

Anti-jam (AJ) performance of some planar as well as some non-planar adaptive antenna arrays in GPS frequency bands (L1 and L2) is discussed. All antenna arrays investigated in this work have similar projected area (looking from top). To make sure that mutual coupling between the antenna elements is accounted for in the performance evaluation, in situ volumetric patterns of antenna array elements are used in this study. It is shown that the non-planar arrays perform significantly better than the planar arrays. This is true for antenna electronics (AE) based on simple power minimization as well as for AE based on beam forming/null steering. It is also shown that one can add more elements to the non-planar antenna arrays for further performance improvement.