Cross-Platform GIS Solutions through SuperGIS Desktop

Ava Lai
Sr. Support Engineer
Supergeo Technologies Inc.

Supergeo®

SuperGIS Products

Supergeo

Server GIS

SuperGIS Server
SuperGIS 3D Earth Server
SuperGIS Network Server
SuperWebGIS

Cloud GIS

SuperGIS Online
- Data Services
- Excel Add-in
- Address Locator
- Statistical API

Desktop GIS

SuperGIS Desktop
- Spatial
- Spatial Statistical
- 3D
- Biodiversity
- Network
- Topology
- 67-97 CTS (TW only)
- CCTS (TW only)

Developer GIS

SuperGIS Engine
SuperNetObjects
- Network
- Spatial
- Biodiversity
- 3D
- Spatial Statistical

Mobile GIS

SuperGIS Mobile Engine
SuperPad
SuperField
SuperSurv (Android/iOS)
SuperVeyor (Hardware bundle)

Solution

SuperGIS Mobile Tour (Android)

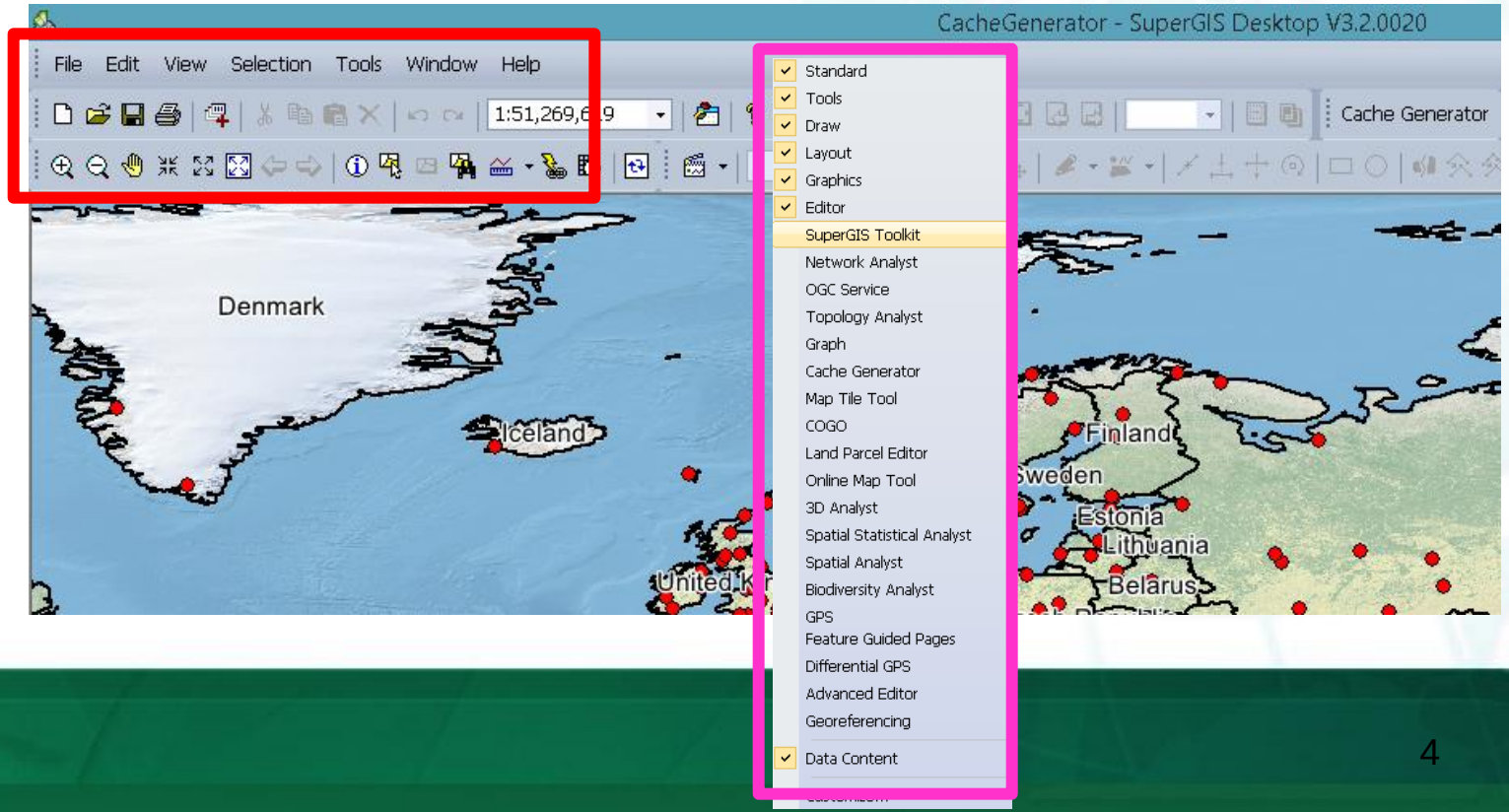
Mobile Cadastral GIS (TW only)

Outline

- With the following case scenarios, you'll have:
  - Integration with mobile/server solution: Cache Generator
  - Conduct Survey with paper work
  - Transfer the survey data in GNSS signal to GIS
  - Check the GIS data with PDF Reader

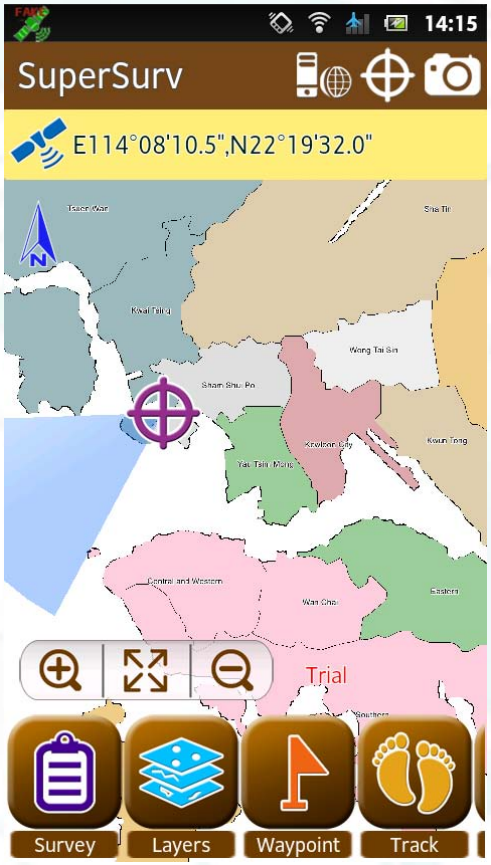
SuperGIS Desktop: basic

- Common use tool: zoom in/out, pan…etc.
- Right click to call out other extensions or add-ons



