Scattering Modeling for Complex Radar Target based on Space Mapping Technique

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Space mapping is used to combine the efficiency of high frequency asymptotic method and accuracy of full wave method.
The flowchart of the proposed method

1. Full-wave simulation
2. Frequency domain
   Surrogate model based on
   space mapping
3. High-frequency
   asymptotic simulation
4. samples over the whole interested
   range with high sampling rate
The training strategy for the proposed surrogate model based on space mapping in frequency domain
The sketch map of the iterative infilling criteria
The solid model of complex radar target, the top is the perspective view, the bottom two figures are the top view and side view, respectively.
The real part and imaginary part of the proposed surrogate model based on space mapping in frequency domain.
Thanks!