

# **GHR SST XIV**

**Woods Hole, MA, USA  
17<sup>th</sup> – 21<sup>th</sup> June 2013**

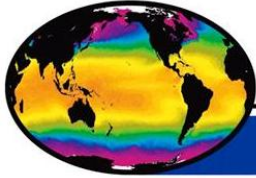
**Final Agenda – 19<sup>th</sup> June 2013**



**Meeting hosted by:**

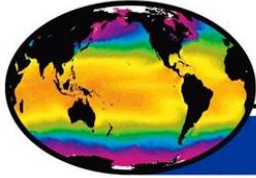
**Woods Hole  
Oceanographic  
Institution**





### Contents

1.	Welcome to GHR SST XIV .....	3
2.	Organisation .....	5
2.1.	Oral Presentations .....	5
2.2.	Poster Presentations .....	5
2.3.	Session Chairs .....	5
2.4.	Rapporteurs .....	6
3.	Agenda .....	7
3.1.	Sunday 16 <sup>th</sup> June 2013 .....	7
3.2.	Monday 17 <sup>th</sup> June 2013 .....	7
3.3.	Tuesday 18 <sup>th</sup> June 2013 .....	11
3.4.	Wednesday 19 <sup>th</sup> June 2013 .....	14
3.5.	Thursday 20 <sup>th</sup> June 2013 .....	15
3.6.	Friday 21 <sup>st</sup> June 2013 .....	18
4.	Meeting venue .....	22
4.1.	Parking notice .....	22
4.2.	Local transport .....	23
4.3.	The meeting .....	25
5.	Special Events .....	26
5.1.	Sunday 16 <sup>th</sup> June .....	26
5.2.	Wednesday 19 <sup>th</sup> June (afternoon) .....	26
5.3.	Wednesday 19 <sup>th</sup> June (evening) .....	26
6.	Travel information .....	28
6.1.	Travel to Woods Hole .....	28
6.2.	Flying into Boston-Logan Airport (BOS) .....	28
6.3.	Flying into Providence-TF Green Airport (PVD) .....	28
6.4.	AMTRAK Northeast .....	28
6.5.	Northeast Bus Service .....	28
7.	Hotel information .....	30
7.1.	Inn on the Square .....	30
7.2.	Holiday Inn Falmouth .....	30
8.	Provisional list of Participants .....	31



# GHRSSST

Group for High Resolution  
Sea Surface Temperature

**XIV Science Team Meeting  
Woods Hole, MA, USA**

## 1. Welcome to GHRSSST XIV

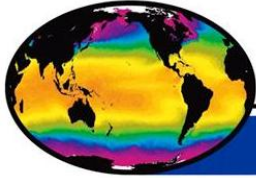
Welcome to the 14<sup>th</sup> Science Team Meeting of GHRSSST!

It has been an interesting and busy year since we last met in Tokyo, with new satellite measurements becoming available and the promise of more to come. There have been personnel changes within GHRSSST, and positive developments with the GHRSSST data streams. On a less uplifting note, the effects of budget contraction here in the US, and elsewhere, are becoming felt and the situation does not show any signs of improving in the near future. As a result of budgetary constraints it is very likely that several GHRSSST stalwarts will not be in attendance at Woods Hole, and we will miss their contributions.

At the last Science Team Meeting, the data from VIIRS were very fresh and the initial impressions were very promising. Now, a year later, we can report that these promises have been fulfilled; the VIIRS infrared bands are very clean and the derived skin SSTs are of high quality. All indications are that VIIRS will not only continue the long time series of wide-swath SSTs that include those from the AVHRRs and the two MODIS's, but will also bring improved spatial resolution and absolute accuracies. Also at the Tokyo meeting we heard of the first data from the AMSR-2 on GCOM-W1 and at this meeting we anticipate hearing more about the characteristics and accuracies of the microwave measurements. EUMETSAT has two additional earth observation satellites: MetOp-B in polar orbit carrying an AVHRR/3 and METEOSAT-10 (MSG-3) in geosynchronous orbit with a SEVIRI. Both AVHRR and SEVIRI are tried-and-tested sensors and we look forward to their data streams continuing over the next many years. We also look forward to the launches into polar orbit of the SGLI (Second generation GLObal Imager) on the Japanese GCOM-C1 and SLSTR on the European Sentinel-3a, and the Advanced Baseline Imager (ABI) on GOES-R into geostationary orbit. These are exciting times!

Another exciting development in the past year has been the signing of a Memorandum of Understanding between EUMETSAT and the National Satellite Ocean Application Service (NSOAS) of China. This bodes well for a wider use of data from Chinese satellites.

On the data front, the GDS-2 is being adopted by data providers, and a new processing of (A)ATSR data is underway. Similarly a reprocessing of the MODIS SSTs is anticipated in the next several months. The GDAC has adopted a "data life-cycle" policy that will ensure critical GHRSSST data streams will continue to be served to the user community through the JPL PO.DAAC. Compliance with the new data policy is to the benefit of all in GHRSSST.



# GHRSSST

*Group for High Resolution  
Sea Surface Temperature*

## **XIV Science Team Meeting Woods Hole, MA, USA**

As you know, Gary Corlett took over from Andrea Kaiser-Weiss as the GHRSSST Project Coordinator in October and has taken up the reins in an admirable fashion. We also thank Silvia Bragaglia-Pike for her continued valuable contributions to the GHRSSST Project Office. GHRSSST is in safe hands.

A lot of effort goes on behind the scenes in preparing for the Science Team meetings, and in addition to the work done through the Project Office the local organizers at Woods Hole have also been busy. We thank Carol Anne Clayson and her team.

So, again, welcome to the 14<sup>th</sup> GHRSSST Science Team Meeting. I am looking forward to a stimulating and exciting week, and I hope you are too.

Peter Minnett

(Chair of the GHRSSST Science Team)

## 2. Organisation

### 2.1. Oral Presentations

Presentation should be made according to the time allotted in the Agenda; please allow a few minutes for questions.

Each presenter is requested to provide an **extended abstract** of their presentation **by the end of the meeting, or by the 30<sup>th</sup> June at the latest** in Microsoft Word format for inclusion in the GHRSSST proceedings. This will help get the proceedings published efficiently and quickly after the meeting ends.

A template for your extended abstracts is provided at:

<https://www.ghrsst.org/files/download.php?m=documents&f=121129121900-yoursurnameabstract.dot>

### 2.2. Poster Presentations

The poster session is on Monday evening from 16:00 in the coffee break area. The poster boards are roughly 47" by 47" in size.

### 2.3. Session Chairs

The main tasks of a session Chair are to briefly introduce each speaker, keep the presentations to the time allowed, and to lead/moderate the discussion. The Chair should work closely with the rapporteur to prepare a **short summary of the session**.

Each **breakout session Chair** is responsible for:

- Preparing the breakout session in advance in order to focus on the key issues for GHRSSST
- Arranging short overview presentations and timetabling these to allow as much discussion as possible
- Reporting the session back to plenary on Friday morning
- Reporting the session formally (based on notes from the rapporteur) in a written **session summary report**

Both **plenary and breakout session summary reports** should be suitable for publication in the proceedings and are to be **delivered to the GPO ([gpa@ghrsst.org](mailto:gpa@ghrsst.org)) before the end of the meeting**.

