CALIFORNIA EARTHQUAKE CLEARINGHOUSE

Tools for Mobile Data Collection

Need for Data Collection & Sharing

- 100s of engineers and scientists are expected to contribute data after a major earthquake in California
- The Earthquake Engineering Research Institute sends reconnaissance teams to earthquakes around the world
- Need for mobile data collection and near real-time data sharing solutions
- Make scientific and engineering observation by making a quick note or by filling out discipline specific forms

Clearinghouse Fieldnotes

Collecting and Sharing Data

Clearinghouse Fieldnotes

- HTML 5 web application with offline capabilities
- Facilitates mobile data collection and sharing
- Internal viewer allows users to view data collected by them and others within the application in real-time

Clearinghouse Fieldnotes Demo

Getting Started

- Open app at http://bayquakeallian ce.org/fieldnotes

Clearinghouse Fieldnotes Demo

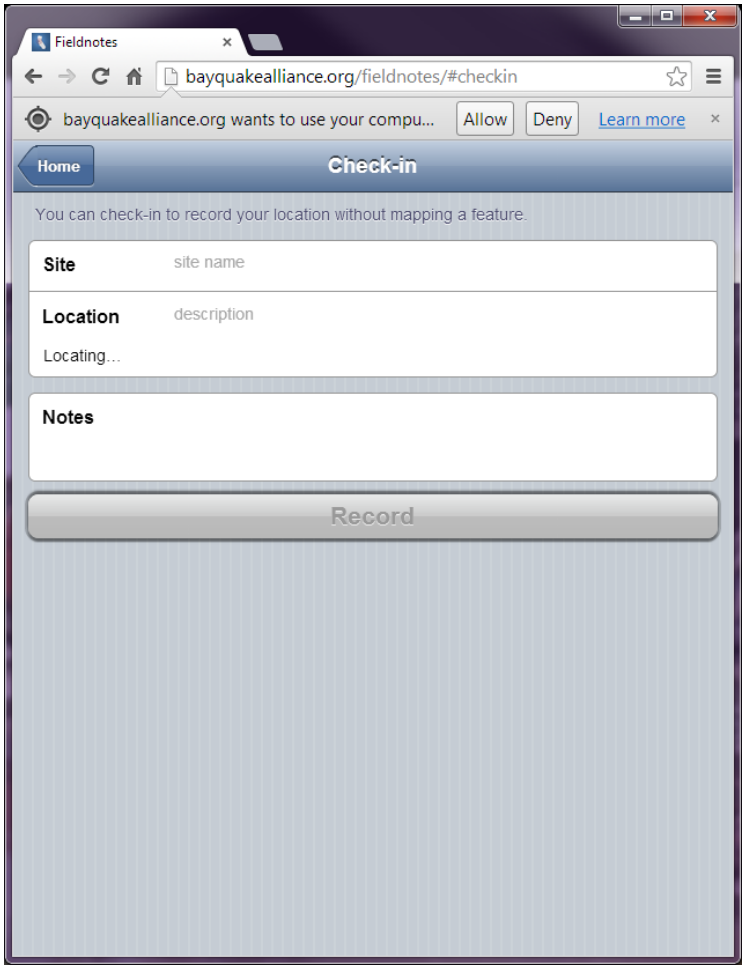
Getting Started

- Enter your email address

Clearinghouse Fieldnotes Demo

Checking-in

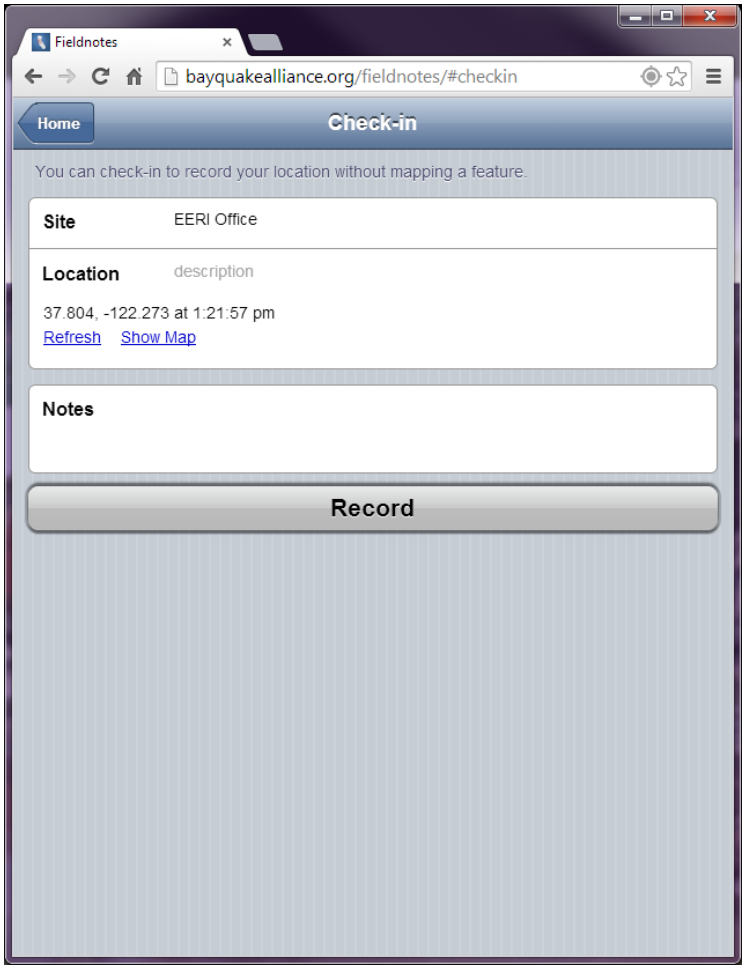
- Select Check-in to make a quick observation without filling out a form
- You will be prompted to allow your browser to use your location information – Select Allow



