Undergoing a Mobile GIS Change to Make Field Tasks More Productive

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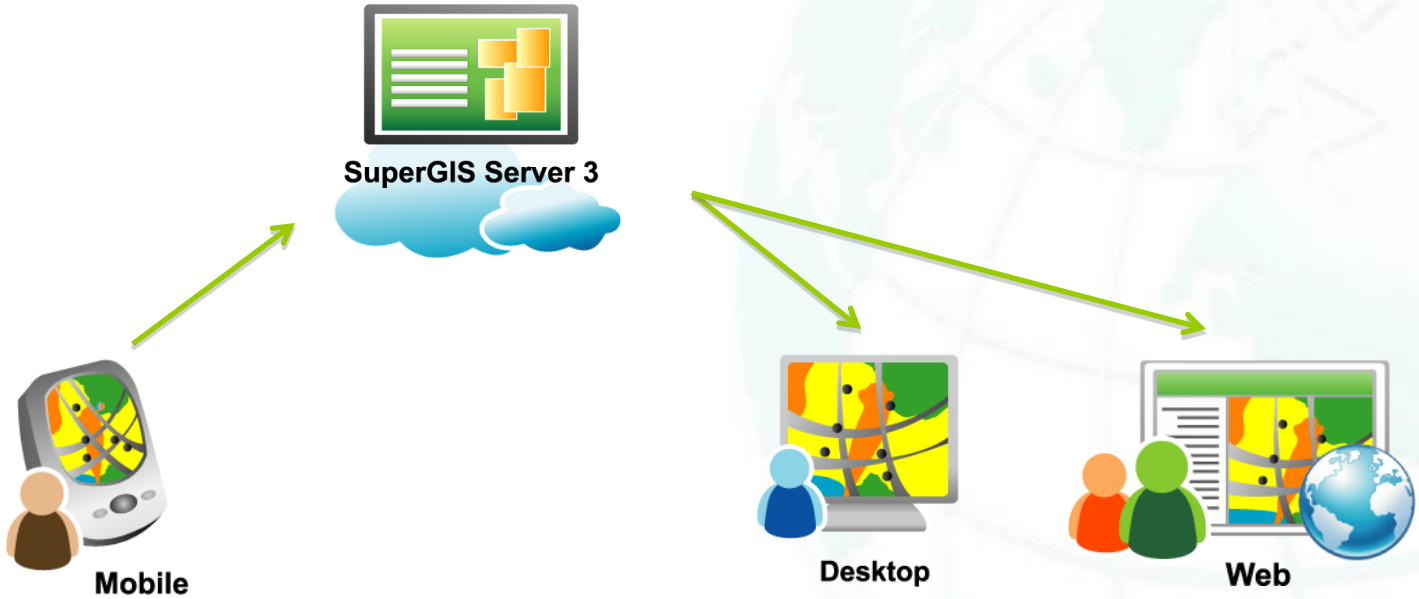
Product Specialist of Product Department

Supergeo®

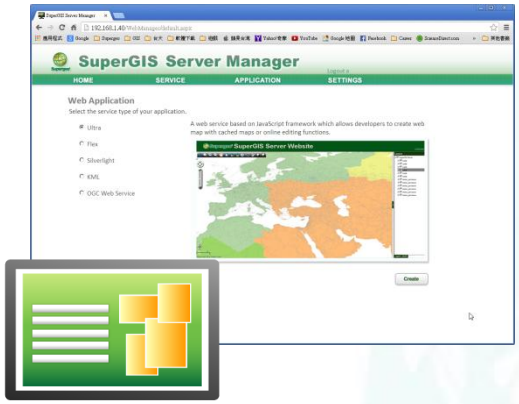
Mobile GIS

- A GIS system on you mobile devices.
- Helpful for field works.

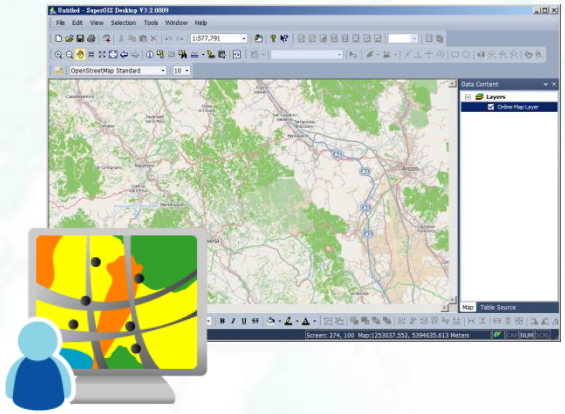


Products

Mobile



SuperGIS Server 3



Desktop

SuperPad

SuperGIS Server

SuperGIS Desktop

The story begins…

A natural disaster just hit a natural park, and the manager of the natural park wants to know where are the affected areas:

- **Damaged Building.**
- **Damaged Roads/Trails.**
- **Damaged Areas**

  (i.e. Flooded Areas, Landslides…)

Things to do…

- Preparation works:
  - **Upload data for field works.**
  - **Download the data and add a base map.**