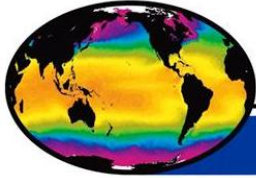
## **2.4. Rapporteurs**

The purpose of the rapporteurs is to capture important information during the session for the follow-up of the workshop by the GHR SST-PO and Science Team. In preparing your session reports, you should avoid making lengthy summaries of the presentations and discussions.

Please concentrate on issues which relate directly to the objectives of the workshop, the mandate of GHR SST and the future development of GHR SST ocean products and services and provide a general overview of the main session outcomes/conclusions.

As a template for your session report please use:

<https://www.ghrsst.org/files/download.php?m=documents&f=121129121900-yoursurnameabstract.dot>



### 3. Agenda

#### 3.1. Sunday 16<sup>th</sup> June 2013

We will gather in Falmouth on Sunday evening for a meal and maybe a few drinks to ward off the jet lag. For those that wish to come along we will get together at 18:00 in the foyer of the *Inn on the Square*.

#### 3.2. Monday 17<sup>th</sup> June 2013

### Monday, 17<sup>th</sup> June 2011

08:30-  
09:00

Registration

[Plenary Session I: Introduction and review \(Room 507\)](#)

[Chair: Anne O'Carroll Rapporteur: Craig Donlon](#)

09:00-  
09:30

Welcome and logistics

*Welcome to GHRSSST*

*Peter Minnett*

*Welcome address from Woods Hole  
Oceanographic Institution*

*Susan Avery (Director of WHOI)*

*Logistics*

*Carol Anne Clayson  
Gary Corlett*

09:30-  
10:30

Reports from GHRSSST Americas

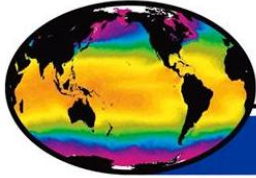
*NOAA/NESDIS/NODC LSTRF*

*Ken Casey*

*NOAA/NESDIS/STAR*

*Alexander Ignatov*





# GHRSSST

Group for High Resolution  
Sea Surface Temperature

## XIV Science Team Meeting Woods Hole, MA, USA

**Monday, 17<sup>th</sup> June 2011**

NOAA/NESDIS/STAR	<i>Eileen Maturi</i>
NOAA/NESDIS/NCDC	<i>Viva Banzon</i>
NOAA/NWS/NCEP	<i>Bob Grumbine</i>
NAVO	<i>Jean-Francois Cayula</i>

**10:30-  
11:00**

**Tea/Coffee Break**

**11:00-  
11:30**

**Reports from GHRSSST Americas (Continued)**

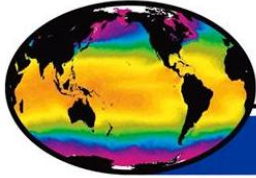
NASA GDAC	<i>Ed Armstrong</i>
NASA L2P & L4	<i>Mike Chin</i>
MISST/RSS	<i>Chelle Gentemann</i>

**11:30-  
12:30**

**Reports from GHRSSST Europe/Africa**

ESA	<i>Craig Donlon</i>
<i>Medspiration/Ifremer</i>	<i>Jean-Francois Piolle</i>
EUMETSAT	<i>Anne O'Carroll</i>
OSI-SAF	<i>Pierre Le Borgne</i>
<i>MyOcean2</i>	<i>Francoise Orain</i>





**Monday, 17<sup>th</sup> June 2011**

<b>12:30-13:00</b>	<b>Reports from GHRSSST Asia/Pacific</b>	
	<i>Australian Bureau of Meteorology</i>	<i>Helen Beggs</i>
	<i>JAXA</i>	<i>Misako Kachi</i>
	<i>JMA</i>	<i>Shiro Ishizaki</i>

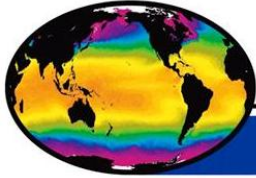
<b>13:00-14:00</b>	<b>Lunch</b>
--------------------	--------------

<p><u><a href="#">Plenary Session II: Preparations for week ahead (Room 507)</a></u></p> <p><u><a href="#">Chair: Peter Minnett Rapporteur: Gary Corlett</a></u></p>	
--	--

<b>14:00-14:15</b>	<i>Summary of GPO activities</i>	<i>Gary Corlett</i>
<b>14:15-14:30</b>	<i>Remarks from the ST Chair</i>	<i>Peter Minnett</i>
<b>14:30-15:30</b>	<i>Discussion – identification of main issues for meeting</i>	

<b>15:30-16:00</b>	<b>Tea/Coffee Break</b>
--------------------	-------------------------

<b>16:00-18:00</b>	<b>Poster Session</b>	
1	SQUAM Updates: progress since GHRSSST-13 and future work	Prasanjit Dash
2	The Sentinel-3 mission: SLSTR technical overview	Craig Donlon
3	The Sentinel-3 mission: SLSTR data products	Craig Donlon



**Monday, 17<sup>th</sup> June 2011**

4	The sentinel-3 mission: performance and status	Craig Donlon
5	Night time detection of Saharan dust using infrared window	Pierre Le Borgne
6	OSI-SAF operational NPP/VIIRS sea surface temperature chain	Pierre Le Borgne
7	Evidence that SST signals are related to changes in the Atlantic meridional overturning circulation	Yang Liu
8	L2 and L3 products from the ESA CCI project	Christopher Merchant
9	GMES-PURE: Shaping the marine GMES/Copernicus user requirements	Anne O'Carroll
10	IASI L2Pcore sea surface temperature	Anne O'Carroll
11	New method in estimating Inter Sensor Sea Surface Temperature Biases using DINEOF analysis	Francoise Orain
12	Coastal diurnal warming study through in-situ and satellite data	Xiaofang Zhu

**16:00-  
18:00**

### VIIRS Side Meeting (Room 509)

Special session in VIIRS SST retrieval and validation

SST algorithm - 40min

SST QFs - 1hr 20min

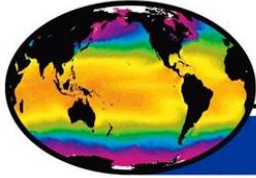
For further information please contact: Alexander Ignatov (NOAA)

**18:00-  
21:00**

### MISST Side Meeting (Room 507)

MISST project meeting

For further information please contact: Chelle Gentemann (RSS)



# GHRSSST

Group for High Resolution  
Sea Surface Temperature

## XIV Science Team Meeting Woods Hole, MA, USA

### 3.3. Tuesday 18<sup>th</sup> June 2013

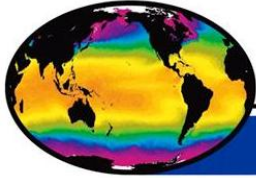
**Tuesday, 18<sup>th</sup> June 2013**

**07:30-08:00 Registration desk open**

[GHRSSST Parallel Breakouts for TAGs/WGs](#)

