

S10 TCODE Topic Session

Marine data management and delivery systems to support ecosystem monitoring

Co-Convenors: S. Allen Macklin, Bernard A. Megrey (U.S.A.) and Igor I. Shevchenko (Russia)

A stated objective of PICES is to provide data in exchangeable formats to better enable the evaluation of North Pacific ecosystems status and trends, and to support other strategic pursuits. PICES scientists face challenges in managing and delivering data in a shareable way. Furthermore, a growing number of ocean observing systems require data management and communication methodologies that conform to rigid standards and protocols. For the most part, traditional science education of the past century offered little training in data management. Today's typical scientist, although supportive of data exchange, lacks the background to understand techniques to facilitate it. This session will acquaint PICES scientists with state-of-the-art information about metadata description, data delivery and data browsing techniques, with emphasis on existing standards and web services recommended for ocean observing systems. Basic to advanced methods will be presented in a graduated format. Presenters and participants will describe and explore existing successful systems. Participants will learn ways to map existing data structures into conformant, exchangeable formats using no-cost, open-source applications.

Tuesday, October 4, 2005 14:00-18:10

- 14:00-14:30 **Anthony W. Isenor** (Invited)
Data exchanges, XML, and why the exchange problem is still unsolved (S10-2426)
- 14:30-14:50 **Deng-Wen Xia**
Marine data exchange prototype based on XML (S10-2539)
- 14:50-15:10 **Dmitry. D. Kaplunenko, Vyacheslav B. Lobanov, Young Jae Ro and Mikhail Danchenkov**
Merging Argo data and ship CTD observations to study mesoscale patterns in the Japan/East Sea (S10-2477)
- 15:10-15:30 **Natalia I. Rudykh, Elena V. Dmitrieva and Vladimir I. Ponomarev**
Use of diverse database aggregation for the study of variability in oceanographic parameters of the Japan/East Sea (S10-2317)
- 15:30-15:50 **Shin-ichi Ito, Shigeho Kakehi, Motohiko Kashima, Yoshioki Oozeki and Kazuyuki Uehara**
A system development for near-realtime data exchange between ship and shore-based analysts in Japan's Fisheries Research Agency (FRA) (S10-2410)
- 15:50-16:10 **Benoît Pirenne and Robin Brown**
NEPTUNE and VENUS: Data management and archival system for cabled ocean observatories (S10-2622)
- 16:10-16:30 **Coffee Break**
- 16:30-16:50 **Kimberly Bahl, Hee Dong Jeong, Kyu Kui Jung, Hae Seok Kang, S. Allen Macklin and Bernard A. Megrey**
Federated metadata of PICES member nations: Information sharing across international boundaries (S10-2505)
- 16:50-17:10 **Alex Kozyr and Misha Krassovski**
The Mercury Metadata Search System and Web-Accessible Visualization and Extraction System (WAVES) for oceanographic data (S10-2561)

- 17:10-17:30 **Igor D. Rostov, Vladimir I. Rostov, Natalia I. Rudykh, Elena V. Dmitrieva and Alexander A. Pan**
Oceanographic data base applications for the Far Eastern Region of Russia (S10-2286)
- 17:30-17:50 **Sei-Ichi Saitoh, Hidetada Kiyofuji, Daichi Tachikawa, Mihoko Abe, Kazuhiko Tateyama and Motoki Hiraki**
Research and development of ubiquitous information services for integrated fisheries activities in the offshore around Japan (S10-2420)
- 17:50-18:10 **Anatoly I. Alexanin, Marina G. Alexanina, Pavel V. Babyak and Michail V. Kruglov**
Problems of satellite data delivery and their solution by the FEB RAS Centre for Regional Satellite Environment Monitoring (S10-2525)

Posters

Stepan A. Antushev, Vitaliy K. Fischenko and Andrey V. Golik

About the scope of Grid technologies for support of complex oceanographic research in the northern Pacific (S10-2416)

Sergey A. Fedorov, Vitaliy K. Fischenko and Andrey V. Golik

Web-based technology of CTD data visualization in FEB RAS corporate oceanographic GIS (S10-2415)

Sergey M. Krasnopeyev and Alexander O. Teregulov

Metadata catalogue service based on the preliminary national standard (S10-2564)

Alexander A. Pan and Vladimir I. Rostov

Tools for the visualization of gridded oceanographic data (S10-2390)

Tomowo Watanabe and Yukimasa Ishida

Oceanographic data in the Japan Fisheries Oceanography DataBase (JFODB) (S10-2521)