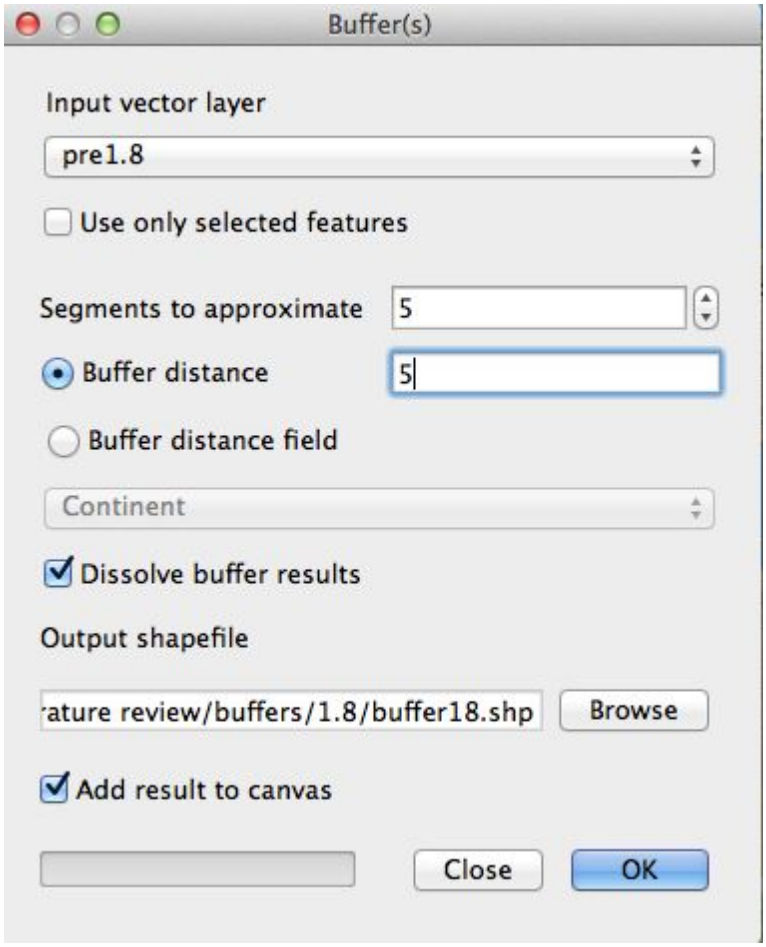
GIS pipeline for creating maps of ranges

This has not been performed manually. Points 1-4 were converted into a script and executed in a batch mode. The description of the algorithm was kept as part of the documentation.

1. Create a buffer

Use vector -> geoprocessing tools -> buffer

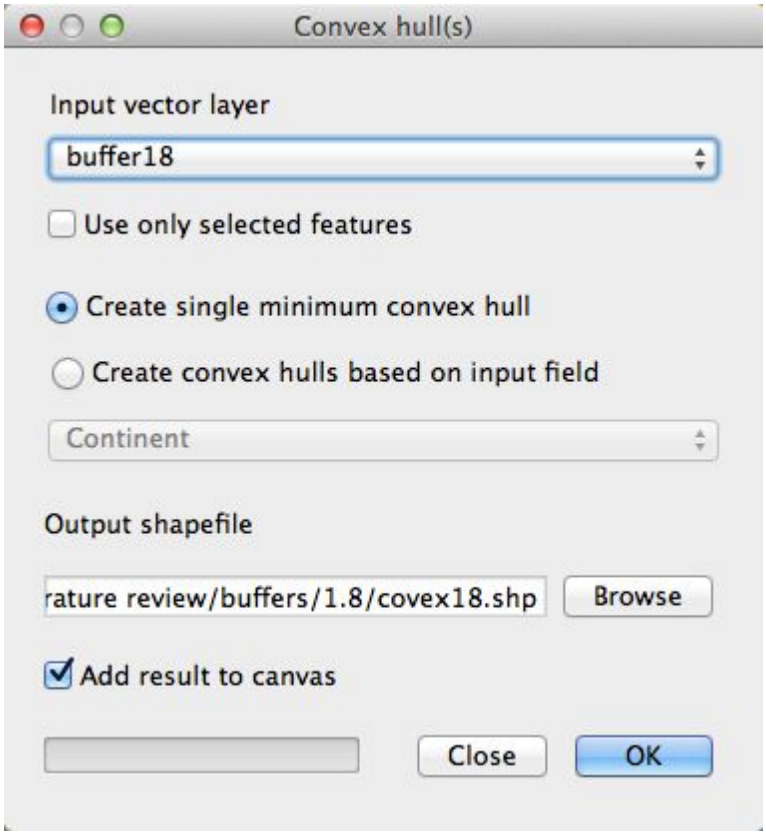
   a. Input layer - points in a given time slot
   b. Segments to approximate - default 5
   c. Buffer distance 5
   d. Tick dissolve buffer results
   e. Name output files



