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# First installation of an optical OBS, cabled offshore Les Saintes, Lesser Antilles – Supplementary Figures –

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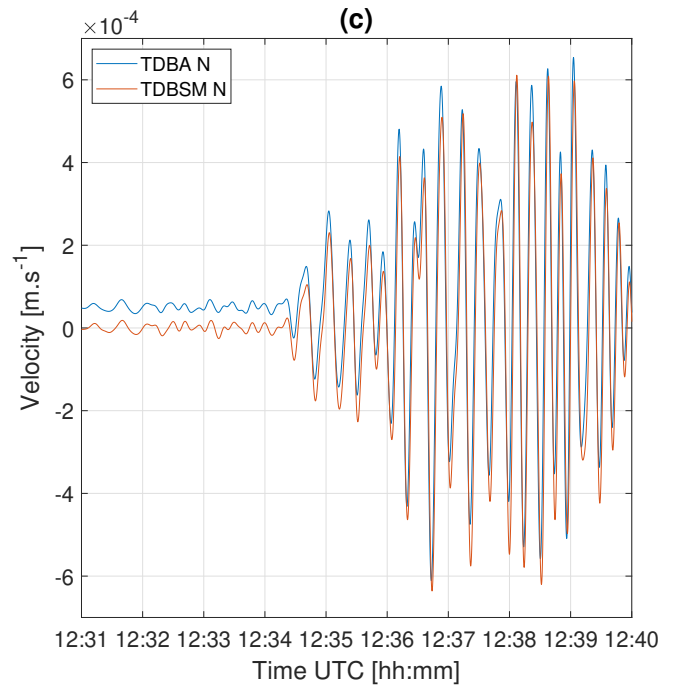
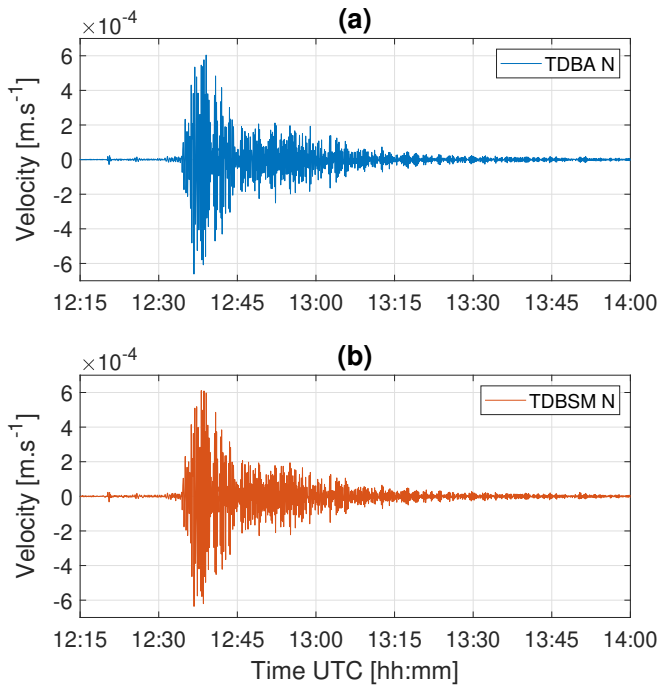
[Supplemental Material](#)

