

Workshop
SMART Cables for Earthquake and Tsunami Science and Early Warning
Nov 3-4, GFZ Potsdam, Germany

Building H, Room V1

Deutsches GeoForschungsZentrum (GFZ), Telegrafenberg 1, 14473 Potsdam, Germany

Programme

Thursday Nov 3

| | | |
|-----------|---|---|
| 8:30-9:00 | Registration + coffee | |
| 09:00 | Welcome and Introduction | Reinhard Hüttl (Scientific Executive Director of GFZ) |
| | <i>Global networks (chair F. Tilmann)</i> | |
| 09:15 | The JTF SMART Cable Initiative: Science Monitoring And Reliable Telecommunications, Climate Monitoring and Disaster Mitigation | Rhett Butler + Bruce Howe |
| 09:40 | CTBTO cabled hydroacoustic monitoring system | Georgios Haralabus |
| 10:05 | Technical Description of PTWC Operations | Stuart Weinstein |
| 10:40 | Coffee break | |
| | <i>Regional networks (chair B. Howe)</i> | |
| 11:00 | Earthquake and tsunami warning in Chile, status and future plans | S. Barrientos |
| 11:30 | Tsunami warning in Indonesia | J. Lauterjung, A. Strollo |
| 11:45 | MONSOON (MONitoring Subduction by Ocean Observatory Network): A Proposal to Develop Cost- Effective Seafloor Observatory System in Sumatra Java against Earthquake Tsunami Using the New Korean Research Vessel Isabu | Sang-Mook Lee |
| 12:00 | NEAMTWS: Evaluation of Candidate Tsunami Service Providers and updates 2016 | Alexander Rudloff |
| 12:15 | The Hellenic National Tsunami Warning Center (Greece):current status and future prospects as Tsunami Service Provider in the frame of NEAMTWS- IOC-UNESCO | Gerasimos Papadopoulos |
| 12:30 | Seismic activity in the Black Sea and the possible effects on the west coast of Black Sea and the infrastructure in the area | Constantin Ionescu |
| 12:45 | Lunch | |

| | | |
|-------|---|------------------|
| | <i>Large earthquakes and tsunamis (H. Kopp)</i> | |
| 13:30 | Near real-time earthquake source imaging - A potential use of SMART cables | Rongjiang Wang |
| 13:55 | The role of the tsunami modeling component in the early warning framework | Natalja Rakowsky |
| 14:20 | Interpretation of the signals recorded by ocean-bottom pressure gauges | Mikhail Nosov |
| 14:45 | Cabled systems for near-field tsunami early warning: An observation system simulation experiment (OSSE) offshore Portugal | Andrey Babeyko |
| 15:10 | Coffee | |
| | <i>Earth Structure applications (chair R. Butler)</i> | |
| 15:40 | SMART Cable Sensors and Global Seismology | Charlotte Rowe |
| 16:05 | Seafloor compliance | Wayne Crawford |
| | <i>Subsea sensors</i> | |
| 16:30 | Marine geophysical sensors and technology: opportunities for integration into SMART cable systems | Heidrun Kopp |
| 16:55 | The Modular Subsea Monitoring-Network | Jacob Sobin |
| 17:10 | Brief report on Subduction Zone Observatory Workshop in US | Frederik Tilmann |
| 17:15 | Wrap-up discussion: planning of breakout groups | |
| 17:45 | Close of day | |
| 20:00 | Workshop dinner in Potsdam centre (Schmiede 9) | |

Friday Nov 4

| | | |
|-------|--|-----------------|
| | <i>Cabled Observatories (chair S. Weinstein)</i> | |
| 09:00 | From a single science node to a dedicated warning system: ALOHA, DONET, and S-Net. | Bruce Howe |
| 09:30 | Earthquake and Tsunami applied science at Ocean Networks Canada | Gary Rogers |
| 10:25 | Synergies of SMART cables and offshore geophysical monitoring in Cascadia | William Wilcock |
| 10:40 | Ocean Observatory Initiative Cabled Array | Mike Harrington |
| 11:05 | Coffee break | |

| | |
|-------|---|
| 11:30 | Discussions in breakout groups Possible topics: 1. Define tasks still needed for quantitative demonstration of benefits to tsunami warning, earthquake physics and tomography. 2. Review of current technical concept (sensor types, sensitivities, connection to repeaters); future instrumentation ideas 3. Identify possible funding avenues; link to local partners, industry and regulatory bodies |
| 13:00 | Lunch |
| 13:30 | Short tour of the historical Telegrafenberg campus |
| 14:00 | Joint discussion of outcomes of breakout groups |
| 15:00 | Coffee |
| 15:30 | Initiate putting together written summaries / recommendations |
| 16:30 | Final wrap-up session; summarising outcomes; next steps |
| 17:00 | Close of workshop |

Notes:

Wireless internet will be available through “eduroam” or guest accounts distributed on the day.

Supported by:

