Preface

The electronic version of this report[1] makes the included programs and applications available to the reader. The markings [ER], [CR], and [NR], are promises by the author about the reproducibility of each figure result.

Reproducibility is a way of organizing computational research, which allows both the author and the reader of a publication to verify the reported results at a later time. Reproducibility facilitates the transfer of knowledge within SEP and between SEP and its sponsors.

ER denotes Easily Reproducible and are the results of a processing described in the paper. The author claims that you can reproduce such a figure from the programs, parameters, and makefiles included in the electronic document. The data must either be included in the electronic distribution, or be easily available (e.g. SEG-EAGE data sets) to SEP and non-SEP researchers. The data may also be available in the SEP data library, which can be viewed at http://sepwww.stanford.edu/public/docs/sepdatalib/toc_html/. We assume you have a UNIX workstation with Fortran, Fortran90, C, X-Windows system and the software downloadable from our website (SEP makerules, SEPlib, and, to properly reproduce the documents, the SEP latex package). Before the publication of the electronic document, someone other than the author tests the author's claim by destroying and rebuilding all ER figures. Some ER figures may not be reproducible by outsiders because they depend on data sets that are too large to distribute, or data that we do not have permission to redistribute but are in the SEP data library.

CR denotes Conditional Reproducibility. The author certifies that the commands are in place to reproduce the figure if certain resources are available. SEP staff have only attempted to make sure that the makefile rules exist and the source codes referenced are provided. The primary reasons for the CR designation is that the processing requires 20 minutes or more, or commercial packages such as Matlab or Mathematica.

M denotes a figure that may be viewed as a movie in the web version of the report. A movie may be either ER or CR.

NR denotes Non-Reproducible. This class of figure is considered non-reproducible. SEP discourages authors from flagging their figures as NR except for artist drawings, scannings, etc.

Our testing is currently limited to IRIX 6.5 and LINUX 2.1 (using the Portland Group Fortran90 compiler), but the code should be portable to other architectures. Reader's suggestions are welcome. For more information on reproducing SEP's electronic documents, please visit `<http://sepwww.stanford.edu/redoc/>`.

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[1] http://sepwww.stanford.edu/private/docs/sep103