

EDINA Geoservices:



Fieldtrip GB

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EDINA, Geoservices Support

EDINA

- **Jisc** Supported National Datacentre
 - Data Delivery
 - Data Discovery
 - Apps, Tools, APIs, Infrastructure
- **Geographical** – Reference – Multimedia – Access

EDINA's Geo Services

- View Annotate and Print Maps
- Download Map Data
- Search for Datasets, News etc.
- Create Metadata Records
- Create Geospatial Search Tools
- Geoparse text to find locations
- Embed Maps in Websites / GIS
- Record Data in the Field
- Citizen Science



Digimap[®]



GoGeo



Unlock

OpenStream



Fieldtrip GB

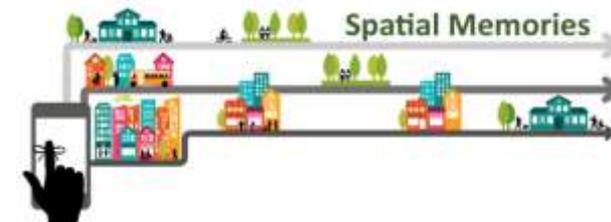


Digimap[®]

<http://edina.ac.uk/>

EDINA's Recent Geo Projects

- Layering Historical Data
- Crowdsourcing data correction
- Geoparse Documents
- Visualise the results
- Assist learners with disabilities
- Mobile app development
- European FP7 Project led by EDINA
- Developing Field Study mobile apps



<http://edina.ac.uk/>

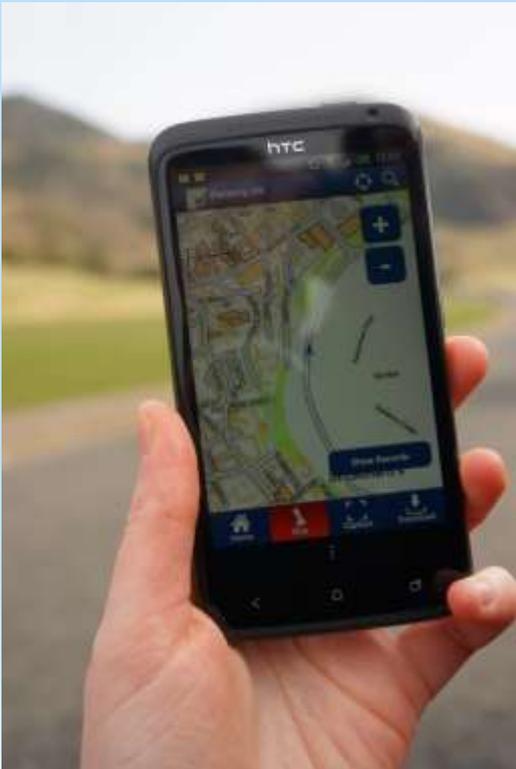


Fieldtrip GB: A Data Collection Mobile App





What does it do?



All the key features:

- ❖ Capture information
 - ✓ Images
 - ✓ Audio
 - ✓ Text
 - ✓ Location
- ❖ High quality background maps
- ❖ Saved maps for use “offline”
- ❖ Custom data collection forms
- ❖ Manual location correction
- ❖ It's **Free**





The Basics



Maps: view online maps or saved ones offline



Download: maps and view captured records.



Capture Data: basic capture forms and GPS tracking



Login: to a Dropbox account





The Basics



Maps: view online maps or saved ones offline



Capture Data: basic capture forms and GPS tracking



Download: maps and view captured records.



Upload records and Download new forms from Dropbox





Dropbox



Why Dropbox?



- ❖ Basic Account is free
- ❖ Dropbox terms of use don't give them access to the users data
- ❖ EDINA aren't responsible for User's data
- ❖ Account details can be shared
- ❖ We didn't want people to have yet another set of login details to remember





Authoring tool



FieldTrip GB Author Home Create new form Record Viewer Editors Gallery My Editors Contact

Edit menu Mode Rotation Size screen Actions

Title: Geology Edit Unsyncronized

Form Elements

- Text
- Range
- Text Area
- Multiple Choice Selector
- Single Choice Selector
- Drop down Selector
- Image Capture
- Audio Capture

Download app from:

Options

Title

Title

Required

Yes

Placeholder

Placeholder

Max length

10

Done Preview

Drag and drop:
❖ Easy to use form builder



Custom Forms



Easy data management:

- ❖ Consistent terms
- ❖ Single data structure
- ❖ Set increments to aid estimates
- ❖ Reduced errors
 - ❖ consistent errors at least!

