

## README MTGSAM utilities

The MTGSAM utilities are being distributed in a compressed format. If the files are obtained using FTP, make sure to use a binary file transfer; i.e., issue a "binary" command before the "get" command. If you have trouble with file transfers, please contact your local computer expert. To decompress the files, obtain a copy of MTGSUTIL.EXE, and execute that file. Several files will be created in the subdirectory containing the MTGSUTIL.EXE file. The files included are:

HERITCOR.FOR	Generates sample file of heritabilities and correlations from variance components sample file
LAGCOR.FOR	Calculates correlations of variables in sample file
MNSAMP.FOR	Calculates mean of sampled values (useful to evaluate an unfinished chain)
PULLDAT.FOR	Copy Gibbs samples from sample files to text file
PULLMAT.FOR	Copy Gibbs samples from sample file to a MATLAB data file that can be "load"ed using commercial MATLAB
COMPHC.BAT	Compiles batch file for HERITCOR.FOR
HERITCOR.MAK	Makes file for HERITCOR.FOR (links with several external subroutines from MTGSAM)
LAGCOR.M	MATLAB subroutine to calculate lag correlations (for commercial MATLAB; not public domain version)
MTGSUTIL.DOC	Program description

An additional utility program that users may find useful is GIBBSIT by Raftery and Lewis. This program provides some burn-in and thinning analysis. Data need to be in a text format for those programs to be used. That program can be obtained from StatLib at <http://ftp.uni-bayreuth.de/math/statlib/S/gibbsit>. The StatLib home page is at <http://ftp.uni-bayreuth.de/math/statlib/oldindex.html>.

As a reminder, please make sure to let us know if you are using the programs. Fill out the user information form (<https://www.ars.usda.gov/ARUserFiles/80420530/AIP%20software/mtgsam/userinfo.txt>), and e-mail the file to Curt Van Tassell.

The program was developed and tested using Microsoft Fortran Powerstation. The source code is intended to be portable. It has not been tested with any other compilers. If there are compiler-specific problems, please let us know about them.