

## **Antarctic Treaty**

### **Electronic Information Exchange System**

# Party: Germany 2014/2015 Annual Information

#### Scientific Information - Science Activities in Previous Year

**Project Name/Number:** 

Activities at Dallmann Laboratory: Assessing the ecological role of scavenging amphipods (Lysianassoidea) and their potential response in a changing polar food web (Potter Cove,

**King George Island**)

Discipline:

**Principal Investigator:** 

Main Activity/ Remarks:

C. Held (AWI)

Due to their high abundance, the amphipod scavenging guild has a key role in Antarctic food webs, both as food source for higher trophic levels and as recyclers of organic matter (Dauby et al 2001, De Broyer et al 2004). However, there is so far only scarce knowledge on their ecological role, trophic dynamics and vulnerability towards current and future environmental changes. These changes are particularly apparent in the Potter Cove (PC), which is exposed to an increasing freshwater inflow and sedimentary run-off due to glacier melt. The first objective of the field and laboratory studies was to estimate the abundance and taxonomic diversity of scavenging amphipods of different benthic habitat types in the PC using baited traps. Secondly, we investigated the ecological role and behaviour of scavenging amphipods attracted to bait by measuring feeding and succession rates in laboratory experiments. Our experiments formed the baseline for future experiments that will focus on the response of lysianassoid amphipods to changing conditions (pH, temperature) in laboratory experiments. In close cooperation with Dr. Esteban Barrera-Oro and his ichthyology group (Instituto Antártico Argentino and CONICET, Buenos Aires, Argentina) we investigated the decomposition of carcasses from the notothenid fish Notothenia coriceps, attracted to different members of the amphipod scavenger quild, the interspecific feeding behaviour of lysianassoid amphipods. Due to these experiments we could find out more about the role allocation of small and big lysianassoid species by behavioural observations. Together with Maria Liliana

Quartino (Instituto Antártico Argentino, Buenos Aires, Argentina) and her macroalgae group we tested the feeding preference and the consumption rate of the omnivore lysianassoid amphipod Cheirimedon femoratus on different food items (macroalgae Palmaria decipiens and the ice cod Notothenia rossii). Due to our investigations reported herein and our upcoming experiments in the

season 2015/2016 we aim to improve our understanding of the abundance and trophic importance of lysianassoid amphipods in Potter Cove.

Link (URL):

**Additional Information:** 

Operating Period: From: 24 Nov 2014 To: 18 Jan 2015

**Areas of Operation** 

Dallmann Laboratory

**Project Name/Number:** 

Activities at Dallmann Laboratory: Impact of global warming on Antarctic benthic algae

Discipline:

**Principal Investigator:** 

K. Zacher (AWI)

The Western Antarctic Peninsula (WAP) is experiencing the fastest rates of global warming worldwide. Surface waters at the WAP have warmed by more than 1 °C since the 1950s and are predicted to warm further into the next century. Benthic macro- and microalgae are important primary producers in this area where phytoplankton biomass is low. In this campaign we want to test how the warming is affecting the benthic primary producers in Potter Cove in multifactorial approaches. For this reason the experiments were divided in three subparts: 1. benthic microalgae PI Dr. Angela Wulff), 2. macroalgae spores and propagules (PI Dr. Katharina Zacher) and 3. young benthic algal communities containing both benthic microalgae and young developmental stages of macroalgae (PIs Dr. Katharina Zacher and Gabriela Campana). All organisms were exposed to normal and elevated temperatures in combination with other factors (grazing, light, salinity etc.). The young developmental algal stages are the most sensitive stages, forming the bottle-neck for a successful survival of the species. Furthermore, species do not exist in isolation but interspecific

Main Activity/ Remarks:

competition might play a big role driving colonization. Benthic microalgae and bacteria are the first settlers preconditioning the substratum for macroalgal propagules. The aim of these studies was to combine the results from the multi-factorial laboratory experiments on single species with results from community research and multifactorial GIS-based habitat modeling to get a more precise picture of how the changing environmental conditions will alter the polar seaweed communities in an interdisciplinary approach. SUBPROJECT 1: Benthic diatoms were exposed to different salinities and temperatures. Here is attached the abstract from the EPC6 in London: Effects of increased temperature and decreased salinity on Antarctic benthic marine diatoms Angela Wulff, Anders Torstensson, Gabriela L. Campana, Maria Liliana Quartino, Katharina Zacher The most dramatic effects of Antarctic climate change are predicted around the Antarctic Peninsula. The temperature increase and glacier retreat are already affecting the marine environment. Here, the planktonic primary productivity is not sufficient to cover the carbon demand by benthic fauna. Hence, benthic microalgal productivity is of uttermost importance for the ecosystem functioning. In an outdoor setup we tested the effects of increased temperature on benthic microalgal communities (primarily pennate diatoms) sampled from 5-7 m water depth. During 12 days, the diatoms were exposed to a temperature gradient in steps of ca 2°C, from ambient (2°C) up to ca 10°C. No effects on total cell numbers (growth) were observed (diatom composition remains to be analysed). Treatment effects in "F/Fm were found with highest yield at the highest temperature. In parallell to the out door experiment, a laboratory experiment was set-up to test the effect of decreased salinity from ambient salinity 33 to 21 units. Over 11 days, no treatment effects on cell number (growth) or photosynthetic activity (Fv/Fm) were observed. Therefore, an additional treatment with salinity 14 was set-up. Only Fv/Fm was tested but over 7 days, again no treatment effects were observed compared to the control. However, significantly lower NPQ values were found for salinity 33. Samples for analyses of bacterial biomass, photosynthetic pigments (HPLC), lipid peroxidation (thiobarbituric acid reactive substances (TBARs) assay) and biomass of heterotrophic bacteria are currently transported to Sweden. In conclusion, our preliminary results show that the benthic diatoms studied have a wide tolerance to rapid changes in both temperature and salinity, and as a community these diatoms do not seem affected by effects of the ongoing climate change around King George Island. SUBPROJECT 2: Spores of the brown alga Adenocystis utricularis were exposed to a two-factorial approach: a) 2° and 6° C and 15 and 30 µmol PAR (photosynthetic active radiation). Germination and a possible gametogenesis was observed over 2 weeks. None of the developing gametophytes became fertile during this time in contrast to temporal or Arctic algae. Filaments of gametophytes growing under more light and higher temperature, however, grew faster. SUBPROJECT 3: This part was already presented in a congress in Ushuaia, Argentina by Debandi, Zacher, Campana, Deregibus and Quartino. For the experiment 5x5 cm tiles were installed in the field one year prior to the start. Young algal communities were then exposed in the laboratory to three different factors: 1. Sedimentation (no and 100 mg/L), 2. Grazing (no and grazing by the limpet Nacella cocinna) and 3. Temperature (2° and 6°C). Species composition, biomass, growth rates of Palmaria decipiens and maximum quantum yield were measured. There were complex interactions between the different factors and the experiment is currently analyzed.

Link (URL):

**Additional Information:** 

Operating Period: From: 15 Jan 2015 To: 08 Feb 2015

**Areas of Operation** 

Dallmann Laboratory

**Project Name/Number:** 

Activities at Dallmann Laboratory: Population genetics of storm petrels Oceanites oceanicus and Fregetta tropica and response to climate change

Discipline:

**Principal Investigator:** 

P. Quillfeldt (University of Giessen, Germany)

The circumpolar breeding range of Wilson's and Black-bellied Storm-petrels includes islands of the Scotia Archipelago, through the southern Indian Ocean to the Antipodes Islands (New Zealand), including subantarctic islands from Cape Horn (Chile) east to the Kerguelen Islands (Southern Indian Ocean), and also includes coastal Antarctica. Due to their small size and nocturnal life, they are still relatively little studied. The biology of the species has been studied between 1996 and 2000 at the Tres Hermanos, and this has been the first thorough investigation of these species after initial studies in 1940 and 1970. Following on from this previous work and a recent study by Dr. N. Coria and students, we would now suggest following up this work, especially in the framework of changes in the food availability due to climate change. We also propose to use newly available technology (miniature geolocation loggers) to follow migration directly. Further, we will collect samples for a planned study of the genetic structure of the population in the circumpolar context. Scientific lines of the project: 1. Population genetics – genetic variability and population connectivity with populations at Kerguelen (Southern Indian Ocean) and other Antarctic sites 2. Migration ecology – using GLS loggers and stable isotope analysis 3. Historical migration ecology – using stable isotope analysis of museum and recently collected samples

Link (URL):

**Additional Information:** 

Main Activity/ Remarks:

Operating Period: **From:** 01 Feb 2015 **To:** 01 Mar 2015

**Areas of Operation** 

Dallmann Laboratory

Activities at Dallmann Laboratory: Rapid climate warming effects on the relation between **Project Name/Number:** 

benthic biodiversity and biogeochemical functioning

Discipline:

**Principal Investigator:** Ann Vanreusel and U. Braeckmann (University of Ghent), F. Wenzhöfer (AWI, MPI)

> bioturbation) on biogeochemistry in polar marine ecosystems in a rapid climate warming context. Potter cove, situated on the Western Antarctic Peninsula, is influenced by the Fourcade Glacier that has been actively retreating since the 1950s (Moll et al. 2006). Several contrasting benthic habitat types are present within the bay. Although bathymetric and granulometric characteristics are identical, the sediment-inhabiting fauna community composition is very different, ranging from colonist to medium developed benthic communities in a gradient from the melting glacier that once fully covered Potter Cove (Pasotti et al. 2014). This raises questions regarding the impact of

We aim to investigate the influence of sea floor biodiversity (both taxonomic and functional:

increased melt water run-off, higher concentrations of suspended matter, increase in macroalgal biomass and elevated sea water temperatures on benthic biogeochemistry and bioturbation of the contrasting sites. During this campaign, we would like to perform in situ measurements of carbon mineralization and benthic primary production (oxygen consumption and production, DIC and nutrient fluxes) as well as in situ microprofiling of oxygen, pH and H2S in the sediment and perform

a laboratory experiment on the degradation of algal biomass within the sediment community.

Link (URL):

**Additional Information:** 

Main Activity/ Remarks:

**Operating Period:** From: 15 Jan 2015 To: 14 Mar 2015

**Areas of Operation** 

Dallmann Laboratory

Activities at Juan Carlos: Biological soil crust algae in Polar Regions

Discipline:

**Principal Investigator:** 

PI: K. Komsic-Buchmann (U Cologne), Prof. Dr. Ulf Karsten (University of Rostock), PD Dr. Burkhard

Becker (University of Cologne), Prof. Dr. Burkhard Büdel (University of Kaiserslautern)

Terrestrial green algae and cyanobacteria are typical and abundant components of biological soil crusts in the polar regions. These communities have important ecological roles in primary production, nitrogen fixation, nutrient cycling, water retention and stabilization of soils. Although available data on green algae and cyanobacteria are generally very limited for the Antarctic, their functional importance as ecosystem developers in nutrient poor environments is regarded as high. Therefore, the main goal of the interdisciplinary project is, for the first time, a precise evaluation of their biodiversity and ecophysiological performance. Temperature and water availability, two key environmental factors for terrestrial organisms, are currently changing in the Antarctic due to global warming, and hence their effect on growth and photosynthesis response patterns will be comparatively investigated. During the field stay we took soil crust samples at about 20 terrestrial locations after the snow melting season. During a research stay on Livingston Island in January/February 2015, soil crust samples were collected within 3 days around the station Juan

Carlos I. At each collecting point always 5 replicates were taken. Air-dried soil samples can be kept

vital for at least 6-12 months under dry, cool and dark conditions. After arrival in Germany they will be further processed according to existing experience.

Link (URL):

**Additional Information:** 

Main Activity/ Remarks:

**Operating Period:** From: 02 Feb 2015 To: 11 Feb 2015

**Areas of Operation** 

Juan Carlos I

**Project Name/Number:** 

Activities at Kohnen Station: AMAK (Aerosol Measurements At Kohnen)

Discipline:

**Principal Investigator:** 

Rolf Weller (AWI)

The main objective of our air chemistry research activities this season was to initiate a periodic intensive aerosol measuring program during summer campaigns at the EPICA drilling site in Dronning Maud Land (Kohnen Station, 75°00'S, 0°04'E). Up to now, previous results from this site were restricted to the bulk chemical (ionic) composition of the aerosol, obtained during four summer campaigns and four year-round aerosol sampling by an automated aerosol sampler. Our new initiative started at 14 January 2015 and ended at 4 February 2015. The focus of our research activities was on the dynamics of particle concentration and particle size distribution combined with size segregated aerosol sampling dedicated for chemical analysis. In order to assess aerosol source apportionment, long range transport, and finally deposition on the Antarctic plateau, it is necessary to characterize such relevant physical and chemical aerosol properties. As for the aerosol sampling program, we installed one low-volume aerosol sampler and a Berner type impactor. These measurements started at 17 January. All in all, during the pretty short duration of the campaign of less than three weeks, five impactor samples with a respecting sampling period of three days and 16 low volume bulk aerosol samples (on teflon/nylon filter combinations) with daily resolution were obtained. These samples are dedicated for ion chromatography analyses (ions to be determined: CI-, SO42-, NO3-, methane sulfonate, Na+, K+, Mq2+, Ca2+, and NH4+), which will be performed at the AWI soon after return. In addition, a scanning mobility particle sizer (SMPS) was implemented to measure particle size distributions in the range between 2.5 nm and 65 nm during the first half (16 Jan. through 27 Jan.), and from 9.5 nm to 480 nm during the second half of the campaign (27 Jan. through 2 Feb.), respectively. These measurements were completed by condensation particle (CP) measurements, capturing the total particle number concentration between 4 nm and 3.5 µm. A preliminary analysis of the latter in situ experiments revealed that during the impact of an extensive low pressure system dominating the weather situation between 18 and 22 January, the dynamics of

particle number concentrations as well as their size distribution showed a striking variability

Main Activity/ Remarks:

Link (URL):

**Additional Information:** 

Operating Period: From: 14 Jan 2015 To: 04 Feb 2015

**Areas of Operation** 

indicating most probably regional new particle formation.

Kohnen Station

Activities at Kohnen Station: Coldest Firn 2014/15 (CoFi1415)

Discipline:

**Principal Investigator:** 

S. Kipfstuhl (AWI)

During the season 2014/15 the main focus was to take snow and firn core down to a depth of  $\sim 3$  m along two trenches 500 m apart to study the seasonal distribution of the water isotopes and their variability in high areal and vertical resolution. Two trenches each 50 m long were excavated by a snow blower. The snow walls were sampled classically for isotope profiles (vertical and horizontal resolution: 3 cm and 5 m, respectively). Snow and firn cores were taken every meter. Density and electrical conductivity of the top 2 m were determined on the cores in a DEP-bench (DiElectric

Main Activity/ Remarks:

electrical conductivity of the top 2 m were determined on the cores in a DEP-bench (DiElectric Profiling) every meter to derive the density layering. A set of 30 cores was shipped home to Bremerhaven to determine density by computer tomography in sub-millimeter resolution. The snow of these cores is analysed for water isotopes and ions. The snow height along and between the two trenches was as well as along two 100 m long profiles where the accumulation, the specific surface area of the snow and its density were measured every meter several times during the season to learn more about the evolution of the snow pack.

Link (URL):

**Additional Information:** 

Operating Period: From: 08 Jan 2015 To: 04 Feb 2015

**Areas of Operation** 

Kohnen Station

Project Name/Number: Activities at Neumayer Station: Antarctic Fast Ice Network (AFIN) - Sea ice properties in

**Atka Bay** 

Discipline:

Principal Investigator: M. Nicolaus (AWI)

In the framework of the Antarctic Fast Ice Network (AFIN) physical properties, thickness and extend of sea ice and its snow cover are determined over the entire Atka Bay. These measurements are performed each year since 2010. The work will be performed mainly and as a matter of routine by the wintering team of the Neumayer station. The measurements in the Atka Bay provide the German contribution to the international sea ice program AFIN. Extensive reports and results can be found under http://epic.awi.de/ (for example Hoppmann et al., 2012, http://epic.awi.de/30991/). The planned measurements contain a large variety of methods: 1) Snow and Ice thicknesses: The thicknesses of snow and ice are measured manually by drillings and with electromagnetic

noninvasive methods. For this, repeated measurements are performed at defined stations on the ice as well as along transects over the sea ice. In addition, the thickness of the platelet ice layer (loose ice platelets, accumulating under sea ice) is determined. 2) Weather/ Radiation station: The weather and radiation conditions are registered with an automatic station deployed on the sea ice. These stations are regularly maintained through the season. 3) Thermistor buoy: The mass balance

of the sea ice is measured with an autonomous thermistor chain. It records temperature and thermal conductivity from air, snow, sea ice and water. The data are transferred directly to Bremerhaven. When the sea ice breaks out, the buoy will drift from Atka Bay towards the Weddell Sea. 4) Ice cores: Temperature, texture and salinity of the sea ice will be determined by drilling ice cores during end of the measurement season. Some measurements will be performed directly on the ice, additional cores will be transported to Bremerhaven for further analysis and for archiving. 5)

The planned CTD measurements were not performed.

