



CLIVAR-FIO SUMMER SCHOOL ON PAST, PRESENT AND FUTURE SEA LEVEL CHANGES AND WESTPAC/RTRC-ODC TRAINING COURSE ON OCEAN FORECAST SYSTEM

PROGRAMME

25 June - 7 July 2018, Qingdao, China

Hosted by

**The First Institute of Oceanography (FIO),
State Oceanic Administration (SOA), China**



Contents

1. Background.....	1
2. Training Program	2
2.1 Time Schedule	2
2.2 Place for Training	5
2.3 Lecturers and resource persons	6
3. Other Activities	8
3.1 Trainee Reports.....	8
3.2 Group Discussion and Reports	9
3.3 Trainee Certificates and Awards.....	9
4. Useful Information	10
4.1 A map around FIO	10
4.2 Transportation	12
➤ From Qingdao Liuting International Airport to FIO/Hotel	12
➤ From Railway Stations to FIO/Hotel	12
➤ Getting around in Qingdao	12
4.3 Other Information.....	13
➤ Currency and ATM in Qingdao	13
➤ Medical services	14
➤ Electricity	14
➤ Useful Numbers.....	14
➤ Internet connection.....	14
➤ Tips.....	14
Appendix I: List of trainee reports (by presenting date).....	15
Appendix II: Restaurant.....	16
Appendix III: Coffee.....	18
Appendix IV: Shopping Malls.....	18
Appendix V: Hotel	19

1. Background

CLIVAR (Climate and Ocean: Variability, Predictability and Change) is one of the four core projects of the World Climate Research Programme (WCRP). The goal of CLIVAR is to improve understanding and prediction of ocean-atmosphere interactions and their influence on climate variability and change, to the benefit of society and the environment. With strong emphasis of CLIVAR on the capacity building in particular for Early Career Scientist, and thanks to the great support from the First Institute of Oceanography (FIO), State Oceanic Administration of China, the hosting agency for both International CLIVAR Global Project Office and CLIVAR Summer School, the 1st CLIVAR-FIO Summer Course on “Past, Present and Future Sea Level Changes” will be organized in Qingdao, China, from June 25 to 30, 2018. CLIVAR-FIO Summer Course will cover a wide range of physical processes contributing to global and regional sea level change: from observations to modelling of the main physical processes of global and regional sea level rise and variability. In addition, there is a specific focus on impact studies in coastal areas. Also, the CLIVAR Summer School is trying to establish a platform to foster international joint research among lectures and trainees, and to provide opportunities of exchanging visiting scholars and doctoral education. For more information, please visit: <http://www.clivar.org/events/clivar-fio-joint-summer-school-2018>.

The UNESCO/IOC Regional Training and Research Center on Ocean Dynamics and Climate (ODC) was officially established through one Agreement signed by the Intergovernmental Oceanographic Commission (IOC) of UNESCO and the host institute, the First Institute of Oceanography (FIO), State Oceanic Administration (SOA) of China, at the WESTPAC-VIII in Bali, Indonesia in May 2010. ODC Center was built to provide advanced training and education for young scientists, promote exchange among experts within and outside regional ocean research and initiate cutting-edge research on ocean and climate model development. As the first UNESCO/IOC Regional Training and Research Center, ODC center was inaugurated on 9 June 2011 at the host institute of the First Institute of Oceanography, State Oceanic Administration of China. During the past 7 years, annual training courses with the subjects of Ocean Models (10-16 June 2011), Ocean Dynamics (16-22 July 2012), Air-Sea Interaction and Modeling (12-23 August 2013), Climate Models (3-14 November 2014), Climate Change (7-18 September 2015), Ocean Dynamics and Multi-scales Interaction (5-16 September 2016) and Development of Coupled Regional Ocean Models (12-23 June 2017) had been successfully held. Totally, 312 trainees from 33 countries have been trained. With the constructive suggestions and overwhelming interests received from the previous training courses, the eighth ODC Training Course on Ocean Forecast System will be held during 2-7 July, 2018. The training in 2018 is designed to comprehensively introduce the development of regional ocean forecasting systems with topics covering from ocean data assimilation, forecast of wave, tide and circulation, to interpretation of numerical results and present development practices of regional OFS. More information could be found on ODC website (http://www.fio.org.cn/en/training_center/index.htm) and WESTPAC/IOC website (<http://iocwestpac.org>).

2. Training Program

2.1 Time Schedule

Time	Activity	Chair/Lecturer
COURSE I. CLIVAR-FIO SUMMER SCHOOL ON PAST, PRESENT AND FUTURE SEA LEVEL CHANGES (25 June – 30 June 2018)		
25 June, 2018 (Monday)		
08:30-09:00	Registration in the meeting room	
09:00-10:00	Opening Ceremony	Jing Li
	1) Remark by SOA	
	2) Remark by Fangli Qiao	
	3) Remark by Detlef Stammer	
	4) Introduction of Summer Course by Jose Santos	
	5) Self-introduction by participants	
10:00-10:30	UN Decade of Ocean Science for Sustainable Development (2021-2030)	Wenxi ZHU
10:30-11:00	Break & Group photo	
11:00-12:30	Introduction to Sea Level Science	Detlef Stammer
12:30-14:00	Lunch	
14:00-15:30	Past sea level changes. (geological scale briefly, tide gauge observations, observing systems, use of tide gauge data for climate research, use of altimeter data)	S. Jevrejeva
15:30-16:00	break	
16:00-17:30	Modern observations. (including brief info about satellite altimetry, GRACE and others, energy budget, sea level budget components, the role of the ocean component in sea level budget)	Detlef Stammer
17:30-18:00	Delivering Ocean Services to Meet Societal Needs: Lessons and Experiences from the SEAGOOS Ocean Forecasting System Development	Somkiat KHOKIATTIWONG
18:00	End of activities	
26 June, 2018 (Tuesday)		
09:00-10:30	Ocean observations, heat uptake, thermosphere sea level (including ocean in situ temperature, thermosteric sea level, observing systems: past, present and future, detection and attribution). Part 1	Karina von Schuckmann
10:30-11:00	Break	
11:00-12:30	Ocean observations, heat uptake, thermosphere sea level (including ocean in situ temperature, thermosteric sea level, observing systems: past, present and future, detection and attribution). Part 2	Karina von Schuckmann
12:30-14:00	Lunch	
14:00-15:30	Observed and modelled Sea level variability: Observations (including role of climate modes, role of the ocean in SL variability, time series analysis, use of statistical methods for SL studies)	Detlef Stammer
15:30-16:00	Break	
16:00-17:30	Observed and modelled sea level variability: Modelling (including global, regional and coastal), use of altimeter data	Detlef Stammer
17:30-18:30	Trainee reports (1)	Leader of Group 1
18:30	End of activities	

