

# EAS372    Assignment 3 (15%)    Due: Fri. 25 Apr., 2014

## Weather Case Study

Document a “live” storm in North America (or elsewhere<sup>1</sup>) occurring this term. Focus primarily on the performance of Numerical Weather Prediction in relation to the observed weather, but secondarily, too, on the mechanism of development and/or decay as per mechanisms emphasized by the quasi-geostrophic model (i.e. vorticity advection and thermal advection). Your report might draw on the following categories of information:

- the prognosis (or prognoses) first suggesting (or, failing to suggest) the event
- official (e.g. Envir. Cda. public) forecasts and available informal forecasters’ commentary
- the actual event as depicted in (e.g.) radar images, EC weather reports, press commentary
- the actual event as depicted in standard weather analyses, soundings, satellite images
- key fields (e.g. horizontal divergence, vorticity advection, thermal advection, omega) depicting the actual event, using web sites given at <https://courses.eas.ualberta.ca/eas372/urls>. or elsewhere.

**Format:** Please submit a tidy, organized report.

- in electronic copy
- maximum of **six** pages of narrative, in font size 12, double spaced
- plus up to **fifteen** properly captioned and *relevant* images, charts, tables or figures
- narrative must make clear why each image (etc.) relates to the “story”
- assume your readers are trained meteorologists (as opposed to the general public)

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<sup>1</sup>Please bear in mind that if you choose a remote location, it may be harder to obtain meteorological data.