

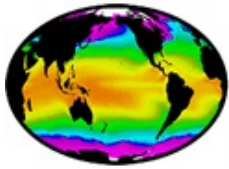
**GHR SST**  
GROUP FOR HIGH RESOLUTION  
SEA SURFACE TEMPERATURE

## 2<sup>nd</sup> GHR SST Short Course on SST

**Ocean University of China, Qingdao, China**  
**31 May – 2 June 2017**

Final Programme – May 2017





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## 1. WELCOME TO THE 2<sup>ND</sup> GHRSSST SHORT COURSE ON SST

### 1.1. Objectives:

- To gain knowledge about GHRSSST and what GHRSSST provides
- To gain knowledge of IR radiative transfer, cloud masking and SST retrieval
- To apply the gained knowledge with real practical examples

### 1.2. Participation

Post graduate, PhD students, post-doctoral research scientists and users from China interested in Ocean Remote Sensing are invited to apply (see Section 3.2) to the 3-day course.

### 1.3. Lecturers:

- Prof Chris Merchant, University of Reading, UK
- Prof Peter Minnett, University of Miami, USA
- Dr Gary Corlett, University of Leicester, UK
- Dr Mingqiang Fang, Ocean University of China, China

### 1.4. Practical examples:

The course will exploit practical examples of using SST data to understand scientific issues. Attendees will be split in a maximum of 5 groups and you will work together during and after the course on your assigned problem. Ideally, the problems will come from your own research plans otherwise they will be provided by the lecturers.

By the end of the course you should have sufficient knowledge to at least be able to write a short (1 page) research plan on how you can best exploit GHRSSST data to research your problem. We would then encourage you to implement your research plan – taking time after the course as necessary – and to submit a short (4 page) report on what you found from your analysis.

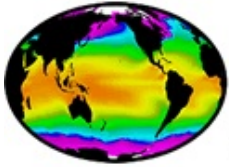
### 1.5. Prerequisites:

- Basic background in satellite remote sensing
- Computer programming skills advantageous (e.g. Matlab, IDL, iPython)

## 2. COURSE OUTLINE

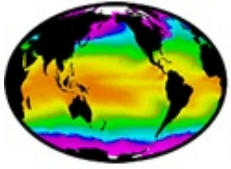
### 2.1. Wednesday 31<sup>st</sup> May 2017

Wednesday 31 <sup>st</sup> May 2017	
08:30	Registration of students
09:00	<i>Introductory Session</i>
09:30	<i>Lecture 1: Basic Concepts</i>
10:30	Break
11:00	<i>Research Topic Assignments</i>
11:30	<i>Lecture 2: Radiative Concepts</i>
12:30	Lunch
13:30	<i>Practical Session 1</i>
	<ul style="list-style-type: none"> <li>• Overview of GHR SST and GHR SST data</li> <li>• Introduction to SNAP</li> <li>• Practical demonstration of access, download and reading of GHR SST products</li> </ul>
15:30	Break
16:00	<i>Lecture 3: Sea Surface Temperature Retrieval</i>
17:00	Close for the day



## 2.2. Thursday 1<sup>st</sup> June 2017

Thursday 1 <sup>st</sup> June 2017	
09:30	<i>Lecture 4: Cloud Screening for SST</i>
10:30	<b>Break</b>
11:00	<i>Practical Session 2</i>
	<ul style="list-style-type: none"><li>• Basic analysis of L1b imagery</li><li>• Cloud masking; development of simple cloud mask</li><li>• Carry out SST retrieval on L1b imagery</li></ul>
12:30	<b>Lunch</b>
13:30	<i>Lecture 5: Measuring SST by Microwave Radiometers</i>
14:30	<i>Practical Session 3</i>
	<ul style="list-style-type: none"><li>• Extended analysis<ul style="list-style-type: none"><li>○ Spatial averaging</li><li>○ SST gradients</li><li>○ Time series</li></ul></li></ul>
15:30	<b>Break</b>
16:00	<i>Practical Session 4</i>
	<ul style="list-style-type: none"><li>• Research topics</li></ul>
17:00	<b>Close for the day</b>



### 2.3. Friday 2<sup>nd</sup> June 2017

Friday 2 <sup>nd</sup> June 2017	
09:30	<i>Lecture 6: Uncertainties in SST</i>
10:30	<b>Break</b>
11:00	<i>Practical Session 5</i>
	<ul style="list-style-type: none"><li>• Research topics</li></ul>
12:30	<b>Lunch</b>
13:30	<i>Lecture 7: Processing Concepts</i>
14:30	<i>Practical Session 6</i>
	<ul style="list-style-type: none"><li>• Research topics</li></ul>
15:30	<b>Break</b>
16:00	<i>Closing Session</i>
17:00	<b>Close of course</b>



### 3. LOGISTICS

#### 3.1. Meeting venue

The course will take place at the Ocean University of China's Laoshan Campus.

- All lectures will take place in S - A404
- All practicals will take place in S - A516

S is the south building of the College of Information Science & Engineering

#### 3.2. Meal options

All attendees can use the OUC canteens. For lunch, it is suggested to go to the **Feng Wei canteen** or the **1924 café** in the north-canteen area. For other meals, you can use any of the canteens.

Payment can only be made by OUC card – **no cash**. A temporary OUC card for a deposit of 150 CNY can be bought during registration and the remaining balance will be returned at the end of the course.

#### 3.3. Accommodation

Several standard rooms have been reserved at the hostel of OUC Laoshan Campus which is close to the north entrance of the campus. If you need accommodation during the program, please contact Mr. Fan WU at 185-1466-5125

OUC campus information, <http://eweb.ouc.edu.cn/964/list.htm>

## 4. CONTACTS

The local contacts for the short course in Qingdao are:

Prof. Lei Guan  
Ocean University of China  
238 Songling Road, Qingdao, 266100, China  
Tel: [+86 \(0\)532 66782326](tel:+86(0)53266782326)  
Email: [leiguan@ouc.edu.cn](mailto:leiguan@ouc.edu.cn)

### GHR SST

Dr. Gary Corlett ([gpc@ghrsst.org](mailto:gpc@ghrsst.org))

### More useful links

GHR SST: (<http://www.ghrsst.org>)