

Xiaojun Yuan

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I was curious about the mysteries of the ocean and attracted by the beauty of tropical fish in the coral reef when I was in high school. Oceanography consequently became my first choice for college. I received a bachelor's degree in physical oceanography from Shangdon College of Oceanography, China, in 1982. After spending four years at the National Research Center for Environmental Forecast in Beijing, I came to the United States and worked with Dr. Namias at Scripps Institution of Oceanography. We studied the persistence of sea surface temperature anomalies in the North Pacific and its influence on the climate variability of the Northern Hemisphere. A year later, I enrolled in the Ph.D. program at Scripps under the supervision of Professor Talley. I investigated oceanic fronts in the North Pacific using historical conductivity-temperature-depth (CTD) measurements together with surface fluxes. Upon receiving my Ph.D. in 1994, I moved to New York and started postdoctoral studies with Dr. Martinson at Lamont-Doherty Earth Observatory of Columbia University. I then focused on Antarctic sea ice and its relationships with global climate. Lamont boosted my career development. I was promoted to Doherty Associate Research Scientist in 1998 and to Doherty Research Scientist in 2004.

Currently, I conduct a broad range of studies. I have investigated Antarctic sea ice and its relationships with regional climate modes and remote forcing. My studies have identified a major climate mode, the Antarctic Dipole, in the air-sea-ice system of the Southern Ocean and established its connection with El Niño-Southern Oscillation (ENSO) variability through diagnostic analyses and mechanism studies. Collaborating with Dr. Chen, we built the first generation Antarctic sea ice forecast model. As a member of the NASA Ocean Vector Wind Science Team, I investigate the effect of scatterometer winds on estima-



Xiaojun Yuan and her children spent a vacation in Beijing in summer 2004. She has been working at Lamont since 1995. Xiaojun lives with her husband Kaiyuan Zhang, son Thomas, and daughter Amy in Tappan, New York.

tions of air-sea fluxes and on ocean general circulation model (OGCM) simulations. I am also the lead principal investigator of the U.S./Chinese ship-of-opportunity sampling program, which has been monitoring upper ocean thermohaline variability in the Southern Ocean since 1998.

The greatest challenge in my life is balancing career and family. While pursuing my research interests, I want to be a good mother as well. After years of struggling with the two full-time jobs, I am sincerely appreciating the opportunity provided by this unique career. I enjoy working on my laptop outside my daughter's music lesson room or on the bleachers of my son's swim competition as much as working in my office or meeting with leading scientists in international conferences. Life is full of challenges and excitement.