



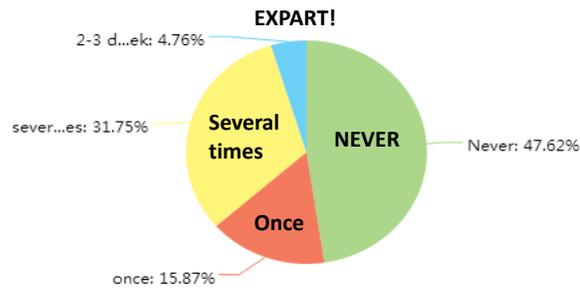
The “GEOTRACES IDP 2017 data with Ocean Data View” Workshop Report

May 2nd & 3rd 2018, Qingdao, China
Ocean University of China

A hands-on workshop to teach standard and advanced Ocean Data View (ODV) methods for the exploration and scientific analysis of environmental data was held on May 2 and 3 2018, Qingdao, China. Total 82 participants attended the workshop including graduate and undergraduate students as well as young scientists, from Ocean University of China. During the workshop, the GEOTRACES Intermediate Data Product 2017 (IDP2017) was used as example dataset. For the day 1, participants learned how to use ODV software, create map, property-property plots, sections, surface plots. In addition, participants also learned how to create ODV data file with their own data set. For the day 2, part of participants (14 students) gave presentations based upon the topics they have interest, which cover Global Physical water circulation, GEOTRACES IDP2017 data, Time-series data (Station Aloha), and their own dataset etc. Lastly, participants learned some tips of advanced level of ODV on how to work on their own dataset.

Participants were encouraged to bring their own laptop computer for use during the hands-on sessions of the workshop. All computers were prepared before the workshop by installing the latest version of the ODV software (ODV 5.0) and downloading the data set. Also, participants were encouraged to fill the survey before the workshop, which helped to understand the participant’s needs and to organize the workshop. The survey was included those questions: (i.e. Have you ever used ODV before? Have you ever made any “scatter”, “section”, “surface” plots with ODV? Have you ever created own data spreadsheet for ODV and import into ODV? What topic are you interested in the most? i.e. Global Physical water circulation, GEOTRACES IDP2017 data, Time-series data (Station Aloha), Carbon, Hydrothermal vents, and Others. The 63 students were answered those questions, and the main results were shown in the following figure.

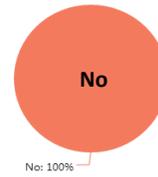
Have you ever used ODV software before?



Have you ever created own data spreadsheet for ODV and import into ODV?



Have you ever imported netCDF format data file into ODV?



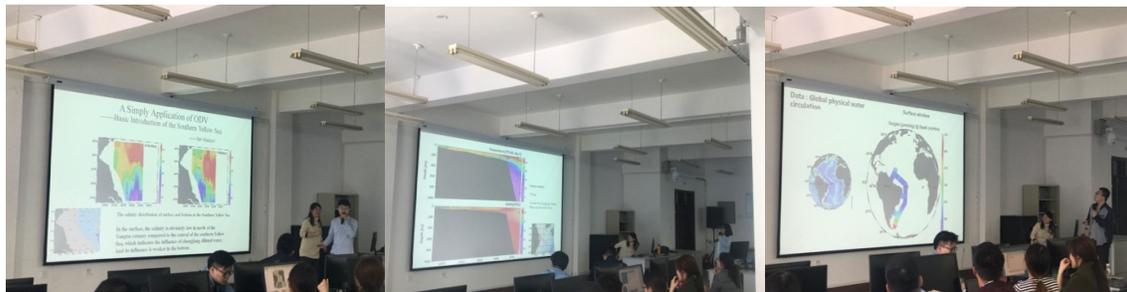
The results of the survey before the class.



Dr. Mariko Hatta gave her presentations during the workshop on the Day 1 (May 2 2018).



The scene at room B317, south building in the College of Information Science and Engineering, Ocean University of China.



