

## Curriculum Vitae

### **Nandini Ramesh**

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### Education

- **M.Phil./Ph.D. (Earth and Environmental Sciences), Columbia University**  
(2012-present)  
Department of Earth and Environmental Sciences  
Major: Physical Oceanography  
Minors: Climate Science, Statistical Methods
- **M.Sc. (Earth Physics), Australian National University, Canberra, Australia**  
(2011)  
Research School of Earth Sciences  
Specialisation: Geophysical Fluid Dynamics  
Thesis: *Propagation of Wave Signals through the Torres Strait*
- **B. Sc. (Physics), Stella Maris College (Madras University), Chennai, India**  
  
(2007-2010)
- **Indian School Certificate (Year 12), Sishya School, Chennai, India**  
(2005-2007)
- **Indian Certificate of Secondary Education (Year 10), Abacus Montessori School, Chennai, India**  
(1996-2005)

### Awards

- **Gold Medal for Physics (2007-2010), Madras University, Chennai**
- **Umachandran Cash Award for Most Meritorious Student of the Department of Physics (2007-2010), Stella Maris College, Chennai**
- **Silver Medal for English (2007-2010), and Proficiency Prize in English (2007-08), Stella Maris College, Chennai**
- **General Proficiency Prize (2007-2008, 2008-2009, 2009-2010), Stella Maris College, Chennai**
- **Kalyani Sundaram Memorial Prize for Best Performance in ISC Mathematics (2007), Sishya School, Chennai**

### Work Experience

1. Climate Change Research Centre at **University of New South Wales**, Sydney, Australia (Feb-Jul 2012)
  - Research Assistant under Dr. Shayne McGregor and Dr. Paul Spence: the role of the South Pacific Convergence Zone in the termination of El Niño events.
2. Centre for Atmospheric and Oceanic Sciences at **Indian Institute of Science**, Bangalore, India (Jul-Dec 2010)

- Project Trainee under Prof. Raghu Murtugudde: the role of subsurface processes in the onset of El Niño events.
3. Insect Flight Lab at the **National Centre for Biological Sciences**, Bangalore, India (May-Jun 2009)
    - Summer Student under Dr. Sanjay P. Sane: insect flight and the mechanics of the carnivorous plant *Utricularia*.
  4. Astronomy and Astrophysics Group at **Raman Research Institute**, Bangalore, India (May-Jun 2008)
    - Visiting Student under Dr. Biman Nath: Hydrostatic Equilibrium in Different Astrophysical Contexts and Hydrodynamics of Star Formation.

### Publications

- Ramesh, N. and Murtugudde, R., “All Flavors of El Niño Have Similar Early Subsurface Origins” *Nature Climate Change*, vol. 3, pp. 42-46, 2013.
- McGregor, S., Ramesh, N., Spence, P., England, M. H., McPhaden, M. J., Santoso, A., “Meridional movement of wind anomalies during ENSO events and their role in event termination” *Geophysical Research Letters*, vol. 40, pp. 1-6, 2013.

### Media

- Australian Broadcasting Corporation - Interview regarding my paper in *Nature Climate Change* in the science section of their website:  
<http://www.abc.net.au/science/articles/2012/06/25/3531367.htm?topic=enviro>
- Phys.org – Interview regarding my paper in *Nature Climate Change*:  
<http://phys.org/news/2012-06-tell-tale-el-nio-months.html>

### Extra- and Co-curricular Activities

- Student Volunteer on a scientific cruise on the RV Solander to deploy deep-ocean moorings in the Ombai and Timor Straits as part of Australia’s **Integrated Marine Observing System (IMOS)** in June 2011.
- Member of the **Chevron Student Initiative Fund** peer committee (2013-present) which reviews proposals for student initiatives on campus.
- Member of the Australian National University **Cross-Disciplinary Student Academy** and the organizing team for the **Global Cross-Disciplinary Tournament 2011**.
- **Editorial Board Member** of Physik! , the **Department of Physics Magazine** (2008-2009), **Chief Editor** in 2009-2010.
- Member of the **Reclaim Our Beaches** youth initiative, which organizes beach clean-ups and promotes eco-friendly development of the beaches of Chennai in co-ordination with the **Student Sea Turtle Conservation Network** (2008-2010).
- **Secretary** of Dramatics Club Maris College in 2008-2009.
- **Volunteer** at V-Excel, a school for children with Autism Spectrum Disorders (2007-2009), in Chennai, India.