Clearinghouse Fieldnotes Demo

Checking-in

- Enter a site name
- Note that your location information is automatically populated.
- Click on “Show Map” to see a map of your location



Clearinghouse Fieldnotes Demo

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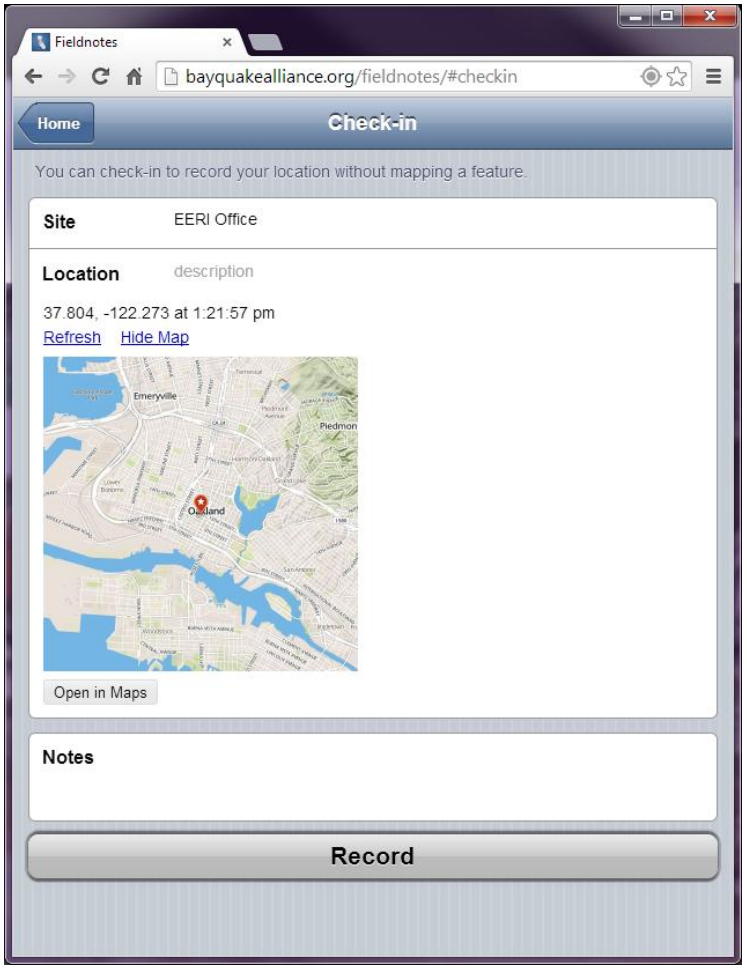
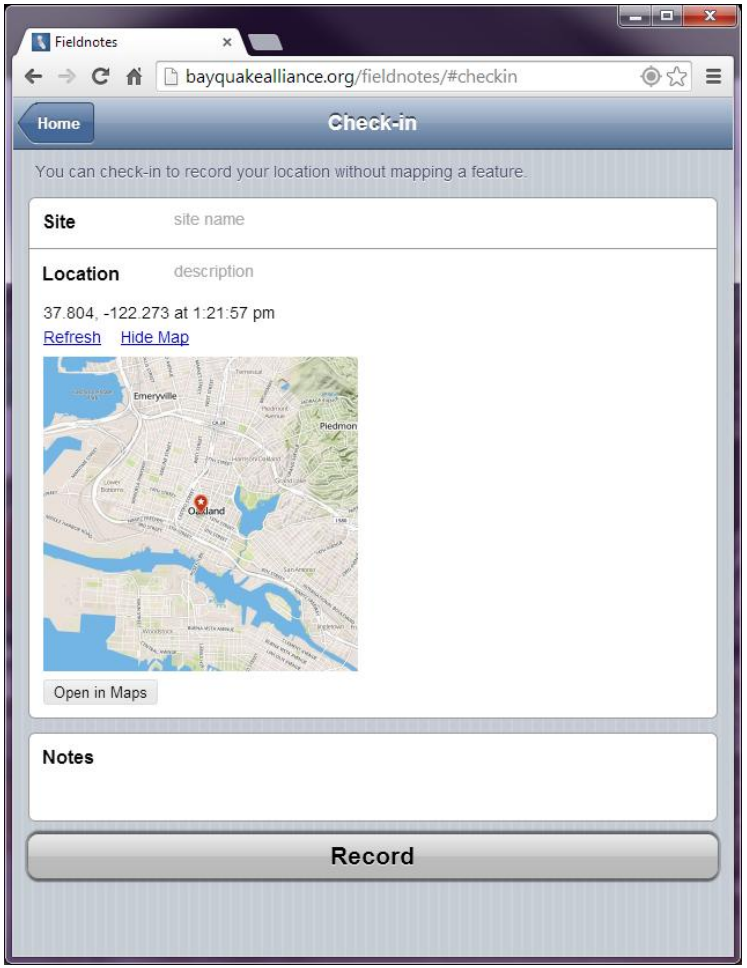


