

Definition Liverpool Format (csv)

A Liverpool format file is a CSV file, which can contain data for multiple specimens. Each specimens starts with a header, followed by the data and ends with an END statement, then the next header is given for the next specimen, etc.

The first field of the header is the specimens name, the rest of the header fields are ignored [name ,]. The header is followed by the data in specific order: [RefNum, MW Pwr, MW Time, X, Y, Z, Mass, H int, H Dec, H inc, Date, Time, Comment, StepNum, StepType, MW Gain, MW integral, JR6 Err, FiT Err, Utrecht Err, AF Peak, TH Peak].

File format – Liverpool Format

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[name0], 99, 999, 0, 0, 0, 0, 0, 0, 0, MW-PI-IZZI+, Name, Tristan, Tristan, , 20130828, DBMWV2New_20130911, 0.08, 2500
[RefNum0], [MW Pwr0], [MW Time0], [X0], [Y0], [Z0], [Mass0], [H int0], [H Dec0], [H inc0], [Date0], [Time0], [Comment0], [StepNum0], [StepType0], [MW Gain0], [MW integral0], [JR6 Err0], [FiT Err0], [Utrecht Err0], [AF Peak0], [TH Peak]
[RefNum1], [MW Pwr1], [MW Time1], [X1], [Y1], [Z1], [Mass1], [H int1], [H Dec1], [H inc1], [Date1], [Time1], [Comment1], [StepNum1], [StepType1], [MW Gain1], [MW integral1], [JR6 Err1], [FiT Err1], [Utrecht Err1], [AF Peak1], [TH Peak]
[RefNum2], [MW Pwr2], [MW Time2], [X2], [Y2], [Z2], [Mass2], [H int2], [H Dec2], [H inc2], [Date2], [Time2], [Comment2], [StepNum2], [StepType2], [MW Gain2], [MW integral2], [JR6 Err2], [FiT Err2], [Utrecht Err2], [AF Peak2], [TH Peak]
[RefNum3], [MW Pwr3], [MW Time3], [X3], [Y3], [Z3], [Mass3], [H int3], [H Dec3], [H inc3], [Date3], [Time3], [Comment3], [StepNum3], [StepType3], [MW Gain3], [MW integral3], [JR6 Err3], [FiT Err3], [Utrecht Err3], [AF Peak3], [TH Peak]
END
[name1], 99, 999, 0, 0, 0, 0, 0, 0, 0, MW-PI-IZZI+, Name, Tristan, Tristan, , 20130828, DBMWV2New_20130911, 0.08, 2500
[RefNum0], [MW Pwr0], [MW Time0], [X0], [Y0], [Z0], [Mass0], [H int0], [H Dec0], [H inc0], [Date0], [Time0], [Comment0], [StepNum0], [StepType0], [MW Gain0], [MW integral0], [JR6 Err0], [FiT Err0], [Utrecht Err0], [AF Peak0], [TH Peak]
[RefNum1], [MW Pwr1], [MW Time1], [X1], [Y1], [Z1], [Mass1], [H int1], [H Dec1], [H inc1], [Date1], [Time1], [Comment1], [StepNum1], [StepType1], [MW Gain1], [MW integral1], [JR6 Err1], [FiT Err1], [Utrecht Err1], [AF Peak1], [TH Peak]
[RefNum2], [MW Pwr2], [MW Time2], [X2], [Y2], [Z2], [Mass2], [H int2], [H Dec2], [H inc2], [Date2], [Time2], [Comment2], [StepNum2], [StepType2], [MW Gain2], [MW integral2], [JR6 Err2], [FiT Err2], [Utrecht Err2], [AF Peak2], [TH Peak]
[RefNum3], [MW Pwr3], [MW Time3], [X3], [Y3], [Z3], [Mass3], [H int3], [H Dec3], [H inc3], [Date3], [Time3], [Comment3], [StepNum3], [StepType3], [MW Gain3], [MW integral3], [JR6 Err3], [FiT Err3], [Utrecht Err3], [AF Peak3], [TH Peak]
END
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The format is similar for Thermal and Microwave Thellier protocols, explanation of the fields an which are needed for the different protocols:

RefNum	– reference number (optional)
MW Pwr	– microwave power [W] – obligatory for MW Thellier
MW Time	– microwave time [s] – obligatory for MW Thellier
X, Y, Z	– components of the magnetization [10^{-9} Am ²] – obligatory for Thermal & MW Thellier
Mass	– mass of the sample [grams](optional)
H int, H Dec, H inc	– strength and direction of applied lab filed – obligatory for Thermal & MW Thellier
Date, Time	– optional
Comment	– optional comments
StepNum	– step number, same number for corresponding I,Z & P steps – obligatory for Thermal & MW Thellier
StepType	– type of step, NRM, Z (zero-filed), I (in-field), P (pTRM check), T (pTRM-tail-check), O (ignore step), Anisotropy Ax+, Ax-, Ay+, Ay-, Az+, Az-, Axc (alteration check for Ax+) – obligatory for Thermal & MW Thellier
MW Gain	– microwave gain (optional)
MW integral	– microwave integral – obligatory for MW Thellier
JR6 Err, FiT Err, Utrecht Err	– error on the magnetization measurement (optional)
AF Peak	– alternating field step [mT]
TH Peak	– temperature step [°C] – obligatory for Thermal Thellier