**CLIVAR-FIO SUMMER SCHOOL ON PAST, PRESENT AND FUTURE SEA LEVEL CHANGES
& WESTPAC/RTRC-ODC TRAINING COURSE ON OCEAN FORECAST SYSTEM**

27 June, 2018 (Wednesday)		
09:00-10:30	Vertical land movement. (GPS observations, observing systems for geophysical signals, including GIA and local subsidence, include GRACE here or in the next lecture)	Matt King
10:30-11:00	Break	
11:00-12:30	Practical Applications: GIA model corrections to tide gauges, computing trends from individual gauges, sea-level fingerprints etc. Observed contributions from ice sheets	Matt King
12:30-14:00	Lunch	
14:00-17:30	Visit to Qingdao National Laboratory for Marine Science and Technology (QNLN)	Local organisers
17:30	End of activities	
28 June, 2018 (Thursday)		
09:00-10:30	Sea level components. Contribution from Glaciers, observations and modelling	Shiyin Liu
10:30-11:00	Break	
11:00-12:30	Ice sheet contributions – dynamics (Formation and evolution of ice sheets, contemporary evolution of Greenland and Antarctic mass balance, processes behind observed changes in the dynamics of outlet glaciers)	Gael Durand
12:30-14:00	Lunch	
14:00-15:30	Ice sheet contributions – modelling and projections (Brief history of ice sheet modelling, current challenges in numerical developments, projections of ice sheets' evolution)	Gael Durand
15:30-16:00	Break	
16:00-17:30	Sea level projections. (Global & regional, local approaches, comparison with 20 th century observations/modelling; introduction to fingerprints, patterns, e.g. the role of land water, glaciers)	S. Jevrejeva
17:30-18:30	Trainee reports (2)	Leader of Group 2
18:30	End of activities	
29 June, 2018 (Friday)		
09:00-10:30	Projections for the 21 st century and beyond	S. Jevrejeva
10:30-11:00	Break	
11:00-12:30	Understanding and managing coastal hazards (including flooding, erosion with references to groundwater salinization): (1) examples of impacts from current events; (2) the physical phenomena driving the hazards; (3) current management of coastal risks (prevention, preparedness, crisis management, response, adaptation)	Gonéri Le Cozannet
12:30-14:00	Lunch	
14:00-15:30	Coastal impacts of sea level rise (shoreline changes, extreme water levels and flooding): (1) impacts from sea level rise from a global to local perspective; (2) managing uncertainties in sea level rise impact assessments; (3) evaluating the expected benefits of adaptation and mitigation; (4) services to support adaptation in coastal areas	Gonéri Le Cozannet
15:30-16:00	Break	
16:00-17:30	Challenges for sea level science	TBA
17:30-18:30	Trainee reports (3)	Leader of Group 3

**CLIVAR-FIO SUMMER SCHOOL ON PAST, PRESENT AND FUTURE SEA LEVEL CHANGES
& WESTPAC/RTRC-ODC TRAINING COURSE ON OCEAN FORECAST SYSTEM**

18:30	End of activities	
30 June, 2018 (Saturday)		
09:00-10:30	Development of new climate model	Fangli Qiao
10:30-11:00	Break	
11:00-12:00	Closing Ceremony	Local organizers
12:00-15:00	Reception	
1 July, 2018 (Sunday) - break		
COURSE II: WESTPAC/RTRC-ODC TRAINING COURSE ON OCEAN FORECAST SYSTEM (2 July – 7 July 2018)		
2 July, 2018 (Monday)		
08:30-09:00	Registration	
09:00-10:00	Welcome remarks by Fangli Qiao Introduction of ODC training course by Xunqiang Yin Self-introduction of trainees ...	Xunqiang Yin
10:00-10:30	Break & Group photo	
10:30-12:00	Historical perspective on the science of ocean predictions	Nadia Pinardi
12:00-12:30	The operational ocean forecasting system components	
12:30-13:30	Lunch	
13:30-14:30	The operational ocean forecasting system components (continued)	Nadia Pinardi
14:30-15:20	Examples of implementation in the Mediterranean Sea and the global ocean	
15:20-15:30	Break	
15:30-18:30	Interpretation of numerical results from ocean forecast system	Guimei Liu
3 July, 2018 (Tuesday)		
09:00-09:50	Visualisation of Regional Ocean forecast results	Yunfei Zhang
10:00-10:10	Break	
10:10-12:40	Trainee reports (4)	Leader of Group 4
12:40-14:00	Lunch	
14:00-15:30	Site visiting of FIO (TBD)	Local organizers
15:20-15:30	Break	
15:30-18:30	Group discussion	Yiying Lu
4 July, 2018 (Wednesday)		
9:00-10:30	Visualisation of Regional Ocean forecast results (continued)	Yunfei Zhang
10:30-10:40	Break	
10:40-12:30	Group discussion (practice)	Yunfei Zhang
12:30-14:00	Lunch	
14:00-15:30	Circulation forecast model in coastal region	Qiang Wang
15:30-15:40	Break	
15:40-18:30	Trainee reports (5)	Leader of Group 5
5 July, 2018 (Thursday)		
9:00-12:30	Set up of regional tidal and circulation forecast models	Qiang Wang
10:30-10:40	Break	
10:40-12:30	Set up of regional tidal and circulation forecast models (continued)	Qiang Wang
12:30-14:00	Lunch	

