

AN INTRODUCTION TO QGIS AND SPATIAL DATA ANALYSIS

Workshop date: 30 September and 1 October 2024.

Venue: FERAL Bengaluru Office

Tentative Schedule

Day 1. September 30th Monday

09:30–13:00

Introduction to Spatial Data, Types of Spatial Data, Projections and Coordinate Reference Systems.

Introduction to QGIS

Configuration and setup

Importing data from spreadsheets

Visualisation of data – symbology, size, transparency, labels

Saving the Vector data

Lunch (13:00–14:00)

14:00 am–16:30 pm

Georeferencing

Digitisation: Creating vector layers, editing the layer

Vector Data Processing and Analysis

Apply filters

Attribute data management – Field Calculator

Attribute joining

Geoprocessing, Geometry tools

Day 2. October 1st Tuesday

09:30–13:00

Vector Data Processing and Analysis

Analysis – Grids, Random and uniform points, Point count, Distance Matrix

Running Spatial Queries

Use of plugins and adding Web layers (Open layers, Bing Maps, QuickOSM etc) onto QGIS

Introduction to Raster Data

Visualisation of Satellite Data and Analysis (True and False Color Composites)

Raster Calculator and Developing Vegetation Indices

Zonal Statistics

Lunch (13:00 – 14:00 pm)

14:00 pm to 16:00 pm

Developing Publishable Quality Maps