

**Experimental works made by the Teledetection and
Experimentation in Microwaves group
of the Fresnel Institute, France**

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The experimental set-up (university area of Marseille Nord (Technopôle de Château Gombert)) is used by the TEM team of the Fresnel Institute. It's a large anechoic Faraday cage (14.20m x 6.50m x 6.50m) (<http://www.loe.u-3mrs.fr/rf.htm>) . Three mechanical positionners installed in the chamber allow to adjust positions of antennas and targets. A lot of configurations are used : monostatic ou bistatic 2D ou 3D with a new spherical positionner. The frequency range is 500 MHz to 26.5 GHz

We can make :

- Measurement of 2D et 3D scattering diagrams :
 - Direct problems : bistatic scattering diagrams, Radar Cross Sections [1].
 - Inverse problems [2, 3].
- Antenna measurements [4].
- Characteristics of materials: permittivity and permeability.

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