Queries in SuperMap

SuperMap Software Co., Ltd.

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Overview

- Simple Query
- Spatial Query
- SQL Query

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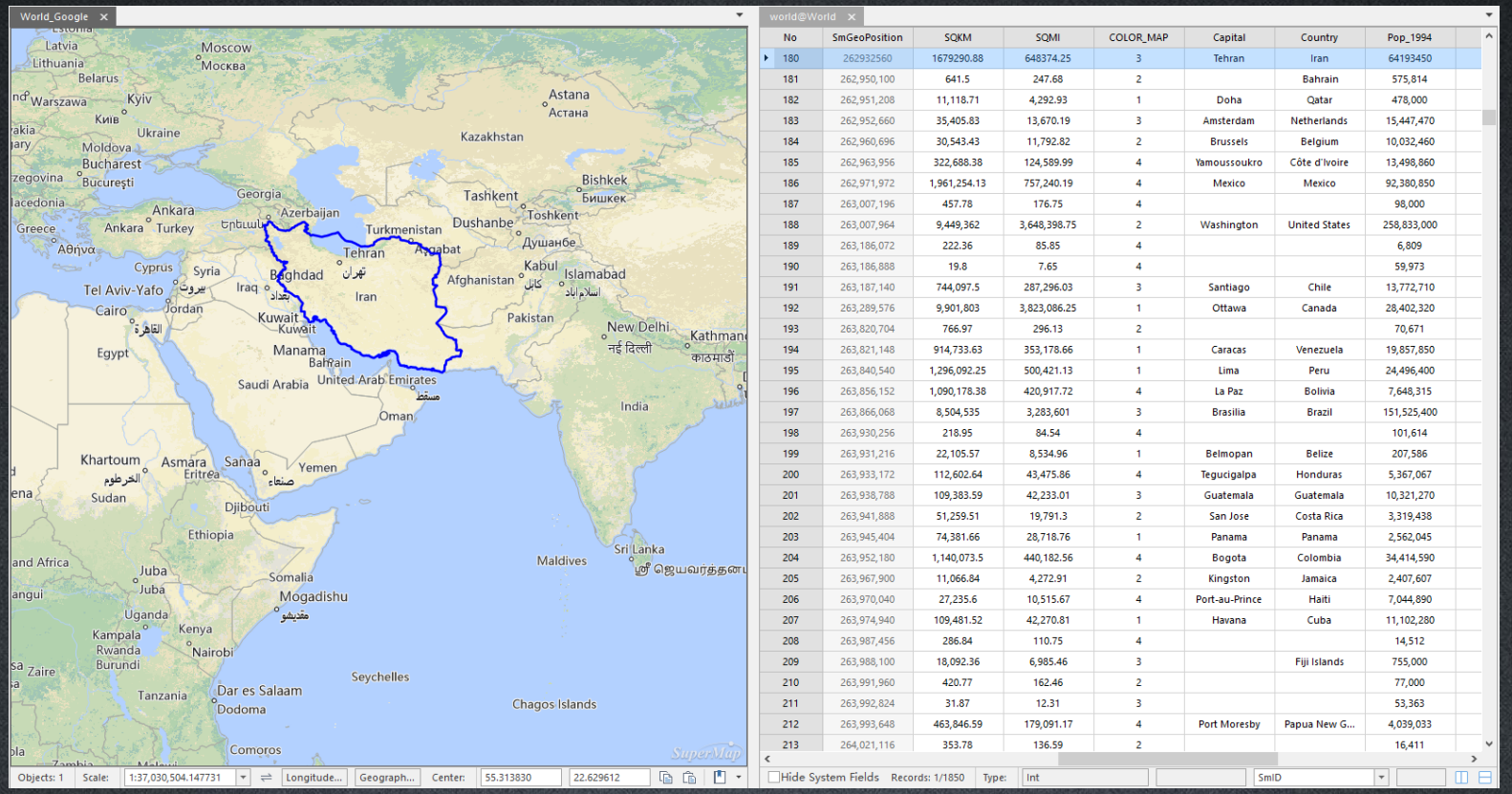
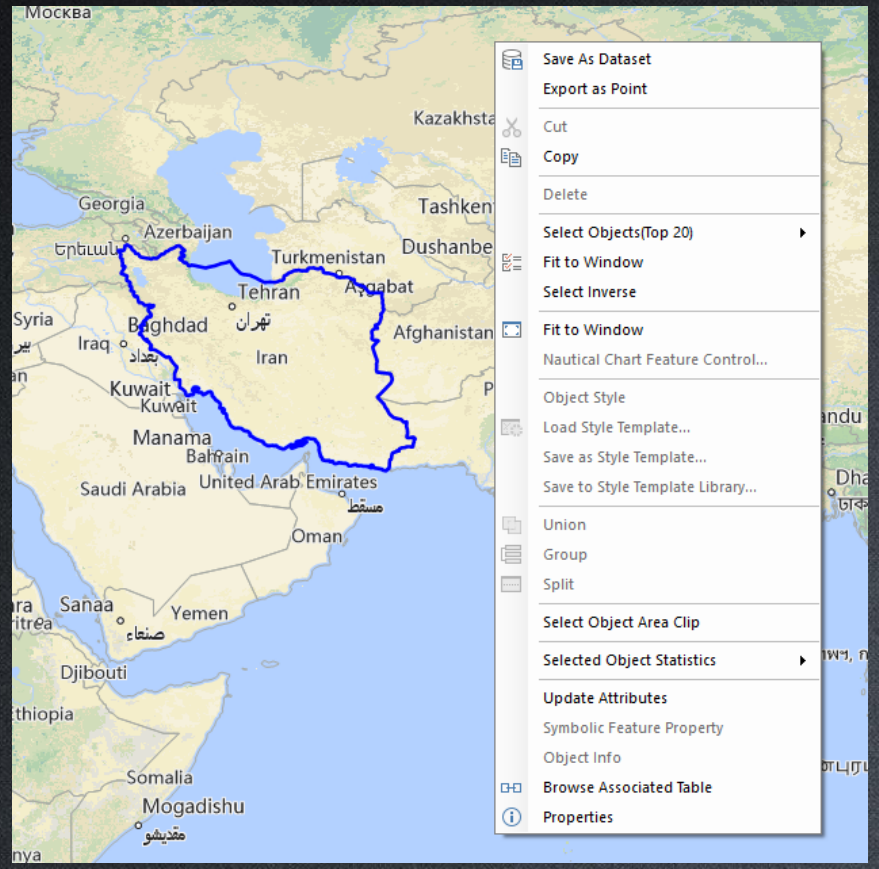
Simple Query

