

## **Planar and spherical bistatic measurement facilities for testing inversion algorithms**

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In this contribution, results from an ongoing collaboration between the INTEC laboratory of the Ghent University (Belgium) and the Institut Fresnel (Marseille) on the elaboration and calibration of two measurement facilities for acquiring scattering data for inversion purposes is reported. The INTEC laboratory has developed an automated planar bistatic scanning system, which is especially suited to conduct subsurface measurements. The spherical free-space measurement system of Institut Fresnel is well-) known in the mean time, but a continuous effort is devoted to improve the quality of the data acquisition. A great challenge here is the acquisition of 3D scattering data from 3D objects. The performance of the planar system is illustrated with measurements and simulations for a number of reinforced concrete samples, while for the spherical system a comparison is made between measurements and simulations for a dielectric cube.





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