**CLIVAR-FIO SUMMER SCHOOL ON PAST, PRESENT AND FUTURE SEA LEVEL CHANGES
& WESTPAC/RTRC-ODC TRAINING COURSE ON OCEAN FORECAST SYSTEM**

14:00-15:30	Data assimilation in ocean forecast system	Shiqiu Peng
15:30-15:40	Break	
15:40-18:30	Trainee reports (6)	Leader of Group 6
6 July, 2018 (Friday)		
9:00-10:30	Example of SST assimilation in a coastal model and validation	Shiqiu Peng
10:30-10:40	Break	
10:40-12:30	Example of SST assimilation in a coastal model and validation (continued)	Shiqiu Peng
12:30-14:00	Lunch	
14:00-15:30	Coupling of wave-tide-circulation in ocean forecast system	Fangli Qiao
15:30-15:40	Break	
15:40-18:30	Trainee reports (7)	Leader of Group 7
7 July, 2018 (Saturday)		
9:00-10:30	Test case for coupling of wave-tide-circulation in a coastal region	Bin Xiao
10:30-10:40	Break	
10:40-12:30	Test case for coupling of wave-tide-circulation in a coastal region (continued)	Bin Xiao
12:30-13:30	Lunch	
13:30-18:30	Group discussion	Xunqiang Yin
15:30-15:40	Break	
15:40-18:30	Group reports	Xunqiang Yin
19:00-19:30	Completion ceremony of ODC training course	
19:30-21:00	Farewell diner	

2.2 Place for Training

Most of lectures for the two-week training will be given at the meeting room 302, located at the 3rd floor of the Administration Building (see Figure 1), in the First Institute of Oceanography, State Oceanic Administration, China. The detailed arrangements for group discussions and laboratory visit will be announced in due course.



Figure 1: The training venue at FIO

2.3 Lecturers and resource persons

Lecturers (By order of teaching)

Prof. Detlef STAMMER

Oceanography, Remote Sensing of the Earth System and Coupled Climate Assimilation, Universität Hamburg, Germany
E-mail: detlef.stammer@uni-hamburg.de

Dr. Karina von Schuckmann

Mercator Ocean in Toulouse, France.
Email: kvonschuckmann@gmail.com

Prof. Shiyin Liu

Institute of International Rivers and Eco-security, Yunnan University, China
Email: shiyin.liu@ynu.edu.cn

Dr. Gonéri Le Cozannet

Bureau de Recherches Géologiques et Minières (BRGM), Orléans, France
Email: G.LeCozannet@brgm.fr

Prof. Nadia Pinardi

Department of Physics and Astronomy, Environmental Sciences University of Bologna
Email: n.pinardi@sincem.unibo.it

Prof. Yunfei Zhang

National Marine Environmental Forecasting Center
E-mail: zhangyf@nmefc.cn

Prof. Shiqiu Peng

South China Sea Institute of Oceanology, Chinese academy of Sciences
Email: speng@scsio.ac.cn

Dr Svetlana Jevrejeva

Marine Physics and Ocean Climate The National Oceanography Centre (NOC), Liverpool, UK
Email: sveta@noc.ac.uk

Dr. Matt King

School of Technology, Environments and Design, University of Tasmania, Hobart, Australia
Email: Matt.King@utas.edu.au

Dr. Gael Durand

CNRS - Institute of Geosciences and Environmental research (IGE), France
Email : gael.durand@univ-grenoble-alpes.fr

Prof. Fangli Qiao

The First Institute of Oceanography, State Oceanic Administration, China
E-mail: qiaofl@fio.org.cn

Prof. Guimei Liu

National Marine Environmental Forecasting Center
Email: liugm@nmefc.cn

Prof. Qiang Wang

Alfred Wegener Institute
E-mail: Qiang.Wang@awi.de

Dr. Bin Xiao

The First Institute of Oceanography, State Oceanic Administration
E-mail: xiaobin@fio.org.cn

Invited

Mr. Wenxi Zhu

Head, IOC Sub-Commission for the Western Pacific
Intergovernmental Oceanographic Commission of UNESCO
c/o Department of Marine and Coastal Resources, Thailand
Tel: +66 2 1411287; Fax: +66 2 1439245
E-mail: w.zhu@unesco.org

Dr. Somkiat Khokiattiwong

Chair of IOC/WESTPAC
Head of Oceanography and Marine Environment, Phuket Marine Biological Center, Department of Marine and Coastal Resources, THAILAND
Tel: +66-76-391128; Fax: +66-76-391127
Email: skhokiattiwong@gmail.com

Local Organizers

Mr. Yafeng Yang

The First Institute of Oceanography, State Oceanic Administration
No. 6 Xianxialing Road, Qingdao, China
E-mail: yfsoa@hotmail.com

Dr. Xunqiang Yin

The First Institute of Oceanography, State Oceanic Administration
No. 6 Xianxialing Road, Qingdao, China
Tel/Fax: +86-532-88967415
E-mail: yinxq@fio.org.cn

Prof. Jose Santos

Executive Director
International CLIVAR Project Office
The First Institute of Oceanography, State Oceanic Administration, China
Email: jose.santos@clivar.org

Ms. Jing Li

Staff Scientist
International CLIVAR Project Office
The First Institute of Oceanography, State Oceanic Administration, China
Email: jing.li@clivar.org

Ms. Yiyang Lu

Assistant of ODC center
UNESCO/IOC RTRC-ODC center
The First Institute of Oceanography, State Oceanic Administration
No. 6 Xianxialing Road, Qingdao, China
E-mail: odc_center@fio.org.cn

Ms. Lina Kang

Administrative Assistant
International CLIVAR Project Office
The First Institute of Oceanography, State Oceanic Administration, China
Email: lina.kang@clivar.org

Ms. Yan Wang

Assistant
UNESCO/IOC RTRC-ODC center
The First Institute of Oceanography, State Oceanic Administration
No. 6 Xianxialing Road, Qingdao, China
E-mail: odc_center@fio.org.cn

Ms. Stefanny De Las Mercedes Quiroz Torres

Intern
International CLIVAR Project Office
The First Institute of Oceanography, State Oceanic Administration, China
Email: stedquir@espol.edu.ec

3. Other Activities

3.1 Trainee Reports

This training aims to help establish research networks, and identify possible areas of cooperation among trainees and their institutions. To this end, each trainee is required to give a presentation know as the ‘**trainee report**’ at the training course, which could cover his/her main research focus, his/her institution’s areas of work, and preliminary idea for cooperation with other countries in the region.