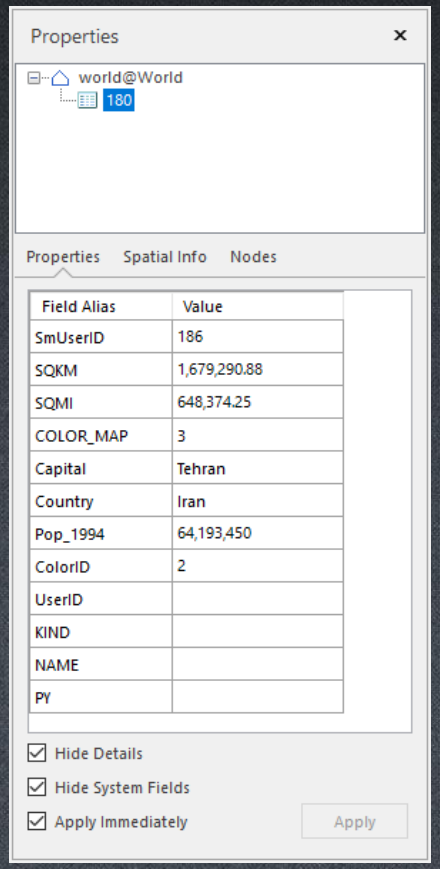
- Browse Associated Attributes Table
  - Build a linkage between spatial data and attribute data
  - Dynamic and simultaneous

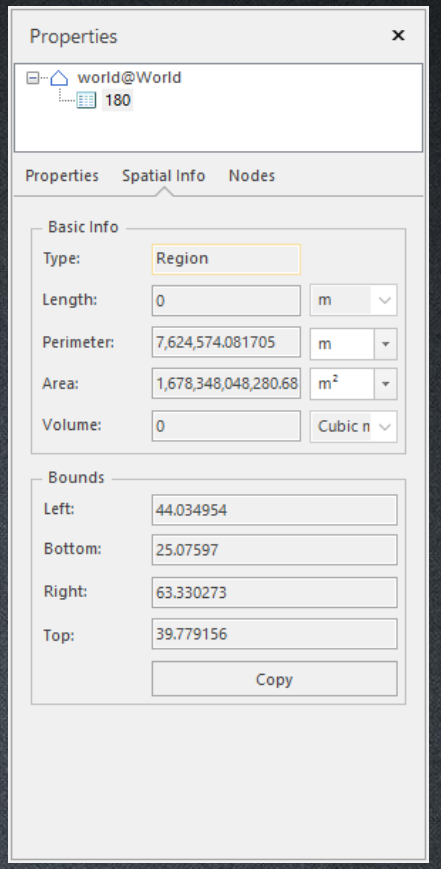


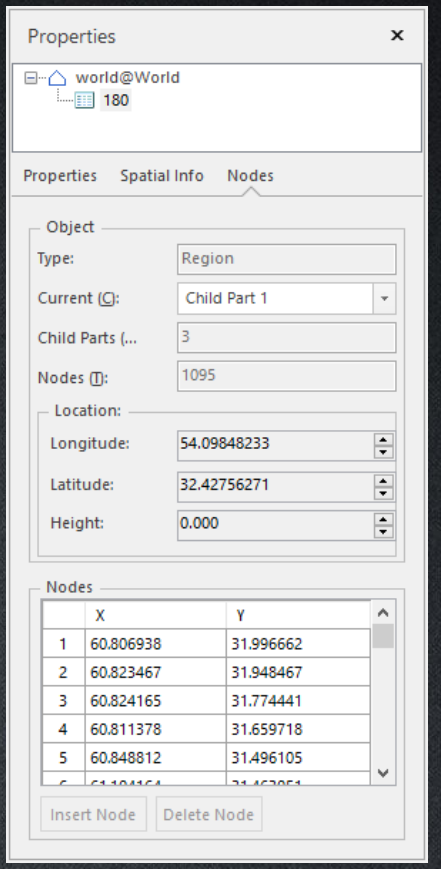
Simple Query

- Query objects' Attribute values & Spatial Info & Nodes









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Simple Query

- Query the nodes' spatial information of an polygon object.