08:00-10:00	<i>EARWIG (507)</i>	<i>ICTAG (509)</i>
	<p><b>Awaiting final agenda – session will include 10 min presentations on:</b></p> <ol style="list-style-type: none"> <li>1. <i>Mitigation of striping in ACSP0 clear-sky radiances and SST products (Marouan Bouali)</i></li> <li>2. <i>Pattern recognition enhancements to NOAA ACSP0 clear-sky mask (Boris Petrenko for Irina Gladkova)</i></li> <li>3. <i>Skin SST physical retrieval from GOES using modified total least square method (Prabhat Koner)</i></li> <li>4. <i>Using numerical weather prediction model profiles to improve SST calculations: application to Metop/AV (Pierre Le Borgne)</i></li> <li>5. <i>Quantifying the effect of ambient cloud on clear-sky ocean brightness temperatures and SSTs (Korak Saha)</i></li> </ol>	<p>8:00-8:10: <i>Introduction</i></p> <p>8:10-8:50: <i>Analysis methods and development of L4 SST products</i></p> <p><i>Presentations (10 min each):</i>  <i>Sea surface temperature by Barnes' interpolation: current stage (Gutemberg France)</i>  <i>Recent updates to the near real time OSTIA system (Jonah Roberts-Jones)</i></p> <p><i>Brief update (5 min):</i>  <i>NOAA Geo-Polar 5km Global SST Analysis for day &amp; night, night-only, and diurnal correction plans (Eileen Maturi)</i>  <i>Discussion (15 min)</i></p> <p>8:50-9:35: <i>Inter-comparison of L4 SST products</i>  <i>Presentations (10 min each):</i>  <i>A comparison of SST gradients and the impact of going to higher resolution (Jorge Vazquez)</i>  <i>L4 comparison using Reynolds/Chelton spectrum test (Michael Chin)</i></p> <p><i>Discussion (25 min), including:</i>  <i>Plans for the IC-TAG-wide inter-comparison based on Reynolds/Chelton approach</i></p> <p>9:35-9:45: <i>GMPE plans discussion (lead by Gary Corlett and Jonah Roberts-Jones)</i></p> <p>9:45-10:00: <i>General discussion and plans for the next year</i></p>

**10:00-10:30 Tea/Coffee Break**



**Tuesday, 18<sup>th</sup> June 2013**

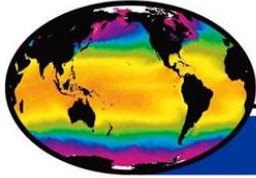
10:30-12:30	STVAL (507)	R2HA2 (509)
	<p><u>10:30:</u> Introduction and ST-VAL Report (Helen Beggs)</p> <p><u>10:40:</u> Status of in situ SST Quality Monitor (iQUAM) (Alexander Ignatov for Feng Xu)</p> <p><u>10:50:</u> Preliminary analyses of Metop AVHRR, MODIS and VIIRS SST products in SQUAM (Prasanjit Dash)</p> <p><u>11:00:</u> Initial Validation of VIIRS Skin SST Retrievals with Shipboard Radiometers (Peter Minnett)</p> <p><u>11:10:</u> High Latitude SST Cal/Val Activities at DMI (Jacob Hoeyer)</p> <p><u>11:20:</u> Multi-Sensor Match-up Database for ESA SST_CCI (Gary Corlett)</p> <p><u>11:30:</u> BoM Efforts to Improve SSESs for AVHRR SST Level 3 Products (Helen Beggs for Chris Griffin)</p> <p><u>11:40:</u> General discussion and questions based on presentations.</p> <p><u>11:55:</u> Discussion and feedback on the future of the GHRSSST MDB, MMDB and HR-DDS through the Felyx System (Led by Jean-Francois Piolle).</p> <p><u>12:10:</u> Other ST-VAL Issues (Led by Helen Beggs).</p>	<p><b>Awaiting final agenda</b></p>

**12:30-13:30**

**Lunch**

**12:30-13:30**

**GPO Meeting**



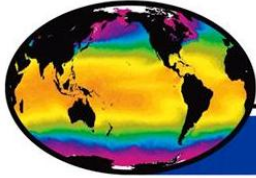
**Tuesday, 18<sup>th</sup> June 2013**

13:30- 15:30	<i>DVWG (507)</i>	<i>DASTAG (509)</i>
	<p><b>Brief Presentations/Updates:</b></p> <ul style="list-style-type: none"> <li>• Update on the GHRSSST Tropical Warm Pool Diurnal Variability (TWP+) Project (Helen Beggs)</li> <li>• Comparison of Diurnal Warming Estimates from Unpumped Argo Data and SEVIRI Satellite Observations (Sandra Castro)</li> <li>• A diurnal warming dedicated matchup database: Examples and preliminary validation results (Pierre Le Borgne)</li> <li>• SST diurnal variability: Regional extent &amp; implications in atmospheric modeling (Ioanna Karagali)</li> <li>• Application and evaluation of diurnal warming models forced with GFS model inputs (Gary Wick)</li> <li>• SST sensitivity and its relevance to measuring diurnal variability (Chris Merchant)</li> <li>• Carol Anne Clayson</li> </ul> <p><b>Discussion Topics:</b></p> <ul style="list-style-type: none"> <li>• Group goals and priorities</li> <li>• Membership</li> </ul>	<ol style="list-style-type: none"> <li>1. Emerging trends in metadata (Ted Habermann, remote)</li> <li>2. PO.DAAC integrated web services ( Ed Armstrong)</li> <li>3. Reconciling GHRSSST archive integrity and data flows ( Ken Casey)</li> <li>4. A Hadoop framework for data mining and analyses of large datasets (Jean Francois Piolle)</li> <li>5. Proposals for new GHRSSST dataset policies (Ed Armstrong and Gary Corlett)</li> </ol>

15:30- 16:00	<b>Tea/Coffee Break</b>
-----------------	-------------------------

16:00- 18:00	<i>HLTAG (507)</i>	<i>AUSTAG (509)</i>
	<i>Awaiting final agenda</i>	<ul style="list-style-type: none"> <li>• 16:00: GMES-Pure ( Anne O'Carroll)</li> <li>• 16:10: Results from NASA sponsored GHRSSST Webinar (Jorge Vazquez)</li> <li>• 16:40: Overview of SQUAM and demo (Prasanjit Dash)</li> <li>• 17:10 Overview of fisheries habitat prediction (Ed Armstrong)</li> <li>• 17:20 General Discussion on key topics (Gary Corlett)</li> </ul> <ol style="list-style-type: none"> <li>1. Users – who are they?</li> <li>2. Possible user symposium – we should have a good discussion on the what, why, when etc.</li> <li>3. Expansion into new areas – coordinating our efforts into South America and Asia etc.</li> </ol>

18:00- 18:30	<b>Tea/Coffee Break</b>
-----------------	-------------------------



### Tuesday, 18<sup>th</sup> June 2013

18:30-20:30	IWWG (509)	CDRTAG (507)
	Awaiting final agenda	<p><b>Awaiting final agenda – session will include 10 min presentations on:</b></p> <ul style="list-style-type: none"> <li>The generation of SST climate data records using shipboard radiometers (Peter Minnett)</li> <li>A long term satellite based data record of sea surface temperature from ESA's climate change initiative (Chris Merchant for Nick Rayner)</li> </ul>

