

IN-SITU MEASUREMENTS OF SOLAR EXPOSURE DISTRIBUTION ON A CORAL REEF: PRELIMINARY FINDINGS RELATING TO REEF ASPECT, WATER TURBIDITY AND DOSIMETER DESIGN

N.J. Downs¹, P.W. Schouten, and A.V. Parisi¹

¹International Centre for Applied Climate Sciences, University of Southern Queensland, Toowoomba, Australia.

Coral Reef, Solar Exposure, Aspect, Coral bleaching, Dosimetry

Thin film dosimeters have been used for the measurement of solar radiation since the 1970s. Their application includes personal exposure measurement and environmental exposure monitoring. Polyphenylene oxide (PPO) films have recently been developed for use in various underwater environments. These dosimeters are capable of measuring solar ultraviolet-B (UVB, 290 – 315 nm), which is a recognized physical stressor of corals when combined with elevated water temperatures occurring within the irregular structure of a coral reef. We present preliminary findings employing a newly developed PPO dosimeter clamp deployed upon reef building corals situated within turbid inshore waters of the Great Sandy Marine Park, Southern Queensland, Australia. UVB exposures measured over a 24 hour period during peak summer exposure conditions ranged from 12.11 kJ m⁻² to 21.13 kJ m⁻². This preliminary data showed a clear dependence on reef aspect with the highest exposures incident upon north facing (Southern Hemisphere) reef surfaces. We conclude that exposure stress to corals may still occur in shallow turbid water with UVB exposure being strongly associated with reef aspect.

**13th International Coral Reef Symposium Hawaii Convention Center ·
19-24 June 2016 · Honolulu, Hawaii USA**

Please do not reply to this message for information regarding the specific day and time for your presentation or for information regarding travel grants. The full program schedule will be posted before 1 April 2016 and travel grant applicants will be notified by early March 2016.

Dear 13th ICRS Participant:

Thank you for submitting an abstract for the 13th International Coral Reef Symposium that will take place in Honolulu, Hawaii, 19-24 June 2016. This message is to let you know that your **abstract has been accepted**. Soon you will receive more information regarding your presentation assignment (whether oral or poster), the day and time for your talk or poster presentation, and guidelines for preparation.

The scientific program committee met recently to review the abstract submissions and to schedule the sessions into the appropriate blocks of time. There was an overwhelming response to this meeting, and they tried to provide as many oral slots as possible in order to accommodate most requests for talks. However, in some cases, they were able to accept abstracts for poster presentation even though the author may have selected an oral preference. Final assignments (oral or poster) will be made by the chair of the session to which you were assigned. There will be exclusive poster sessions during the week.

The **full schedule of sessions and a revised meeting schedule will be posted on the Web site soon.** <http://sgmeet.com/icrs2016/default.asp>. We hope you will plan your travel in order to attend the welcome reception on Sunday evening, 19 June 2016. The meeting begins promptly at 08:00 Monday morning with the opening plenary session. All events will take place at the Hawaii Convention Center.

If you have not yet registered for the meeting, you must do so in order to present. The email confirmation that you received when you submitted your abstract included instructions and login information that you will need when you register. Please note that payment of a single-day registration **does not include eligibility to participate in the scientific program. If you are presenting either a talk or a poster, you must pay the appropriate full registration fee.**

Childcare for attendees of the 13th ICRS can be arranged directly with Kama'aina Kids, a private, non-profit, multi-service organization in Honolulu. Childcare programs will be available for infants to 2 years old, 3 and 4 year olds, and 5 to 12 year olds. To reserve a space, parents must arrange childcare directly with Kama`aina Kids. For more information, please go to: <http://sgmeet.com/icrs2016/childcare.asp>

Finally, **hotel reservation and accommodation information** is available on the meeting web site at: <http://sgmeet.com/icrs2016/accommodations.asp>. We have limited room blocks at the hotels listed. Honolulu is a very popular destination in the summer months. Be sure to make your reservations as soon as possible to secure the best rates.

Again, we request that you do not reply to this message for information regarding your presentation assignment or travel grant application. You will be notified as soon as this information is available.

We appreciate your interest in the meeting, and we look forward to seeing you in June.

On behalf of the meeting convener, Bob Richmond, and the organizing committee,

Lynda West, Project Manager, 13th ICRS E-mail: lyndaw@sgmeet.com

Follow [@ICRS2016](#) on Twitter · Like [2016 International Coral Reef Symposium](#) on Facebook

2016 Renewals are now open at:
<https://www.sgmeet.com/isrs/membership/memberlogin.asp>