

# Red Sea coral bleaching: 2023

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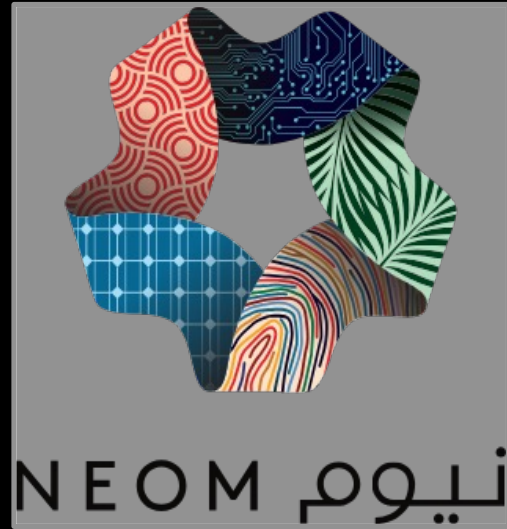
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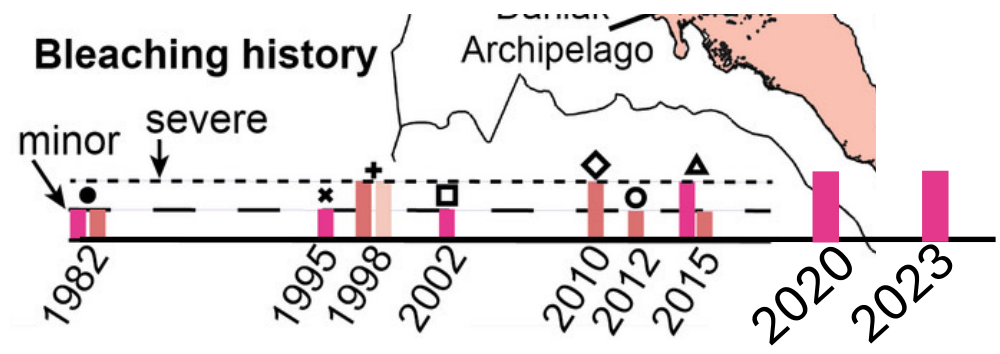
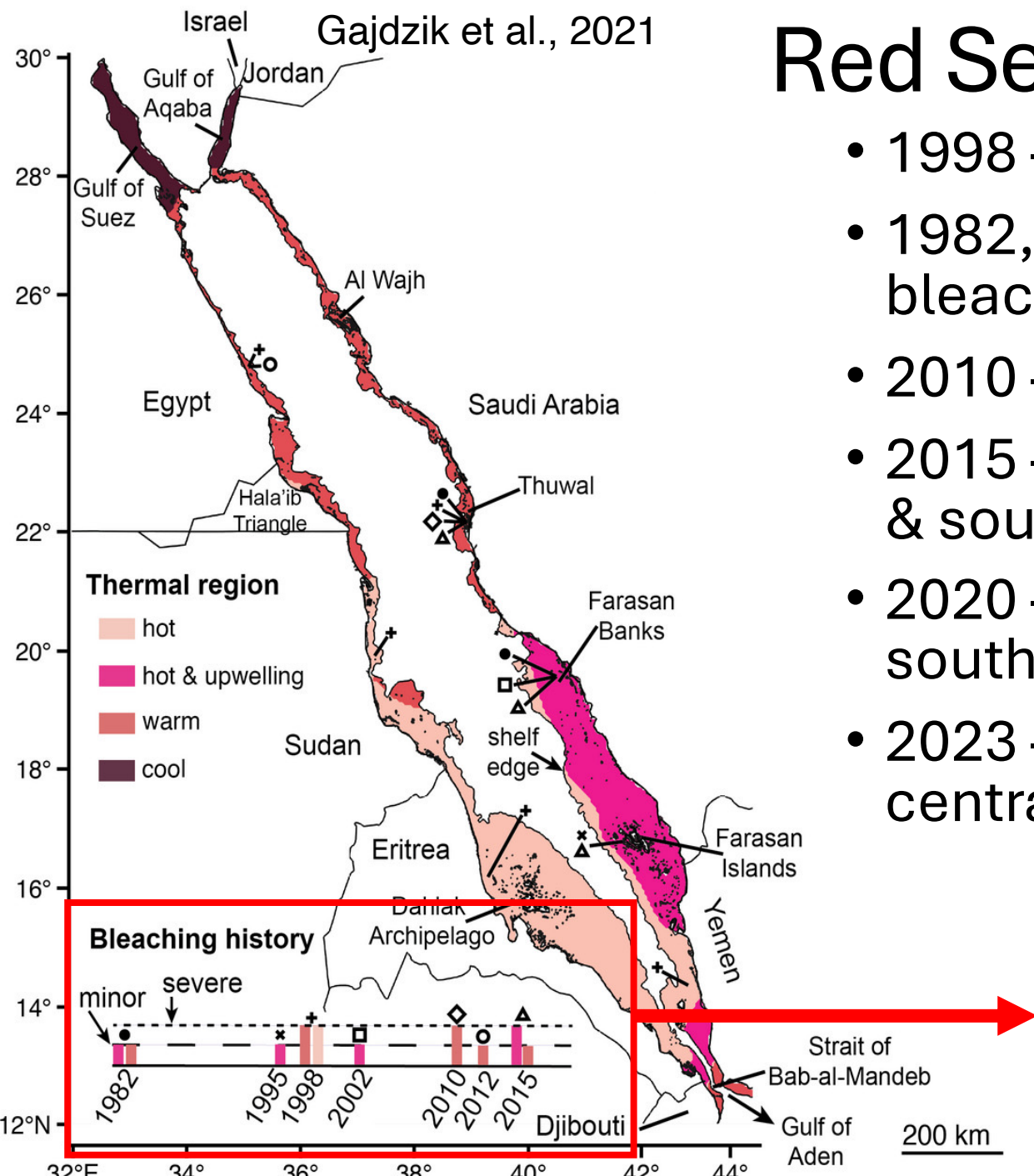


