

Report of Technical Committee on Data Exchange

The meeting of the Technical Committee on Data Exchange (hereafter TCODE) was held from 18:00 to 19:30 h on October 16 and from 14:00 to 18:00 h on October 19, 2011. Dr. Tony Koslow, new member from U.S.A, was introduced and two observers attended on behalf of members of China (*TCODE Endnote 1*). Several changes were made to the draft agenda. The revised agenda was adopted (*TCODE Endnote 2*).

AGENDA ITEM 3

Report of POC/MONITOR/TCODE workshop

TCODE Chairman, Dr. Toru Suzuki, a Co-convenor of the POC/MONOTOR/TCODE Workshop on “*Recent advances in monitoring and understanding of Asian marginal seas: 5 years of CREAMS/PICES EAST-I Program*”, gave a summary report. The workshop was held on October 14, 2011, and consisted of 13 oral presentations (including 2 invited talks) plus 7 posters. The workshop was completed successfully. TCODE was responsible for judging the posters to determine the Best Poster award for a TCODE-sponsored workshop.

Unfortunately, the TCODE E-Poster Session on “Data and data systems for validation of numerical models” had to be cancelled because no presentations were submitted.

AGENDA ITEM 4

Review of proposed topic session for PICES-2012 in Hiroshima, Japan

Dr. Koslow, Co-convenor of the proposed topic session on “*Trends in hypoxia and ecosystem impacts in the North Pacific*” (*TCODE Endnote 3*) explained the background for the topic. Dr. Suzuki, also a member of the Section on *Carbon and Climate* (S-CC), reported that S-CC agreed to support the session and that the POC Committee recommended adding two more co-conveners. Dr. Suzuki suggested that it might be a good idea to merge the topic session with the S-CC-proposed topic session on “*Anthropogenic CO₂ trends and their impacts on marine ecosystems in the North Pacific and its marginal seas*” co-sponsored POC and BIO. TCODE members supported the suggestion.

AGENDA ITEM 5

Report of POMA 2011

Dr. Suzuki reported on behalf of Dr. Hernan Garcia that Dr. Garcia has added a new POMA nomination to the existing list of nominations, bringing the total to four. Science Board members elected the recipient of POMA 2011 *in camera* at the inter-sessional Science Board meeting in April 2011 in Honolulu. TCODE members confirmed the other three nominations to be rolled over to 2012 and will encourage scientists to submit new nominations, especially from China and Russia.

AGENDA ITEM 6

Review progress on TCODE workplan for 2010/2011

a) *Continue to support, coordinate, and identify of PICES data and information products*

i) Dr. Thomas Royer reported that the second North Pacific Ecosystem Status Report (NPESR II) was published in 2010 and that NPESR III will be proposed by the FUTURE Advisory Panel on *Status, Outlooks, Forecasts and Engagement* (AP-SOFE). He also said that NPESR III should not be as large but serve as an update and should be primarily electronic allow users to obtain figures from the text.

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ii) Mr. Robin Brown stated the HAE-DAT database has encountered problems in obtaining data and buy-in.

iii) Dr. Suzuki reported on the progress of PACIFICA, the ocean carbon and its related data synthesis project of S-CC. The PACIFICA database will be released as a beta version by the end of November and finalized by the end of February 2012.

v) Dr. Suzuki noted that the data of the CREAMS/PICES EAST-I project are important not only for AP-CREAMS but also for other PICES expert groups, so it should be encouraged to be publicly available.

vi) AP-CRP's database, established by SAHFOS (Sir Alister Hardy Foundation for Ocean Science), continues to mature.

vii) The status of AP-MBM and other expert groups was unclear. TCODE members agreed to continue this item in next year's workplan.

b) Cooperation with other data management groups and activities

Dr. Georgiy Moiseenko reported on the status of ICES WGDIM (Working Group on Data and Information Management) and announced that he would not continue as a member of WGDIM next year. Dr. Suzuki reported that Dr. Helge Sagen, Co-Chair of WGDIM, invited him to be on the WGDIM mailing list in order to exchange information between the Working Group and TCODE.

Dr. Suzuki reported that he attended an IODE international conference celebrating its 50th anniversary on March 21–22, 2011, in Liège, Belgium. There were nearly 100 participants, 24 oral presentations and many posters. Dr. Suzuki also attended IODE-XXI session of the IOC Committee on IODE held on March 23–26, 2011 as a representative of PICES. The participants of the session were 91, including participants from all PICES member countries. His plans are to attend the next session, to be held in Cancún, [later changed to Ensenada] Mexico.

