4 Conclusions

The presented research has investigated the capabilities and advantage of a bistatic approach for landmine recognition. In particular, three different representative landmines have been investigated, each of them with a different external and internal design. The outcomes demonstrated that acquiring the signature changing the transmitter and receiver separation could yield additional information on the eventual presence of internal components, feature which is unlikely to be present in commonly encountered clutter objects. Hence, the possibility of detecting this feature, which can be considered as a discriminant characteristic, could significantly improve the performance of GPR and enhance its deployment as a landmine detection sensor. These results should be compared to the equivalent signatures of clutter targets, to further demonstrate the efficacy of this acquisition approach.

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