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of Portable Infrasound Sites to Assess Feasibility of Additional Elements, I51GB, Bermuda, UK

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IMS infrasound station I51GB, located on the island of Bermuda in the Atlantic Ocean, was certified in December 2008. The original installation presented many design challenges driven by land availability, island topography and proximity to populous zones. These challenges not only dictated the amount of elements that could be installed, but also the geometry of the station. The array geometry of I51GB is atypical for an IMS infrasound station, comprising of a large-aperture, rectangular four-element array. To add to the uniqueness of the site locations, is the large lagoon that lies directly between all elements. In late 2018, after several incidents of vandalism rendered elements inoperable, the PTS was approached about the feasibility of relocating existing elements to more secure locations, which had become available since the original installation. In September 2019, with cooperation of the Station Operator, the PTS installed two portable infrasound stations in parallel with the existing I51GB elements. Data was collected for roughly 10 months to allow for IMS station site survey requirements and to assess, whether the additional elements benefit station infrasound event detection capabilities. Results from the successful site survey are summarized in this poster.

Promotional text

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