Prof. Burton Jones

Gajdzik et al., 2021

# Red Sea Bleaching History

- 1998 – widespread in the southern Red Sea
- 1982, 1995, 1996, 2002 – moderate bleaching events in central Red Sea
- 2010 – severe bleaching in central Red Sea
- 2015 – severe bleaching & mortality in central & southern Red Sea
- 2020 – extensive bleaching central (and southern?) Red Sea
- 2023 – extensive bleaching from north-central to southern Red Sea



1998

2010

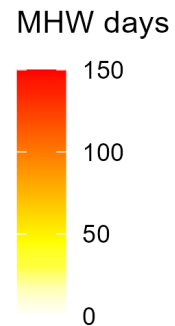
2015

# Red Sea Bleaching History

- # of days where sea temperatures qualified as a marine heatwave (MHW)
  - Days over the year with sea surface temperature (SST) over 30°C

2020

2023

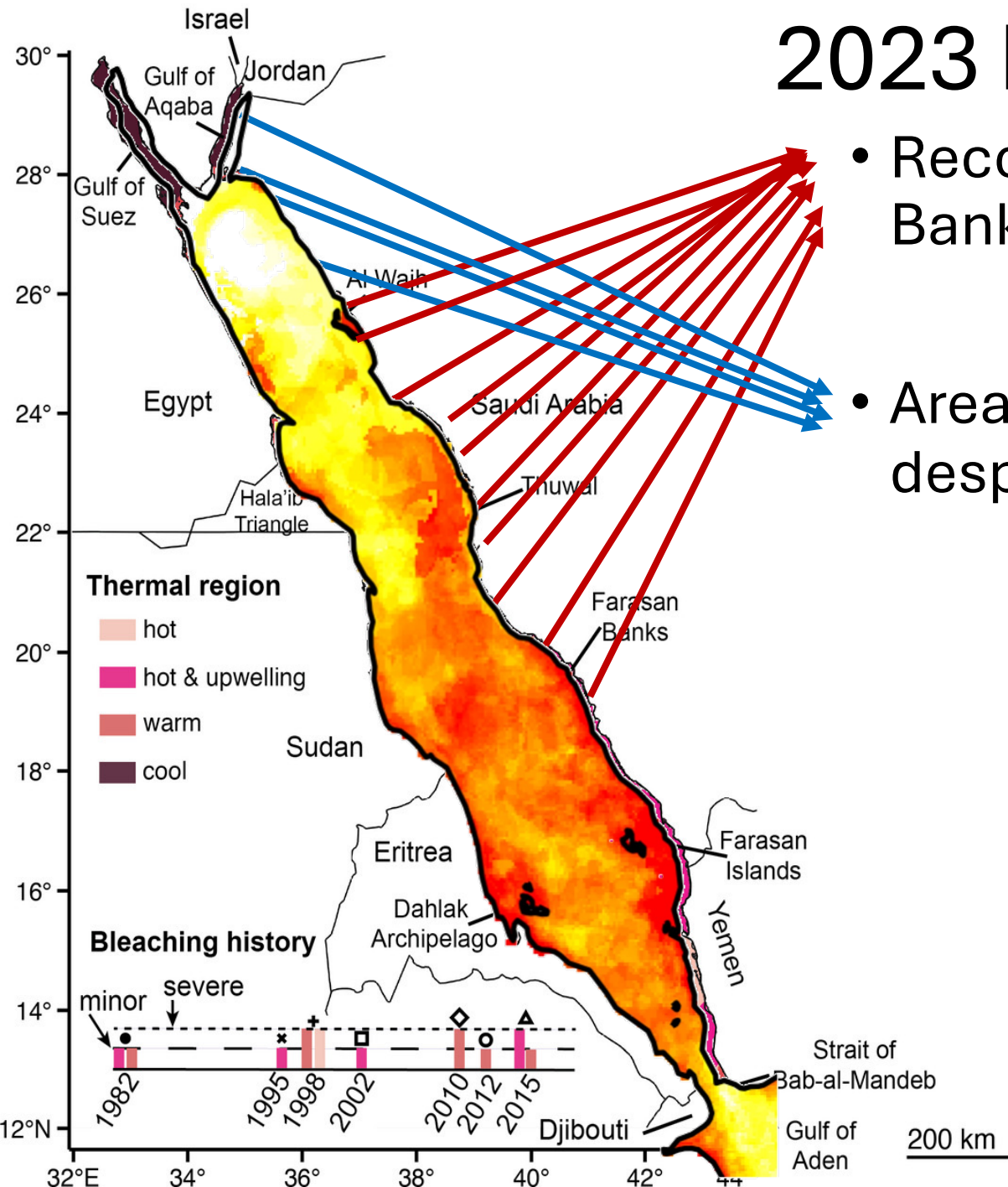


Dr. Lily Genevier, RSMP Group



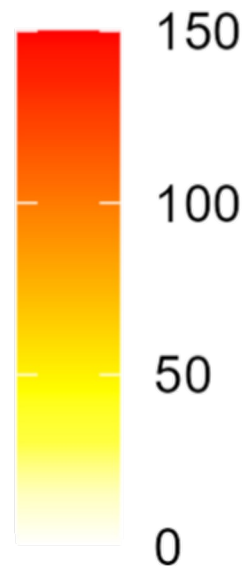
Prof Ibrahim Hoteit, RSMP Group & Climate Change Center

# 2023 Bleaching



- Records from all over the Red Sea (Farasan Banks up to Al Wajh region)
- Areas with reports of limited bleaching despite warm temperatures