Link (URL):

**Additional Information:** 

Main Activity/ Remarks:

Operating Period: From: 01 May 2014 To: 30 Apr 2015

**Areas of Operation** 

Atka Bay, close to Neumayer Station III

**Activities at Neumayer Station: CHOICE** 

Discipline:

**Principal Investigator:** 

A. Chouker (LMU Munich)

The vulnerability of totally isolated wintering groups in Antarctica is a concern alike of those needing major consideration when planning health care and health monitoring during long-term space flights, manned lunar exploration and potential future "extraterrestrial" settlement. Beside the consequences of confinement on stress-dependent immune-modulation, hypobaric hypoxia may add to alter immunity and potentially aggravate immune suppression. The CHOICE project at CONCORDIA and NEUMAYER III will increase knowledge on the physiological adaptation of humans'

CONCORDIA and NEUMAYER III will increase knowledge on the physiological adaptation of humans health and immunity during long-term confinement in the presence or absence of hypobaric hypoxia, respectively. Because oxygen tension is a major variable affecting any cells' function and hereby impacting health and immunity, the Antarctic Missions are of high significance for future

Space application as both appear to be of comparable nature. This might be of importance especially in the light of future lunar missions. The project element run at Neumayer III will increase this knowledge on the physiological adaptation of human's health as it serves as a normoxic control to the effects as measured previously under similar confined but hypobaric hypoxic conditions at the

Concordia base from 2008 to 2010 and now again in 2015 to 2018.

Link (URL):

Additional Information:

Main Activity/ Remarks:

Operating Period: From: 01 Nov 2014 To: 31 Oct 2015

**Areas of Operation** 

Neumayer Station III

Project Name/Number: Activities at Neumayer Station: Geophysics Observatory at Neumayer-III and remote

seismographic stations

Discipline:

Principal Investigator: A. Eckstaller (AWI)

a) Seismology The primary objective of the seismographic observations at Neumayer-III (NM) is to complement the worldwide network of seismographic monitoring stations in the southern hemisphere. Special interests focus on the detection of local and regional earthquakes within Antarctica. Long term monitoring of regional seismicity over many years may eventually allow a rather detailed mapping of seismic active regions within the Antarctic plate. This will contribute to a better understanding of current neotectonic processes in Antartica. The local seismographic network at Neumayer-III Station comprises the Geophysics Observatory VNA1 near NM itself and 2 remote stations VNA2 and VNA3 on the ice rises Halvfar Ryggen and Søråsen, resp. Still unique in Antarctica is the small aperture detection array with 15 vertical seismometers placed on three concentric rings with a total diameter of almost 2 km at station VNA2. This array is a powerful tool for monitoring local and regional seismicity. Additionally we operate some more unattended seismographic broadband stations in Dronning Maud Land. These stations are located at the Russion base Novolazarevskaya, at Kohnen Station, near Weigel Nunatak and at the Swedish summer base Svea. The seismic broadband station at SanaeIV is also included into the larger seismographic network. Additional recordings from seismic stations in and around Antarctica are retrieved from internet and are very helpful for reliable localizations of Antarctic earthquakes. As in previous years both remote stations VNA2 and VNA3 were serviced during austral season 2013/14 by members of the wintering team and a summer season team leader. Again more efforts were made to improve the 12V DC power supply at remote station VNA2. A third windturbine was installed at on of the container posts and the total battery capacity was raised to 1600 Ah. Thermal insulation of the batteries and heating them using excess windturbine energy was additionally improved. A simple W-Lan based remote control was installed for switching the wind turbines on or off. Windturbines are shortcut during summer whenn sufficient solar power is available. This reduces the risk of damage and wearing of the bearings. For easier installation works the array container of station VNA2 was towed to the base for approx. 3 weeks in January 2014. No recordings at site VNA2 could be made during this period. Remote station VNA3 operated without any interruption also in 2013. However, the seismometer signal shows strange almost monchromatic and persistent long period disturbances on both horizontal components with slightly varying periods in the range between 80 -100 sec. A change of the seismometer in mid-May 2014 was without any success. The reason for these "unpleasant" noise contamination is completely not clear yet. Eventually unknown electromagnetic disturbances from the power management system are coupling into the feedback system of the seismometer. Thus very long period surface wave recordings are contaminated at the moment by this effect. More efforts to eliminate these disturbances will be made again starting in August 2014. Servicing Kohnen Station and Weigel Nunatak was carried out by a team member of the Kohnen traverse team. Data retrieval at the Novolazarevskaya seismic station was made by the science officer in charge after arriving from Cape Town. A one-day trip to Svea with a Twin Otter aircraft

was made to service the seismic station there. Some field explorations in the vicinity of Svea station

Main Activity/ Remarks:

were made by 3 two-man-teams to look for suitable locations for the eventual installation of a local autonomous seismic stations network in this area. b) Geomagnetism The new Geomagnetic Observatory at Neumayer-III was built during January and February 2009 and the routine observations were carried on at the new site with just a rather short data gap. During summer season 2011/2012 a second 3-component fluxgate magnetometer was installed. It is a standard FGE fluxgate sensor which is the current worldwide observatory standard. This second sensor was placed on top of a deeply frozen in, stable pillar outside the measuring hut. The geomagnetic observatory comprises now a NS orientated STL 3-component sensor and a second FGE sensor oriented in magnetic North direction. A GSM-19 Overhauser proton-magnetometer is used for recording total intensity. All systems run at a sample rate of 1 second. For better absolute measurements of the field components also a second declinometer was installed on a stable pillar outside the measuring container housing. These measurements are now free from vertical deflections by walking around the tripod which sometimes cause some reading errors. Continuous routine recording of the second system started in July 2013. We are applying to become a member of Intermagnet, an international geomagnetic union. With the new FGE magnetometer we hopefully will fulfill the Intermagnet requirements for high data quality. During summer season 2013/2014 parts of the side walls of the observatory's firn cavern were reshaped again by cutting out of approx. half a meter. This was necessary because the side walls are slowly bulging out with time due to the flow and deformation of the firn. c) Contiunuous GPS recordings were carried on are now available sind beginning of July 2012. This is accomplished using a 2-band Ashtec Z-12 receiver with its antenna on the roof of Neumayer-III. Converted data in Rinex format are available on request and might in future be downloaded from a web interface. These GPS recordings have been relaunched because they provide valuable informations for higher atmosphere reasearch.

Link (URL):

Additional Information:

Operating Period: From: 10 Dec 2013 To: 26 Feb 2014

**Areas of Operation** 

Project Name/Number:

Activities at Neumayer Station: Geophysics Observatory at Neumayer-III and remote

seismographic stations: Maintenance Airchemistry Observatory

Discipline:

**Principal Investigator:** Rolf Weller (AWI)

> Apart from the routine measuring program established at the Air Chemistry Observatory, a so-called ToF-ACSM (Time of Flight Aerosol Chemical Speciation Monitor) from the Finnish Meteorological Institute (FMI, PI: Risto Hillamo) was installed in early December 2014 and will be in operation during the forthcoming over-wintering season 2015. With this instrument we aim at a chemical speciation of the aerosol, in particular concerning organic compounds. For the first time such a highly sophisticated instrument will be operated throughout a year in Antarctica. Primarily for the characterization of organic aerosol compounds, this experiment has to be regarded as a feasibility study due to the expected extremely low concentration levels. Apart from this experiment, our scientific summer activities concentrated also on cloud condensation nuclei (CCN) measurements, again in co-operation with the FMI which provided a CCN-counter. Unfortunately, this instrument

> broke down in late December, but could be repaired a few weeks later after respecting spare parts have been shipped to Neumayer by Dromlan flight D8. After overhaul, an ozone monitor was successfully re-installed in early January. Finally, we accomplished the usual maintenance operation at the Air Chemistry Observatory as well as training of the new air chemistry over-winterer Bettina

Nekat.

Link (URL):

**Additional Information:** 

Main Activity/ Remarks:

**From:** 18 Dec 2014 **To:** 24 Feb 2015 **Operating Period:** 

**Areas of Operation** 

Activities at Neumayer Station: Long term gamma dose rate measurements under **Project Name/Number:** 

extreme conditions

Discipline:

**Principal Investigator:** Dr. Roger Luff (Bundesamt für Strahlenschutz, Rendsburg)

> The probe installed at Neumayer is the standard BfS probe equipped with 2 Geiger-Müller tubes for high and low count rates. It measures automatically and continuously the environmental gamma dose rate. It registers the radiation to get the terrestrial as well as the cosmic component of the

Main Activity/ Remarks:

gamma radiation. Moreover the probe measures the temperature and the air pressure in the probe housing for quality insurance. Due to the extreme weather conditions (temperatures below -55°C) one of the goals is to find out, if the hardware developed by BfS can be used under these extreme conditions and to find out what kind of problems occur if it does not work to find new kind of "error responses" from the system. The other goal is the detection of the radioactive flux from the cosmic radiation originating from the sun and from outer space. It is subject to a complex process of interaction with the earth's magnetic field and atmosphere. Most of this radiation is attenuated and only a small fraction reaches the earth's surface as ionizing radiation. At ground level, it contributes to the total measured ambient dose rate between 15%-50%. It is modulated by atmospheric pressure, the solar cycle and, occasionally, by solar flare events. Dose rate probes of similar response to cosmic radiation at different latitudes will help to understand the characteristics of the temporal variability of cosmic radiation and to better separate these effects from other environmental parameters.

Link (URL):

**Additional Information:** 

Operating Period: From: To:

**Areas of Operation** 

**Activities at Neumayer Station: Meteorological observatory** 

Discipline:

**Principal Investigator:** 

Main Activity/ Remarks:

Gert König-Langlo

The meteorological observatory programme at Neumayer is ongoing. It includes: • 3-hourly routine synoptic observations, • daily upper-air soundings, • weekly ozone soundings, • continuous surface radiation and mast measurements, • satellite picture reception (HRPT). • training of the over winterer staff. • preparation of the over wintering period 2015. DROMLAN Weather forecast service Established in season 2002/03, the meteorological observatory of the German Antarctic station Neumayer offered a detailed and individual weather forecast service for all activities in Dronning Maud Land. This service is performed in close cooperation between the Alfred-Wegener-Institute for

Maud Land. This service is performed in close cooperation between the Alfred-Wegener-Institute for Polar and Marine Research (AWI) and the German Weather Service (DWD). During the summer season 2014/2015 several thousand forecasts get performed for field parties, ships, stations and especially aircrafts. It is obvious, that this service increased the safeness of the ambiguous projects in the Dronning Maud Land. Furthermore, it helps to reduce weather induced idle times of expensive

flight operations to a minimum. The service will start again in November 2015.

Link (URL):

**Additional Information:** 

Operating Period: From: 01 Oct 2014 To: 30 Sep 2015

Areas of Operation

**Project Name/Number:** 

Activities near Novolazarevskaya: Ground-based geodetic observations for the calibration

and validation of Cryosat-2 data (Cryosat-2 Cal/Val)

Discipline:

**Principal Investigator:** 

Main Activity/ Remarks:

M. Scheinert (TU Dresden)

The European satellite CRYOSAT-2 was launched on April 8, 2010. This mission aims to investigate the polar regions, especially to infer ice surface heights and sea-ice thickness, and to contribute to the study of ice mass changes. For the calibration and validation terrestrial and airborne observation campaigns have to be carried out. While AWI Bremerhaven focused on airborne operations, TU Dresden collected ground-based GNSS data at bare ice ("blue ice") areas south of Schirmacher Oasis, central Dronning Maud Land. These data are processed in close cooperation with AWI

Glaciology (CryoVex campaign, V. Helm) and serve as a sound basis for the calibration and

validation of CRYOSAT-2.

Link (URL):

**Additional Information:** 

Operating Period: From: 18 Nov 2014 To: 05 Feb 2015

**Areas of Operation** 

Novolazarevskaya, Schirmacher Oasis

**Project Name/Number:** 

**Dallmann Laboratory** 

Discipline:

Principal Investigator:

Main Activity/ Remarks:

Th. Brey (AWI)

During the last campaign research was centered on the influence of global and local climate change on selected biota and the whole ecosystem. In particular, the effects of UV radiation, rising temperatures and of climate-induced intensified input of meltwater on marine communities were studied. The latter research activity is a major part in the ESF project IMCOAST: "Climate change Impact in the Coastal Environment". IMCOAST is an interdisciplinary activity, linking causes and effects within the presently observed rapid climate change scenario in the marine coastal environment of the Maritime Antarctic, IMCOAST builds directly on IPY-34 clicOPEN (climate change

environment of the Maritime Antarctic. IMCOAST builds directly on IPY-34 clicOPEN (climate change in coastal areas of the Antarctic Peninsula), and constitutes a high-resolution investigation of the hierarchical chain of effects produced by regional warming, the retreat of tide water glaciers on the coastal sedimentary environment, patterns of deposition and sediment transport to the open ocean. Effects of changes in coastal run-off will be linked to the observed shifts in the coastal biosphere,

including experimental cause-effect studies of water column and benthic systems.

Link (URL):

**Additional Information:** 

Operating Period: From: 01 Nov 2013 To: 30 Apr 2014

**Areas of Operation** 

Project Name/Number: Fildes Peninsula

Discipline:

**Principal Investigator:** H.-U. Peter (University of Jena, Germany)

Aim of the project "Current environmental situation and management proposals for the Fildes Peninsula Region" is the continuation of an updated standardized assessment of fauna and flora of

the Fildes Peninsula and Ardley Island with focus on birds and seals. Any considerable

environmental changes were analyzed to keep the scientific data base up to date and usable during the process of discussion on international level about protection measures. Within this project the monitoring of penguins (Pygoscelis spec.) and Southern Giant Petrels (Macronectes giganteus) was continued. The first aim of the project "Population ecology and migration of Antarctic Skuas" on Fildes Peninsula was the continuation of the long-term project on the population ecology of both

skua species and hybrid pairs. The project "Monitoring of penguin colonies with remote sensing methods" included a satellite based quantification of changes in penguin colonies including high-quality ground-truthing data. We used UAVs to provide a precise and efficient method to map penguin colonies. By generating high resolution Digital Surface Models (DSM) as well, a more

precise orthorectification of satellite images was possible.

Link (URL):

**Additional Information:** 

Main Activity/ Remarks:

Operating Period: From: 01 Oct 2014 To: 28 Feb 2015

**Areas of Operation** 

Bellingshausen Station (Russia)

Geomorphology and Glacial Geology of the James Ross Island Archipelago and South

**Shetland Islands, Northern Antarctic Peninsula** 

Discipline:

**Principal Investigator:** 

Main Activity/ Remarks:

G. Kuhn (AWI), J. Strelin (Instituto Antártico Argentino and Universidad Nacional de Córdoba)

The geomorphological and glacial-geological studies of South Shetland Islands (SSI) provide an incomplete paleoenvironmental reconstruction of the insular NW margin of Antarctic Península (AP) and hence only a limited comparison (correlation) is possible with the NE side, particularly with the James Ross Island Archipelago (JRIA) located in the wind shadow of the AP mountain chain. Recently obtained multibeam marine ground registers and sediment cores provide an accurate outline of the LGM and deglaciation (Termination 1) time period on both sides of AP, but chronology by radiocarbon ages are subject to uncertainty because of large reservoir age and recycled detrital carbon contamination. Accordingly, the aim of our project is to improve these ages by employing "on land" geomorphological, glacial geological and geo-chronological techniques on both sides of AP, trying to reconstruct the history of their paleo-landscape and climatic evolution. The herein obtained results will be contrasted with those obtained in Margarit Bay region in the SW of Antarctic Peninsula and further N with the Scotia Arc, Tierra del Fuego and southern Patagonia. During CAV 2015, in the aim of this project, we continued the detailed geomorphological mapping, scale

1:25000, with field control of erosive and depositional landforms, mainly glacial, marine littoral, and periglacial; and dug and interpreted several stratigraphic sections, with facies descriptions and

samples collection for radiocarbon, OSL and EA absolute chronology dates.

