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To: EDGES Group  
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Subject: Automated S11 measurement system calibration

Several algorithms are possible. Here is one used for comparison:

In the lab:

- 1] Put calibration SOL at reference plane
- 2] Solve for S-parms using SOL models based on datasheet
- 3] Get data for internal SOL
- 4] Solve for S11 values for internal SOL using S-parameters from step 2.

In the field with antenna at reference plane and internal SOL available via switch:

- 5] Get internal SOL data
- 6] Solve for S-parameters using values of internal S11 for SOL from step 4.
- 7] Get antenna data
- 8] Solve from corrected antenna S11 using S-parameters from step 6.