### 3.4. Wednesday 19<sup>th</sup> June 2013

#### Wednesday, 19<sup>th</sup> June 2013

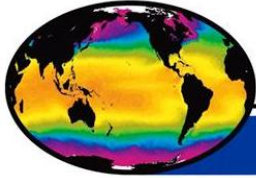
08:00-08:30 Registration desk open

**Plenary Session III: Focus on topics relating to data and user services (Room 507)**

**Chair: Jorge Vazquez Rapporteur: Ed Armstrong**

08:30-08:50	CEOS SST-VC: update on progress	Craig Donlon
08:50-09:10	Felyx: A generic tool for EO data analytics	Jean-Francois Piolle
09:10-09:30	Data life cycle policy	Edward Armstrong
09:30-10:00	Open discussion led by session chair	

10:00-10:30 Tea/Coffee Break



**Wednesday, 19<sup>th</sup> June 2013**

[Plenary Session IV: Focus on key topics relating to estimation, masking and validation \(Room 507\)](#)

[Chair: Helen Beggs Rapporteur: Bob Grumbine](#)

10:30-10:50	<i>Progress in sea surface temperature retrieval and future directions</i>	<i>Christopher Merchant</i>
10:50-11:10	<i>METOP-A/AVHRR derived SST over the Arctic: Five year (2007-2012) results</i>	<i>Pierre Le Borgne</i>
11:10-11:30	<i>GCOM-W1 AMSR2 SST</i>	<i>Misako Kachi Chelle Gentemann</i>
11:30-12:00	<i>Open discussion led by session chair</i>	

**12:00-18:00**

**Afternoon Team Building**

**See section 5 for further details**

**19:00-22:00**

**GHR SST Dinner**

**See section 5 for further details**

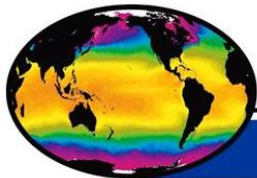
### 3.5. Thursday 20<sup>th</sup> June 2013

**Thursday, 20<sup>th</sup> June 2013**

**08:15-08:45**

**Registration desk open**





Thursday, 20<sup>th</sup> June 2013

[Plenary Session V: Focus on key topics relating to Level 4 \(Room 507\)](#)

[Chair: Alexey Kaplan Rapporteur: Mike Chin](#)

08:45-09:05	<i>High Resolution Daily Sea Surface Temperature Analysis: the 2-stage OI</i>	<i>Richard Reynolds</i>
09:05-09:25	<i>Evaluation of GHRSSST products for studies of short term climate variability - a comparison between OSTIA and NCDC OI2 analyses</i>	<i>Dudley Chelton</i>
09:25-09:45	<i>SST data impact in global HYCOM</i>	<i>Jim Cummings</i>
09:45-10:15	<i>Open discussion led by session chair</i>	

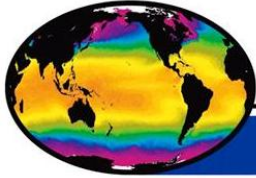
10:15-10:45

**Tea/Coffee Break**

[Plenary Session VI: Focus on key topics relating to climate \(Room 507\)](#)

[Chair: Christopher Merchant Rapporteur: Jon Mittaz](#)

10:45-11:05	<i>ESA SST CCI L4 reanalysis using the OSTIA system</i>	<i>Jonah Roberts-Jones</i>
11:05-11:25	<i>A multi-sensor SST reanalysis for the arctic ocean</i>	<i>Jacob Hoeyer</i>
11:25-11:45	<i>Sampling errors in satellite derived sea surface temperature for climate data records</i>	<i>Yang Liu</i>
11:45-12:15	<i>Open discussion led by session chair</i>	



Thursday, 20<sup>th</sup> June 2013

12:15-  
12:45

### S3VT Special Session (Room 507)

Special session on Sentinel 3 Validation Team

Welcome and overview of S3VT-T (10 min)  
Summary slides from team members/groups (10 min)  
Questions/issues for discussion (10 min)

For further information please contact:  
Anne O'Carroll (EUMETSAT) or Craig Donlon (ESA)

12:45-  
14:15

### Lunch

**Plenary Session VII: Physical oceanography and SST (Room 507)**

**Chair: Peter Cornillon Rapporteur: Jonah Roberts-Jones**

14:15-  
14:35

*Biases in global mean SST  
estimates obtained from gridded  
data sets*

*Alexey Kaplan*

14:35-  
14:55

*Statistical analysis of sub-  
mesoscale processes from  
satellite SST observations*

*Emmanuelle Autret*

14:55-  
15:15

*SEVIRI and VISSR SST front and  
gradient datasets*

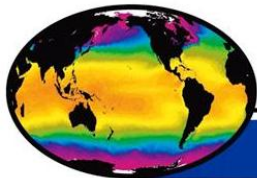
*Peter Cornillon*

15:15-  
15:45

*Open discussion led by session chair*

15:45-  
16:15

### Tea/Coffee Break



Thursday, 20<sup>th</sup> June 2013

[Plenary Session VIII: SST in ocean-atmosphere interaction \(Room 507\)](#)

[Chair: Carol Anne Clayson Rapporteur: Gary Wick](#)

16:15- 16:35	<i>Impact of diurnal warming on assimilation of satellite observations of sea surface temperature</i>	<i>Charlie Barron</i>
16:35- 16:55	<i>Relating of sea surface temperature and color to carbon dioxide partial pressure and flux</i>	<i>Timothy Liu</i>
16:55- 17:15	<i>Mid-latitude sea surface temperature signal in the upper troposphere</i>	<i>Xiasou Xie</i>
17:15- 17:45	<i>Open discussion led by session chair</i>	

18:00-  
20:00

**Advisory Council (Room 507)**

Meeting of the GHRSSST Advisory Council

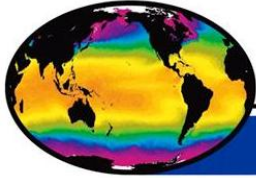
For further information please contact: Helen Beggs (ABoM)

### 3.6. Friday 21<sup>st</sup> June 2013

Friday, 21<sup>st</sup> June 2013

08:00-  
08:30

Registration desk open



**Plenary Session IX: Coupled data assimilation and SST (Room 507)**

**Chair: Jim Cummings Rapporteur: Andy Harris**

08:30-08:50	<i>Direct assimilation of satellite SST radiances</i>	<i>Jim Cummings</i>
08:50-09:10	<i>Evaluating the diurnal variability of sea surface temperature in a global initialised couple model</i>	<i>Jose Rodriguez</i>
09:10-09:30	<i>Sea surface temperature estimates and coupled forecasting</i>	<i>Christopher Merchant</i>
09:30-10:00	<i>Open discussion led by session chair</i>	

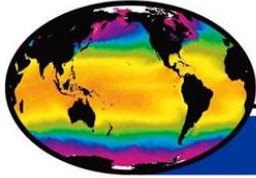
<b>10:00-10:30</b>	<b>Tea/Coffee Break</b>	
--------------------	-------------------------	--

**Closing Session (Room 507)**

**Chair: Peter Minnett Rapporteur: Gary Corlett**

10:30-10:45	<i>GHRSSST and possible future developments</i>	<i>David Llewellyn-Jones</i>
-------------	---	------------------------------

10:45-11:00	<i>Report from Advisory Council</i>	<i>Helen Beggs</i>
-------------	-------------------------------------	--------------------



11:00-11:50	Summary of breakout groups	
1	AUS-TAG	Jorge Vazquez
2	CDR-TAG	Christopher Merchant
3	DAS-TAG	Ed Armstrong
4	DVWG	Gary Wick
5	EaRWiG	Andy Harris
6	HL-TAG	Bob Grumbine
7	IC-TAG	Alexey Kaplan
8	IWWG	Bob Grumbine
9	ST-VAL	Helen Beggs
10	R2HA2	Peter Cornillon

