



Grant Boxer

*FAIG (RPGeo Min Expl), MGeolSocAust*

---

*Geologist Specialising in Diamond and Mineral  
Exploration & GIS (MapInfo-Discover & QGIS)*

---



# “QGIS for Geologists” Workshop

Saturday 22<sup>nd</sup> April 2017

**What is QGIS?** QGIS is a fully featured FREE open source GIS program that is rapidly gaining acceptance around the world as a viable alternative to the commercial GIS packages. QGIS runs on Windows, Mac and Linux. Although not specifically written for geological applications, it is very powerful and can handle the majority of GIS tasks required by the geologist. The presenter has been using GIS for about 20 years and has been a QGIS user for about two years. The program is continually in development by the QGIS project team. QGIS opens shape and tab files, as well as a huge variety of raster files. Open source plug-ins extend the capability of QGIS and as an example the Semi-Automatic Classification plug-in allows for the searching, download and processing of ASTER, Landsat and Sentinel 2 satellite data for locations worldwide. Map preparation in QGIS is excellent. QGIS supports hundreds of coordinate systems. Check out the QGIS website for examples of how the program has been utilised by other professions. QGIS can seamlessly integrate with PostGreSQL, PostGIS, Spatialite, and Oracle databases.

**Overview:** This one day workshop will show how QGIS can be used for a wide variety of tasks undertaken by today’s exploration geologist and allow a hands-on experience of the program to familiarise the participant with the QGIS interface and illustrate the power of QGIS.

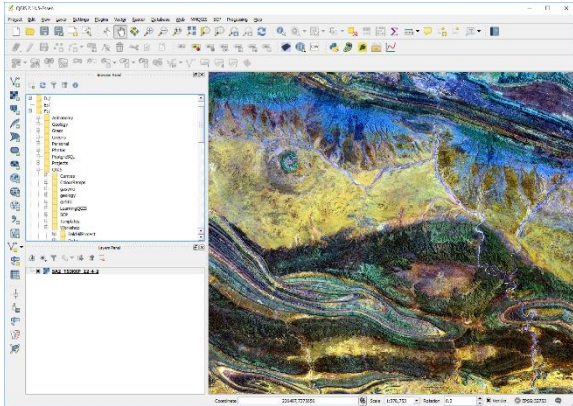
**Who should attend?:** The workshop is aimed at exploration geologists, students and researchers who wish to keep their GIS costs down but still have a great GIS program. The workshop will give an overview of QGIS, data presentation, map making and a hands-on workshop to allow the participants to get a feel of the program.

## **Workshop Outline:**

The workshop will illustrate how QGIS can easily load ArcView shape files and MapInfo tab files, and import a large array of raster formats. It has over 600 free plug-ins to do specialist tasks.

Data will be imported from text, csv and spreadsheet files. Geophysical images and satellite data will also be imported and processed.

A demonstration of the extensive map styling options and the map preparation operations will be presented.



The workshop will include an introduction to the QGIS interface, illustrate the import and display of vector and raster data, data editing operations; basic map production; labelling, gridding, contouring and 3D display. The use of QGIS plug-ins for importing and processing ASTER, Landsat and Sentinel 2 satellite data will also be demonstrated.

There will also be a demonstration on accessing WMS (web mapping services) to produce detailed base maps for mapping.

Participants should bring their own laptop running Windows (preferred) with the latest QGIS version installed (currently 2.18.3, available from <http://www.qgis.org/en/site/>). Mac users are welcome and can also install QGIS from the above address. Note the Mac install is a little more involved and users should check the install instructions.

**Grant Boxer** (RP geo FAIG, MGSAust) is a consultant geologist with over 40 years of experience in exploration and mining geology in Australia, Africa, India and South America. He was employed by CRA Exploration, Argyle Diamonds and Rio Tinto Exploration from 1978 until 1997 undertaking diamond exploration and evaluation activities. During this time, he spent 10 years based at the Argyle diamond mine carrying out exploration and evaluation programs, feasibility studies and mine development studies for the Argyle and Ellendale diamond deposits and Argyle's associated alluvial diamond deposits.

Since 1998, Grant has been employed by various companies in a consultant role, undertaking project reviews, field visits, project management, drilling and sampling program supervision and project generation, primarily for diamonds in Australia, Brazil, China, India and Tanzania.

Grant has a keen interest in GIS and remote sensing and in getting this information into a useable format for the people in the field. He has been a user of MapInfo and Discover since the mid-1990's and QGIS since 2015.

Grant is a Member of the Geological Society Australia, and is a Fellow of Australian Institute of Geoscientists and Registered Professional in Geology. He is also a member of Meteoritical Society and has a keen interest in impact structures.

For further information, please contact

Grant Boxer  
Email: [boxerg@iinet.net.au](mailto:boxerg@iinet.net.au)