

Figure 1. Location of the study sites (T, transect) and bleached corals at Malvan Marine Sanctuary. **a**, Completely bleached *Plesiastrea versipora*; **b**, Bleached and dead *P. lutea* covered by turf algae; **c**, *Porites compressa*; **d**, Bleached colonies of *Porites compressa*; **e**, Partially bleached *Porites* sp. with completely bleached *Pseudosiderastrea tayami*; **f**, *Cyphastrea serailia*; **g**, *Pseudosiderastrea tayami*; **h**, *Favites melicerrum*; **i**, *Turbinaria mesenterina*; **j**, *Porites lichen*.

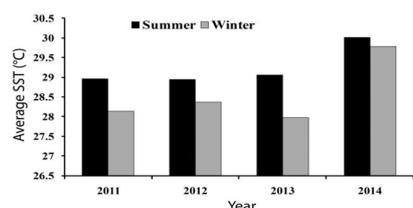


Figure 2. Average summer and winter sea-surface temperature time data (11 $\mu\text{m}/\text{day}$ at 4 km level) analysed during the past 4 years (data courtesy: NASA, USA).

Analysis of SST data of this region, derived from the Giovanni on-line data system⁵, developed and maintained by

NASA GESDISC, revealed 1.02°C and 1.61°C rise in temperature above normal during 2014, in summer and winter respectively, could trigger coral bleaching (Figure 2). The present study indicates that the reef is under stress; however, a detailed study is required to understand coral bleaching more precisely.

Fishing and eco-tourism related to the reef are the main source of livelihood for the local population at Malvan. The present study suggests that if this event continues, it will ruin the marine biodiversity as well as economy of the region in the future.

1. Hoegh-Guldberg, O., *Mar. Freshwater Res.*, 1999, **50**(8), 839–866.
2. Hill, J. and Wilkinson, C. R., In *Method for Ecological Monitoring of Coral Reef: A Resource for Managers. Version 1*, Australian Institute of Marine Science, Townsville, Australia, 2004, pp. 47–48.
3. Cantin, E. N., Cohen, L. A., Karnauskas, B. K., Tarrant, M. A. and McCorkle, C. D., *Science*, 2010, **329**(5989), 322–325.
4. Jokiel, L. P. and Coles, L. S., *Coral Reefs*, 1990, **8**(4), 155–162.
5. Acker, J. G. and Leptoukh, G., *EOS Trans. Am. Geophys. Union*, 2007, **88**(2), 14–17.

ACKNOWLEDGEMENTS. We thank the Director, CSIR-NIO, Goa for providing the necessary facilities. K.D. thanks DST, New Delhi for DST-Inspire fellowship. We thank CSIR, New Delhi (grant PSC0206) and RGSTC, Government of Maharashtra (grant GAP2871) for financial support. This is NIO contribution number 5802.

KALYAN DE¹
 SABYASACHI SAUTYA²
 SAMBAHAI MOTE¹
 LOBSANG TSERING³
 VISHAL PATIL¹
 RAHUL NAGESH¹
 BABAN INGOLE^{1,*}

¹CSIR-National Institute of Oceanography, Goa 403 004, India

²CSIR-National Institute of Oceanography, Regional Centre, Mumbai 400 053, India

³New Camp No. 14, Baylakuppe, Mysore 571 104, India

*e-mail: baban@nio.org

NEWS

Nobel Prizes 2015

Nobel Prize winners in the area of science, medicine or physiology and economics for the year 2015 have been announced.

Nobel Prize in Physiology or Medicine was awarded to three scientists. One half was shared by Prof. William C. Campbell of Drew University, Madison, NJ, USA and Satoshi Omura, Kitasato University, Japan ‘for their discoveries concerning a novel therapy against infec-

tions caused by roundworm parasites’. The other half was announced in favour of Youyou Tu of the China Academy of Traditional Chinese Medicine, Beijing China ‘for discoveries concerning a novel therapy against malaria’.

Nobel Prize in Physics was shared by Prof. Takashi Kajita, University of Tokyo, Kashiwa, Japan and Prof. Arthur B. McDonald of Queen’s University, Kingston, Canada ‘for the discovery of neutrino oscillations which shows that neutrinos have mass’.

Nobel Prize in Chemistry was awarded to three scientists for their ‘mechanistic studies of DNA repair’. The three scientists are Prof. Thomas Lindahl of Francis

Crick Institute, Hertfordshire, UK; Prof. Paul Modrich, Howard Hughes Medical Institute and Duke University of Medicine, Durham, NC, USA and Prof. Aziz Sancar, University of North Carolina, Chapel Hill, NC, USA ‘for mechanistic studies of DNA repair’.

The Sveriges Riksbank Prize in Economics was announced in favour of Angus Deaton of Princeton University, NJ, USA ‘for analysis of consumption, poverty and welfare’. These studies have great relevance to India.

Current Science has planned to publish more detailed account of some of these prizes in the subsequent issues of the journal.