Dr. Suzuki reported on behalf of Dr. Hernan Garcia, who was not able to attend the meeting, that the IODE GE-BICH (Group of Experts on Biological and Chemical Data Management and Exchange Practices) 5th meeting was held on January 17-20, 2011 in Oostende, Belgium, and that Dr. Garcia was nominated for long-term membership and elected co-chair. Dr. Suzuki also nominated for long-term membership. He also reported that a universal quality flag scheme was proposed to IODE Ocean Data Standard pilot project and a second international quality control workshop on chemical oceanographic data will be held March 26–30, 2012. Dr. Garcia and he will attend this workshop as GE-BICH members.

Dr. Suzuki introduced the IODE ODP (Ocean Data Portal) which aims at providing seamless access to collections and inventories of marine data from NODCs of the IODE network. China, Russia and USA have already established an ODP node, and Japan and Korea are ready to do so. He also mentioned that SG-ODP will hold its second meeting in February 2012 in Oostende, Belgium.

Dr. Suzuki reported the status of OBIS (Ocean Biogeographic Information System). IODE adopted the establishment of SG-OBIS (Steering Group for OBIS) and GE-OBIS (Group of Experts on OBIS) at IODE XXI. An IOC circular for long-term members of GE-OBIS sent to the PICES Secretariat was forwarded to TCODE for discussion. TCODE encourages the nomination of long-term members to GE-OBIS from PICES member countries and continues to invite OBIS, as *ex-officio* member, to TCODE meetings.

Dr. Igor Shevchenko reported that rent for the AdHost remote server for the PICES GeoNetwork portal has been renewed and he continuously maintains the server. He has prepared a proposal to renew rent for next year. He noted that the GeoNetwork portal user's manual is available and presented it on a new document sharing system using Google Docs to the Committee. TCODE agreed to evaluate it. Dr. Shevchenko also gave a short presentation on the GeoNetwork portal. There are currently 4,210 records of datasets, 3 of maps and graphics, 38 records of PICES Digital Data Library. He reported the results of AdHost performance experiments on accessing metadata from different locations and multiple users. All experiments were finished successfully and he thanked

the members for their collaboration. Dr. Suzuki stated that existing metadata records have not been moved to the AdHost server yet, and that the status of China and Korea were unclear. He recommended that this item should be carried over for discussion to next year. Dr. Shevchenko was unclear how the server could be removed from the NSDI clearinghouse system. However, it was noted that the node server of the NSDI clearinghouse in Japan had already terminated. TCODE discussed developing a strategy to encourage metadata submission from relevant expert groups. It was agreed that there was a need to promote this activity and to continue to pursue a way to do this. Dr. Shevchenko will maintain the TCODE web pages on TINRO for the next year.

AGENDA ITEM 7

Report of FUTURE AP joint meeting at PICES-2011

Mr. Brown, Chairman of AP-SOFE, presented a report from the FUTURE Advisory Panels (AICE, COVE and SOFE) which included AP membership, the inter-sessional FUTURE workshop on “*Indicators of status and change within North Pacific Marine Ecosystems*” held in April, 2011, in Honolulu, USA, new Working Group on *North Pacific Climate Variability and Change* (WG 27) and Working Group on *Development of Ecosystem Indicators to Characterize Ecosystem Responses to Multiple Stressors* (WG 28) and proposed new expert groups, *Section on Climate Change and Marine Ecosystems* (S-CCME) and *Human Dimensions of Marine Systems* (S-HD) linked to FUTURE, FUTURE co-sponsored topic sessions for PICES-2012, and other upcoming events and activities. Mr. Brown also discussed TCODE’s contribution to FUTURE, adding that present and past Chairs of TCODE are/were represented on the FUTURE APs.

AGENDA ITEM 8

Proposal for special volume dedicated to B. Megrey

Dr. Suzuki introduced a proposal submitted by Dr. Shin-ichi Ito (member of POC) for special volume or issue in a scientific journal dedicated to Dr. Bernard A. Megrey who was Chairman of TCODE from 2008–2010. Dr. Enrique Curchitser, who will serve as one of the guest editors, has already contacted the chief editor of the *Journal of Marine Systems*. The proposal also invites one or more TCODE members to be guest editors (*TCODE Endnote 4*). TCODE members endorsed the proposal and picked Dr. Suzuki to be one of the guest editors.

AGENDA ITEM 9

PICES data repository

TCODE members discussed storage and dissemination of data and information products from PICES expert groups. Dr. Deborah Reusser, member of Working Group on *Non-indigenous Aquatic Species* (WG 21), and observer at this meeting, introduced the NIS database project, which is great achievement of WG21, and requested TCODE to provide long term archive assistance of the data because WG 21’s term will be finished in October 2012. After discussing technical issues, TCODE agreed to assist in data archiving and registration of metadata on GeoNetwork. This activity will be added to next year’s workplan.