- Field works:
  - **Data collecting and synchronizing.**

- Back to office:
  - **Data post processing.**

Desktop

- Prepare the data
- Symbology design
- Save as .sgd file

Upload

SuperGIS Server 3

- Create a new service
- Configure as a feature service

Upload data for field works

Preparation works

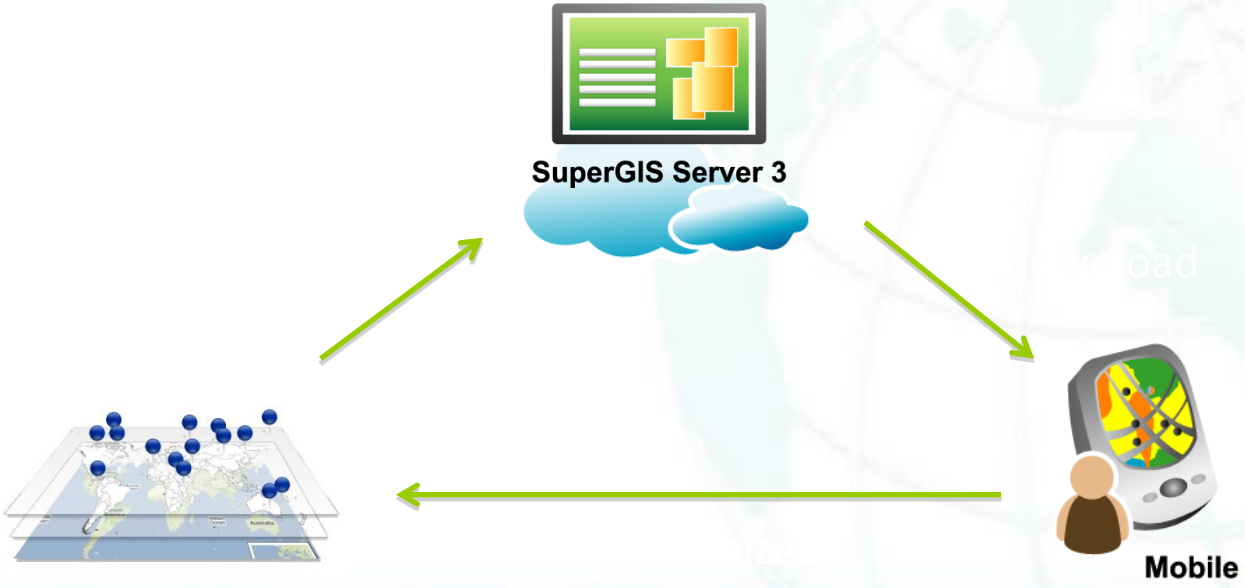
Create Layers for Field Works

- To record the affected areas, the following layers are needed:

  - **Point Layer:** **Damaged Buildings**
  - **Line Layer:** **Damaged Roads/Trails**
  - **Polygon Layer:** **Damaged Areas**

Upload Layers

- Publish the map layers to SuperGIS Server so that the data collected from the field works can be synchronized to the server.



Key Concepts

- In SuperGIS Desktop
  - **Prepare your data, including necessary layers and their attributes.**
- In SuperGIS Server
  - **Publish the data to the SuperGIS Server as a feature service.**

Reviews

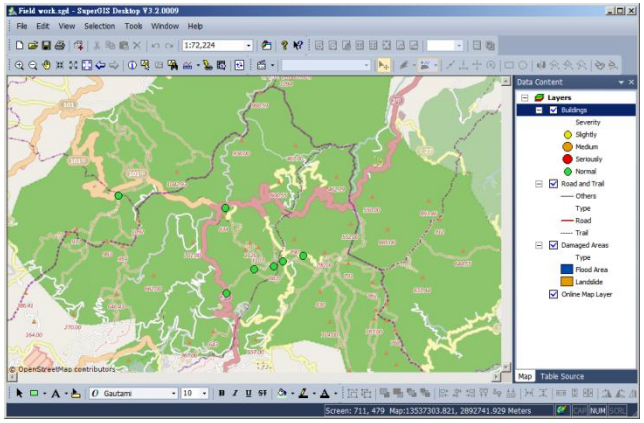
Desktop

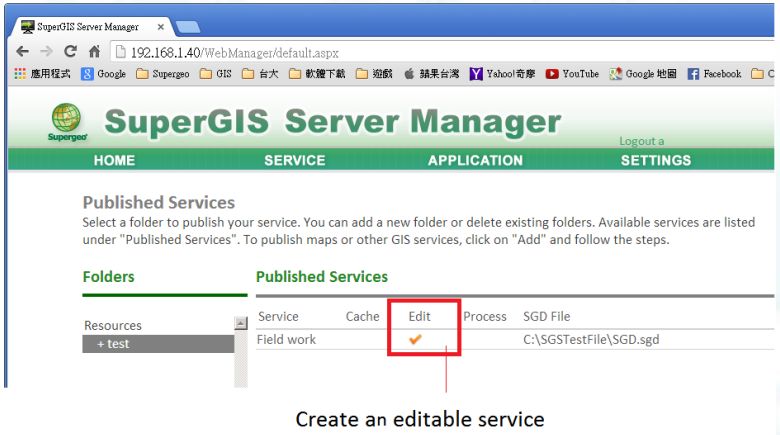
- Prepare the data
- Symbology design
- Save as .sgd file

