

MEMBER COUNTRY: Germany
National Report to SCAR for
year: 2010/2011

Activity	Contact Name	Address	Telephone	Fax	Email	web site
National SCAR Committee						
National body being the member of SCAR	Dr. Birgit Scheibner-Münker	Deutsche Forschungsgemeinschaft, Postfach 20 50 04, 53170 Bonn - Bad Godesberg, Germany	+49-228-885-2328	+49-228-885-2777	Birgit.Scheibner-Munker@dfg.de	http://www.dfg.de
Chairman of National SCAR committee	Prof. Dr. Günter Heinemann (past chair: Prof. Dr.-Ing. Reinhard Dietrich)	Universität Trier, Umweltmeteorologie, 54286 Trier	+49-651-201-4623	+49-651-201-3817	heinemann@uni-trier.de	http://klima.uni-trier.de
Secretary of National SCAR committee	Dr.-Ing. Hans Oerter	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	+49-471-4831-1347	+49 471 4831 1271	sekretariat@scar-iasc.de	http://www.scar-iasc.de
SCAR Delegates						
1) Delegate	Prof. Dr. Karin Lochte	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	+49-471-4831-1101	+49-471-4831-1102	Karin.Lochte@awi.de	http://www.awi.de
2) Alternate Delegate	Prof. Dr. Günter Heinemann	Universität Trier, Umweltmeteorologie, 54286 Trier	+49-651-201-4623	+49-651-201-3817	heinemann@uni-trier.de	http://klima.uni-trier.de
Standing Scientific Groups						
Life Sciences						
1)	Prof. Dr. Wilhelm Hagen	Universität Bremen, FB2 Marine Zoologie, Leobener Str., 28359 Bremen, Germany	+49 421 218 63030	+49 421 218 63055	whagen@uni-bremen.de	http://www.marzoo.uni-bremen.de
2)	Dr. Joachim Plötz (until 2010)	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	+49 471 481 1309	+49 471 4831-1918	Joachim.Ploetz@awi.de	http://www.awi.de
	Dr. Horst Bornemann (since 2011)	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	+49 471 481 1862	+49 471 4831-1149	Horst.Bornemann@awi.de	http://www.awi.de

3)	Dr. Hans-Ulrich Peter	Friedrich-Schiller-Universität Jena, AG Polar- & Ornitho-Ökologie, Dornburger Straße 159, 07743 Jena, Gemany	+49 3641 949 415	+49 3641 949 402	Hans-Ulrich.Peter@uni-jena.de	http://www.uni-jena.de
4)	Prof. Dr. Angelika Brandt	Zoological Museum, University of Hamburg, Martin-Luther-King-Pl.3, 20146 Hamburg, Germany	+49-40-42838-2278	+49-40-42838-393	abrandt@zoologie.uni-hamburg.de	http://www.uni-hamburg.de/fachbereiche-einrichtungen/biologie/
Geosciences						
1)	Dr. Detlef Damaske	Bundesanstalt für Geowissenschaften und Rohstoffe (BGR), Stilleweg 2, 30655 Hannover, Germany	+49-511-643-2692	+49-511-643-3663	d.damaske@bgr.de	http://www.bgr.de
2)	Dr. Rainer Gersonde	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	+49-471-4831-1203	+49-471-4831-1419	Rainer.Gersonde@awi.de	http://www.awi.de
3)	Dr.-Ing. Mirko Scheinert	Technische Universität Dresden, Institut für Planetare Geodäsie, 01062 Dresden, Germany	+49-351-463-33683	+49-351-463-37063	scheinert@ipg.geo.tu-dresden.de	http://www.tu-dresden.de
4)	Prof. Dr. Lothar Viereck-Götte (until 2010)	Friedrich-Schiller-Universität Jena, Institut für Geowissenschaften, Burgweg 11, 07749 Jena, Germany	+49-3641-948720	+49-3641-948662	lothar.viereck-goette@uni-jena.de	http://www.uni-jena.de
	Prof. Dr. Martin Melles (since 2011)	Universität zu Köln, Institut für Geologie und Mineralogie, Zulpicherstraße 49a, 50674 Köln	+49-221-470-5619	+49-221-470-5149	mmelles@uni-koeln.de	http://www.uni-koeln.de
Physical Sciences						
1)	Prof. Dr. Günther Heinemann	Fachbereich Vi Geographie / Geowissenschaften, Fach Umweltmeteorologie, 54286 Trier, Germany	+49-651-201-4623	+49-651-201-3817	heinemann@uni-trier.de	http://klima.uni-trier.de
2)	Dr. Eberhard Fahrbach	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	+49-471-4831-1820	+49-471-4831-1797	Eberhard.Fahrbach@awi.de	http://www.awi.de

