

INFO 7275 - Advanced Database Management Systems

Topic – USA Wildfires

P3: Implementation (Project Team – 4)

Alteryx Workflows to load the database tables:

1) Land_Owner Table



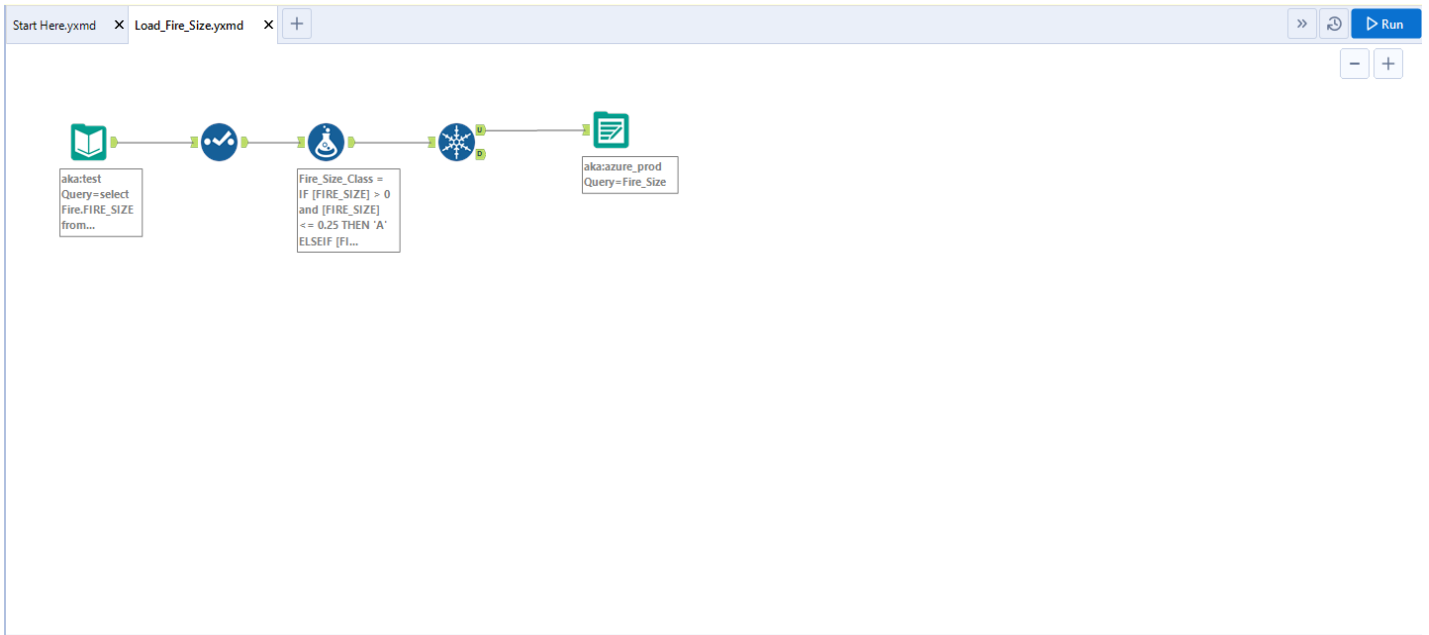
➤ Screenshot of the Loaded Data into Land_Owner Table

The screenshot shows the Microsoft Azure portal interface. The main pane displays the 'Query editor (preview)' for the 'WildfireData (adbms-info7275/WildfireData)' SQL database. The query editor shows a single query: `select * from [dbo].[Land_Owners]`. The results pane below the query editor displays the loaded data in a table format.

Owner_Code	Owner_Description
0	FOREIGN
1	BLM
2	BIA
3	NPS
4	FWS
5	USFS
6	OTHER FEDERAL
7	STATE
8	PRIVATE

The status bar at the bottom indicates 'Query succeeded | 0s'.