Clearinghouse Fieldnotes Demo

Checking-in

- Enter any observations in the notes area



Clearinghouse Fieldnotes Demo

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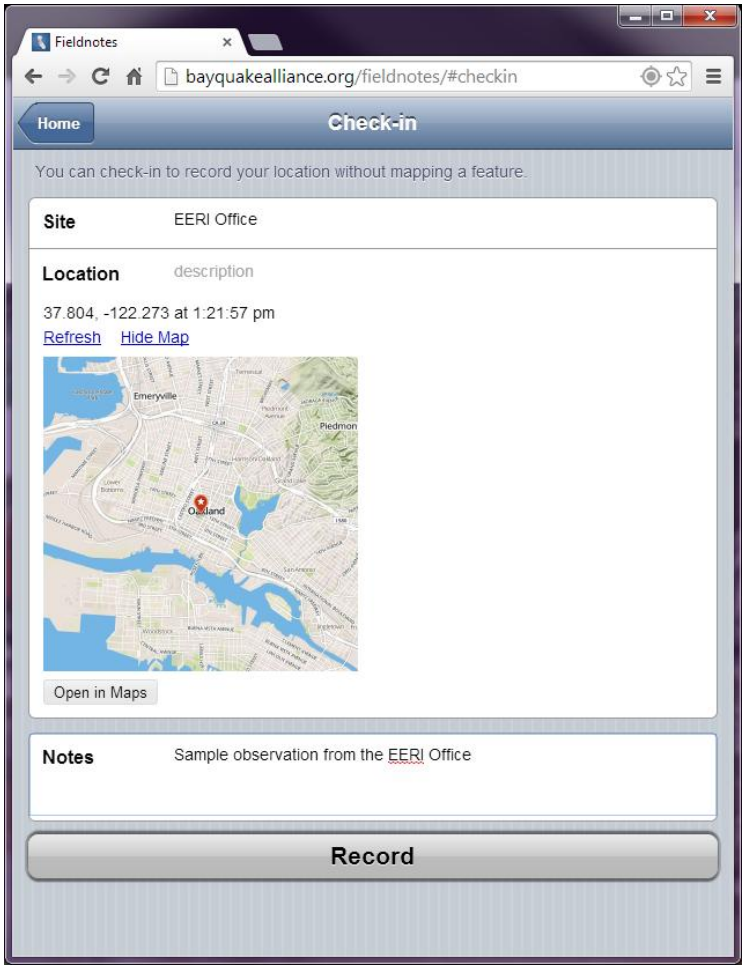
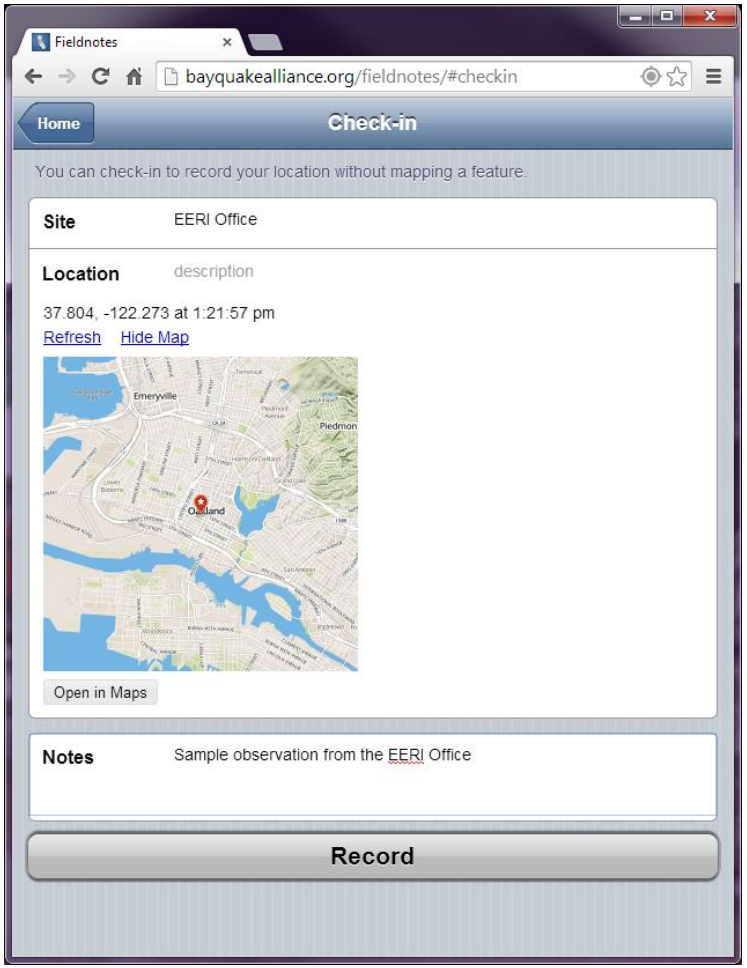


