

International training course on ocean bottom and amphibian experiment seismological data

Date: September 5th to 6th, 2019

Venue: German Research Centre for Geosciences, Helmholtz Centre Potsdam
14473 Potsdam, Telegrafenberg, building H, VR 2 + 3

Programme

Day 1 – Thursday, September 5th, 2019

L = talk/lecture; T = short talk; D = demo/practical; E = Exercise/training; P = homework practical

Potentials and challenges of ocean bottom seismology + basic theory (synth. data)			
09:00-10:15	Short Intro + Potentials and scientific challenges of ocean bottom seismology	L	Dahm, N.N.
	Seismic waves observed at the ocean bottom	L+D	S. Heimann
10:15-10:30	<i>Coffee break</i>		
10:30-12:00	OBS stations, sensors + components, ...	L	S. Stähler (S.Aursch)
	Overview OBS pools, amphibian experiments	T (3x)	M. Schmidt-Aursch (D) W. Crawford (FR) N. Harmon (UK)
12:00-13:00	<i>Lunch</i>		
Data access, preparation & quality			
13:00-15:15	Data archives, download, meta data	T + P	J. Quinteros
	Preprocessing / processing of OBS data	L	K. Hannemann
15:15-15:30	<i>Coffee break</i>		
15:30-18:00	Preprocessing / processing of OBS data	P	K. Hannemann
	Seafloor noise, noise reduction by processing, compliance	T + D	W. Crawford
19:00	<i>Joint dinner participants + lecturers (self-paid)</i>		

Day 2 – Friday, September 6th, 2019

Scientific application / examples			
9:00-10:15	Ambient noise techniques using OBS	L	C. Juretzek (C. Hadziioannou)
	Seismicity studies using OBS / amphibian data I	D+E	D. Lange
10:15-10:30	<i>Coffee break</i>		
10:30-12:00	Seismicity studies using OBS / amphibian data I	D+E	D. Lange
12:00-14:00	<i>Lunch</i>		
Scientific application / examples			
14:00-16:00	Teleseismic body wave methods?		K. Hannemann
	Surface / interface waves analysis using OBS Receiver function studies		N. Harmon
15:45-16:00	<i>Coffee break</i>		
Expert support (software, examples, discussions)			
16:00-18:00	Individual training on request	E	all

Lecturers:

German Research Centre for Geosciences, Helmholtz Centre Potsdam

Prof. Dr. Torsten Dahm

Dr. Sebastian Heimann

Dr. Javier Quinteros

ETH Zürich, Department of Earth Sciences

Dr. Simon Stähler

AWI Bremerhaven, Helmholtz centre for polar and marine research

Dr. Mechita Schmidt-Aursch

Institut de Physique du Globe de Paris, Géosciences marines

Prof. Dr. Wayne Crawford

University of Southampton, Ocean and Earth Science, National Oceanography Centre

Prof. Dr. Nicholas Harmon

University of Leipzig

Dr. Katrin Hannemann

University of Hamburg

Carina Juretzek, Dr. Celine Hadziioannou

GEOMAR, Helmholtz Centre for Ocean Research Kiel

Dr. Dietrich Lange