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Spatial Query

- Application Example
  - Which countries are located on the equator?
  - The yellow river passes through which provinces?
  - If a road needs to be widened, which houses should be removed?
  - …
- Query among datasets by various conditions
  - Cross, Contain, Within, Overlap, Disjoint, Touch, Identity, and Intersect.

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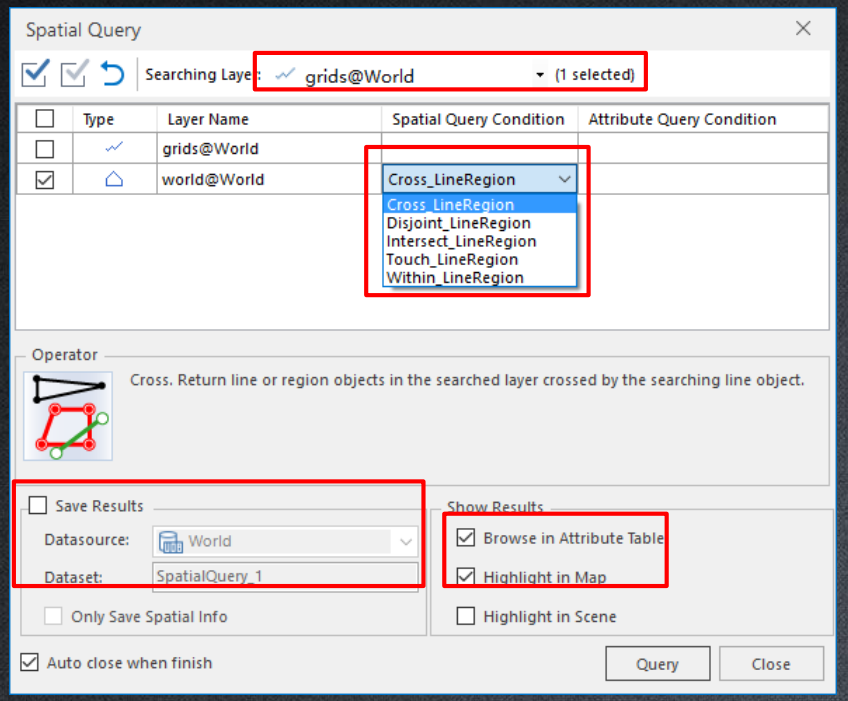
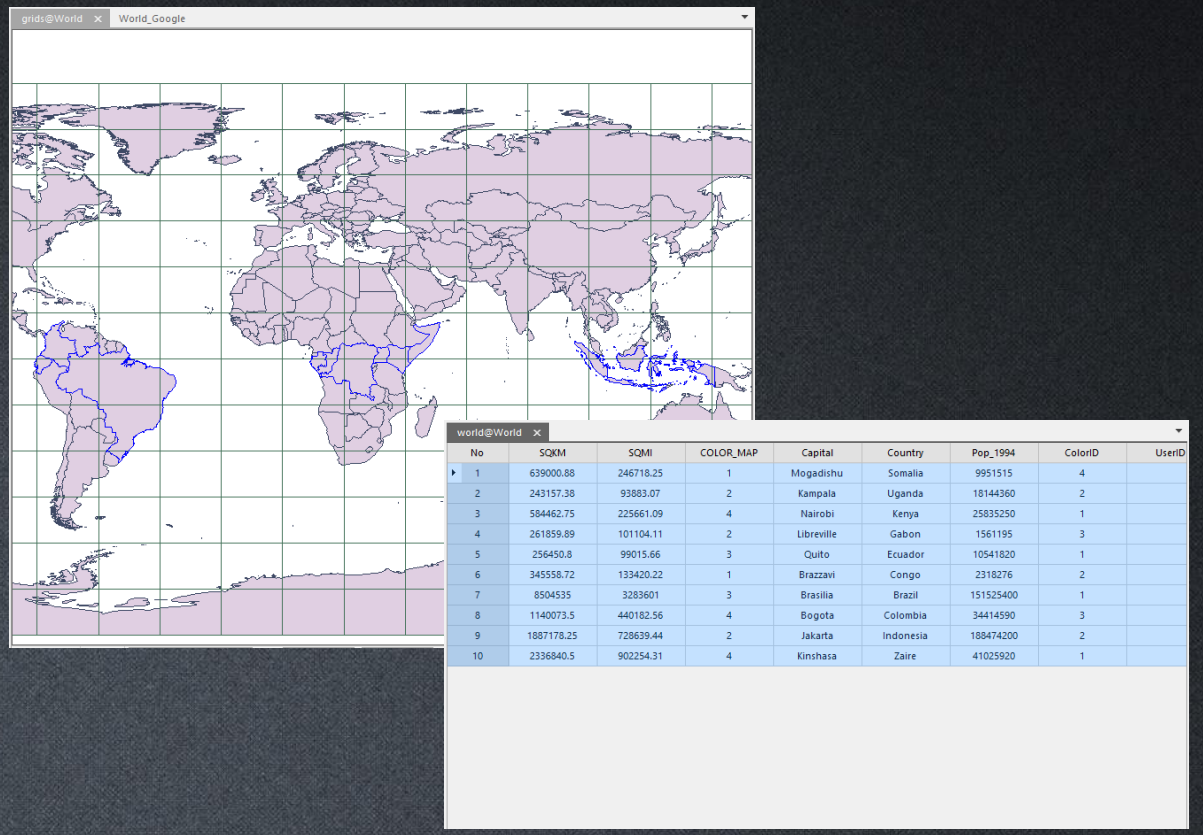
Exercise:

- Find the world countries located at the equator.