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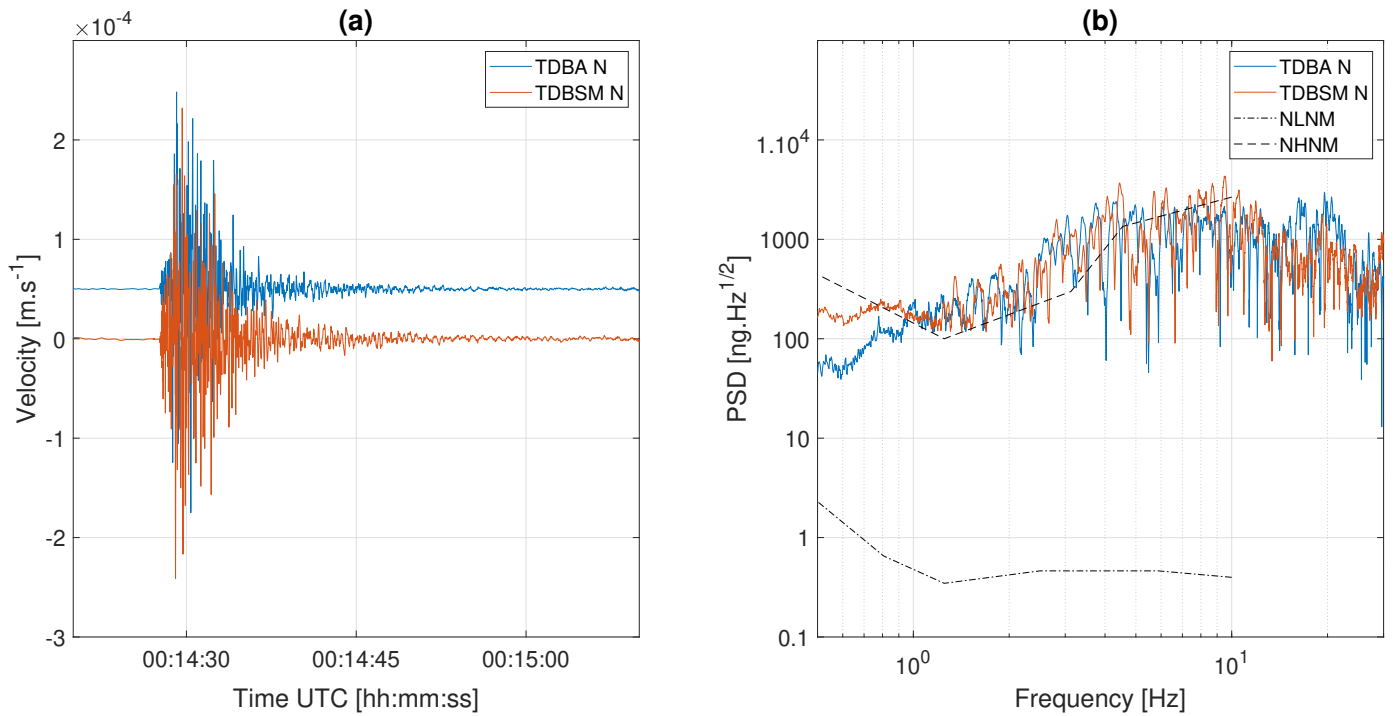
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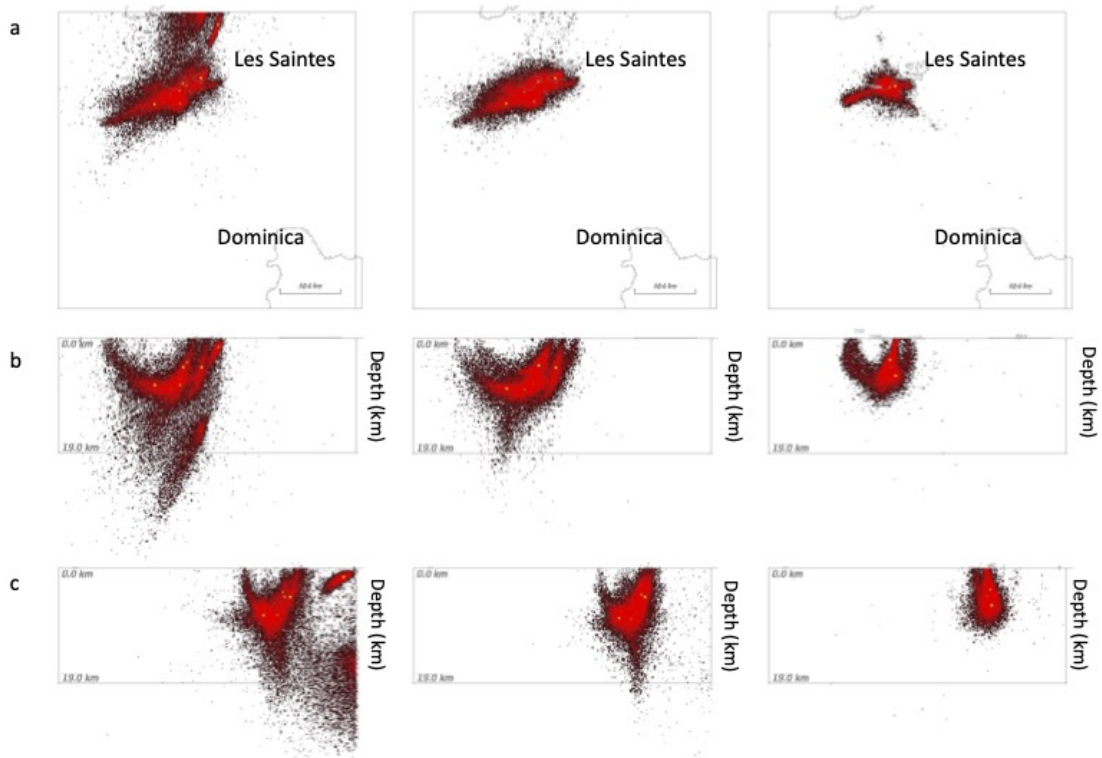


