

New results of absolute antenna calibrations and related problems

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A new set of anechoic chamber calibrations of geodetic GPS antennae was observed in September 2005. The measurements aimed at the validation and comparison of these laboratory results to the absolute values obtained from the IGS accepted robot calibration by GEO++. Remaining systematic discrepancies and error sources of the anechoic chamber set-up leading to different levels of agreement for different antenna-types between these two methods were studied. These are effects of cables, remaining multipath, and calibration mechanism, among others. Results will be shown for Trimble Zephyr, Leica AX1202 and Dorne Margolin type antennae. In addition experiences of the use of absolute antenna calibration parameter in the German SAPOS network and antenna change related effects will be discussed.