Field Trip GB

Title
Placeholder

Rock Type
[Dropdown]

Rock Description
Placeholder

Dip
Placeh [Slider]

Strike
Placeh [Slider]

Note Book Ref
Placeholder

Photo
Camera Gallery

Save Cancel

Home Map Capture Download

Fieldtrip GB

Location Name
Placeholder

Species
[Dropdown]

Number Seen Concurrently
[Slider]

Photo
Camera Gallery

Save Cancel

Home Map Capture Download





Capture Data



Fieldtrip GB

Location Name
Placeholder

Species
[Dropdown menu]

Number Seen Concurrently
[Slider]

Photo
Camera Gallery

Save Cancel

Home Map Capture Download

Fill in the form:

- ❖ Drop down menus are quicker than typing
- ❖ Sliders can also speed data entry

Update the location:

- ❖ Urban canyons can confuse the GPS
- ❖ Allows data entry from remote locations to be carried out

Field Trip GB

My Mug Details

Description: test pic of mug

[Map with location pin]

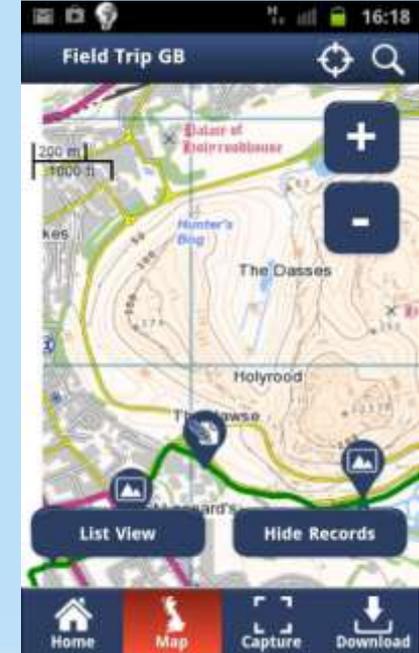
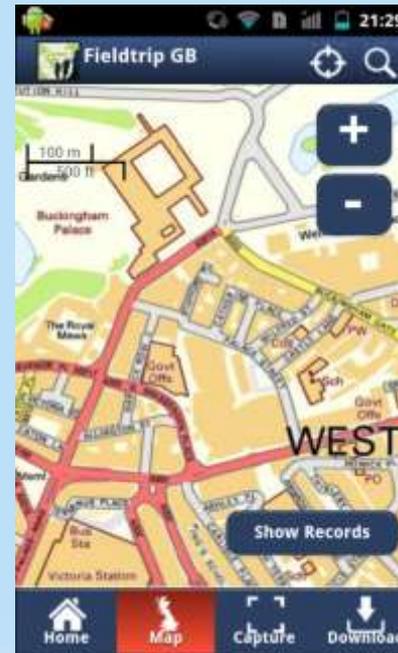
Save Cancel

Home Map Capture Download





The Mapping



- ❖ Strategi
- ❖ Natural England
- ❖ Land-Form PANORAMA
- ❖ Vector Map District
- ❖ OS Street View
- ❖ OpenStreetMap





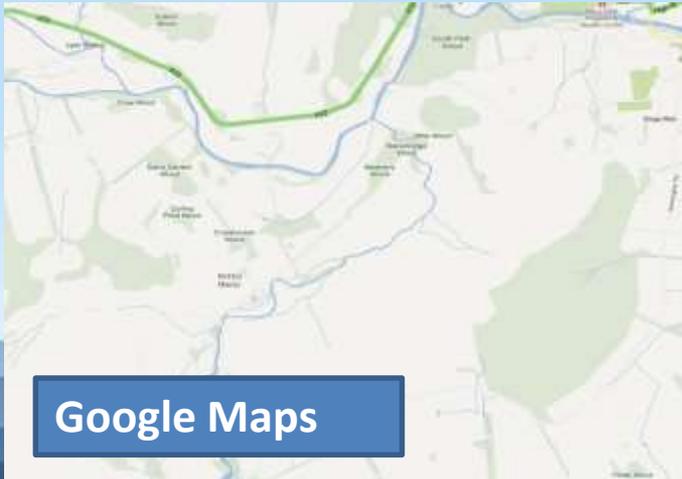
Why does Fieldtrip GB need its own map?



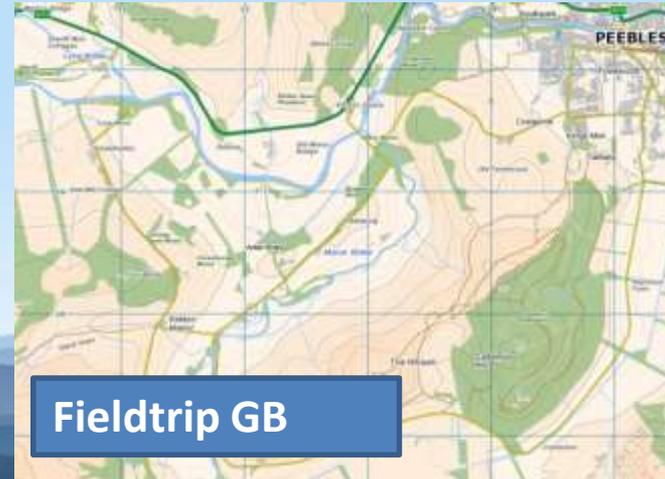
OS OpenData



OpenStreetMap



Google Maps



Fieldtrip GB





Urban vs. Rural



Quality Mapping in all locations:

- ❖ One mapping stack for both urban and rural environments

- ❖ Mapserver 6.2 Masking





Offline Mapping

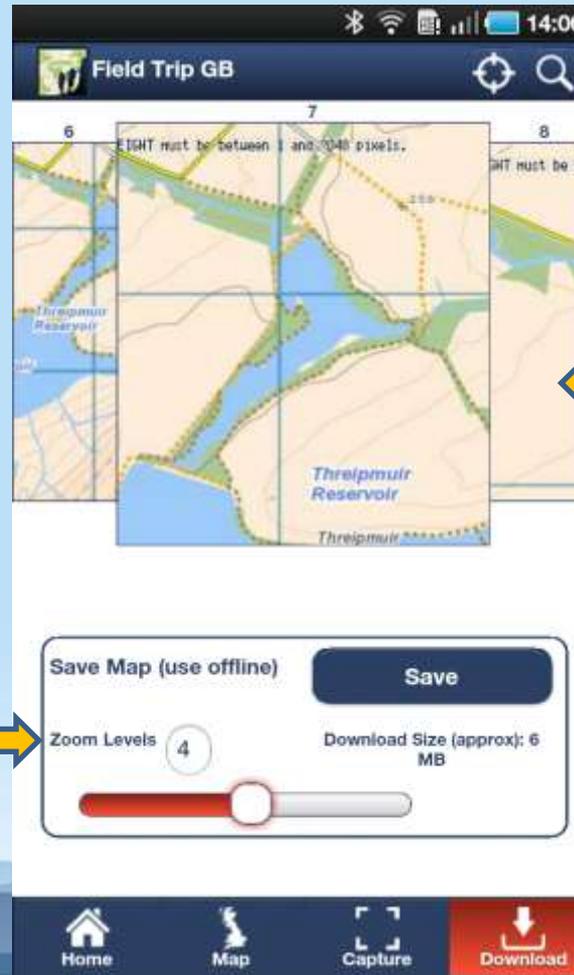


Why save maps to the phone?

- ❖ No need to be online to view maps
- ❖ Streaming maps uses data allowance
- ❖ Maps load faster from memory

Zoom Levels:

Set the number of zoom levels you want to download



Preview Map:
Shows the detail of the mapping for your location.



Edit & Share



The screenshot shows the Fieldtrip GB Author interface. On the left, there are sections for 'Filter Records', 'Export Records', and 'Help Menu'. The main area displays a map of 'East Meado Park' with streets like 'MELVILLE DRIVE', 'ARGYLE PL', and 'SYLVAN'. A table below the map shows a list of records with columns for 'A/A', 'Record', 'Editor', and 'View/E'. A 'Condition' dropdown menu is visible on the right side of the map.

A/A	Record	Editor	View/E
0	TF	Tree odr	View/Eat Delete
1	TF	Tree odr	View/Eat Delete
2	TF	Tree odr	View/Eat Delete
3	TF	Tree odr	View/Eat Delete
4	TF	Tree odr	View/Eat Delete
5	TF	Tree odr	View/Eat Delete
6	TC	Tree odr	View/Eat Delete

Easy Data Sharing:

- ❖ Upload data
- ❖ Filter data by form name
- ❖ Visualise your data on a basemap
- ❖ Edit collected data
- ❖ Export to kml, GeoJson, csv, wms*
- ❖ Share maps through Dropbox





Lesson Plan



1. Before you start

- Get a new group Dropbox account to share with your class
- Download Fieldtrip GB to your devices

2. Design your form

- Log into the Authoring Tool
- Create a custom form and save it

3. Share the form

- Get the class to log into the group Dropbox account
- Use Download to get the form on their devices

4. In the field

- Collect data using the form
- Manually correct remote points or in urban canyons

5. Back indoors

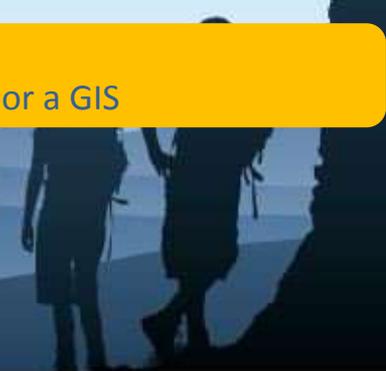
- Connect to WiFi
- Get the team to upload their data

6. Manage your data

- Log into Authoring Tool
- Filter by form name and edit points if needed

7. View the results

- Export to a KML file, GeoJSON, CSV or WMS
- Map the points in Google Earth, OpenLayers or a GIS





Future Directions:



We are planning...

- ❖ OpenStreetMap Global Edition
- ❖ Upload your own maps
- ❖ Upload points of interest / waymarkers
- ❖ Extra sensor measurements
- ❖ More complex forms





Any Questions?



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