

Dr Stéphanie Dupré

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Geologist

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**Education and diplomas**

- 1998-2003 **PhD - Earth Sciences**, Tectonics and Structural Geology Department, Vrije University Amsterdam, The Netherlands
- 1996-1997 **D.E.A. (=M.S.) - Quantitative Methods and Modelling of Sedimentary Basins**, Option Rock Physics and Seismology, mention Assez Bien, École Nationale Supérieure du Pétrole et des Moteurs, École Nationale Supérieure des Mines de Paris, Institut de Physique du Globe de Paris, Universities Paris VI et Paris VII, Muséum National d'Histoire Naturelle, France
- 1995-1996 **Maîtrise (= B.S.) - Physical Earth Sciences in Geophysics**, Option Geomaterials, mention Assez Bien, University Paris VII, France
- 1994-1995 **Licence - Physical Earth Sciences**, Option Geophysics, mention Bien, University Paris VII, France
- 1993-1999 Field work and geophysical acquisition trainings

Research activities**• Research projects**

- 2003-2007 **Geophysical imagery of fluid systems of the Nile Deep Sea Fan - Euromargins Mediflux et Hermes Projects**, Post doc position at the Géosciences Marines Department, Ifremer, Brest, France (2006-2007) and at the Sedimentology and Marine Geology Department, Vrije University Amsterdam, The Netherlands (2003-2006)
- 1998-2003 **Integrated tectonic study of the South Gabon Margin. Insights on the rifting style from seismic, well and gravity data analysis and numerical modelling**, PhD position at the Tectonics and Structural Geology Department, Vrije University Amsterdam, The Netherlands, in collaboration with Norsk Hydro, Norway
- 1996-1997 **Geochemical and gravimetric evolution of the oceanic mantle and its implications on sea level changes**, DEA Research Project at the University of Paris VII and CNRS URA 736, France
- 1995-1996 **Effects of a fracture on the seismic characteristics of a calcareous dry and waterlogged sample**, Maîtrise Research training at the Institut de Physique du Globe de Paris, France

• Marine Research Expeditions

- 2006 - **Bionil** cruise onboard R/V *Meteor* in the Nile Deep Sea Fan
Responsibilities: Eastern Mediterranean GIS, planning and positioning of the different operations (*Quest* ROV and *Aster^x* AUV dives, cores)
Participation: geophysical acquisition with the ship and AUV echosounders (multibeam, sediment and fishery echosounders)
- 2004 - **Mimes** expedition onboard R/V *Pelagia* in the Eastern Mediterranean: Nile Deep Sea Fan and Anaximander Mountains
Responsibilities: planning and positioning of the different operations, and editing of the cruise report entitled: Mimes An expedition on *Pelagia* 13 June 2004 - 14 July 2004: a contribution to the Mediflux project of Euromargins, 81 pp.
Participation: side scan sonar data (*DTS-1 EdgeTech*) acquisition and processing
- 2003 - **Nautinil** cruise onboard R/V *L'Atalante* in the Eastern Mediterranean: Nile Deep Sea Fan and Mediterranean Ridge
Responsibilities: submersible *Nautile* dive database management and editing of dive and cruise reports
Participation: *Nautile* dive and geophysical acquisition with the ship multibeam echosounder

Skills

• Teaching

- 2003 **Marine Geology Lecture** entitled 'Rifted continental margins - Salt tectonics and seeping activity', Master level, Vrije Universiteit, Amsterdam
- 2000-2002 **Basin Analysis Course:** Teaching assistant, Master level, The Netherlands Research School of Sedimentary Geology Courses, Vrije Universiteit, Amsterdam
- 1997 **Field work training:** Geologist assistant, High school level, Oisans Valley and Chenaillet, French Alps

• Computing experience

Environments: DOS/Windows, UNIX/Solaris, Macintosh, Linux/Redhat-Mandrake

Geo-sofwares: GeoFrame and The Kingdom Suite (processing and interpretation of seismic and Chirp data), ERMapper, ArcGis and Adelle ©Ifremer (construction of an Eastern Mediterranean GIS), Alamer ©Ifremer (ROV and submersible dive database management), 2Dmove (depth conversion of seismic profiles), Backstrip and BMOD (basin modelling), GM-SYS (gravity and magnetic modelling), Caraibes ©Ifremer et Prism (processing of multibeam and side scan sonar data)

Applications: Microsoft Office, EndNote, Tecplot, Kaleidagraph, Adobe (Acrobat, Illustrator, Photoshop), ClarisDraw, Canvas, Fotolook, HTML-Kit

Webmaster For the website of the Tectonics and Structural Geology Department (2001) and of the Sedimentology and Marine Geology Department (2004 to 2006), Vrije Universiteit, Amsterdam

Project Maîtrise training at the laboratory of Seismology of the Institut de Physique du Globe de Paris: geophysical data processing, using Matlab, of the different stations of the Piton de La Fournaise observatory

- ### • Langues
- French: mothertongue
English: read, spoken, written
German, Dutch: knowledge