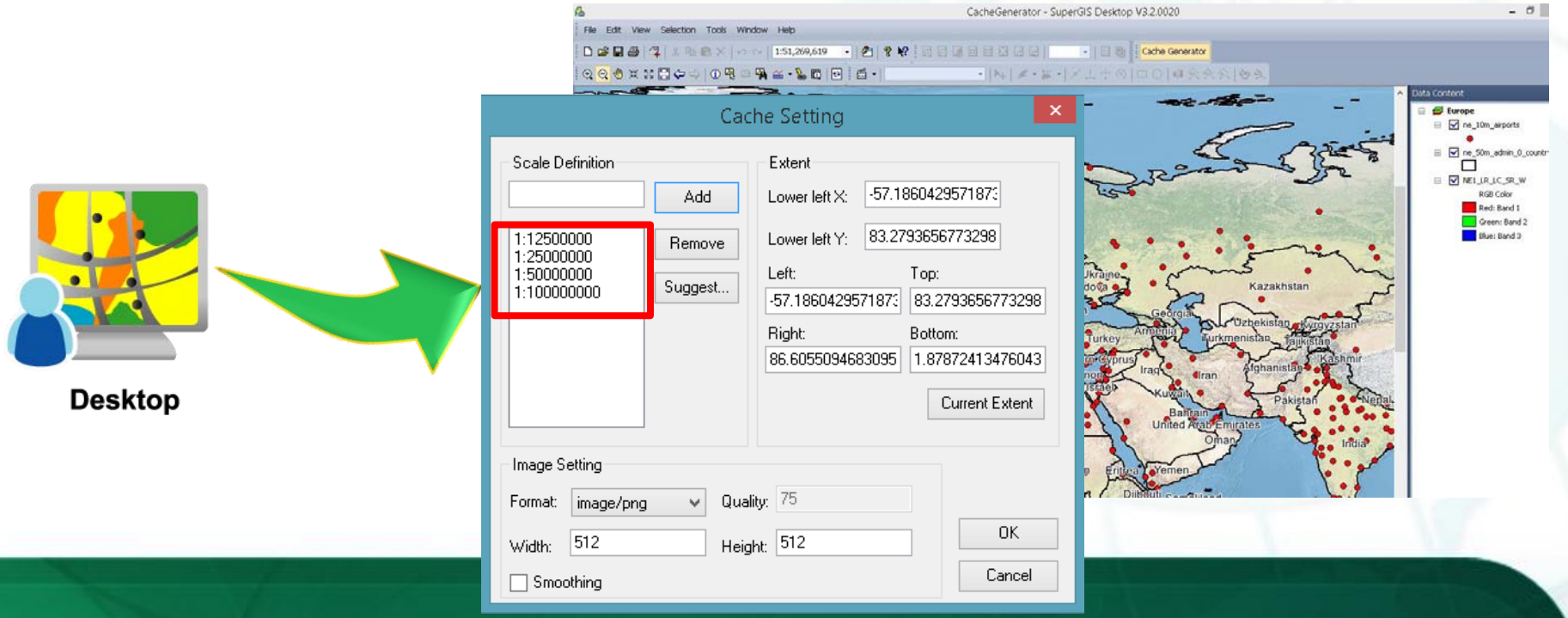
Generate Cache Map

- Why we need to have Cache Map?
  - Survey in the field by using mobile solution
  - Without internet connection
  - How to ensure the location and start to do the survey?



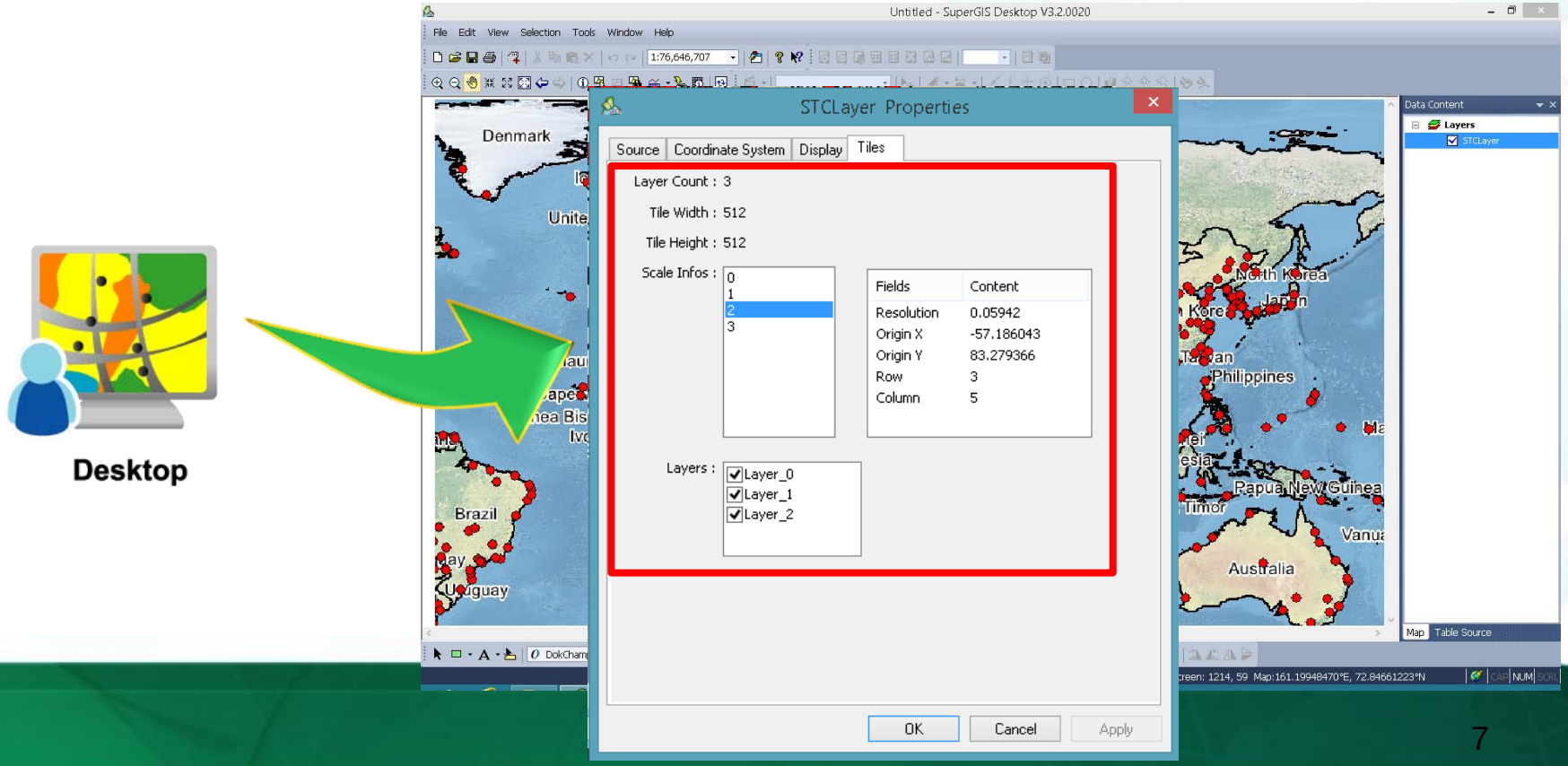
Generate Cache Map

- Cache Generator in SuperGIS Desktop
  - Produce Supergis Tile Cache : color, pattern, labeling…etc.
  - Even visible scale



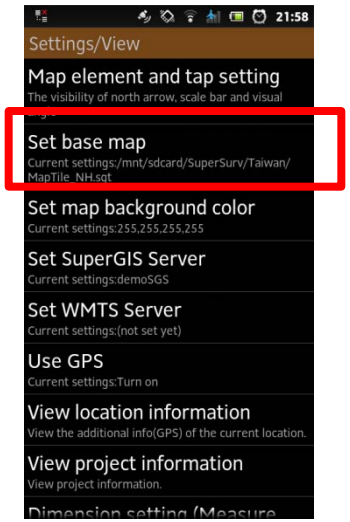
View in SuperGIS Desktop

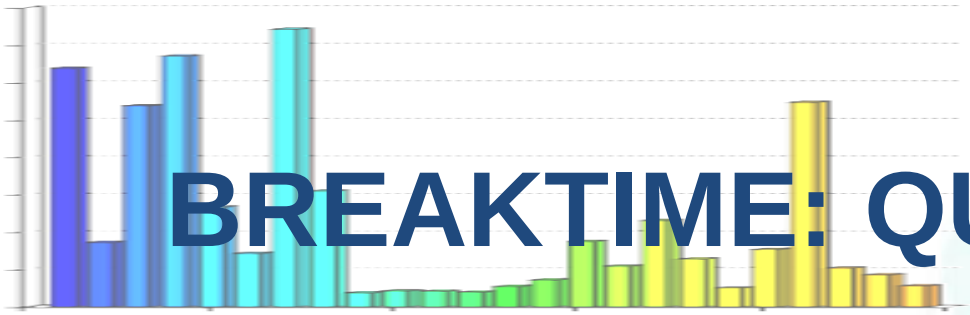
- From the tool: Add Layer
- Properties settings to display the layers