2) Fire_Size Table



➤ Screenshot of the Loaded Data into Fire_Size Table

Microsoft Azure | Search resources, services, and docs (G+/)

Home > WildfireData (adbms-info7275/WildfireData)

WildfireData (adbms-info7275/WildfireData) | Query editor (preview)

SQL database

Search (Ctrl+/) | Login | New Query | Open query | Feedback

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WildfireData (info7275)

Showing limited object explorer here. For full capability please open SSOT.

Tables

- dbo.Date_Dimension
- dbo.Fire
- dbo.Fire_Causes
- dbo.Fire_Size
- dbo.Geography_Dimension
- dbo.Land_Owners
- dbo.NWCG_Data
- dbo.Wildfire_Data

Views

Stored Procedures

Query 1

Run | Cancel query | Save query | Export data as | Show only Editor

```
1 select * from [dbo].[Fire_Size]
```

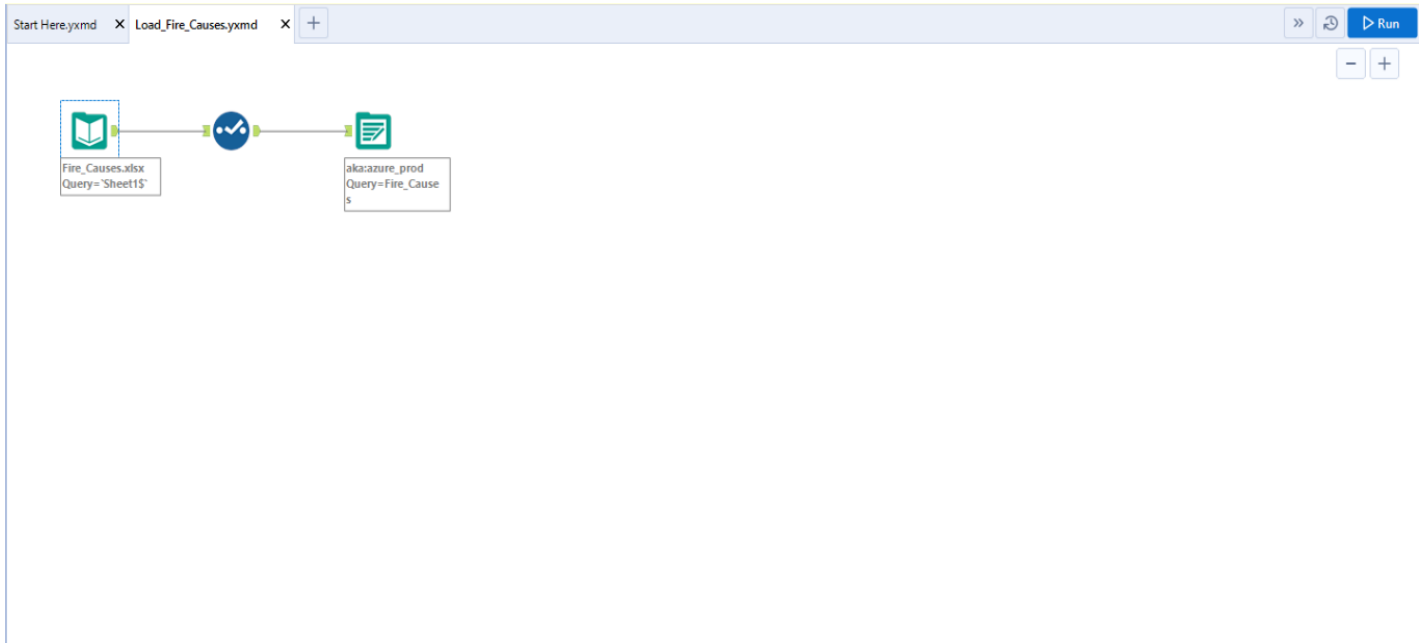
Results | Messages

Search to filter items...