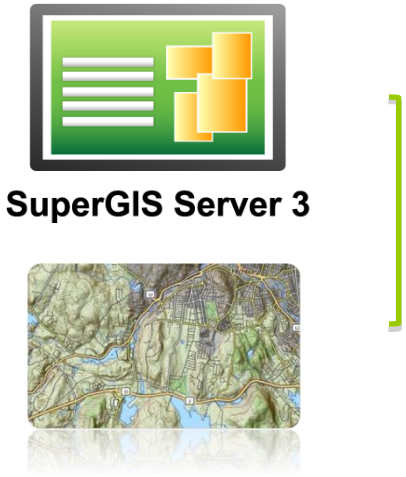
Upload

SuperGIS Server 3

- Create a new service
- Configure as a feature service







Download

Download data from

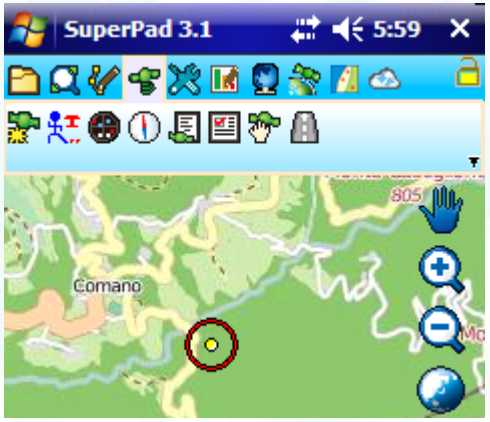
- SuperGIS Server
- OpenStreetMap

Download data and add a base map

Preparation works

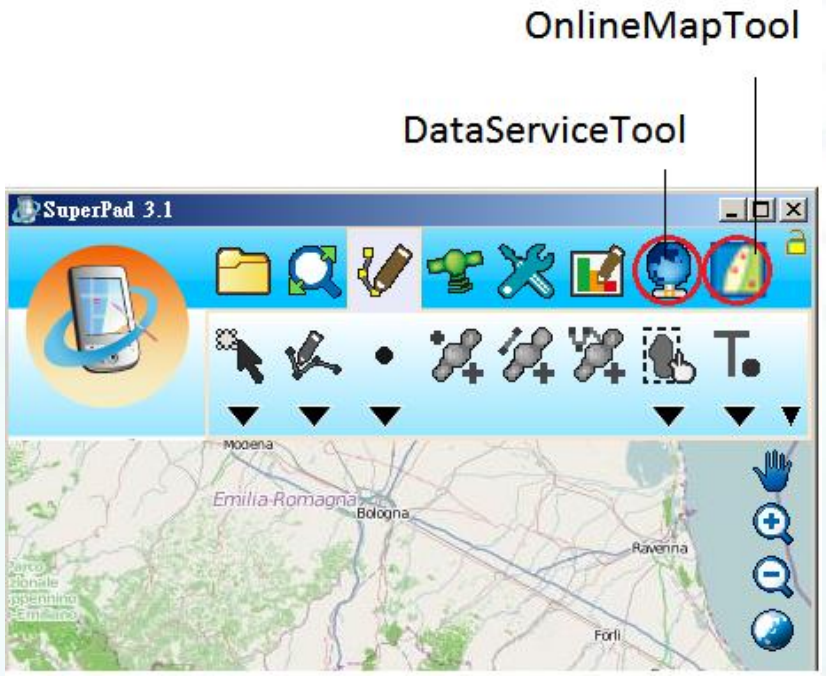
Add Base Map

- Greatly help the field workers see their current location and also the location of the affected areas, thus making the field works more productive.



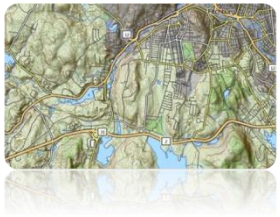
Key Concepts

- In SuperPad
  - Activate and use "OnlineMapTool" to add OpenStreetMap.
  - Activate and use "Data Service Tool" to add the layers from the SuperGIS Server.



Reviews

SuperGIS Server 3



Download

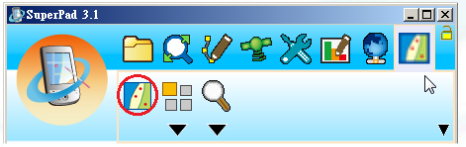
Mobile

Download data from

- SuperGIS Server
- OpenStreetMap

Activate extensions

Add map layers from SuperGIS Server



Add OpenStreetMap

Mobile

Collect data using

- Edit tools
- GPS tools
- Advanced attribute editing

Synchronize

SuperGIS Server 3

View data in real time using:

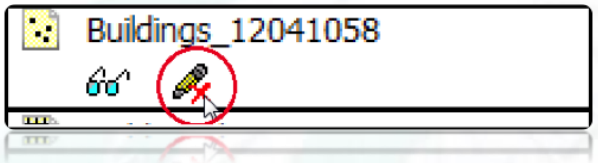
- SuperGIS Desktop
- Web browsers

Data collecting and synchronizing

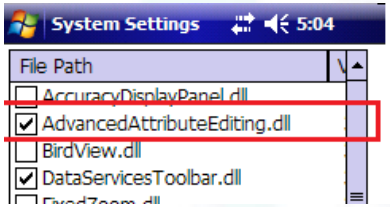
Field works

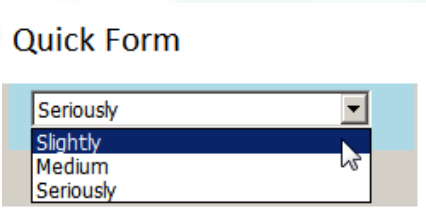
Data Collecting

- To collect data, you have to add the map layers from the server to your mobile device, and enable editing.



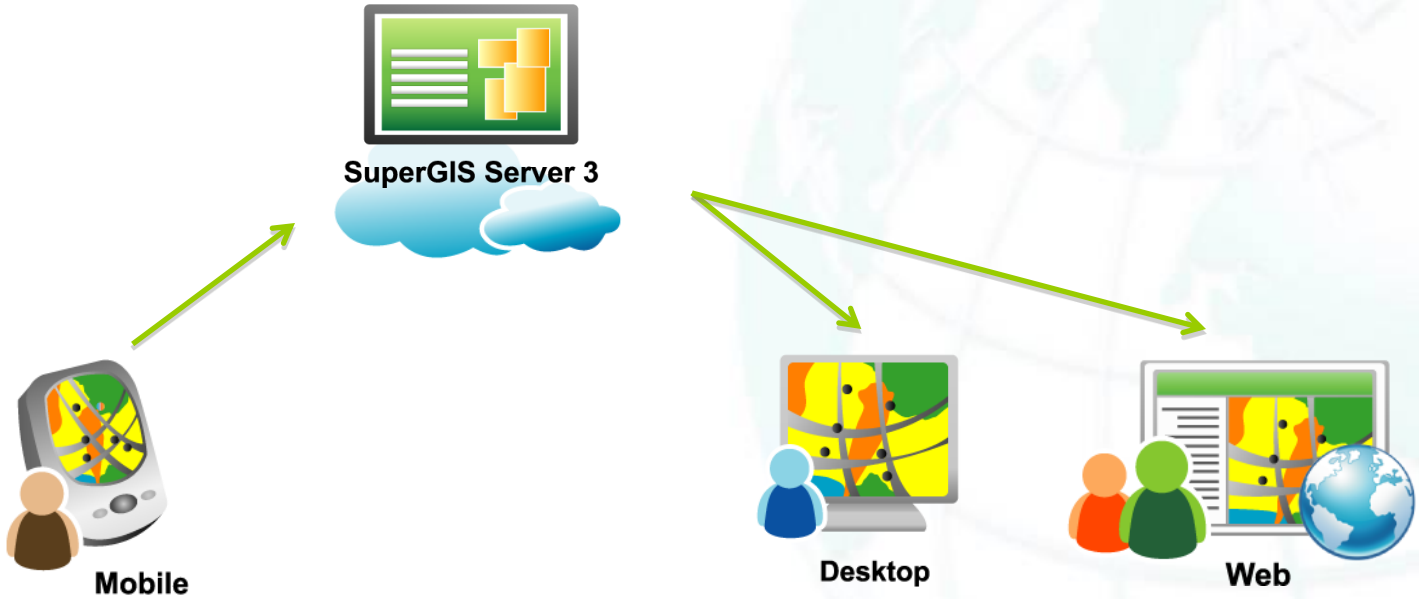
- You can also use the ‘Advanced Attribute Editing’ extension to help you collect the data easier.





Data Synchronizing

- After a new data is collected, it can be synchronized to the server and displayed in real time.



Key Concepts

- In SuperPad
  - **Edit the layers from SuperGIS Server.**
  - **Activate and use "Advanced Attribute Editing" to make data collecting easier.**
  - **Synchronizing the data to SuperGIS Server.**
- In SuperGIS Desktop and browser
  - **View the data in real time**

Reviews

Mobile

Collect data using

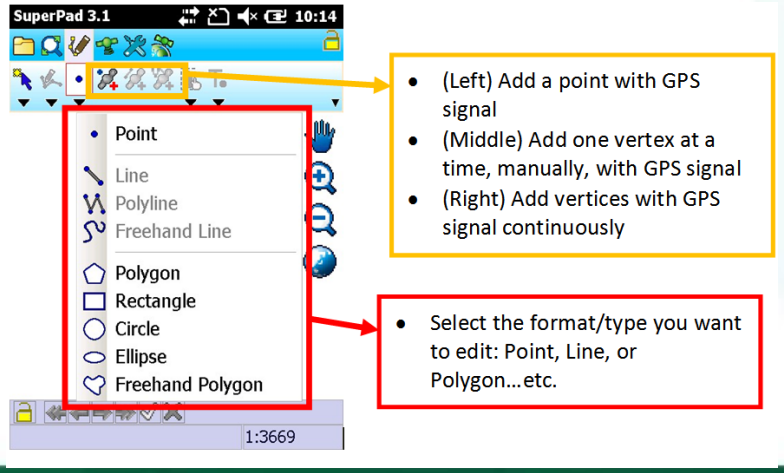
- Edit tools
- GPS tools
- Advanced attribute editing

