

New Arctic Research Project "ArCS"

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The Arctic is the place where the changes caused by the Global Warming appear most conspicuously. The changes in the Arctic are not only a concern for local communities who are directly affected by the change, but also for people who live in the rest of the world, because the Arctic plays a special role in the global climate system. On the other hand, with the decrease in sea ice, the possibilities of development of new Arctic sea route and the exploitation of natural resources are drawing significant attention from the world, even from non-Arctic countries. While worldwide attention to changes occurring in the Arctic is growing, the scientific understanding of these changes and the data for analysis are still insufficient to show to the stakeholders how the Arctic changes affect global weather/climate and ecosystem, and what impact these changes have on human society and economy for both sustainable development and conservation of the natural environment in the Arctic region. The scientific knowledge, which provides the base of discussions on governance and international protocols regarding the sustainability of the Arctic, are expected to be developed from private sectors and policy-makers in the world. The research project for the Arctic, called ArCS (Arctic Challenge for Sustainability), was started in the autumn of 2015 as a Japanese national project funded by the Ministry of Education, Culture, Sports, Science and Technology. Under close cooperation with other Arctic projects in the world and working groups of Arctic Council and IASC, ArCS aims to elucidate the changes in the climate and environment and to evaluate their effects on human society. ArCS has three main pillars of its activity, namely, reinforcement of research bases and/or stations in the Arctic, capacity building of researchers (including those in private sector), and promotion of international cooperative researches. The National Institute of Polar Research (NIPR), Japan Agency for Marine-Earth Science and Technology (JAMSTEC) and Hokkaido University are playing the key roles in this project. ArCS will be continued until March 2020.

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