Fire_Size_Class	Fire_Size
A	1E-05
A	9E-05
A	0.0001
A	0.0002
A	0.00022
A	0.00034
A	0.0004
A	0.000459
A	0.0006

Query succeeded | 0s

3) Fire_Causes Table



➤ Screenshot of the Loaded Data into Fire_Causes Table

Microsoft Azure

Home > WildfireData (adbms-info7275/WildfireData)

WildfireData (adbms-info7275/WildfireData) | Query editor (preview)

SQL database

Search (Ctrl+/)

Overview, Activity log, Tags, Diagnose and solve problems, Quick start, Query editor (preview), Power Platform, Power BI (preview), Power Apps (preview), Power Automate (preview), Settings, Configure, Geo-Replication, Connection strings, Sync to other databases, Add Azure Search, Properties, Locks, Integrations, Stream analytics (preview), Security, Auditing, Data Discovery & Classification, Dynamic Data Masking

WildfireData (info7275)

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- dbo.Fire
- dbo.Fire_Causes
- dbo.Fire_Size
- dbo.Geography_Dimension
- dbo.Land_Owners
- dbo.NWCG_Data
- dbo.Wildfire_Data
- Views
- Stored Procedures

Query 1

Run, Cancel query, Save query, Export data as, Show only Editor

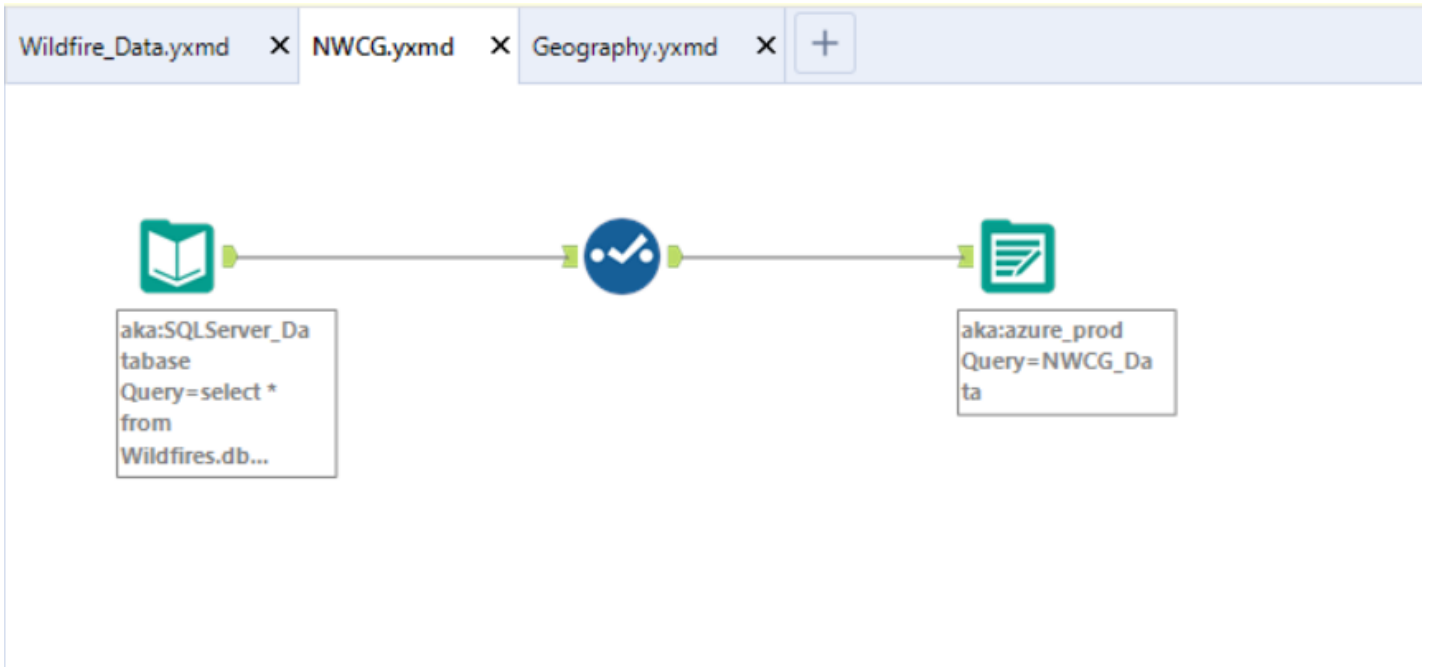
```
1 select * from [dbo].[Fire_Causes]
```

