L., 1998 *Late Cenozoic Stratigraphic record from the continental margin of East Antarctica*. *Terra Antarctica Reports* 2, 89-93.
- La Macchia C. and De Santis L.. 2000. *Seismostratigraphic Sequence Analysis in the Prydz Bay Area (East Antarctica)*. *Terra Antarctica Reports* no. 4, Palaeoclimatic reconstructions from marine sediments of the Ross Sea and Southern Ocean. *Terra Antarctica Reports*, 4, 259-267.
- Protopsalti I., Immordino F., De Santis L., Fanzutti G. P.. *Sediment grain size and quartz grain morphology from Cape Roberts 1 core sample (Ross Sea): proxies for transport and depositional processes*. *Royal Society of New Zealand Bulletin* 35, 2002. 301-307.
- Camerlenghi A., Rebesco M., De Santis L., Volpi V., De Rossi A. *The Antarctic Peninsula Pacific Margin. Modelling Flexure and Decompaction with constraints from ODP leg 178 Initial drilling results*. *Royal Society of New Zealand Bulletin* 35, 2002. 261-267.
- Presti M., L. De Santis, M. Busetto, G. Giorgetti, 2003. *The George V Basin (East Antarctica): a trap of glacial origin for Late Quaternary sediments"* *Terra Antarctica Report* n. 8, 139-142.
- De Santis L., Brown B. and Brancolini G., 2003. *Tectonic evolution of the continental shelf of the Wilkes Land (East Antarctica)*, *Terra Antarctica Report* n. 9, 11-14.
- F J Davey, L De Santis. 2006. *A Multi-phase Rifting Model for the Victoria Land Basin, western Ross Sea*. Futterer DK, Damaske D., Kleinschmidt G., Miller H., Tessensohn F. (eds). *Antarctica: Contributions to global earth Sciences*. Springer-Verlag, berlin Heidelberg New York, pp. 303-308. 9th ISAES Proceedings volume.
- De Santis L., G. Brancolini, D. Accettella, A. Cova, A. Caburlotto, F. Donda, C. Pelos, F. Zgur, M. Presti (2007), *New insights into submarine geomorphology and depositional processes along the George V Land continental slope and upper rise (East Antarctica)*– *Online Proceedings of the 10th ISAES X*, edited by A. K. Cooper and C. R. Raymond et al., *USGS Open-File Report* 2007-1047, Extended Abstract 061, 5 p.
- M. Presti, L. Barbara, D. Denis, X. Crosta, E. De Voos, M. Lipizer, C. De Vittor A. Acquavita, C. Kissel, and L. De Santis. *Late Quaternary sediment record of six glacial/interglacial cycles off*

the Wilkes Land - Adelie Land Coast (East Antarctica): Preliminary geochemical results. U.S. Geological Survey and The National Academies; USGS OF-2007-1047, Extended Abstract 126

Petronio, L., Lipizer, M., De Santis, L., Rintoul, S., Wardell, N. Seismic reflections within the sea water column in the Southern Ocean, Antarctica (Conference Paper) Society of Petroleum Engineers - 71st European Association of Geoscientists and Engineers Conference and Exhibition 2009 Volume 4, 2009, Pages 2312-2316

De Santis L., Richard Levy, Tim Naish, Frank Rack, Robert DeConto and Carlota Escutia on behalf of the Scientific Committee on Antarctic Research, Antarctic Climate Evolution Project (SCAR-ACE). INVEST white paper 2009: proposal for future Antarctic margin paleoclimate scientific drilling under the IODP. Report submitted at the IODP INVEST meeting (<http://www.marum.de/iodpinvest.html>), as a reference document for the science plan of IODP-Beyond 2013.

De Santis L., M. Hilden, Y. Kristofferson, B. Wolff-Boenisch. The contribution of a new joint European research icebreaker capacity to environmental monitoring and policy relevant research in Polar Regions with special emphasis on the Arctic. FP7/project ERICON AURORA BOREALIS. Deliverable 2.5. ESF Publication 2012. <http://www.esf.org/publications/polar-sciences.html>

Willmott V. and R. Azzolini, A. Brandt, H. Brinkhuis, A. Camerlenghi, B. Coakley, L. De Santis, Y. Kristoffersen, L. Lembke-Jene, M. Rebesco, J. Thiede. ERICON Science Perspective 2015-2030, Scientific Research in Polar Areas. FP7/project ERICON AURORA BOREALIS. ESF Publication 2012. <http://www.esf.org/publications/polar-sciences.html>

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