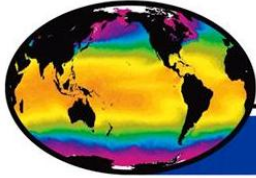
11:50-12:30	Review of action items
-------------	------------------------

12:30-13:15	Identification of priorities for following 12 months
-------------	--

13:15-13:30	Wrap-up/closing remarks
-------------	-------------------------

**Close of GHRSSST XIV**

13:30-14:30	Box lunch to go
-------------	-----------------



**GHRSSST**

*Group for High Resolution  
Sea Surface Temperature*

**XIV Science Team Meeting  
Woods Hole, MA, USA**

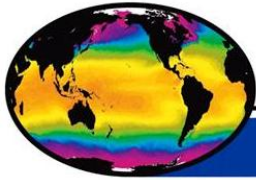
**14:00-  
17:00**

**CEOS SST-VC (Room 507)**

Meeting of the CEOS SST Virtual Constellation

For further information please contact:

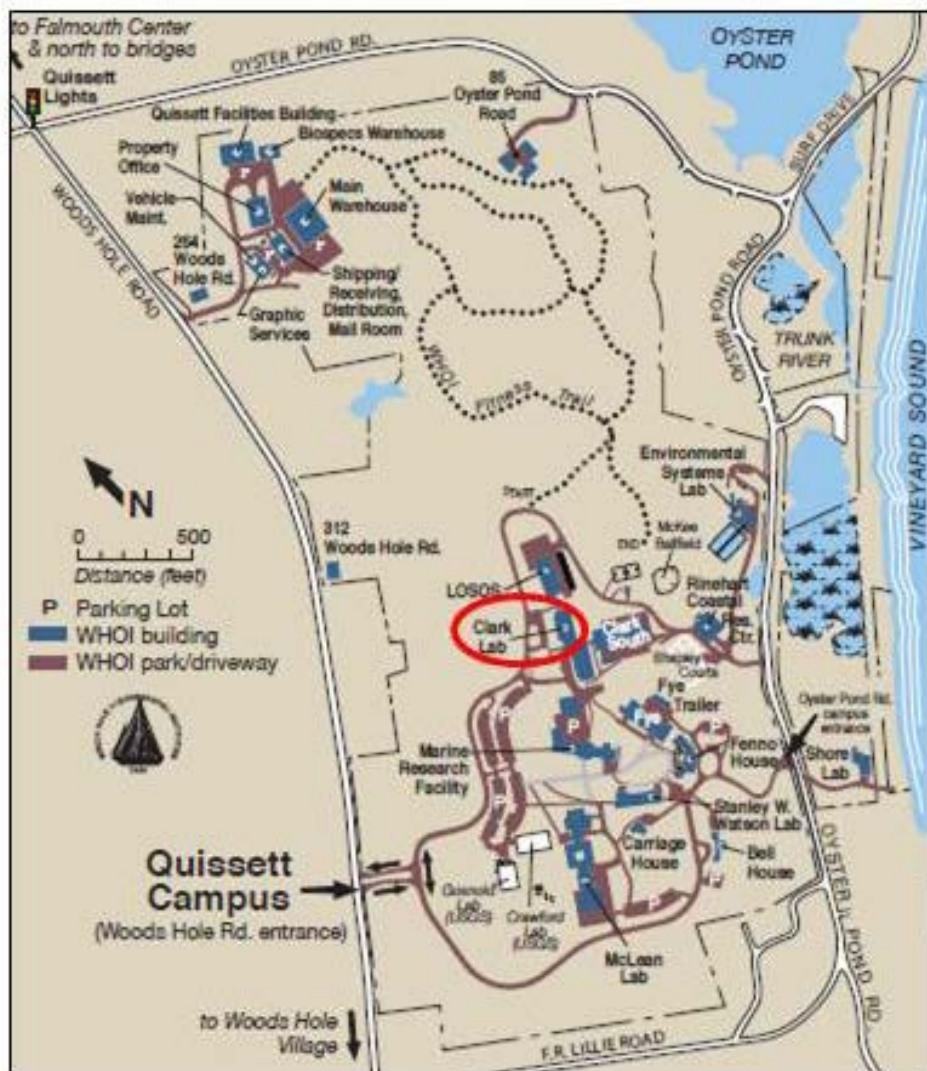
Kenneth Casey (NOAA) or Craig Donlon (ESA)



### 4. Meeting venue

All of the meeting sessions will take place in the **Clark Building, Quissett Campus**, at WHOI. WHOI has a comprehensive visitor website for general information here: <http://www.whoi.edu/main/visitor-information>.

#### Quissett Campus



#### 4.1. Parking notice

Parking permits will be available at the GHRSSST meeting check in desk (Clark Building, 5th floor foyer, outside Room 507) for those who have cars. Parking is available anywhere on the Quissett campus.



## 4.2. Local transport

There may be a number of participants who have rental cars and are willing to offer transport to other people staying at the same hotels. A car-sharing scheme is being investigated and more information will be made available locally.

If not we advise you use the following mode of transport:

### **The Breeze: Woods Hole Trolley**

The Woods Hole Trolley runs between Falmouth Mall and Woods Hole along Route 28 and Woods Hole Road, seven days a week. [Visit Website](#)

### **The Breeze: b-bus**

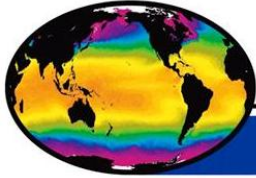
b-bus is convenient, low-cost public transportation from Cape Cod and back. The Cape Cod Regional Transit Authority provides this door-to-door, ride-by-appointment service for people of all ages for trips for any purpose, including school, work, shopping, college, doctor's appointments, visiting friends and even Boston medical trips. Enrolment required. [Visit Website](#)

### **Taxis:**

- Falmouth Taxi can be reached at either 01-508-540-7214, 508-548-3100, or [info@falmouthtaxi.com](mailto:info@falmouthtaxi.com).
- All Seasons Taxi: (508) 548-9990
- Upper Cape Taxi: (508)-540-1290

Finally, a possible further alternative for those staying at the Inn on the Square could be to either hire bicycles or even walk!

