Raspberry Pi Foundation

Classifying data from the world's oceans — Project brief

About Argo

Argo is an international programme that uses robotic instruments (floats) to collect data about the temperatures and the concentration of salt (salinity) in the world's oceans. The floats drift with the ocean currents and move up and down between the surface and a mid-water level.

When the floats return to the ocean surface, they make a connection with a satellite so that the data collected can be retrieved.

The temperature data has helped scientists make more accurate predictions about sea level rises. The changes in salinity monitored by Argo also allow scientists to study the changes in global rainfall patterns.

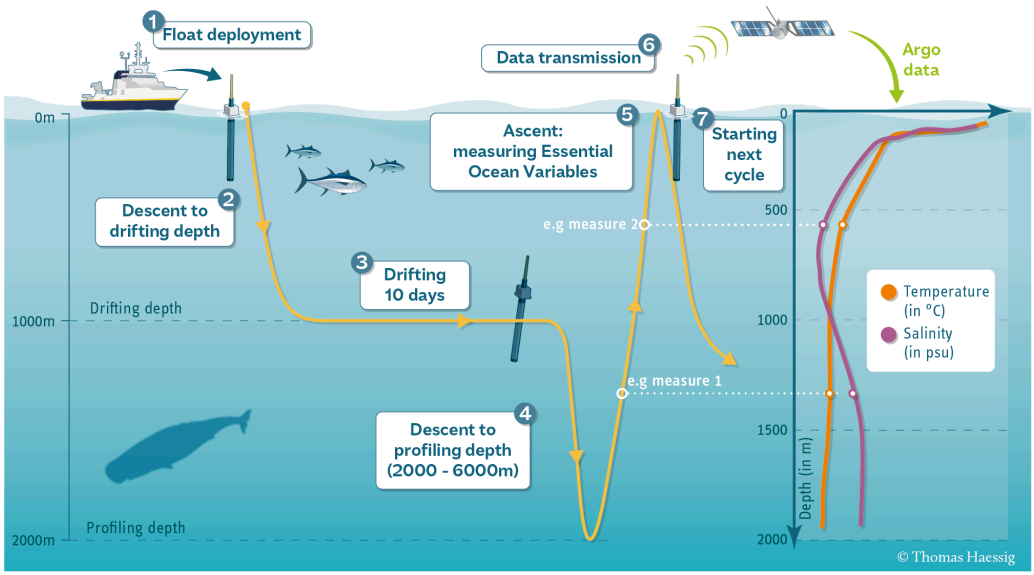

Image source: argo.ucsd.edu

The problem

Some of the equipment on the floats has become faulty and the location data is not being received by satellites. This means that scientists are unable to use the data to help them with their research.

Your task is to train a machine learning model that will predict the location of each float that has failed to send back its location data.

Sample of the data

temperature	salinity	region
5.0481	32.607	subtropical
0.4268	33.428	polar
28.292	35.0672	tropical