How to Use in Mobile Device

- Setup for the base map in your mobile device



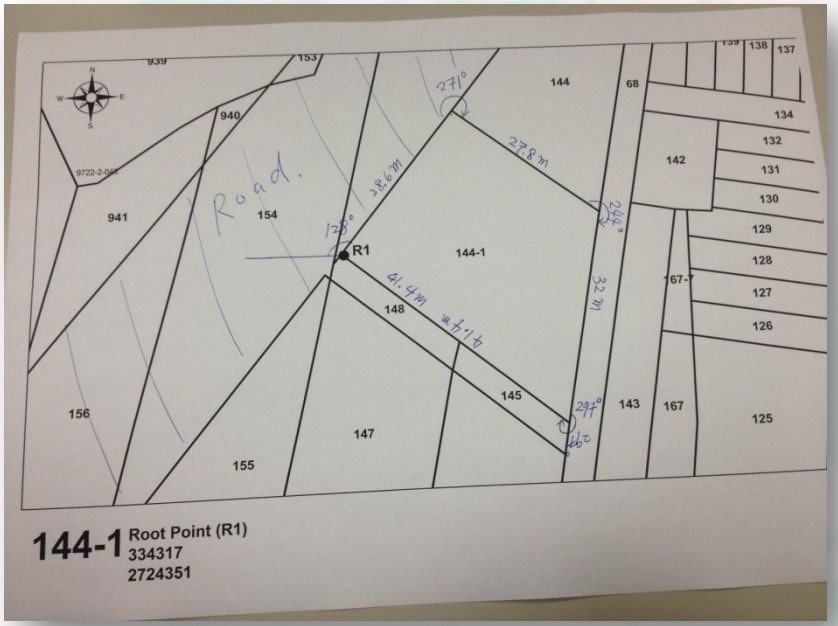


BREAKTIME: QUICK POLL – I

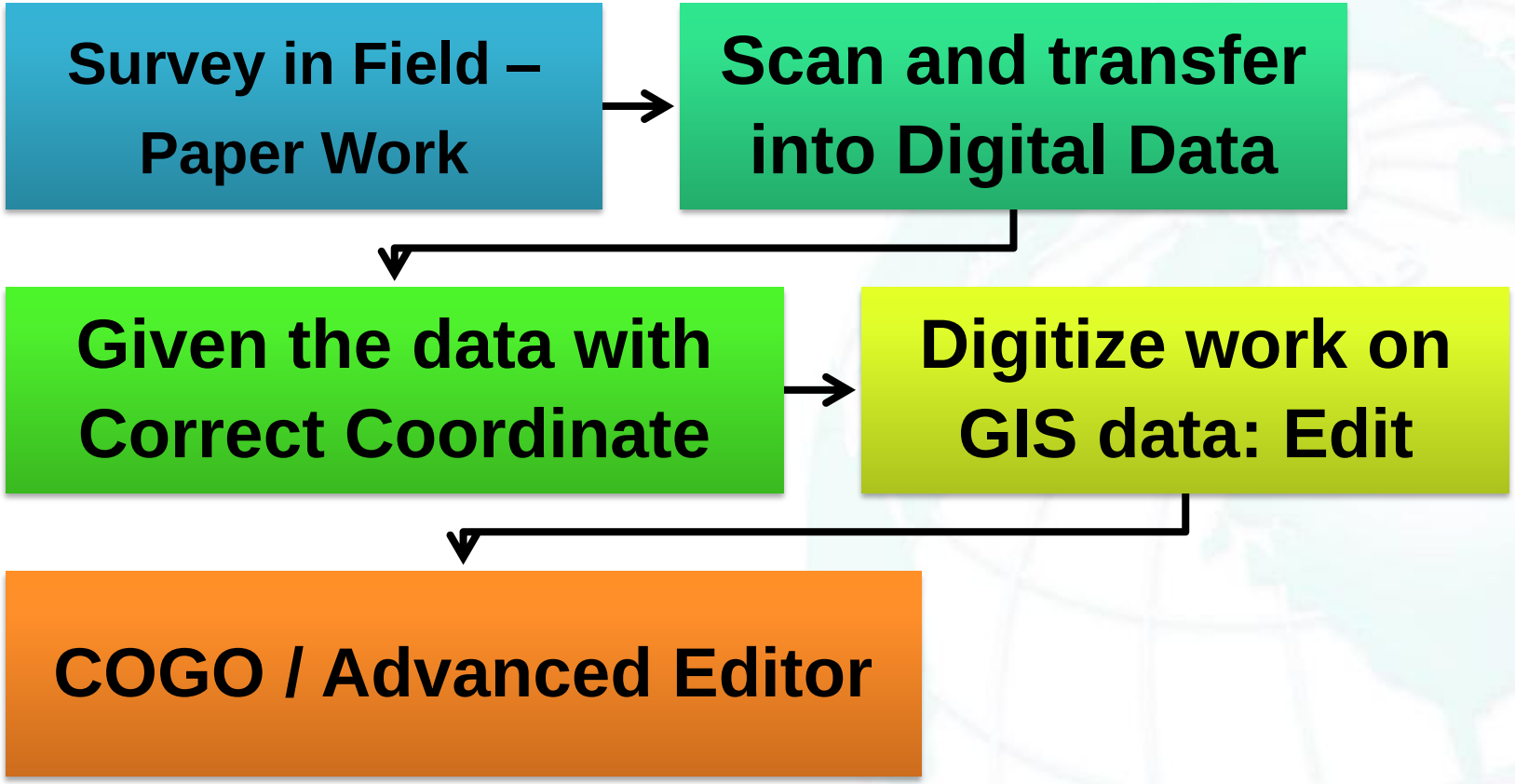
Subscribe **SupergeoTV** now!
http://www.youtube.com/user/supergeotv

Survey in Field: Parcel

- Paper work: scan into digital data
- Data collected by GPS: GPX or KML format

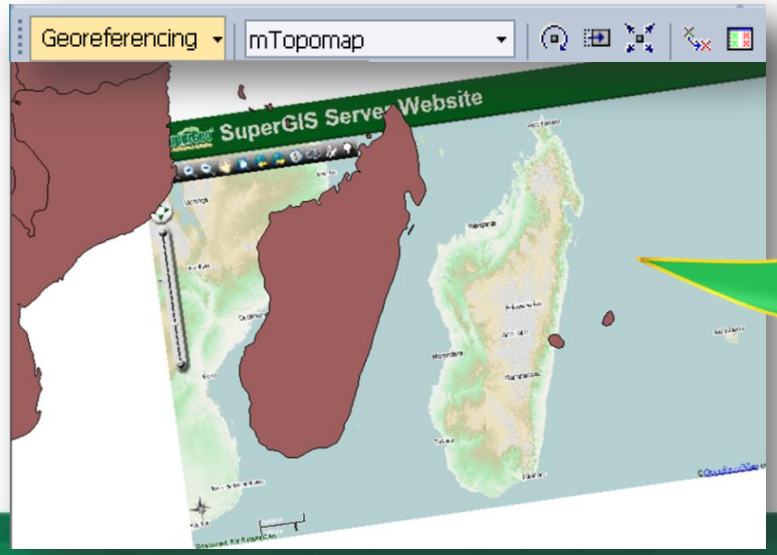


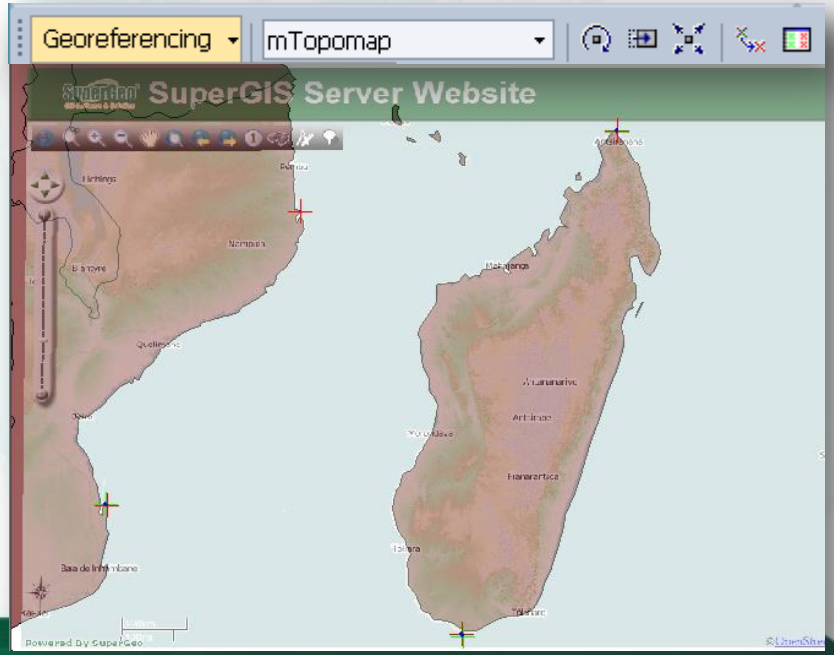
Work Flow 1 as:



How to Give a Correct Coordinate for the Raster Data

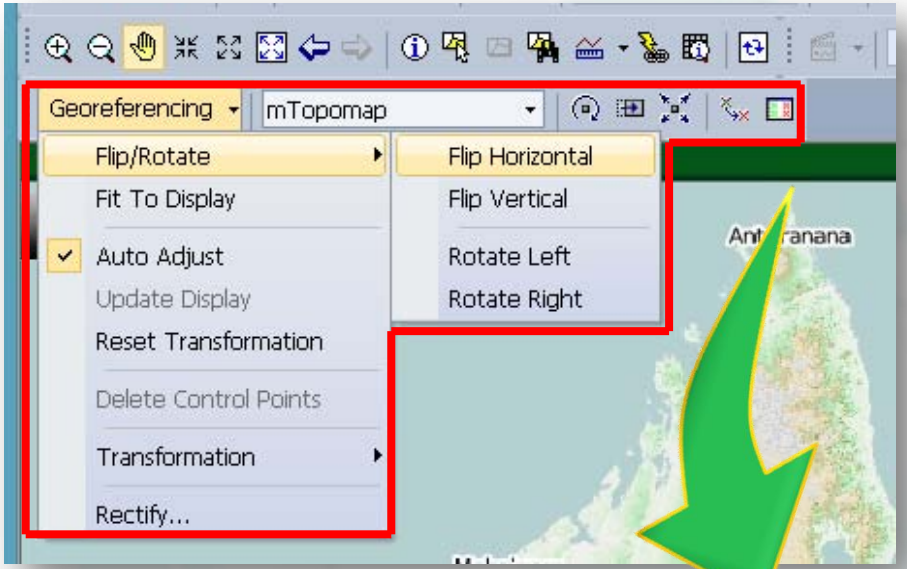
- Gives raster data a correct position
  - Rotate
  - Shift
  - Scale…etc.