Link (URL):

**Additional Information:** 

**Operating Period:** From: 18 Jan 2015 To: 27 Feb 2015

**Areas of Operation** 

Bellingshausen Station (Russia)

**Project Name/Number:** 

MOGS2

Discipline:

**Principal Investigator:** 

Main Activity/ Remarks:

A. Läufer and C. Kasch (BGR), V.Cincotti and G. De Rossi (RNRA S.C.r.l., Rome)

the Lillie Marleen Hut in 1980, it was originally erected as a bivouac hut during the GANOVEX III expedition in 1982/83 and then extended and converted into a summer station during GANOVEX V (1988/89). The main building consists of 16 interconnected 20-foot containers. Gondwana Station is accessible by ship or an aeroplane capable of landing on the sea ice in Terra Nova Bay. Gondwana Station was used as the main base during numerous BGR expeditions to northern Victoria Land, most recently during GANOVEX X (2009/10). After more than 25 years of its existence, BGR will conduct major renovation and modernization work is needed. Particularly, the power engineering facilities, water supplies and waste management system need to be modernised. The main renovation/modernization work is planned for the 2015/16 Antarctic season (MOGS 3) with the logistic support of the Italian National Antarctic Research Programme (PNRA). In advance to the main phase, BGR and PNRA personnel led by BGR's chief logistics manager Christoph Kasch carried out major preparations for the main 2015/16 construction phase already in the 2014/15 season (MOGS 2, 20-Oct- to 20-Nov-2014) in order to keep the calculated time plan and to re-open the station in February 2016. The work carried out during MOGS 2 mainly involved the removal of all items used for energy and water supply and waste management of the station (generators, sanitary equipment, water and waste management facilities) and all related installations in and outside the station. These items will be replaced by new installations meeting modern energetic and environmental standards during the MOGS 3 campaign in the 2015/16 season. All material was sorted packed and moved to Mario Zucchelli Station for storage and further treatment/disposal. Dangerous items (HAZMAT) were treated and disposed of by Mario Zucchelli Station personnel.

The Gondwana Station of BGR is located on Gerlache Inlet of Terra Nova Bay in the Ross Sea, Like

Link (URL):

**Additional Information:** 

**Operating Period:** From: 20 Oct 2014 To: 20 Nov 2014

**Areas of Operation** 

Gondwana Station

Project Name/Number: Polar 6 Science Discipline:Airborne CampaignPrincipal Investigator:D. Steinhage (AWI)

During the season 2014/15 POLAR 6 made 69 flights in Antarctica and on the ferry in 105 days. In total, 181 h were flown for two of the three scientific projects CryoVEx (37 h), WEGAS (144 h). No flights were possible for the RecFil project. Logistics flights totalled 23 h. There were no ferry-only flights within Antarctica. The ferry to and from Antarctica (Novo runway) lasted about 93 h. The logistic flights were carried out for support of CoFi WEGAS and DROMLAN, flying ice cores from Kohnen to Neumayer, and fuel, personnel and equipment between various stations. During the course of the austral season 2014/15 seven stations and a field camp were visited, including the ferry to and from Dronning Maud Land. For the most part, there were enough days of good flying conditions for the project aims to be met: • 2 survey flights as part of CryoVEx from Rothera. • 2 survey flights as part of CryoVEx from iStar camp • 1 survey flight as part of CryoVEx from Union Glacier • 1 survey flight as part of CryoVEx from Halley • 1 survey flight as part of CryoVEx from Neumayer • 2 survey flights as part of CryoVEx from Novo • 2 survey flights as part of WEGAS from Novo • 26 survey flights as part of WEGAS from the Belgian base Princess Elisabeth. • 2 test and calibration flights as part of WEGAS from Novo. • 1 survey flight from Novo as part of WEGAS. • 1 survey flight from Kohnen as part of WEGAS. The single long pre-survey flight of RecFil was not completed, owing to a combination of survey equipment failure, logistical difficulties related to a generator failure at Halley Station, and bad weather between Neumayer, Halley and the Filchner Ice Shelf. In detail: CryoVEx 2 survey flights each from Rothera (one combined with testing, one with ferry), iStar camp (one combined with ferry), and Novo, and single flights from Union Glacier, Halley and Neumayer (all including ferry segments), were conducted for the project CryoVEx. These flights yielded new data with the ASIRAS, accumulation radar, snow radar, laser scanner, nadir video and photo camera, IR thermometer, 50 Hz and 1 Hz geodetic GPS receiver, basic meteorology (temperature, humidity, wind, pressure), and AIMMS20 instruments. WEGAS After completing two flights out of Novo, one for testing and configuration and one for testing and ferry purposes, WEGAS was based mostly out of the Belgian Princess Elisabeth Station. The survey continued the WEGAS flight pattern in Dronning Maud Land, returning ice thickness radar, accumulation radar, gravity, magnetic, laser scanner, nadir video, 50 Hz and 1 Hz geodetic GPS receiver, basic meteorology (temperature, humidity, wind, pressure) data. In particular, this survey saw the first successful deployment of AWI's new airborne gravity meter. Two flights, comprising a round trip to Novo from Princess Elisabeth, were used for a combination of fuelling and gravity data collection. Two flights, comprising a round trip to Kohnen from Princess Elisabeth, were used for a combination of equipment and personnel ferry, and survey. The data contribute to AWI and BGR's ongoing study of regional tectonics and satellite validation as well as contributing to local ice thickness data, surface and sub-glacial topography data sets. RecFil The ice-thickness measuring flight over the Filchner-Ronne Ice Shelf, already postponed from the previous season, could not be carried out this season either. Logistic support On 9 logistic flights equipment and personnel was moved from Kohnen and Novo to Neumayer. Scientific equipment: 26 November - 10 December 2014: ASIRAS, accumulation radar, snow radar, laser scanner, nadir video and photo camera, IR thermometer, 50 Hz and 1 Hz

Main Activity/ Remarks:

Link (URL):

**Additional Information:** 

Operating Period: From: 18 Oct 2013 To: 16 Feb 2014

**Areas of Operation** 

meteorology (temperature, humidity, wind, pressure).

Project Name/Number: pRES - phase sensitive radio-echo sounding measurements at selected sites

Discipline:

**Principal Investigator:** D. Steinhage (AWI)

The pRES measurements were restricted for logistical reasons to the area around Kohnen and Neumayer station. Further pRES measurements at Neumayer station are planned for the austral

winter. They will be carried out by the geophysicists of the wintering team currently at Neumayer.

geodetic GPS receiver, basic meteorology (temperature, humidity, wind, pressure), and AIMMS20 instruments 13 December 2014 - 19 January 2015: Ice thickness radar, accumulation radar, gravity

meter, magnetics, laser scanner, nadir video, 50 Hz and 1 Hz geodetic GPS receiver, basic

Link (URL):

**Additional Information:** 

Operating Period: From: 10 Jan 2015 To: 08 Feb 2015

**Areas of Operation** 

Neumayer Station III

Kohnen Station

RAE60 -Geodetic investigations in the region of subglacial Lake Vostok

Discipline:

**Principal Investigator:** 

Main Activity/ Remarks:

M. Scheinert (TU Dresden)

order to determine horizontal ice flow velocity vectors and height changes of the ice surface. These observations allow conduct detailed glaciological analysis with regard to the flow regime at the deep ice core of Vostok station. Furthermore, in the course of the scientific traverse Vostok – Progress geodetic GNSS observations serve as a basis for a detailed investigation of ice mass changes when compared to earlier observations made in that region. The ground-based measurements serve also as a means to validate observations respectively products of satellite altimetry. These investigations are carried out in the framework of a joint, long-term German-Russian cooperation which involves the Arctic-Antarctic Research Institute / Russian Antarctic Expedition (AARI/RAE, head: V. Lukin), St. Petersburg, and OAO Aerogeodeziya (Director General: A. Matveev), St. Petersburg.

At the region of the subglacial Lake Vostok repeated geodetic GNSS observations were carried out in

Link (URL):

**Additional Information:** 

Operating Period: From:

**From:** 06 Dec 2014 **To:** 24 Feb 2015

**Areas of Operation** 

Russian Antarctic Station Vostok

**Progress Station** 

Project Name/Number: SPOT (Single Penguin Observation & Tracking), maintainence of a temporary fotographic

penguin observatory

Discipline:

**Principal Investigator:** Daniel Zitterbart (AWI)

This project aims to understand the reorganization process in penguin huddles and the implications for social thermoregulation. We operate a remote-operated penguin observatory including hard- and software for fast image acquisition and real-time processing. The observatory will be capable of detecting the whole huddle, as well as tracking the movements of thousands of individual penguins throughout the winter. An accurate count of animals within the colony and the size of individual

animals is will recorded, and together our data will help to estimate how the increasing environmental strain such as ongoing climate changes, thinning sea ice and reduced krill availability,

is affecting Emperor penguins.

Link (URL):

**Additional Information:** 

Main Activity/ Remarks:

Operating Period: From: 01 Feb 2014 To: 01 Feb 2015

**Areas of Operation** 

**Project Name/Number:** 

VELMAP

Discipline:

**Principal Investigator:** Prof. Dr. Matthias Braun, Thorsten Seehaus (University Erlangen-Nürnberg)

The aim of the project is to improve the estimates of mass discharge from Antarctic Peninsula glaciers using time series of SAR satellite imagery from the archives (ERS I/II, ENVISAT, Radarsat-1, ALSO PALSAR) as well as data from current sensors like TerraSAR-X/TanDEM-X and Sentinel-1a. Changes in glacier extent and surface velocities are derived from the SAR data. Digital elevation models are interferometrically derived from TanDEM-X bistatic SAR acquisitions to calculate surface

Main Activity/ Remarks: elevation changes in combination with ASTER and SPOT Spirit data. These datasets are

complemented by in-situ data including DGNSS surveys, surface mass balance measurements and time lapse cameras photo series as well as survey flights with airborne laser altimetry and ground penetrating radar (by AWI Polar-6, NASA Operation IceBridge). Main target areas are the tributary glaciers draining into the former Larsen-A Ice Shelf and Prince Gustav Channel and glaciers on

James-Ross Island.

Link (URL):

**Additional Information:** 

Operating Period: From: 21 Jan 2015 To: 28 Feb 2015

**Areas of Operation** 

Marambio IAA

#### **Operational Information – National Expeditions - Stations**

Name: **German Antarctic Receiving Station (GARS)** 

Type: Wintering

Site Name: German Antarctic Receiving Station (GARS) Lat: 63° 19′ 00′′ S Long: 57° 54′ 00 Location:

W

**Maximum Population:** 14

Remarks / Description:

**Medical Facilities:** none, provided by at O'Higgins Station

> PI Dr. Erhard Diedrich, DLR The station is operated as an annex station to the General Bernardo O'Higgins station (Chile). The location was selected because of its excellent conditions regarding infrastructure, bedrock foundation, and access. The station is in operation 90-120 days throughout the year for data acquisition campaigns. The focus is on Antarctic summertime, when it is possible to obtain ground measurements for reference purposes, as well as to exchange personnel and

magnetic tape data carriers, and bring in supplies and replacement parts. Transportation and logistics are coordinated with the Chilean Antarctic Programme using ships and aircraft.

Name: **Neumayer Station III** 

Type: Wintering

Site Name: Neumayer Station III Lat: 70° 41′ 00′′ S Long: 8° 16′ 00′′ W Location:

**Maximum Population:** 50

**Medical Facilities:** hospital

> Expedition Leader summer: Eberhard Kohlberg, AWI The NEUMAYER STATION III is the permanently occupied German research station located at the Ekstrøm Ice Shelf, north-west edge of Atka Bay in Dronning Maud Land. The station is operated by the Alfred Wegener Institute for Polar and Marine Research (AWI) The station continuously operates scientific observatories, and it is the operational base for aircraft missions and deep field traverses during summer season. The wintering staff is 1 station leader/physician, 4 scientists, 3 technicians, 1 cook. During summer season up to 40

Remarks / Description: scientists and technicians can be accommodated. Transport of personnel and equipment is performed via the airlink from Cape Town to Antarctica established in the frame of the international

cooperation Dronning Maud Land Air Network (DROMLAN). 8 to 11 intercontinetal flights are performed from November until February every summer season. Regular supply of the station is performed by ship delivering consumables, maintenance material, heavy equipment such as vehicles, sledges etc. 2 ship calls are performed every summer season. In-house inspection of the

research infrastructure of AWI PI: U. Nixdorf (AWI)

Name: **Dallmann Laboratory at Base Carlini** 

Type: Summer

Site Name: Dallmann Laboratory Lat: 62º 14′ 00′′ S Long: 58º 14′ 00′′ W Location:

**Maximum Population:** 

**Medical Facilities:** 

PI: D. Mengedoht (AWI) The studies performed are part of the German-Argentinean cooperation at the Dallmann Laboratory/Base Carlini. The focus of the summer campaign 2014/15 was the synoptic **Remarks / Description:** 

investigation of climate driven physico-hydrographical, sedimentological, geochemical and biological

change in the Potter Cove system.

**Operating Period:** From: November To: March

Name: **Kohnen Station** 

Type: Summer

**Site Name:** Kohnen Station **Lat:** 75° 00′ 00′′ S **Long:** 00° 04′ 00′′ E Location:

**Maximum Population:** 11

**Medical Facilities:** @ NM III

> PI: S. Kipfstuhl (AWI) The station is currently used as the logistic base for subglacial studies using the EPICA drilling hole as well as for meteorological, air chemistry and seismic observations and glaciological field investigations. The station will also provide ground service for scientific aircraft

Remarks / Description:

mission above the inland ice plateau. The station is located on the inland ice plateau (Amundsenisen, Wegnerisen). The distance along the sledge traverse route to Neumayer Station III is about 750 km. Access to the station is possible by means of sledge traverses starting from NEUMAYER STATION III at the cost or by aircraft support in the frame of Dronning Maud Land Air Network (DROMLAN). The air link is mainly used for the transport of personnel, light weighted scientific cargo and food. The advantage of this aircraft access is that it became possible to start scientific works early in the season or to carry out a short stay for maintenance and service automatic stations. Supply of the station is mainly based on sledge traverses to transport large amount of fuel, consumables and material. To travel from NEUMAYER STATION III to KOHNEN STATION takes 11 days on average. The typical arrangement of a sledge train is 6 towing vehicles (Pistenbulli), 12 sledges carrying piece goods and containers, and 5 sledges with tank containers and accommodation facilities. On average about 180 tons of supply goods are needed to run the station. The fuel consumption is about 400 litres per one ton of payload over a distance of 1,000 km

Operating Period: From: November To: February

#### **Operational Information – National Expeditions - Vessels**

Name: PS89 (ANT-XXX/2); To conduct basic research in physical, biological and chemical

