

# German Arctic expeditions 2012 - 2013

ASSW, 15 – 19 April, 2013, Kraków, Poland

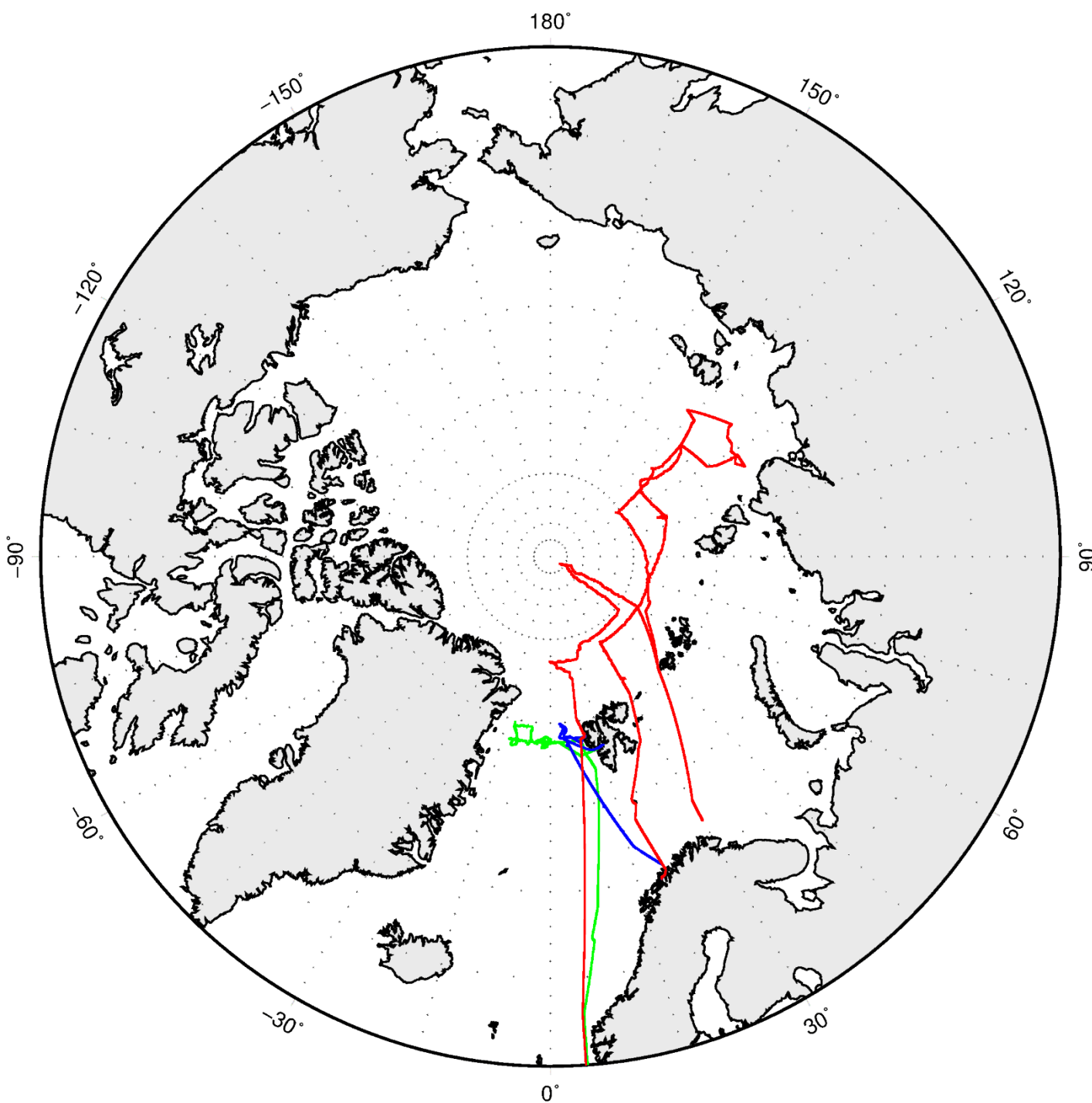
# Polarstern Arctic Expeditions 2012 AWI

