

Technical tour on 18 June: Dongsha Island Supersite

This is a one-day technical training tour to visit the Dongsha Island (20°33'-21°10'N, 115°54'-116°57'E), designated as one of the supersites in northern domain of the 7-SEAS. During the period of Dongsha Experiment in March-June 2010, the Taiwan EPA's Air Quality Monitoring Mobile and NASA's COMMIT (including lidar profiling) have been operating continuously at Dongsha (*cf.* Fig. 1), as well as the radiation measurements and the sampling of greenhouse/trace gases, aerosols and toxics for two Intensive Observation Periods (14-30 March & 10-20 April 2010).

Dongsha atoll (http://dongsha.cpami.gov.tw/en/e_main.aspx) and its surrounding waters (*cf.* Fig. 2) are located at the northern area of South China Sea. It is composed of a saline lake of ~500 square kilometers and the Dongsha Island. The atoll is rich in biological resources and coral reef landscape, and is an ideal spot for a wide variety of marine life. The ring-like reef flat is approximately 46 kilometers long and 2 kilometers wide. Its reef flat is exposed in the air during ebb tide. The lagoon in the atoll measures 16 meters deep, consisting of beach and saline lake. Outside the atoll, the water measures 25 meters in depth where the seabed is laden with sunken wreck ships ruins, tropical corals, tropical fish, echinoderm, crustaceans, algae, steep reef slope, and other abundant sea bio-organisms. The Dongsha atoll became the 7th National Park in Taiwan since 17 January 2007.

Tentative arrangement of the tour is briefly described as follows. This trip will start from the Taipei International Airport at 9:00 AM sharp on 18 June 2010, and will take about one hour chartered flight to the Dongsha Island. We will first visit the meteorological station, run by Taiwan Navy, where the Air Quality Monitoring Mobile and COMMIT are located, and learn the operations of various instruments and near real-time processing of measurements. An open house ceremony will be followed immediately. After lunch, we will shortly visit the Fishery Center for radiation and vertical profiling deployment including E-Z lidar, sunphotometer and an array of radiometers. Before departure back to Taipei, a guided ecological and cultural tour will be arranged. The entire tour will be ended at Taipei after dinner.

Limited number of passengers is allowed for the chartered flight, and the cost is fully covered for those attendee receiving travel support from the 7SEAS meeting and those with full-registration. National Central University, Taiwan EPA and Taiwan National Science Council are the major sponsors for this technical tour.



Figure 1. Taiwan-EPA Air Quality Monitoring Mobile and NASA/COMMIT collocated at Dongsha Island

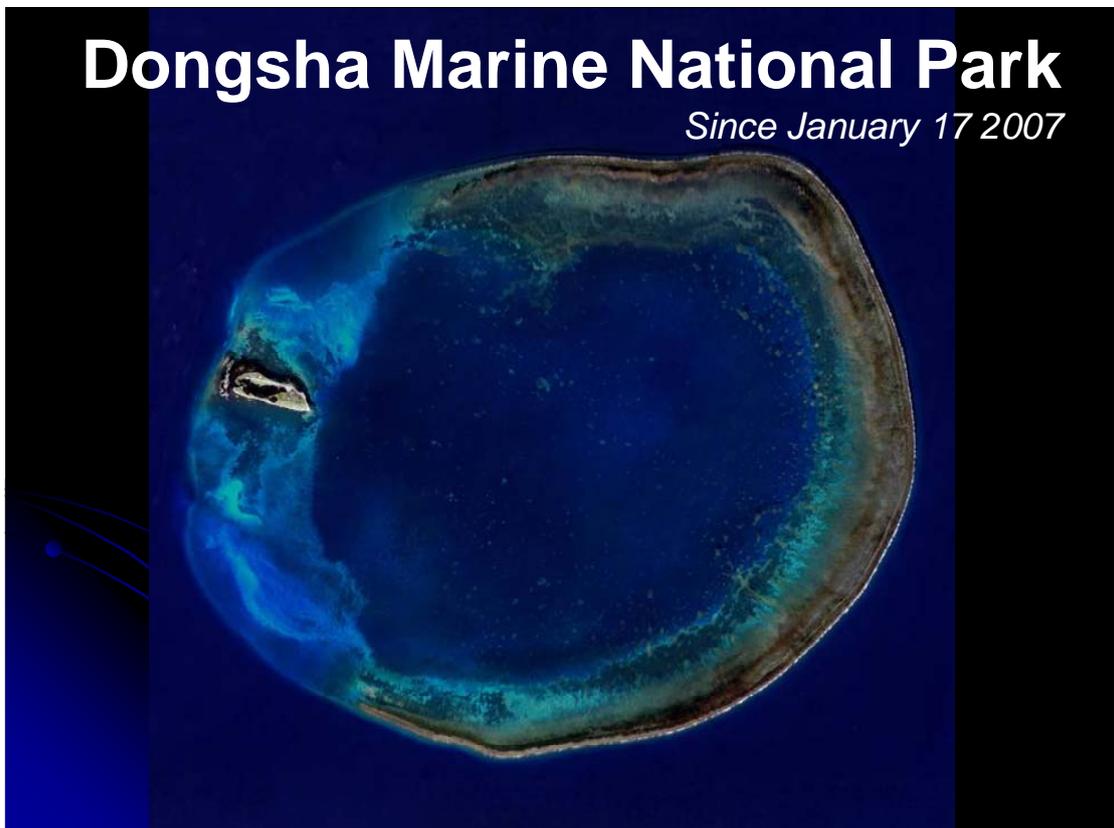


Figure 2. Dongsha atoll