

عنوان مقاله:

Application of Nonlinear Filtering for Sea Clutter Prediction

محل انتشار:

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خلاصه مقاله:

Application of nonlinear predictor for sea clutter was restricted to sea clutter chaotic model. This paper is concerned with the application of a nonlinear predictor for sea clutter modeled statistically, using a zero-memory nonlinearity (ZMNL) followed by a second order Volterra filter (SVF) as described in [2]. First partial statistical information such as marginal probability density function (PDF) and the covariance structure are exploited. The clutter PDF parameters are estimated by a combinational method based on maximum likelihood and method of moments, resulting in the lowest variance of parameter estimation as mentioned in [5]. The ZMNL transforms the process into a Gaussian process, finally the transformed process is predicted by a SVF. The improvement concerned with application of the nonlinear predictor, when compared with linear one is outlined.

کلمات کلیدی:

K distribution, T/Wv1, homomorphic filter, SVF, ZMNL

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