Clearinghouse Fieldnotes Demo

Checking-in

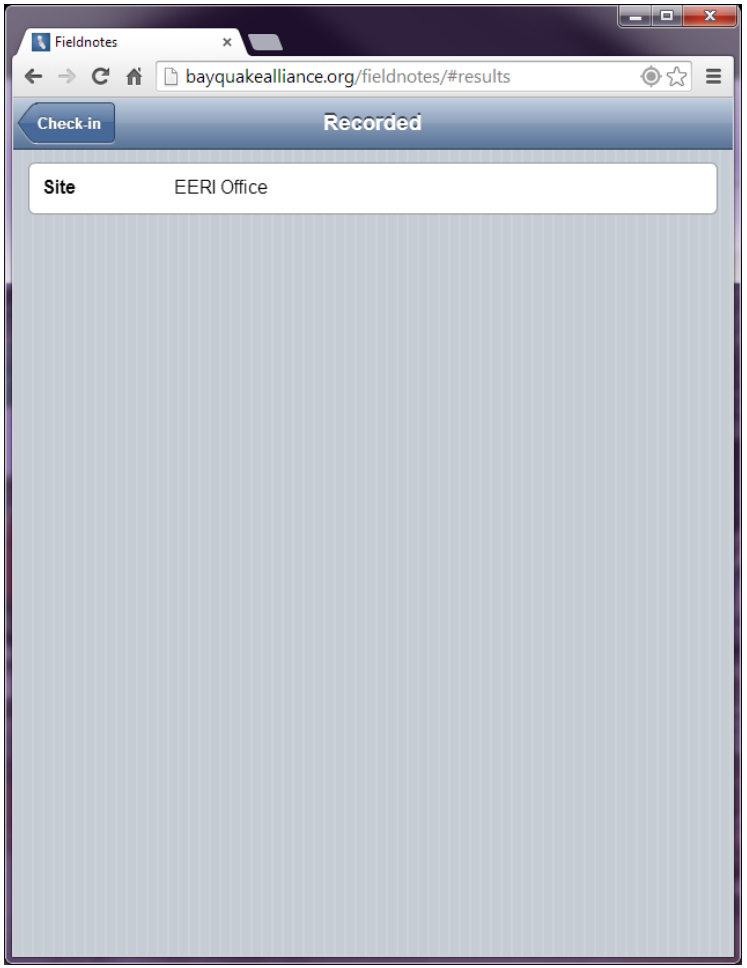
- Hit the Record button to record your data point



Clearinghouse Fieldnotes Demo

Checking-in

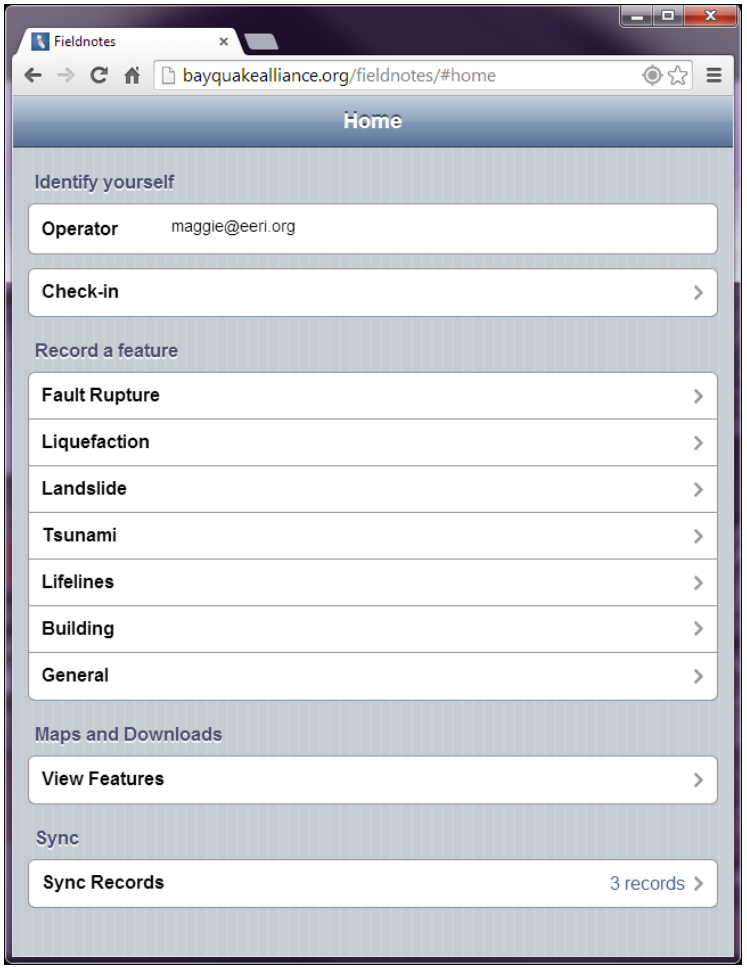
- You will see a confirmation page indicating that your information was recorded
- If you are ONLINE, your information is automatically sent to the server



Clearinghouse Fieldnotes Demo

Checking-in

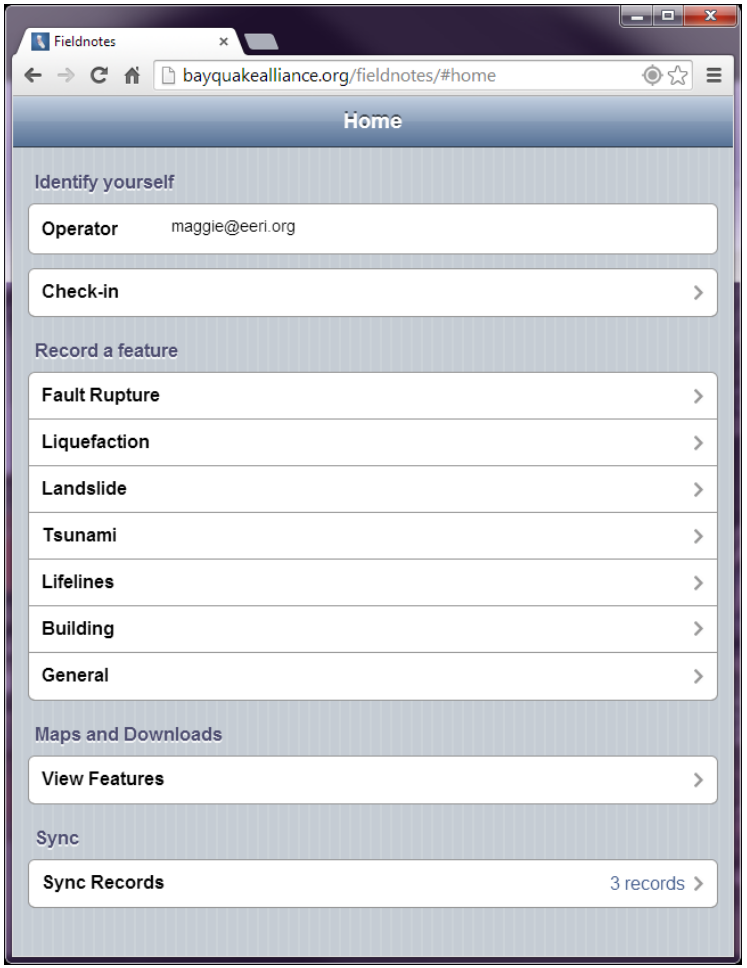
- If you are OFFLINE, you will have to initiate this when you are connected again
- You can see how many records have not been uploaded in the "Sync Records" area of the Home menu



