

309 W 99th #2A1, New York, NY 10025
edassie@ldeo.columbia.edu
+1 (518) 210 6702

CURRENT POSITION

2012 – present **Columbia University**
Lamont-Doherty Earth Observatory, Palisades (USA)
Biology and Paleo Environment

Postdoctoral Research Scientist
Research advisor: Dr. Braddock K. Linsley

EDUCATION

2012 **PhD**, Department of Atmospheric and Environmental Sciences, University at Albany, State University of New York, USA
Research advisor: Dr. Braddock K. Linsley

2007 **MA**, ENVironnement, Océanographie Littorale & Hauturière, Environnement et Paléoenvironnements Océaniques - EPOC UMR 5805 Univ. Bordeaux 1, FRANCE
Research advisor: Prof. Thierry Corrège

2005 **BA**, Geology/Biology, Univ. Bordeaux 1, FRANCE

PUBLICATIONS

REFEREED JOURNAL ARTICLES

- Emilie P. Dassié**, Gavin M. Lemley, and Braddock K. Linsley (2013) The Suess effect in Fiji coral $\delta^{13}\text{C}$ and its potential as a tracer of anthropogenic CO_2 uptake. *Palaeogeography, Palaeoclimatology, Palaeoecology*, doi:10.1016/j.palaeo.2012.11.012
- Henry C Wu, Braddock K. Linsley, **Emilie P. Dassié**, Benedetto Schiraldi, and Peter B. deMenocal (2013) Oceanographic variability in the South Pacific Convergence Zone region over the last 210 years from multi-site coral Sr/Ca. *Geochemistry, Geophysics, Geosystems*, doi:10.1029/2012GC004293
- Emilie P. Dassié**, Braddock K. Linsley, Thierry Corrège, Stephen S. Howe, Henry C. Wu, Gavin M. Lemley, and Guy Cabioch (submitted). Fiji Coral $\delta^{18}\text{O}$ Network: A multi-coral composite approach for obtaining a more accurate reconstruction of ocean-climate variability. *Paleoceanography*
- Mélanie Moreau, Thierry Corrège, **Emilie P. Dassié**, and Florence Le Cornec (submitted). Evidence for the noninfluence of salinity variability on the coral Sr/Ca paleothermometer. *Coral Reef*

WORK IN PROGRESS

- Emilie P. Dassié** and Braddock K. Linsley. Coral $\delta^{18}\text{O}$ in *Diploastrea* – sampling resolution and climatic signal
- Emilie P. Dassié**, Thierry Delcroix, and Braddock K. Linsley. Fiji and Tonga climatic variability to reconstruct the interannuals movements of the SPCZ for the last 200 years
- Chloé Brahmi, **Emilie P. Dassié**, and Florence LeCornec. Method optimization for Coral trace elements analyses using laser ablation ICP MS
- Braddock K. Linsley, Henry C. Wu, **Emilie P. Dassié**, and Daniel Schrag. The Pacific Decadal Oscillation and Stalls in Rising Earth Surface Temperature Since 1791 C.E.

ABSTRACTS PRESENTED

- 2013 American Geophysical Union Fall Meeting, December 9-13, “Coral $\delta^{18}\text{O}$ records Porites vs. Diploastrea – sampling resolution and climatic signal” (Poster Presentation)
- 2012 American Geophysical Union Fall Meeting, December 3-7, “Evolution of Interannual and Decadal/Interdecadal variability of the SPCZ since the late 18th century using a network of Fiji coral $\delta^{18}\text{O}$ time-series” (Oral Presentation)
- 2012 Climate Informatics workshop, September 20-21, “Assessing the number of coral $\delta^{18}\text{O}$ records needed to obtain statistically significant paleoclimatic reconstructions” (Poster Presentation)
- 2011 American Geophysical Union Fall Meeting, December 5-9, “Evaluating the influence of Solar Radiation, Coral Extension Rate and Anthropogenic CO_2 on Skeletal $\delta^{13}\text{C}$ in a Network of Fiji *Porites* Corals” (Poster Presentation)
- 2011 Graduate Climate Conference, October 28-30, “Evaluating the SPCZ Interannual Changes with Both Instrumental and Coral-Derived SSS data” (Oral Presentation)
- 2010 American Geophysical Union Fall Meeting, December 13-17, “Evaluating the SPCZ interannual changes with both instrumental and coral-derived SSS data” (Poster presentation)

