

## Online tool guide

The online tool comes in the form of an R app. For review, this app is enclosed in a zip file. Unzip the file, and then open R with working directory set to the resulting 'PhysicalNetworkAustraliaApp' directory (this should be the directory containing physNetworkInt.R, the test\_app folder, and two .csv files). Run all code within the 'physNetworkInt.R' script, this should load or install all necessary packages and open the app to your default web browser. Settings can be changed in the top left section (Panel 1 of Figure A6), including the relative weightings of each voyage type, the year of data to be considered, a 'baseline' year to allow visual comparison of the regions of greatest increase, and choosing between number of flights and number of passengers to weight passenger flights, and similarly between last port of call only, or including previous stops along a given flight number.

As you change various settings, the remaining panels will update to reflect them. Panel 2 shows a map presenting a visual representation of the cumulative weighted impact into Australia from each source region. Panel 4 gives a list of the top 10 source regions under the given choice of parameters, and the contributions of each voyage type that make up this score. Panel 3 gives an indication of how the ranks of these top 10 change over time: the vertical dotted line indicates the year currently being shown, and the different coloured lines each represent a source region. For example, in Figure A6, the data is set to show results from 2012, at which time Singapore is the highest ranked source region (black line), and New Zealand North Island is the second highest ranked. The plot in panel 3 shows that these two source regions had held their positions since 2004, but that from 1999–2003 their relative rankings were reversed. Similarly, the third ranked source region, Hong Kong (green line), had been ranked 3rd since 2006, but prior to that its ranking had varied.

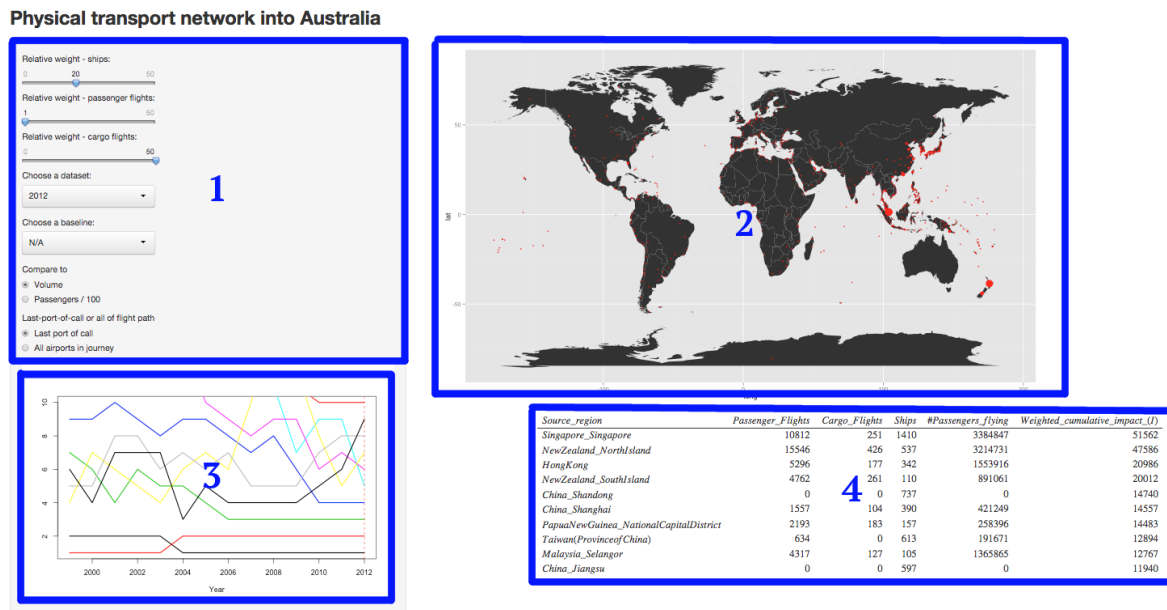


Figure A6: A screenshot of the online tool, annotated with section numbers. Panel 1 is the settings pane, panel 2 is the world map indicating relative physical transport connectedness to Australia for the given settings, panel 3 is a plot showing how the rankings of source regions change over the study period (1999–2012) for the given settings, and panel 4 is a table describing the top 10 source regions under the given settings.