EDINA Geoservices: Fieldtrip GB

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EDINA

- **Jisc** **Supported National Datacentre**
  - **Data Delivery**
  - **Data Discovery**
  - **Apps, Tools, APIs, Infrastructure**

- **Geographical** – Reference – Multimedia – Access

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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**

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GoGeo

Unlock

OpenStream

Fieldtrip GB
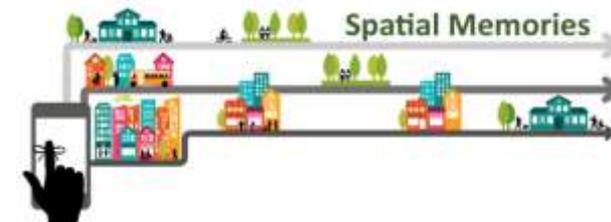
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EDINA's Recent Geo Projects

- **Layering Historical Data**
- **Crowdsourcing data correction**

- **Geoparse Documents**
- **Visualise the results**

- **Assist learners with disabilities**
- **Mobile app development**

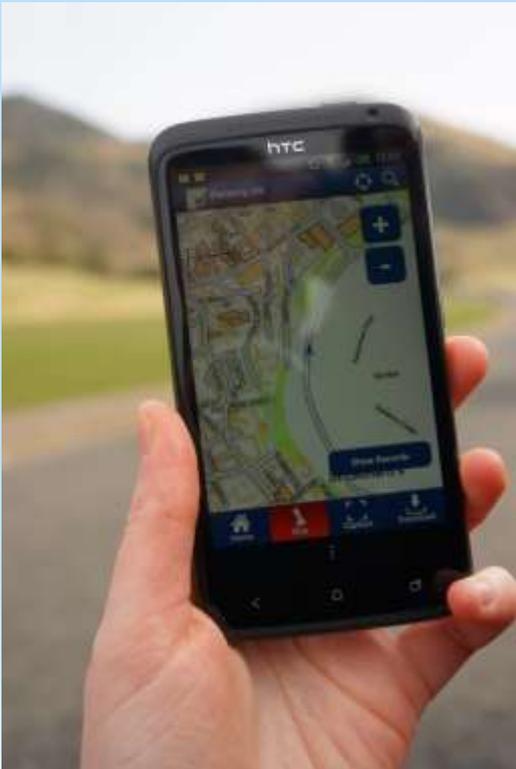- **European FP7 Project led by EDINA**
- **Developing Field Study mobile apps**

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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**

EDINA Jisc

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

EDINA Jisc

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Maps: view online maps or saved ones offline

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Capture Data: basic capture forms and GPS tracking

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

Dropbox

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Authoring tool

Drag and drop:
❖ Easy to use form builder

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Custom Forms

Easy data management:

❖ Consistent terms

❖ Single data structure

❖ Set increments to aid estimates

❖ Reduced errors

   ❖ consistent errors at least!

Capture Data

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

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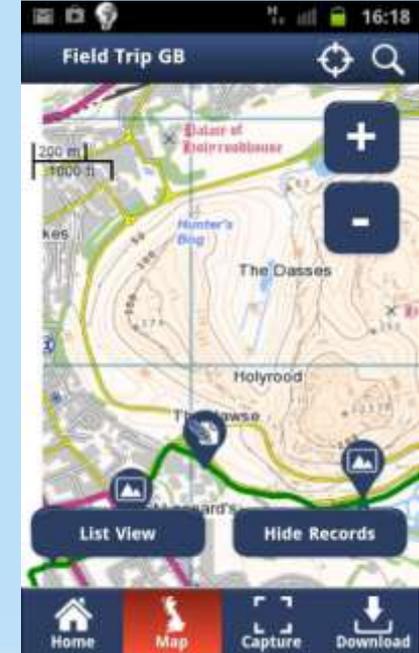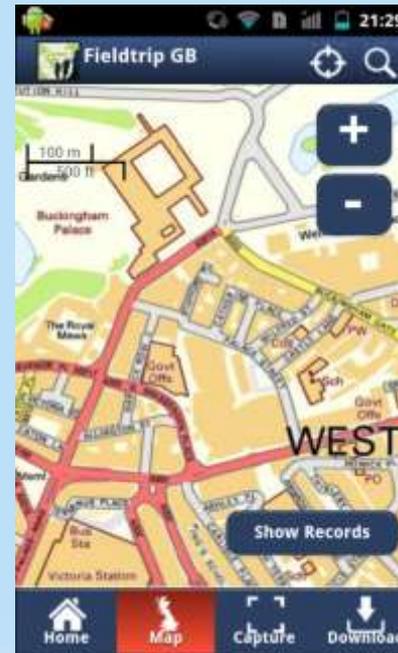
- ❖ **Strategi**
- ❖ **Vector Map District**
- ❖ **Natural England**
- ❖ **OS Street View**
- ❖ **Land-Form PANORAMA**
- ❖ **OpenStreetMap**

