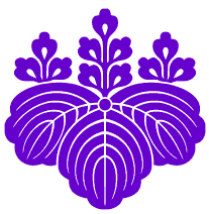
ASIA Cities Person Trip Data Browser and Analyzer

Understanding human mobility from spatial perspective

QUICK GUIDE

Version 2014.08.30



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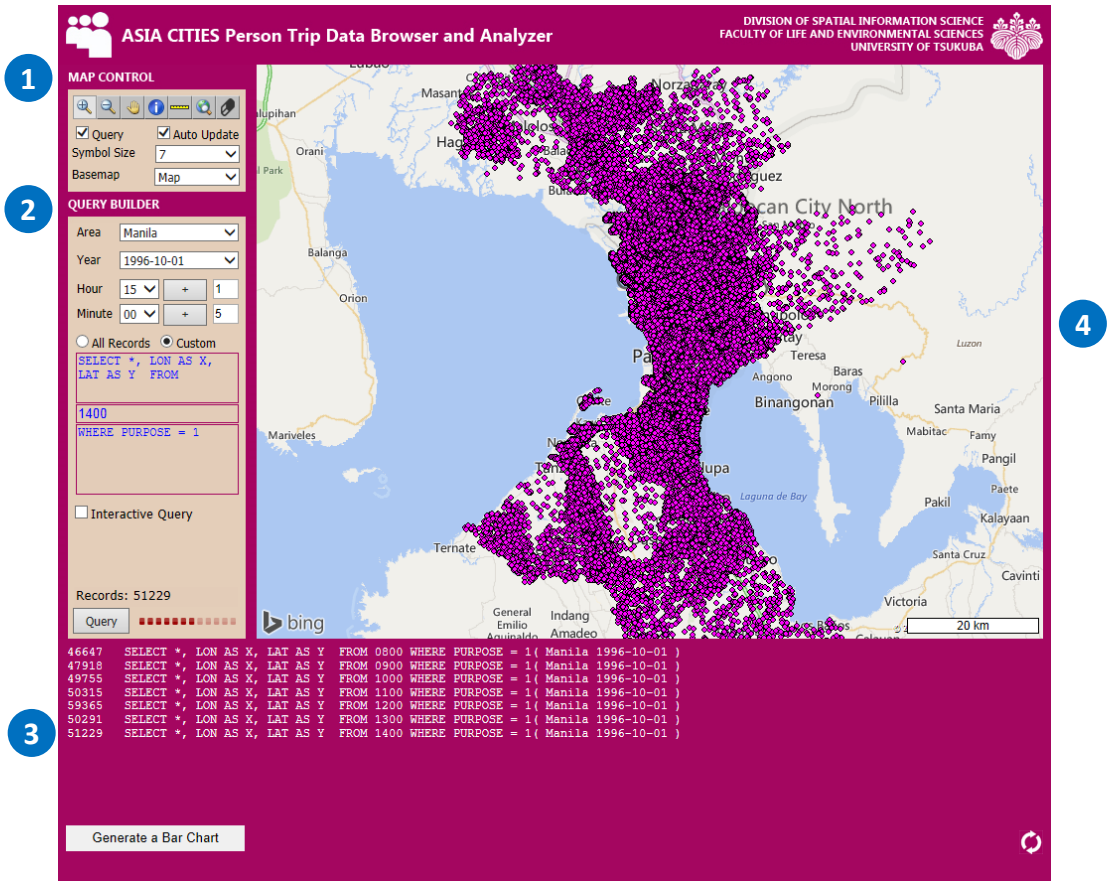
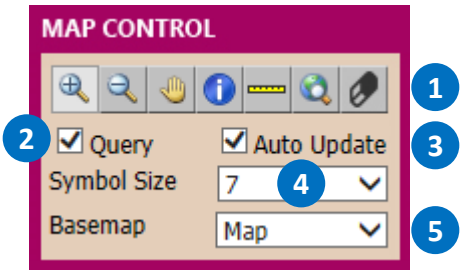
1. GRAPHICAL USER INTERFACE

URL: http://land.geo.tsukuba.ac.jp/persontrips/asia



1. Map controls (Zoom In/Out, Pan, Get Attribute Information, etc.)
2. Query Builder
3. Query Log Display
4. Map View

2. MAP CONTROLS



1
- Zoom In
- Zoom Out
- Pan
- Get Attribute Information
- Distance Measurement
- Zoom All
- Clear the Map (Remove all queries results)