Activity	Contact Name	Address	Telephone	Fax	Email	web site
3)	Dr.-Ing. Hans Oerter	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	+49-471-4831-1347	+49 471 4831 1271	Hans.Oerter@awi.de	http://www.awi.de
4)	Dr. Christian Spiering (until 2010)	DESY, Platanenallee 6, 15738 Zeuthen, Germany	+49-33762-77218	+49-33762-77330	Christian.Spiering@desy.de	http://www.desy.de

Scientific Research Program

ACE						
1) National contact partner for ACE	Dr. Rainer Gersonde	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	+49-471-4831-1203	+49-471-4831-1419	Rainer.Gersonde@awi.de	http://www.awi.de
2) Radio echo sounding	Dr. Detlef Damaske	Bundesanstalt für Geowissenschaften und Rohstoffe (BGR), Stilleweg 2, 30655 Hannover, Germany	+49-511-643-2692	+49-511-643-3663	d.damaske@bgr.de	http://www.bgr.de
3)						
4)						
AGCS						
1) National contact partner for AGCS	Dr. Eberhard Fahrbach	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	+49-471-4831-1820	+49-471-4831-1797	Eberhard.Fahrbach@awi.de	http://www.awi.de
2)						
3)						
4)						
EBA						
1) Member	Prof. Dr. Angelika Brandt	Zoological Museum, University of Hamburg, Martin-Luther-King-Pl.3, 20146 Hamburg, Germany	+49-40-42838-2278	+49-40-42838-393	abrandt@zoologie.uni-hamburg.de	http://www.uni-hamburg.de/fachbereiche-einrichtungen/biologie/
2) WP4	PD Dr. Julian Gutt	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	+49-471-4831-1333	+49-471-4831-1918	Julian.Gutt@awi.de	www.awi.de
3) WP1	Dr. Brigitte Hilbig	Ruhr-Universität Bochum, Universitätsstr. 150/ Geb. ND05/753, 44780 Bochum, Germany			bhilbig@senckenberg.de	
4)						

1) 2) 3) 4)	ICESTAR					
1) 2) 3) 4)	SALE					
1) 2) 3) 4)	1) National contact partner for SALE (ended in 2010)	Dr. Christoph Mayer	Bayerische Akademie der Wissenschaften, Kommission für Erdmessung und Glaziologie, Abt. Glaziologie, Alfons-Goppel-Str. 11, 80539 München, Germany	+49-89-23921-1269	+49-89-23031-1100	christoph.mayer@lrz.badw-muenchen.de http://www.glaziologie.de
1) 2) 3) 4)	AAA (2010-)					

Activity	Contact Name	Address	Telephone	Fax	Email	web site
ACTION GROUPS						
1) SCAR History Group	PD Dr. Cornelia Lüdecke	Fernpass Strasse 3, 81373 München, Germany	+49-89-7256725	+49-89-7256725	C.Luedecke@lrz.uni-muenchen.de	http://www.scar.org/about/history/
2) Census of Antarctic Marine Life (CAML) (ended in 2010)	PD Dr. Julian Gutt	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	+49-471-4831-1333	+49-471-4831-1918	Julian.Gutt@awi.de	http://www.awi.de
	Prof. Dr. Angelika Brandt	Zoological Museum, University of Hamburg, Martin-Luther-King-Pl.3, 20146 Hamburg, Germany	+49-40-42838-2278	+49-40-42838-393	abrandt@zoologie.uni-hamburg.de	http://www.uni-hamburg.de/fachbereiche-einrichtungen/biologie/
3) Marine Biodiversity Information Network (MarBIN)	Dr. Christian Schäfer-Neth	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	+49-471-4831-1554	+49-471-4831-1590	Christian.Schaefer-Neth@awi.de	http://www.awi.de
4) Cross-SSG Action Group on Prediction of Changes in the Physical and Biological Environment of the Antarctic (PCBEA)	PD Dr. Julian Gutt	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	+49-471-4831-1333	+49-471-4831-1918	Julian.Gutt@awi.de	http://www.awi.de
5) Acoustics in the Marine Environment	Dr. Olaf Boebel	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	+49-471-4831-1879	+49-471-4831-1797	Olaf.Boebel@awi.de	http://www.awi.de
6) Multibeam Data Acquisition	NN					
7) Ocean Acidification	NN					
8) Joint IASC/SCAR Bipolar Action Group	Dr. Detlef Damaske	Bundesanstalt für Geowissenschaften und Rohstoffe (BGR), Stilleweg 2, 30655 Hannover, Germany	+49-511-643-2692	+49-511-643-3663	d.damaske@bgr.de	http://www.bgr.de
9) King George Island Science Coordination Group (cross-SSGs initiative)	Dr. Hans-Ulrich Peter	Friedrich-Schiller-Universität Jena, AG Polar- & Ornitho-Ökologie, Dornburger Straße 159, 07743 Jena, Germany	+49 3641 949 415	+49 3641 949 402	Hans-Ulrich.Peter@uni-jena.de	http://www.uni-jena.de