Results

Cause_Code	Cause_Description
1	Lightning
2	Equipment Use
3	Smoking
4	Campfire
5	Debris Burning
6	Railroad
7	Arson
8	Children
9	Miscellaneous

Query succeeded | 1s

4) NWCG_Data Table



➤ Screenshot of the Loaded Data into NWCG_Data Table

Microsoft Azure

Home > WildfireData (adbms-info7275/WildfireData)

WildfireData (adbms-info7275/WildfireData) | Query editor (preview)

Search (Ctrl+/) Login New Query Open query Feedback

WildfireData (info7275)

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Tables

- dbo.Date_Dimension
- dbo.Fire
- dbo.Fire_Causes
- dbo.Fire_Size
- dbo.Geography_Dimension
- dbo.Land_Owners
- dbo.NWCG_Data
- dbo.Wildfire_Data
- Views
- Stored Procedures

Query 1

Run Cancel query Save query Export data as Show only Editor

```
1 select * from [dbo].[NWCG_Data]
```

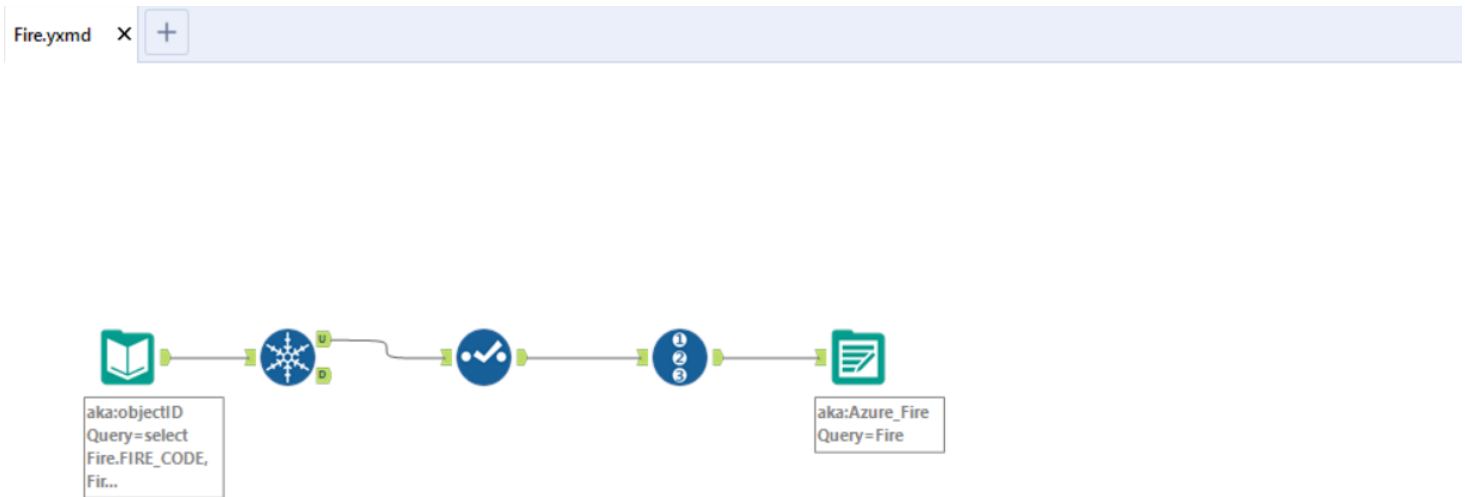
Results Messages

Search to filter items...