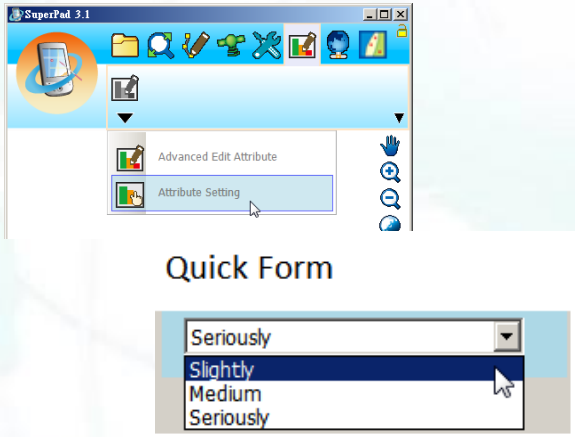
Synchronize

SuperGIS Server 3

View data in real time using:

- SuperGIS Desktop
- Web browsers





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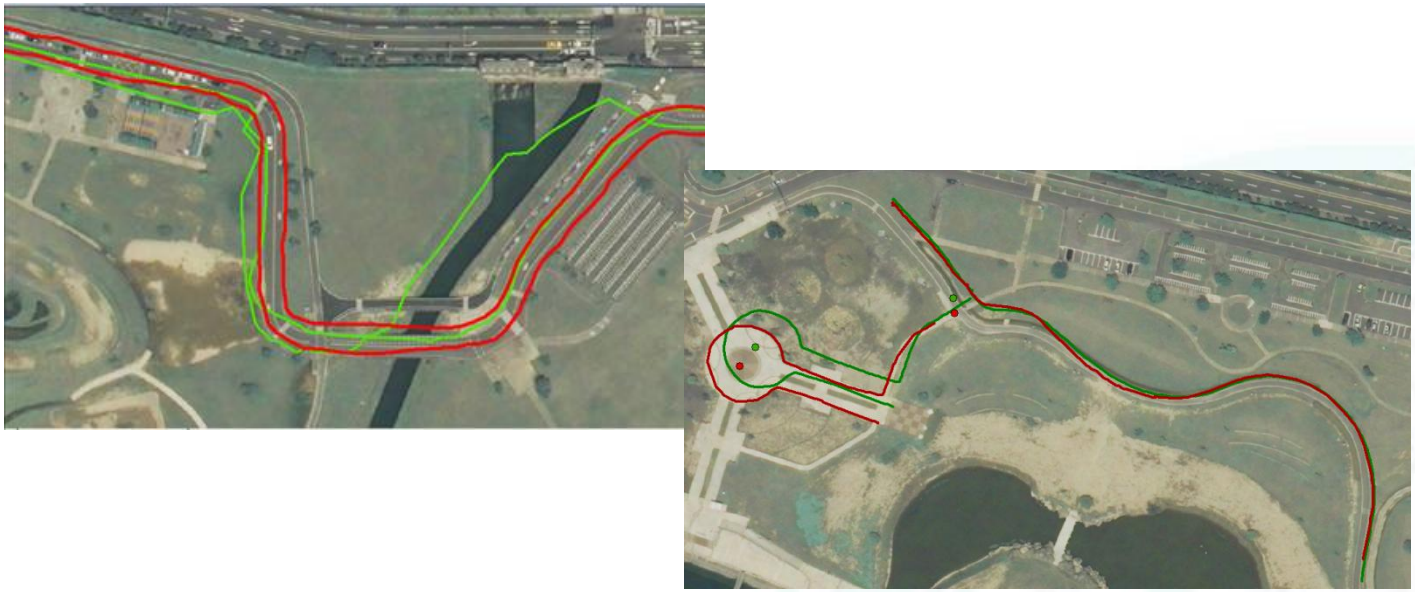