AGENDA ITEM 10

Annual country reports

Annual reports were submitted by China, Russia and USA but could not be presented at the meeting because of lack of time. However they can be found in *TCODE Endnotes 5, 6 and 7*, respectively, and will be available in Google Docs.

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AGENDA ITEM 11

Relation with other international programme/organizations

TCODE agreed to continue exchanging information with IOC/IODE, OBIS and ICES WGDIM. In addition, potential collaborations with other international programmes were with OceanSITES (worldwide system of long-term deeper water reference stations) suggested by Dr. Koslow, GEOS (Group on Earth Observations) suggested by Dr. Gongke Tan, and WDS (ICSU World Data System; formerly WDC (World Data Center)) suggested by Dr. Suzuki.

AGENDA ITEM 12

Summary of items with financial implications

Next year's rent for the AdHost server will be at the same level as this year.

AGENDA ITEM 13

TCODE workplan for 2011/2012

Dr. Suzuki presented a draft workplan for 2011/2012 based on the one for 2010/2011. Several changes were made at the meeting and a revised workplan was adopted (*TCODE Endnote 8*). Dr. Suzuki cautioned that this workplan was not final and requested members to continue providing input and revisions to the workplan at any time.

AGENDA ITEM 14

Other business

Dr. Royer introduced a draft proposal for the production of the third North Pacific Ecosystem Status Report (NPESR III) submitted to AP-SOFE and MONITOR in detail (*TCODE Endnote 9*). Dr. Shevchenko mentioned that the report will be also available on GeoNetwork. Members agreed that TCODE will also be responsible for this draft proposal.

Dr. Suzuki closed the meeting at 18:00 h.

TCODE Endnote 1

TCODE participation list

Members

Robin Brown (Canada)
Tony Koslow (USA)
Georgiy Moiseenko (Russia)
Thomas Royer (USA)
Igor Shevchenko (Russia)
Toru Suzuki (Japan, Chairman)

Observers

Yang Ho Choi (Korea)
Deborah Reusser (USA)
Gongke Tan (China)
Qiulu Wang (on China's behalf)
Jinkun Yang (on China's behalf)

TCODE Endnote 2**TCODE meeting agenda**

1. Welcome and introduction of members
2. Adoption of agenda
3. Report of POC/MONITOR/TCODE Workshop on October 14 – Suzuki
4. Review of proposed topic session for PICES-2012 in Hiroshima, Japan – T. Koslow and Suzuki
5. Report of POMA 2011 – Suzuki
6. Review progress on TCODE workplan for 2010/2011
 - a) Continue to support, coordinate, and identify of PICES data and information products
 - i) MONITOR - T. Royer
 - ii) AP-AICE (S-HAB, WG 21, WG 24) – I. Shevchenko and R. Brown (S-HAB)
 - iii) AP-COVE (S-CC, WG 20, WG 22, WG 23) - Suzuki and Brown (WG 22)
 - iv) AP-SOFE (WG-FCCIFS, SG-HD) - Brown
 - v) AP-CREAMS – Suzuki
 - vi) AP-CRP
 - vii) AP-MBM
 - b) Cooperation with other data management groups and activities
 - i) ICES WG on Data and Information Management (WGDIM) - G. Moiseenko
 - ii) IODE-XXI Session in March 2011 - Suzuki
 - iii) IODE GE-BICH in January 2011 – Suzuki instead of H. Garcia
 - iv) IODE ODP - Suzuki
 - v) OBIS – Suzuki
 - vi) Invitation of *ex-officio* member - Suzuki
 - c) PICES Metadata Federation Project
 - i) Renew Remote server contract - Shevchenko
 - ii) Continue to administer AdHost server - Shevchenko
 - iii) Prepare proposal to renew rented server for another year - Shevchenko
 - iv) Develop strategy to award and encourage metadata submission - All
 - v) Run the AdHost server performance experiment on accessing metadata from different locations and multiple users - Shevchenko and all
 - vi) China, Japan and Korea move their metadata records to the AdHost server - R. Yin (China), Suzuki (Japan), K-K. Jung (Korea), Shevchenko
 - vii) Remove NPEM, KODC, MIRC servers from the NSDI clearinghouse site - (NPEM), (KODC), Suzuki (MIRC)
 - viii) Update AdHost server to monitor MDB use – (Olga Vasik)
 - ix) Promote the GeoNetwork Portal
 - Prepare short PowerPoint presentation on GeoNetwork portal – Shevchenko and Brown
 - Request GeoNetwork resource be reported at PICES 2011 opening session as part of PICES activities – Shevchenko
 - Prepare a presentation for Expert Groups – Shevchenko and Brown
 - Add the MDB server link on the sidebar of the PICES web page
7. Report of FUTURE AP meeting and discussion AP-SOFE – Brown, Shevchenko and Suzuki
8. Discussion of proposal for special volume dedicated to B. Megrey – Suzuki
9. Discussion of PICES data repository - All
10. Annual country reports
11. Relation with other international programme/organizations
12. Summary of items with financial implications
 - i) Proposed inter-sessional workshop/meeting(s) for 2012 and beyond
 - ii) Proposed publications for 2012 and beyond
 - iii) Travel support requests
 - iv) Proposal to continue rented server for another year
 - v) Other items