oceanography

Country of Registry: Germany

Number of Voyages: 0

Maximum Crew: 44

**Maximum Passengers:** 

4

47 PI Olaf Boebel The Polarstern expedition PS89 to the Antarctic was initially routed from Cape Town via Atka Bay (Neumayer Station III) through the Weddell Sea to Punta Arenas. However, the pitch control system of the portside propeller of the ship suffered an irreparable damage during our stay at Atka Bay, which we had entered to provide for Neumayer Station III. This failure reduced the vessel's performance and manoeuvrability to such degree that the decision was taken to cease the expedition and return to Bremerhaven via Cape Town to have the necessary repairs undertaken as soon as possible. This resulted in a rerouting of this expedition from Cape Town to Atka Bay and back to Cape Town. The expedition had been dedicated to logistic and scientific purposes. All logistic aims (supply of Neumayer Station III with fuel and goods) were achieved successfully whereas it had only been possible to carry out less than half of the scientific programme, i.e. the part prior to reaching Atka Bay. Due to the damage of the portside propeller of Polarstern, the projects HAFOS (PI: O. Boebel, AWI), Tracemetal (PI: J. Wollenburg, AWI), SIPES (PIs: H. Flores and M. Nicolaus, AWI) were conducted with an adopted programme. Aerial and ship based observation of marine mammals took place during the cruise (PI: H. Feindt-Herr). In the following, the scientific work was characterised by station-based, sea ice-based, ship-based and helicopter-borne activities. The station-based work comprised: • Recovery of 13 deep sea pressure gauges along the Good Hope section, (of 14 planned) • Recovery/deployment of 6/6 moorings east of Neumayer Station III (of 7/5 planned) • Recovery/deployment of 0/0 moorings west of Neumayer Station III (of 14/11 planned) • Deployment of 15 Argo floats (of 28 planned) • Deployment of 12 SOCCOM floats (of 12 planned) • 94 CTD casts with rosette • Calibration of 6 RAFOS sound sources • Analyses of approximately 4,000 water samples • Sampling of deep sea bottom using multicore (2). Ship-based research consisted of: • Surveys of birds, seals, and whales • Measurement of temperature, salinity, and current profiles • 18 SUIT hauls, 8 out of those under sea ice (of >30 planned) • 15 RMT hauls, 6 out of those in ice covered areas (of >20 planned) Sea ice-based research included: • 5 ROV ice stations (2 out of those on drifting sea ice, of 12 planned) • Deployment of 12 sea ice buoys (of different types, of 22 planned) • 3 ice core stations (of 6 planned) • 2 ice thickness transects using sledge (of 0 planned) Helicopter-borne work amounted to 116 flights with 84:32 h of cumulative flying time. Out of the 116 flights we carried out: • 20 flights for animal observations (out of approximately 60 planned) • 5 flights for EM bird transects (out of 15 planned). Other flights were undertaken to mark ice floes, for testing of instruments, logistic flights for ice stations, and for transportation of researchers and material to and from Neumayer Station III. The expedition set off on December 2, 2014 at 18:00 LT in Cape Town. The recovery of the deep sea pressure gauges along the route was performed in a timely manner - a fact in large parts to be attributed to the remarkably well operating POSIDONIA system (mobile unit in the moon pool and USBL box), significantly speeding up the recovery process (most effective from the Zodiac). On the way south CTDs were cast at the mooring sites along the route and every 60nm south of 55°. Furthermore, bio-geochemically enhanced Argo floats were deployed at selected positions for the SOCCOM project. A rapidly opening polynya around Maud Rise allowed quick travelling along the 0° transect. At the southernmost tip of this transect, however, we met heavy ice coverage similar to the situation we had encountered two years before, rendering the mooring recoveries very timeconsuming. However, the loss of station time could be compensated by introducing ice stations in parallel. Thus, we were able to leave the zero-meridian on 23 December and enter Atka Bay on 25 December, with the intention to start provisioning Neumayer Station III in accordance with the time schedule. Since the berthing site at the "North Pier" was blocked by heavily ridged sea ice, the decision was taken to break the longer way through primarily one-year old sea ice towards the north-easterly berthing site, which started 26 December, 01:00 h. After two and a half days of breaking the ice, this effort came to an end just 1 nm off the "North East Pier" due to the technical failure mentioned above. Due to this circumstance, the unloading of solid provisions was started on 31 December, 10:00 h via the sea-ice. Thanks to the remarkable preparation and commitment of both the station's and the ship's personnel, the loading procedures were completed within two days. Leaving Atka Bay on January 1, 2015, 16:00 h, the ship was positioned about 20nm to the west, to commence bunkering of fuel for Neumayer Station III. A first share was pumped on 2 January between 14:00 h and 22:00 h. However, due to unfavourable weather and ice conditions, bunkering could only be resumed on 8 January, to be completed by 9 January. Only four days later, on 13 January, we were able to start heading back to Cape Town, when the weather conditions finally allowed reconnaissance flights near the ship to find a suitable way through the thick belt of ice encircling the coast. Having reached open waters on 15 January, 06:00 h, some scientific station work was resumed. The remaining station time however could only be exploited in parts, as the technical impairments constrained our ability to find suitable ice floes near the ice edge or to reach specific locations. During the 21-days-stay in Atka Bay (with 3 days initially planned) the waiting time was filled with a substitution programme of ice stations, RMT hauls, SUIT catches, CTD casts

and sound source calibrations, whenever the logistics and meteorological conditions permitted. On

Remarks:

the sidelines of the original expedition plan this programme allowed to collect complementary data. In summary, one needs to acknowledge that during the ship's unrestraint operability almost all of the goals set were reached in the usual mutual cooperation of the science and the ship crews. However, with the cancellation of the further expedition, none of the stations planned for the Weddell Sea west of Atka Bay could be reached. Any of the project goals basing on research work in that area could not be achieved and will completely rely on an alternate expedition. The cruise ended on February 1, 2015, 08:00 h LT, in Cape Town.

Name: RV Polarstern - General Opertations

Country of Registry: Germany

Number of Voyages: 0

Maximum Crew: 44

Maximum Passengers: 55

Remarks:

The research and supply vessel RV POLARSTERN commissioned in 1982 is a high class ice breaking vessel and the major research tool for the German Antarctic program. The advanced scientific and technical equipment and ability to navigate in heavy ice conditions in almost all regions of the Arctic and Antarctic oceans provide ideal working conditions for almost all compartments of marine sciences, atmospheric as well as glaciological research (modernisation from 1998 till 2001). Since 1982 the ship regularly operates in arctic and antarctic waters with an average of 320 days on sea every year. The supply of NEUMAYER STATION III is a regular task. Lifting gears and scientific winches are designed for launching and recovery of devices and sensors, fishing and deep sea sediment probing. Hydro-acoustic survey systems such as Hydrosweep, Parasound and fishery sounders can be continuously operated. The fibre optic network connects bridge, winch control room, laboratories and all scientific working places with several servers and distributes information of the central data acquisition system. Altogether 24 scientific laboratories, aquarium and refrigerating rooms are placed at disposal. Additionally up to 15 mobile laboratory containers can be installed inside the ship on E-Deck (10) and at F-Deck (5). The weather station records meteorological data and provides forecast information and satellite imagery on sea ice distributions. Recently technical facilities and hydro-acoustic navigation aids have been installed to deploy ROV for deep sea missions. Shipping company: Reederei F. Laeisz Permanent Measurements: PI: G. König-

Langlo (AWI) Meteorological measurements PI: Walter (DESY) Measurements of cosmic particles.

#### **Operational Information – National Expeditions - Aircraft**

Type: Helicopter service

Category:

**Period From:** 02/12/2014 Period To: 01/02/2015

> PI: E. Herr (HeliService International) Helicopter-borne work amounted to 116 flights with 84:32 h of cumulative flying time. Out of the 116 flights we carried out: • 20 flights for animal observations (out of approximately 60

Remarks: planned) • 5 flights for EM bird transects (out of 15 planned). Other flights were undertaken to mark ice floes, for testing of instruments, logistic flights for ice stations, and for transportation of researchers and material to and from

Neumayer Station III

Type: Polar 6 operation

Category:

**Period From:** 13/11/2014 Period To: 16/02/2015

Begin End Project 13/Nov 25/Nov Ferry to Rothera 26/Nov 10/Dec CryoVEx ANT, Rothera, ISTAR camp, Novo 11/Dec 13/Dec reconfiguration, Novo airfield 14/Dec 19/Jan WEGAS, Princess Elisabeth 20/Jan reconfiguration, Remarks:

Novo airfield 21/Jan 28/Jan RecFil, Halley 29/Jan 30/Jan de-configuration, Novo airfield 31/Jan 05/Feb Logistics

06/Feb 16/Feb Ferry to Calgary

Type: Polar 6 science

Category:

Remarks:

**Period From:** 18/11/2014 Period To: 16/02/2015

> PIs: V. Helm, G. Eagles (AWI) During the season 2014/15 POLAR 6 made 69 flights in Antarctica and on the ferry in 105 days. In total, 181 h were flown for two of the three scientific projects CryoVEx (37 h), WEGAS (144 h). No flights were possible for the RecFil project. Logistics flights totalled 23 h. There were no ferry-only flights within Antarctica. The ferry to and from Antarctica (Novo runway) lasted about 93 h. The logistic flights were carried out for support of CoFi WEGAS and DROMLAN, flying ice cores from Kohnen to Neumayer, and fuel, personnel and equipment between various stations. During the course of the austral season 2014/15 seven stations and a field camp were visited, including the ferry to and from Dronning Maud Land. For the most part, there were enough days of good flying conditions for the project aims to be met: • 2 survey flights as part of CryoVEx from Rothera. • 2 survey flights as part of CryoVEx from iStar camp • 1 survey flight as part of CryoVEx from Union Glacier • 1 survey of CryoVEx from Novo • 2 survey flights as part of WEGAS from Novo • 26 survey flights as part of WEGAS from the

> flight as part of CryoVEx from Halley • 1 survey flight as part of CryoVEx from Neumayer • 2 survey flights as part Belgian base Princess Elisabeth. • 2 test and calibration flights as part of WEGAS from Novo. • 1 survey flight from Novo as part of WEGAS. • 1 survey flight from Kohnen as part of WEGAS. The single long pre-survey flight of RecFil was not completed, owing to a combination of survey equipment failure, logistical difficulties related to a generator failure at Halley Station, and bad weather between Neumayer, Halley and the Filchner Ice Shelf. In detail: CryoVEx 2 survey flights each from Rothera (one combined with testing, one with ferry), iStar camp (one combined with ferry), and Novo, and single flights from Union Glacier, Halley and Neumayer (all including ferry segments), were

conducted for the project CryoVEx

#### Operational Information - Non Governmental Expeditions - Vessel-Based Operations

Name: Hanse Explorer GmbH & Co KG

Contact Address: Hermann-Hollerith-Str. 10, 28355 Bremen
Operator:

Email Address: HanseExplorer@hp-shipping.de

Website Address:

Name of Vessel: Hanse Explorer

Country of Registry: Antigua and Barbuda

Number of Voyages: 4

Maximum Crew: 16

Maximum Passengers: 12

**Remarks:** 3 Voyages along the Antarctic Peninsula

Voyages:

Depart. Date Depart. Port Arrival Date Arrival Port Expedition Leader

25 Dec 2014 King George Island, Antarctica 02 Jan 2015 King George Island, Antarctica

Visited Sites: View in Google Earth Map

Site Name: Maxwell Bay, King George Latitude: 62º 15' 00' S Longitude: 58º 51' 00' W

Visit Date: 25/12/2014

This visit includes landing: Yes Number of Visitors: 20

Activities: Passenger Exchange

Site Name: Cuverville Island Latitude: 64° 41′ 00′′ S Longitude: 62° 34′ 00′′ W

Visit Date: 26/12/2014

This visit includes landing: No Number of Visitors: 5

Activities: Small Boat Cruising

Site Name: Cuverville Island Latitude: 64° 41′ 00′ S Longitude: 62° 34′ 00′ W

Visit Date: 26/12/2014

This visit includes landing: Yes Number of Visitors: 6

Activities: Small Boat Landing

Site Name: Neko Harbor Latitude: 64°50 'S Longitude: 62°33 'W

Visit Date: 27/12/2014

This visit includes landing: Yes Number of Visitors: 12

Activities: Small Boat Landing

Site Name: Almirante Brown Latitude: 64º 54′ 00′′ S Longitude: 62º 52′ 00′′ W

Visit Date: 27/12/2014

This visit includes landing: No Number of Visitors: 6

Activities: Small Boat Cruising

Site Name: Jougla Point Latitude: 64°50′S Longitude: 63°30′W

Visit Date: 28/12/2014

This visit includes landing: No Number of Visitors: 4

Activities: Kayaking

Site Name: Goudier Island Latitude: 64° 50′ 00′′ S Longitude: 63° 30′ 00′′ W

Visit Date: 28/12/2014

This visit includes landing: Yes Number of Visitors: 14

Activities: Small Boat Landing

Site Name: Larrouy Island Latitude: 65° 52′ 00′′ S Longitude: 65° 15′ 00′′ W

Visit Date: 29/12/2014

This visit includes landing: Yes Number of Visitors: 14

Activities: Ice Walk

Site Name: Pleneau Island Latitude: 65° 06′ 00′′ S Longitude: 64° 04′ 00′′ W

Visit Date: 30/12/2014

This visit includes landing: Yes Number of Visitors: 6 Activities: Small Boat Cruising, Small Boat Landing

Site Name: Useful Island Latitude: 64° 43′ 00′′ S Longitude: 62° 52′ 00′′ W

Visit Date: 31/12/2014

This visit includes landing: Yes Number of Visitors: 6

Activities: Small Boat Landing

Site Name: Orne Harbor Latitude: 64°37 'S Longitude: 62°32 'W

Visit Date: 31/12/2014

This visit includes landing: Yes Number of Visitors: 9

Activities: Small Boat Landing

Site Name: Baily Head Latitude: 62°58 'S Longitude: 60°30 'W

Visit Date: 01/01/2015

This visit includes landing: Yes Number of Visitors: 6

Activities: Small Boat Landing

Site Name: Whalers Bay Latitude: 62° 59′ 00′′ S Longitude: 60° 34′ 00′′ W

Visit Date: 01/01/2015

This visit includes landing: Yes Number of Visitors: 6

Activities: Small Boat Landing

Site Name: Maxwell Bay, King George Latitude: 62° 15′ 00′′ S Longitude: 58° 51′ 00′′ W

Visit Date: 02/01/2015

This visit includes landing: Yes Number of Visitors: 20

Activities: Passenger Exchange

02 Jan 2015 King George Island, Antarctica 12 Jan 2015 King George Island, Antarctica

Visited Sites: View in Google Earth Map

Site Name: Maxwell Bay, King George Latitude: 62º 15' 00' S Longitude: 58º 51' 00' W

Visit Date: 02/01/2015

This visit includes landing: Yes Number of Visitors: 28

Activities: Passenger Exchange

Site Name: Orne Harbor Latitude: 64°37 'S Longitude: 62°32 'W

Visit Date: 03/01/2015

This visit includes landing: No Number of Visitors: 14

Activities: Small Boat Cruising

Site Name: Orne Harbor Latitude: 64°37 'S Longitude: 62°32 'W

Visit Date: 03/01/2015

This visit includes landing: Yes Number of Visitors: 15

Activities: Small Boat Landing

Site Name: Useful Island Latitude: 64° 43′ 00′′ S Longitude: 62° 52′ 00′′ W

Visit Date: 04/01/2015

This visit includes landing: No Number of Visitors: 14

Activities: Small Boat Cruising

Site Name: Cuverville Island Latitude: 64° 41′ 00′′ S Longitude: 62° 34′ 00′′ W

**Visit Date:** 04/01/2015

This visit includes landing: Yes Number of Visitors: 14

Activities: Small Boat Landing

Site Name: Andvord bay Latitude: 64° 52′ 00′ S Longitude: 62° 30′ 00′ W

Visit Date: 04/01/2015

This visit includes landing: No Number of Visitors: 15

Activities: Small Boat Cruising

Site Name: Vernadsky station Latitude: 65° 15′ 00′′ S Longitude: 64° 15′ 00′′ W

Visit Date: 05/01/2015

This visit includes landing: Yes Number of Visitors: 20

Activities: Station Visit

Site Name: Booth Island Latitude: 65° 05′ 00′′ S Longitude: 64° 02′ 00′′ W

**Visit Date:** 06/01/2015

This visit includes landing: Yes Number of Visitors: 21

Activities: Small Boat Landing

Site Name: Booth Island Latitude: 65° 05′ 00′ S Longitude: 64° 02′ 00′ W

Visit Date: 06/01/2015

This visit includes landing: No Number of Visitors: 5

Activities: Small Boat Cruising

Site Name: Jougla Point Latitude: 64°50 'S Longitude: 63°30 'W

Visit Date: 06/01/2015

This visit includes landing: Yes Number of Visitors: 6

Activities: Small Boat Landing

Site Name: Goudier Island Latitude: 64º 50′ 00′ S Longitude: 63º 30′ 00′ W

Visit Date: 06/01/2015

This visit includes landing: Yes Number of Visitors: 18

Activities: Small Boat Landing

Site Name: Larrouy Island Latitude: 65° 52′ 00′′ S Longitude: 65° 15′ 00′′ W

Visit Date: 07/01/2015

This visit includes landing: Yes Number of Visitors: 14

Activities: Ice Walk

Site Name: Detaille Island Latitude: 66° 52′ 00′′ S Longitude: 66° 48′ 00′′ W

Visit Date: 08/01/2015

This visit includes landing: Yes Number of Visitors: 12

Activities: Small Boat Landing

Site Name: Lallemand Fjord Latitude: 67°05 S Longitude: 66°43 W

Visit Date: 08/01/2015

This visit includes landing: Yes Number of Visitors: 20

Activities: Ice Walk

Site Name: Petermann Island Latitude: 65° 10′ 00′ S Longitude: 64° 10′ 00′ W

Visit Date: 09/01/2015

This visit includes landing: Yes Number of Visitors: 14

Activities: Small Boat Landing

Site Name: Neko Harbor Latitude: 64°50 'S Longitude: 62°33 'W

Visit Date: 10/01/2015

This visit includes landing: Yes Number of Visitors: 14

Activities: Small Boat Landing

Site Name: Andvord bay Latitude: 64° 52′ 00′ S Longitude: 62° 30′ 00′ W

Visit Date: 10/01/2015

This visit includes landing: No Number of Visitors: 14

**Activities:** Small Boat Cruising

Site Name: Andvord bay Latitude: 64° 52′ 00′′ S Longitude: 62° 30′ 00′′ W

Visit Date: 10/01/2015

This visit includes landing: No Number of Visitors: 8

**Activities:** Kayaking

Site Name: Whalers Bay/Deception Island Latitude: 62° 59′ 00′ S Longitude: 60° 34′ 00′ W

Visit Date: 11/01/2015

This visit includes landing: No Number of Visitors: 15

Activities: Small Boat Cruising

Site Name: Whalers Bay Latitude: 62° 59′ 00′′ S Longitude: 60° 34′ 00′′ W

Visit Date: 11/01/2015

This visit includes landing: Yes Number of Visitors: 10

Activities: Small Boat Landing

Site Name: Maxwell Bay, King George Latitude: 62º 15' 00' S Longitude: 58º 51' 00' W

