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## Democratizing and Densifying Low Noise Long Period Broadband Stations

**Geoffrey Bainbridge**<sup>1</sup>, Valarie Hamilton<sup>2</sup>, and Timothy Parker<sup>3</sup>

<sup>1</sup>Nanometrics Inc, Ottawa, Canada ([geoffreybainbridge@nanometrics.ca](mailto:geoffreybainbridge@nanometrics.ca))

<sup>2</sup>Nanometrics Inc, Ottawa, Canada ([valariehamilton@nanometrics.ca](mailto:valariehamilton@nanometrics.ca))

<sup>3</sup>Nanometrics Inc, Ottawa, Canada ([timparker@nanometrics.ca](mailto:timparker@nanometrics.ca))

The Streckeisen STS-1 set a very high performance and lasting broadband (VBB) sensor standard that has been hard to match by other instruments, but these sensors also required a very careful emplacement and shielding from environmental changes and conditions, along with the high costs of ensuring the conditions for this level of instrument performance. Recent developments have demonstrated equivalent and broader bandwidth sensors that enable deploying these types of sensors in most any terrestrial environment. These new instruments, in many types of form factors, all magnetically shielded, open up new opportunities for continuing and expanding these VBB observations, democratizing the observations of these long period signals and opening up the possibilities of better performance through deep boreholes and observations of less developed sites that have harsher environmental conditions, along with recapitalizations of sites where STS-1s are no longer supported. We will describe recent testing results of Trillium 360 GSN vault, borehole, and posthole sensors as well as the Horizon 360 from many observatories and new potential use cases, some in polar environments that were impractical until now, and discuss development of the new Horizon 360 OBS.