Leg	Start	End	Days	Pers.	Person days	Programme name	Mission
ARK-XXVII/1	14.06.12	15.07.12	32	88	2816	ACOBAR / PEBCAO	Physical oceanography, plankton ecology and biogeochemistry in the Fram Strait
ARK-XXVII/2	15.07.12	30.07.12	17	89	1513	PEBCAO / HAUSGARTEN	Pelagic and deep sea biology in the Fram Strait
ARK-XXVII/3	02.08.12	07.10.12	67	98	6566	IceARC	Physical, biogeochemical and planktonic studies of the water column, sea ice and the ocean floor

ARK-XXVII/1

ARK-XXVII/2

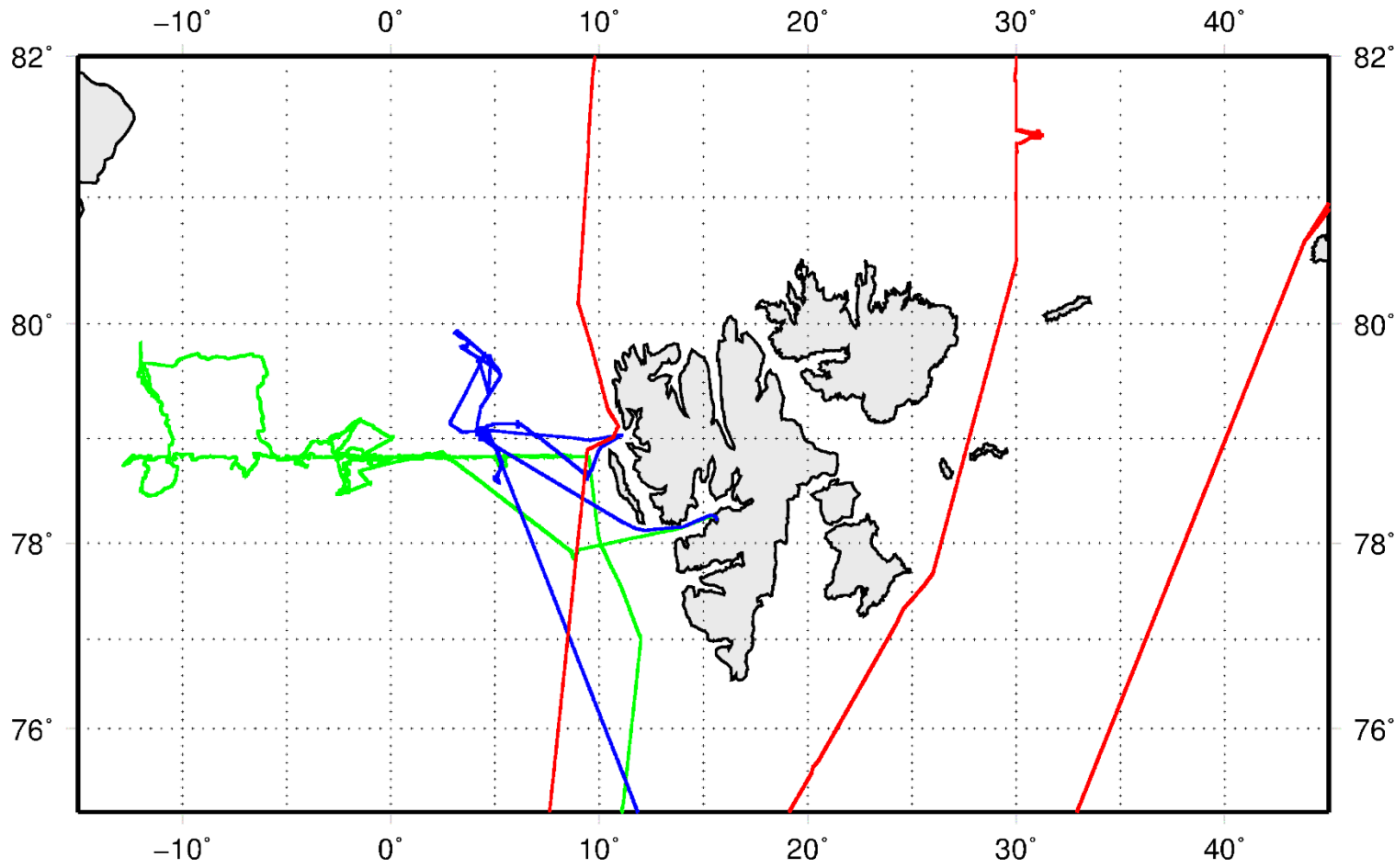
ARK-XXVII/3



ARK-XXVII/1

ARK-XXVII/2

ARK-XXVII/3





Projects	Start	End	Pers. Days	Nations	Mission
37	Jan	Sep	1322 1215	France Germany	Atmospheric sciences Seismology, Gravity Glaciology, Marine Biology Sea ice