MHW days



6 September 2023

25 September 2023

Thuwal, central Red Sea



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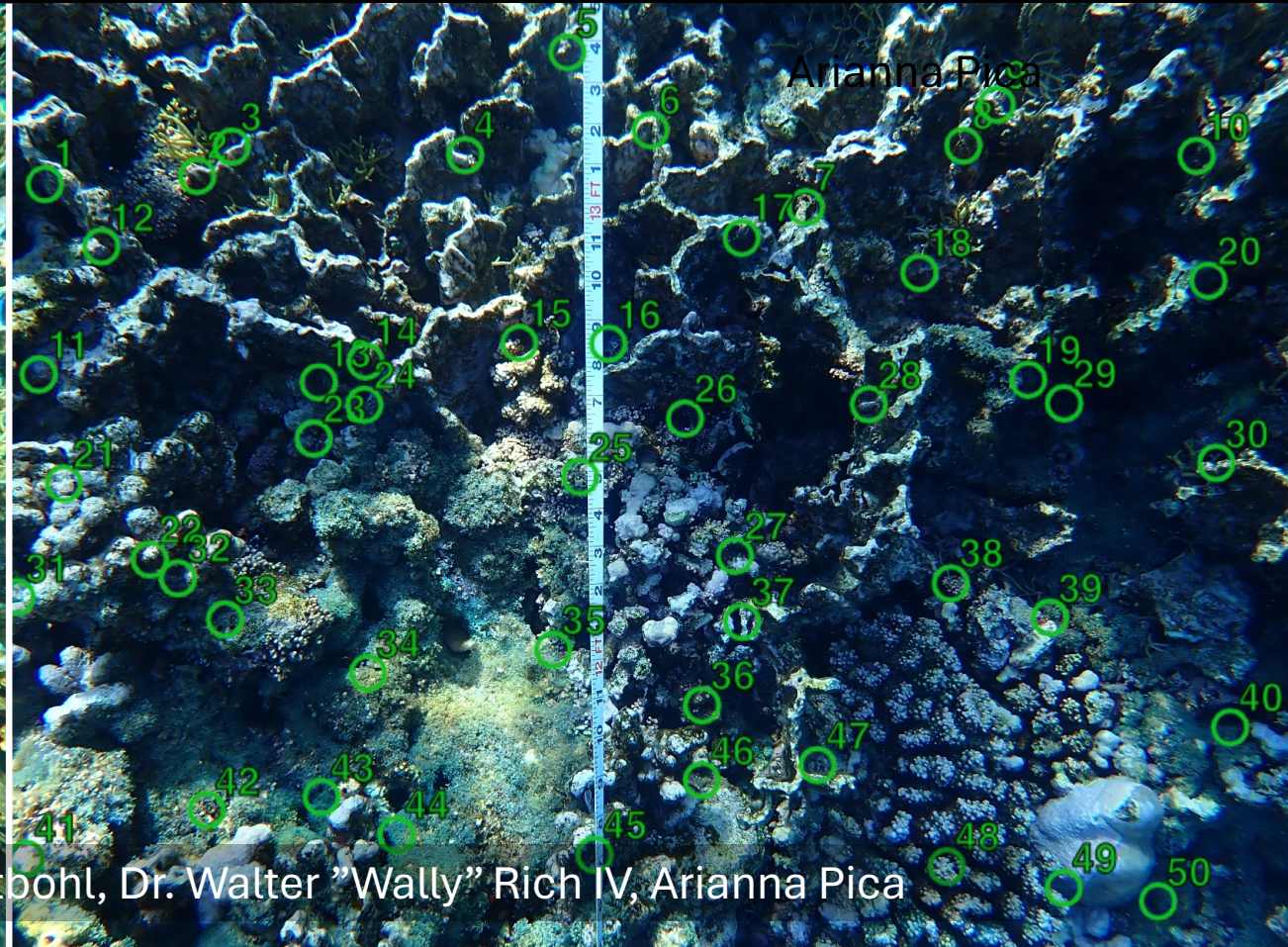
