The Impact of Cyclone Seroja at Yarragadee

Randall Carman

Geoscience Australia, Yarragadee, Australia

On the 11th of April 2021 at approximately 1430 UT, Category 3, Tropical Cyclone Seroja passed directly over the Yarragadee Geodetic Observatory. Wind speeds in excess of 160km/h were measured but thankfully the cyclone passed through very quickly, meaning structural damage was limited mainly to non-geodetic infrastructure.

Although a lot of superficial damage was caused and we were without communications for some time and commercial power for 11 days, the impact to operations was minimal, with our first SLR data obtained within 36 hours of the cyclone passing.

The Geoscience Australia survey team performed a minimized local tie survey as soon as possible post cyclone and the results are discussed in this poster.

Even though a nearby 13m satellite dish was damaged and wind speeds were very close to maximum load ratings, our 12m VLBI dish was mostly unaffected apart from needing a new pointing model, due mostly to movement in elevation. The GA survey team did not however have time to include the VLBI dish and will return later in 2022 to check for any change.

This poster will give an overview of some of the structural damage caused to our ancillary infrastructure.