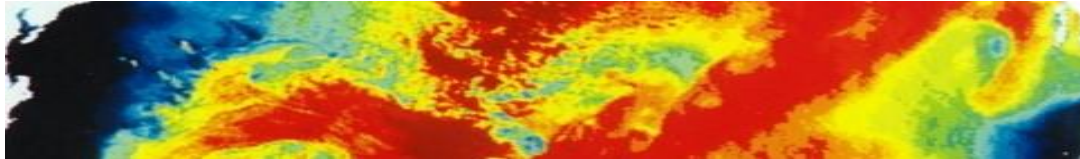


# SSTs Over and Around Reefs (SOAR) Workshop

August 27-31, 2018, Townsville, Queensland, Australia

Updated August 9, 2018



The primary goal of the workshop is to identify gaps and potential improvements to current satellite SST products. It is planned to be an upside down (or inverted) workshop – in that SST users will explain their use and needs with respect to SST so that algorithm developers understand the end use of their current and future products.

A meeting report and white paper to be published as tangible outputs.

The emphasis will be on facilitated group and panel discussions with introductory and overview talks to help set up the discussions. These talks will be prescriptive and given by invited speakers and their topics will be defined by workshop organisers as a broad overview of the subject matter with the intention that they will set up discussions rather than just present the work that the speaker is doing.

In addition we will have facilitators to help keep discussions on track and flowing and a rapporteur. The notes below are starting points but we are keen to work through the presentations and points of discussion to ensure it is as relevant to the workshop's goals as possible.

**Registration** is free. Please fill out the following Survey Monkey so that we can confirm your workshop and dinner attendance and dietary requirements:

<https://www.surveymonkey.com/r/soarworkshop2018>

We will use this response as the official intent to attend and cater accordingly.

**Conference website:** <http://imos.org.au/calendar/events/soarworkshop2018/>

## Day 1 – WELCOME AND INTRODUCTORY TALKS

Venue: AIMS

- 0815** Bus leaves Townsville Yacht Club for AIMS Cape Ferguson
- 0915** Welcome and Housekeeping — *Craig Steinberg (AIMS)/William Skirving (NOAA)*
- 0930** Round table self-introductions
- 0945** The National Oceanic and Atmospheric Administration (NOAA) Coral Reef Conservation Program (CRCP) and Satellite Algorithm Development — *Mark Eakin (NOAA Coral Reef Watch Program Manager)*
- 1015** The Integrated Marine Observing System (IMOS) — *Tim Moltmann (IMOS Director)*
- 1045** The Great Barrier Reef Marine Park Authority (GBRMPA) — *Russ Reichelt (GBRMPA Chairman)*
- 1115** **Morning tea (30 mins)**
- 1145** The Influence of SST on Coral Physiology — *Neal Cantin (AIMS)*
- 1215** What is Remote Sensing and Overview of Satellite SST — *William Skirving (NOAA)*
- 1245** The Physical Oceanography of Coral Reefs — *Craig Steinberg (AIMS)*
- 1315** **Lunch (1 hour)**
- 1400** **AIMS tour**
- 1630** **Bus back to Townsville Yacht Club**

## Day 2 – USERS of SST

Venue: Townsville Yacht Club

Days 2 and 3 are mostly divided into sections:

- 1) A talk by an expert on SST use in their field (designed to set up the discussions)
- 2) A discussion about the use of SST, where everyone should participate
- 3) A panel discussion involving speakers (experts) to reflect on the discussions

- 0850** Housekeeping - *Craig Steinberg*
- 0900** The Australian Institute of Marine Science — *Paul Hardisty (AIMS CEO)*
- 0930** Users: Coral Reef Managers' use of SST — *David Wachenfeld (GBRMPA)*

- 0950** Users: Ecological Modellers' use of SST — *Peter Mumby (UQ)*
- 1010** *Discussion* – What do managers want? Possible or not? How to deliver?  
*Facilitator: Peter Mumby (UQ)*
- 1040** **Morning tea 30 mins**
- 1110** Users: Biologists' Scientific use of SST — *Neal Cantin (AIMS)*
- 1140** *Discussion* – What do biologists want? Possible or not? How to deliver?  
*Facilitator: Neal Cantin (AIMS)*
- 1210** **Lunch (1 hour)**
- 1310** Users: Physical Scientists/Oceanographers use of SST — *Madeleine Cahill (CSIRO)*
- 1330** Users: physical Scientists/Modellers' use of SST  
— *Mike Herzfeld (CSIRO)/Clothilde Langlais (CSIRO)*
- 1350** *Discussion* – What do physical scientists want? Possible or not? How to deliver? *Facilitator: Madeleine Cahill (CSIRO)*
- 1420** Panel Discussion Users – David Wachenfeld (GBRMPA), Pete Mumby (UQ), Neal Cantin (AIMS), Madeleine Cahill (CSIRO), Mike Herzfeld (CSIRO), Clothilde Langlais (CSIRO) *Facilitator: Britta Schaffelke (AIMS)*
- 1500** **Afternoon tea (30 mins)**