*The **trainee report** should be concise and informative, with text around 4-6 pages, single space, and in font 12, including title, author list, affiliation, an abstract less than 300 words, text, figures and captions, as well as references (no more than 10).*

Table 1. Group division and date of trainee reports presentation

Group	ID	Name	Country	Date
1	127	Mr. Ferrero, Bruno	Brazil	Jul. 6
	78	Ms. Wu, Xiaofen	China	Jun. 26
	86	Mr. Kharlamov, Pavel	Russia	Jun. 28
	94	Mr. Mulualem, Getachew Mehabie	Ethiopia	Jun. 29
	18	Mr. Ullala Pathiramage, Gayan Pathirana	Sri Lanka	Jul. 4
	181	Mr. Poh, Heng Kok	Malaysia	Jul. 5
	142	Dr. Suriyan, Saramul	Thailand	Jul. 5
2	112	Mr. Song, Chunyang	China	Jun. 26
	34	Mr. Dinapoli, Matias	Argentina	Jun. 28
	101	Mr. Parvez, Md. Sohel	Bangladesh	Jun. 29
	138	Ms. Kuczynska Siehien, Joanna	Poland	Jul. 2
	111	Mr. Li, Kai	China	Jul. 4
	187	Ms. Ika Ratnawati, Herlina	Indonesia	Jul. 5
	4	Mr. Arshad, Adnan	Pakistan	Jul. 6
3	83	Ms. Quiroz Torres, Stefanny	Ecuador	Jun. 26
	167	Ms. Stout, Rebecca Cleveland	USA	Jun. 29
	82	Ms. Chanthasiri, Nuttida	Thailand	Jul. 2
	55	Mr. Chowdhury, K M Azam	Bangladesh	Jul. 4
	16	Dr. Nguyen Thanh Truong Hoi	Vietnam	Jul. 4
	158	Dr. Ren, Qiuping	China	Jul. 5
	88	Dr. Choulli, Badia	Tunisia	Jul. 6
4	26	Dr. Indasi, Victor	Kenya	Jun. 26
	64	Dr. Sangmanee, Chalermrat	Thailand	Jun. 28
	195	Dr. Chen, Meixiang	China	Jun. 29
	104	Dr. Long, Xiaoyu	China	Jul. 2
	173	Mr. Jeong, SangHun	Republic of Korea	Jul. 4
	150	Ms. Cuellar-Ramirez, Palmira Consuelo	Mexico	Jul. 5
	56	Dr. Jamshidi, Siamak	Iran	Jul. 6
	85	Dr. Yusri, Yusup	Malaysia	Jun. 29
5	17	Mr. Hermans, Tim	Dutch	Jun. 26

**CLIVAR-FIO SUMMER SCHOOL ON PAST, PRESENT AND FUTURE SEA LEVEL CHANGES
& WESTPAC/RTRC-ODC TRAINING COURSE ON OCEAN FORECAST SYSTEM**

Group	ID	Name	Country	Date
	23	Mr. Kemgang Ghomsi, Franck Eitel	Cameroon	Jun. 28
	37	Dr. Sultan, Shahzad	Pakistan	Jul. 2
	148	Mr. Salama, Amr	Egypt	Jul. 4
	104	Ms. Wang, Jinping	China	Jul. 5
	188	Ms. Bilgera, Princess Hope	Philippines	Jul. 6
	174	Mr. Kwon, Yeong Yeon	Republic of Korea	Jul. 6
6	116	Mr. Kim, Yongyub	Republic of Korea	Jun. 26
	202	Mr. Meyer, Elke	Germany	Jun. 28
	75	Mr. Cedeño, Jonathan	Ecuador	Jul. 2
	10	Ms. Jadhav, Jyoti	India	Jul. 4
	103	Ms. Moldanova, Uliana	Russia	Jul. 5
	107	Mr. Jin, Yi	China	Jul. 6
	63	Dr. Kartadikaria, Aditya	Indonesia	Jul. 6
7	113	Ms. He, Yue	China	Jun. 28
	172	Mr. Jin, Hyunkeun	Republic of Korea	Jun. 29
	180	Mr. Sopheak, Thav	Cambodia	Jul. 2
	106	Dr. Zhang, Shouwen	China	Jul. 2
	98	Ms. Loarca, Andrea Lira	Guatemala	Jul. 2
	124	Mr. Cabrales Infante, Javier	Cuba	Jul. 4
	170	Dr. Dada, Olusegun	Nigeria	Jul. 5
	11	Mrs. Nguyen, Nguyet Minh	Vietnam	Jul. 6

3.2 Group Discussion and Reports

All trainees will be divided into several groups with a group leader elected from each group with tasks to help organize their respective group discussions and prepare group reports. The group leader is required to chair one trainee report session. The groups distribution is listed in table 1.

The trainees in each group will complete their homework together during the group discussion. A **group report** is required at the end of the training course, which summarizes the knowledge they have learnt from the training courses, results of their assignments, and suggestions to the cooperation in the future. The format of this report is the same as the trainee's report. The detailed arrangements for group discussions will be announced in due course. Some proposed assignments are listed in the following:

- (1) New knowledge or skills in Sea Level Change ([reading material](#)) and Regional Ocean forecast.
- (2) Discuss your ideas about the cooperation among your group members in the future.
- (3) Complete the lab practices during the training course together within your team.
- (4) Make a poster (using PPT) to introduce your group members, cooperation, new knowledge learnt in this course. It should be submitted before the last day of training courses and we will give the printed posters to all trainees.

3.3 Trainee Certificates and Awards

For evaluating the performance of trainees during the training course, a score will be given to each trainee. The score is determined by attendance, motivation and activity performance during the training course and the quality of trainee report and group report. Based on the score of each trainee, the certificate for accomplishment of the training courses

and the best trainee awards will be issued.