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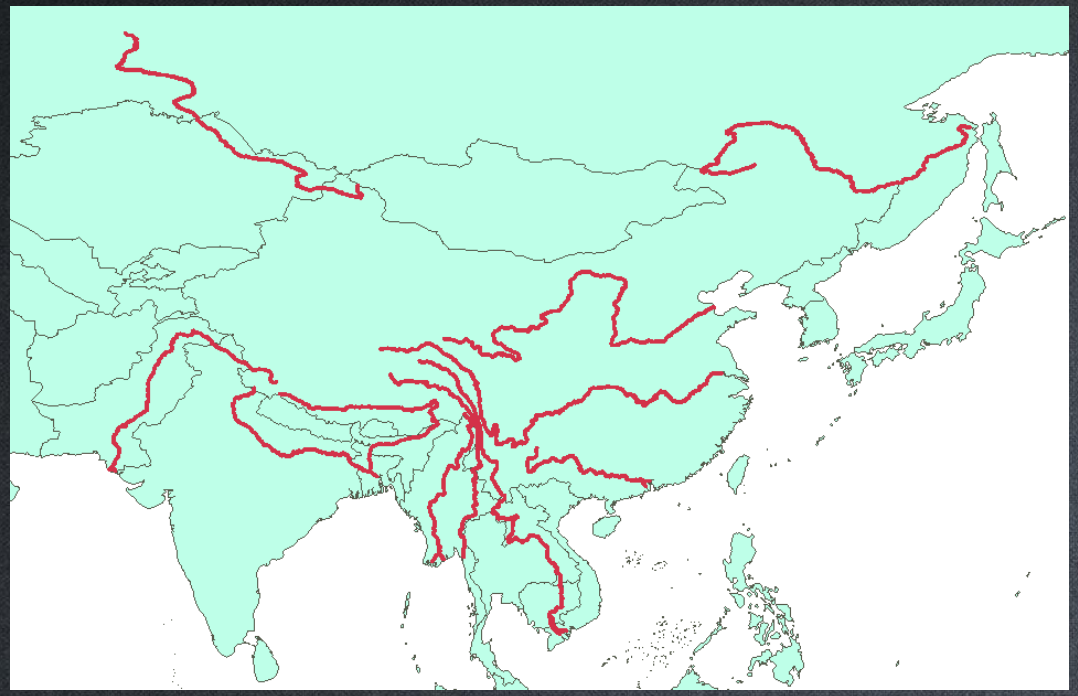
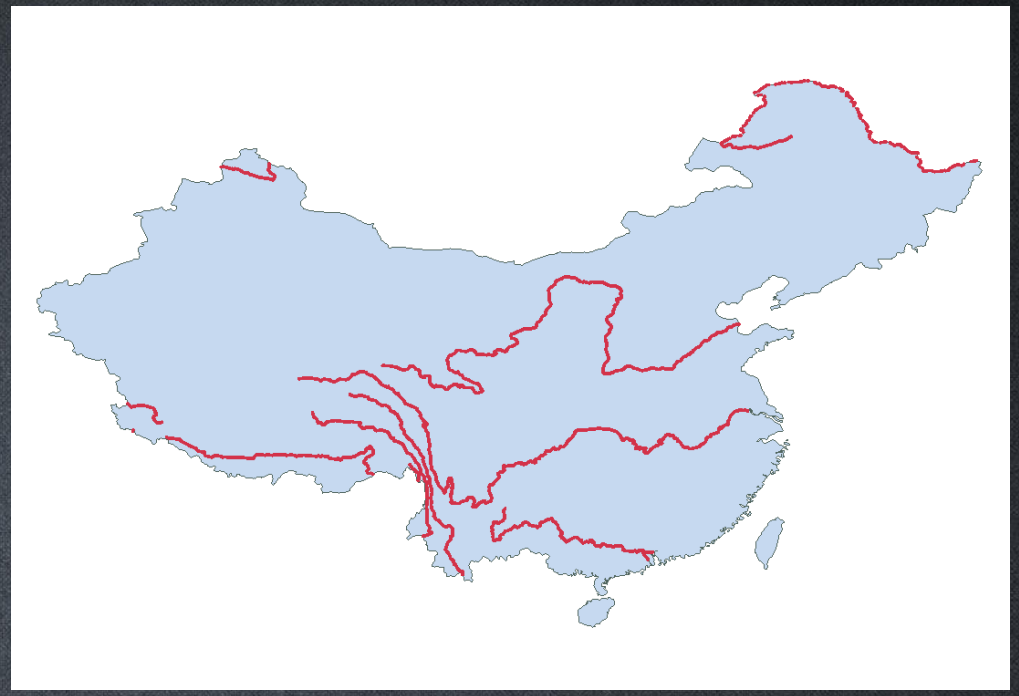
Exercise:

- The combined length of all rivers in China.
  - Step1: query which rivers intersect with China
  - Step2: to get those rivers in China by overlay analysis
  - Step3: to sum the length of Chinese river by statistic function





