Name: LS-TOOL

Developers: Hongming Zhang, Qinke Yang, Rui Li, Jie Zhang, Chen Yan, Jinxiang Wang, Xian Chen, Qingrui Liu.

Contact address: Xinong Road 22

Northwest Agriculture & Forest University 50#

712100 Yangling city Shaan Xi province

China

Tel. +86 29 87019577, +86 29 87012061, +86 29 87081249, Fax. +86 29 87012210

E-mail: qkyang@nwu.edu.cn, zhm@nwsuaf.edu.cn

Year first available: 2010

Hardware required: IBM compatible PC

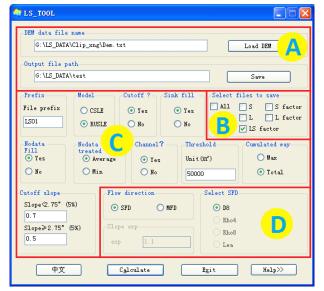
Software required: MS Windows version XP or higher

Program language: C# .NET 2005

Program size: dotnetfx 28.2MB, Setup.exe 2.19MB Availability: Freely available for non-commercial use.

The graphical user interface (GUI) of LS-TOOL is shown in following figure. The four areas most relevant for calculation of the LS factor are denoted in red from A to D and their functionality can be explained as follows:

- (1) Area A: Selection of the DEM file and output file path,
- (2) Area B: Selection of which file(s) to save, S: slope steepness L: slope length, S factor, L factor or ALL,
- (3) Area C: Calculation options. Including file prefix, models, use of the cutoff or not, whether to fill nodata or sink cells, how to fill nodata cells (average value or minimum value of surrounding eight cells), consider channel or not, threshold of accumulated area, set cutoff slope value,
- (4) Area D: Algorithm options, single-flow direction (sfd) or multiple-flow direction (mfd).



The graphical user interface (GUI) of LS_Tool. The areas denoted by the red letters A, B, C and D are referred to in the text where details are provided.