

Selection of PICES XVII theme (China, 2008)

Previous theme topics for PICES since 2001 have included:

| Meeting | Theme | Location |
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PICES X Retrospective Victoria, Canada, October 5–13, 2001

PICES XI Technological advances in marine scientific research Qingdao, the People's Republic of China, October 18–26, 2002

PICES XII Human dimensions of ecosystem variability Seoul, Korea, October 10–18, 2003

PICES XIII Beyond the continental slope - complexity and variability in the open North Pacific Ocean Honolulu, Hawaii, U.S.A., October 14–24, 2004

PICES XIV Mechanisms of climate and human impacts on ecosystems in marginal seas and shelf regions Vladivostok, Russia, September 29–October 9, 2005

PICES XV Boundary current ecosystems Yokohama, Japan, October 13–22, 2006

PICES XVI The changing North Pacific: Previous patterns, future projections, and ecosystem impacts Victoria, Canada, October 26–November 4, 2007

At PICES XV, Science Board was unable to achieve consensus between “*Beyond observations to achieving understanding and forecasting in a changing North Pacific: Forward to the Future*” and “*Forward to the Future: Understanding and forecasting in a changing North Pacific*” for the preferred theme title for PICES XVII, to be hosted by Dalian, China from October 23 to November 2, 2008. Both titles were submitted to Governing Council for review. Council determined that the theme of PICES XVII will be: “*Beyond observations to achieving understanding and forecasting in a changing North Pacific: Forward to the future*”.

At previous inter-sessional meetings, topic sessions, titles and outlines, have been discussed/selected, including names of convenors and invited speakers.

Rationale for deferring the finalization of the PICES XVII theme until the Science Board meeting at PICES XVI is provided by Science Board Chairman, Dr. Kuh Kim, in the points stated below.

Point 1: Original Proposal

Theme for PICES XVII (Dalian, China)

“Beyond observations to achieving understanding and forecasting in a changing North Pacific: Forward to the future”

One of PICES’ mandates is to advance scientific knowledge about the ocean environment, global weather and climate change, living resources and their ecosystems, and the impacts of human activities. Observation, numerical simulation and theoretical analysis are main methods of oceanographic research. Undoubtedly, observation is the basis for all the related marine research. However, the scientific community needs to address two issues: To understand the mechanisms driving the evolution of the marine environment, scientific experiments are needed. To predict how marine environments of North Pacific will evolve, forecast is needed. Numerical models can serve as helpful tools for simulations and forecasting. Although we have a lot of observational data from North Pacific, they are sparse in space and time resolution. Modern technology allows us to monitor the ocean by remote sensing but we still know very little about what occurs beneath the sea surface. To improve our understanding of the North Pacific, we need to nowcast in order to organize data through marine dynamical systems. To project what the marine environment will look like in the future, models that can forecast from days to hundreds years is needed. Advanced numerical models may serve as one solution for the above problems. A theme of Seventeenth PICES Annual Meeting in this direction will greatly help to improve our scientific knowledge of North Pacific.

Point 2: As the above document was received quite late at PICES XV in Yokohama, Science Board did not have time to discuss it and produce the final theme abstract. However, Science Board members did note that the original proposal was too narrow in scope to draw wide participation for the Annual Meeting.

Point 3: “FUTURE” starts at PICES XVII China, 2008 according to the recent working documents of FISP which are produced after PICES XV. So it would be considered quite appropriate to make the Science Board Symposium at PICES XVII as an occasion to address the final themes of FUTURE. In fact, several key words in the original proposal from China are essentially the same as those addressed in FISP planning documents, such as: impacts of human activities, mechanisms, predict marine environments, forecast in addition to three PICES words which are climate change, living resources and ecosystems. It is very desirable to invite to the Science Board Symposium those who will play key roles in FUTURE. If this can be achieved, the abstract should be phrased in anticipation of those scientists. However, we do not yet know who will be the key players, such as chairmen of the next program.

Point 4: As a draft of the Science Plan for FUTURE will be presented at PICES XVI in the Open Forum, we will have a better idea of the scope and themes of FUTURE by this time. So it might be best to finalize the theme abstract for PICES XVII (2008, China) at the Science Board meeting immediately after closing of PICES XVI to take the draft of the Science Plan into consideration.