INVITED TALKS

- 2013 Bureau of Meteorology, Melbourne, VIC, Australia,
“Evolution of Interannual and Decadal/Interdecadal variability of the SPCZ since the late 18th century.”
- 2013 Australian Institute of Marine Science, Townsville MC, QLD,
“Interannual and Interdecadal variability of the South Pacific Convergence Zone using a network of Fiji corals”.
- 2012 EPOC, University of Bordeaux 1, Talence, France
“Variabilité interannuelle à inter-décennale de la Zone de Convergence du Pacifique Sud depuis le 18^{ème} siècle vu à travers un réseau de coraux fidjiens”

GRANT APPLICATIONS

- 2013 NSF Geoinformatics, “Bringing Cyberinfrastructure to the Coral Research Community”, E. P. Dassié, Kerstin Lehnert, Maureen Raymo and Brad Linsley
- 2013 NSF Marine Geology and Geophysics, The ^{13}C Suess effect in Pacific corals and the regional rate of anthropogenic CO_2 uptake, E. P. Dassié, Principal Investigator in collaboration with Brad Linsley
- 2013 Climate Center of Columbia University's (**Granted \$10,000**), “A Multi-proxy approach to determine Pacific Intermediate Water variability during the late Holocene”
- 2013 Climate Center of Columbia University's (**Granted \$10,000**), “Tracking tropical cyclonic activity using trace metals in coral skeletons”
- 2012 Climate Center of Columbia University's (**Granted \$10,000**), “Assessing the utility of the coral genus *Diploastrea* for paleoclimatic reconstructions”
- 2011 University at Albany State University of New York – Graduate Student Organization Travel Grant (**Granted \$250**)

RESEARCH & OCEANOGRAPHIC FIELD EXPERIENCE

RESEARCH EXPERIENCE

- 2013 – present **Lab Manager Assistant**
LDEO Stable Isotope Laboratory, LDEO, Columbia University
- 2012 - present **Postdoctoral Research Scientist**
Department of Earth and Environmental Sciences, LDEO, Columbia University
- 2010 – 2012 **Graduate Research Assistant**
Laboratory of Dr. Braddock K. Linsley, State University of New York, at Albany
- 2006 **Summer Training course**
School of GeoSciences, Edinburgh, United Kingdom, “Investigating $\delta^{18}\text{O}$ in the shell of *Tridacna derasa* from New Caledonia, *Advisor*: Dr. Mary Elliot.

OCEANOGRAPHIC CAMPAINS

- 2013 **Member of the Scientific Party**
RV SONNE – SO – 228 – EISPAC-WESTWIND _ SIODP Cruise,
Kaohsiung (Papua New Guinea) – Townsville (Australia)
- 2006 **Student during the University at Sea**
R.V. Marion Dufresnes - Marco Polo 2 scientific cruise,
Shanghai (China) - Jakarta (Indonesia)

TEACHING & MENTORING EXPERIENCE - University at Albany, SUNY

TEACHING

- 2011 **Instructor** - Minerals, Rocks, and Geological Time (GEO 221)
- 2008 **Laboratory Instructor** - Mineralogy (ENV/GEO 210/212)
- 2007 – 2010 **Teaching Assistant** (*supervising and grading exams*)
Geohydrology (ENV/GEO 435), Paleoclimatology (ENV/GEO 450),
Environmental Geochemistry (ENV/GEO 350), Introduction to Environmental
Science (ENV/GEO 105), Mineralogy (ENV/GEO 210/212)

MENTORING

- 2011 **Independent Study advisor** - senior college student
- 2010 - 2012 **Laboratory supervision** – two undergraduate students

ACADEMIC SERVICES & SOCIETY MEMBERSHIPS

ACADEMIC SERVICES

- 2013 - present **Co-Leader** of the Lamont-Doherty Earth Observatory Postdoc Professional
development group
- 2013 – present **Communications Chair** for the Climate Informatics workshop

SOCIETY MEMBERSHIPS

EarthCube community
New York Academy of Science
American Geophysical Union

REVIEWER

Palaeogeography, Palaeoclimatology, Palaeoecology
National Science Foundation – Paleo Perspectives on Climate Change solicitation

PROFFESIONAL SKILLS

ANALYTICAL TECHNIQUES

Inductively coupled plasma mass spectrometry : ICP-MS Varian-UltraMass ®
Inductively coupled plasma optical emission : ICP-OES ICP Thermo element
iCap 60500
Mass spectrometer Elementar Isoprime 100 w/ dual inlet and multiprep
Mass spectrometer Thermo Delta V+ w/ dual inlet and Kiel IV
MicroMill (marine bivalves microsampling device)
Mini drill (coral sampling device)

PROGAMMING - MATLAB

Wavelet Analysis
Composite and Correlation Maps
Statistical tools
Forward model

LANGUAGES

French (*native language*)
English (*fluent*)
Spanish (*some knowledge*)