P3800 Project Marking Scheme

Completion of tasks 40

- Marks divided over all specific tasks. For a task to be complete, codes need to be written and produce the correct result, and non-coding-related questions answered.

Submission format (executable scripts, does everything compile and run?) 10

- Instructor should be able to run ./run_project.sh (or equivalent) on alfven and all codes should then compile, run and produce results, with summaries appearing on the screen.
- Files should have the correct permissions.
- Latex file should compile.
- The command *make clean* should remove all object code and compiled executables.

Functionality and commenting of scripts and codes 10

- Source codes and scripts should be understandable
- Codes should not be excessively complicated
- Codes should produce all required output

Writing 20

0 – No text describing results and/or original text of project description largely intact
4 – No text describing results, but appropriate headings are given
8 – Some attempt was made at writing up the report
12 – All tasks and/or results described
16 – Sufficient background included to describe what is being done
20 – All writing flows well, or appropriate length, with good style and practically no grammatical or typographical errors

All results should be reported in the main text, not just in the captions.

Do not include the original questions in your report. Include enough background, equations etc so that your report is a stand-along document that makes sense to a reader unfamiliar with the project. Brevity is good, but make sure to include enough information.

Deductions may be made for poor spelling, grammar, and writing too much (this last one is rare).

Latex must-dos and deductions:
- Variables (like x, t, etc) must appear in math font (e.g. x) in the main text, not just in the equations.

- Equations and figures should be labelled with, e.g., \lable{figname}, and then referenced using that label, e.g., Fig.~\ref{figname}. Do not explicitly write something like "Fig.~1" or "Eq.~2". (The ~ is used to avoid a double space after a period.)
- Do not report numbers in the format like 1.23e-12, use 1.23×10^{-12} instead.
- There should be a space between number and unit, and units should not appear in italics, e.g. 100 K, not 100K or 100 *K*. In Latex, 2.0 g/cm^2 can be rendered 2.0~g/cm^2
- Double quotes in Latex are rendered using two backticks `` (top left on most keyboards) followed by two single quotes (next to Return key on many keyboards). Consider using a different or modified font (like italics) instead of quotes.
- Chemical elements are not italicized, e.g., CO$_2$, not CO_2.

Figures and captions 10

Deductions for (list not exhaustive)
- Font too small for axes labels and legend entries
- Inappropriate scaling of axes
- Use of PNG or other bitmap/rasterized image files: use eps or pdf files for always-crisp lines and fonts
- Curves for different data sets are not sufficiently distinguishable
- Inclusion of a title on the graph itself
- Lack of a frame around the graph
- Caption that does not start with the equivalent of a title
- Caption that does not describe the curves/data plotted

Analysis and discussion of results 10

Up to 6 - little or no discussion
7 - reasonable job
10 - results linked to creative insights, other parts of the course, literature