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13. Discussion and adoption on TCODE workplan for 2011/2012
14. Other business
15. Closing

TCODE Endnote 3

Proposed Topic Session of PICES 2012 in Hiroshima, Japan

Title: *Trends in hypoxia and ecosystem impacts in the North Pacific*

Duration: ½ day

Sponsoring Committees: POC/BIO/TCODE

Declining oxygen levels have been reported from mid-ocean depths in the tropical oceans and across the North Pacific. Global climate models predict that dissolved oxygen concentrations in the deep ocean will decline by 20-40% over the coming century or so as global warming enhances stratification of the upper mixed layer and reduces ventilation of the deep ocean. This session will examine current trends in oxygen concentration in the North Pacific, the factors contributing to observed trends, and their ecosystem impacts. Studies examining time series for oxygen concentration in the deep ocean; the physical, chemical and biological factors underlying observed trends; and the physiological, ecological and biogeochemical impacts of hypoxia on the water column and benthos are invited. Examples of impacts on the distribution and abundance of deepwater fish stocks or the midwater micronekton, their predators and prey, are particularly encouraged. The session is especially interested in papers that examine the impact of hypoxia on ecosystem structure, the biogeochemistry of the carbon cycle, and the vulnerability of ecosystems to climate change.

Potential invited speakers: Brad Seibel, URI (USA); Frank Whitney, IOS (Canada); Tsuneo Ono or Y.W. Watanabe (Japan)

Scientists willing to serve as PICES convenors: Tony Koslow (USA), Tsuneo Ono (Japan)

TCODE Endnote 4

Proposal for special volume dedicated to Dr. Bernard A. Megrey

Theme: Modeling of marine ecosystem dynamics and the use of observations for improving models

Objective:

To highlight different approaches to modeling the impacts of climate variability and change on marine ecosystems and their ability to support sustainable ecosystem services.; to summarize the state of knowledge in marine ecosystems and to model them and explore data needs for improving modeling approaches, and hence our understandings.

Throughout his life, Dr. Bernard Megrey contributed to the modeling of marine ecosystems that incorporate both environmental and biological queues. He was engaged in a national/international effort to construct an integrated end-to-end ecosystem model (climate-to-fishers). He also explored historical data and promoted the importance of data for improving model skill and knowledge. This special volume will be dedicated to the memory of Dr. Bernard Megrey.

Guest Editors: Enrique Curchitser, Shin-ichi Ito, Geir Huse, Kenneth Rose, Francisco Werner (potentially Toru Suzuki and another member from T-CODE)

Proposed journal: Journal of Marine System

Papers to be called:

Papers on different types of ecosystem models will be accepted including: Mass-balance (ECOPATH) models, size-based models, minimalist models, individual based models (IBMs) and end-to-end models. Special emphasis will be placed on models that examine trophic interactions as well as models that link biogeochemical processes with higher trophic level production. Papers on methods for estimating uncertainties in model predictions and discuss data requirement to improve modeling approaches are also encouraged.

Timeline:

| | |
|-----------|---|
| Dec. 2011 | Call for papers |
| Oct. 2012 | Deadline for submission |
| Jan. 2013 | First review result will be return to the authors |
| Feb. 2013 | Revision submission |
| May 2013 | Publish |

Potential papers:

- from presentations at ESSAS OSM 2011 (S3: *Modeling marine ecosystem dynamics in high latitude regions*);
- from presentations at PICES-2012 (Proposed POC/FIS Topic Session: *Linking migratory fish behavior to End-to-End models II*).
- Other studies under ICES, PICES and IMBER.

TCODE Endnote 5

2011 Country Report of China
submitted by
Yang Jinkun, NMDIS/SOA, China

1. Outline of Participation in TCODE

China has been following TCODE/PICES related marine ecosystem observations and study projects, and paying great attention to PICES oceanographic data exchange activities. China has already provided information on Chinese marine experts to TCODE, and has actively participated in TCODE marine information technology exchange activities.