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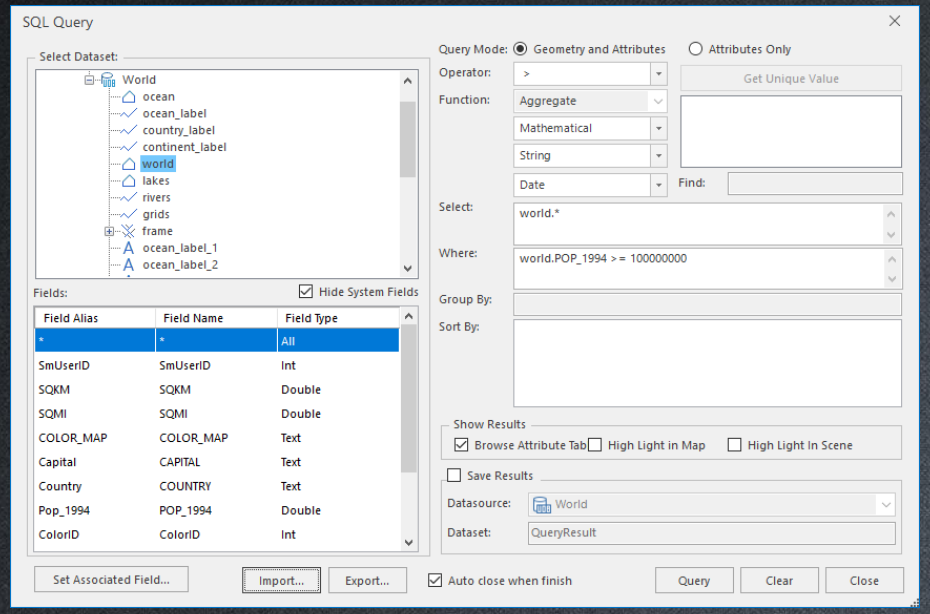
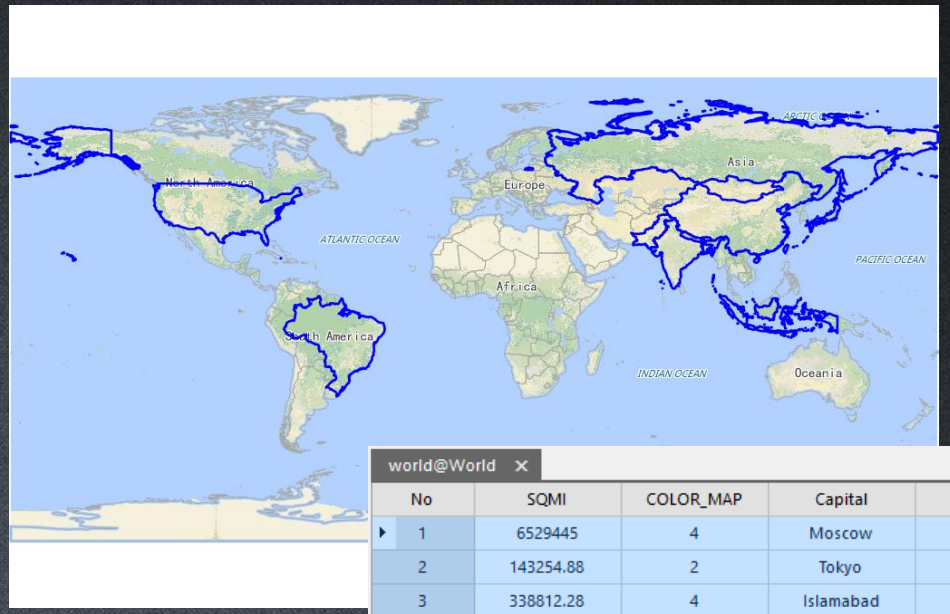
SQL Query

- Construct a SQL expression to query spatial and non-spatial data.
  - Query the countries which population is more than 100 million and store the query results in a new dataset.





world@World

No	SQMI	COLOR_MAP	Capital	Country	Pop_1994
1	6529445	4	Moscow	Russia	151827600
2	143254.88	2	Tokyo	Japan	125746300
3	338812.28	4	Islamabad	Pakistan	126693000
4	53356.74	1	Dhaka	Bangladesh	120732200
5	3648398.75	2	Washington	United States	258833000
6	3283601	3	Brasilia	Brazil	151525400
7	728639.44	2	Jakarta	Indonesia	188474200
8	1219954.75	2	New Delhi	India	894608700
9	3616707.25	1	Beijing	People 's Rep...	1128139689

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SQL Query Parameters

- Query Mode
- Select: Query result fields.
- Where: Query condition.
- Sort by: Query result would be ordered by this field.
- Group by:
  - Specifies the fields to be used to group the query results. The records with the same value in the specified field will be grouped together.
  - Use “Attribute Only” query mode, and the “group by” field would divide the table into several types, such as using “State_Name” as group by field, “SmID” field is not recommended to use.
- Show Result:
  - open the dataset in a map window before querying in order to use “highlight geometry”.