Unit_ID	Name	Gacc	Wildland_Role	Unit_Type	Department	Agency
USAKCAN	Calista Regional Native Corpor...	USAKACC	Resource Provider Only	Non-Government	NG	ANC
USAKCEKX	Central Emergency Services	USAKACC	Incident Host Geographic	US County/Local	AK	C&L
USAKCFX	City Fairbanks Fire Department	USAKACC	Incident Host Geographic	US County/Local	AK	C&L
USAKCFMX	Central Mat-Su Fire Department	USAKACC	Incident Host Geographic	US County/Local	AK	C&L
USAKCFQ	Clear Air Force Station	USAKACC	Incident Host Geographic	US Federal	DOD	USAF
USAKCGF	Chugach National Forest	USAKACC	Incident Host Geographic	US Federal	USDA	FS
USAKCGFC	Chugach National Forest Dispa...	USAKACC	Dispatch/Coordination Center	US Federal	USDA	FS
USAKCGFX	Chena Goldstream Fire & Rescue	USAKACC	Incident Host Geographic	US County/Local	AK	C&L

Query succeeded | 4s

5) Fire table



➤ Screenshot of the Loaded Data into Fire Table

Microsoft Azure | Search resources, services, and docs (G+/)

Home > WildfireData (adbms-info7275/WildfireData)

WildfireData (adbms-info7275/WildfireData) | Query editor (preview)

SQL database

Search (Ctrl+/) « Login + New Query ↑ Open query Feedback

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Dynamic Data Masking

WildfireData (info7275)

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Tables
dbo.Date_Dimension
dbo.Fire
dbo.Fire_Causes
dbo.Fire_Size
dbo.Geography_Dimension
dbo.Land_Owners
dbo.NWCG_Data
dbo.Wildfire_Data

Views
Stored Procedures

Query 1 X

Run Cancel query Save query Export data as Show only Editor

```
1 select top 100 * from [dbo].[Fire]
```

