To: Users of the Walkabout computer software
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memorandum

Software Release Notice for Walkabout 1.2

Platforms supported: Executable files for Walkabout Version 1.2 are available for the Apple Snow Leopard operating system and for 64bit versions of the Linux operating system.

Disposition of previous versions: Version 1.2 supersedes previous versions.

Description of the changes:

1. Includes a slightly modified algorithm that eliminated a problem with numerical roundoff that caused the code to enter an infinite loop on rare occasions when searching for the computational cell containing the current particle.

2. Includes a new time step control algorithm that eliminates spurious steps in situations of a very large contrast in velocity.

Description of testing: All verification and acceptance tests, as documented in the Walkabout User's Manual, were executed on the LANL Quad Core MacPro computer denoted LiveOak. Results are identical to those shown in the Users Manual except for statistical fluctuations, which are expected for a Monte Carlo algorithm. A limited subset of verification tests were also executed on the LANL computer denoted Aquifer, which runs the Linux operating system. Results of those tests were identical to those shown in the Walkabout User's manual, except for expected statistical fluctuations. Input and output files and results of all testing are archived in the Walkabout Software File.

Status of the User's Manual: The User's Manual for Walkabout has been updated to Version 1.2. Release is pending issuance of a Los Alamos Unclassified Release (LA-UR) number.