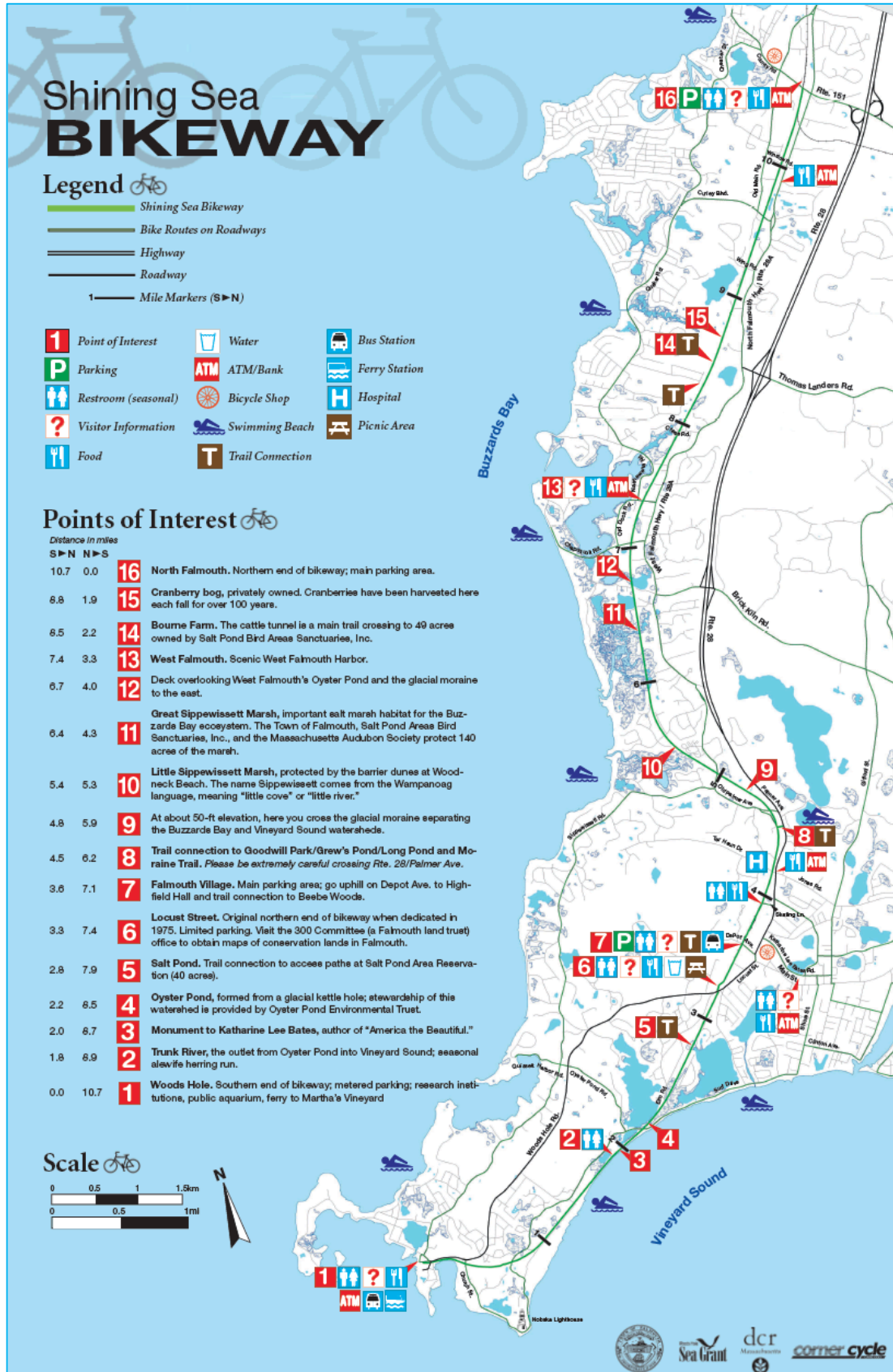
The Shining Sea Bikeway runs right past Inn on the Square and the Quissett Campus (1.8 miles). On the map on the following page the Inn on the Square is right at stop 7, and stop 2 is right about at the WHOI campus, although there is not a sign on the bikeway pointing up the hill to the Quissett campus. If you would like further information please let the WHOI hosts know and they can provide more information.



# GHR SST

Group for High Resolution  
Sea Surface Temperature

## XIV Science Team Meeting Woods Hole, MA, USA



### **4.3. The meeting**

You will find the GHRSSST XIV Reception Desk in the foyer outside Room 507 (main meeting room) on the 5<sup>th</sup> floor of the Clark Building.

Plenary Sessions (Monday, Wednesday, Thursday and Friday) will be in room 507 and Breakout Sessions (Tuesday) will take place in Room 507 and in Room 509 on 5<sup>th</sup> floor (see agenda for further details).

#### Meeting coordinators

- Local coordinators:
  - Carol Anne Clayson (850-321-9300; [cclayson@whoi.edu](mailto:cclayson@whoi.edu))
  - Alec Bogdanoff (508-444-2532)
  - Kathy Ponti (508-289-3806)
- GHRSSST Project Office
  - Gary Corlett (0044-789-420-4135; [gpc@ghrsst.org](mailto:gpc@ghrsst.org))
  - Silvia Bragaglia-Pike ([gpa@ghrsst.org](mailto:gpa@ghrsst.org))
- In case of emergency:
  - To report an emergency on the WHOI campus: Dial 2911 (or 508-289-2911 from your cell phone).
  - To reach local emergency services when off campus: Dial 911.

#### Coffee breaks and meals during the meeting

- Coffee Breaks: in foyer outside Room 507
- Lunches: On Monday, Tuesday and Thursday they will be available in the foyer outside room 507. On Friday there will be box lunches.  
Details of lunch on Wednesday are provided in the Special Events section.

#### Dinners

Information on local restaurants and opening times will be available at the venue.

## 5. Special Events

### 5.1. Sunday 16<sup>th</sup> June

- Where: Inn on the Square foyer
- When: 18:00 hours
- How to get there: See information in the Accommodation section

### 5.2. Wednesday 19<sup>th</sup> June (afternoon team building)

For the Wednesday afternoon team building activity we are considering two options to allow for changes in weather:

1. Sports: This will be a team event and we are currently looking at a couple of different sports so please some appropriate clothing for a bit of activity. There may be a small charge for equipment hire (to be advised at registration) and we will meet at WHOI at 13:00.
2. Martha's Vineyard: This will be a visit to Martha's Vineyard, travelling by ferry to and from Woods Hole, with guidance to be provided on what to do once there. There will be a small cost for the ferry and for transport on the Vineyard. Please note that you will need to be at WHOI ready to go by 12:30.

Obviously the success of these activities will very much depend on the local weather on Wednesday afternoon and a final decision will be made nearer the time.

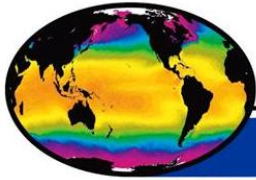
Please note that Lunch on Wednesday is not included in the registration fee and you buy your own. If the sport option is selected then we will likely order in some take away food.

### 5.3. Wednesday 19<sup>th</sup> June (evening)

The meeting dinner will be at the Coonamessett Inn on Wednesday, June 19. The cost for the dinner is \$40 per person. There will be a cash bar available during the dinner. We highly suggest that all meeting attendees join us for this year's dinner. **Please note that if you wish to attend you must have registered your interest by Thursday 13<sup>th</sup> June at the latest.**

The Coonamessett Inn is located at 311 Gifford Street, Falmouth, MA 02540. The Coonamessett Inn is located 0.1 miles from the Holiday Inn and 0.8 miles from the Inn on the Square.