Certificate for accomplishment: A certificate of accomplishment will be issued to the trainees if their scores are above 70.

Best Trainee Award: Four trainees will be selected as the best trainees according to their training scores. A special certificate will be issued and counted to the consideration of financial supports for the next training course.

Evaluation of each part is listed as follows:

Table 2. Scoring criteria

Items	Full Score	Addition or deduction
Attendance	40	<ul style="list-style-type: none"> ✗ Once late for class will reduce 1 score; ✗ Absence from class for half day/once will reduce 3 scores; ✗ Absence from class for a whole day/once will reduce 6 scores.
Activity during training course	30	<ul style="list-style-type: none"> ✓ Take part in class discussion once will add 1 score. ✗ Sleeping in class once will reduce 1 score.
Trainee Report	15	Evaluated by lecturers and all other trainees
Group Report presentation	15	<ul style="list-style-type: none"> Evaluated by lecturers and trainees in other groups ✓ Each member of this group will be scored based on the performance during the group presentation; ✓ Participants who cannot present will be given the average score of the group.

4. Useful Information

4.1 A map around FIO

A map around the First Institute of Oceanography (FIO), State Oceanic Administration (SOA), China, is provided in Appendix I. And information of some surrounding restaurants, shopping malls and hotels can also be found in Appendix I.



Figure 2. A map around FIO

Trainees will be arranged in hotel of Hitide International Hotel (海泰万丰国际酒店, Add: No.68, Shandong Tou Road, Laoshan District, Qingdao, China, 中国青岛崂山区山东头路 68 号; Room reservation: +86-532-88956666) which is about 10 minutes' walk to FIO (see Figure 3 & 4). More information can be found in <http://weibo.com/haitaiwanfeng>.



Figure 3: Information of Hitide International Hotel

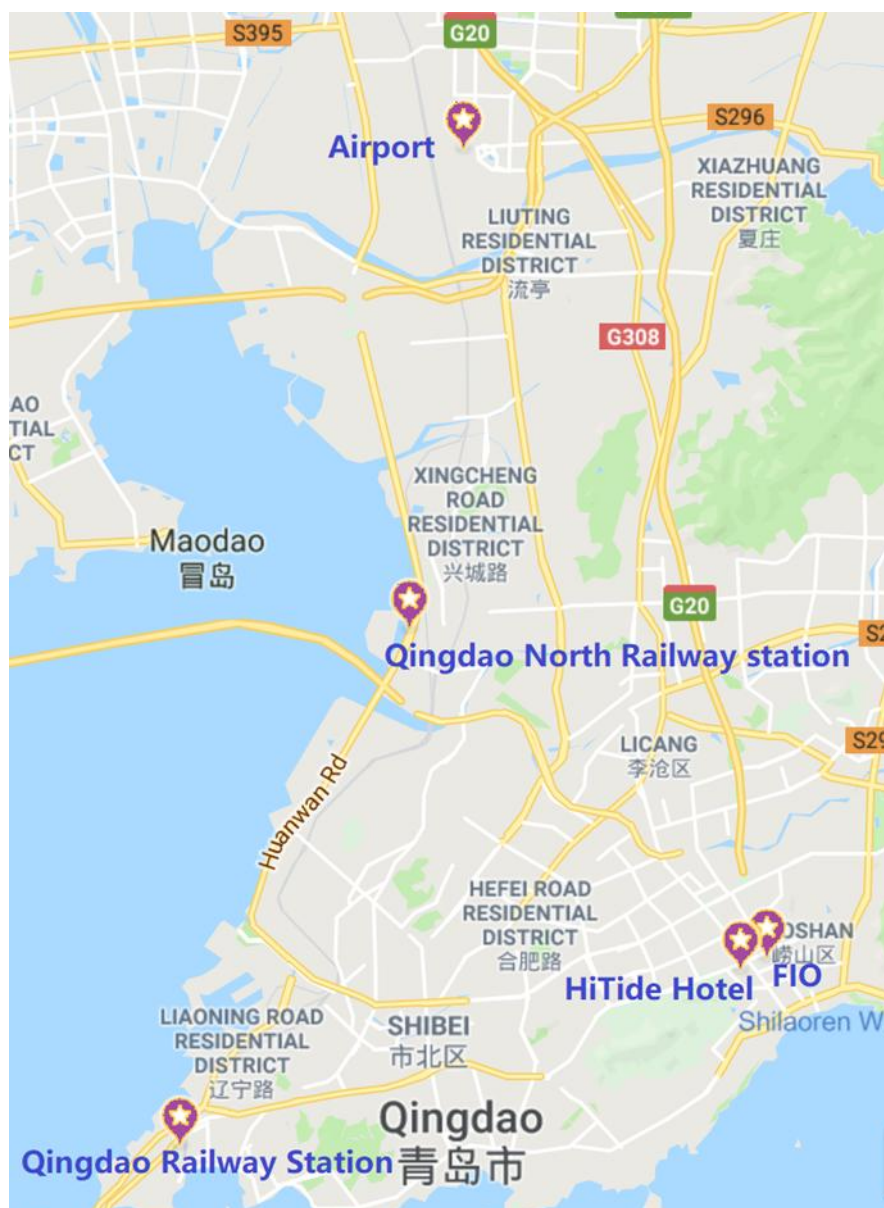


Figure 4: Location of Airport, railway stations, FIO and HiTide Hotel

4.2 Transportation

➤ From Qingdao Liuting International Airport to FIO/Hotel

Qingdao Liuting International Airport is the main international airport in Qingdao. It is about 25 kilometers from the airport to FIO or Hitide International Hotel. Trainees can choose either taxis or shuttle buses.

By taxi: It will cost you about 90 RMB from the airport to FIO or Hitide International Hotel. Please follow the taxi signs in the airport and do not take cars outside the airport because they are not licensed which may cost you much more money than the licensed taxi. Hotel in Chinese is 青岛海泰万丰国际酒店（近青医附院东院） and you can show it to the driver.

