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**Analyses of Explosive Cyclones Reaching the Antarctic Coast in 2017**

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Explosive cyclones or meteorological bombs are a kind of mesoscale cyclones known for their rapid intensification, but are not necessarily short-lived. They can produce strong winds, heavy rainfall and dangerous oceanic conditions as a result of rapid change of central pressure. It is likely that climate change is causing an increase in this type of event in the Antarctic coast and, if this increase is confirmed, the regime of winds and temperatures may be changing. In the northern portion of the Antarctic Peninsula a decrease in temperature has been recorded over the last 15 years, with a higher incidence of explosive cyclones over the region having been noted during this period. Explosive cyclones, which change the wind patterns when they reach certain areas, therefore may be contributing to this change in the Antarctic climate. This study is part of the "Explosive Cyclones on the Antarctic Coast" (EXCANC) Project conducted by the World Environmental Conservancy organization which analyzes data from 13 meteorological stations strategically scattered throughout the coast and operated by various international Antarctic programs, and also utilizes satellite images. Results show that through October of 2017, 96 cases of explosive cyclones in the Antarctic continent have occurred with around 100 cases being expected through the end of the year; the greatest number of events have been recorded at the Australian Casey station (16 cases). Intensity analyses also are shown.