

# POC Paper Session

*Convenor: Michael G. Foreman (Canada)*

Papers are invited on all aspects of physical oceanography and climate in the North Pacific and its marginal seas, particularly those related to the impacts of future climate change.

*Wednesday, October 5, 2005 14:00-18:10*

- 14:00-14:10     **Michael G. Foreman** (Introduction by POC Chairman)  
Evaluation of climate change projections: A new Working Group under the PICES Physical Oceanography and Climate Committee
- 14:10-14:40     **Hiroyasu Hasumi, Tatsuo Suzuki, Takashi T. Sakamoto, Seita Emori, Masahide Kimoto and Akimasa Sumi** (Invited)  
Present and future of the North Pacific simulated by a high resolution coupled atmosphere-ocean general circulation model (POC\_Paper-2221)
- 14:40-15:10     **Muyin Wang and James E. Overland** (Invited)  
A first look at the new IPCC AR4 climate model simulations over the North Pacific (POC\_Paper-2503)
- 15:10-15:30     **Yasuhiro Yamanaka, Taketo Hoshioka, Maki N. Aita and Michio J. Kishi** (Oral)  
Changes in ecosystem in the western North Pacific associated with global warming (POC\_Paper-2255)
- 15:30-15:50     **Larissa A. Gayko** (Oral)  
The analysis of temperature regimes in coastal areas of the north-west Japan/East Sea by climatic periods (POC\_Paper-2283)
- 15:50-16:10     **Ichiro Yasuda, Satoshi Osafune and Hiroaki Tatebe** (Oral)  
Possible mechanism of bi-decadal North Pacific ocean/climate variability in relation to the 18.6-year period nodal cycle (POC\_Paper-2487)
- 16:10-16:30     **Coffee Break**
- 16:30-16:50     **Skip McKinnell** (Oral)  
Detecting the 1972/73 El Niño in the Northeast Pacific with an improved tropical teleconnection index (POC\_Paper-2310)
- 16:50-17:10     **Victor I. Kuzin, Aleksandr S. Lobanov and Valery M. Moiseev** (Oral)  
Analysis and modeling of north and tropical Pacific SST variability (POC\_Paper-2358)
- 17:10-17:30     **Yulia N. Tananaeva and Marat A. Bogdanov** (Oral)  
Interannual variability of cold and warm seasons and their duration in the North West Pacific (POC\_Paper-2431)
- 17:30-17:50     **Satoshi Osafune and Ichiro Yasuda** (Oral)  
Bidecadal variability in the intermediate waters of the northwestern subarctic Pacific and the Okhotsk Sea in relation to the 18.6-year nodal tidal cycle (POC\_Paper-2485)
- 17:50-18:10     **Fangli Qiao, Changshui Xia, Zhenya Song, Yongzeng Yang and Yeli Yuan** (Oral)  
Ocean surface waves play an essential role in air-sea interaction from an atmosphere-wave-ocean coupled model (POC\_Paper-2319)

Thursday, October 6, 2005 08:30-17:00

- 08:30-08:50 **Shin-ichi Ito, Shigeho Kakehi, Motohiko Kashima, Kosei Komatsu, Takashi Setou and Yasumasa Miyazawa** (Oral)  
Predictability of location of the Kuroshio Extension and the Oyashio First Branch by JCOPE (POC\_Paper-2407)
- 08:50-09:10 **Michael Foreman, Wendy Wiggins, Angelica Peña, Emanuele Di Lorenzo, Barbara Hickey, Amy MacFadyen and Vera Trainer** (Oral)  
Modelling and observational studies of the Juan de Fuca Eddy (POC\_Paper-2293)
- 09:10-09:30 **Gennady A. Platov, Elena N. Golubeva, Young Jae Ro and John F. Middleton** (Oral)  
Numerical study of the general circulation in the Japan/East Sea with simple assimilation of temperature and salinity data (POC\_Paper-2344)
- 09:30-09:50 **Olga O. Trusenkova, Vyacheslav B. Lobanov and Aleksandr A. Nikitin** (Oral)  
Seasonal and interannual variation of currents in the western Japan/East Sea: Numerical simulation in comparison with infrared satellite imagery (POC\_Paper-2273)
- 09:50-10:10 **Gongke Tan, Binghua Guo, Kyung-Tae Jung and Hyoun-Woo Kang** (Oral)  
A review of the investigation and study on Yellow Sea circulation (POC\_Paper-2361)
- 10:10-10:30 **Coffee Break**
- 10:30-10:50 **Hao Wei, Yunchang He, Qingji Li and Zhiyu Liu** (Oral)  
Seasonal hypoxic zone adjacent to the Changjiang Estuary (POC\_Paper-2254)
- 10:50-11:10 **Young Jae Ro and Kwang Young Jung** (Oral)  
Realtime monitoring of oceanic state variables in Kangjin Bay, South Sea, Korea (POC\_Paper-2386)
- 11:10-11:30 **Yuri Yu. Nikonov, Valeriy N. Chastikov and Ludmila Yu. Gavrina** (Oral)  
Water and chlorophyll circulation modeling of Aniva Gulf according to oceanographic data from the year 2002 (POC\_Paper-2302)
- 11:30-11:50 **Anatoly Obzhirov, Anatoly Salyuk, Renat Shakirov, Olga Vereschagina, Natalia Pestrikova, Artem Ageev, Anna Venikova, Olesia Yanovskaja and Elena Korovitskaja** (Oral)  
Flux of methane to the atmosphere from the Okhotsk Sea (POC\_Paper-2459)
- 11:50-12:10 **Vladimir I. Matveev** (Oral)  
Interannual changes of dissolved oxygen in an active layer of the Okhotsk Sea (POC\_Paper-2582)
- 12:10-12:30 **Nafanail V. Bulatov and Natalya G. Obukhova** (Oral)  
One type of eddy development in the north-eastern Kuroshio branch (POC\_Paper-2484)
- 12:30-14:00 **Lunch**
- 14:00-14:20 **Yugo Shimizu, Lynne D. Talley, Shin-ichi Ito and Miyuki Tatesawa** (Oral)  
Distribution and transport variations of source waters for North Pacific Intermediate Water formation revealed by multiple tracer analysis (POC\_Paper-2411)
- 14:20-14:40 **Yury V. Novikov and Vadim M. Petruk** (Oral)  
On the problem of bottom water formation on the shelf of Peter the Great Bay (Japan/East Sea) in spring (POC\_Paper-2228)
- 14:40-15:00 **George Shevchenko and Valery Chastikov** (Oral)  
Seasonal variability of oceanological conditions in the southern part of the Okhotsk Sea from CTD surveying on standard section Cape Aniva – Cape Dokuchaev (POC\_Paper-2268)