*Samoylov  
Research Station*

# Land based activities: Siberia & Canada AWI

Leg	Start	End	Pers. Days	Nations	Mission
LENA 2012	April 12	Sep 05	3968	Russia Germany	Long term studies of energy and water balance, carbon turn over, greenhouse gas emission in permafrost Coastal dynamic and subsea permafrost stud. Hydrological, sedimentological and biological studies in shoreface transects
TRANSDRIFT XX	March 19	April 23	805	Russia Germany	studies of the Siberian Shelf Polynya in response to oceanic, sea-ice and atmospheric forcings as well as feedbacks from the Laptev Sea polynya to the Arctic system
Kytalyk-Pokhodsk + Buor Khaya 2012	Jul 01	Sep 07	1041	Russia Germany	Hydrological, sedimentological and biological studies of Polygons in tundra wetlands: state and dynamics under climate variability in Polar Regions
Yukon Coast 2012	Jul 17	Aug 28	384	Canada Germany	<ul style="list-style-type: none"> <li>• Coastal erosion and permafrost geomorphology</li> <li>• Onshore and offshore sediment, carbon and nutrient fluxes</li> <li>• Permafrost cores → reconstruct paleogeography</li> <li>• Lake sediments → climate reconstructions</li> </ul>

# Polar 5 and Polar 6





## PAMARCMIP

Alert to Svalbard,  
atmospheric research

## Airmeth

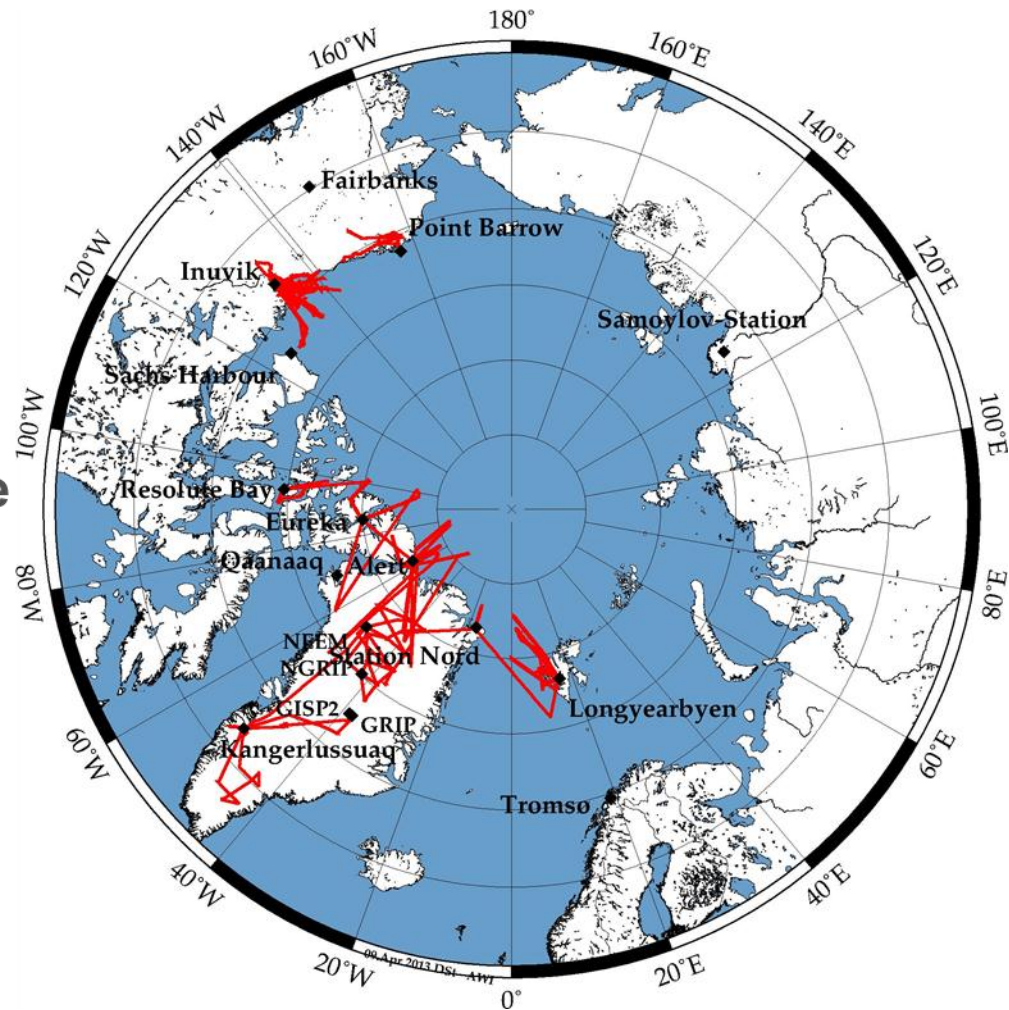
Finland, North & Baltic Sea  
methane emissions

