**Comminicating threats - past events and progress:**

**A LOW PROBABILITY SCENARIO FOR A VULNERABLE COMMUNITY**

**Peter Otto**

*Tropical Cyclone Warning Center, Bureau of Meteorology, Brisbane, Australia*

ABSTRACT

Severe Tropical Cyclone Ita rapidly intensified to (Australian) category 5 as it approached Australia’s northeast coast late in the 2013-14 cyclone season, and was the strongest storm to approach the vicinity for over 90 years. The Bureau of Meteorology’s official forecast track consistently depicted the most populous community in the area (the city of Cairns) within, yet at the fringes of the forecast track envelope. As Cairns lies within a river delta and has a substantial portion of its population living along its low lying coast, the risk to Cairns was high despite the relatively low probability of a direct eye-wall impact there. The differing risk and probability levels presented communication and response challenges, and these challenges were increased further by alternative scenarios depicted within forecasts from unofficial sources. A combination of the above pressures resulted in a strong demand for probabilities and forecast scenarios, and these additional services were delivered with successful outcomes for the community. Ultimately the storm weakened rapidly in the hours prior to landfall as it experienced an eye-wall replacement cycle, which was fortunate in terms of limiting the impact, but also presents additional communication challenges as people attempt to assign a historical significance to the event. The opportunities identified for service and communication enhancement will be detailed, with time set aside for group discussion.

*Corresponding author address:* Peter Otto, Bureau of Meteorology, GPO Box 413, Brisbane, Australia, 4001. Email: [p.otto@bom.gov.au](file:///C:\Users\pwo\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\WFZ7N79U\p.otto@bom.gov.au)