The National Marine Data and Information Service (NMDIS), which subordinates to the State Oceanic Administration (SOA) of China, joined the PICES Metadata Federation Project (held by the North Pacific Ecosystem Metadatabase, NPEM) under TCODE in 2006. It officially became a Chinese Node for the PICES Metadata Federation and has been responsible for the setup and operational maintenance of the node since then. In August 2008 NMDIS completed the registration in the NSDI Clearinghouse of Federal Geographic Data Committee, FGDC, of the United States, and first released 50 metadata about ocean tide prediction products of Chinese oceanographic stations and major coastal ports and waterways in Chinese and Southeast Asian coastal areas. Mr. Yin Ruguang, from NMDIS, SOA, has been a member of TCODE for a long time, and has been actively participating in TCODE activities and implementation of the action plans.

2. Operation and Maintenance of Chinese Node of PICES Metadata Federation

2.1 Operation and Maintenance of the Node

In 2011, the Chinese node of the PICES Metadata Federation was moved to the PICES metadata rented server, and the routine management of the node has been conducted, which ensures the regular operation of the Chinese node.

2.2 Metadata Release and Update

In response to the requirements of the PICES Metadata Federation Project, China increased the metadata of the Chinese node in 2011 to include:

- Monthly mean sea level metadata from 6 Chinese coastal stations, Dalian, Kanmen, Lvsi, Zhapo, Nansha and Xisha, with a time range from 2009 to 2010;
- Hourly sea level metadata from 2 Chinese coastal stations, Lianyungang and Dalian, with a time period from 2009 to 2010;
- Metadata of meteorological, wave, temperature and salinity data in 2010 from 13 Chinese coastal stations, Dalian, Xiaochangshan, Yantai, Xiaomaidao, Lianyungang, Lvsi, Shengshan, Zhenhai, Dachen, Nanji, Beishuang, Dongshan and Zhelang.

3. Exchange and Cooperation with Other Related International Programs

The National Marine Data and Information Service (NMDIS) is a public institution directly under the State Oceanic Administration (SOA) of China. It fulfills the national obligations of international marine information exchange and cooperation, and undertakes the work of the International Ocean Institute (IOI) Western Pacific Regional Center. On behalf of China, NMDIS participated in the IOC, JCOMM, GOOS, GLOSS and many other international organizations and programs. It hosts the China Argo Data Center, China GTSP Data Center, China NEAR-GOOS Delay Mode Database, China ODAS Metadata Center, Ocean Data and Information Network for the Western Pacific Region (ODINWESTPAC), Ocean Data Portal (ODP) and many other national centers or national nodes. Information exchange and cooperation with international and regional projects have had good and fruitful outcomes, including:

- China Argo Data Center (<http://www.argo.gov.cn/>),
- China GTSP Data Center (<http://221.239.0.160/gtsppweb/index.htm>),
- China NEAR-GOOS Delayed Mode Database (<http://near-goos.coi.gov.cn/>),
- China ODAS Metadata Center (<http://www.odas.org.cn/>),
- Ocean Data and Information Network for the Western Pacific Region (ODINWESTPAC) (<http://www.odinwestpac.org.cn/>),
- Ocean Data Portal (ODP) (<http://www.OceanDataPortal.org/>).

4. Proposal and Future Plan

4.1 Proposal

- i. To promote the sharing of PICES metadata, increase the amount of information, and establish the appropriate encouragement and reciprocal mechanism;
- ii. To further improve the update of TCODE website, and build a user-friendly interface for users to browse and download the latest technical documentation and project information;
- iii. China supports the development of the GeoNetwork Portal project, and recommends that TCODE could provide technical training and other technical support to Member States.

4.2 Future plan

- i. China will actively participate in, and implement, the TCODE 2011–2012 action plan.
- ii. China will continue to maintain the Chinese node of the PICES Metadata Federation, and increase PICES metadata information.

TCODE Endnote 6

2011 Country Report of Russia
prepared by
Igor Shevchenko and Georgiy Moiseenko

1. Key Institutions/Key Persons:

PICES TCODE

<http://tcode.tinro.ru/>

Igor Shevchenko

Fisheries Institutes

Pacific Fisheries Research Center (TINRO-Center)

<http://www.tinro-center.ru>

Igor Shevchenko

Russian Federal Research Institute of Fisheries & Oceanography (VNIRO)

<http://www.vniro.ru>

Georgiy Moiseenko

Khabarovsk Branch of Pacific Fisheries Research Center (KhOTINRO)

<http://www.tinro.khv.ru/>

Vladimir Shemyakin

Magadan Institute of Fisheries and Oceanography (MagadanNIRO)

<http://www.magniro.ru>

Igor Izergin

Chukotka Institute of Fisheries and Oceanography (ChukotNIRO)