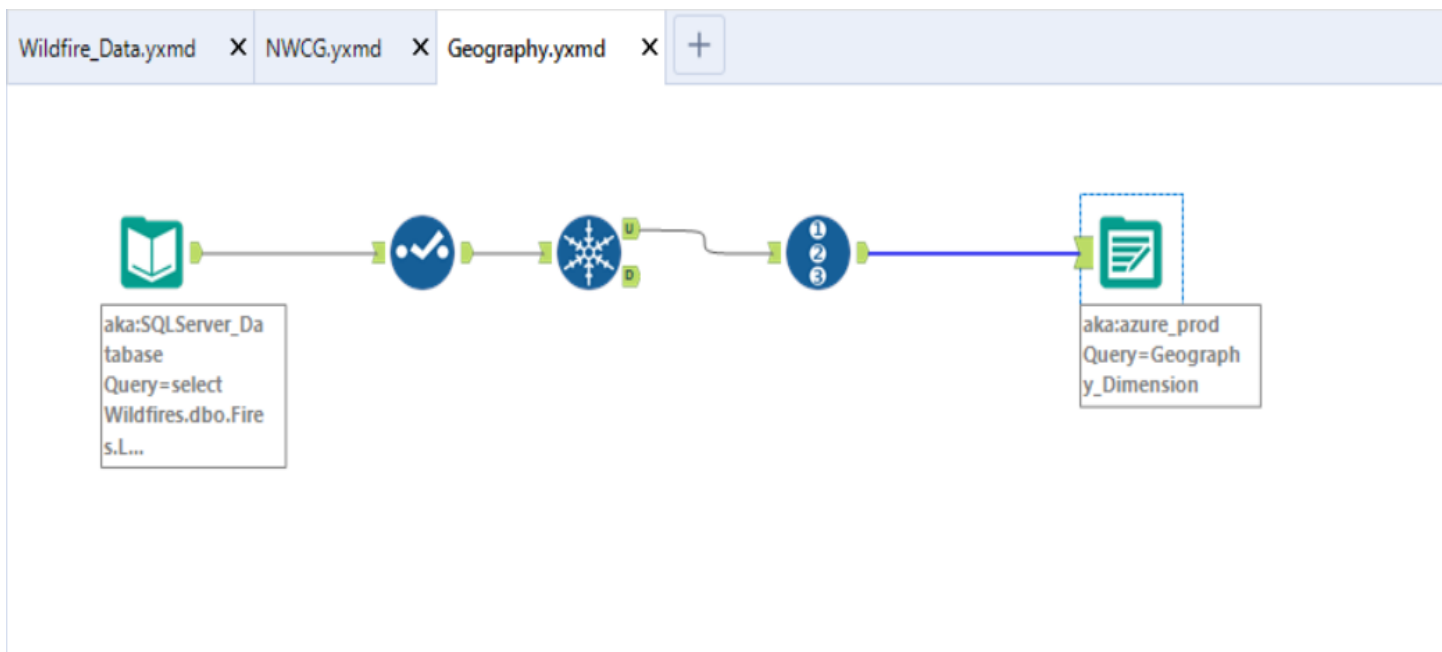
Results Messages

Search to filter items...

Fire_ID	Fire_Name	ICS_209_Incident_Number	ICS_209_Name	MTBS_ID	MTBS_Fire_Name	Fire_Code
1						
2	1789 CO RD 21 N, AL					
3	2478 CENTER CHURCH RD, AL					
4	3000 HOMESTEAD, AL					
5	400 HARMS ROAD					
6	4801 RR1723					
7	486 AND CR443 GRASS FIRE					
8	500 RHODES RD, AL					
9	540 MT MIRIAH RD, AL					

Query succeeded | 1s

6) Geography_Dimension table



➤ Screenshot of the Loaded Data into Geography_Dimension Table

Microsoft Azure | Search resources, services, and docs (G+)

Home > WildfireData (adbms-info7275/WildfireData)

WildfireData (adbms-info7275/WildfireData) | Query editor (preview)

SQL database

Search (Ctrl+/) < Login + New Query ↑ Open query ♥ Feedback

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WildfireData (info7275)

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Tables

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- dbo.Land_Owners
- dbo.NWCG_Data
- dbo.Wildfire_Data

Views
Stored Procedures

Query 1

Run Cancel query Save query Export data as Show only Editor

```
1 select top 100 * from [dbo].[Geography_Dimension]
```