# GHR SST

Group for High Resolution  
Sea Surface Temperature

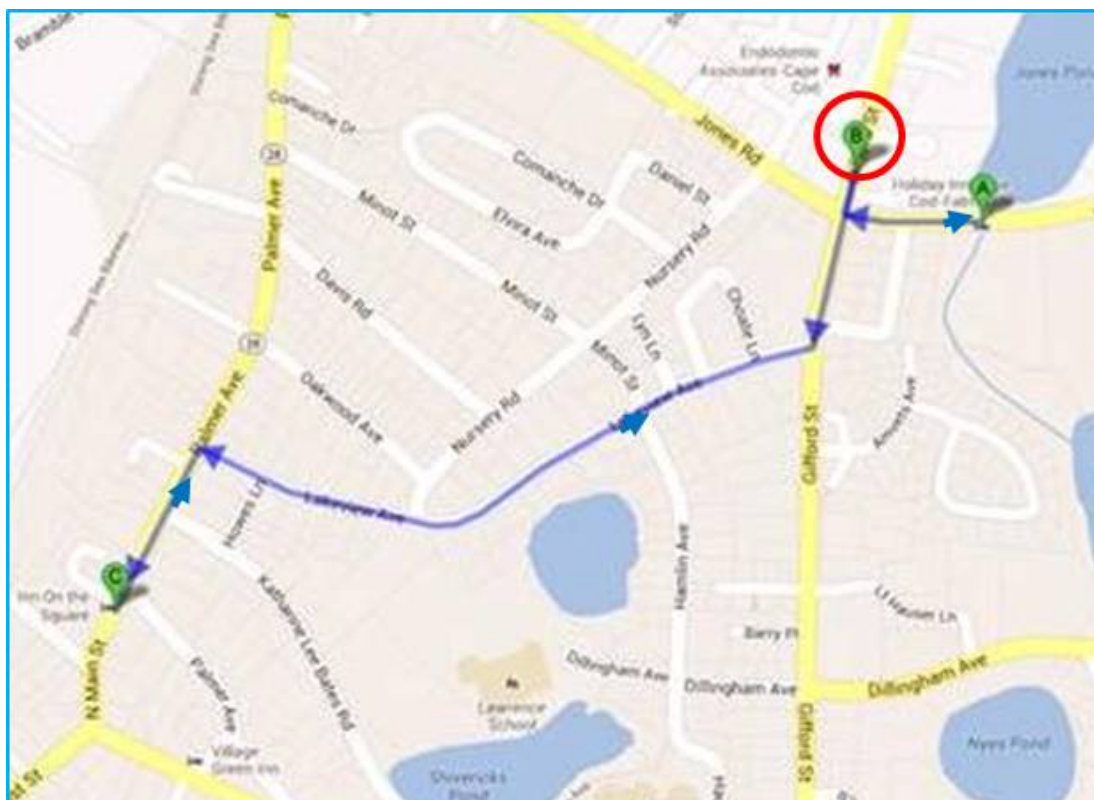
## XIV Science Team Meeting Woods Hole, MA, USA



Both hotels are a walkable distance to/from the location of the dinner:

Holiday Inn (A) to Coonamessett Inn (B) = ~0.1 mi

Inn on the Square (C) to Coonamessett Inn (B) = ~0.8 mi



## 6. Travel information

### 6.1. Travel to Woods Hole

The Woods Hole Oceanographic Institution is located on beautiful Cape Cod. It is roughly 75 miles southeast of Boston, MA. Woods Hole is about equidistant from the Providence-TF Green Airport and Boston-Logan Airport; however, it is much easier to get from Boston to Woods Hole via public transportation.

Travel information to WHOI can be found here: <http://www.whoi.edu/directions/>.



### 6.2. Flying into Boston-Logan Airport (BOS)

- **Car Rental:** You can rent a car at the airport and drive to Woods Hole. Direction to the Quissett Campus are available here: <http://www.whoi.edu/directions/>
- **Bus:** The best option is Peter Pan Bus service from the airport directly to Falmouth or Woods Hole. You can purchase tickets online on the Peter Pan website: [www.peterpanbus.com](http://www.peterpanbus.com).

### 6.3. Flying into Providence-TF Green Airport (PVD)

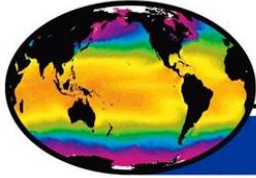
- **Car Rental:** You can rent a car at the airport and drive to Woods Hole. Direction to the Quissett Campus are available here: <http://www.whoi.edu/directions/>
- **Public transportation** is quite difficult from PVD to Woods Hole.

### 6.4. AMTRAK Northeast

- If you are in New England and want to take Amtrak, you can take the train to South Station in Boston and then take the Peter Pan Bus down to Falmouth. You can purchase tickets online on the Peter Pan website: [www.peterpanbus.com](http://www.peterpanbus.com).

### 6.5. Northeast Bus Service

- Peter Pan Bus provides service (via connections) to Falmouth/Woods Hole from several New England metropolitan areas. You can purchase tickets online on the Peter Pan website: [www.peterpanbus.com](http://www.peterpanbus.com).



# GHR SST

*Group for High Resolution  
Sea Surface Temperature*

## XIV Science Team Meeting Woods Hole, MA, USA

Note to travelers: There are only two bridges to Cape Cod, and can get backed up during the summer. In addition, the buses to and from the Cape can fill up. **We recommend spending the couple extra dollars on “Reserved Seats” for a specific schedule, date and time of departure.**



## 7. Hotel information

Both hotels that had rooms reserved for participants to GHRSSST XIV are located far enough from the Quissett Campus that a rental car may be desired. If you stay at Inn on the Square, you can take the Peter Pan Bus from the airport to within a very short walking distance from the hotel. We can help those who desire to carpool. In addition, you can walk or rent a bike for the week (<http://www.cornercycle.com>) - it is a nice 2 mile walk or bike ride along the Shining Sea Bike Path (<http://www.woodshole.com/documents/bikewaymap.pdf>) from Inn on the Square to the Quissett Campus.

### 7.1. Inn on the Square



40 North Main Street, Falmouth, MA 02540 - [www.innonthesquare.com](http://www.innonthesquare.com).

Phone: 508-457-0606 or 800-676-0000 for reservations.

All room rates subject to state/occupancy taxes, currently 9.7%. \$15 per person charge for more than 2 adults in a guest room

**Note:** Cancellations must be placed 72 hours prior to the date of arrival, or guests will be billed for one night's rate plus tax.

Roughly 2 miles from WHOI, and next door to the Falmouth Peter Pan Bus terminal. For those not planning to rent a car, this hotel will be the best option.

### 7.2. Holiday Inn Falmouth



291 Jones Road, Falmouth, MA 02540, <http://www.holidayinn.com/hotels/us/en/falmouth/fmhma/hoteldetail>,

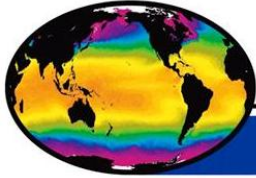
Phone: Skype 508-540-2000 or 508-540-2000 FREE.

All rooms have two double beds and are non-smoking.

All room rates subject to state/occupancy taxes, currently 9.7%

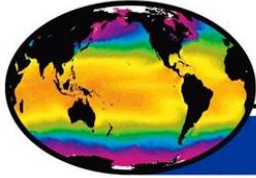
**Note:** Cancellations must be placed 48 hours prior to the date of arrival, or guests will be billed for one night's rate plus tax.