Sergey Palma

Sakhalin Institute of Fisheries and Oceanography (SakhNIRO)

<http://www.sakhniro.ru>

Peter Vasilets

Kamchatka Research Institute of Fisheries and Oceanography (KamchatNIRO)

<http://www.kamniro.ru/kniro32/index.php>

Oleg Lapshin

Russian Federal Fisheries Agency

<http://fish.gov.ru>

Atlantic Research Institute of Marine Fisheries and Oceanography (AtlantNIRO)

<http://www.atlantniro.ru/index.php/home/atlantniro>

Caspian Institute of Fisheries (KaspNIRKH)

<http://www.kaspnirh.ru/en/>

Polar Marine Fisheries Institute (PINRO)

http://www.pinro.ru/index_e.htm

Centre for Fishery Monitoring and Communications (CFMC)

<http://www.cfmc.ru>

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Kamchatka Regional Center for Monitoring (KRCM)

<http://www.krcm.ru>

National Fishery Resources

<http://www.nfr.ru>

Hydrometeorological Institutes

All-Russian Research Institute of Hydrometeorological Information – World Data Center (RIHMI-WDC)

<http://www.meteo.ru/english/>

Nickolay Mikhailov

State Oceanographic Institute (SOI)

<http://www.oceanography.ru>

Igor Zemlyanov

Arctic and Antarctic Research Institute (AARI)

http://www.aari.ru/default_en.asp

Far Eastern Regional Hydrometeorological Research Institute (FERHRI)

<http://www.ferhri.ru>

Nikolay Rykov

Academy of Sciences

Pacific Oceanological Institute (POI)

<http://www.pacificinfo.ru/en/>

Igor Rostov

Institute of Marine Biology (IMB)

<http://www.imb.dvo.ru>

Space Research Institute (IKI)

<http://www.iki.rssi.ru/eng/>

Evgeny Loupian

P.P. Shirshov Institute of Oceanology of the Russian Academy of Sciences

<http://www.ocean.ru/eng/>

2. Existing Data and Metadata Sets

| Agency | Division | Data/Metadata description | URL |
|---|--------------------------------------|---|--|
| Russian Federal Fishery Agency | TINRO | Cruise metadatabase | http://metadata.tinro.ru/index.cgi?lang=en |
| | TINRO | Russian annual fishery statistics for Far East seas | http://vsurf.tinro.ru/index.jsp |
| | FCMC | Near real time fishery statistics | http://www.cfm.ru |
| Federal Service for Hydrometeorology and Environmental Monitoring | Hydrometeorological Centre of Russia | - Climate temperature and precipitation data - Weather forecasts | http://wmc.meteoinfo.ru |
| | AARI | Ice charts and forecasts | http://www.aari.ru/default_en.asp |
| | AARI | Interdisciplinary Arctic seas databases | http://www.aari.nw.ru/projects/ECIMOT/index.htm |
| | SOI | Hydrographic, meteorology and pollution data for Russian seas | http://www.oceanography.ru/ |
| | FERHRI | Hydrographic station data; temperature, salinity; inter-disciplinary data | http://www.ferhri.ru |
| Russian Academy of Sciences | IKI | Satellite data (NOAA, GOMS, RESURS) | http://www.iki.rssi.ru/eng/ http://smiswww.iki.rssi.ru/ |
| | POI | Hydrographic observations (national and foreign) in the Northern Pacific | http://www.pacificinfo.ru/en |

The Russian Federal Program ESIMO portal <http://www.esimo.ru> is an entry point to sites maintaining governmental information funds of data on the state of the World Ocean and coastal areas.

3. Technical Methodologies

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4. Ongoing Data Management Programs

The Unified System of Information on the World Ocean State (ESIMO) <http://www.esimo.ru>

5. Real-time data sources:

FCMC - Russian fishery statistics <http://www.cfm.ru>

6. Data visualization and analysis

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7. Regulations for data exchange

Federal laws:

Федеральный закон от 20 февраля 1995 г. N 24-ФЗ "Об информации, информатизации и защите информации"

Закон РФ от 23 сентября 1992 г. N 3523-I "О правовой охране программ для электронных вычислительных машин и баз данных (в ред. Федерального закона от 24.12.2002 N 177-ФЗ)"

8. PICES GeoNetwork tests

PICES GeoNetwork portal home page

<http://67.212.128.197/geonetwork/srv/en/main.home>

In September 2011, tests on the PICES GeoNetwork server were performed. Some members of TCODE and scientists from TINRO-Center took part in this work. The total number of test participants was 7. The test results show that such a number of concurrent users is not critical for the current server configuration. A summary of these tests will be presented on the TCODE home page and Google Docs.