Visit Date: 12/01/2015

This visit includes landing: Yes Number of Visitors: 28

Activities: Passenger Exchange

Visited Sites: View in Google Earth Map

Site Name: King George Island Latitude: 62°05′S Longitude: 58°15′W

Visit Date: 12/01/2015

This visit includes landing: Yes Number of Visitors: 23

Activities: Passenger Exchange

Site Name: Frei Station Latitude: 62º 12 '00 ' S Longitude: 58º 57 '00 ' W

Visit Date: 12/01/2015

This visit includes landing: Yes Number of Visitors: 9

Activities: Aircraft Landing

Site Name: Danco Island Latitude: 64° 44′ 00′′ S Longitude: 62° 37′ 00′′ W

**Visit Date:** 13/01/2015

This visit includes landing: Yes Number of Visitors: 11

Activities: Small Boat Landing

Site Name: Orne Harbor Latitude: 64°37 'S Longitude: 62°32 'W

Visit Date: 13/01/2015

This visit includes landing: Yes Number of Visitors: 11

Activities: Small Boat Landing

Site Name: Goudier Island Latitude: 64° 50′ 00′ S Longitude: 63° 30′ 00′ W

Visit Date: 14/01/2015

This visit includes landing: Yes Number of Visitors: 13

Activities: Small Boat Landing

Site Name: Neko Harbor Latitude: 64°50 'S Longitude: 62°33 'W

Visit Date: 14/01/2015

This visit includes landing: Yes Number of Visitors: 8

Activities: Small Boat Landing

Site Name: Detaille Island Latitude: 66° 52′ 00′′ S Longitude: 66° 48′ 00′′ W

Visit Date: 15/01/2015

This visit includes landing: Yes Number of Visitors: 10

Activities: Small Boat Landing

Site Name: Liard Island Latitude: 66º 51′ 00′′ S Longitude: 67º 25′ 00′′ W

Visit Date: 16/01/2015

This visit includes landing: No Number of Visitors: 8

Activities: Small Boat Cruising

Site Name: unknown Latitude: 67° 00′ 05′′ S Longitude: 66° 47′ 03′′ W

Visit Date: 16/01/2015

This visit includes landing: Yes Number of Visitors: 16

Activities: Ice Walk

Site Name: Arrowsmith Peninsula Latitude: 67°17 S Longitude: 67°02 W

Visit Date: 16/01/2015

This visit includes landing: Yes Number of Visitors: 14

Activities: Ice Landing

Site Name: Fish Islands Latitude: 66º 02′00′′ S Longitude: 65º 25′00′′ W

Visit Date: 17/01/2015

This visit includes landing: No Number of Visitors: 9

**Activities:** Small Boat Cruising

Site Name: Fish Islands Latitude: 66º 02′00′′ S Longitude: 65º 25′00′′ W

Visit Date: 17/01/2015

This visit includes landing: No Number of Visitors: 7

Activities: Small Boat Cruising

Site Name: Vernadsky station Latitude: 65° 15′ 00′′ S Longitude: 64° 15′ 00′′ W

Visit Date: 18/01/2015

This visit includes landing: Yes Number of Visitors: 15

Activities: Station Visit

Site Name: Goudier Island Latitude: 64° 50′ 00′′ S Longitude: 63° 30′ 00′′ W

Visit Date: 18/01/2015

This visit includes landing: Yes Number of Visitors: 9

Activities: Small Boat Landing

Site Name: Gerlache Strait Latitude: 64° 16′ 00′′ S Longitude: 61° 51′ 00′′ W

Visit Date: 19/01/2015

This visit includes landing: No Number of Visitors: 8

**Activities:** Small Boat Cruising

Site Name: Gerlache Strait Latitude: 64° 16′ 00′′ S Longitude: 61° 51′ 00′′ W

Visit Date: 19/01/2015

This visit includes landing: No Number of Visitors: 10

**Activities:** Small Boat Cruising

Site Name: Penguin Island Latitude: 62º 06′ 00′ S Longitude: 57º 54′ 00′ W

Visit Date: 20/01/2015

This visit includes landing: Yes Number of Visitors: 13

Activities: Small Boat Landing

Site Name: Whalers Bay/Deception Island Latitude: 62° 59′ 00′ S Longitude: 60° 34′ 00′ W

Visit Date: 20/01/2015

This visit includes landing: No Number of Visitors: 0

**Activities:** Ship Cruise

Site Name: Point Wild Latitude: 61° 06′ 00′′ S Longitude: 54° 52′ 00′′ W

Visit Date: 21/01/2015

This visit includes landing: Yes Number of Visitors: 12

Activities: Small Boat Landing

**Site Name:** Port Stanley, Falklands **Latitude: Longitude: Visit Date:** 31/01/2015

This visit includes landing: Yes Number of Visitors: 23

**Activities:** Passenger Exchange

05 Feb 2015 Ushuaia, Argentina 15 Feb 2015 Ushuaia, Argentina

Visited Sites: View in Google Earth Map

Site Name: Ushuaia Latitude: Longitude:

Visit Date: 05/02/2015

This visit includes landing: Yes Number of Visitors: 29

**Activities:** Passenger Exchange

Site Name: Detaille Island Latitude: 66° 52′ 00′′ S Longitude: 66° 48′ 00′′ W

Visit Date: 08/02/2015

This visit includes landing: Yes Number of Visitors: 16

Activities: Small Boat Landing

Site Name: Detaille Island Latitude: 66° 52′ 00′′ S Longitude: 66° 48′ 00′′ W

Visit Date: 08/02/2015

This visit includes landing: No Number of Visitors: 14

**Activities:** SCUBA Diving

**Site Name:** Vernadsky station **Latitude:** 65° 15′ 00′′ S **Longitude:** 64° 15′ 00′′ W

Visit Date: 09/02/2015

This visit includes landing: No Number of Visitors: 5

**Activities:** Swimming

Site Name: Vernadsky station Latitude: 65° 15′ 00′′ S Longitude: 64° 15′ 00′′ W

Visit Date: 09/02/2015

This visit includes landing: Yes Number of Visitors: 20

**Activities:** Station Visit

Site Name: Vernadsky station Latitude: 65° 15′ 00′′ S Longitude: 64° 15′ 00′′ W

**Visit Date:** 09/02/2015

This visit includes landing: No Number of Visitors: 14

Activities: SCUBA Diving

Site Name: Goudier Island Latitude: 64° 50′ 00′′ S Longitude: 63° 30′ 00′′ W

**Visit Date:** 10/02/2015

This visit includes landing: Yes Number of Visitors: 21

Activities: Small Boat Landing

Site Name: Jougla Point Latitude: 64°50 'S Longitude: 63°30 'W

Visit Date: 10/02/2015

This visit includes landing: Yes Number of Visitors: 16

Activities: Small Boat Landing

Site Name: Pleneau Island Latitude: 65° 06′ 00′′ S Longitude: 64° 04′ 00′′ W

Visit Date: 10/02/2015

This visit includes landing: Yes Number of Visitors: 16

Activities: Small Boat Landing

Site Name: Pleneau Island Latitude: 65° 06′ 00′′ S Longitude: 64° 04′ 00′′ W

Visit Date: 10/02/2015

This visit includes landing: No Number of Visitors: 13

**Activities:** SCUBA Diving

Site Name: Hidden bay Latitude: 65° 04′ 00′′ S Longitude: 63° 49′ 00′′ W

Visit Date: 10/02/2015

This visit includes landing: No Number of Visitors: 16

Activities: Small Boat Cruising

Site Name: Paradise Bay Latitude: 64° 49′ 00′′ S Longitude: 62° 52′ 00′′ W

Visit Date: 11/02/2015

This visit includes landing: No Number of Visitors: 16

**Activities:** Small Boat Cruising

Site Name: Paradise Bay Latitude: 64° 49′ 00′′ S Longitude: 62° 52′ 00′′ W

Visit Date: 11/02/2015

This visit includes landing: Yes Number of Visitors: 16

**Activities:** Small Boat Landing

Site Name: Börgen Bay Latitude: 64°45 'S Longitude: 63°30 'W

Visit Date: 11/02/2015

This visit includes landing: No Number of Visitors: 12

**Activities:** Swimming

**Site Name:** Börgen Bay **Latitude:** 64°45′S **Longitude:** 63°30′W

**Visit Date:** 11/02/2015

This visit includes landing: No Number of Visitors: 14

**Activities:** SCUBA Diving

Site Name: Elephant Point Latitude: 62°41 'S Longitude: 60°52 'W

**Visit Date:** 12/02/2015

This visit includes landing: Yes Number of Visitors: 17

**Activities:** Small Boat Landing

Site Name: Whalers Bay Latitude:  $62^{\circ}$  59' 00'' S Longitude:  $60^{\circ}$  34' 00'' W

**Visit Date:** 12/02/2015

This visit includes landing: Yes Number of Visitors: 16

Activities: Small Boat Landing

Site Name: Whalers Bay Latitude: 62° 59′ 00′′ S Longitude: 60° 34′ 00′′ W

**Visit Date:** 12/02/2015

This visit includes landing: No Number of Visitors: 12

**Activities:** SCUBA Diving

Site Name: Ushuaia Latitude: Longitude:

Visit Date: 15/02/2015

This visit includes landing: Yes Number of Visitors: 29

**Activities:** Passenger Exchange

**Contact Address:** Ballindamm 25, D-20095 Hamburg, Germany

**Website Address:** 

**Email Address:** 

Name of Vessel: **MS HANSEATIC** 

**Country of Registry:** Bahamas

**Number of Voyages:** 0

**Maximum Crew:** 124

**Maximum Passengers:** 160

German Journalist Thomas Felber will be aboard HAN1503 to make enquiries and to take photos for Remarks:

an article in a magazine. Journey lasts from 09.02.2015 to 28.02.2015

Voyages:

Operator:

Depart. Port **Arrival Date Arrival Port** Depart. Date **Expedition Leader** 

**Contact Address:** Ballindamm 25, D-20095 Hamburg, Germany **Operator:** 

Email Address:

Website Address:

Name of Vessel: MS HANSEATIC

Country of Registry: Bahamas

Number of Voyages: 6

Maximum Crew: 130

Maximum Passengers: 188

Remarks: All Voyages to Westantarctic Peninsula

Voyages:

Depart. Date Depart. Port Arrival Date Arrival Port Expedition Leader

06 Nov 2014 Buenos Aires, Argentina 25 Nov 2014 Ushuaia, Argentina

**Visited Sites:** View in Google Earth Map

Site Name: Buenos Aires Latitude: Longitude:

Visit Date: 06/11/2014

This visit includes landing: Yes Number of Visitors: 270

**Activities:** Passenger Exchange

Site Name: Point Wild Latitude: 61° 06′ 00′′ S Longitude: 54° 52′ 00′′ W

Visit Date: 18/11/2014

This visit includes landing: No Number of Visitors: 78

Activities: Small Boat Cruising

Site Name: Half Moon Island Latitude: 62°36 'S Longitude: 59°55 'W

Visit Date: 19/11/2014

This visit includes landing: Yes Number of Visitors: 128

Activities: Extended Walk, Small Boat Landing

Site Name: Penguin Island Latitude: 62° 06′ 00′′ S Longitude: 57° 54′ 00′′ W

Visit Date: 19/11/2014

This visit includes landing: Yes Number of Visitors: 165

Activities: Extended Walk, Small Boat Landing

Site Name: Whalers Bay Latitude: 62° 59′ 00′′ S Longitude: 60° 34′ 00′′ W

Visit Date: 20/11/2014

This visit includes landing: Yes Number of Visitors: 124

Activities: Extended Walk, Small Boat Landing

Site Name: Telefon Bay Latitude: 62º 56′ 00′′ S Longitude: 60º 40′ 00′′ W

Visit Date: 20/11/2014

This visit includes landing: Yes Number of Visitors: 107

Activities: Extended Walk, Small Boat Landing

Site Name: Goudier Island Latitude: 64° 50′ 00′′ S Longitude: 63° 30′ 00′′ W

Visit Date: 21/11/2014

This visit includes landing: Yes Number of Visitors: 144

Activities: Small Boat Landing

Site Name: Almirante Brown Latitude: 64º 54′ 00′′ S Longitude: 62º 52′ 00′′ W

Visit Date: 21/11/2014

This visit includes landing: Yes Number of Visitors: 136

Activities: Small Boat Landing

Site Name: Skontorp Cove Latitude: 64° 54′ 00′′ S Longitude: 62° 52′ 00′′ W

Visit Date: 21/11/2014

This visit includes landing: No Number of Visitors: 147

Activities: Small Boat Cruising

Site Name: Neko Harbor Latitude: 64°50 'S Longitude: 62°33 'W

Visit Date: 22/11/2014

This visit includes landing: Yes Number of Visitors: 154

Activities: Extended Walk, Small Boat Landing

Site Name: Ushuaia Latitude: Longitude:

**Visit Date:** 25/11/2014

This visit includes landing: Yes Number of Visitors: 270

Activities: Passenger Exchange

25 Nov 2014 Ushuaia, Argentina 13 Dec 2014 Ushuaia, Argentina

**Visited Sites:** View in Google Earth Map

Site Name: Ushuaia Latitude: Longitude:

Visit Date: 25/11/2014

This visit includes landing: Yes Number of Visitors: 279

Activities: Passenger Exchange

Site Name: Point Wild Latitude: 61° 06′ 00′′ S Longitude: 54° 52′ 00′′ W

Visit Date: 06/12/2014

This visit includes landing: No Number of Visitors: 162

**Activities:** Small Boat Cruising

Site Name: Brown Bluff Latitude: 63° 32′ 00′′ S Longitude: 56° 55′ 00′′ W

Visit Date: 07/12/2014

This visit includes landing: Yes Number of Visitors: 169

Activities: Small Boat Landing

Site Name: Yankee Harbor Latitude: 62°32 'S Longitude: 59°47 'W

Visit Date: 08/12/2014

This visit includes landing: Yes Number of Visitors: 176

**Activities:** Small Boat Landing

Site Name: Whalers Bay Latitude: 62° 59′ 00′′ S Longitude: 60° 34′ 00′′ W

Visit Date: 08/12/2014

This visit includes landing: Yes Number of Visitors: 176

Activities: Extended Walk, Small Boat Landing

Site Name: Neko Harbor Latitude: 64°50′S Longitude: 62°33′W

**Visit Date:** 09/12/2014

This visit includes landing: Yes Number of Visitors: 160

Activities: Small Boat Landing

Site Name: Almirante Brown Latitude: 64º 54′ 00′′ S Longitude: 62º 52′ 00′′ W

Visit Date: 09/12/2014

This visit includes landing: Yes Number of Visitors: 162

Activities: Small Boat Landing

Site Name: Goudier Island Latitude: 64° 50′ 00′ S Longitude: 63° 30′ 00′ W

Visit Date: 10/12/2014

This visit includes landing: Yes Number of Visitors: 176

**Activities:** Small Boat Landing

Site Name: Ushuaia Latitude: Longitude:

**Visit Date:** 13/12/2014

This visit includes landing: Yes Number of Visitors: 279

**Activities:** Passenger Exchange

13 Dec 2014 Ushuaia, Argentina 04 Jan 2015 Ushuaia, Argentina

Visited Sites: View in Google Earth Map

Site Name: Ushuaia Latitude: Longitude:

Visit Date: 13/12/2014

This visit includes landing: Yes Number of Visitors: 251

Activities: Passenger Exchange

Site Name: Cape Lookout Latitude: 61º 16 '00 ' S Longitude: 55º 12 '00 ' W

**Visit Date:** 24/12/2014

This visit includes landing: No Number of Visitors: 125

**Activities:** Small Boat Cruising

Site Name: Brown Bluff Latitude: 63° 32′ 00′′ S Longitude: 56° 55′ 00′′ W

**Visit Date:** 26/12/2014

This visit includes landing: Yes Number of Visitors: 81

Activities: Small Boat Landing

Site Name: Arctowski Station Latitude: 62° 15′ 00′′ S Longitude: 58° 51′ 00′′ W

Visit Date: 27/12/2014

This visit includes landing: Yes Number of Visitors: 60

Activities: Small Boat Landing

Site Name: Whalers Bay Latitude: 62° 59′ 00′′ S Longitude: 60° 34′ 00′′ W

Visit Date: 28/12/2014

This visit includes landing: Yes Number of Visitors: 143

Activities: Extended Walk, Small Boat Landing

Site Name: Half Moon Island Latitude: 62°36′S Longitude: 59°55′W

Visit Date: 28/12/2014

This visit includes landing: Yes Number of Visitors: 128

Activities: Extended Walk, Small Boat Landing

Site Name: Melchior Islands Latitude: 64º 19 ' 00 ' ' S Longitude: 62º 57 ' 00 ' ' W