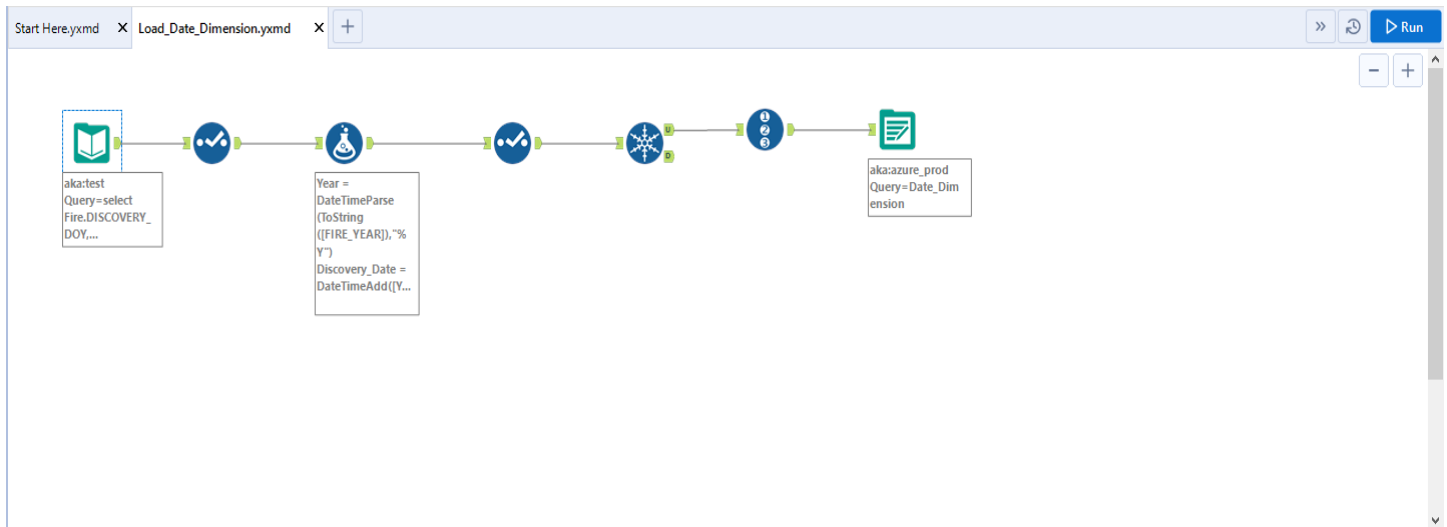
Results Messages

Search to filter items...

Geography_ID	Latitude	Longitude	State	County_Code	County_Name
1439745	46.097667	-67.819972	ME	003	Aroostook
1439746	46.097681	-91.952877	WI	129	Washburn
1439747	46.097706	-94.205681	MN	097	Morrison
1439748	46.097771	-91.5263	WI	113	Sawyer
1439749	46.097725	-94.195345	MN	097	Morrison
1439750	46.097735	-94.173519	MN	097	Morrison
1439751	46.0977778	-115.58916667	ID	049	Idaho
1439752	46.0977778	-115.34	ID	049	Idaho
1439753	46.0977778	-115.0005556	ID	049	Idaho

Query succeeded | 8s

7) Date_Dimension Table



➤ Screenshot of the Loaded Data into Date_Dimension Table

Microsoft Azure | Search resources, services, and docs (G+/I)

Home > WildfireData (adbms-info7275/WildfireData)

WildfireData (adbms-info7275/WildfireData) | Query editor (preview)

SQL database

Search (Ctrl+J) | Login | New Query | Open query | Feedback

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WildfireData (info7275)

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- dbo.NWCG_Data
- dbo.Wildfire_Data

Views

Stored Procedures

Query 1

Run | Cancel query | Save query | Export data as | Show only Editor

```
1 select top 100 * from [dbo].[Date_Dimension]
```

