# Cope comet landform classification

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# 1. Objective

Apply image classification (<https://developers.google.com/earth-engine/guides/classification>) and image segmentation (<https://en.wikipedia.org/wiki/Image_segmentation>) to obtain landform characteristics of river deltas

# 2. Approach

Use Google Earth Engine in python, with Jupyter notebooks running in Google Colab, shared in Google Drive

## 2.1 Image classification

Use supervised ML techniques to train a classifier to identify deltas <https://colab.research.google.com/github/giswqs/geemap/blob/master/examples/notebooks/32_supervised_classification.ipynb>

Needs training dataset (pick cells we know are deltas)

Needs data to source (collect rasters that we think will predict delta occurrence)

## 2.2 Image segmentation

Use objective based methods to link neighbouring river delta pixels

<https://developers.google.com/earth-engine/guides/image_objects>