

Data Comparison in EMC

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ABSTRACT:

EMC data comes in many shapes and sizes but mostly shares one common feature: it needs to be compared with something else. This may be against limit lines or against other simulations or measurements. The comparison against limit lines needs little explanation but there are several circumstances that do merit further review. This session looks at a couple of subsets of such comparisons. It focusses on:

- An approach to limit variation in human responses where ‘eyeballing’ data sets is needed.
- Using the IELF (integrated error against log frequency) technique to compare data sets that are ‘grassy’ or ‘noisy’ in nature.
- Using the FSV (Feature selective validation) technique for data sets that have many readily definable features, which sit between the ‘grassy’ data and the generally smoother data for which standard statistical techniques might be applied (correlation and similar are not discussed in this tutorial).

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Gang Zhang was born in Tai’an, China, in 1984. He received the B.Sc. in electrical engineering from China University of Petroleum, Dongying, China, in 2007, and the M.Sc. and Ph.D. degrees in electrical engineering from Harbin Institute of Technology (HIT), Harbin, China, in 2009 and 2014, respectively.

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