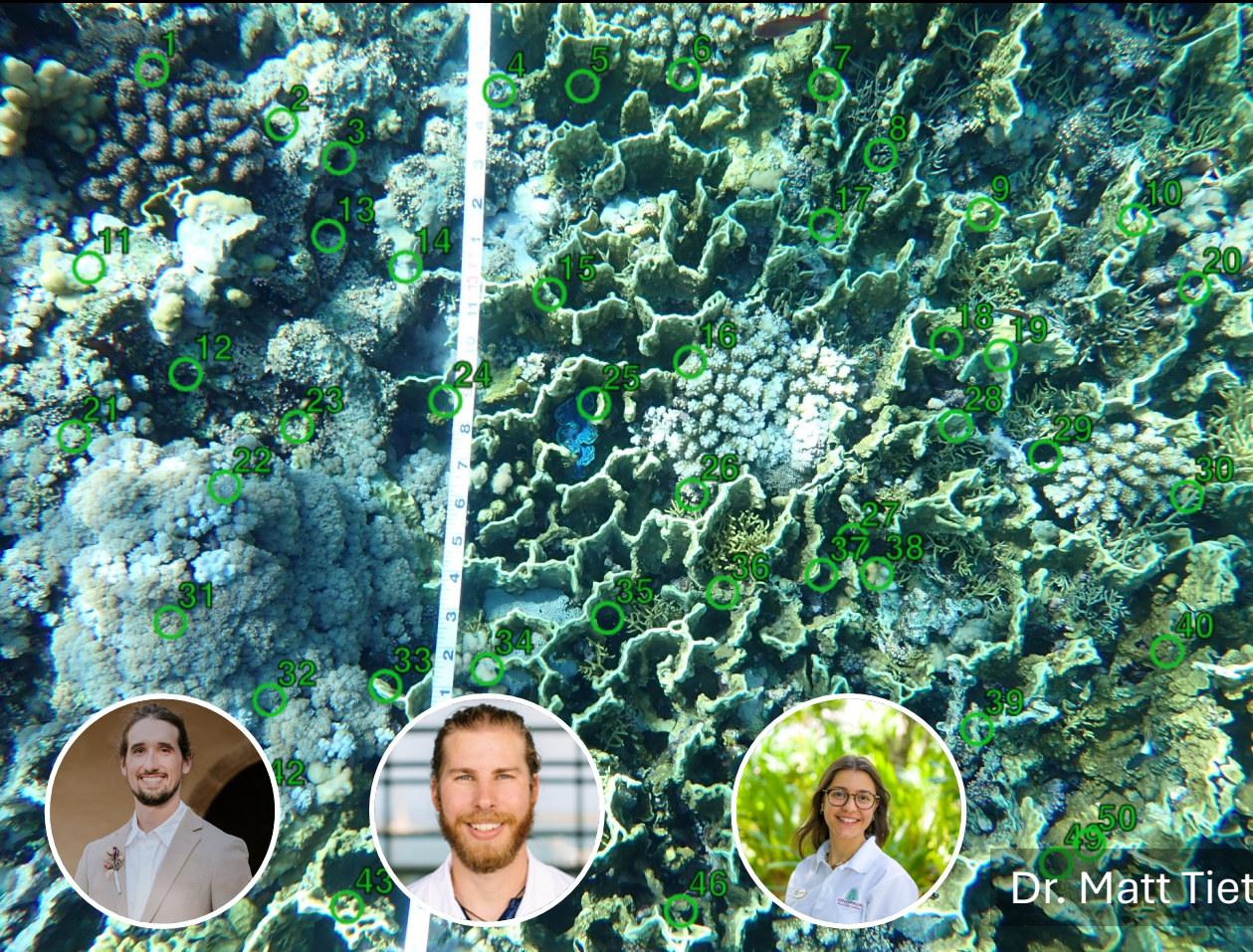
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# Shallow water coral mortality appears high