## NGT

North Greenland Traverse,  
mapping the internal structure  
of the ice sheet and drilling  
shallow ice cores

## TIFAX

North of Station Nord,  
sea ice thickness mapping



# POLAR 5/6 schedule 2013



Leg	Start	End	Pers. Days	Institutions	Programme name	Mission
STABLE	Feb 26	March 29	286	AWI, FMI	Spring Time Arctic atmospheric Boundary Layer Experiment	Temporal and regional variability of energy fluxes and momentum in the ABL and variability of the albedo above sea ice
PAM ARC MIP	April 17	May 02	160	AWI, Uni York, EC	Polar Airborne Measurements and Arctic Regional Climate Model Simulation Project	Black carbon in atmosphere and deposition to snow/ice surfaces and climatic impacts Sea ice thickness CryoSat Cal/Val
Airmeth	June 29	July 31	148	GFZ, AWI	Airborne Messurements of Methane Emissions	Determining methane fluxes above permafrost regions
TIFAX / TOP79. 5	Aug 19	Sep 06	60	AWI, Uni York	Thick Ice Feeding Arctic Export	Sea ice thickness and roughness and radiation above SMOS, CryoSat Cal/Val
	Aug 19	Sep 06	30	AWI	Surface Topography of the 79.5° Glacier	Altimetry

A still life photograph featuring a glass of whisky with a large ice cube on a rustic wooden table. The glass is the central focus, with the amber liquid and the clear ice cube catching the light. To the left and right, other glasses of whisky are partially visible. In the background, a white ceramic bowl sits on the table. The lighting is warm and directional, creating soft shadows and highlights on the glass and wood. The overall mood is cozy and elegant.

Thank you!

Dziękujemy!

# POLAR 5/6 plan 2014



Leg	Start	End	Pers. Days	Institutions	Programme name	Mission
LEAST	March 01	March 30	120	Uni Trier, Uni Hamburg	Lead and ABL Study in the Transpolar System	Structure of the ABL and leads in sea ice, satellite validation
RACEPAC	April 19	May 26	380	Uni Leipzig, AWI, Uni Aubièrre, FZ Jülich, KIT, MPI Mainz	RAdiative Closure ExPeriment for Arctic Clouds	Analyzing the interaction of Arctic mixed-phase clouds by investigating microphysical and radiative properties and atmospheric conditions.
NETCARE	June 13	July 12	120	Uni Toronto, EC, AWI, MPI Mainz	NETwork on Climate and Aero-sols: Addressing Key Uncertainties in Remote Canadian Environments	Characterization of aerosol sources, properties and climate impacts, Sea ice thickness CryoSat Cal/Val
MELTEX	July 01	Aug 04	165	AWI, Uni Kiel	Impact of melt ponds on energy and momentum fluxes between atmosphere and sea ice	Sea ice thickness and roughness and radiation above SMOS, CryoSat Cal/Val
MRI Test	Aug 07	Aug 31	70	AWI, Uni Kansas	Multi channel Radar Imager	Test of new ice penetrating multichannel radar system.

