“A complex range of influences, including weakening currents and suppressed upwelling, can result in marine heatwaves in regions – at the eastern extent of subtropical gyres and which run along the western sides of continents – such as the Benguela system off western Africa, and the California and Peru Current systems off North and South America.

“Prior to 2017, reports of marine heatwaves in regions, at the western extent of subtropical gyres, are notably absent from the scientific literature, apart from the eight-month event in the Tasman Sea during 2015/16.

“Our capacity to detect marine heatwaves is improving with advances in remote sensing and *in situ* instruments, as well as new datasets that allow us to understand the three-dimensional structure of these events.

“Further improvements in our monitoring and understanding will be increasingly important in the future if we are to improve our capacity to predict marine heatwaves and provide rapid assessments to the communities they affect,”