Clearinghouse Fieldnotes Demo

Filling Out a Form

- On the home menu, you will see many options in the "Record a Feature" Section
- Select a feature to fill out a form, for this demo, we will select "Building"



Clearinghouse Fieldnotes Demo

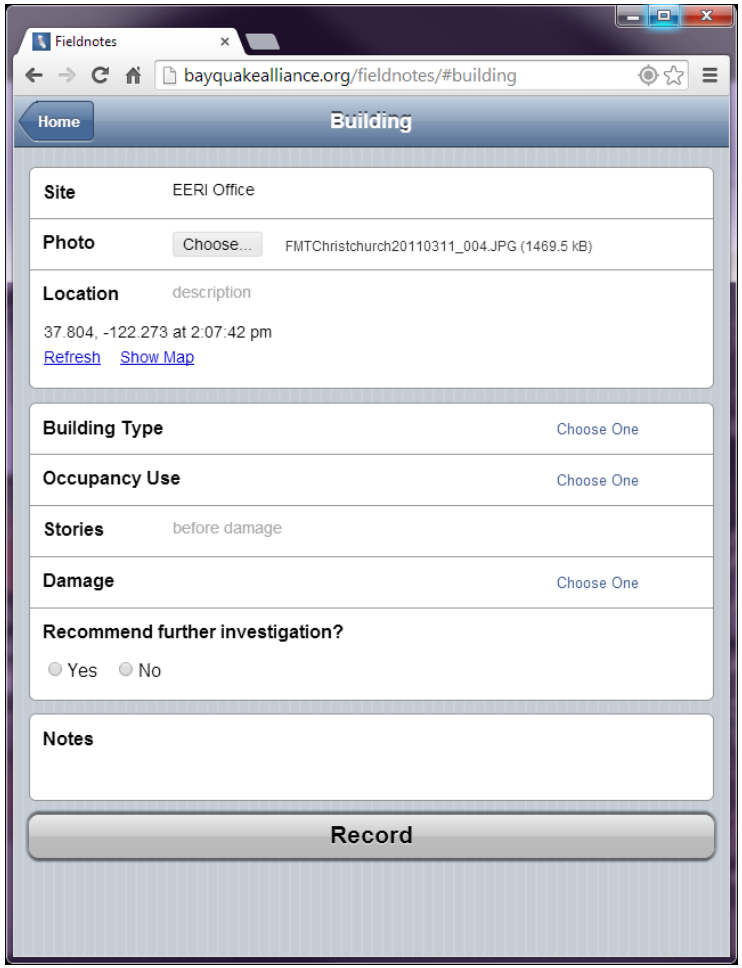
Filling Out a Form

- Similar to Checking in enter a site name

Clearinghouse Fieldnotes Demo

Filling Out a Form

- A photo of the feature, in this case a building, can be selected to accompany the information submitted through the form
- Location information is again automatically populated



