

The performance of STAP based AE in the beam forming mode is studied. The beam forming is carried out using the Ohio State University approach. Using the measured data for ten GAS-1 CRPA units, it is shown that one needs at least 7-tap STAP to correct for antenna induced carrier phase and code phase biases. Also, errors in the knowledge of antenna manifolds lead to significant increase in the antenna induced biases. In this case, the performance of a 7-tap STAP is no better than space-only processing as long as there are no interfering signals. In the presence of interfering signals, 7-tap STAP performs much better than space-only processing.