9. Russian scientists have taken part in the following TCODE activities:

PICES Metadata Federation Project

- Items of TCODE workplan:
 - Renew Remote server contract,
 - Continue to administer AdHost server,
 - Prepare proposal to renew rented server for another year,
 - Promote the GeoNetwork Portal, Prepare short PowerPoint presentation on GeoNetwork portal,
 - Prepare a presentation for Expert Groups,
 - Add the MDB server link on the sidebar of the PICES web page,
 - Explore GeoNetwork Portal backup options,
 - Update the Technical report to reflect GeoNetwork.

TCODE web pages maintenance.

TCODE Endnote 7

2011 Country Report of USA – U.S. Academic research

prepared by
Thomas Royer

1. Several multiyear marine field programs in the North Pacific are in transition. These studies in the Gulf of Alaska, Aleutian Islands, Bering and Beaufort Seas are funded in part by National Science Foundation (NSF) and North Pacific Research Board (NPRB). The Bering Sea Integrated Research Program/Bering Sea Ecosystem Study (BSIERP/BEST) had its field program from 2008 to 2010. The program is now in the analysis and synthesis phases. The site for data management for the BSIERP has been shifted from the University of Alaska Fairbanks to the Alaska Ocean Observing System (see www.aoots.org and www.nprb.org). A more recent field program in the Gulf of Alaska in 2011 by NPRB is the Gulf of Alaska Integrated Ecosystem Research Program (GOAIERP). It will have another field program in 2013. These programs are mentioned here to highlight the submission of these new data to the PICES GeoNetwork Portal. The data management for GOAIERP is in the RFP stage at the present time.

2. The Exxon Valdez Oil Spill studies (<http://www.evostc.state.ak.us/>) are continuing to address 1) herring and 2) long-term monitoring of marine conditions and injured resources within the spill region. They, too, will be encouraged to submit their metadata to the PICES GeoNetwork Portal.
3. The Alaska Ocean Observing System (AOOS) has a transitional data portal established and designed by a private consulting company, Axiom Consulting and Design. The beta version was released at the Alaska Marine Science Symposium in January 2011. The website at www.aos.org offers some archived and real time marine data for coastal Alaska. It provides access to a variety of oceanographic datasets and feeds, and they would appreciate comments on its content and operation. PICES members are encouraged to review this data portal and provide comments.
4. The U.S. Integrated Ocean Observing System will be expanding its field program in 2012 (see <http://www.ioos.gov/> for details).
5. There are growing concerns about the fragility of the data archives due to outdated equipment and software and the pressures of declining budgets. PICES participants should be aware of these potentially serious losses of archived data.
6. Some efforts need to be made within the PICES member countries to enhance the participation of member states in data archive/exchange processes. This might be accomplished by obtaining feedback on the existing practices for data exchange and National Oceanographic Data Center contacts. This enhanced data exchange might occur both with 1) the new NPESR procedures discussed at PICES 2011 by TCODE and MONITOR and 2) the implementation of the PICES GeoNetwork Portal.
7. There should be a better coordination of coastal monitoring activities for the Northeast Pacific from Mexico to Alaska. This would be a follow up of the November 2003 PICES workshop in Victoria. This would link coastal monitoring activities including IOOS, OOSs, CalCOFI, Line P, MBARI, Newport Line, Seward Line and fishery surveys by U.S. and Canadian fishery services. Perhaps the PICES 2013 Annual Meeting in British Columbia would be a place to hold another workshop on the status of these monitoring efforts and to determine whether coordination would help them. This item should be placed on the TCODE agenda for PICES-2012.

TCODE Endnote 8

TCODE Workplan in 2011/2012

- 1) Continue to support, coordinate, and identify of PICES data and information products
 - a) MONITOR
Responsibility – T. Royer
 - b) AP-AICE (S-HAB, WG 21 (–2012), WG 24)
Responsibility – I. Shevchenko and R. Brown (S-HAB)
 - c) AP-COVE (S-CC, WG 23 (–2011), WG 26, WG 27, WG 28)
Responsibility – T. Suzuki
 - d) AP-SOFE (WG-FCCIFS, SG-HD (–2011))
Responsibility – R. Brown
 - e) AP-CREAMS/AP-CRP/AP-MBM (–2011)
Responsibility – T. Suzuki
- 2) Cooperation with other data management groups and activities
 - a) ICES WG on Data and Information Management (WGDIM)
Responsibility – G. Moiseenko
 - b) IODE GE-BICH workshop in March 2012
Responsibility – H. Garcia and T. Suzuki
 - c) IODE SG-ODP-II in February 2012