Publications

- Dupré, S., Woodside, J.M., Foucher, J.-P., de Lange, G., Mascle, J., Boetius, A., Mastalerz, V., Stadnitskaia, A., Ondréas, H., Huguen, C., Harmégnies, F., Gontharet, S., Loncke, L., Deville, E., Niemann, H., Omeregie, E., Olu-Le Roy, K., Fiala-Médioni, A., Dählmann, A., Caprais, J.-C., Prinzhofer, A., Sibuet, M., Pierre, C., Sinninghe Damsté, J. and the NAUTINIL Scientific Party, 2007. Seafloor geological studies above active gas chimneys off Egypt (Central Nile Deep Sea Fan). *Deep Sea Research, Part I*, 54: 1146-1172.
- Dupré, S., Bertotti, G. & Cloetingh, S., 2007. Tectonic history along the South Gabon Basin: Anomalous early post-rift subsidence. *Marine and Petroleum Geology*, 24: 151-172.
- Bayon, G., Loncke, L., Dupré, S., Caprais, J.-C., Ducassou, E., Duperron, S., Etoubleau, J., Foucher, J.-P., Fouquet, Y., Gontharet, S., Henderson, G.M., Huguen, C., Klaucke, I., Mascle, A., Migeon, S., Olu-Le Roy, K., Ondréas, H., Pierre, C., Sibuet, M., Stadnitskaia, A. and Woodside, J. M., 2007. Fluid seepage on an unstable margin: The case of the Centre Nile fan. Submitted to *Marine Geology, Special ESF Issue (July 2007)*.
- Dupré, S., Woodside, J.M., Klaucke, I., Mascle, J., Foucher, J.-P. and the NAUTINIL & MIMES Scientific Parties, 2006. Multi-scale seafloor mapping of active seep-related structures, offshore Egypt. *CIESM Workshop Monograph*, 29: 65-71.
- Dupré, S., 2003. Integrated tectonic study of the South Gabon Margin. Insights on the rifting style from seismic, well data, gravity data analysis and numerical modelling. PhD Thesis, Netherlands Research School of Sedimentary Geology, Vrije Universiteit, Amsterdam, 125 pp.
- Dupré, S., 2002. South West African Margin: regional studies based on the South Gabon Basin data. Norsk Hydro internal report: 47 pp.
- Dupré, S., 2001. West African Margin. Crustal structure of the South Gabon Basin derived from seismic and gravity. Norsk Hydro internal report: 33 pp.
- Dupré, S., 2000. South Gabon Margin: From geology to modelling and back. Norsk Hydro internal report: 12 pp.
- Dupré, S., 2000. Crustal structure offshore South Gabon. Norsk Hydro internal report: 19 pp.
- Dupré, S., 1997. Evolution géochimique et gravimétrique du manteau océanique: implications sur les variations du niveau des mers. DEA Memoir, University of Paris VII and CNRS: 45 pp.

Oral communications (selection)

- Dupré, S. (*solicited*), Woodside, J., Foucher, J.-P., Mascle, J., Buffet, G., Klaucke, I., Boetius, A. and the MEDIFLUX Scientific Party, 2007. MEDIFLUX surveys reveal fluid seepage through the Nile Deep Sea Fan seabed offshore Egypt. European Geosciences Union General Assembly 2007. Geophysical Research Abstracts, 9: 8293.
- Dupré, S. (*invited participation*), Woodside, J.M., Klaucke, I., Mascle, J., Foucher, J.-P. and the NAUTINIL & MIMES Scientific Parties, 2005. Multi-scale seafloor mapping of active seep-related structures, offshore Egypt. CIESM Workshop 'Fluids seepages/mud volcanism in the Mediterranean and adjacent domains': 42-48.
- Dupré, S., Woodside, J.M., Klaucke, I. and the MIMES Scientific Party, 2005. Active fluid emission systems imaged by high resolution geophysics on the Nile Deep Sea Fan. European Geosciences Union General Assembly 2005. Geophysical Research Abstracts, 7: 2147.
- Dupré, S. (*chairman*), Loncke, L., Deville, E., Niemann, H., Fiala Medioni, A., Dählmann, A., Caprais, J.C., Prinzhofer, A., Mascle, J., Foucher, J.P., Woodside, J.M. and the NAUTINIL Scientific Party, 2004. In-situ observations on the Nile deep-sea fan gas chimneys. 7th Nederlands Aardwetenschappelijk Congres, Programme and abstracts: 4.1.
- Dupré, S., Bertotti, G., Wheeler, W. and Cloetingh, S., 2003. Tectonic evolution of the Gabon-Angola Margin based on seismic, well and potential-field data and associated geophysical modelling. EGS-AGU-EUG Joint Assembly. Geophysical Research Abstracts, 3: 685.
- Dupré, S., Bertotti, G., Cloetingh, S. and Arnesen, L., 2001. Post-rift evolution of the South Gabon Margin: anomalous patterns and implication for the syn-rift. 2001 Margins Meeting. Schriftenreihe der Deutschen Geologischen Gesellschaft, Heft 14. Sven Roth and Andres Rüggeberg: 44.
- Dupré, S., Bertotti, G., Cloetingh, S. and Arnesen, L., 2001. Basin configuration and tectonic development offshore South Gabon: constrains from seismic, well and potential-field data. 2001 Margins Meeting. Schriftenreihe der Deutschen Geologischen Gesellschaft, Heft 14. Sven Roth and Andres Rüggeberg: 44.
- Dupré, S., Bertotti, G., Cloetingh, S., Dart, C., Karpuz, R., Sperrevik, S. and Telnæs, N., 2000. Regional cross sections in South Atlantic Salt Basin, offshore Angola. XXV General Assembly European Geophysical Society, Millennium Conference on Earth, Planetary & Solar Systems Sciences. Geophysical Research Abstracts, 2: 33.