2. Create a convex hull

Use vector -> geoprocessing tools -> convex hulls

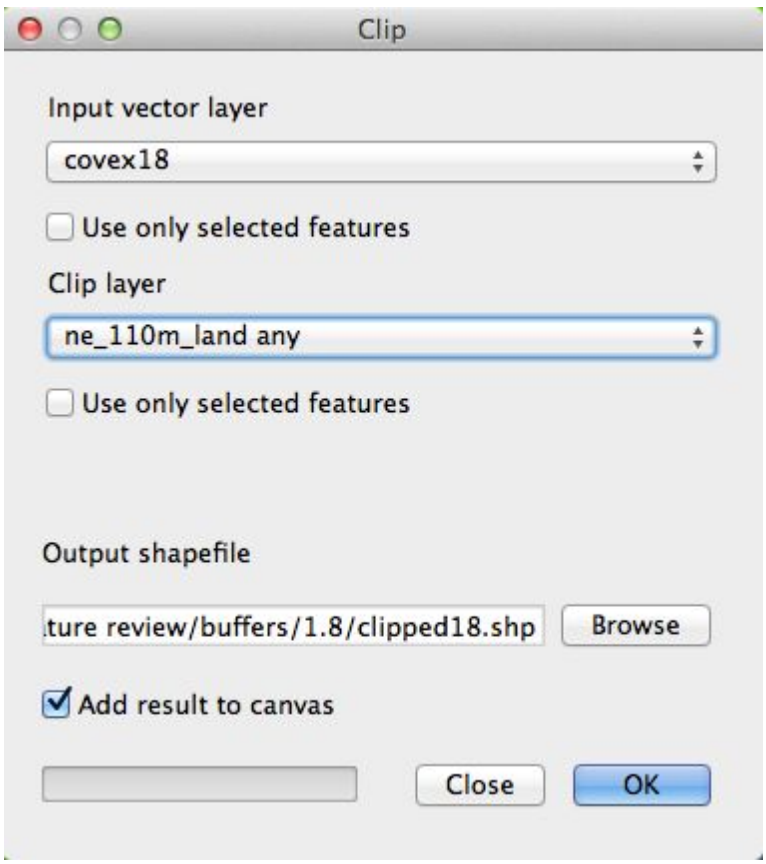
   a. Input vector layer - buffer layer
   b. Create minimum convex hull
   c. Name the output file



3. Clip the layer to the continents

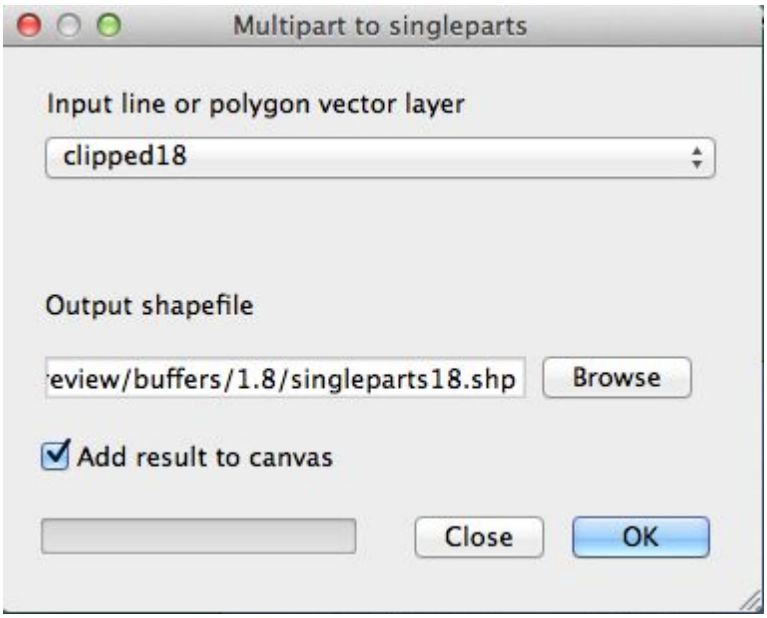
Use vector -> geoprocessing -> clip

a. Input vector layer: covex
b. Clip tone_110m_land any
c. Name the output file



Use vector -> geometry tools ->multipart to singleparts

A. Input: clipped
B. Name output file



Use selection tool to select landmasses (e.g. islands) that fell into the polygon.

Enter edit mode

Click on e.g. madagascar, it will turn yellow and hit backspace to remove. Similar other islands.
Exit the edit mode

4. Stylise the layers
    a. Click on the multiqml plugin button

    b. Choose the layers that need changing
    c. Fill_final(1 or 2 or 3).qml depending on the ‘reliability’ score
        color: red
        Fill: gradient fill
        Transparency: 50%
        Layer transparency: depends on the ‘reliability’ score