EXPERT GROUPS						
1) Birds and Marine Mammals (EGBAMM)	Dr. Hans-Ulrich Peter	Friedrich-Schiller-Universität Jena, AG Polar- & Ornitho-Ökologie, Dornburger Straße 159, 07743 Jena, Gemany	+49 3641 949 415	+49 3641 949 402	Hans-Ulrich.Peter@uni-jena.de	http://www.uni-jena.de
	Dr. Horst Bornemann	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	+49 471 481 1862	+49 471 4831-1149	Horst.Bornemann@awi.de	http://www.awi.de
2) Continuous Plankton Recorder (CPR)	Prof. Dr. Ulrich Bathmann	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	+49-471-4831-1275	+49-471-4831-1149	Ulrich.Bathmann@awi.de	http://www.awi.de
3) Geodetic Infrastructure for Antarctica (GIANT)	Prof. Dr.-Ing. R. Dietrich	Technische Universität Dresden, Institut für Planetare Geodäsie, 01062 Dresden, Germany	+49-351-463-34652	+49-351-463-37063	dietrich@ipg.geo.tu-dresden.de	http://www.tu-dresden.de/ipg
4) Permafrost and Periglacial Environments (PPE)	NN					
5) International Bathymetric Chart of the Southern Ocean (IBCSO)	Dr.-Ing. H.-W. Schenke	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	+49-471-4831-1977	+49-471-4831-1977	Hans-Werner.Schenke@awi.de	www.awi.de
6) Antarctic Digital Magnetic Anomaly Project (ADMMap)	Dr. Detlef Damaske	Bundesanstalt für Geowissenschaften und Rohstoffe (BGR), Stilleweg 2, 30655 Hannover, Germany	+49-511-643-2692	+49-511-643-3663	d.damaske@bgr.de	http://www.bgr.de
7) Ice Sheet Mass Balance and Sea Level (ISMAsS)	Dr.-Ing. Hans Oerter	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	+49-471-4831-1347	+49 471 4831 1271	Hans.Oerter@awi.de	http://www.awi.de
8) Operational Meteorology (OpMet)	Dr. G. König-Langlo	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	0049-471-4831-1806		Gert.Koenig-Langlo@awi.de	www.awi.de
9) joint SCAR/SCOR Oceanography EG (OCEAN)	Dr. Eberhard Fahrback	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	+49-471-4831-1820	+49-471-4831-1797	Eberhard.Fahrback@awi.de	http://www.awi.de

10) Antarctic Climate Change and the Environment (ACCE)	PD Dr. Julian Gutt	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	+49-471-4831-1333	+49-471-4831-1918	Julian.Gutt@awi.de	http://www.awi.de
SCADM						
1)	Dr. Hannes Grobe	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	+49-471-4831-1220	+49-471-4831-1923	Hannes.Grobe@awi.de	http://www.awi.de
2)						
SCAGI						
1)	Dr. Antonie Haas (since 2011)	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	+49-471-4831-1501		Antonie.Haas@awi.de	http://www.awi.de
2)						
NATIONAL ANTARCTIC DATA CENTRE						
PANGAEA	Dr. Hannes Grobe	Alfred Wegener Institut für Polar- u. Meeresforschung, Postfach 12 01 61, 27515 Bremerhaven, Germany	+49-471-4831-1220	+49-471-4831-1923	Hannes.Grobe@awi.de	http://www.pangaea.de
SCAR DATABASE						
Database of the SCAR Epoch Crustal Movements Campaigns	Prof. Dr.-Ing. R. Dietrich	Technische Universität Dresden, Institut für Planetare Geodäsie, 01062 Dresden, Germany	+49-351-463-34652	+49-351-463-37063	dietrich@ipg.geo.tu-dresden.de	http://tpg.geo.tu-dresden.de/ipg/forschung/scargps/scardata.htm