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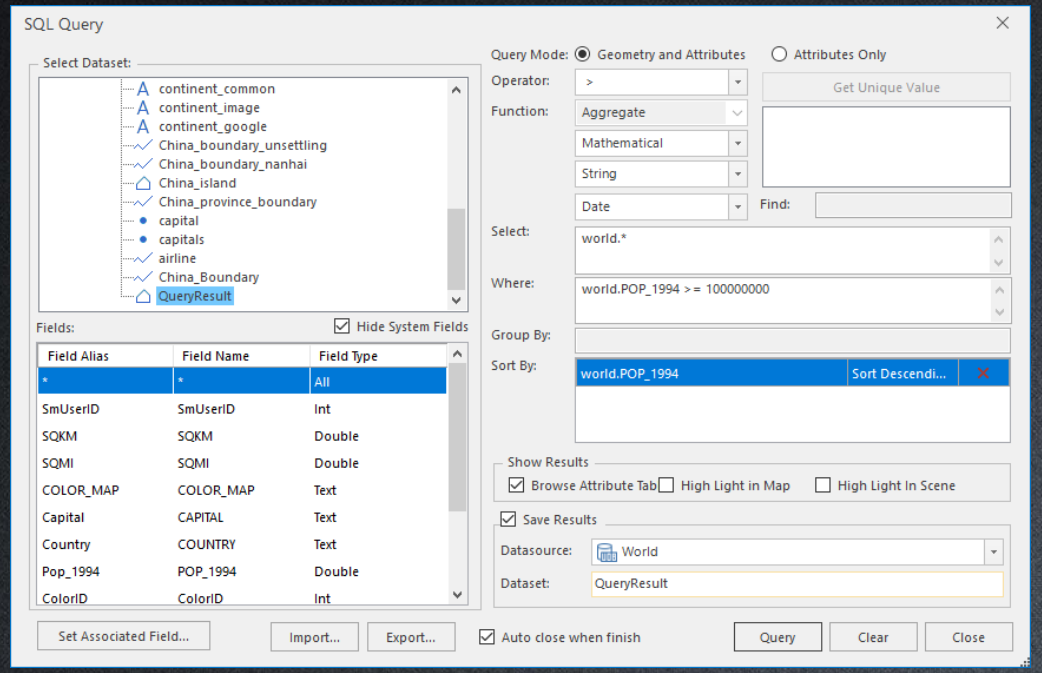
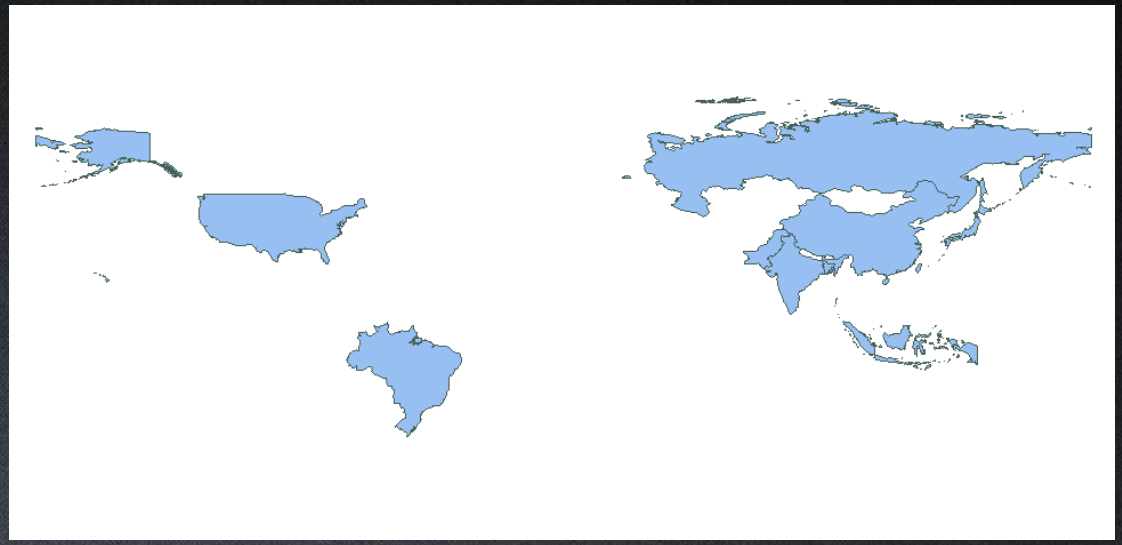
SQL Query





QueryResult@World

No	SQKM	SQMI	COLOR_MAP	Capital	Country	Pop_1994
1	9,367,281	3,616,707.25	1	Beijing	People 's Rep...	1,128,139,689
2	3,159,685.5	1,219,954.75	2	New Delhi	India	894,608,700
3	9,449,362	3,648,398.75	2	Washington	United States	258,833,000
4	1,887,178.25	728,639.44	2	Jakarta	Indonesia	188,474,200
5	16,911,282	6,529,445	4	Moscow	Russia	151,827,600
6	8,504,535	3,283,601	3	Brasilia	Brazil	151,525,400
7	877,524.69	338,812.28	4	Islamabad	Pakistan	126,693,000
8	371,030.5	143,254.88	2	Tokyo	Japan	125,746,300
9	138,194.09	53,356.74	1	Dhaka	Bangladesh	120,732,200