**Fig.A 1.** Velocity record of the 2021 M7.2 Haiti earthquake at TDBSM (red) and TDBA (blue)

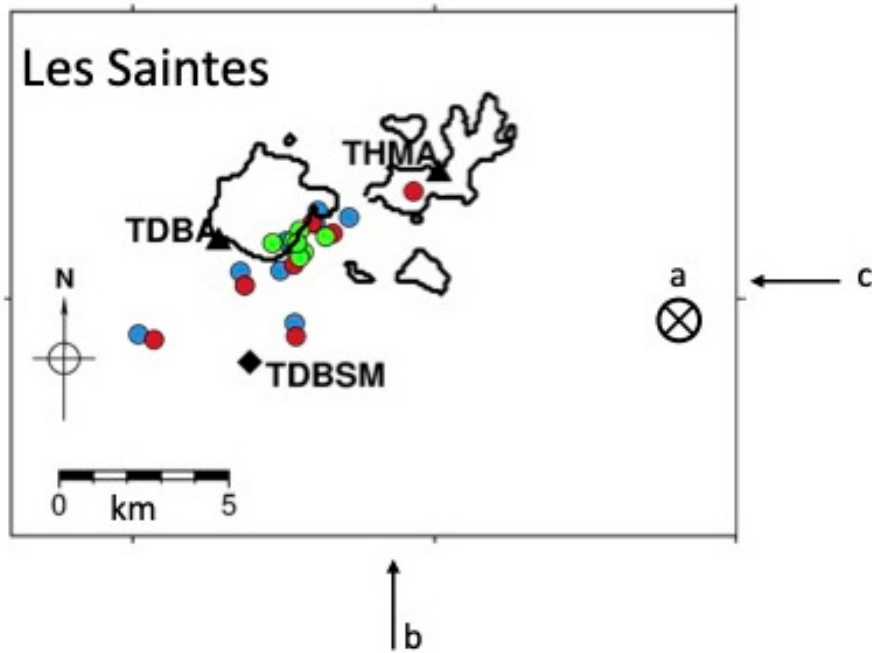
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**Fig.A 2.** Records (comp. N) of a local earthquake (M=4.2, 11/20/2021) at TDBSM(red) and TDBA (blue). left: velocity record. right: PSD of acceleration. Although very similar in amplitude and spectra, the records differ in phase, due to the 4 km interstation distance which is larger than the dominant wavelengths.



**Fig.A 3.** Probability density function (pdf) for the 8 events belonging to the multiplets. Left column: pdf for the OVSG locations without including the TDBSM station, in map (a), in section from south to north (b) , in section from east to west (c). The locations are shown in blue on the map in Fig. A4. Center column : pdf for the OVSG locations including the TDBSM station. Same representations as previously. The locations are in red on the map in Fig. A4. Right column: pdf for the locations obtained using only the 3 stations installed in Les Saintes (TDBA, THMA and TDBSM). The locations are in green on the map in Figure A4.



**Fig.A 4.** Epicenters of the multiplets, located by the NonLinLoc software in the Les Saintes velocity model of Bazin et al. (2010). Blue: location with the OVSG stations without including the TDBSM station. Red: location with the OVSG stations including the TDBSM station. Green: location using only the 3 stations installed in Les Saintes (TDBA, THMA and TDBSM). a, b and c: direction of view for the seismicity plots of Figure A3.