Nina Otter* (otter@math.ucla.edu), Kristian Strommen, Matthew Chantry and Joshua Dorrington. The topology of climate data. Preliminary report.

We use persistent homology, a method in topological data analysis that allows to study the "shape of data", to analyse some well-known data sets of weather regimes. Finding patterns in these measurements is believed to be crucial for our understanding of climate, and standard data analysis methods currently fail at this task. (Received September 15, 2020)