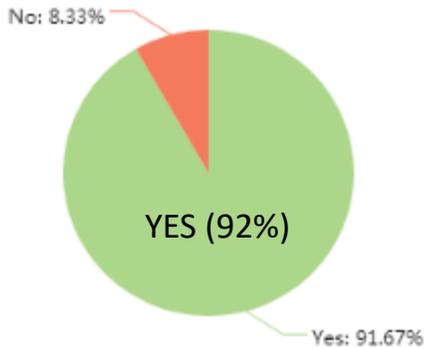
Students gave presentations during the workshop on the Day 2 (May 3, 2018)



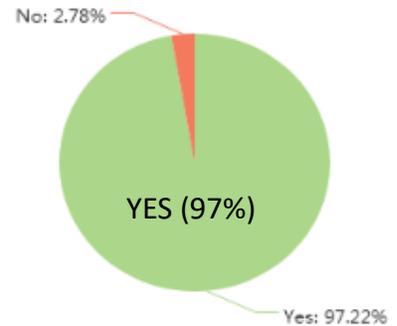
Students discussion with Dr. Mariko Hatta after the class.

Participants (36 students) were also answered the post-class survey.

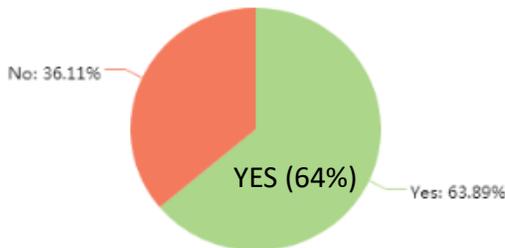
a. Did you learn what the GEOTRACES is?



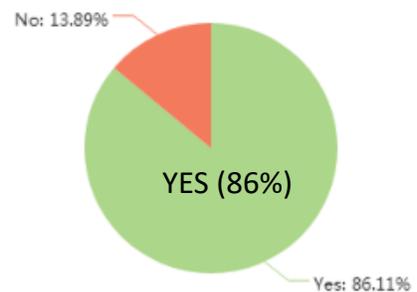
c. Did you learn new thing or new skill about Ocean Data View during the class?



b. Will you use GEOTRACES IDP 2017 after the class?



d. Do you want to take more class about GEOTRACES?



Overall, the majority of the participants had understood the concept of the GEOTRACES project and learned how to use ODV software during the class. In addition, 80% of the participants satisfied the class, and 100% of the participants prefer to take more ODV class in the future. There are several suggestions for the improvement of the class:

- Would like to learn more advanced technique for ODV.
- Would like to learn more detailed for the making the plots.
- Prefer to have a demo video on how to make some complicated plots with ODV additional to the handout which was provided for the class.
- During the class, some participants had some problems (i.e. installation of ODV, some issue between the software version (ODV 5.0) and their computers etc.), which caused significantly slow-down for the class.
- Increasing teaching assistants might help to maintain the class better.
- Prefer to learn the class in Chinese.

The workshop agenda is as follows,

Workshop Agenda

Day 1 (May 2nd)

13:30-14:15 Introduction of international GEOTRACES program
Oceanographic data and the shipboard analysis during GEOTRACES
N. Atlantic Ocean cruise

14:15-14:45 IDP2017 GEOTRACES data

14:45-15:00 Break

15:00-16:15 Introduction to Ocean Data View software
How to open the ODV
How to make property-property plot, section plot, and surface plot
How to make own data sheet

16:15-16:30 Break

16:30-17:00 Introduction of the oceanographic data for ODV
1. Global Physical water circulation (eWOCE)
2. GEOTRACES IDP2017 data
3. Time-series data (Station Aloha)
4. CCHDO (GO-SHIP data set)

Day 2 (May 3rd)

13:30-14:00 Presentations from the participants
2 mins talk for each person
Q&A

14:00-15:00 Advanced ODV software
Q&A and some of the tips to work on your data set.

Organizers

Dr. Qian Liu, Ocean University of China, China.
Dr. Mariko Hatta (lecturer), University of Hawaii, US.
Dr. Jingling Ren, Ocean University of China, China.
Dr. Meixun Zhao, Ocean University of China, China.
Dr. Jing Zhang, University of Toyama, Japan.

Acknowledgements

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