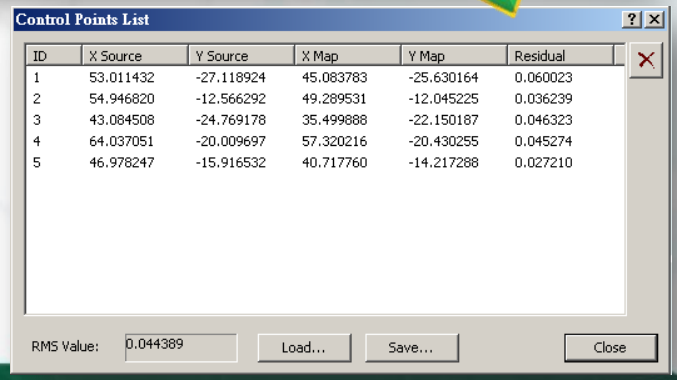




Georeferencing Tool

- Rotate / Shift / Scale
- Flip / Rotate
- Auto Adjust
- Reset Transformation
- Control Point List
- **Rectify (at least 4 pairs of control point)**

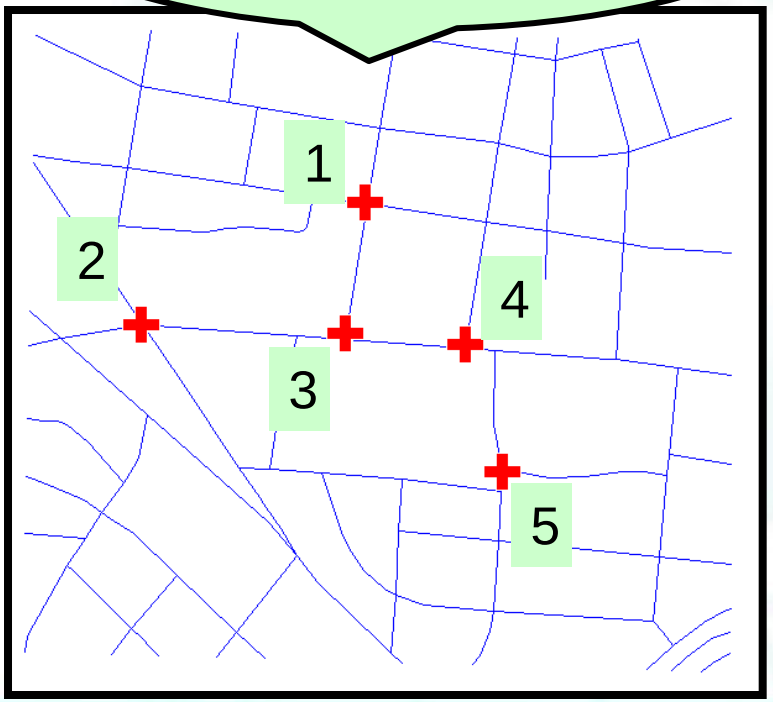




Start to Do Georeferencing

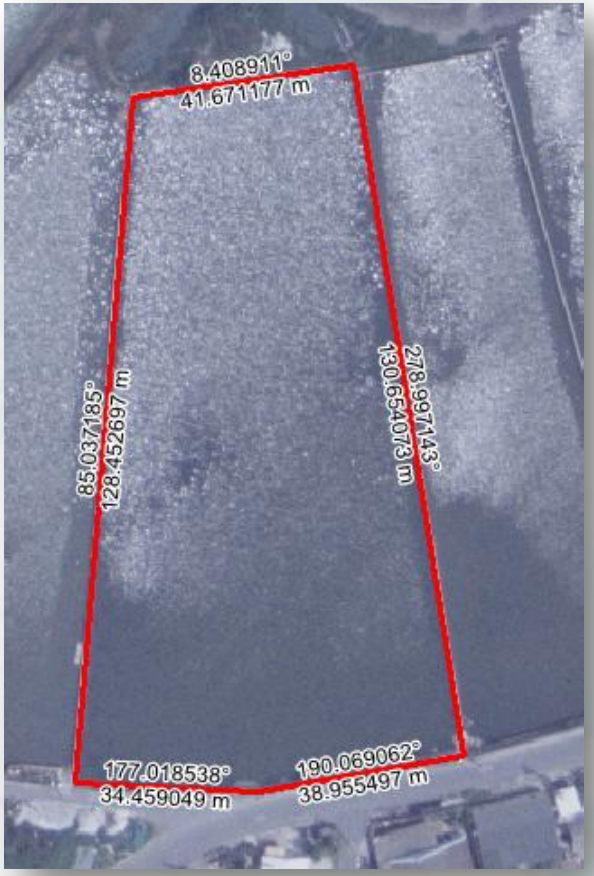
The raster data which needs to be given the correct coordinate

The GIS data with correct coordinate, which is used to be the comparison



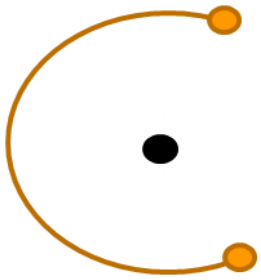
Digitize the Work: Precise Mapping

- Base on your survey work, which including every detail, ex: length, direction…etc., and you need to digitize GIS data on your computer.



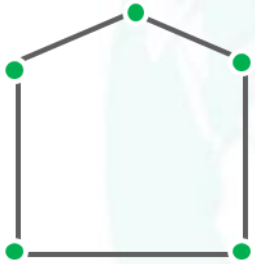
Tools for Precise Mapping

- Advanced Editor
  - More tools for smart editing, ex: Copy Tools
- COGO
  - Construct the line with direction and distance

