

Detection and Length and Orientation Measurement of Extended Targets

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Abstract: A method for rapid detection of extended targets and for measuring the length and the orientation in 2D angle space is presented. The detector and the measurements are based on the distribution of the generalized monopulse ratio. The statistical performance of the estimators is given. This method facilitates the initialization of group tracking algorithms and handling partially connected convoy targets. The performance measures may be used as a priori knowledge in tracking.