- 15:00-15:20 **Andrey G. Andreev and Victoria I. Baturina** (Oral)  
Impacts of the tides and atmospheric forcing variability on salinity and dissolved oxygen in the western subarctic Pacific (POC\_Paper-2270)
- 15:20-15:40 **Young-Gyu Park, Kyung-Hee Oh and Moon-Sik Suk** (Oral)  
Meridional mass and heat transport across the 38-40°N line in the East/Japan Sea (POC\_Paper-2432)
- 15:40-16:00 **Denis V. Darkin, Leonid M. Mitnik and Maia L. Mitnik** (Oral)  
Evolution of sea ice in the Okhotsk Sea in January-April 2003: Analysis with the use of multisensor satellite and auxiliary data (POC\_Paper-2321)
- 16:00-16:20 **Coffee Break**
- 16:20-16:40 **Hiroki Takemura and Sei-Ichi Saitoh** (Oral)  
Spatial phytoplankton distributions affected by eddy dynamics in the Eastern Kamchatka Current and Oyashio regions during the spring between 1998-2004 (POC\_Paper-2460)
- 16:40-17:00 **Vladimir A. Luchin and Igor A. Zhigalov** (Oral)  
Typical distribution of interannual variations of water temperature in the active layer of the Okhotsk Sea and their possible prediction (POC\_Paper-2322)

## Posters

### **Tatyana V. Belonenko**

Oceanographic field variability in the North Pacific by temperature circulation indices (POC\_Paper-2483)

### **Tatyana Bogdanovskaya**

Comparative analysis of parameters of Pacific subtropical anticyclones (POC\_Paper-2461)

### **Valentina D. Budaeva, Georgi V. Shevchenko, Vajcheslav Makarov and Valery N. Chastikov**

Intraannual thermohaline dynamics in Aniva Bay (POC\_Paper-2382)

### **Manchun Chen, Hui Wang and Hengyi Weng**

Interannual-interdecadal variability of the mean sea level along the China Coast during 1968-2002 (POC\_Paper-2617)

### **Maochang Cui, Lingjuan Wu and Fan Wang**

Principle of partial similitude for tsunami waves (POC\_Paper-2226)

### **Boris S. Dyakov**

Spatial and temporal variability in circulation and hydrophysical fields in Tatar Strait (POC\_Paper-2440)

### **Victor R. Foux**

Altimetry estimation of divergence and convergence area dispositions in streams for exchange application (POC\_Paper-2531)

### **Lyudmila Yu. Gavrina, L.N. Propp and V.N. Chastikov**

Factors of the environment and production characteristics in Aniva Bay, Sea of Okhotsk and bordering straits (Laperuz, Tatarsky) in 1996-2002 (POC\_Paper-2530)

### **Shigeho Kakehi, Shin-ichi Ito, Motohiko Kashima, Kosei Komatsu, Takashi Setou and Yasumasa Miyazawa**

The comparisons between JCOPE and observed data in Tohoku regions (POC\_Paper-2409)

