Climate Model Analysis Project

The attached are 3-D (latitude, longitude, altitude) cloud ice (cli) distributions simulated by two climate models (am3 and am4).

The task is to analyze and identify the differences of the two model results.

To start, the tasks are:

1. Plot latitude versus longitude maps of cli at three different altitudes (pressure levels): 150 hPa, 600 hPa and 900 hPa and analyze the difference between the two models.
2. Average cli values for all longitude and plot zonal-mean, i.e. latitude versus pressure level of cli.
3. Average cli values for all longitude and latitude and plot cli profiles.
4. Write a 2-page report. The overall objective is to determine the differences between the two models.