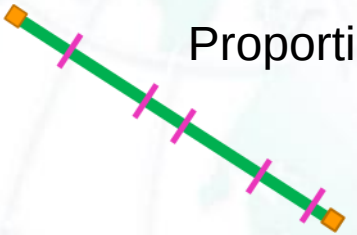


Cul-De-Sac

OffsetLine



COGO Area

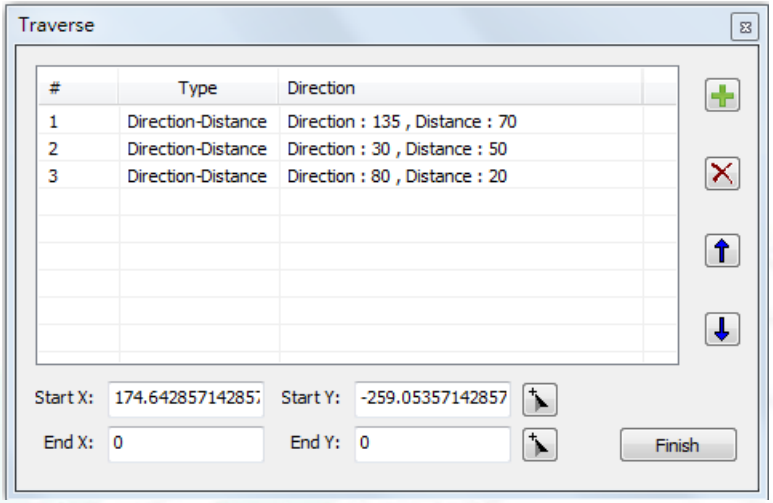


Proportionally

Auto
Intersection

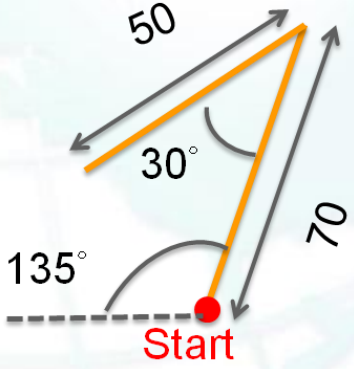
Traverse

- Create the next vertex with direction and distance



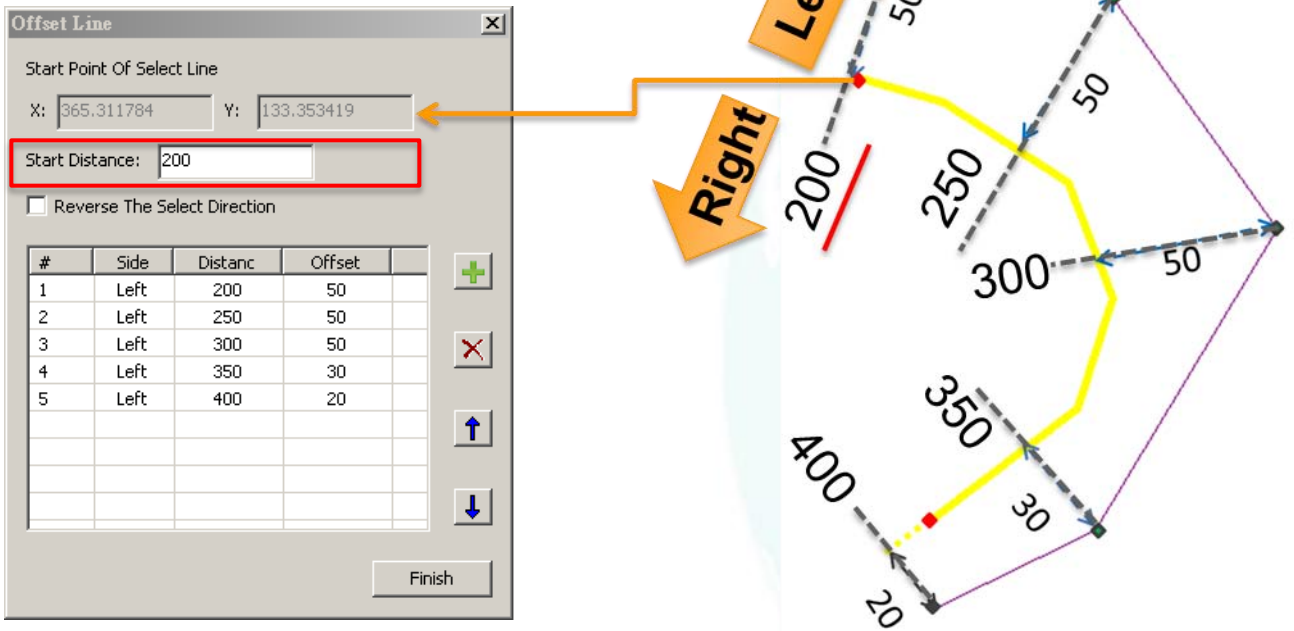
Direction-Distance

Angle-Distance



Offset Line

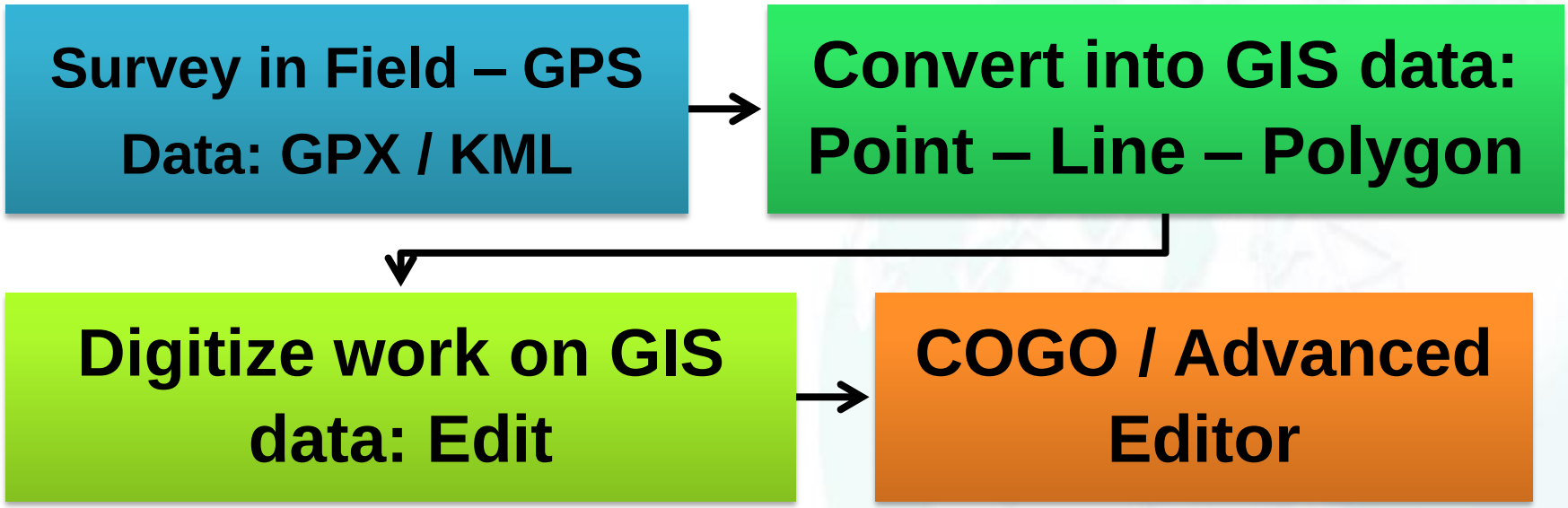
- Create the parallel line by input the offset and length



DEMO TIME FOR WORK FLOW 1

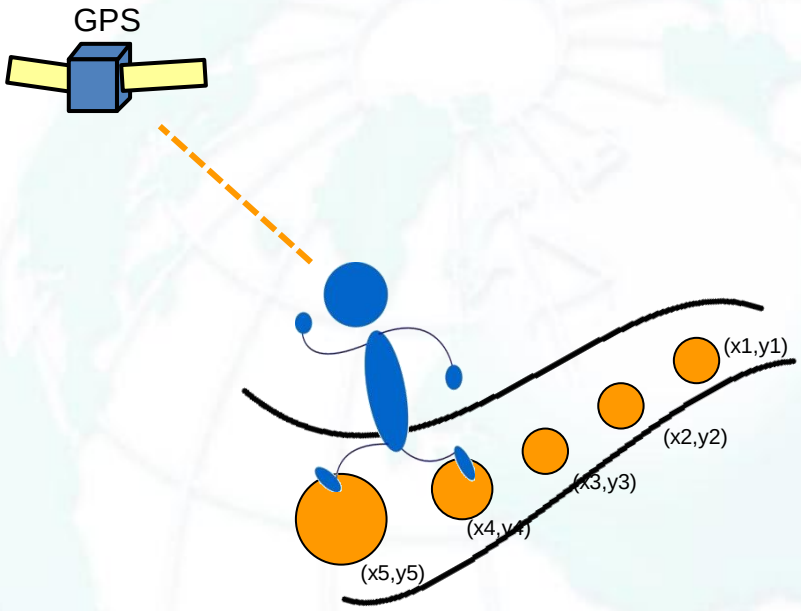
Subscribe **SupergeoTV** now!
http://www.youtube.com/user/supergeotv

Work Flow 2 as:



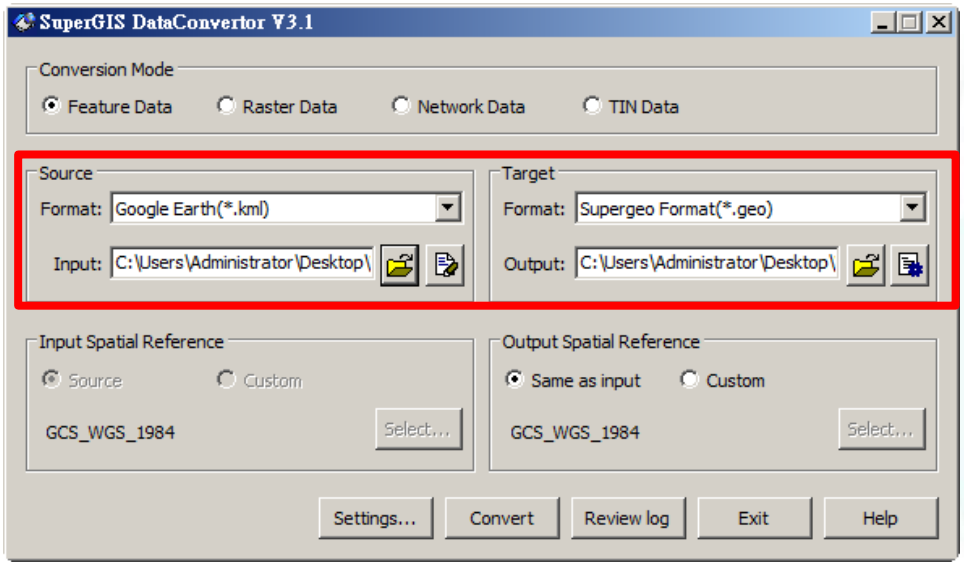
Digitize the Work: Precise Mapping

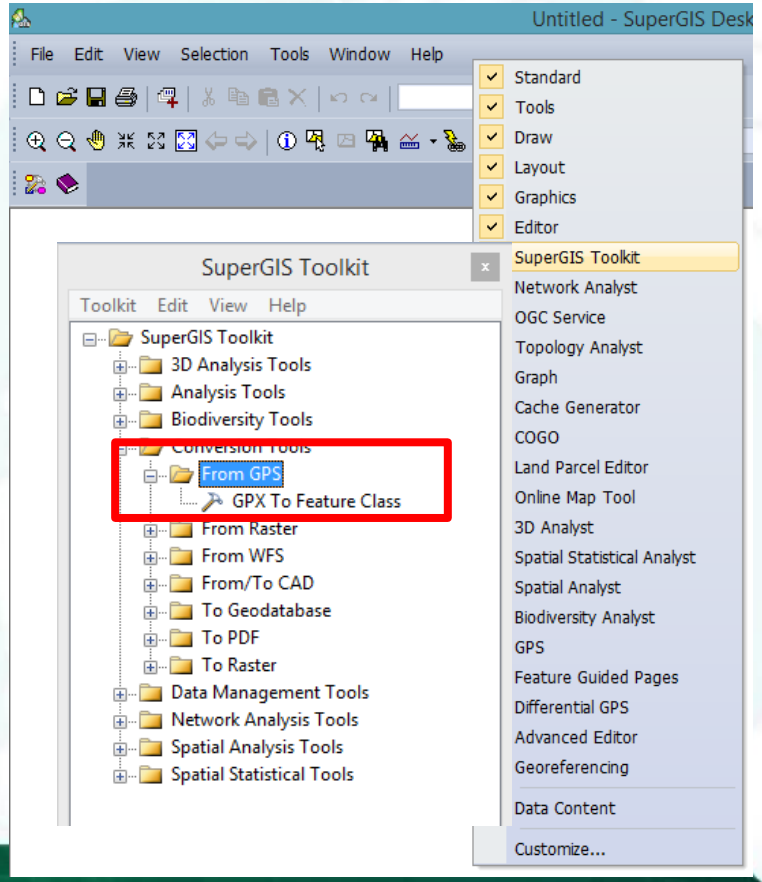
- Base on the survey work, which recorded by GNSS signals, in GPX or KML format



From GPS data to GIS data

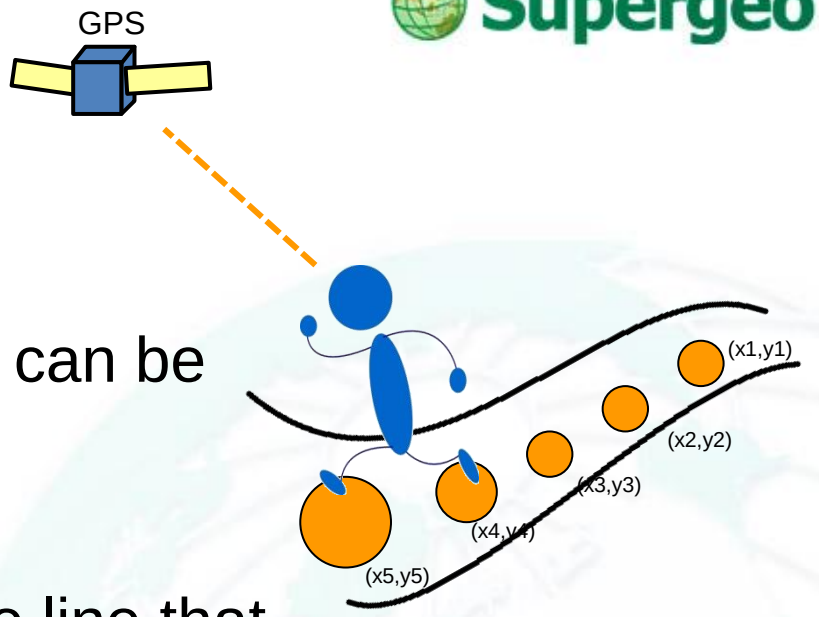
- Way 1: SuperGIS DataConvertor
- Way 2: SuperGIS Toolkit

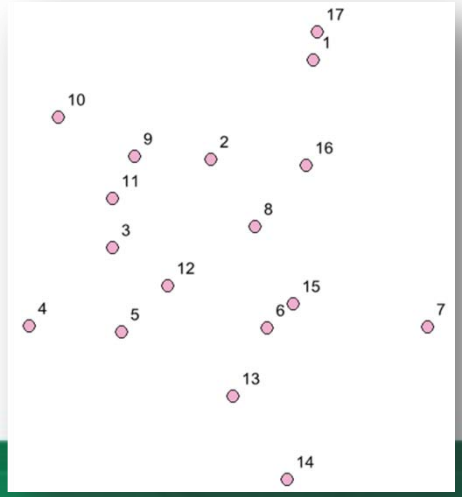


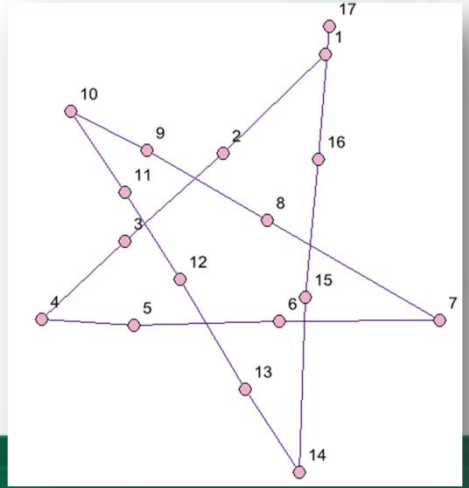


Point to Line

- Convert the points to line
  - The collected survey points can be converted as a line
  - Save the time to digitize
  - Increase the accuracy of the line that is generated from the points