Clearinghouse Fieldnotes Demo

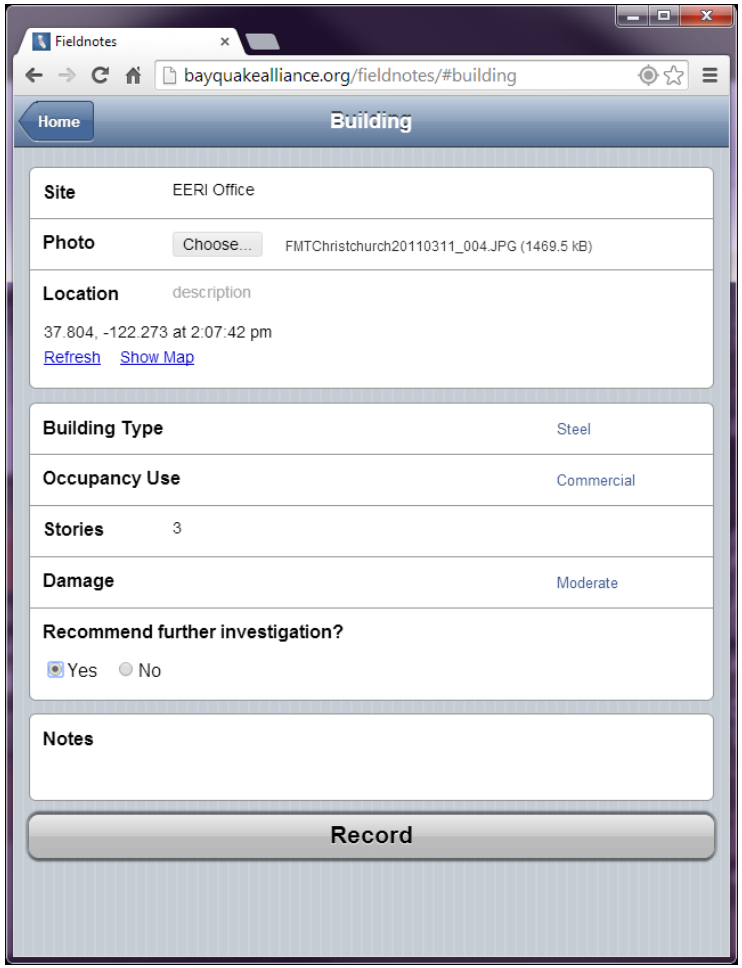
Filling Out a Form

- In this form there are 5 questions to answer

Clearinghouse Fieldnotes Demo

Filling Out a Form

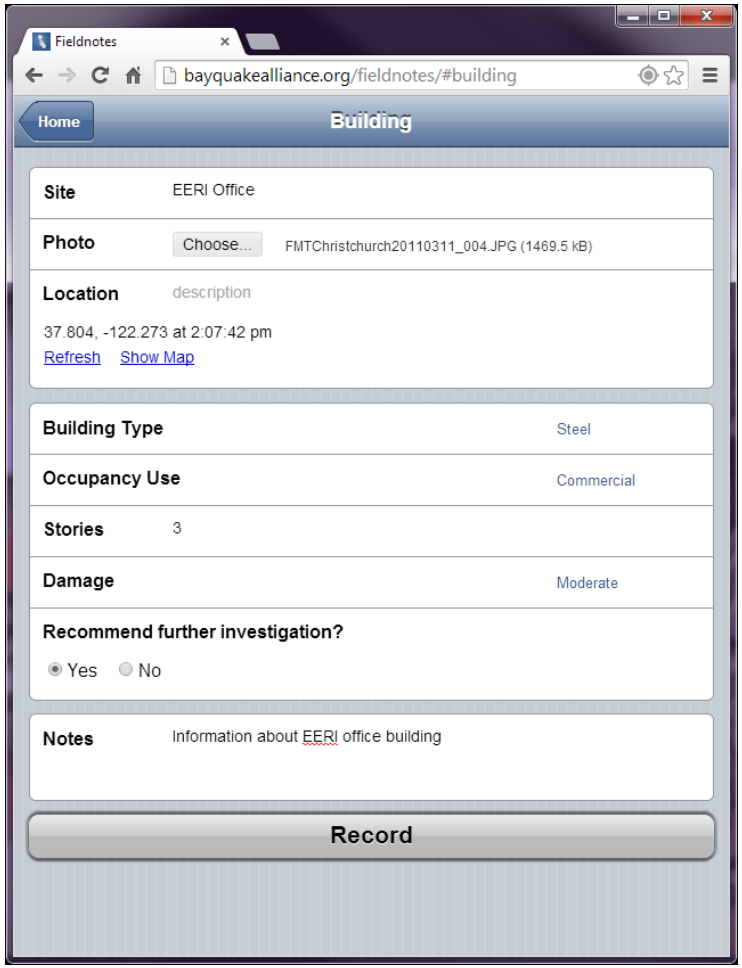
- After answering all questions, there is a space to add more text in the Notes section



Clearinghouse Fieldnotes Demo

Filling Out a Form

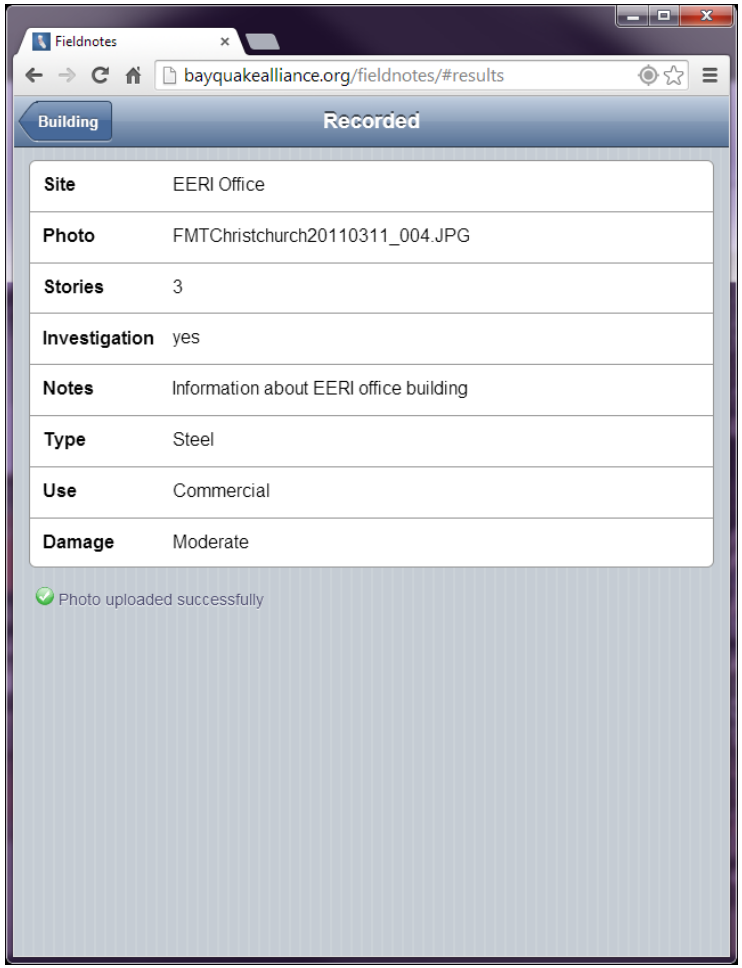
- Once the form is complete, the information can be sent or stored by clicking record



Clearinghouse Fieldnotes Demo

Filling Out a Form

- After recording you will see confirmation
- If you included a photo, it will take a moment to upload



