

## F. Example of structure surveying for the Detailed Exposure Model

A step-by-step example of the remote surveying process of a three-story confined masonry building is presented next. Google Maps, Google StreetView and IDCT are used simultaneously. It is necessary to have a georeferenced image of the surveyed area before using this methodology. The methodology to obtain a georeferenced image of the city is described in Appendix E.

- The cities are remotely visited using Google StreetView and the residential structures are identified. A specific structure is then selected for surveying, as shown in Figure F.1.



Figure F.1: Remote survey visualization of the selected building using Google Maps (left) and Google StreetView (right)

- The location of the same structure is identified in the georeferenced image on IDCT. Using the Add Point command, a new field observation is added to the IDCT project (Figure F.2).

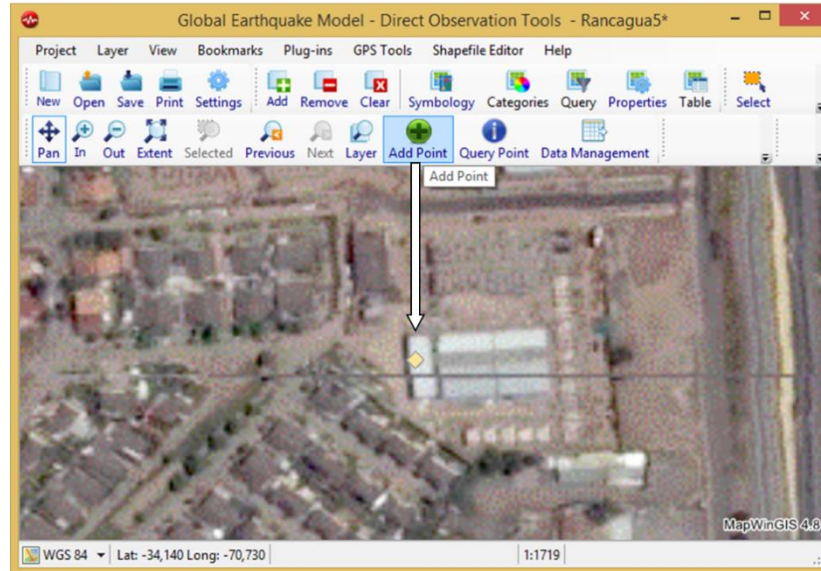


Figure F.2: Visualization of the selected building using IDCT. The added point is identified in orange.

- The *Add New Observation* window emerges to add the metadata to the point, i.e., the information of the surveyed structure. The different available fields are filled with observable information using all the views Google StreetView provides for the structure. Information fields are completed (see Figure F.3):
  - Position: latitude and longitude are automatically saved from the georeferenced image.
  - Material type: *Masonry, confined*
  - Structural Irregularity: *regular structure*
  - Building Occupancy: *residential*
  - Material technology: *Fired clay hollow bricks* is assumed
  - General Building Comments:
    - Number of stories: *3*
    - Number of dwellings : *1*
    - Mixed materials: *no*

Add New Observation

Materials and Irregularity | Building Components | Building Information | Consequences and Exposure | Photographs and Media | Help

Favourites: ★

Location: X:  Y:

Advanced view: show longitudinal, transverse, primary and secondary fields

**Lateral Load Resisting System Materials**

Material Type:

Material Technology:

Mortar/Stone Type:

Masonry Reinforcement:

Steel Connection:

**Structural Irregularity**

Structural Irregularity:

Plan Irregularity:

Vertical Irregularity:

**General Building Comments**

Figure F.3: Information to be saved on IDCT for the surveyed structure