By shuttle bus: There are five shuttle lines operating between Qingdao Liuting International Airport and downtown. You can take Line 3 (No. 703) which will cost you 20 RMB and get off at the Shenzhen Road Xianxialing Road station (深圳路仙霞岭路站). Please notice that the bus departs hourly and the bus departs once full at peak hours. More information can be found on the website: <https://www.travelchinaguide.com/cityguides/shandong/qingdao/airport/>

➤ From Railway Stations to FIO/Hotel

There are two railway stations in Qingdao: Qingdao Railway Station and Qingdao North Railway Station.

a. Qingdao Railway Station is about 20 kilometers to FIO or Hitide International Hotel. Trainees can take taxis or public buses.

By taxi: It will cost you about 40 RMB if you take a taxi from the Qingdao North Railway Station to FIO or Hitide International Hotel.

By Subway: You can take Subway Line 3 at Qingdao Railway Station, and transfer at May Fourth Square (五四广场) station to Line 2, and get off at Miao Ling Road (苗岭路) Station Exit A.

By public bus: You can take bus No. 501 from Qingdao Railway Station and get off at Shenzhen Road and Xianxialing Road station (深圳路仙霞岭路).

b. Qingdao North Railway Station is about 15 kilometers to FIO or Hitide International Hotel.

By taxi: It will cost you about 35 RMB if you take a taxi from the Qingdao North Railway Station to FIO or Hitide International Hotel.

By Subway: You can take subway Line 3 at Qingdao North (青岛北站) Railway Station, and transfer at Li Cun (李村) station to Line 2, and get off at Miao Ling Road (苗岭路) Station Exit A.

➤ Getting around in Qingdao

By taxi: Taxis in Qingdao are relatively abundant. Rates start at 10 RMB for the first 3 kilometers or 12 for fancier taxis (black color); rates are slightly higher after 11pm. You can hail a taxi in the street – if the box in the middle of the front windshield is red, the taxi is available for hire; green means it is occupied or on call.

By public transportation: Because of its hilly terrain, few people use bicycles or motorcycles in the city. Consequently, the public bus and subway (see Figure 5 for subway lines) are the main vehicle. Standard bus fare is 1 RMB; fare on an air-conditioned bus is 2 RMB. You can take bus No.314 or Subway Line 2 from FIO to downtown.

(8:30am to 7pm or 9pm). Visa, Master and a few other international cards can be used to withdraw cash in local currency from ATMs with respective labels on, however, ATMs in different bank may accept different cards to withdraw cash. Hence it might be a process of trial and error. There are several ATMs with English language options that accept international credit cards in the basement of Lion Mall or Leader Plaza. We advise you to exchange RMB at your own countries as your first option. If you do need to exchange money in Qingdao, please use USD or Euro.

➤ **Medical services**

The Affiliated Hospital of Qingdao University is located at No. 59, Haier Road, Laoshan District Qingdao, near FIO. If any problems, please call 96166 (inside Qingdao) or 0532-96166 (outside Qingdao).

The International Medical Center of Qingdao (ICQD) is the nearest hospital with English-, Japanese- and Korean -speaking- doctors, located at No. 5 Donghai Middle Rd, Qingdao, China. It was in the 4th Floor of Main Building in Qingdao Municipal Hospital (East).

Service hours: Mon~Sat 8:00am-12:00am; 1:00pm~5:00pm

Reception Tel: 0532-85937690; Emergency Tel: 0532-85937678

➤ **Electricity**

Voltage is 220 and most outlets accept US and European style plugs.

➤ **Useful Numbers**

Some useful numbers are provided to you if any emergency issues.

Police number is 110; Fire Number is 119; Ambulance Number is 120.

Local telephone numbers: country code (+86), area code (532), telephone number (8 digits)

24-Hour hotline of local organizing committee:

+86 185 6171 8325 (Jose Santos); +86 15966878937 (Xunqiang Yin)

➤ **Internet connection**

All Google applications (Gmail, Google Drive etc.), social media tools (Facebook, Twitter, Instagram, Youtube, etc.) and application like Dropbox, are not accessible in China without a VPN (Virtual Private Network). Short-term subscriptions for VPNs can be found online for little or no cost, but we advise you to download them before coming to China.

➤ **Tips**

In China it is not customary to tip restaurant waiters, taxi drivers or hotel.

Appendix I: List of trainee reports (by presenting date)

Date	TID	Name	From	Group
Jun. 26	78	Ms. Wu, Xiaofen	China	1
Jun. 26	112	Mr. Song, Chunyang	China	2
Jun. 26	17	Mr. Hermans, Tim	Dutch	5
Jun. 26	83	Ms. Quiroz Torres, Stefanny	Ecuador	3
Jun. 26	26	Dr. Indasi, Victor	Kenya	4
Jun. 26	116	Mr. Kim, Yongyub	Korea	6
Jun. 28	34	Mr. Dinapoli, Matias	Argentina	2
Jun. 28	23	Mr. Kemgang Ghomsi, Franck Eitel	Cameroon	5
Jun. 28	113	Ms. He, Yue	China	7
Jun. 28	202	Mr. Meyer, Elke	Germany	6
Jun. 28	86	Mr. Kharlamov, Pavel	Russia	1
Jun. 28	64	Dr. Sangmanee, Chalermrat	Thailand	4
Jun. 29	101	Mr. Parvez, Md. Sohel	Bangladesh	2
Jun. 29	195	Dr. Chen, Meixiang	China	4
Jun. 29	94	Mr. Muluaem, Getachew Mehabie	Ethiopia	1
Jun. 29	172	Mr. Jin, Hyunkeun	Korea	7
Jun. 29	85	Dr. Yusri, Yusup	Malaysia	4
Jun. 29	167	Ms. Stout, Rebecca Cleveland	USA	3
Jul. 2	180	Mr. Sopheak, Thav	Cambodia	7
Jul. 2	104	Dr. Long, Xiaoyu	China	4
Jul. 2	106	Dr. Zhang, Shouwen	China	7
Jul. 2	75	Mr. Cedeño, Jonathan	Ecuador	6
Jul. 2	98	Ms. Loarca, Andrea Lira	Guatemala	7
Jul. 2	37	Dr. Sultan, Shahzad	Pakistan	5
Jul. 2	138	Ms. Kuczynska Siehien, Joanna	Poland	2
Jul. 2	82	Ms. Chanthasiri, Nuttida	Thailand	3
Jul. 4	55	Mr. Chowdhury, K M Azam	Bangladesh	3
Jul. 4	111	Mr. Li, Kai	China	2
Jul. 4	124	Mr. Cabrales Infante, Javier	Cuba	7
Jul. 4	148	Mr. Salama, Amr	Egypt	5
Jul. 4	10	Ms. Jadhav, Jyoti	India	6
Jul. 4	173	Mr. Jeong, SangHun	Korea	4
Jul. 4	18	Mr. Ullala Pathirana, Gayan Pathirana	Sri Lanka	1
Jul. 4	16	Dr. Nguyen Thanh Truong Hoi	Vietnam	3

