

## Recent activity from SOLAS-Japan

In the western Pacific (WESTPAC) region, dust originating from Asian and Australian arid regions to the North Pacific, biomass burning emissions from Southeast Asia to sub-tropical Pacific, and other anthropogenic substances are transported regionally and globally to affect cloud and rainfall patterns, air quality, and radiative budgets downwind. Deposition of these compounds into the Asian marginal seas and onto the Pacific Ocean influence surface primary productivity. Nitrogen fixation in the Pacific and increasing emission of nitrogen compounds from the WESTPAC region to the Pacific are hot topics, and these issues are of concern for global/regional climate change research.

The W-PASS (Western Pacific Air-Sea interaction Study) project has been newly funded for 5 years as a part of SOLAS-Japan activity in the summer of 2006. We aim to resolve air-sea interaction through field observation studies mainly using research vessels and island observatories over the western Pacific (see SOLAS News Letter, issue 6, pp. 24-25, 2007).

An intensive marine atmospheric observation including direct atmospheric deposition measurement was carried out by a dozen W-PASS research groups at the NIES Atmospheric and Aerosol Monitoring Station of Cape Hedo at the northern end of Okinawa main Island facing the East China Sea from 17 March to 13 April 2008. A few Kosa (dust) events, anthropogenic air outflows, typical local air and occupation of marine background air were identified during the campaign period. A workshop for data analysis will be held in June.

In the summer 2008, collaboration with Japan-IMBER, the SPEEDS (Subarctic Pacific Experiment for Ecosystem Dynamics Study)/SOLAS cruise will be carried out in the subarctic to subtropical region in the western North Pacific from 29 July to 16 September 2008. We will seek phytoplankton bloom patches of various stages with age and find out differences among composition of marine biogases from age of the patches. We will meet at an Asian SOLAS workshop that will be held during the IOC/WESTPAC Symposium at Kota Kinabaru in Malaysia in May, 2008.