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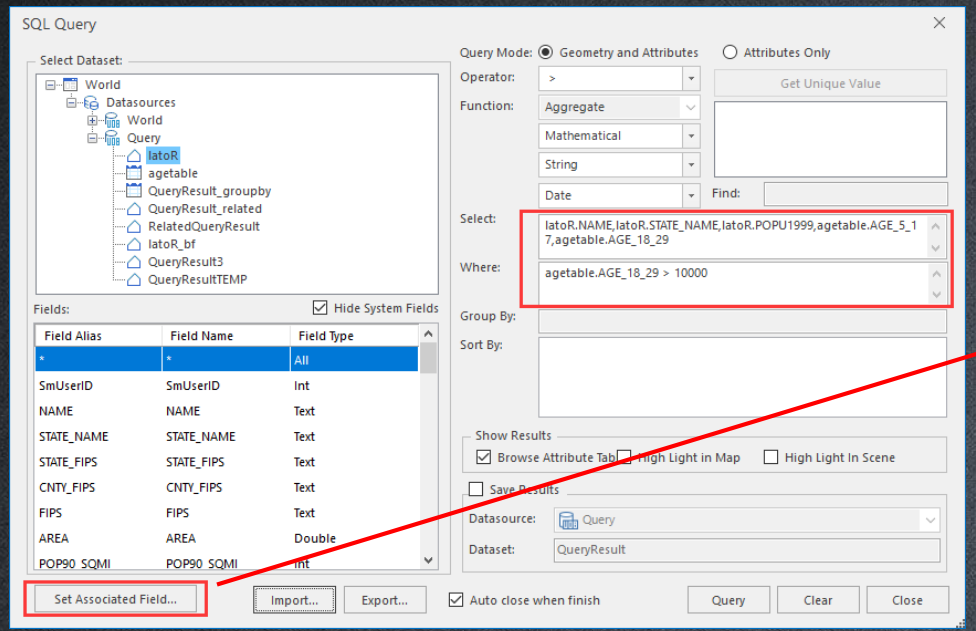
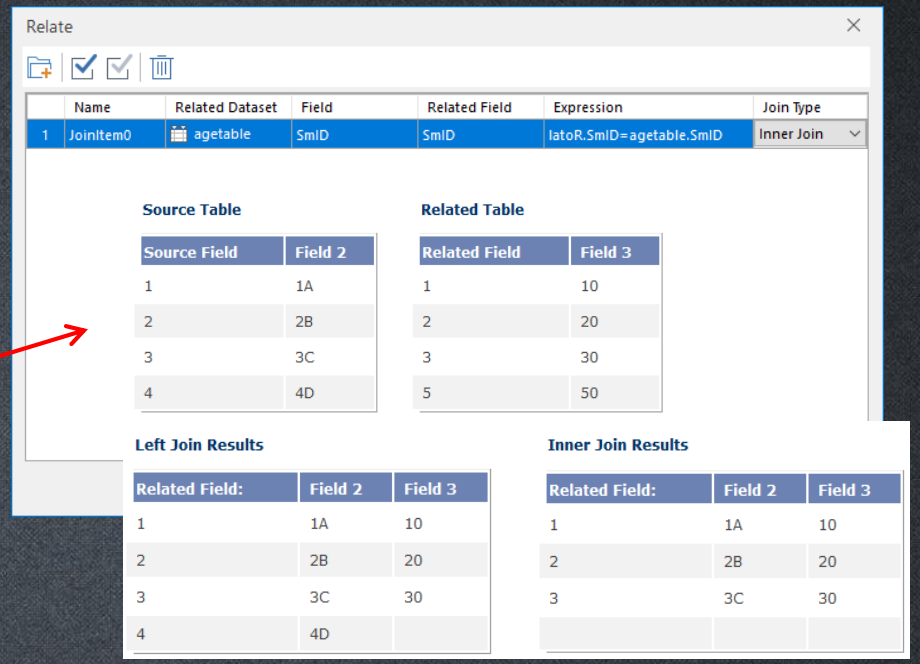
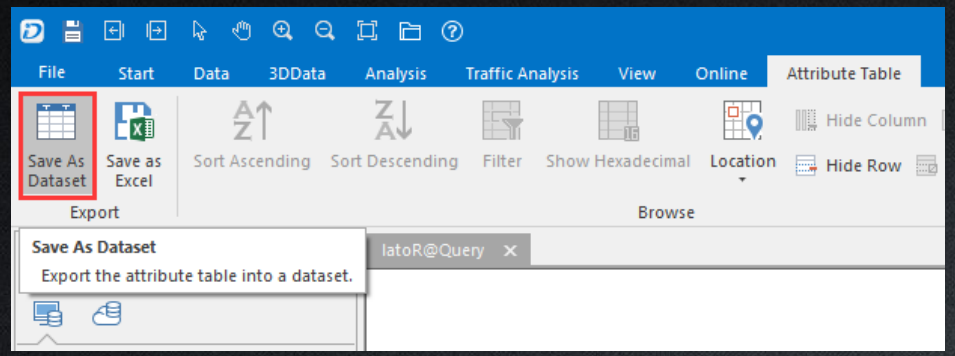
Related Query
-Linked Table SQL Query

