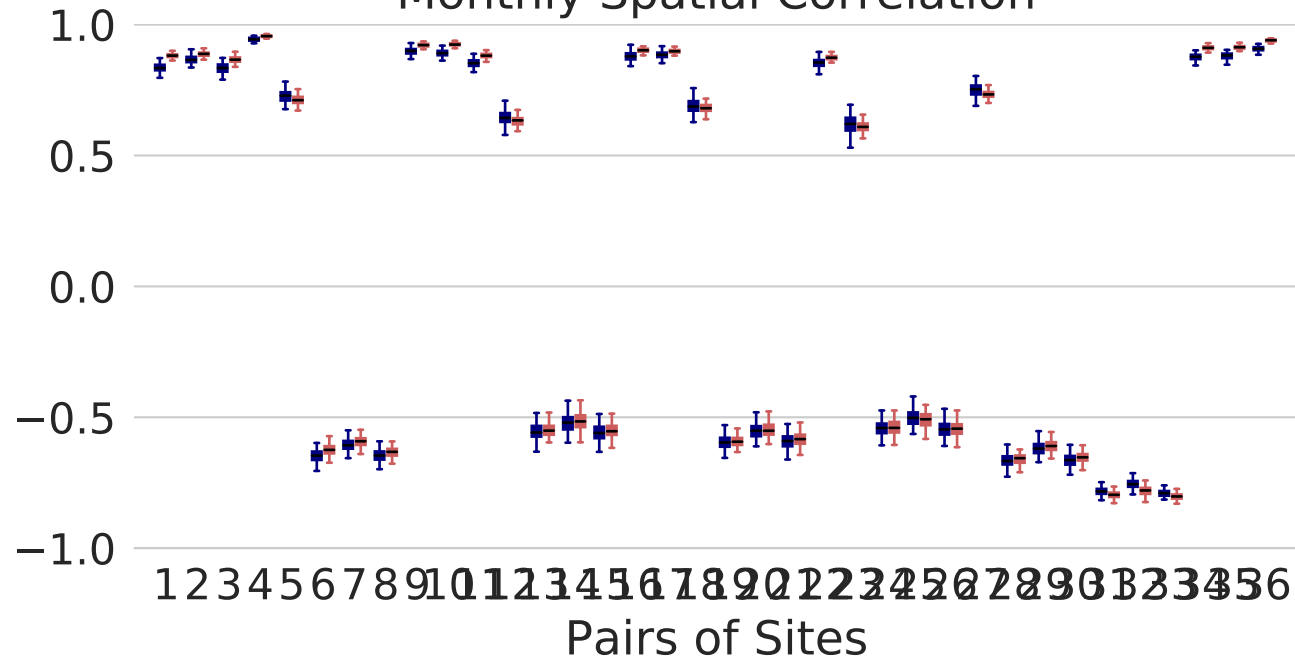Log Space Pairwise Correlation