**A BRIEF SUMMARY OF
SCIENTIFIC HIGHLIGHTS*:**

SSG Physical Sciences

DESY completed the IceCube Neutrino Observatory at the South Pole Amundsen-Scott base in December 2010. With data of the previously (2004-2010) deployed parts of IceCube already a variety of scientific results have been obtained for neutrino astronomy and particle physics, e.g. best limits for diffuse neutrino fluxes, neutrinos from point sources and dark matter. On top of the ice sheet 81 IceTop stations shield the digital optical modules in the ice from down-going muons created in air showers in the earth atmosphere. An unexpected result was the measurement of an anisotropy of cosmic rays in the Southern hemisphere fitting similar data in the North. A new activity of DESY together with Kiel and Potchefstroom (South Africa) universities is the study of cosmic rays in correlation with Sun activities and geomagnetic variations. The installation of a muon telescope on board of the "Polarstern" delivered a large data set during its travel to Antarctica and back in 2010. contact: Rolf.Nahnauer@desy.de

Oceanographic data obtained between 1984 and 2008 (almost all of them collected with RV Polarstern) from eight repeated hydrographic sections (moored instruments and profiling floats) in the Weddell gyre on the Greenwich meridian were used to identify variations in the Weddell Sea system. Fluctuations in the water mass properties were detected in the Warm Deep Water, with a temperature maximum in the 1990s and a minimum in 2005, but also significant variations occurred in the Weddell Sea Deep - and Bottom Waters. Whereas the Warm Deep Water is dominated by decadal variations, the average temperature and salinity of the whole water column is subject to a positive trend over 24 years. The variations of the water mass properties are induced by variations of the inflow of Circumpolar Deep Water at the boundary. Due to asymmetric wind forcing at the northern and the southern limb of the gyre, variable in- and outflows occur at the open boundaries. Internal processes redistribute heat and salt in the gyre resulting in a long-term increase of the temperature and salinity in the whole water column. The transfer of heat to deeper layers assigns to the Weddell gyre the role of a buffer, with potential impact on the global climate. contact: Eberhard.Fahrbach@awi.de

SSG Life Science

South Polar Skuas from a single breeding population at King George Island, South Shetland Islands, have been tracked. Overall, 72% of individuals migrated to the Atlantic, and 28% to the Pacific Ocean and individuals choose the same ocean in consecutive non-breeding seasons. 92% of Skuas overwintered in the northern hemisphere, in three regions in the Atlantic and two in the Pacific. Despite migrating to different oceans, birds showed a similar figure-of-eight flight pattern, and equivalent residency periods in the main wintering areas. In addition, 87% of the migrants used stopped-over at terminal staging sites off South America shortly before return to the breeding site. Although the high diversity of migration patterns may buffer South Polar Skuas from climate change and other anthropogenic threats, carry-over effects are still possible and selection for particular strategies would lead to future changes in genetic structure. contact: Hans-Ulrich.Peter@uni-jena.de

Major scientific activities of marine biology centered around the final event of the "Census of Antarctic Marine Life" in October 2010. Two main German projects were carried out in close cooperation with experts from all over the world. Within the IPY core project ANDEEP-SYSTCO the evolution, taxonomy and biogeography of the Antarctic deep-sea benthos were studied in an ecological and climate change context. The Larsen-project provided a first benchmark to investigate the Antarctic marine ecosystem under environmental stress after ice shelf disintegration. The results contributed considerably to scientific publications, workshops, conferences, book and popular presentations. Main topics focussing on the pelagic and sea-ice system were iron fertilisation, ikait, and krill. contact: Julian.Gutt@awi.de; abrandt@zoologie.uni-hamburg.de; whagen@uni-bremen.de

* Please include any scientific activities you believe might be considered bioprospecting (<http://www.scar.org/treaty/atc/mxxxiii/> see WP2)