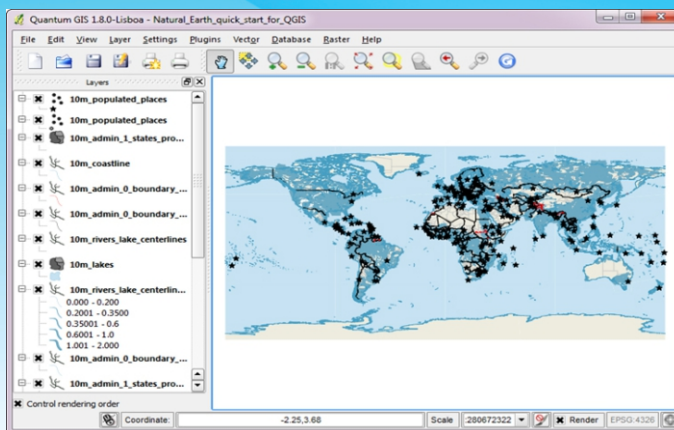


## Course content

- Coordinate systems and map datum
- Operating principles of GPS
- Setting up of GPS
- Geo-referencing and Navigation using GPS
- Navigation using GPS receiver coupled with Google Earth software
- Importing GPS coordinates to QGIS (open source GIS program)
- Preparation of Vector layer of GPS coordinates
- Displaying GPS coordinates on Google Earth software



## Contact

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# One day workshop on use of GPS and Google Earth tools in research

# Google™ earth



Offered by

Board of Study in Soil Science  
Postgraduate Institute of Agriculture  
(Colombo Branch),  
University of Peradeniya



**Conducted by**  
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**09<sup>th</sup> February 2017**  
**At**  
**Sri Lanka Foundation Institute**  
**Colombo**



## Introduction

Geo-coding or geo-referencing of samples and land features has become an essential aspect in present day research and surveys. Such Geo referenced data can be reused in national or regional level studies. Using freely available software such as Google Earth, QGIS numerous value additions can be performed for geo-coded data; such as display on maps, spatial pattern identification, etc.

Global Positioning System (GPS) receiver is a readily available tool for geo-referencing. Moreover, it facilitates navigation of sample locations and land features for monitoring purposes. A proper knowledge about the operating principle of GPS, accuracy issues and range of options available are of great importance for its effective use. Sound knowledge on coordinate systems, map datum and projections allows effective usage of GPS. Exposure on the free domain GIS software and Google earth software is equally important to generate maps showing spatial distribution of sample locations and land feature. Such, maps can be directly used for publications and also other reports.

“Hands on experience on using GPS and Google Earth on research can build a confidence among potential users”

## Aims of the workshop

This workshop is offered to provide a basic theoretical and practical exposure on the use of GPS and Google Earth in research activities. Following topics will be covered,

1. Coordinate systems and Map Datum.
2. Theoretical background of GPS.
3. Practical session on Configuration of GPS receiver, Geo-referencing and Navigation.
4. Practical session on field navigating sample locations using Google Earth combined with GPS receiver.
5. Practical session on plotting sampling locations and land features using Google Earth.

## Target group

Researchers/Technical officers in different institutes and private organizations or interested individuals who are involved with spatial sampling, data analysis, report writing.



## Number of Participant

Enrolment is limited to 25 participants and registration will be made on first come, first serve basis (Please contact the course coordinator before registering)

## Workshop fee

Rs. 6,500.00 per participant

This includes charges for reading materials, morning, evening tea and the lunch.

## Date and Venue

**Date:** 09<sup>th</sup> February 2017

**Time:** 8.30 AM – 5.00 PM

**Venue:** Colombo Branch of the Postgraduate Institute of Agriculture,  
University of Peradeniya.  
Sri Lanka Foundation Institute,  
No.100, Sri Lanka Padanama Mw,  
Independence Square, Colombo 7.