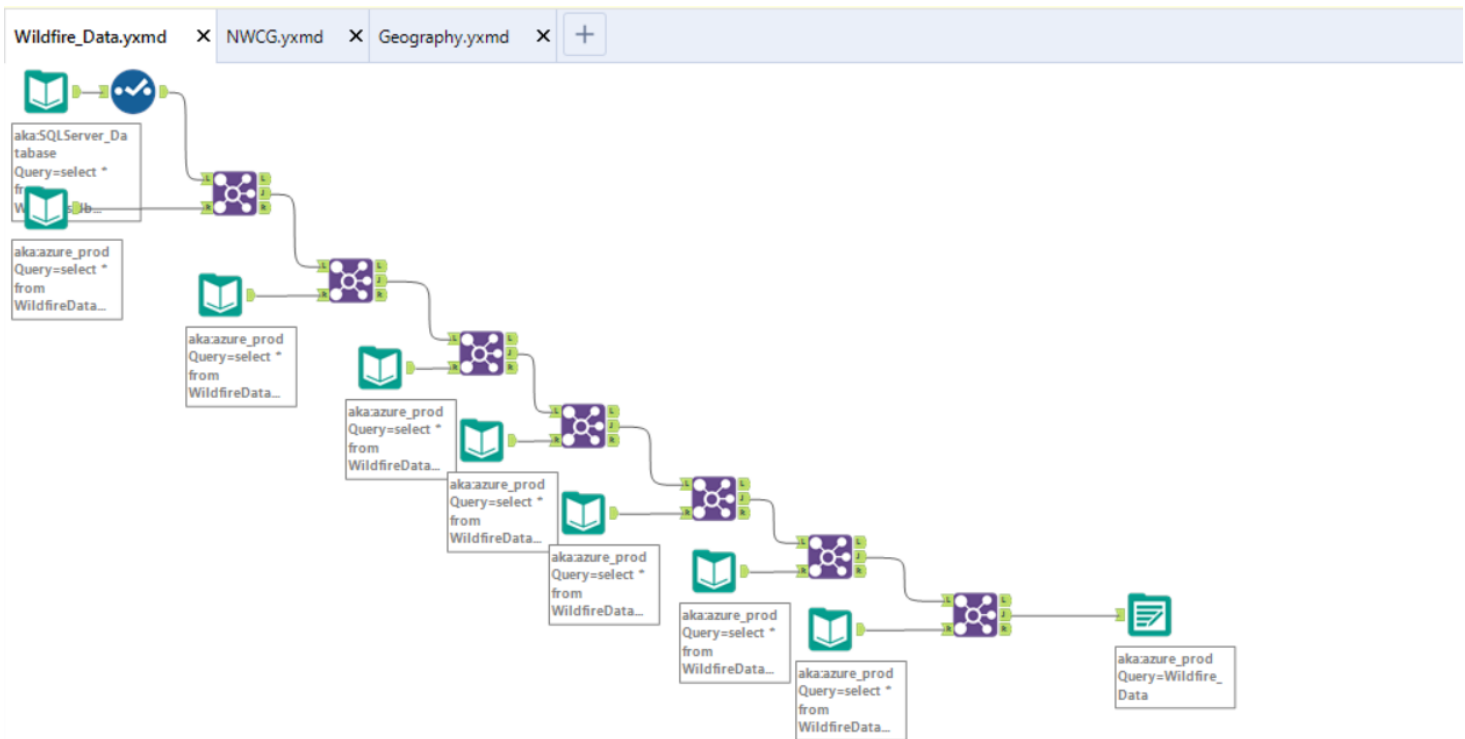
Results | Messages

Search to filter items...

Date_ID	Fire_Year	Discovery_Date	Discovery_DOY	Discovery_Time	Cont_Date	Cont_DOY	Cont_Time
1	1992	1992-01-01T00:00:00.00...	1		1992-01-01T00:00:00.00...		
2	1992	1992-01-01T00:00:00.00...	1		1992-01-01T00:00:00.00...	1	
3	1992	1992-01-01T00:00:00.00...	1		1992-01-01T00:00:00.00...	1	1103
4	1992	1992-01-01T00:00:00.00...	1		1992-01-01T00:00:00.00...	1	1110
5	1992	1992-01-01T00:00:00.00...	1		1992-01-01T00:00:00.00...	1	1122
6	1992	1992-01-01T00:00:00.00...	1		1992-01-01T00:00:00.00...	1	1124
7	1992	1992-01-01T00:00:00.00...	1		1992-01-01T00:00:00.00...	1	1133
8	1992	1992-01-01T00:00:00.00...	1		1992-01-01T00:00:00.00...	1	1140
9	1992	1992-01-01T00:00:00.00...	1		1992-01-01T00:00:00.00...	1	1144

Query succeeded | 10s

8) Wildfire_Data Table



➤ Screenshot of the Loaded Data into Wildfire_Data Table

Microsoft Azure

Home > WildfireData (adbms-info7275/WildfireData)

WildfireData (adbms-info7275/WildfireData) | Query editor (preview)

Search (Ctrl+/) Login + New Query Open query Feedback

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Views

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Query 1

Run Cancel query Save query Export data as Show only Editor

```
1 select top 100 * from [dbo].[Wildfire_Data]
```

Results Messages

Search to filter items...

Object_ID	Unit_ID	Cause_Code	Owner_Code	Date_ID	Geography_ID	Fire_ID
1	USFLFLS	6	14	1	11022	1
2	USFLFLS	6	14	1	19925	1
3	USFLFLS	9	14	1	26118	1
4	USFLFLS	7	14	1	29394	1
5	USFLFLS	6	14	1	31081	1
6	USFLFLS	6	14	1	35120	1
7	USFLFLS	9	14	1	39405	1
8	USFLFLS	6	14	1	39628	1

Query succeeded | 4s