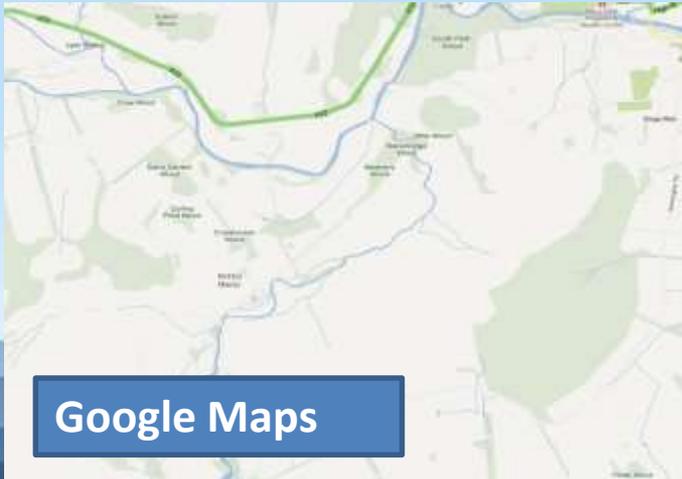**http://fieldtripgb.blogs.edina.ac.uk/**

EDINA Jisc

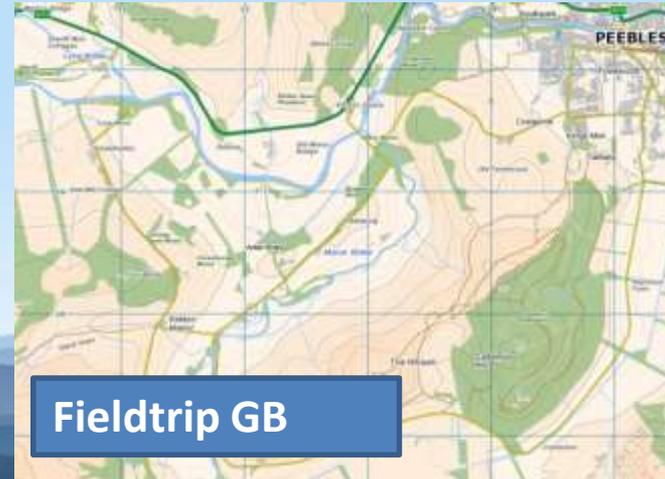# Why does Fieldtrip GB need its own map?

OS OpenData

OpenStreetMap

Google Maps

Fieldtrip GB

Urban vs. Rural

Quality Mapping in all locations:

❖ One mapping stack for both urban and rural environments
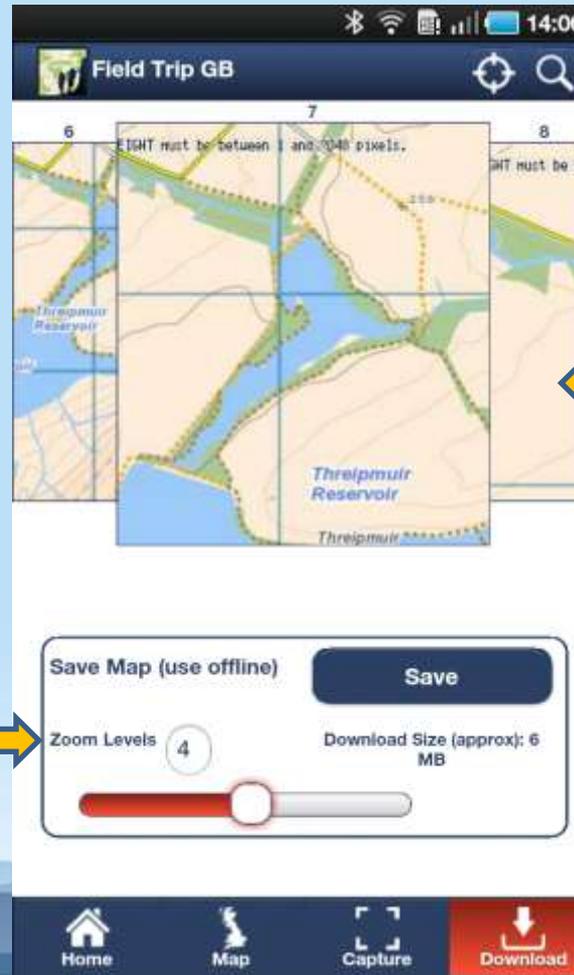
❖ Mapserver 6.2 Masking

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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

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

Zoom Levels:
Set the number of zoom levels you want to download

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Edit & Share

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

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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
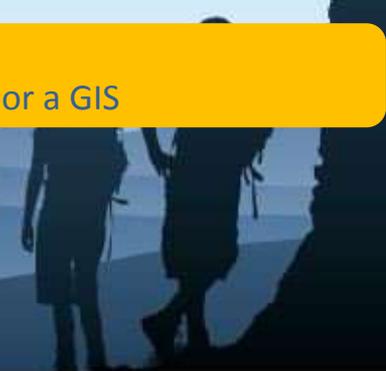
5. Back indoors
- Connect to WiFi
- Get the team to upload their data

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

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Future Directions:

We are planning...

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

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Any Questions?

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