

## Long-term Plan for Arctic Environmental Research compiled by JCAR

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Arctic environment specialists aim to present the research direction over the period of 10 to 20 years for the resolution of environmental issues to citizens concerned with environmental problems and researchers in various fields. Up to now, no long-term plan has focused on Arctic environmental research in our country, hence, it is important to present analyses of the current status and future direction to be taken. It is no exaggeration to say that the fact that this long-term plan has been developed by JCAR has confirmed its existence. This plan reflects the hopes of the next generation of researchers, encouraging forward progress toward common goals by working together. The four objectives are as follows. The first one, which is the background for formation of JCAR, is research on "Understanding of the abrupt-complex phenomenon and elucidation of the mechanisms and impacts associated with global warming enhanced in the Arctic, along with improvement of their future prediction". In this objective, seven themes have been selected such as amplification of warming in the Arctic. The second one, research to elucidate "Biodiversity in land and ocean, and also the effects of anthropogenic environmental change on ecosystem, not limited to global warming" is divided into terrestrial and marine themes. The third one covers "Broad and important research on the Arctic environment and its fundamental information" and includes three themes such as the geo-space environment surrounding the earth. The fourth objective covers three categories of methods related to the previous themes, "Monitoring, modelling and integration of the two, enabling breakthroughs in environmental research".

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