Jul. 5	158	Dr. Ren, Qiuping	China	3
Jul. 5	104	Ms. Wang, Jinping	China	5
Jul. 5	187	Ms. Ika Ratnawati, Herlina	Indonesia	2
Jul. 5	181	Mr. Poh, Heng Kok	Malaysia	1
Jul. 5	150	Ms. Cuellar-Ramirez, Palmira Consuelo	Mexico	4
Jul. 5	170	Dr. Dada, Olusegun	Nigeria	7
Jul. 5	103	Ms. Moldanova, Uliana	Russia	6
Jul. 5	142	Dr. Suriyan, Saramul	Thailand	1
Jul. 6	127	Mr. Ferrero, Bruno	Brazil	1
Jul. 6	107	Mr. Jin, Yi	China	6
Jul. 6	63	Dr. Kartadikaria, Aditya	Indonesia	6
Jul. 6	56	Dr. Jamshidi, Siamak	Iran	4
Jul. 6	174	Mr. Kwon, Yeong Yeon	Korea	5
Jul. 6	4	Mr. Arshad, Adnan	Pakistan	2
Jul. 6	188	Ms. Bilgera, Princess Hope	Philippines	5
Jul. 6	88	Dr. Choulli, Badia	Tunisia	3
Jul. 6	11	Mrs. Nguyen, Nguyet Minh	Vietnam	7

Appendix II: Restaurant

1. Lanzhou Hand-Pulled Noodles (HALAL) (兰州拉面)

Address: Second floor, No. 1-12 Xianxialing Road.

This HALAL restaurant offers hand-pulled noodles and rice.

The distance from FIO: about 80 m.

2. Feng Tian Rice with Spare Ribs (奉天排骨米饭老店)

Address: No. 1-10, Xianxialing Road.

This authentic restaurant provides rice with spare ribs.

The distance from FIO: about 90 m.

3. Tong Xiao Niu Hotpot (彤小牛筋头巴脑香锅米饭)

Address: Second floor, No. 1-7 Xianxialing Road.

This restaurant serves hotpot especially with beef.

The distance from FIO: about 120 m.

4. Yu Pin Beef Soup Restaurant (御品正宗牛肉汤)

Address: Second floor, No. 1 Xianxialing Road.

This restaurant serves beef soup with rice.

The distance from FIO: about 90 m.

5. Yi Sheng Pin Seafood Restaurant (一圣品海鲜舫)

Address: No. 16-7 Xianxialing Road.

This restaurant serves fresh seafood.

The distance from FIO: about 950 m.

6. Dongjia-Korea Charcoal Barbecue (东家韩国炭烤肉)

Address: Building 1, No. 16-17 Xianxialing Road.

This restaurant provides Korea traditional charcoal barbecue, as well as chicken and beer.

The distance from FIO: about 800 m.

7. Three Dishes (三条鱼崂山渔家菜)

Address: Building 2, No. 33 Yinchuan East Road.

This restaurant offers typical local cuisines, especially the fresh seafood.

The distance from FIO: about 900 m.

8. Lao Ma Tou Hotpot (老码头火锅)

Address: Building 2, No.16-23 Xianxialing Road.

This restaurant services spicy Sichuan Hotpot.

The distance from FIO: about 800 m.

9. Liu Hao Men Fish Restaurant (六号门沸腾鱼)

Address: at the corner of Yinchuan East Road and Qinling Road.

This restaurant provides spicy Sichuan cuisine.

The distance from FIO: about 800 m.

10. Kong Tao Casiu (港岛记)

Address: Building 1, No. 61 Hai'er Road.

This restaurant is famous for its HongKong food, such as roast pork and HongKong classic milktea.

The distance from FIO: about 550 m.

11. Blue Aegean Sea Western-style Restaurant (蓝海爱琴海西餐厅)

Address: Building 3, No. 9-2 Miaoling Road.

This cafeteria contains beef steak, salmon, Chinese food and other delicious food.

The distance from FIO: about 1400 m.

12. GREATHai (味泰)

Address: First Floor of Lion Mall, No. 195 Xianggang East Road.

This restaurant offers Thailand-style dishes.

The distance from FIO: about 1400m.

13. Hitide International Hotel (海泰万丰国际酒店)

Address: No. 68 Shandong Tou Road.

The hotel in which you live also services buffet during the lunch and dinner time.

The distance from FIO: about 1600m.

Appendix III: Coffee

14. SPROfessional Coffee (泛亚旗舰店)

Address: at the corner of Xianxialing Road and Hai'er Road.

The distance from FIO: about 350 m.

15. GeekMall Coffee (创客咖啡)

Address: No. 63, Hai'er Road.

This coffee bar also provides great dessert.

The distance from FIO: about 700 m.

Appendix IV: Shopping Malls

16. Youke Convenient Store (友客便利店)

Address: No. 1-8 Xianxialing Road.

This store keeps open for all day (24 hours) and provides necessities of life.

The distance from FIO: about 100 m.

17. Leader Plaza (丽达购物中心)

Address: No. 18 Qinling Road.

There are some restaurants in the second floor and the supermarket is on the basement of the plaza.

The distance from FIO: about 950 m.

18. Lion Mall (金狮广场)

Address: No. 195 Hong Kong East Road.