Clearinghouse Fieldnotes Demo

Viewing and Downloading Features

- This application also has a built in map feature that allows users to see or download all points that have been recorded
- Select “View Features”

Clearinghouse Fieldnotes Demo

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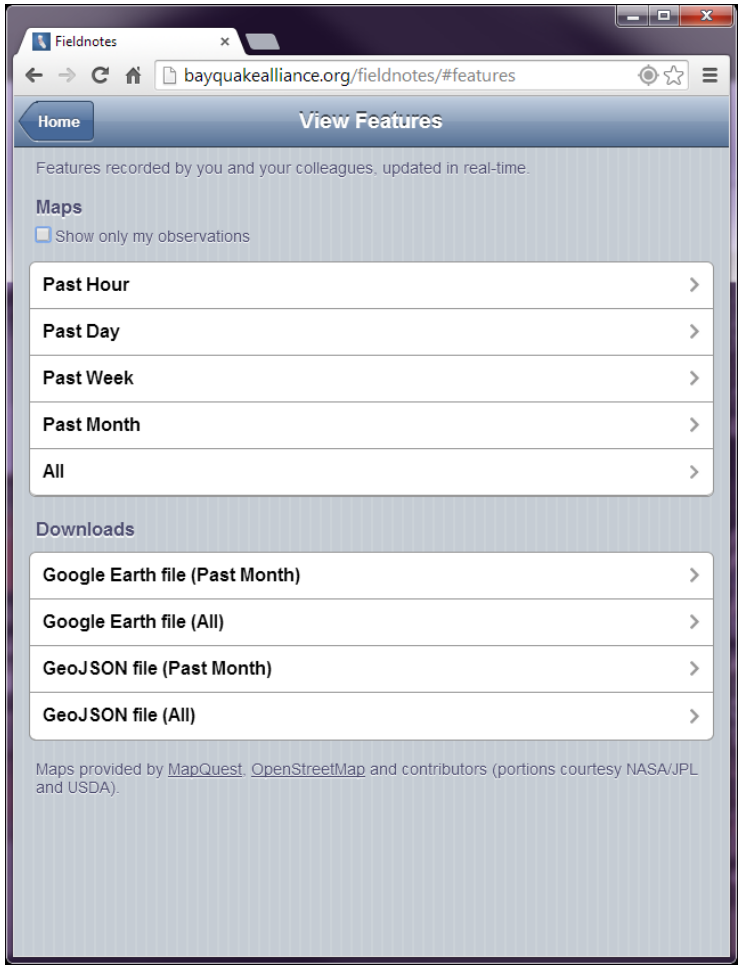


Clearinghouse Fieldnotes Demo

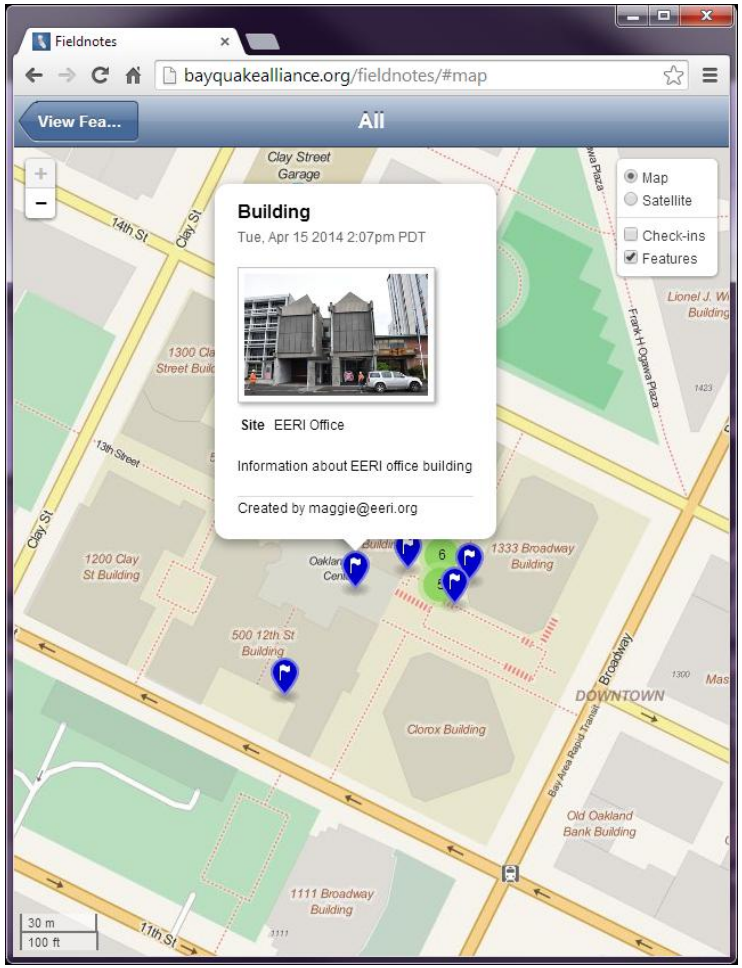
Viewing Features

- Selecting "All" shows a map with all points ever collected using this application

