

# Buoyancy waves generated by bell-shaped mountain as a model test (exercises)

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## Tasks

Task 1: Construct a test with linear hydrostatic flow over bell-shaped orography. Compare the outputs of hydrostatic and nonhydrostatic models. Use `gnuplot` script `gptemplate` as template for output figures

Task 2: Construct a test with linear non-hydrostatic flow over bell-shaped orography. Compare the outputs of hydrostatic and nonhydrostatic models. Use `gnuplot` script `gptemplate` as template for output figures

## NB and Hints

- To define different flow fields you need to edit `wp.c`
- See `Run_template` script for a possible worksession.
- Make sure that the `wp` `outputfilename` and `filename` in the `gnuplot` script coincide
- Adjust contour level parameters of `gptemplate` to reasonable values
- If the continuation of the information on right hand side is visible on left upper corner try to increase horizontal size of the area.
- Adjust horizontal dimensions of `gptemplate`