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LAGEOS-2 and Circular Polarization

The use of linear polarization causes an asymmetry in the range correction matrix for satellites with uncoated cube corners. The bias in the range correction is on the order of a couple of millimeters for LAGEOS-2 for single photoelectron systems. For constant fraction detection systems the range correction and the bias depend on the transmitted pulse length. The bias can be removed by using circular polarization.