

This link contains (1) an outline of key algorithmic steps for modeling the product-moment correlations between two variables within a longitudinal data based on the methodology proposed in Tu et al. (2007) and (2) a collection of sample SAS programs for inference of such correlations under missing data. The algorithmic outline is found in "Algorithm\_outline.pdf."

Step 1 is to test the missing completely at random (MCAR) assumption under MAR. The sample sas code "Logistic\_Model\_Code.sas" performs this step. Under MCAR, Step 3 is to make inference of product-moment correlations over time and the sample code: "Correlation\_Code.sas" performs this step. We are currently developing the code for calculating the asymptotic variance of the inversely probability weighted Pearson correlation estimators for Step 2 of the algorithm and will post it as soon as it is ready for distribution. Details about the methodology can be found in Tu et al. (2007) and a related publication Tu et al. (2006).

1. Tu, X.M., Feng, C., Tang, W., Kowalski, J., Wang, H., Wan, C. and Ma, Y.: Correlation analysis for longitudinal data: Applications to HIV and psychosocial research, provisionally accepted for publication by Statistics in Medicine upon revision.
2. Tu, X.M., Kowalski, J., Crits-Christoph, P., and Gallop, R.J.: Power analyses for correlations from clustered study designs. *Statistics in Medicine*, 40: 2587-2606, 2006.