Marine Disaster Assessment and Adaptation in Coastal Areas under Sea Level Rise

In the context of global climate warming, sea level rise and its impacts have drawn high attentions of global coastal countries. In recent years, China has actively participated in global ocean governance, vigorously promoted international ocean communications and cooperation, further played our leading role in international bilateral and multilateral ocean governance, and actively carried out multidisciplinary cooperative research on natural environment and socio-economic impacts to jointly cope with sea level rise. In 2018, the National Marine Data and Information Service (NMDIS) undertook a project entitled “Marine Disaster Assessment and Adaptation in Coastal Areas under Sea Level Rise” sponsored by the Special Cooperation Fund for the Asian Region. The project lasts for two years with total cost of 800,000 RMB and is part of the regional cooperation thematic research involving government-driven activities China participating in under the Asian Regional Cooperation Mechanism.

The project conducts combined sea level change analysis and projection in the South China Sea and the East Indian Ocean, and carries out marine disaster risk assessment and adaptation research in Thailand and Sri Lanka. At the same time, the standard specifications for sea level observation, sea level data processing and quality control, and marine disaster assessment are set.

In order to promote regional marine disaster prevention and mitigation capacity building, under the framework of the project, in September 2018, NMDIS hosted the first training course of the OceanTeacher Global Academy (OTGA) Tianjin Training Center. The training content included marine observation data processing, sea level change impact investigation and assessment, marine disaster warning, etc., attended by 25 participants from 10 countries in the Western Pacific region.

In November 2018, NMDIS hosted the ASEAN Regional Forum (ARF) International Symposium. Scientists and officials from 10 countries including Thailand and Australia discussed the regional sea level rise adaptation and response, coastal disaster impacts, risk assessment and so on comprehensively. Meanwhile, the representatives appealed the ASEAN Regional Forum member countries to strengthen fundamental research, risk assessment, communications and cooperation in the field of sea level change with an official proposal.

The implementation of the project will help improve the marine disaster prevention and mitigation capabilities of the participating countries, provide a platform for countries to exchange and dialogue by means of the seminars on regional climate change and coastal disaster response, further deepen the regional bilateral and multilateral cooperation and communications in the maritime field, and provide strong support for the construction of the 21st Century Maritime Silk Road.
Figure 1  Group Photo of the 2018 OTGA Training Course

Figure 2  Group Photo of the 2018 ARF Workshop