

Design and Validation of a Wide Band Optical Seismometer

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Our recent research in an integrated optical interferometer has led to the development of a very low noise optical seismometer based on such transducer. The performances of the transducer combined with the appropriate technical choices for its integration leads to a seismometer which is able to measure subnanometrics earth displacements over a very wide bandwidth. Our optical seismometer has an intrinsic noise which is at least 10 dB below the seismic low noise model from 10-5 Hz up to 10 Hz. More generally, this seismometer benefits from more than 50 years of experience in geophysic sensors design at CEA.

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Promotional text

Successfull validation of a very wide band optical seismometer.

Oral preference format

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