## **INTERMEDIATE USERS of SST**

- 1530** Intermediate users use of SST - *Mark Eakin (NOAA)*
- 1600** *Panel Discussion* (1 hour) – Mark Eakin (NOAA), William Skirving (NOAA), Edward King (CSIRO), Grant Smith (BoM), Jessica Benthuisen (AIMS)  
*Facilitator: Scott Heron*
- 1700** **End day 2**

## Day 3 - SATELLITE SST – CURRENT STATUS AND GAPS

Venue: Townsville Yacht Club

**0850** Housekeeping — *William Skirving*

**0900** Satellite SST products — *Chris Merchant (U. Reading)*

**0945** *Panel Discussion* – Q&A Panel discussion on current products, prioritizing new products. Panellists: Chris Merchant (U. Reading), Sasha Ignatov (NOAA), Andy Harris (NOAA), Chris Griffin (BoM), Jonathan Mittaz (U. Reading)  
*Facilitator: William Skirving*

**10:30 Morning tea (30 mins)**

**1100** Summarising SST needs of users and intermediate users  
*William Skirving and Craig Steinberg*

**1230 Lunch (1 hour)**

## IMPROVING SATELLITE SST FOR CORAL REEFS

### Calibration and Validation

**1330** In situ cal/val data for the Great Barrier Reef region  
— *Helen Beggs (BoM)/Jessica Benthuyzen (AIMS)/Scott Bainbridge (AIMS)*

**1400** Cal/val opportunities in the Caribbean  
— *Natchanon Amornthammarong “Mana” (NOAA)*

**1410** *Panel Discussion* – Panel: Helen Beggs (BoM), Jessica Benthuyzen (AIMS), Scott Bainbridge (AIMS), Mana Amornthammarong (NOAA), Craig Steinberg (AIMS)  
How can cal/val data help, what is needed, etc. Are the current in situ observations adequate for satellite SST cal/val in and around reefs?  
*Facilitator: Edward King (CSIRO)*

**1500 Afternoon tea (30 mins)**

**1530** Discussion – summarise the satellite improvements that are feasible.

Divide them into three groups:

1. Modifications that can occur within the current development programs
2. Development that is outside the scope of current development and therefore needs funding or needs a change in program direction

3. Development that can't be done with current or planned satellites and therefore need new satellites/sensors.

*Facilitator: Chris Merchant (U. Reading)*

**1700 End day 3**

**1845 Conference Dinner: A Touch of Salt** <https://www.atouchofsalt.com.au/>

## **Day 4 – IMPROVING SATELLITE SST FOR CORAL REEFS - continued**

Venue: Townsville Yacht Club

**0850** Housekeeping — *Craig Steinberg*

**0900** Satellite products overview – what currently exists? — *Helen Beggs (BoM) & Gary Corlett (GHRSSST, University of Leicester)*

**0930** Scientific discussions about how to achieve 1 and 2  
(from previous discussion at end of day 3)  
*Facilitator: Jonathan Mittaz (U. Reading)*

**1030 Morning tea (30 mins)**

**1100** Continuation of scientific discussion if needed  
Summarise what is likely to be done in the near future  
Summarise what can be done with additional funding  
Summarise what can only be done if new satellites are designed and launched  
*Facilitator: Jonathan Mittaz*

**1220** Explanation of day 5 (write-up) – *William Skirving*

**1230 End day four**

**Afternoon – free:**

Tourist information will be provided at the beginning of the week. Participants are invited to organise their own activities. Please feel free to ask questions of locals participating in the workshop. Craig and William are also happy to assist with local knowledge.

## Day 5 – WRITE-UP DAY

Venue: Townsville Yacht Club

**0930** Begin writing papers

Two papers are envisaged, one as a meeting summary to EOS, one as a full journal article that details the outcomes and recommendations arising from the workshop.

**1700** End day

### Contact details:

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A taxi from Townsville airport to Palmer Street should be ~ A\$25

Directions from Townsville Airport to Townsville Yacht Club, Plume St, South Townsville, QLD 4810. For a map & more details: <http://r.whereis.com/jiSmdNr>