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Literature Review on the Use of IMS Data in the Scientific Community

Comprehensive Nuclear Test Ban Treaty Organization (CTBTO), through its International Monitoring System (IMS) and International Data Centre (IDC), collects, processes, analyses and stores IMS data to support the implementation of the verification regime.

However, these data may contribute not only to the monitoring of nuclear explosions, but also have a wide range of application in civil and scientific areas.

Interest in these data has greatly increased over the past years, as it has been noted that these data can be applied to the enhancement of the understanding and furthering of technical capabilities in fields such as: natural hazard risks, earth processes, undersea earthquakes and tsunami warning, climate monitoring using Ice-breaking noise or ocean swell noise, ocean acoustic thermometry, marine mammals migration studies, volcanic activities, avalanches and storm tracking as well as aurorae and meteorites detections.

A selection of highly relevant scientific articles published in established scientific journals since 2001 have been analysed, in order to understand the actual use of IMS Data in the scientific community.

Primary author: TERZI, Lucrezia (Belgian Nuclear Research Center (SCK-CEN))

Presenter: TERZI, Lucrezia (Belgian Nuclear Research Center (SCK-CEN))

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