Visit Date: 29/12/2014

This visit includes landing: No  $\,$  Number of Visitors: 148

**Activities:** Small Boat Cruising

Site Name: Goudier Island Latitude: 64° 50′ 00′′ S Longitude: 63° 30′ 00′′ W

Visit Date: 29/12/2014

This visit includes landing: Yes Number of Visitors: 154

Activities: Small Boat Landing

Site Name: Petermann Island Latitude: 65° 10′ 00′ S Longitude: 64° 10′ 00′ W

Visit Date: 30/12/2014

This visit includes landing: Yes Number of Visitors: 126

Activities: Small Boat Landing

Site Name: Skontorp Cove Latitude: 64° 54′ 00′′ S Longitude: 62° 52′ 00′′ W

Visit Date: 30/12/2014

This visit includes landing: No Number of Visitors: 123

Activities: Small Boat Cruising

Site Name: Cuverville Island Latitude: 64° 41′ 00′′ S Longitude: 62° 34′ 00′′ W

Visit Date: 31/12/2014

This visit includes landing: Yes Number of Visitors: 105

Activities: Small Boat Landing

Site Name: Neko Harbor Latitude: 64°50′S Longitude: 62°33′W

Visit Date: 31/12/2014

This visit includes landing: Yes Number of Visitors: 124

Activities: Extended Walk, Small Boat Landing

Site Name: Aitcho - Barrientos Island Latitude: 62º 24′ 00′′ S Longitude: 59º 47′ 00′′ W

**Visit Date:** 01/01/2015

This visit includes landing: Yes Number of Visitors: 119

**Activities:** Small Boat Landing

Site Name: Ushuaia Latitude: Longitude:

**Visit Date:** 04/01/2015

This visit includes landing: Yes Number of Visitors: 251

Activities: Passenger Exchange

04 Jan 2015 Ushuaia, Argentina 22 Jan 2015 Ushuaia, Argentina

Visited Sites: View in Google Earth Map

Site Name: Ushuaia Latitude: Longitude:

Visit Date: 04/01/2015

This visit includes landing: Yes Number of Visitors: 293

**Activities:** Passenger Exchange

Site Name: Orcadas Latitude: 60° 45′ 00′′ S Longitude: 44° 44′ 00′′ W

Visit Date: 14/01/2015

This visit includes landing: Yes Number of Visitors: 180

Activities: Small Boat Landing

Site Name: Point Wild Latitude: 61° 06′ 00′′ S Longitude: 54° 52′ 00′′ W

**Visit Date:** 15/01/2015

This visit includes landing: No Number of Visitors: 156

**Activities:** Small Boat Cruising

Site Name: Brown Bluff Latitude: 63° 32′ 00′′ S Longitude: 56° 55′ 00′′ W

Visit Date: 16/01/2015

This visit includes landing: Yes Number of Visitors: 172

Activities: Small Boat Landing

Site Name: Whalers Bay Latitude: 62° 59′ 00′′ S Longitude: 60° 34′ 00′′ W

Visit Date: 17/01/2015

This visit includes landing: Yes Number of Visitors: 182

Activities: Extended Walk, Small Boat Landing

Site Name: Telefon Bay Latitude: 62º 56′ 00′′ S Longitude: 60º 40′ 00′′ W

Visit Date: 17/01/2015

This visit includes landing: Yes Number of Visitors: 90

Activities: Extended Walk, Small Boat Landing

Site Name: Half Moon Island Latitude: 62°36 'S Longitude: 59°55 'W

Visit Date: 17/01/2015

This visit includes landing: Yes Number of Visitors: 178

Activities: Extended Walk, Small Boat Landing

Site Name: Skontorp Cove Latitude: 64° 54′ 00′′ S Longitude: 62° 52′ 00′′ W

Visit Date: 18/01/2015

This visit includes landing: No Number of Visitors: 177

Activities: Small Boat Cruising

Site Name: Pleneau Island Latitude: 65° 06′ 00′′ S Longitude: 64° 04′ 00′′ W

Visit Date: 18/01/2015

This visit includes landing: Yes Number of Visitors: 162

Activities: Small Boat Landing

Site Name: Almirante Brown Latitude: 64º 54′ 00′′ S Longitude: 62º 52′ 00′′ W

**Visit Date:** 18/01/2015

This visit includes landing: Yes Number of Visitors: 177

Activities: Small Boat Landing

Site Name: Goudier Island Latitude:  $64^{\circ}$  50' 00'' S Longitude:  $63^{\circ}$  30' 00'' W

Visit Date: 19/01/2015

This visit includes landing: Yes Number of Visitors: 179

Activities: Small Boat Landing, Station Visit

Site Name: Neko Harbor Latitude: 64°50′S Longitude: 62°33′W

**Visit Date:** 19/01/2015

This visit includes landing: Yes Number of Visitors: 167

Activities: Extended Walk, Small Boat Landing

Site Name: Ushuaia Latitude: Longitude:

Visit Date: 22/01/2015

This visit includes landing: Yes Number of Visitors: 293

Activities: Passenger Exchange

22 Jan 2015 Ushuaia, Argentina 09 Feb 2015 Ushuaia, Argentina

Visited Sites: View in Google Earth Map

Site Name: Ushuaia Latitude: Longitude:

Visit Date: 22/01/2015

This visit includes landing: Yes Number of Visitors: 288

**Activities:** Passenger Exchange

Site Name: Orcadas Latitude: 60° 45′ 00′′ S Longitude: 44° 44′ 00′′ W

Visit Date: 01/02/2015

This visit includes landing: Yes Number of Visitors: 169

Activities: Small Boat Landing

Site Name: Paulet Island Latitude: 63° 35′ 00′ S Longitude: 55° 47′ 00′ W

Visit Date: 03/02/2015

This visit includes landing: Yes Number of Visitors: 163

**Activities:** Small Boat Landing

Site Name: Half Moon Island Latitude: 62°36 'S Longitude: 59°55 'W

Visit Date: 04/02/2015

This visit includes landing: Yes Number of Visitors: 167

Activities: Extended Walk, Small Boat Landing

Site Name: Port Foster Latitude: 62º 57′ 00′′ S Longitude: 60º 39′ 00′′ W

Visit Date: 04/02/2015

This visit includes landing: No Number of Visitors: 288

Activities: Ship Cruise

Site Name: Almirante Brown Latitude: 64° 54′ 00′′ S Longitude: 62° 52′ 00′′ W

Visit Date: 05/02/2015

This visit includes landing: Yes Number of Visitors: 164

Activities: Extended Walk, Small Boat Landing

Site Name: Lemaire Channel Latitude: 65°04 'S Longitude: 63°57 'W

Visit Date: 05/02/2015

This visit includes landing: No Number of Visitors: 288

Activities: Ship Cruise

Site Name: Skontorp Cove Latitude: 64° 54′ 00′′ S Longitude: 62° 52′ 00′′ W

Visit Date: 05/02/2015

This visit includes landing: No Number of Visitors: 177

Activities: Small Boat Cruising

Site Name: Neko Harbor Latitude: 64°50′S Longitude: 62°33′W

Visit Date: 06/02/2015

This visit includes landing: Yes Number of Visitors: 138

Activities: Extended Walk, Small Boat Landing

Site Name: Goudier Island Latitude: 64° 50′ 00′′ S Longitude: 63° 30′ 00′′ W

Visit Date: 06/02/2015

This visit includes landing: Yes Number of Visitors: 181

Activities: Small Boat Landing

Site Name: Ushuaia Latitude: Longitude:

**Visit Date:** 09/02/2015

This visit includes landing: Yes Number of Visitors: 288

**Activities:** Passenger Exchange

09 Feb 2015 Ushuaia, Argentina 28 Feb 2015 Ushuaia, Argentina

Visited Sites: View in Google Earth Map

Site Name: Ushuaia Latitude: Longitude:

Visit Date: 09/02/2015

This visit includes landing: Yes Number of Visitors: 276

**Activities:** Passenger Exchange

Site Name: Point Wild Latitude: 61° 06′ 00′′ S Longitude: 54° 52′ 00′′ W

Visit Date: 20/02/2015

This visit includes landing: No Number of Visitors: 162

Activities: Small Boat Cruising

Site Name: Brown Bluff Latitude: 63° 32′ 00′′ S Longitude: 56° 55′ 00′′ W

Visit Date: 21/02/2015

This visit includes landing: Yes Number of Visitors: 155

Activities: Small Boat Landing

Site Name: Paulet Island Latitude: 63° 35′ 00′′ S Longitude: 55° 47′ 00′′ W

Visit Date: 21/02/2015

This visit includes landing: Yes Number of Visitors: 103

Activities: Small Boat Landing

Site Name: Half Moon Island Latitude: 62°36′S Longitude: 59°55′W

Visit Date: 22/02/2015

This visit includes landing: Yes Number of Visitors: 140

Activities: Extended Walk, Small Boat Landing

Site Name: Whalers Bay Latitude: 62° 59′ 00′′ S Longitude: 60° 34′ 00′′ W

Visit Date: 22/02/2015

This visit includes landing: Yes Number of Visitors: 177

Activities: Extended Walk, Small Boat Landing

Site Name: Telefon Bay Latitude: 62º 56′ 00′′ S Longitude: 60º 40′ 00′′ W

Visit Date: 22/02/2015

This visit includes landing: Yes Number of Visitors: 62

Activities: Extended Walk, Small Boat Landing

Site Name: Goudier Island Latitude: 64° 50′ 00′′ S Longitude: 63° 30′ 00′′ W

Visit Date: 23/02/2015

This visit includes landing: Yes Number of Visitors: 174

Activities: Small Boat Landing

Site Name: Stonington Island Latitude: 68°11 'S Longitude: 67°00 'W

Visit Date: 24/02/2015

This visit includes landing: Yes Number of Visitors: 128

Activities: Small Boat Landing

Site Name: Lemaire Channel Latitude: 65°04'S Longitude: 63°57'W

Visit Date: 25/02/2015

This visit includes landing: No Number of Visitors: 278

Activities: Ship Cruise

Site Name: Skontorp Cove Latitude: 64° 54′ 00′′ S Longitude: 62° 52′ 00′′ W

Visit Date: 25/02/2015

This visit includes landing: No Number of Visitors: 150

Activities: Small Boat Cruising

Site Name: Ushuaia Latitude: Longitude:

Visit Date: 28/02/2015

This visit includes landing: Yes Number of Visitors: 276

**Activities:** Passenger Exchange

Contact Address: Ballindamm 25, D-20095 Hamburg, Germany

Email Address:

**Website Address:** 

Name of Vessel: MS HANSEATIC

**Country of Registry:** 

Number of Voyages: 0

**Maximum Crew:** 

**Maximum Passengers:** 

Remarks:

Austrian Journalist Nicole Kolisch will be aboard HAN1503 to make enquiries and to take photos for

an article in a magazine. Journey lasts from 09.02.2015 to 28.02.2015

Voyages:

Operator:

Depart. Date Depart. Port Arrival Date Arrival Port Expedition Leader

Contact Address: Ballindamm 25, D-20095 Hamburg, Germany

Email Address:

**Website Address:** 

Name of Vessel: MS HANSEATIC

Country of Registry: Bahamas

Number of Voyages: 0

Maximum Crew: 124

**Maximum Passengers:** 160

Remarks:

German Journalist T.Ruhl will be aboard HAN1420 to make enquiries and to take photos for an article in

a magazine

Voyages:

Operator:

Depart. Date Depart. Port Arrival Date Arrival Port Expedition Leader

Contact Address: Ballindamm 25, D-20095 Hamburg, Germany

Email Address:

**Website Address:** 

Name of Vessel: MS HANSEATIC

**Country of Registry:** 

Number of Voyages: 0

**Maximum Crew:** 

**Maximum Passengers:** 

Remarks:

German Journalist Dr. Edgar Hasse will be aboard HAN1500 to make enquiries and to take photos

for an article in a german newspaper. Journey lasts from 13.12.2014 to 04.01.2015

Voyages:

Operator:

Depart. Date Depart. Port Arrival Date Arrival Port Expedition Leader

**Contact Address:** Ballindamm 25, D-20095 Hamburg, Germany **Operator:** 

Email Address: Website Address:

Name of Vessel: MS BREMEN

Country of Registry: Nassau/Bahamas

Number of Voyages: 6

Maximum Crew: 105

Maximum Passengers: 164

Remarks: Voyages:

Depart. Date Depart. Port Arrival Date Arrival Port Expedition Leader

17 Nov 2014 Montevideo, Uruguay 05 Dec 2014 Ushuaia/Argentina

Visited Sites: View in Google Earth Map

Site Name: Montevideo Latitude: Longitude:

Visit Date: 17/11/2014

This visit includes landing: Yes Number of Visitors: 247

**Activities:** Passenger Exchange

Site Name: Elephant Island Latitude: 61°10 'S Longitude: 55°14 'W

Visit Date: 28/11/2014

This visit includes landing: No Number of Visitors: 247

**Activities:** Ship Cruise

Site Name: Penguin Island Latitude: 62° 06′ 00′′ S Longitude: 57° 54′ 00′′ W

Visit Date: 29/11/2014

This visit includes landing: Yes Number of Visitors: 159

Activities: Small Boat Landing

**Site Name:** Half Moon Island **Latitude:** 62°36′S **Longitude:** 59°55′W

Visit Date: 29/11/2014

This visit includes landing: Yes Number of Visitors: 154

Activities: Small Boat Landing

Site Name: Cuverville Island Latitude: 64º 41′ 00′′ S Longitude: 62º 34′ 00′′ W

Visit Date: 30/11/2014

This visit includes landing: Yes Number of Visitors: 156

Activities: Small Boat Landing

Site Name: Neko Harbor Latitude: 64°50 'S Longitude: 62°33 'W

Visit Date: 30/11/2014

This visit includes landing: Yes Number of Visitors: 171

Activities: Small Boat Landing

Site Name: Petermann Island Latitude: 65° 10′ 00′′ S Longitude: 64° 10′ 00′′ W

Visit Date: 01/12/2014

This visit includes landing: Yes Number of Visitors: 160

Activities: Small Boat Landing

Site Name: Goudier Island Latitude: 64° 50′ 00′′ S Longitude: 63° 30′ 00′′ W

**Visit Date:** 01/12/2014

This visit includes landing: Yes Number of Visitors: 164

Activities: Small Boat Landing

Site Name: Paradise Bay Latitude: 64° 49′ 00′′ S Longitude: 62° 52′ 00′′ W

Visit Date: 01/12/2014

This visit includes landing: No Number of Visitors: 247

Activities: Ship Cruise

Site Name: Pendulum Cove Latitude: 62° 56′ 00′′ S Longitude: 60° 36′ 00′′ W

Visit Date: 02/12/2014

This visit includes landing: Yes Number of Visitors: 37

**Activities:** Small Boat Landing

Site Name: Telefon Bay Latitude: 62° 56′ 00′′ S Longitude: 60° 40′ 00′′ W

Visit Date: 02/12/2014

This visit includes landing: Yes Number of Visitors: 141

Activities: Small Boat Landing

Site Name: Ushuaia Latitude: Longitude:

Visit Date: 05/12/2014

This visit includes landing: Yes Number of Visitors: 247

Activities: Passenger Exchange

05 Dec 2014 Ushuaia, Argentina 20 Dec 2014 Ushuaia, Argentina

Visited Sites: View in Google Earth Map

Site Name: Ushuaia Latitude: Longitude:

Visit Date: 05/12/2014

This visit includes landing: Yes Number of Visitors: 216

**Activities:** Passenger Exchange

Site Name: Erebus and Terror Gulf Latitude: 63° 55′ 00′′ S Longitude: 56° 40′ 00′′ W