10 July 2023

4 March 2023

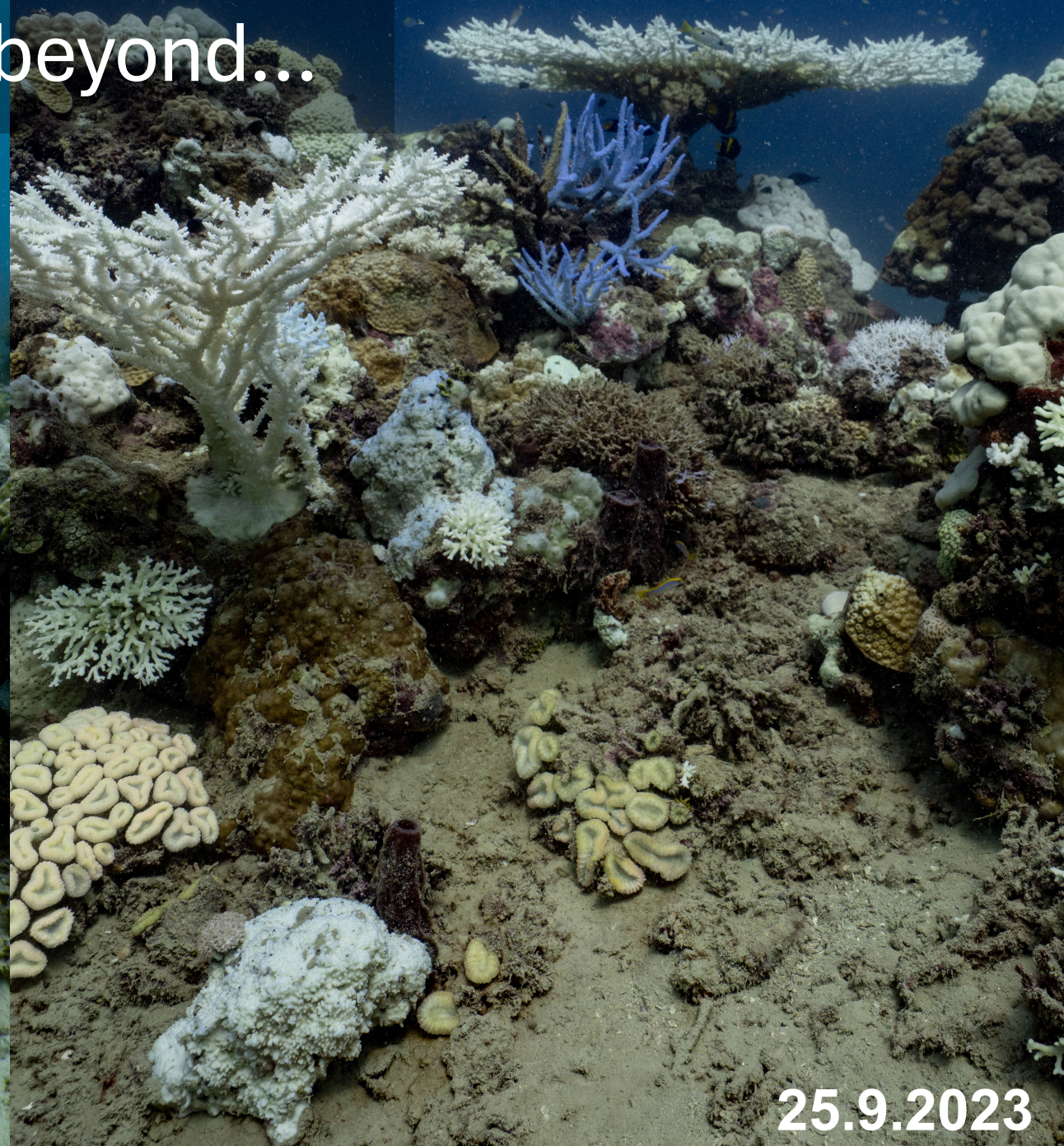


Dr. Matt Tietbohl, Dr. Walter "Wally" Rich IV, Arianna Pica

Future outlook for 2024 and beyond...



15.6.2023



25.9.2023