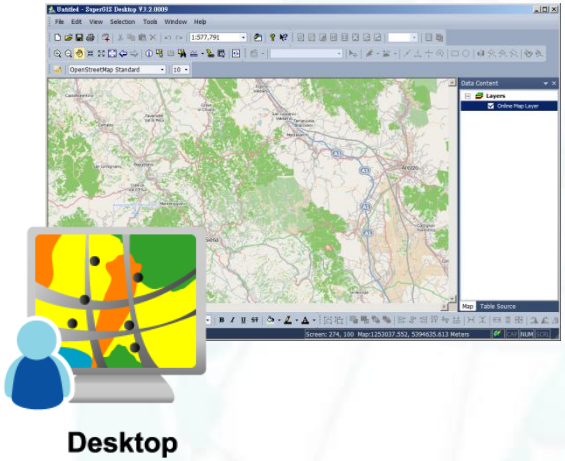
Data Post Processing

Increase the accuracy of the original data

Products

Mobile

SuperPad



Desktop

SuperGIS Desktop

Mobile

Use GNSS extension

Navigation Rinex

Download

Desktop

Post process the data

Data post processing

Back to Office…

Data Post Processing

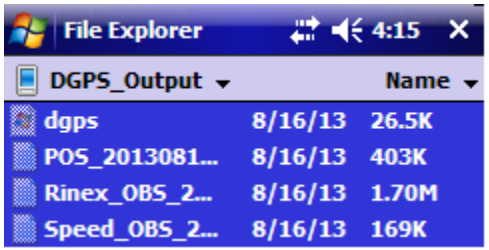
- To increase the accuracy of the data, you can apply post process function to your data.

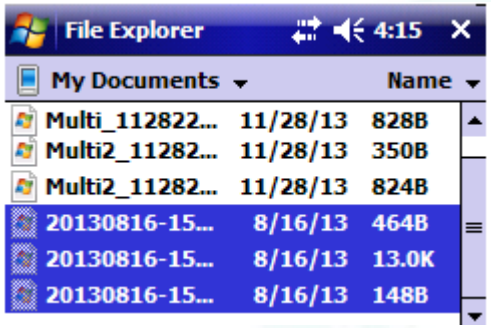
Data Post Processing

- To increase the accuracy of the data, you can apply post process function to your data.

Before Post Processing…

- Use GNSS extension
- Copy the raw data from SuperPad:



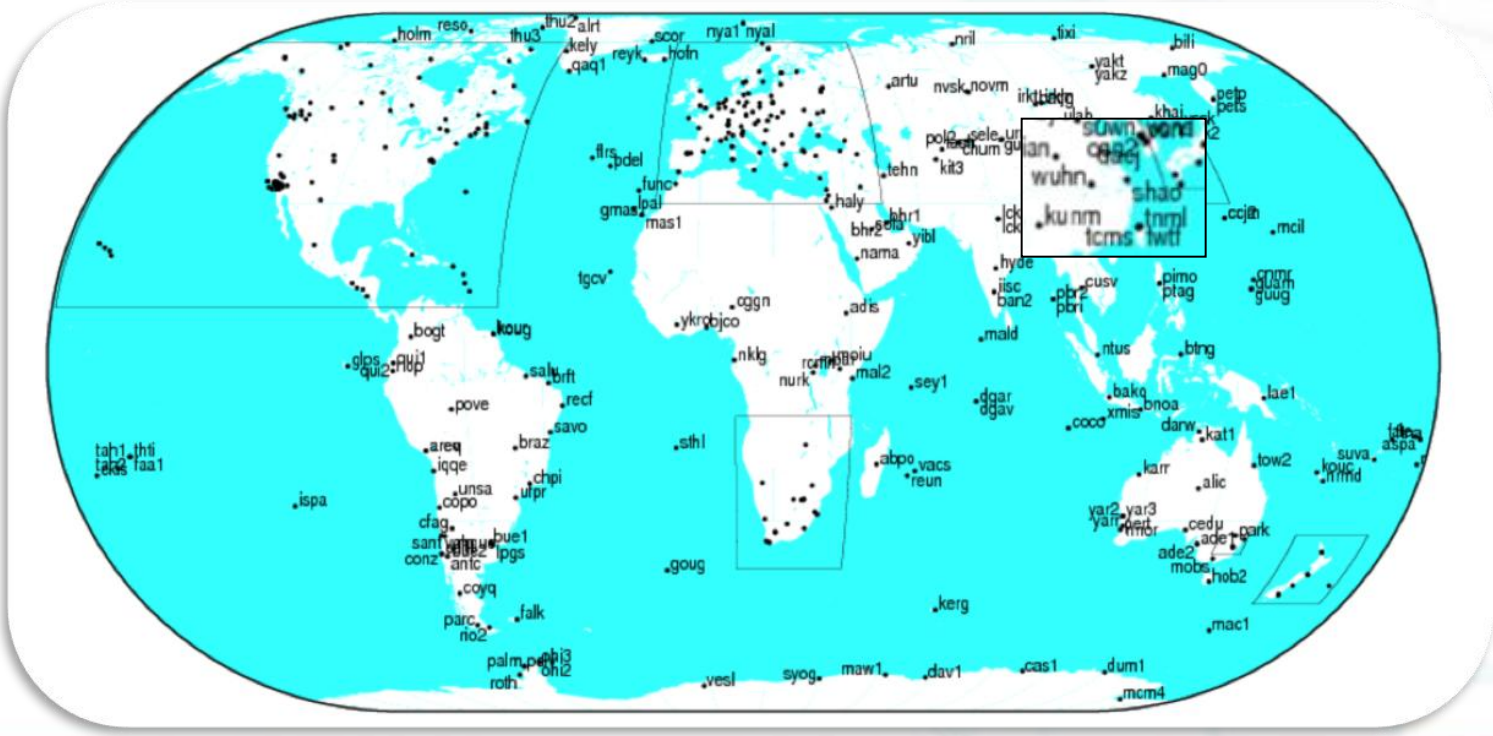


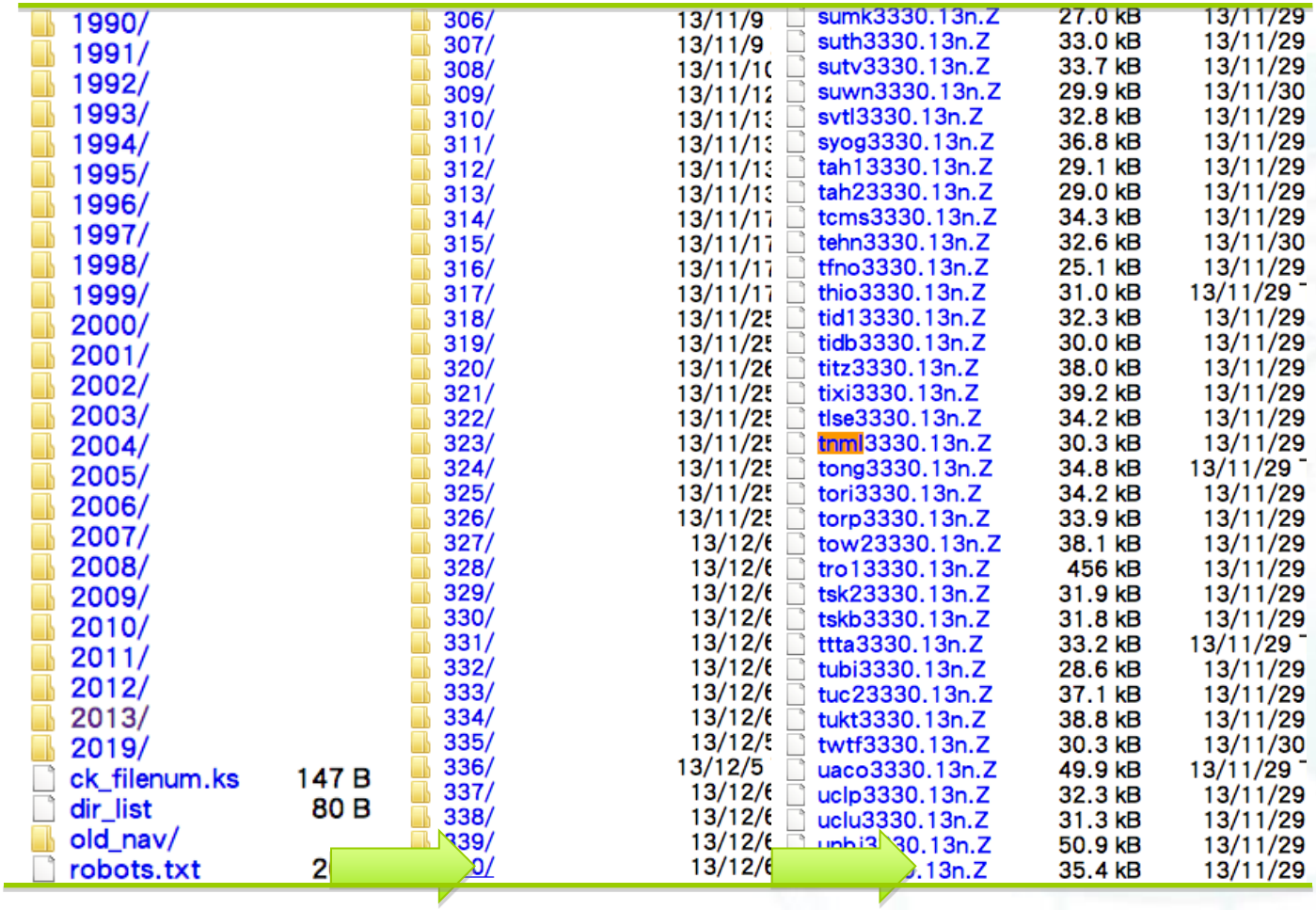
- Download navigation and RINEX data:
  - **Navigation:** **ftp://garner.ucsd.edu/pub/nav/**
  - **RINEX:** **ftp://garner.ucsd.edu/pub/rinex/**

IGS-International GNSS Service

- Find the nearest base station first:

http://igscb.jpl.nasa.gov/network/complete.html





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1994/		310/	13/11/13	svtl3330.13n.Z	32.8 kB	13/11/29
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2011/		327/	13/12/6	tow23330.13n.Z	38.1 kB	13/11/29
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2013/		329/	13/12/6	tsk23330.13n.Z	31.9 kB	13/11/29
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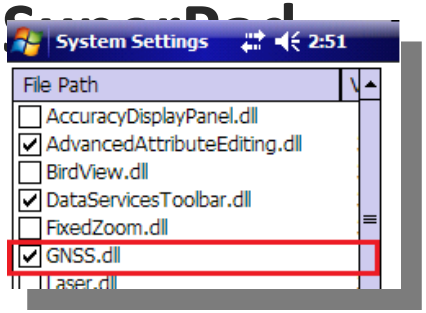
Key Concepts

- In SuperPad
  - Activate and use “GNSS” extension on SuperPad.