Roughly 3.15 miles from WHOI



## 8. Provisional list of Participants

<u>Last Name</u>	<u>First Name</u>	<u>Affiliations</u>	<u>Email</u>
Armstrong	Ed	NASA JPL, PO.DAAC, US	edward.m.armstrong@jpl.nasa.gov
Autret	Emmanuelle	IFREMER, France	emmanuelle.autret@ifremer.fr
Banzon	Viva	NOAA/NESDIS/ NCDC	viva.banzon@noaa.gov
Barron	Charlie	Naval Research Laboratory, US	charlie.barron@nrlssc.navy.mil
Barton	Ian	Australia	ian.barton@ozemail.com.au
Beggs	Helen	CAWCR, Australia	H.Beggs@bom.gov.au
Bingham	Andrew	JPL, US	Andrew.Bingham@jpl.nasa.gov
Bogdanoff	Alec	WHOI, US	alecb@whoi.edu
Bouali	Marouan	NOAA/CIRA, US	marouan.bouali@noaa.gov
Bragaglia-Pike	Silvia	GHRSSST Project, University of Reading, UK	gpa@ghrsst.org
Brasnett	Bruce	Environment Canada	Bruce.Brasnett@ec.gc.ca
Casey	Ken	NOAA/NESDIS/ NODC	Kenneth.Casey@noaa.gov
Castro	Sandra	University of Colorado, US	sandrac@colorado.edu
Cayula	Jean-Francois	Qinetiq North America, US	j.cayula@ieee.org
Chelton	Dudley	OSU, US	chelton@coas.oregonstate.edu
Chin	T. Mike	JPL, US	mike.chin@jpl.nasa.gov
Clayson	Carol Anne	WHOI, US	cclayson@whoi.edu
Corlett	Gary	University of Leicester, UK	gpc@ghrsst.org
Cornillon	Peter	University of Rhode Island, US	pcornillon@me.com

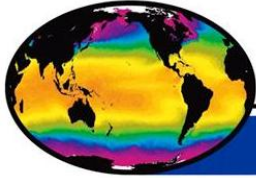


# GHRSSST

Group for High Resolution  
Sea Surface Temperature

## XIV Science Team Meeting Woods Hole, MA, USA

<u>Last Name</u>	<u>First Name</u>	<u>Affiliations</u>	<u>Email</u>
Crosman	Erik	University of Utah, US	erik.crosman@utah.edu
Cummings	James	Naval Research Laboratory, US	cummings@nrlmry.navy.mil
Dash	Prasanjit	NOAA NESDIS / CSU CIRA, US	prasanjit.dash@noaa.gov
de Sousa	Rodrigo Carvalho	AML/UFRJ	rodrigo@lma.ufrj.br
Donlon	Craig	European Space Agency, The Netherlands	craig.donlon@esa.int
Eastwood	Steinar	Norwegian Meteorological Institute	s.eastwood@met.no
Evans	Robert	RSMAS/MPO, US	revans@rsmas.miami.edu
Foley	Dave	Institute of Marine Sciences, UCSC, US	dave.foley@noaa.gov
Foti	Gregg	NODC	gregg.foti@noaa.gov
França	Gutemberg	Federal University of Rio de Janeiro - UFRJ, Brazil	gutemberg@lma.ufrj.br
Gentemann	Chelle	Remote Sensing Systems, US	gentemann@remss.com
Gramer	Lewis	University of Miami CIMAS, US	lgramer@rsmas.miami.edu
Grumbine	Robert	NOAA/NWS/NCEP	robert.grumbine@noaa.gov
Harris	Andrew	ESSIC, UMD, US	andy.harris@noaa.gov
Hoeyer	Jacob	Danish Meteorological Institute	jlh@dm.dk
Ignatov	Alexander	NOAA/NESDIS/S TAR	Alex.Ignatov@noaa.gov
Ishizaki	Shiro	Japan Meteorological Agency	s_ishizaki@met.kishou.go.jp

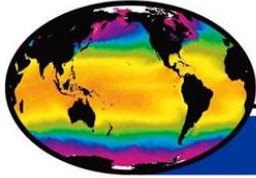


# GHRSSST

Group for High Resolution  
Sea Surface Temperature

## XIV Science Team Meeting Woods Hole, MA, USA

<u>Last Name</u>	<u>First Name</u>	<u>Affiliations</u>	<u>Email</u>
Iwanski	Dan	University of Rhode Island, US	diwanski@gso.uri.edu
Kachi	Misako	JAXA, JAPAN	kachi.misako@jaxa.jp
Kaplan	Alexey	LDEO of Columbia University, US	alexeyk@ldeo.columbia.edu
Karagali	Ioanna	DTU Wind Energy - Technical University of Denmark	ioka@dtu.dk
Koner	Prabhat	ESSIC, US	prabhat.koner@noaa.gov
Lange	Martin	German Weather Service	martin.lange@dwd.de
Le Borgne	Pierre	Météo-France	pierre.leborgne@meteo.fr
Liu	W. Timothy	Jet Propulsion Laboratory, US	w.t.liu@jpl.nasa.gov
Liu	Yang	RSMAS, University of Miami, US	yliu@rsmas.miami.edu
Llewellyn-Jones	David	University of Leicester, UK	dlj1@le.ac.uk
Maturi	Eileen	NOAA/NESDIS, US	eileen.maturi@noaa.gov
Merchant	Christopher	University of Reading, UK	c.j.merchant@reading.ac.uk
Minnett	Peter	University of Miami, US	pminnett@rsmas.miami.edu
Mittaz	Jonathan	University of Maryland, US	Jon.Mittaz@noaa.gov
Nightingale	Tim	STFC Rutherford Appleton Laboratory, UK	tim.nightingale@stfc.ac.uk
O'Carroll	Anne	EUMETSAT, Germany	Anne.Ocarroll@eumetsat.int
Orain	Françoise	Météo-France CMS R&D	francoise.orain@meteo.fr
Petrenko	Boris	NOAA/GST, Inc., US	boris.petrenko@noaa.gov



# GHRSSST

Group for High Resolution  
Sea Surface Temperature

## XIV Science Team Meeting Woods Hole, MA, USA

<u>Last Name</u>	<u>First Name</u>	<u>Affiliations</u>	<u>Email</u>
Piolle	Jean-François	IFREMER, France	jfpiole@ifremer.fr
Poulter	David	Pelamis Scientific Software Ltd, UK	david.poulter@pelamis.co.uk
Reynolds	Richard	CICS-NC	Richard.W.Reynolds@noaa.gov
Roberts-Jones	Jonah	UK Met Office	jonah.roberts-jones@metoffice.gov.uk
Rodríguez	José	UK Met Office	jose.rodriguez@metoffice.gov.uk
Saha	Korak	NOAA/NESDIS/S TAR and CIRA/CSU, US	korak.saha@noaa.gov
Salter	John	University of Rhode Island, US	John_salter@my.uri.edu
Vazquez	Jorge	JPL/Cal Tec, US	jorge.vazquez@jpl.nasa.gov
Whittle	Christo	Council for Scientific and Industrial Research (CSIR), ZA	cwhittle@csir.co.za
Wick	Gary	NOAA/ESRL/PS D, US	gary.a.wick@noaa.gov
Wimmer	Werenfrid	University of Southampton, UK	w.wimmer@soton.ac.uk
Xie	Xiaosu	Jet Propulsion Laboratory, US	xiaosu.xie@jpl.nasa.gov
Yoder	James	WHOI, US	jyoder@whoi.edu
Zhu	Xiaofang	RSMAS, University of Miami, US	xiaofang.zhu@noaa.gov