Visit Date: 14/12/2014

This visit includes landing: Yes Number of Visitors: 131

**Activities:** Ice Landing

Site Name: Brown Bluff Latitude: 63° 32′ 00′′ S Longitude: 56° 55′ 00′′ W

Visit Date: 14/12/2014

This visit includes landing: Yes Number of Visitors: 117

Activities: Small Boat Landing

Site Name: Cierva Cove Latitude: 64° 09′ 00′′ S Longitude: 61° 07′ 00′′ W

Visit Date: 15/12/2014

This visit includes landing: No Number of Visitors: 126

Activities: Small Boat Cruising

Site Name: Neko Harbor Latitude: 64°50 'S Longitude: 62°33 'W

Visit Date: 15/12/2014

This visit includes landing: Yes Number of Visitors: 126

Activities: Small Boat Landing

Site Name: Cuverville Island Latitude: 64º 41′ 00′′ S Longitude: 62º 34′ 00′′ W

Visit Date: 16/12/2014

This visit includes landing: Yes Number of Visitors: 109

Activities: Small Boat Landing

Site Name: Lemaire Channel Latitude: 65°04'S Longitude: 63°57'W

Visit Date: 16/12/2014

This visit includes landing: No Number of Visitors: 216

**Activities:** Ship Cruise

Site Name: Paradise Bay Latitude: 64° 49′ 00′′ S Longitude: 62° 52′ 00′′ W

Visit Date: 16/12/2014

This visit includes landing: No Number of Visitors: 216

**Activities:** Ship Cruise

Site Name: Port Charcot Latitude: 65° 04′ 00′′ S Longitude: 64° 00′ 00′′ W

Visit Date: 16/12/2014

This visit includes landing: Yes Number of Visitors: 109

**Activities:** Small Boat Landing

Site Name: Snow Island Latitude: 62°47′S Longitude: 61°23′W

Visit Date: 17/12/2014

This visit includes landing: Yes Number of Visitors: 113

**Activities:** Small Boat Landing

Site Name: Telefon Bay Latitude: 62º 56′ 00′′ S Longitude: 60º 40′ 00′′ W

Visit Date: 17/12/2014

This visit includes landing: Yes Number of Visitors: 109

**Activities:** Small Boat Landing

Site Name: Ushuaia Latitude: Longitude:

**Visit Date:** 20/12/2014

This visit includes landing: Yes Number of Visitors: 216

**Activities:** Passenger Exchange

20 Dec 2014 Ushuaia/Argentina 07 Jan 2015 Ushuaia/Argentina

**Visited Sites:** View in Google Earth Map

Site Name: Ushuaia Latitude: Longitude:

Visit Date: 20/12/2014

This visit includes landing: Yes Number of Visitors: 244

Activities: Passenger Exchange

Site Name: Penguin Island Latitude: 62° 06′ 00′′ S Longitude: 57° 54′ 00′′ W

Visit Date: 31/12/2014

This visit includes landing: Yes Number of Visitors: 151

**Activities:** Small Boat Landing

Site Name: Brown Bluff Latitude: 63° 32′ 00′′ S Longitude: 56° 55′ 00′′ W

Visit Date: 01/01/2015

This visit includes landing: Yes Number of Visitors: 137

Activities: Small Boat Landing

Site Name: Whalers Bay Latitude: 62° 59′ 00′′ S Longitude: 60° 34′ 00′′ W

Visit Date: 02/01/2015

This visit includes landing: Yes Number of Visitors: 122

Activities: Small Boat Landing

Site Name: Half Moon Island Latitude: 62°36′S Longitude: 59°55′W

Visit Date: 02/01/2015

This visit includes landing: Yes Number of Visitors: 150

Activities: Small Boat Landing

Site Name: Paradise Bay Latitude: 64° 49′ 00′′ S Longitude: 62° 52′ 00′′ W

**Visit Date:** 03/01/2015

This visit includes landing: No Number of Visitors: 137

Activities: Small Boat Cruising

Site Name: Pleneau Island Latitude: 65° 06′ 00′′ S Longitude: 64° 04′ 00′′ W

Visit Date: 03/01/2015

This visit includes landing: Yes Number of Visitors: 134

Activities: Small Boat Landing

Site Name: Goudier Island Latitude: 64° 50′ 00′′ S Longitude: 63° 30′ 00′′ W

Visit Date: 04/01/2015

This visit includes landing: Yes Number of Visitors: 159

**Activities:** Small Boat Landing

Site Name: Ushuaia Latitude: Longitude:

Visit Date: 07/01/2015

This visit includes landing: Yes Number of Visitors: 244

**Activities:** Passenger Exchange

07 Jan 2015 Ushuaia/Argentina 25 Jan 2015 Ushuaia/Argentina

Visited Sites: View in Google Earth Map

Site Name: Ushuaia Latitude: Longitude:

Visit Date: 07/01/2015

This visit includes landing: Yes Number of Visitors: 252

Activities: Passenger Exchange

Site Name: Orcadas Latitude: 60° 45′ 00′′ S Longitude: 44° 44′ 00′′ W

Visit Date: 17/01/2015

This visit includes landing: Yes Number of Visitors: 151

Activities: Small Boat Landing

Site Name: Point Wild Latitude: 61° 06′ 00′′ S Longitude: 54° 52′ 00′′ W

Visit Date: 18/01/2015

This visit includes landing: No Number of Visitors: 151

Activities: Small Boat Cruising

Site Name: D'Urville Monument Latitude: 63° 25′ 00′′ S Longitude: 56° 18′ 00′′ W

Visit Date: 19/01/2015

This visit includes landing: Yes Number of Visitors: 149

Activities: Small Boat Landing

Site Name: Orne Harbor Latitude: 64°37 'S Longitude: 62°32 'W

Visit Date: 20/01/2015

This visit includes landing: Yes Number of Visitors: 159

**Activities:** Small Boat Landing

Site Name: Petermann Island Latitude: 65° 10′ 00′′ S Longitude: 64° 10′ 00′′ W

Visit Date: 21/01/2015

This visit includes landing: Yes Number of Visitors: 161

Activities: Small Boat Landing

Site Name: Goudier Island Latitude: 64º 50′ 00′ S Longitude: 63º 30′ 00′ W

Visit Date: 21/01/2015

This visit includes landing: Yes Number of Visitors: 164

Activities: Small Boat Landing

Site Name: Telefon Bay Latitude: 62º 56′ 00′′ S Longitude: 60º 40′ 00′′ W

Visit Date: 22/01/2015

This visit includes landing: Yes Number of Visitors: 151

Activities: Small Boat Landing

Site Name: Whalers Bay Latitude: 62º 59' 00' S Longitude: 60º 34' 00' W

Visit Date: 22/01/2015

This visit includes landing: Yes Number of Visitors: 116

Activities: Small Boat Landing

Site Name: Ushuaia Latitude: Longitude:

Visit Date: 25/01/2015

This visit includes landing: Yes Number of Visitors: 252

**Activities:** Passenger Exchange

25 Jan 2015 Ushuaia, Argentina 12 Feb 2015 Ushuaia, Argentina

**Visited Sites:** View in Google Earth Map

Site Name: Orcadas Latitude: 60° 45′ 00′′ S Longitude: 44° 44′ 00′′ W

Visit Date: 03/01/2015

This visit includes landing: Yes Number of Visitors: 154

**Activities:** Small Boat Landing

Site Name: Ushuaia Latitude: Longitude:

**Visit Date:** 25/01/2015

This visit includes landing: Yes Number of Visitors: 246

**Activities:** Passenger Exchange

Site Name: Point Wild Latitude: 61º 06′ 00′′ S Longitude: 54º 52′ 00′′ W

**Visit Date:** 04/02/2015

This visit includes landing: No Number of Visitors: 144

Activities: Small Boat Cruising

Site Name: Penguin Island Latitude: 62° 06′ 00′′ S Longitude: 57° 54′ 00′′ W

Visit Date: 05/02/2015

This visit includes landing: Yes Number of Visitors: 146

**Activities:** Small Boat Landing

Site Name: Arctowski Station Latitude: 62° 15′ 00′′ S Longitude: 58° 51′ 00′′ W

**Visit Date:** 05/02/2015

This visit includes landing: Yes Number of Visitors: 156

Activities: Small Boat Landing

Site Name: Paulet Island Latitude: 63° 35′ 00′′ S Longitude: 55° 47′ 00′′ W

Visit Date: 06/02/2015

This visit includes landing: Yes Number of Visitors: 124

Activities: Small Boat Landing

Site Name: Orne Harbor Latitude: 64°37 'S Longitude: 62°32 'W

Visit Date: 07/02/2015

This visit includes landing: Yes Number of Visitors: 143

Activities: Small Boat Landing

Site Name: Spert Island Latitude: 63°51 'S Longitude: 60°57 'W

Visit Date: 07/02/2015

This visit includes landing: No Number of Visitors: 130

**Activities:** Small Boat Cruising

Site Name: Pleneau Island Latitude: 65° 06′ 00′′ S Longitude: 64° 04′ 00′′ W

Visit Date: 08/02/2015

This visit includes landing: Yes Number of Visitors: 140

Activities: Small Boat Landing

Site Name: Goudier Island Latitude: 64º 50′ 00′ S Longitude: 63º 30′ 00′ W

Visit Date: 08/02/2015

This visit includes landing: Yes Number of Visitors: 162

Activities: Small Boat Landing

Site Name: Mikkelsen Harbor Latitude: 63°54′S Longitude: 60°47′W

Visit Date: 09/02/2015

This visit includes landing: Yes Number of Visitors: 123

Activities: Small Boat Landing

Site Name: Telefon Bay Latitude: 62° 56′ 00′′ S Longitude: 60° 40′ 00′′ W

Visit Date: 09/02/2015

This visit includes landing: Yes Number of Visitors: 139

Activities: Small Boat Landing

Site Name: Ushuaia Latitude: Longitude:

Visit Date: 12/02/2015

This visit includes landing: Yes Number of Visitors: 246

Activities: Passenger Exchange

12 Feb 2015 Ushuaia, Argentina 04 Mar 2015 Montevideo, Uruguay

**Visited Sites:** View in Google Earth Map

Site Name: Ushuaia Latitude: Longitude:

Visit Date: 12/02/2015

This visit includes landing: Yes Number of Visitors: 247

**Activities:** Passenger Exchange

Site Name: Whalers Bay Latitude: 62° 59′ 00′′ S Longitude: 60° 34′ 00′′ W

Visit Date: 15/02/2015

This visit includes landing: Yes Number of Visitors: 162

Activities: Small Boat Landing

Site Name: Hannah Point Latitude: 62°39′S Longitude: 60°37′W

**Visit Date:** 15/02/2015

This visit includes landing: Yes Number of Visitors: 153

Activities: Small Boat Landing

Site Name: Goudier Island Latitude: 64º 50′ 00′′ S Longitude: 63º 30′ 00′′ W

Visit Date: 16/02/2015

This visit includes landing: Yes Number of Visitors: 165

Activities: Small Boat Landing

Site Name: Danco Island Latitude: 64º 44′ 00′ S Longitude: 62º 37′ 00′ W

**Visit Date:** 16/02/2015

This visit includes landing: Yes  $\$ Number of Visitors: 141

Activities: Small Boat Landing

Site Name: Detaille Island Latitude: 66° 52′ 00′′ S Longitude: 66° 48′ 00′′ W

Visit Date: 17/02/2015

This visit includes landing: No Number of Visitors: 129

**Activities:** Small Boat Cruising

Site Name: Orne Harbor Latitude: 64°37 'S Longitude: 62°32 'W

Visit Date: 18/02/2015

This visit includes landing: Yes Number of Visitors: 141

Activities: Small Boat Landing

Site Name: Pleneau Island Latitude: 65° 06′ 00′′ S Longitude: 64° 04′ 00′′ W

Visit Date: 18/02/2015

This visit includes landing: Yes Number of Visitors: 131

Activities: Small Boat Landing

Site Name: Paulet Island Latitude: 63° 35′ 00′′ S Longitude: 55° 47′ 00′′ W

Visit Date: 19/02/2015

This visit includes landing: Yes Number of Visitors: 146

Activities: Small Boat Landing

Site Name: Point Wild Latitude: 61° 06′ 00′′ S Longitude: 54° 52′ 00′′ W

Visit Date: 20/02/2015

This visit includes landing: No Number of Visitors: 142

**Activities:** Small Boat Cruising

Site Name: Orcadas Latitude: 60° 45′ 00′′ S Longitude: 44° 44′ 00′′ W

Visit Date: 21/02/2015

This visit includes landing: Yes Number of Visitors: 54

Activities: Small Boat Landing

Site Name: Ushuaia Latitude: Longitude:

Visit Date: 04/03/2015

This visit includes landing: Yes Number of Visitors: 247

Activities: Passenger Exchange

Contact Address: Ballindamm 25, D-20095 Hamburg, Germany

Email Address:

**Website Address:** 

Name of Vessel: MS HANSEATIC

Country of Registry: Bahamas

Number of Voyages: 0

**Maximum Crew:** 

**Maximum Passengers:** 

Remarks:

German Journalist Hans Gerhard Pfaff will be aboard HAN1500 to make enquiries and to take photos

for an article in a german newspaper. Journey lasts from 13.12.2014 to 04.01.2015

Voyages:

Operator:

Depart. Date Depart. Port Arrival Date Arrival Port Expedition Leader

Contact Address: Ballindamm 25, D-20095 Hamburg, Germany

Email Address:

**Website Address:** 

Name of Vessel: MS BREMEN

**Country of Registry:** 

Number of Voyages: 0

**Maximum Crew:** 

**Maximum Passengers:** 

Remarks:

The Austrian journalist Doris Maier aboard ship during first cruise (BRE1423) to make enquiries for

an article in a magazine.

Voyages:

Operator:

Depart. Date Depart. Port Arrival Date Arrival Port Expedition Leader

Contact Address: Ballindamm 25, D-20095 Hamburg, Germany

Email Address:

**Website Address:** 

Name of Vessel: MS HANSEATIC

**Country of Registry:** 

Number of Voyages: 0

**Maximum Crew:** 

**Maximum Passengers:** 

Remarks:

German Journalists Friedrich Graup and Thilo Thielke (Cruisevison) will be aboard HAN1503 to make

enquiries for a tv-feature (N24) Journey lasts from 09.02.2015 to 28.02.2015

Voyages:

Operator:

Depart. Date Depart. Port Arrival Date Arrival Port Expedition Leader

Name: WIRODIVE Tauch- und Erlebnisreisen GmbH, Robert Wilpernig

**Contact Address:** Stadtgraben 17, Stadtgraben 17

**Website Address:** 

**Email Address:** 

Name of Vessel: **MS Plancius** 

**Country of Registry:** 

0 **Number of Voyages:** 

**Maximum Crew:** 

**Maximum Passengers:** 

The German citizen Robert Wilpernig (Wirodive GmbH) will be abord MS Plancius and will fly a UAV Remarks:

for commercial landscape shots in Antarctica

Voyages:

Operator:

Depart. Port **Arrival Date Arrival Port** Depart. Date **Expedition Leader**  Name: Wolf Kloss, Turismo SIM Ltd

Contact Address: Calle Maragaño 168, P.O. Box 6, Puerto Williams, XII Region, Chile
Operator:

Email Address: base@simexpeditions.com

Website Address:

Name of Vessel: S/Y SANTA MARIA AUSTRALIS

Country of Registry: Berlin, Germany

Number of Voyages: 3

Maximum Crew: 2

Maximum Passengers: 9

**Remarks:** 3 Voyages along the Antarctic Peninsula

Voyages:

Depart. Date Depart. Port Arrival Date Arrival Port Expedition Leader

27 Dec 2014 Puerto Williams, Chile 17 Jan 2015 Puerto Williams, Chile

**Visited Sites:** View in Google Earth Map

Site Name: Dallmann Bay Latitude: 64º 20 ' 00 ' ' S Longitude: 62º 55 ' 00 ' ' W

Visit Date: 31/12/2014

This visit includes landing: Yes

Site Name: Dallmann Bay Latitude: 64º 20 ' 00 ' ' S Longitude: 62º 55 ' 00 ' ' W

Visit Date: 01/01/2015

This visit includes landing: Yes

Site Name: Galindez Island, Argentine Islands Archipelago, Antarctic Peninsula Latitude: 65° 15′ 00′′ S Longitude: 64° 15′ 00

, M

Visit Date: 01/01/2015

This visit includes landing: Yes

Site Name: Wiencke Island, Port Lockroy Latitude: 64° 50′ 00′′ S Longitude: 63° 23′ 00′′ W

**Visit Date:** 02/01/2015

This visit includes landing: Yes

Site Name: Port Charcot Latitude: 65° 04′ 00′′ S Longitude: 64° 00′ 00′′ W

**Visit Date:** 03/01/2015

This visit includes landing: Yes

Site Name: Pleneau Island Latitude: 65° 06′ 00′′ S Longitude: 64° 04′ 00′′ W

Visit Date: 04/01/2015

This visit includes landing: Yes

Site Name: Petermann Island Latitude: 65° 10′ 00′′ S Longitude: 64° 10′ 00′′ W

Visit Date: 06/01/2015

This visit includes landing: Yes

Site Name: Almirante Brown Latitude: 64° 54′ 00′′ S Longitude: 62° 52′ 00′′ W

**Visit Date:** 07/01/2015

This visit includes landing: Yes

Site Name: Paradise Bay Latitude: 64º 49′ 00′′ S Longitude: 62º 52′ 00′′ W

Visit Date: 08/01/2015

This visit includes landing: Yes

Site Name: Cuverville Island Latitude: 64° 41′ 00′′ S Longitude: 62° 34′ 00′′ W

Visit Date: 09/01/2015

This visit includes landing: Yes

Site Name: Foyn Harbour Latitude: 64º 55′ 00′′ S Longitude: 62º 02′ 00′′ W

Visit Date: 10/01/2015

This visit includes landing: Yes

Site Name: Whalers Bay Latitude: 62° 59′ 00′′ S Longitude: 60° 34′ 00′′ W

Visit Date: 11/01/2015

This visit includes landing: Yes

Site Name: Telefon Bay Latitude: 62º 52′00′′ S Longitude: 60º 40′00′′ W

Visit Date: 12/01/2015

This visit includes landing: Yes

24 Jan 2015 Puerto Williams, Chile 14 Feb 2015 Puerto Williams, Chile

Visited Sites: View in Google Earth Map

Site Name: Deception Island, Telefon Bay Latitude: 62° 56′ 00′′ S Longitude: 60° 40′ 00′′ W

