



## **Data and Services at the Integrated Climate Data Center (ICDC) at the University of Hamburg**

S. Kern (1), V. Gouretski (1), A. Jahnke-Bornemann (1), R. Sadikni (1), M. Meyer (1), A. Wünsche (1), F. Ament (2), and D. Stammer (3)

(1) Integrated Climate Data Center, Centrum für Erdsystemforschung und Nachhaltigkeit, Universität Hamburg, Hamburg, Deutschland (stefan.kern@uni-hamburg.de), (2) Institut für Meteorologie, Centrum für Erdsystemforschung und Nachhaltigkeit, Universität Hamburg, Hamburg, Deutschland, (3) Institut für Ozeanographie, Centrum für Erdsystemforschung und Nachhaltigkeit, Universität Hamburg, Hamburg, Deutschland

Earth observation data obtained from remote sensing sensors and in-situ data archives are fundamental for our current understanding of the Earth's climate system. Such data are an important pre-requisite for Earth System research and should be easy to access and easy to use. In addition such data should be quality assessed and attached with information about uncertainties and long-term stability. If these data sets are stored in a self-explanatory, easy-to-use format, their usefulness and scientific value increase. This is the guideline for the Integrated Climate Data Center (ICDC) at the Center for Earth System Research and Sustainability (CEN), University of Hamburg. ICDC offers a reliable, quick and easy data access along with expert support for users and data providers.

The ICDC provides several types of worldwide accessible in situ and satellite Earth observation data of the atmosphere, ocean, land surface, and cryosphere via the web portal <http://icdc.zmaw.de>. Recently, data from socio-economic sciences have been integrated into ICDC's data base to enhance interdisciplinary collaboration.

On ICDC's web portal, each data set has its own page. It contains the data access points, a short data description, information about spatiotemporal coverage and resolution, data quality, important reference documents and contacts, and about how to cite the data set. The data are converted into netCDF or ASCII format. Consistency and quality checks are carried out – often in the framework of international collaborations. Literature studies are conducted to learn about potential limitations or preferred application areas of the data offered. The data sets can be accessed through the web page via FTP, HTTP or OPeNDAP. Using the Live Access Server, users can visualize data as maps, along transects and profiles, zoom into key regions, and create time series. In both fields, visualization and data access, ICDC tries to provide fast response times and high reliability.