Machine learning prediction of bluebottle's presence along the Australian coast:

Master project for Data Science

Many Australians have had a painful bluebottle sting when swimming at the beach, yet little is known about the bluebottle, and when they will arrive, and if it will be in large swarms or only a few individuals.

The bluebottle (*Physalia physalis*) is a colonial animal that floats on the ocean surface and is transported by the currents and the wind. In the framework of the BluetbottleWatch project, we aim to investigate machine learning techniques for their prediction.

Aims

Develop machine learning models, and compare their results and efficiency in predicting the presence of bluebottles along the Australian coast.

Datasets available:

- Bluebottle stings (since 2004), presence/absence surveys (NSW, since 2004: ~2000 presence, 70,000 absence), citizen science data.
- Environmental predictors: wind and ocean currents speed and direction, waves height and direction for each bluebottle observation.

Questions:

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