Your assignment is to modify an `SConstruct` to combine the acoustic FD modeling code modified in an earlier assignment in order to generate an image by reverse-time migration. Your task is to identify Madagascar programs necessary to implement reverse-time migration using appropriate `Flows` in `exercise/SConstruct`. Explain in detail how your imaging procedures work.

The procedure: forward modeling,backward modeling by reversed data, then reverse wavefield, apply imaging condition to form the image

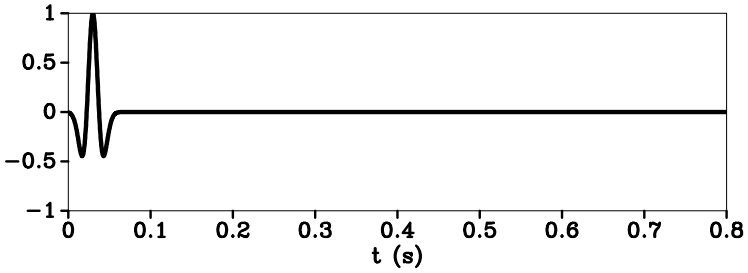

Figure 1: Wavelet.

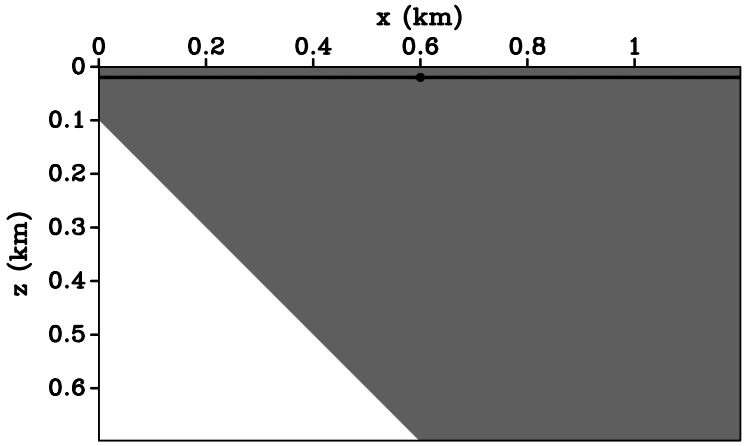

Figure 2: Velocity.

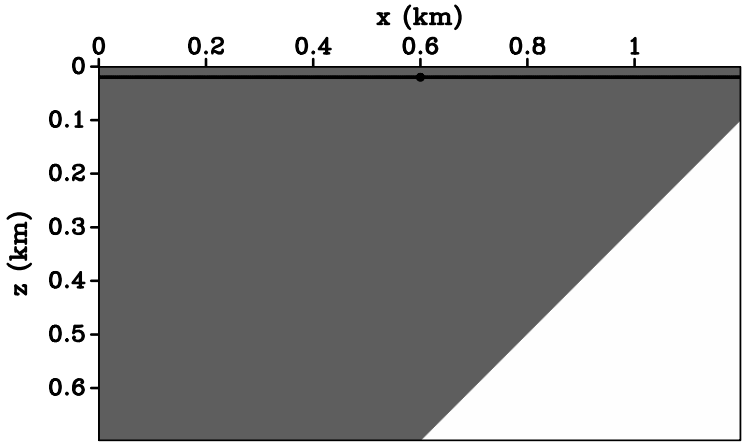

Figure 3: Density.

LOGISTICS

1. Run `scons` in the `CODE` directory to rebuild the modeling code.
2. Run `scons view` to view figures constructed with your modified code.
3. Run `scons lock` to copy the new results to the storage directory.

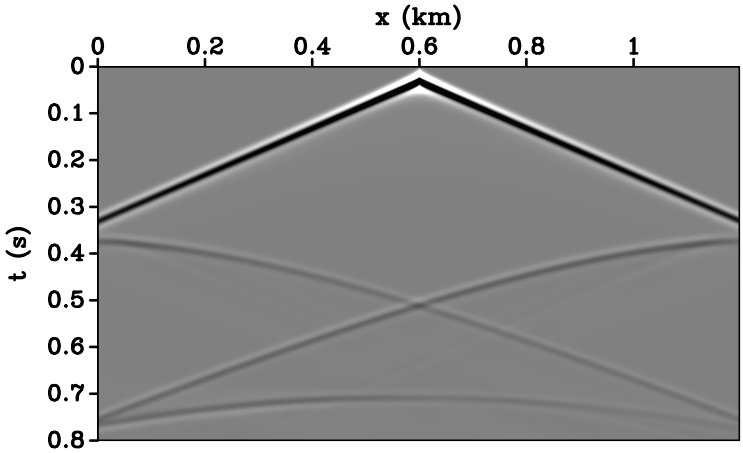

Figure 4: Data.

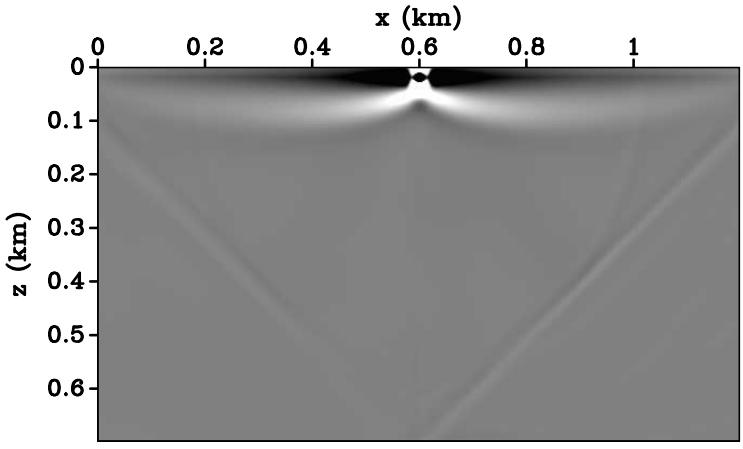

Figure 5: Image.

4. Run `scons handout.read` to build your answer. A PDF file is constructed using your newly created figures and modifications to the text. The modified code is automatically added to the document.

WRAP-UP

Once you are satisfied that your document looks ok, upload it to Canvas.

N.B. This is an individual assignment – your work is subject to the Mines Academic Integrity policy.