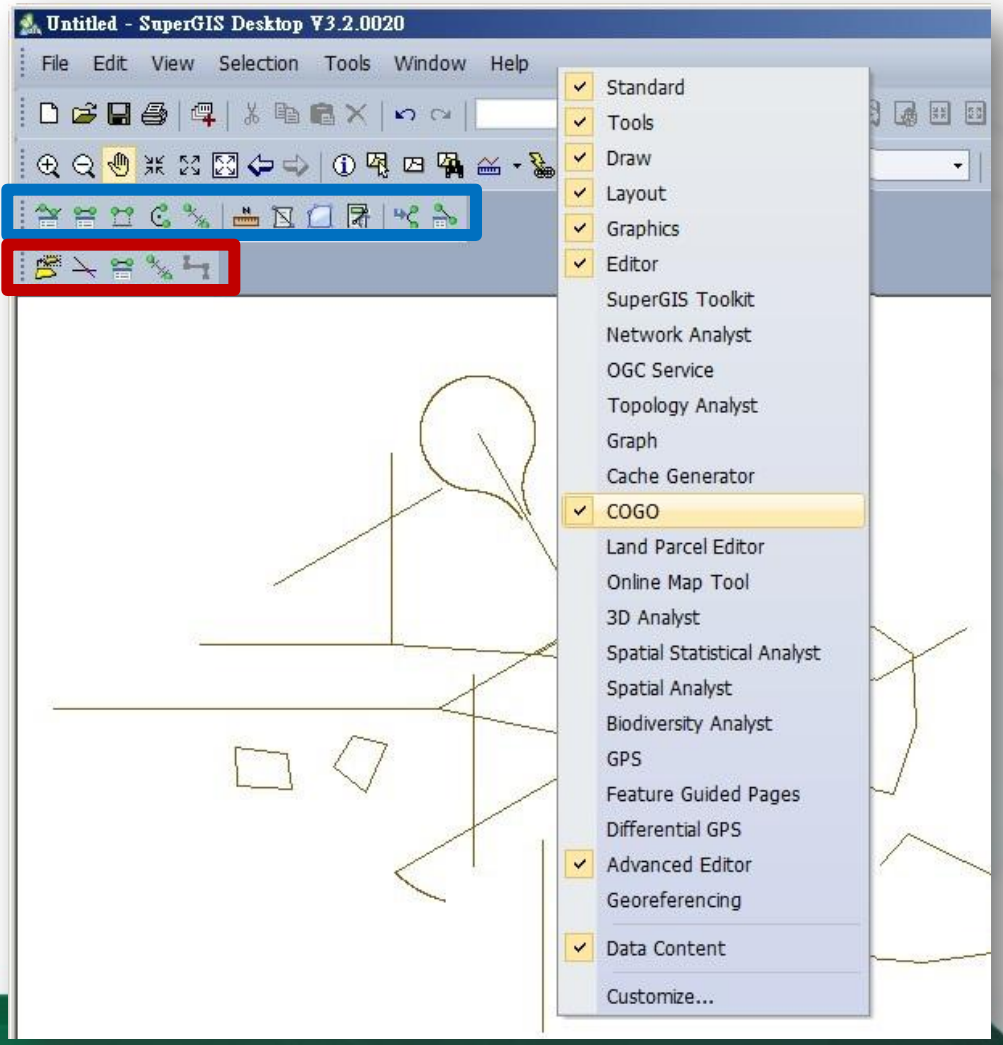




Connecting points to a line by their FID order

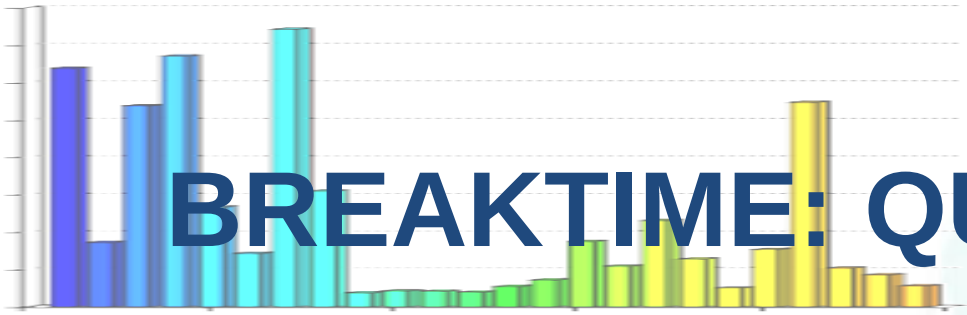
The other functions…

- Advanced Editor:
  - Copy Tool
  - 2-Point Line
  - Split Proportionally
  - Point to Line
- COGO:
  - COGO Area
  - COGO Report
  - Split into COGO lines
  - …etc.



DEMO TIME FOR WORK FLOW 2

Subscribe **SupergeoTV** now!
http://www.youtube.com/user/supergeotv



BREAKTIME: QUICK POLL – II

Subscribe **SupergeoTV** now!
http://www.youtube.com/user/supergeotv

What's next if we don't have any GIS related software?

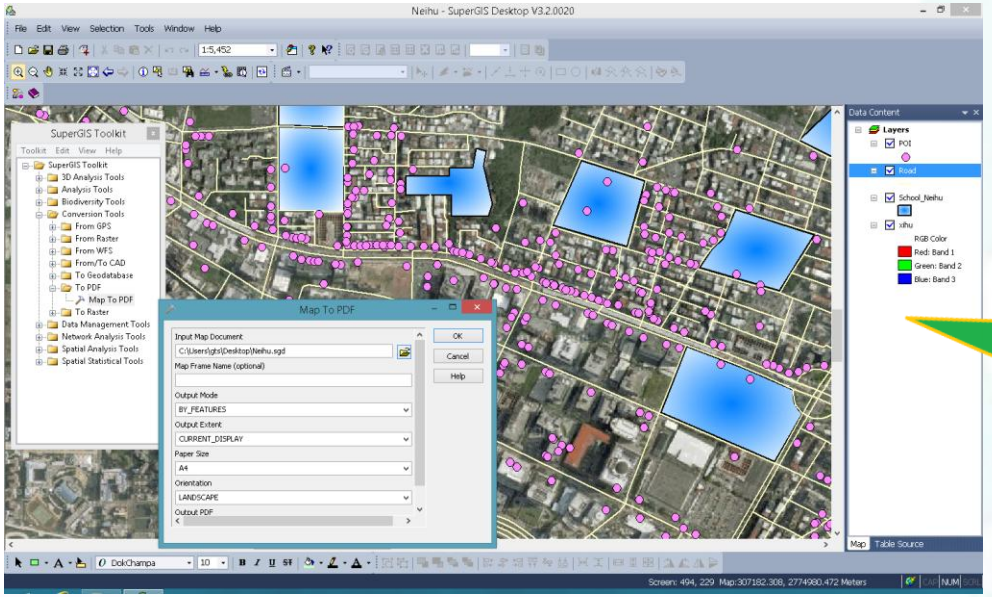
How to check the GIS data?

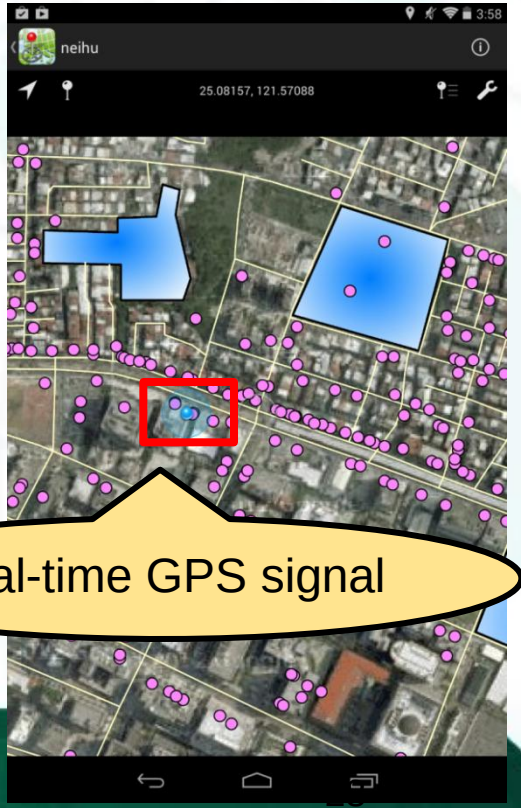
How to view the information of the data?

Have you heard about "Geospatial PDF"?

View GIS Data in PDF

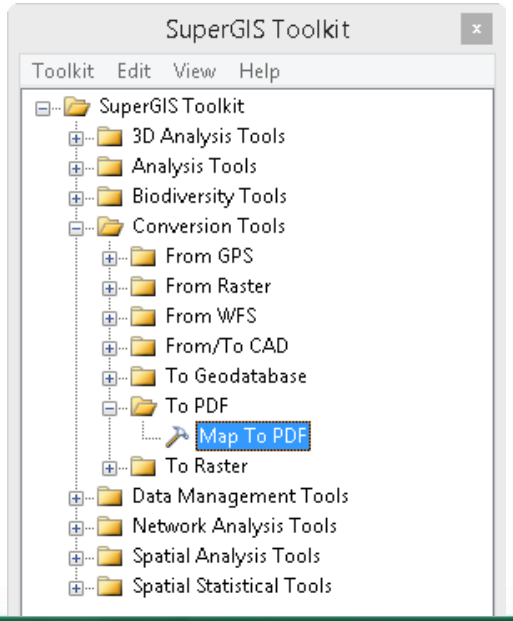
- Create the maps for field tasks.
- You can use Geospatial PDF to view the GIS data, with coordinates.