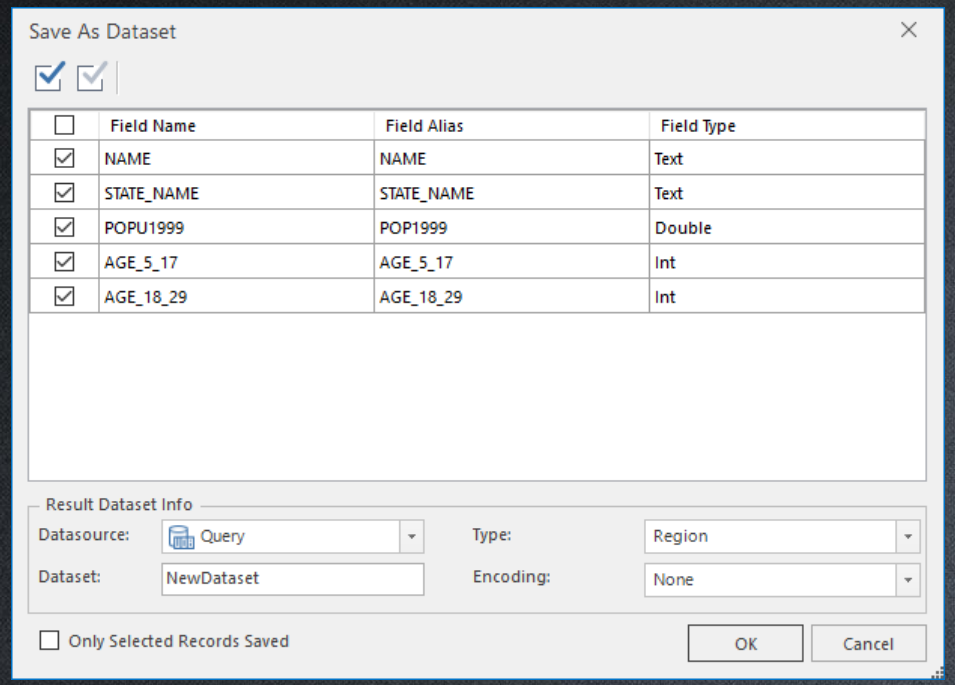
- Query data from more than one table based on the relationship between certain fields in these tables.
  - Relate dataset “latoR” with tabular dataset “agetable” using field “SmID”
  - Then select “latoR.NAME, latoR.STATE_NAME, latoR.POPU1999, agetable.AGE_5_17, agetable.AGE_18_29 ” where “agetable.AGE_18_29>10000”.

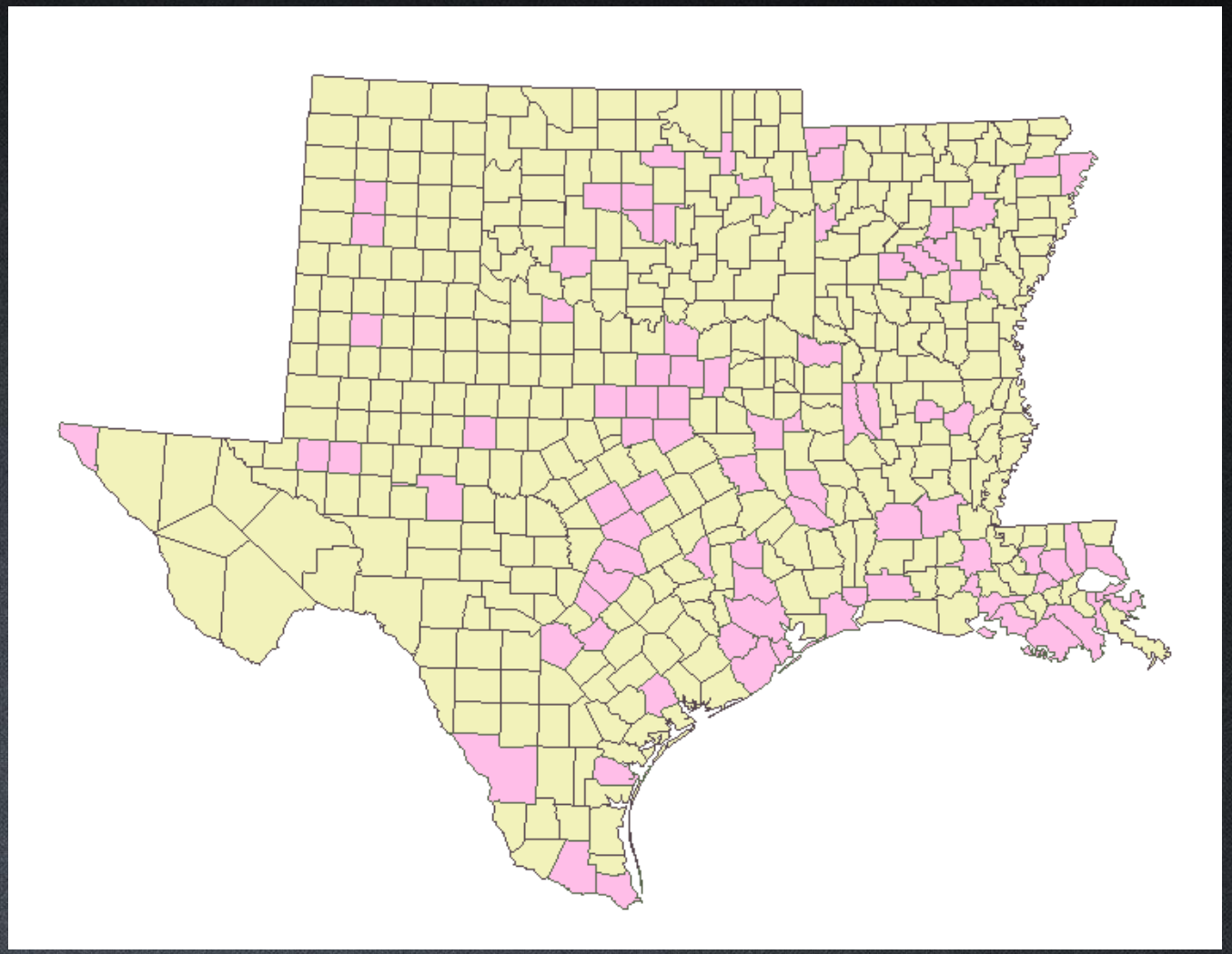




Save As Dataset







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Thank You!

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