

## **On the Study of the Electromagnetic Scattering by Large Obstacle Based on the Method of Auxiliary Sources**

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**Abstract :** We consider fast and accurate solutions of scattering problems by large perfectly conducting objects (PEC) formulated by an optimization of the Method of Auxiliary Sources (MAS). We present various techniques used to reduce the total computational cost of the scattering problem. The first technique is based on replacing the object by an array of finite number of small (PEC) object with the same shape. The second solution reduces the problem on considering only the half of the object. These two solutions are compared to results from the reference bibliography.

**Keywords :** method of auxiliary sources, scattering, large object, RCS, computational resources

**Conference Title :** ICTTA 2015 : International Conference on Telecom Technology and Applications

**Conference Location :** Venice, Italy

**Conference Dates :** November 09-10, 2015