- In SuperGIS Desktop
  - Use Differential GPS add-on
  - Perform post process.

Reviews

Mobile

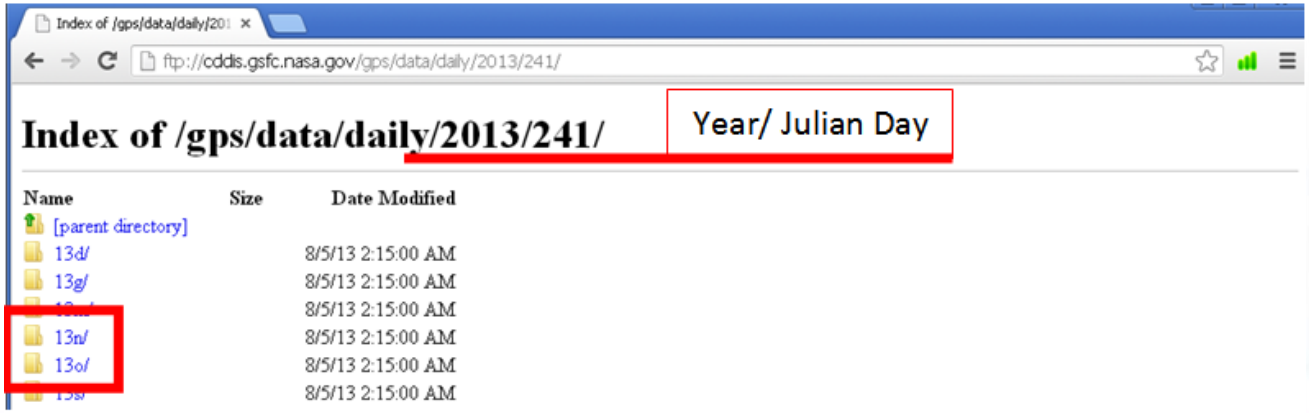
Use GNSS extension

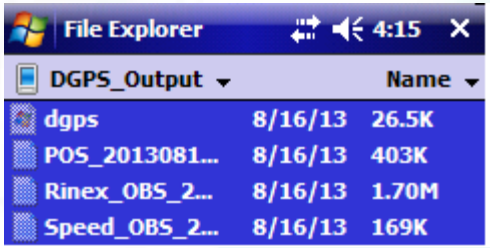
Navigation Rinex

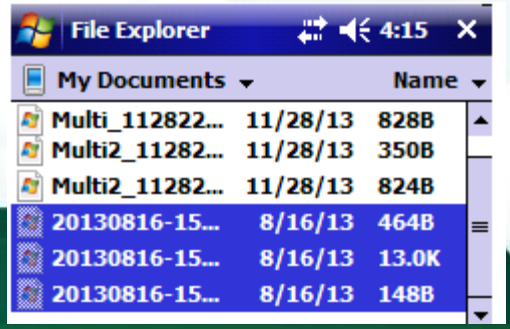
Download

Desktop

Post process the data







Reviews

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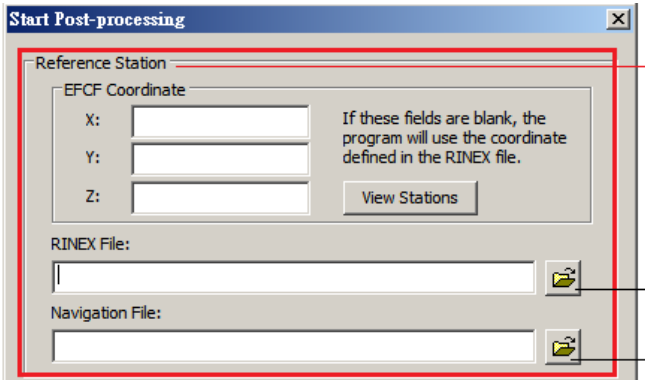
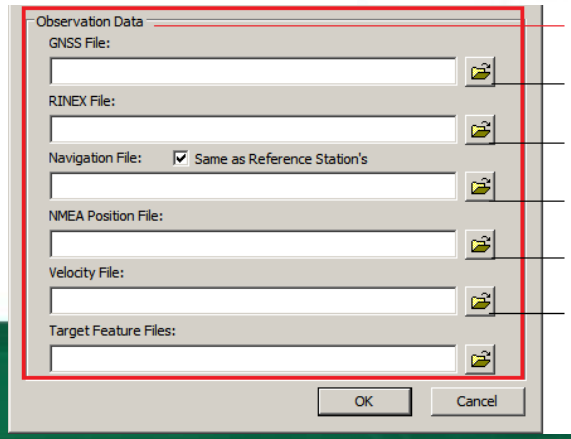


Data downloaded from ftp website

.13o file

.13n file



Data downloaded from mobile device

.gnss file

RINEX file

.13n file

POS file

SPEED file

Any questions are welcomed!

Thank you for your attention

Contact us:

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