**Kosei Komatsu, Takashi Setou, Yasumasa Miyazawa, Akira Kusaka, Shin-ichi Ito, Shigeho Kakehi, Motohiko Kashima, Manabu Shimizu, Hideki Akiyama, Kazuyuki Uehara and Mitsuyuki Hirai**

Verification of JCOPE ocean forecast system using *in situ* data of Japanese fisheries research institutions (POC\_Paper-2456)

**Takashi Setou, Kosei Komatsu, Yasumasa Miyazawa, Shin-ichi Ito, Kazuyuki Uehara, Manabu Shimizu, Akira Kusaka, Shigeho Kakehi, Motohiko Kashima, Hideki Akiyama and Mitsuyuki Hirai**

Incorporating *in situ* data obtained by Japanese fisheries research institutions into the JCOPE ocean forecast system (POC\_Paper-2457)

**Young Jae Ro and Kwang Young Jung**

Hydrographic and hydrodynamic variability in Kangjin Bay, South Sea, Korea (POC\_Paper-2446)

**Gennady A. Kantakov**

Low salinity signal propagation in the western part of the Sea of Okhotsk (POC\_Paper-2512)

**Yun-Bae Kim, Kyung-Il Chang, JongJin Park, Kuh Kim, Jae Hak Lee and Jae-Chul Lee**

Flow through the Ulleung Interplain Gap in the southwestern East/Japan Sea (POC\_Paper-2543)

**Yu-Fei Lin, Su-Mei Liu, Lei Ji, Guo-Sen Zhang, Yan-Feng Bi and Jing Zhang**

Multivariate statistical study on the chemical composition of rainwater at Zhoushan Archipelago (POC\_Paper-2491)

**Zhiyu Liu, Haitang Wang and Hao Wei**

Bottom drag coefficient estimates in the tidal bottom boundary layer from acoustic Doppler velocimeter data (POC\_Paper-2247)

**Vasiliy F. Mishukov, Alexander N. Medvedev and Andrey S. Neroda**

Natural and anthropogenic sources of chemical elements in aerosols over Vladivostok (POC\_Paper-2222)

**Valentina V. Moroz and Konstantin T. Bogdanov**

Water structure and circulation variability in the Kuril Straits area (POC\_Paper-2244)

**Hanna Na and Kuh Kim**

Temporal variation of the estimated volume transport through the Korea and Tsugaru Straits (POC\_Paper-2389)

**Aleksander A. Nikitin**

Thermal features of water structure of the Japan/East Sea on satellite and ship observations (POC\_Paper-2248)

**Aleksander A. Nikitin, Yury Novikov and Vadim Petruk**

Monitoring of Peter the Great Bay (Japan/East Sea) on IK-images and hydrological data in April-May of 2005 (POC\_Paper-2249)

**Alexander A. Nikitin, Larissa S. Shkoldina, Ekaterina N. Selivanova and Lyana D. Kulichkova**

The phenomenon of warm water allochthons in the north-western Japan/East Sea during winter-spring 2003-2004 and peculiarities of the thermal regime (POC\_Paper-2359)

**Eugene V. Samko and Vadim M. Petruk**

Research on Bering Sea geostrophic circulation from satellite altimetry data: Two approaches to solving the problem (POC\_Paper-2296)

**Antonina M. Polyakova**

Especially dangerous wave heights and safety of the fishing fleet in the Northern Pacific (POC\_Paper-2381)

**Antonina M. Polyakova**

Ice formation is especially dangerous for fishing boats in the Northern Pacific and for the safety of the fishing fleet (POC\_Paper-2383)

**Eung Kim and Young Jae Ro**

Structure of seawater properties profiled by the Argo floats in the Ulleung-do area (East/Japan Sea), 2003-2004 (POC\_Paper-2452)

**Eugene V. Samko, Nafanail V. Bulatov and Eugene O. Basyuk**

Structure of an anticyclonic eddy in the southern Kuril Islands region and its influence on water dynamics and the saury fishery (POC\_Paper-2470)

**Renat B. Shakirov, Anatoly I. Obzhirov, Anatoly N. Salyuk and Nicole Biebow**

Methane anomalies in the Okhotsk Sea (POC\_Paper-2523)

**Tatyana A. Shatilina, L.Yu. Matyushenko and R.B. Kravchenko**

Monitoring of baroclinic circulation conditions and ice cover by GIS methods in the Far Eastern Seas (POC\_Paper-2583)

**Young-Sang Suh, Hiroshi Kawamura, Futoki Sakaida, Sang-Woo Kim, Lee-Hyun Jang and Na-Kyung Lee**

Daily variation of abnormal ocean conditions in the northwestern Pacific Ocean using NGSST satellite data (POC\_Paper-2592)

**Svetlana N. Taranova and Igor A. Zhabin**

Water mass transformation in the Japan/East Sea (POC\_Paper-2225)

**Galina A. Vlasova and Vladimir I. Rostov**

Analysis of seasonal variability of hydrodynamic structures in the Sea of Okhotsk and their dependence on baric systems in the atmosphere (POC\_Paper-2284)