There are more than 60 restaurants in the Lion Mall, including worldwide delicious food.

The distance from FIO: about 1000 m.

19. Liqun/Jinding Plaza (利群/金鼎广场)

Address: No. 83 Haier Road

There are more than 30 restaurants on the sixth floor, such as Taipei cuisine, Japan cuisine, and typical Qingdao seafood and so on. And the supermarket is on the basement of the plaza.

The distance from FIO: about 1200 m.

Appendix V: Hotel

20. Qingdao Blue Horizon Hotel (蓝海大饭店)

Tel: +86-532-88996666

Addr: No.9-2 Miaoling Road, Laoshan District, Qingdao (青岛市崂山区苗岭路 9-2号)

The distance from FIO: about 1400m.

21. Hitide International Hotel (海泰万丰酒店)

Tel: +86-532-88956666

Addr: No.68 Shandong Tou Road, Laoshan District, Qingdao (青岛市崂山区山东头路 68 号(近青医附院东院))

The distance from FIO: about 1600m.

22. Home Inn Hotel (如家海尔路会展中心海水浴场店)

Tel: +86-532-88990000

Addr: No.61 Haier Road, Laoshan District, Qingdao (崂山区海尔路 61 号(天宝国际楼下))

The distance from FIO: about 350m.

23. Hanting Hotel (汉庭海尔路会展中心店)

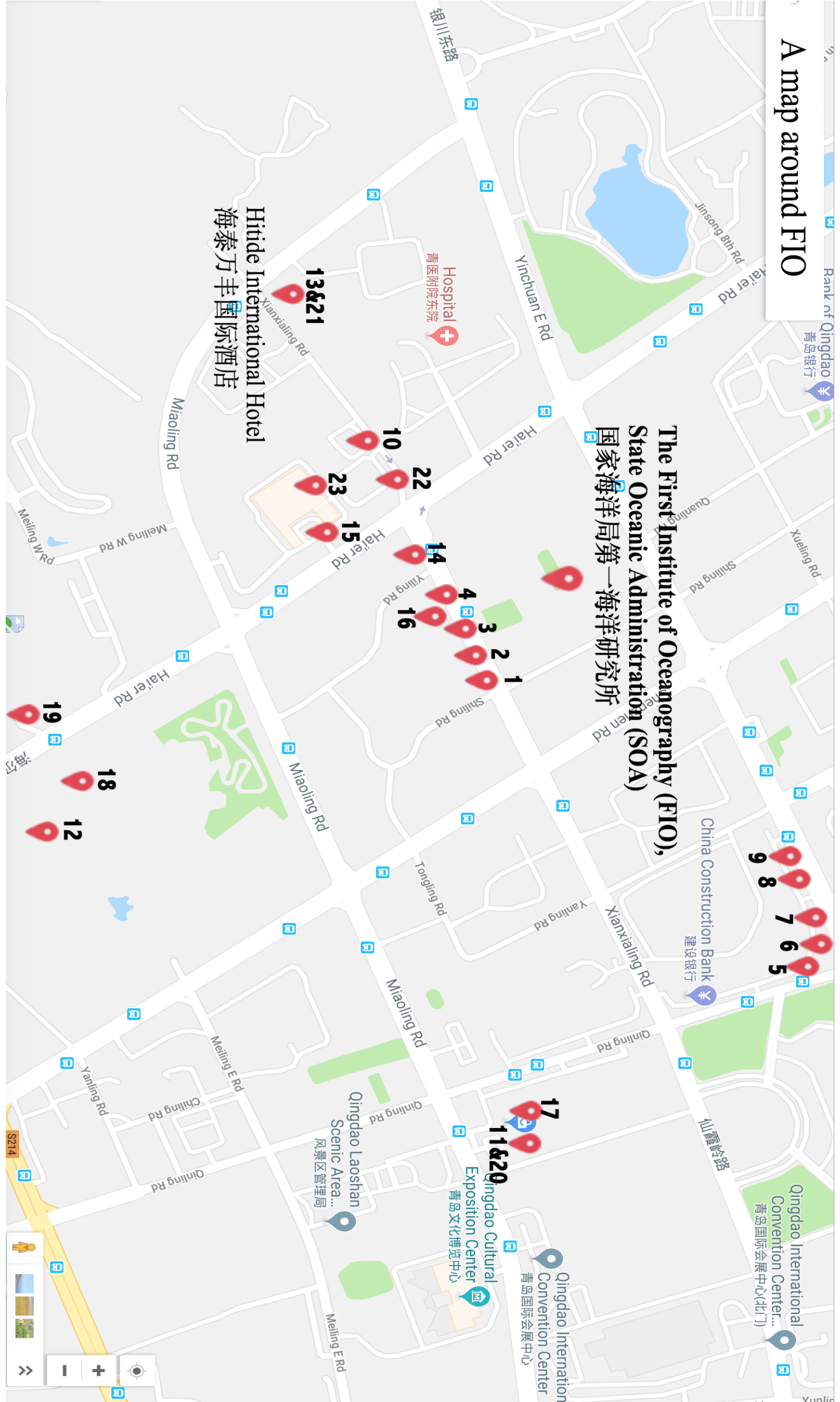
Tel: +86-532-55761111

Addr: No. 63 Haier Road, Laoshan District, Qingdao (崂山区海尔路 63 号 (青岛数码科技中心一楼))

The distance from FIO: about 350m.

Note: The numbers 1-15 display the location of some restaurants and cafe. And the numbers 16-19 show the places that you can go shopping. The numbers 20-23 represent the hotels. The full names of these places are listed in the Appendix II, III and IV. You can also find more details on ODC's website.

A map around FIO



The First Institute of Oceanography (FIO),
State Oceanic Administration (SOA)
国家海洋局第一海洋研究所

Hilde International Hotel
海泰万丰国际酒店

Hospital
青医附院东院

Qingdao Cultural
Exposition Center
青岛文化博览中心

Qingdao International
Convention Center...
青岛国际会展中心(北门)

China Construction Bank
建设银行

Qingdao Laoshan
Scenic Area...
风景区管理局