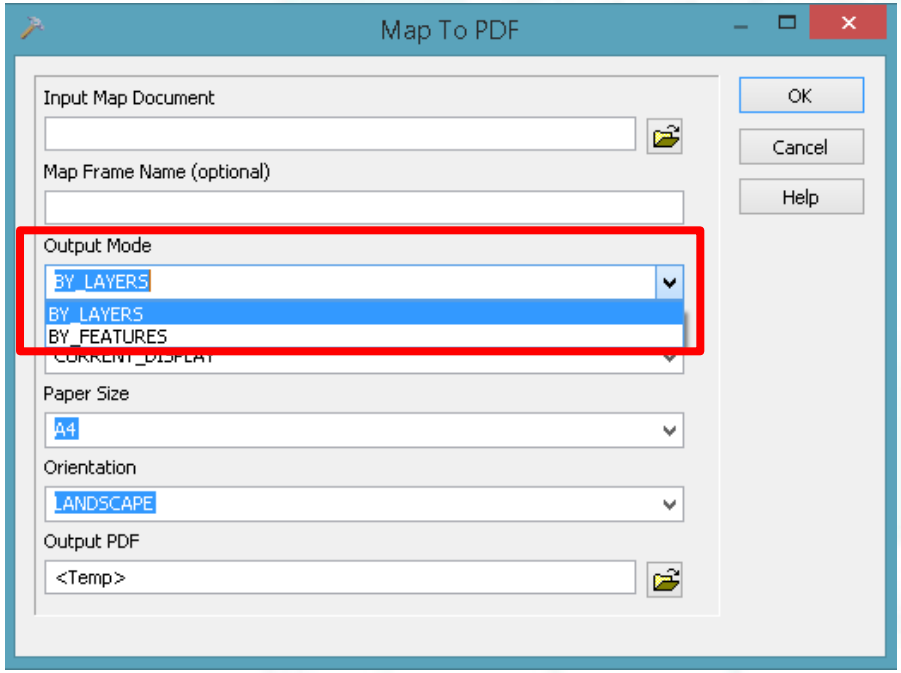




Export to Geospatial PDF

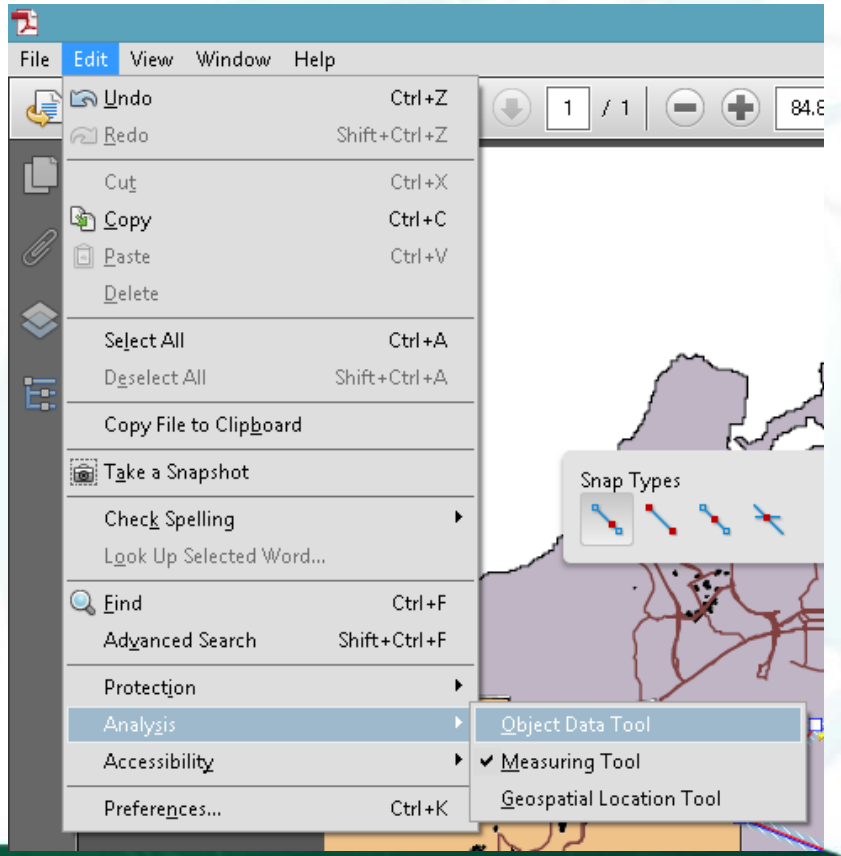
- Using SuperGIS Toolkit: Map To PDF
  - By Layers (Default)
  - By Features





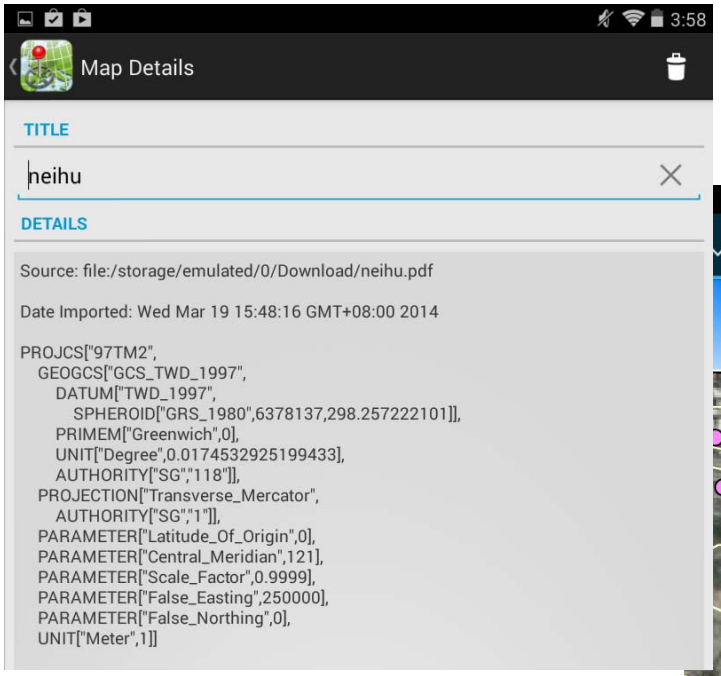
View the GIS Data in PDF

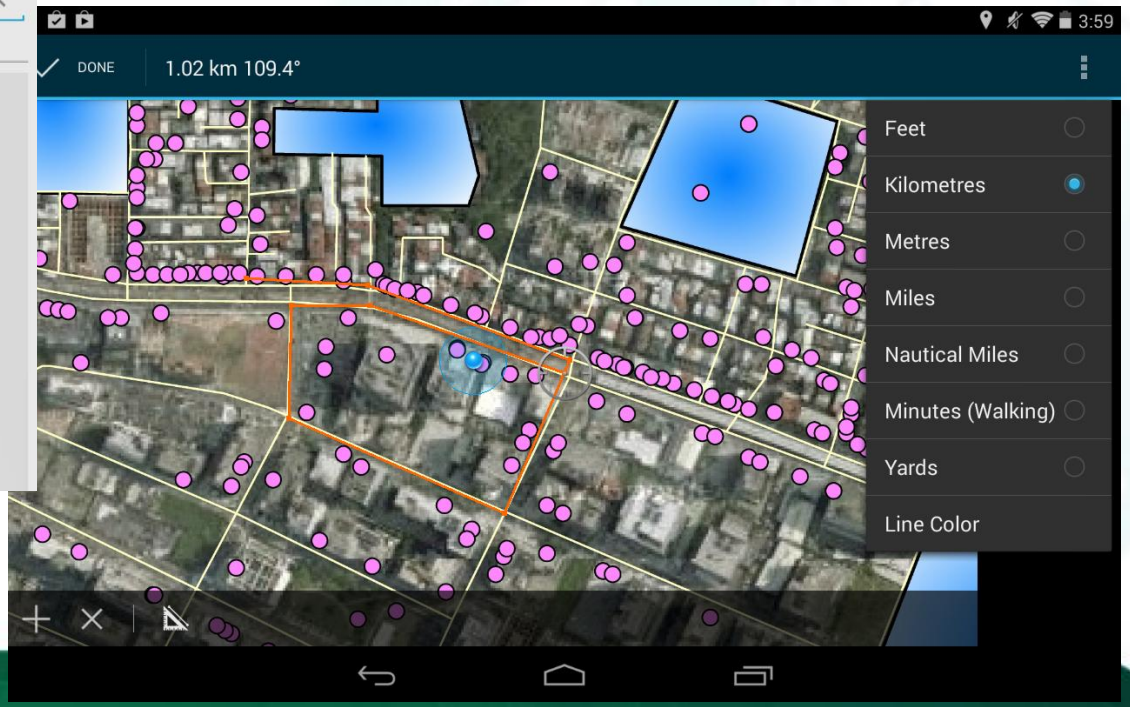
- View the Geospatial PDF by PDF reader
  - Query (Object Data Tool)
    - ✓ Attribute query
    - ✓ Spatial query
  - Measuring
    - ✓ Distance
    - ✓ Perimeter
    - ✓ Area
  - Geospatial Location



View the GIS Data in PDF

- View the Geospatial PDF by mobile device





Q&A Time

Contact us:

http://www.supergeotek.com

Email: staff@supergeotek.com

YouTube Subscribe **SupergeoTV** now!

http://www.youtube.com/user/supergeotv