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- Responsibility – T. Suzuki
- d) OBIS and invitation of *ex-officio* member
Responsibility – T. Suzuki
- 3) PICES Metadata Federation Project
 - a) Renew remote server contract
Responsibility – I. Shevchenko
 - b) Continue to administer AdHost server
Responsibility – I. Shevchenko
 - c) Prepare proposal to renew rented server for another year
Responsibility – I. Shevchenko
 - d) Develop strategy to award and encourage metadata submission
Responsibility – All
 - e) Run the AdHost server performance experiment on accessing metadata from different locations and multiple users
Responsibility – I. Shevchenko and all
 - f) Japan and Korea move their metadata records to the AdHost server
Responsibility – T. Suzuki (Japan), (Korea), I. Shevchenko
 - g) Promote the GeoNetwork Portal
 - i) Update the Technical report to reflect GeoNetwork
Responsibility – I. Shevchenko, H. Garcia, R. Brown
- 4) Maintain TCODE web pages
Responsibility – I. Shevchenko
- 5) PICES-2012 Topic Session and Best Oral/Poster presentations
Responsibility – T. Koslow (co-convener)
- 6) Topic Session and/or Workshop Proposals to PICES 2013 in Nanaimo, Canada
Responsibility – All (Title, blurb, convener, potential invited speaker, and request co-sponsored to other committee and FUTURE)
- 7) POMA 2012 nomination
Remaining three nominations below will be rolled over to the next year (and beyond) for consideration at the next inter-sessional SB meeting. Consider a recommendation of new nomination before February 2012. Rank nominations for POMA 2012 before April 2012
- 8) Prepare to registration metadata of database of WG 21
Responsibility – I. Shevchenko
- 9) Prepare for production of the North Pacific Ecosystem Status Report – third edition
Responsibility – T. Royer and R. Brown

TCODE Endnote 9

Draft proposal on production of the North Pacific Ecosystem Status Report, NPESR

Submitted to AP-SOFE, MONITOR, and TCODE at PICES-2011, Khabarovsk, Russia, October 18, 2011
Please send comments to phil.mundy@noaa.gov

Background

Terms of reference of FUTURE SOFE AP and MONITOR require management of the NPESR. The third edition of the NPESR (2009 – 2014) would be due in 2015, based on schedules followed for the first two editions. The draft report is part of a discussion on how best to provide the information of the report in the future. To facilitate discussion, the draft proposal defines the parameters of report production and offers an example of how the report may be implemented in the next cycle. Funding is an important consideration; however it is a separate (but not unrelated) issue from the nature and means of production.

Report Parameters

1. Components, organization
 - a. Regional reports of disciplinary subject matter specialists
 - b. Trans-regional synthesis report
 - c. Outreach and Engagement
 - i. Power Point, professional, general
 - ii. Web-based delivery of figures and data
 - iii. Brochure, multi-language, general audiences
 - iv. Press releases, public seminars (*i.e.*, Sendai media model)
2. Formats
 - a. Paper
 - b. Web-based versions (pdf graphics format PICES web site, data formats, third party websites)
 - c. Peer reviewed journal (paper and electronic)
3. Timing of production of components and frequency of release
 - a. Annual or biannual regional report updates
 - b. Five or six year synthesis reports
 - c. Annual or biannual ppt, brochure, press release
4. Administrative structure
 - a. Editors
 - b. Regional leads
 - c. Subject matter specialists
5. Process of production
 - a. Manual
 - b. Fully or semi-automated

An Example of NPESR Report Production

A network of nine or ten correspondents (ocean and atmospheric physics, nutrients, phytoplankton, zooplankton, birds, fish, mammals, socioeconomics) per reporting region would annually update reports on a suite of agreed variables via the web in a process similar to electronically submitting a manuscript for review for journal publication, although much abbreviated. Submittals would consist of title, abstract, body, and data (QA, QC, QF) and metadata. A regional lead author, supported by IT staff and assisted by regional peer reviewers, would review submittals and request revisions if necessary. Edited submittals would be passed to two senior editors, assisted by database managers (MS SQL or Oracle) who would format into an NPESR (without synthesis report) on an annual basis. Senior editors would provide a preface of highlights that would serve for ppt and press release. Senior editors would organize synthesis on five- or six-year intervals, drawing upon lead authors, correspondents and other specialists as required.

The suite of agreed variables for each region would be developed through PICES processes. For example by use of “indicator selection framework” (AP-COVE, WG 28) to select time series in climate physics (WG 27), N,P,Z (MEQ), birds, fish and mammals (BIO, FIS), economics (HD), social impacts (HD). Note that “indicators” in this context are observables of known measurement error; variables (SST, fluorescence, DIC, DO, population estimates, *etc.*).