2 Hide/Show query layer

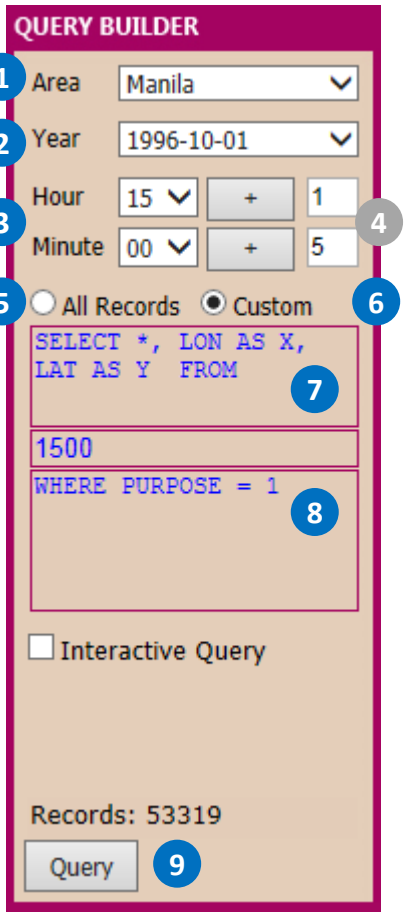
3 Automatic update the query layer while zoom in/out/pan

4 Change the point size

5 Select Base Map type (Map or Aerial or Hybrid or None)

3. QUERY BUILDER

3.1. Simple Query



1. Select **Area** (City)
2. Select **Year**
3. Select **Hour** and **Minute**

Skip for now

4. Set Hour or Minute intervals (only for successive queries using + buttons) See Next "Query by Successive Time Intervals"
5. Select **All Records** to return all records
6. Select **Custom** to define the search category
7. Under **Custom** search: Select desire column fields. For example:
   * for all fields <or> To return PID, AGE and GENDER fields only
   SELECT **PID, AGE, GENDER**, LONG AS X, LAT AS Y FROM (*Same as SQL Language*)

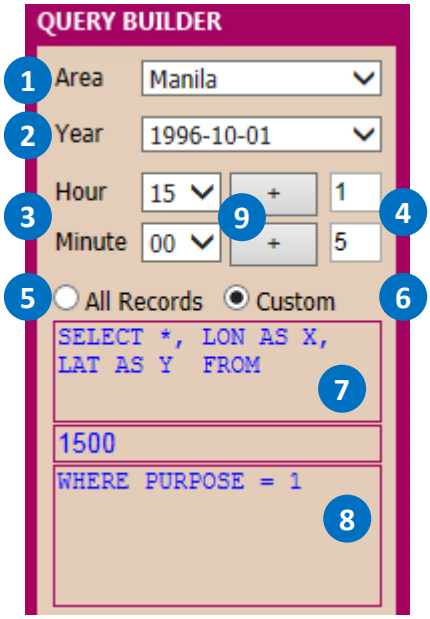
   Database Table Name (Fixed, cannot edit)
   Similar to Time
   For Example
   8:00 ➡ 0800, 12:30 ➡ 1230
8. Search Conditions. For Example
   People age between 20 and 30 who only travel for entertainment purposes
   WHERE PURPOSE = 5 AND AGE BETWEEN 4 AND 6
9. Click **Query** to start

   Display the result in below text box.

```
46647   SELECT *, LON AS X, LAT AS Y  FROM 0800 WHERE PURPOSE = 1( Manila 1996-10-01 )
47918   SELECT *, LON AS X, LAT AS Y  FROM 0900 WHERE PURPOSE = 1( Manila 1996-10-01 )
49755   SELECT *, LON AS X, LAT AS Y  FROM 1000 WHERE PURPOSE = 1( Manila 1996-10-01 )
50315   SELECT *, LON AS X, LAT AS Y  FROM 1100 WHERE PURPOSE = 1( Manila 1996-10-01 )
59365   SELECT *, LON AS X, LAT AS Y  FROM 1200 WHERE PURPOSE = 1( Manila 1996-10-01 )
50291   SELECT *, LON AS X, LAT AS Y  FROM 1300 WHERE PURPOSE = 1( Manila 1996-10-01 )
51229   SELECT *, LON AS X, LAT AS Y  FROM 1400 WHERE PURPOSE = 1( Manila 1996-10-01 )
```

3. QUERY BUILDER

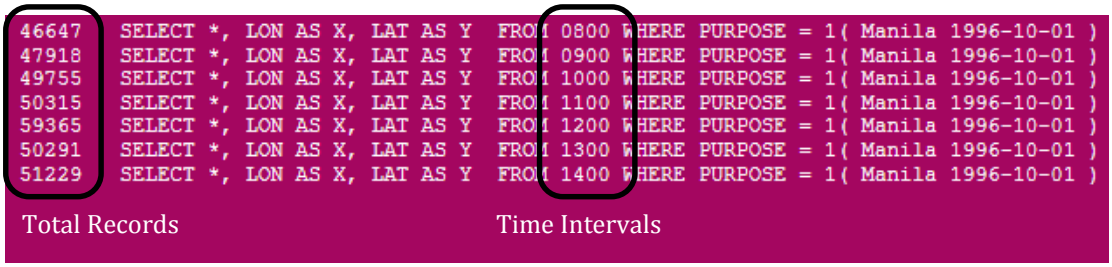
3.2. Query by Successive Time Intervals



1. Select **Area** (City)
2. Select **Year**
3. Select **Hour** and **Minute**
4. Set Hour or Minute intervals
5. Select **All Records** to return all records
6. Select **Custom** to define the search category
7. Under **Custom** search: Select desire column fields. For example:
   * for all fields <or> To return PID, AGE and GENDER fields only
   SELECT **PID, AGE, GENDER**, LONG AS X, LAT AS Y FROM (*Same as SQL Language*)

