Antarctic Near-shore and Terrestrial Observation System (ANTOS)

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Abstract

Antarctic Near-shore and Terrestrial Observation System (ANTOS) is a new SCAR Expert Group. It is a biologically focused initiative, with a long term vision. Its aim is to coordinate and acquire the basic data needed to assess environmental and biological variability and change - at appropriate physical and temporal scales - in terrestrial, freshwater and near-shore habitats. ANTOS is interested in the Antarctic continent and the surrounding sub-Antarctic islands and linked regions. In terms of scale and biological focus, ANTOS differs from standard macroclimate monitoring efforts, and aims to bridge the current gap between these and the measuring and understanding of biological micro-environments that is required to elucidate biological responses to environmental variables and changes therein. ANTOS will recommend technical guidelines for an internationally coordinated installation of appropriate physical and biological sensor networks, and standards for long-term data collection and storage. We are very grateful to KOPRI for generously offering to host the specific databases that will be produced by the network of ANTOS stations. Consultation with SCADM and the existing suite of SCAR-supported data initiatives is high priority, to ensure integration of ANTOS. ANTOS crosses continent and national programme-scales, and will be of relevance to multiple SCAR programmes and to climate change research generally. Longer term, the information gathered on environmental parameters will underpin identification and interpretation of trends and changes in nearshore and terrestrial Antarctic ecosystems. This poster outlines the aims, progress and plans of ANTOS, and how to become involved.

Keywords: biological microclimate, environmental variability, monitoring network, trends, physical and temporal scales