Visit Date: 29/01/2015

This visit includes landing: Yes

Site Name: Whalers Bay/Deception Island Latitude: 62° 59′ 00′′ S Longitude: 60° 34′ 00′′ W

Visit Date: 30/01/2015

This visit includes landing: Yes

Site Name: Foyn Harbour Latitude: 64° 55′ 00′′ S Longitude: 62° 02′ 00′′ W

Visit Date: 31/01/2015

This visit includes landing: Yes

Site Name: Cuverville Island Latitude: 64º 41′ 00′′ S Longitude: 62º 34′ 00′′ W

Visit Date: 01/02/2015

This visit includes landing: Yes

Site Name: Waterboat Point Latitude: 64°49 'S Longitude: 62°51 'W

Visit Date: 02/02/2015

This visit includes landing: Yes

Site Name: Almirante Brown Latitude: 64° 54′ 00′′ S Longitude: 62° 52′ 00′′ W

Visit Date: 03/02/2015

This visit includes landing: Yes

Site Name: Port Charcot Latitude: 65° 04′ 00′′ S Longitude: 64° 00′ 00′′ W

Visit Date: 04/02/2015

This visit includes landing: Yes

Site Name: Pleneau Island Latitude: 65° 06′ 00′′ S Longitude: 64° 04′ 00′′ W

Visit Date: 05/02/2015

This visit includes landing: Yes

Site Name: Galindez Island, Argentine Islands Archipelago, Antarctic Peninsula Latitude: 65º 15′ 00′′ S Longitude: 64º 15′ 00

′′ W

Visit Date: 06/02/2015

This visit includes landing: Yes

Site Name: Petermann Island Latitude: 65° 10′ 00′′ S Longitude: 64° 10′ 00′′ W

Visit Date: 07/02/2015

This visit includes landing: Yes

Site Name: Port Lockroy Latitude: 64° 49′ 00′′ S Longitude: 63° 30′ 00′′ W

**Visit Date:** 08/02/2015

This visit includes landing: Yes

Site Name: Dallmann Bay Latitude: 64º 20′ 00′′ S Longitude: 62º 55′ 00′′ W

Visit Date: 09/02/2015

This visit includes landing: Yes

21 Feb 2015 Puerto Williams, Chile 14 Mar 2015 Puerto Williams, Chile

**Visited Sites:** View in Google Earth Map

Site Name: Deception Island, Telefon Bay Latitude: 62° 56′ 00′ S Longitude: 60° 40′ 00′ W

Visit Date: 26/02/2015

This visit includes landing: Yes

Site Name: Whalers Bay/Deception Island Latitude: 62° 59′ 00′′ S Longitude: 60° 34′ 00′′ W

Visit Date: 27/02/2015

This visit includes landing: Yes

Site Name: Foyn Harbour Latitude: 64° 55′ 00′′ S Longitude: 62° 02′ 00′′ W

Visit Date: 28/02/2015

This visit includes landing: Yes

Site Name: Cuverville Island Latitude: 64° 41′ 00′′ S Longitude: 62° 34′ 00′′ W

Visit Date: 01/03/2015

This visit includes landing: Yes

Site Name: Waterboat Point Latitude: 64°49 'S Longitude: 62°51 'W

Visit Date: 02/03/2015

This visit includes landing: Yes

Site Name: Almirante Brown Latitude: 64° 54′ 00′′ S Longitude: 62° 52′ 00′′ W

Visit Date: 03/03/2015

This visit includes landing: Yes

Site Name: Port Charcot Latitude: 65° 04′ 00′′ S Longitude: 64° 00′ 00′′ W

**Visit Date:** 04/03/2015

This visit includes landing: Yes

Site Name: Galindez Island, Argentine Islands Archipelago, Antarctic Peninsula Latitude: 65° 15′ 00′′ S Longitude: 64° 16′ 00

' W

Visit Date: 06/03/2015

This visit includes landing: Yes

Site Name: Pleneau Island Latitude: 65° 06′ 00′′ S Longitude: 64° 04′ 00′′ W

Visit Date: 06/03/2015

This visit includes landing: Yes

Site Name: Petermann Island Latitude: 65° 10′ 00′′ S Longitude: 64° 10′ 00′′ W

**Visit Date:** 07/03/2015

This visit includes landing: Yes

Site Name: Port Lockroy Latitude: 64° 49′ 00′′ S Longitude: 63° 30′ 00′′ W

Visit Date: 08/03/2015
This visit includes landing: Yes

Site Name: Dallmann Bay Latitude: 64° 20′ 00′′ S Longitude: 62° 55′ 00′′ W

Visit Date: 09/03/2015 This visit includes landing: Yes

## **Operational Information – Non Governmental Expeditions - Land-Based Operations**

Expedition Name: Expedition-Escort and stay at the German NeumayerIII and Kohnen Stations for a

journalistic Report

Method of transportation

to/within/from Antarctica:

DROMLAN Flight

1

**Activities:** 

Aircraft Flight, Helicopter Flight, Helicopter Landing, Station Visit

Number of Participants:

 Date begin:
 07 Jan 2015

 Date end:
 05 Feb 2015

**Number of personnel:** 

Name: Alfred-Wegener-Institut

Contact Address: Am Handelshafen 12, 27570 Bremerhaven

Operator: Email Address:

Website Address: www.awi.de

Remarks: Applicant: Dr. Ulf von Rauchhaupt, Frankfurter Allgemeine Sonntagszeitung

**Location of Activities** 

Atka Bay, close to Neumayer Station III

Kohnen Station

08 Jan 2015 Neumayer III

**Routes:** 

#### Environmental Information - Environmental Impact Assessment (IEE/CEE List - Annex I)

Type: IEE

Title: Antarctic tourism cruises of the MV Bremen - 2014/2015

Organization(s) responsible: Applicant: Hapag-Lloyd Ltd., IEE carried out by the Federal Environment Agency

**Activity:** Tourism cruises (six voyages) - Non Governmental Expedition **Topics:** 

- Tourism

Site name: Antarctic Peninsula Region

Latitude: Latitude:

Period/length of the activity:

Locations:

**Decision/Comment:** Permit granted on 7th October 2014 (in German); Proceed - a minor or transitory impact

Type: IEE

Title: Antarctic tourism cruises of the MV Hanse Explorer - 2014/2015

Organization(s) responsible: Applicant: Hanse Explorer Ltd., IEE carried out by the Federal Environment Agency

**Activity:** Tourism cruises (four voyages) - Non Governmental Expedition **Topics:** 

- Tourism

Site name: Antarctic Peninsula Region

Latitude: Latitude:

Locations: Site name: Weddell Sea

> Latitude: Latitude:

Period/length of the activity:

**Decision/Comment:** Permit granted on 17th December 2014; Proceed - A minor or transitory impact

Type: IEE

Title: Antarctic tourism cruises of the MV Hanseatic - 2014/2015

Organization(s) responsible: Applicant: Hapag-Lloyd Ltd., IEE carried out by the Federal Environment Agency

**Activity:** Tourism cruises (six voyages) - Non Governmental Expedition **Topics:** 

- Tourism

Site name: Antarctic Peninsula Region

Locations: Latitude: Latitude:

Period/length of the activity:

**Decision/Comment:** Permit granted on 26h September 2014 (in German); Proceed - A minor or transitory impact

Type: IEE

Title: Fildes Peninsula Expedition 2014/2015

Applicant: University of Jena (Hans-Ulrich Peter); IEE carried out by the Federal Environment Organization(s) responsible:

Agency

**Activity:** Biological surveys on birds and seals - National Antarctic Programme **Topics:** 

- Science

Site name: King George Island, Maxwell Bay

Locations: Latitude: 62°11'S

Latitude: 58°51W

Period/length of the activity:

**Decision/Comment:** Permit granted on 24th Oct 2014; Proceed - A minor or transitory impact

IEE Type:

Title: Onward operation of Kohnen Station

Organization(s) responsible:

**Topics:** 

**Topics:** 

**Activity:** Operation of scientific summer station

- Construction / operation of facilities

- National Antarctic Programme

- Science

Site name: Kohnen Station, Dronning Maud Land

Latitude: 75° 00′ 00′′ S Locations:

Latitude: 00° 04′ 00′′ E

Period/length of the activity:

**Decision/Comment:** Permit granted on 14th October 2014; Proceed - A minor or transitory impact

IEE Type:

Title: Onward operation of Neumayer Station III

Applicant: Alfred-Wegener-Institute for Polar and Marine Research, IEE carried out by the Federal Organization(s) responsible:

**Environment Agency** 

**Activity:** Operation of scientific wintering station

- Construction / operation of facilities

- National Antarctic Programme

- Science

Site name: Eckström Ice Shelf, Dronning Maud Land, East Antarctica

Locations: Latitude:

Latitude:

Period/length of the activity:

**Decision/Comment:** Permit granted on 23th Oct 2014, Proceed - A minor or transitory impact

Type: IEE

Title: Seismic surveys to quantify the glacial sediment sequences (PS 90/ANT-XXX/3)

Applicant: Alfred-Wegener-Institute (Karsten Gohl), IEE (study) carried out by the Alfred-Wegener-Organization(s) responsible:

Institute

**Activity:** Seismic surveys onboard RV Polarstern

- National Antarctic Programme **Topics:** 

- Science

Site name: Amundsen Sea Locations: Latitude: 60° S - 75°S

Latitude: 115° W - 130° W

Period/length of the activity:

**Decision/Comment:** Permit granted on 17th Dec 2014; Proceed - A minor or transitory impact

#### **Environmental Information - Conservation of Fauna and Flora**

**Permit Number:** 94003-3/327

Permit Period: Date Begin: 03 Feb 2015 Date End: 15 Mar 2015

Species: Birds and seals

Location: Site Name: Amundsen Sea Lat: 73°00′S Long: 112°00′W

Action: Harmful interference

**Harmful Interference:** Aircraft disturbance to birds and seals

Amount:

**Purpose:** Carrying out magnetic surveys by helicopter

Removal or Disposal: No

Remarks:

**Event or Project Name/Number:**Mapping of magnetic anomalies in the Southern Amundsen Sea; Karsten Gohl (AWI); PS 90 (ANT-

XXX/3)

**Permit Number:** 94003-3/326

Permit Period: Date Begin: 02 Dec 2014 Date End: 01 Feb 2015

Species: Birds and seals

**Location:** Site Name: Weddell Sea and Antarctic Peninsula Lat: Long:

**Action:** Harmful interference

**Harmful Interference:** Aircraft disturbance to birds and seals

Amount:

**Purpose:** Carrying out ice thickness surveys with EM-Bird by helicopter

Removal or Disposal: No

Remarks:

Event or Project Name/Number: Sea Ice Physics and Ecology Study -SIPES; H. Flores (AWI); PS 89, ANT-XXX/2

**Permit Number:** 94003-3/324

Permit Period: Date Begin: 02 Dec 2014 Date End: 01 Feb 2015

Species: Birds and seals

Location: Site Name: Weddell Sea and Antarctic Peninsula Lat: Long:

Action: Harmful interference

**Harmful Interference:** Aircraft disturbance to birds and seals

Amount:

**Purpose:** Helicopter landing on ice floes

Removal or Disposal: No

Remarks:

**Event or Project Name/Number:** Hybrid Antarctic Float Observing System - HAFOS, Olaf Boebel (AWI), PS 89, ANT-XXX/2

**Permit Number:** 94003-3/334

Permit Period: Date Begin: 20 Nov 2014 Date End: 20 Feb 2015

Species: Birds and seals

Location: Site Name: Dronning Maud Land, East Antarctica Lat: Long:

Action: Harmful interference

**Harmful Interference:** Aircraft disturbance to birds and seals

Amount:

**Purpose:** Carrying out different airbore measurements by plane

Removal or Disposal: No

Remarks:

The study site also included land and sea areas of the Antarctic Peninsula as well as parts of West

Antarctica; RecFil 2014/2015 was cancelled; some additional logistic flights were carried out

Event or Project Name/Number: CryoVEx ANT 2014/15, WEGAS 2014/15

**Permit Number:** 94003-3/322

Permit Period: Date Begin: 05 Dec 2014 Date End: 31 Jan 2015

Species: Birds and seals

Location: Site Name: Weddell Sea and Antarctic Peninsula Lat: Long:

**Action:** Harmful interference

**Harmful Interference:** Aircraft disturbance to birds and seals

Amount:

Purpose: Carrying out line-transect distance sampling surveys by helicopter

Removal or Disposal: No

Remarks:

Event or Project Name/Number: Aerial and ship based observation of marine mammals; H. Feindt-Herr (ITAW); PS 89, ANT XXX/3

**Permit Number:** 94003-3/320

Permit Period: Date Begin: 03 Feb 2015 Date End: 15 Mar 2015

Species: Marine mammals

Location: Site Name: Amundsen Sea Lat: 73°00′S Long: 112°00′W

Action: Taking
Taking: Molest

Amount:

Purpose: Carrying out sesmic surveys

Removal or Disposal: No

Remarks: Quantifying glazial sediment records for the reconstruction of west Antarctic ice-shield dynamics by

seismic surveys

Event or Project Name/Number: Karsten Gohl (AWI); PS 90/ANT XXX/3

**Permit Number:** 94003-3/338

**Permit Period: Date Begin:** 24 Oct 2014 **Date End:** 31 Mar 2015

Species: South polar skua, brown skua, Adelie, gentoo, chinstrap penguin

Site Name: Fildes Peninsula Region (Fildes Peninsula, Ardley Island and surounding small islands) Location:

Lat: Long:

Action: Taking

Capture

Handle Taking: Injure

Molest

**Amount:** 

Counting, mapping, capturing, measureing, banding, taking blood samples, using artificial eggs with **Purpose:** 

sensors, stomach irrigation at penguins, using micro-UAV to process images

Removal or Disposal: No

Remarks:

**Event or Project Name/Number:** Fildes Peninsula Expedition 2014/2015; Hans-Ulrich Peter (University of Jena)

### **Environmental Information - Area Protection and Management (Permit, Visit and Activities)**

Type: ASPA Number: 125 Name: Fildes Peninsula, King George Island (25 de Mayo) (More ASPA / ASMA:

Details)

**Permit Number:** II2.8-94003-3/338

Number of people: Permitted to enter: 6 That actually entered: 6

**Permit Period: From:** 10 Nov 2014 **To:** 25 Feb 2015

Research Project "Fildes Peninsula Expedition 2014/2015" by the University of Jena (Hans-Ulrich Purpose:

Peter) in cooperation with ThINK Inc. (Osama Mustafa)

Mapping and counting seals and birds; counting, measuring and banding skuas; using an unmanned Summary of activities:

aerial vehicle (UAV) for bird census purposes to minimize human disturbance; actually visited on 14

days between 23.12.2014 and 15.02.2015

Event or project name/number: Fildes Peninsula Expedition 2014/2015

Type: ASPA Number: 150 Name: Ardley Island, Maxwell Bay, King George Island (25 de ASPA / ASMA:

Mayo) (More Details)

**Permit Number:** II2.8-94003-3/338

Summary of activities:

Number of people: Permitted to enter: 6 That actually entered: 6

**Permit Period:** From: 05 Nov 2014 To: 25 Feb 2015

Research Project "Fildes Peninsula Expedition 2014/2015" by the University of Jena (Hans-Ulrich **Purpose:** 

Peter) in cooperation with ThINK Inc. (Osama Mustafa)

Mapping and counting seals and birds; counting, mapping, capturing, measuring, banding birds; taking blood samples, using artificial eggs with sensors, stomach irrigation at penguins; using an

unmanned aerial vehicle (UAV) for bird census purposes and to carry out disturbance vulnerability

surveys; actually visited on 48 days between 27.10.2014 and 18.02.2015

Event or project name/number: Fildes Peninsula Expedition 2014/2015

<b>Environmental Information - Are</b>	ea Protection and Mana	gement (Chang	ie or Damage)
--	------------------------	---------------	---------------

No change or damage was observed during this reporting period.						

# Other Information - Relevant National Legislation

No new information have been provided during the reported period.