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Use of Remote Sensing Technologies for Strengthening Verification Regime

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Micro satellites are cost effective, environmentally friendly and enjoy extended operational life in space. These can be equipped with smart state of the art remote sensors for acquisition of optical, environmental and other data with all the possibilities of detecting related impacts remotely. Success primarily depending upon resolution and other related factors. These acquired data sets can be used to determine surface and subsurface tectonic and other manmade activities to include nuclear detonations. Subsurface activities both deep and shallow leave definite signatures on the surface conditions though depending upon time and other conditions. Speed of S-Wave travelling across the crust depends on the shear modulus and the density expressed by relation $B = \sqrt{(u/p)}$. Therefore a correlation of data acquired from ground stations revealing direction and magnitude with intensity obtained from observations can be correlated with the spontaneous and long terms change detections by the remote sensing platforms. This correlation can yield more authentic scientific evidence towards establishing anthropogenic nuclear activity or detonations in particular. Deep detonations however may take more time and closer observations beside higher resolution of sensors present on board. Launching of a constellation to cover possible end points of body wave impact zones can yield useful results.

Promotional text

Use of Remote Sensing Technologies can be cost effective, more sustainable and more authentic beside being an additional source of data acquisition.

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