



## **Antenna phase centre corrections (PCO/PCV) and near field effects in the scope of GPS, GLONASS and GALILEO**

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As for all measurement tools, for GNSS as well, it is important to know the position of the reference point. For GNSS this is the position where the electromagnetic wave measurements are referred to. The difficulties for the determination of this point are caused by the interaction of the electromagnetic waves with the surrounding environment and the frequency dependent behaviour. This poster gives a short introduction to the definition and determination of phase centre offsets and variations. It shows and discusses furthermore the problems such as site dependent near field effects. Finally it will discuss the frequency dependent variations of PCO's and PCV's and the techniques to economically calibrate antennas for the different GNSS.