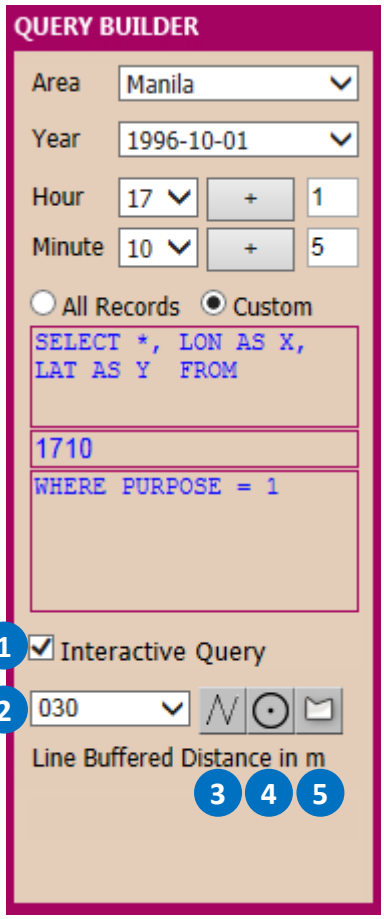
   Database Table Name (Fixed, cannot edit)
   Similar to Time
   For Example
   8:00 ➡ 0800, 12:30 ➡ 1230
8. Search Conditions. For Example
   People age between 20 and 30 who only travel for entertainment purposes
   WHERE PURPOSE = 5 AND AGE BETWEEN 4 AND 6
9. Click + hour or minute button for each query. Hour and Minute will automatically set to specific intervals

Display the result in below text box.



4. SPATIAL QUERY

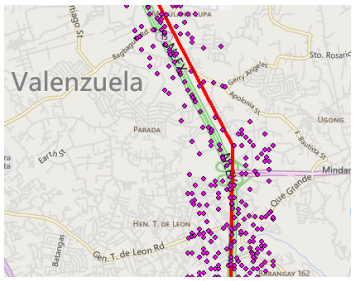
4.1.. Interactive Spatial Queries



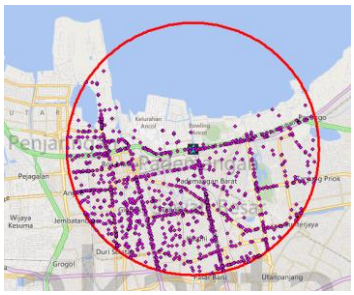
1. Click on Interactive Query CheckBox

2. Set Line Buffer distance in Meter (For Line Tool only)

3. Select  for drawing a line on a map and query.
For example: Finding number of people along the road or railway line. (buffer distance 500m)



4. Select  for drawing a circle with search radius.
For example: Finding number of people by specific point with search radius 4Km.

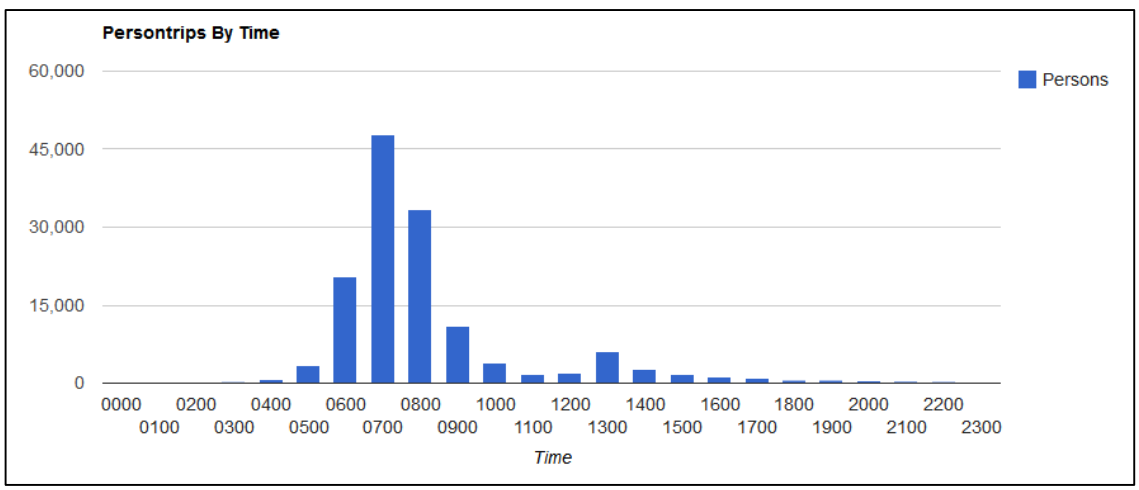


5. Select  for drawing a polygon and query.
For example: Finding number of people by specific zone or area.

5. GRAPH GENERATION

5.1. Bar Chart Generation

1. Click “Generate a Bar Chart” to generate a bar chart from log data
2. Click “Show Me a Bar Chart” to display the bar chart as below in a new page
3. Clear the TextBox



Example: Number of people travel for work by every one hour (Jakarta city)