Clearinghouse Fieldnotes Demo

Viewing Features

- Selecting one of the pins will show the information collected at that site



Clearinghouse Fieldnotes Demo

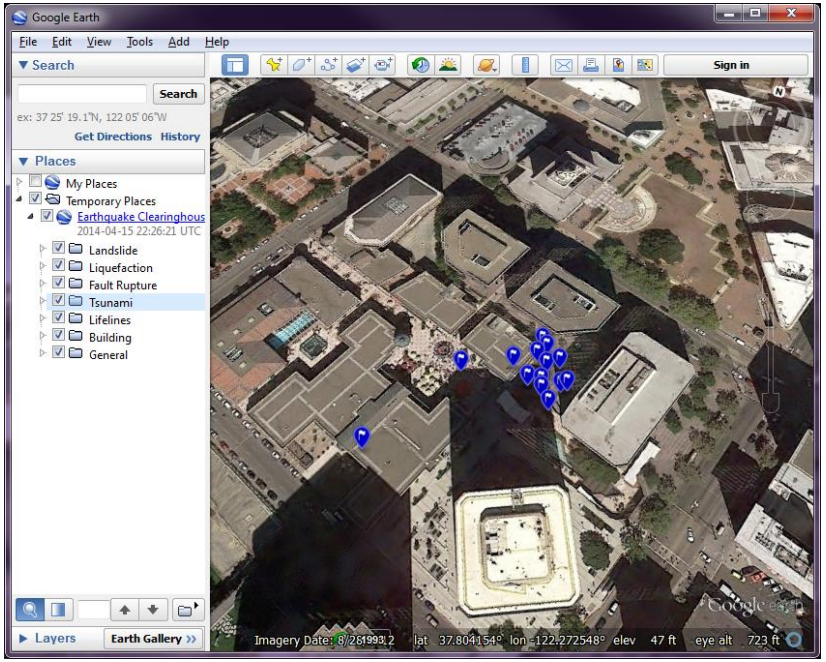
Downloading Features

- It is also possible to download all the information to view in another mapping application such as Google Earth
- Selecting this option initiates downloading a kml file

Clearinghouse Fieldnotes Demo

Downloading Features

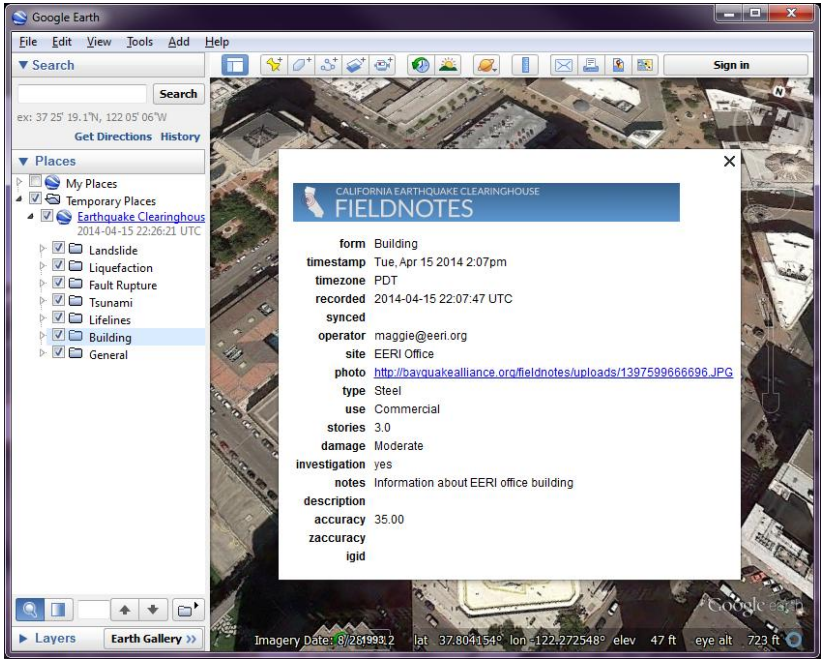
- This is what the data looks like in Google Earth
- It is possible to toggle on and off the different categories of features

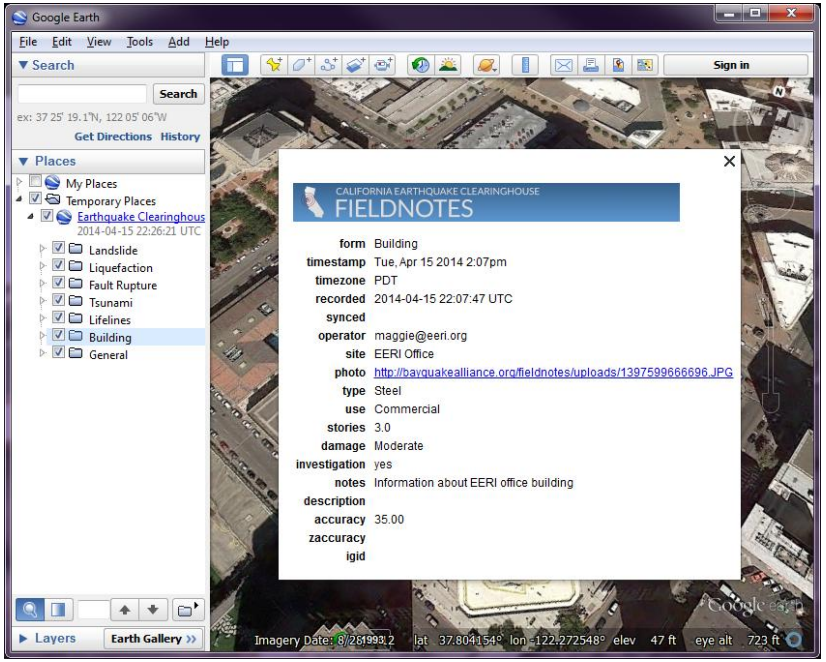


Clearinghouse Fieldnotes Demo

Downloading Features

- Selecting a pin brings up all the information for that point, including the form data and a link to an associated picture



Summary

- Lightweight tool for mobile data collection
- Online viewing facilitated as all data is hosted online