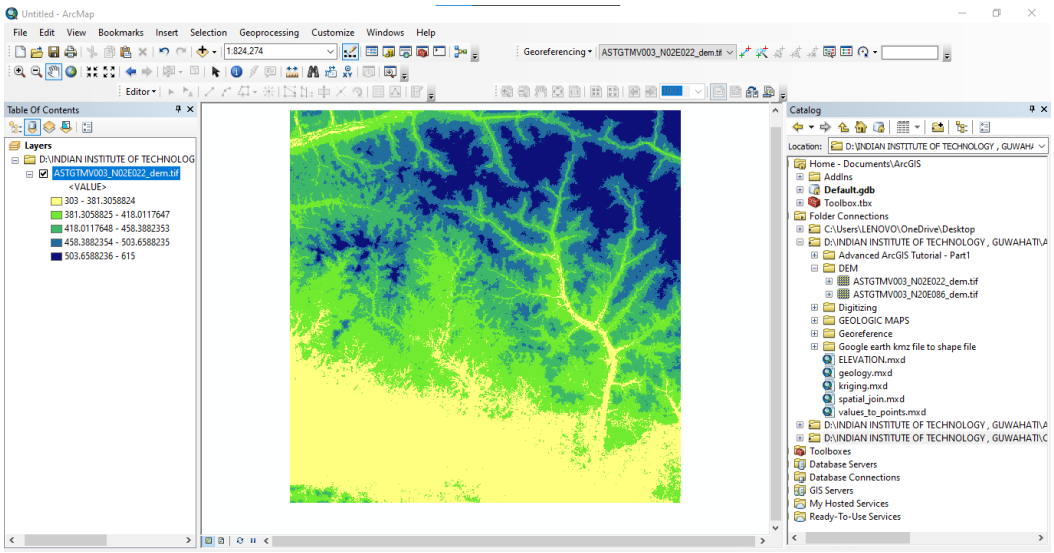
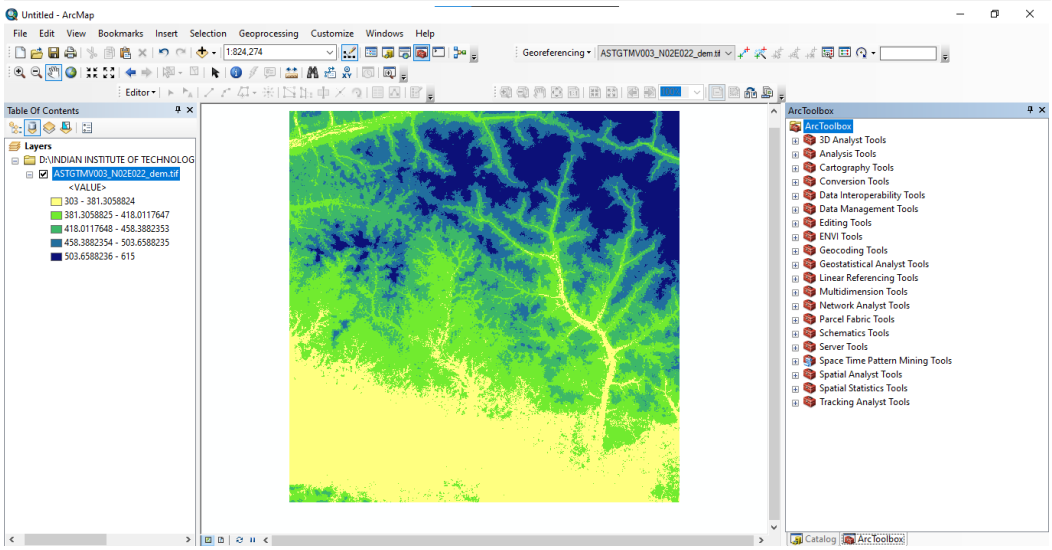
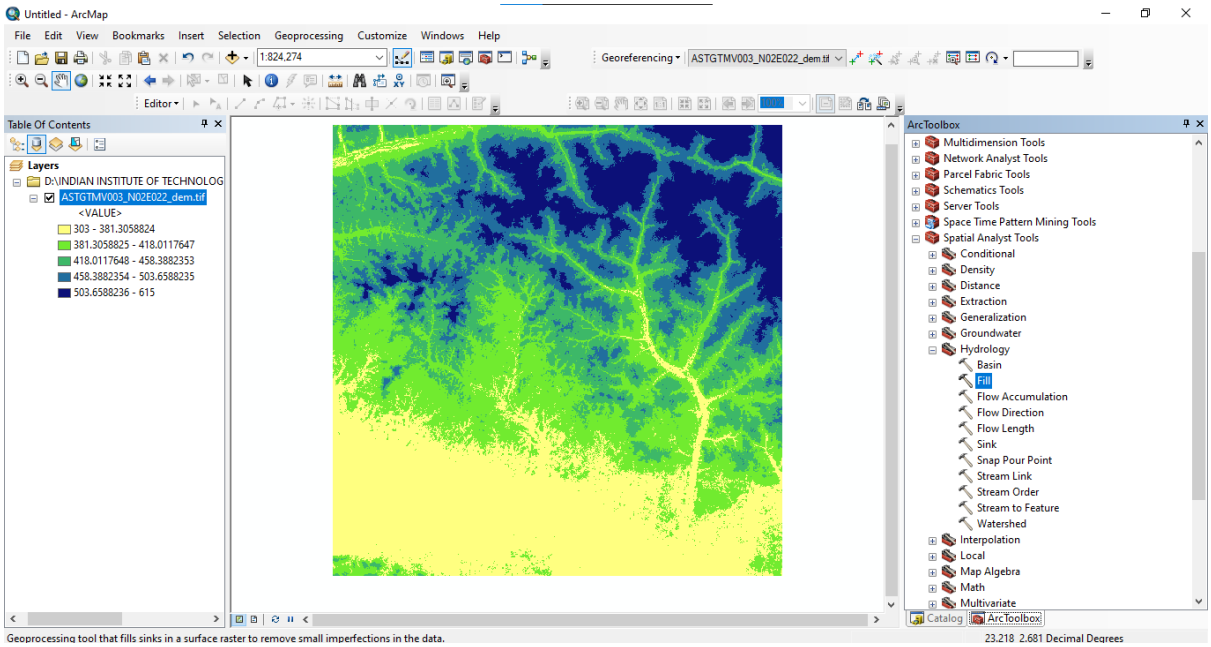
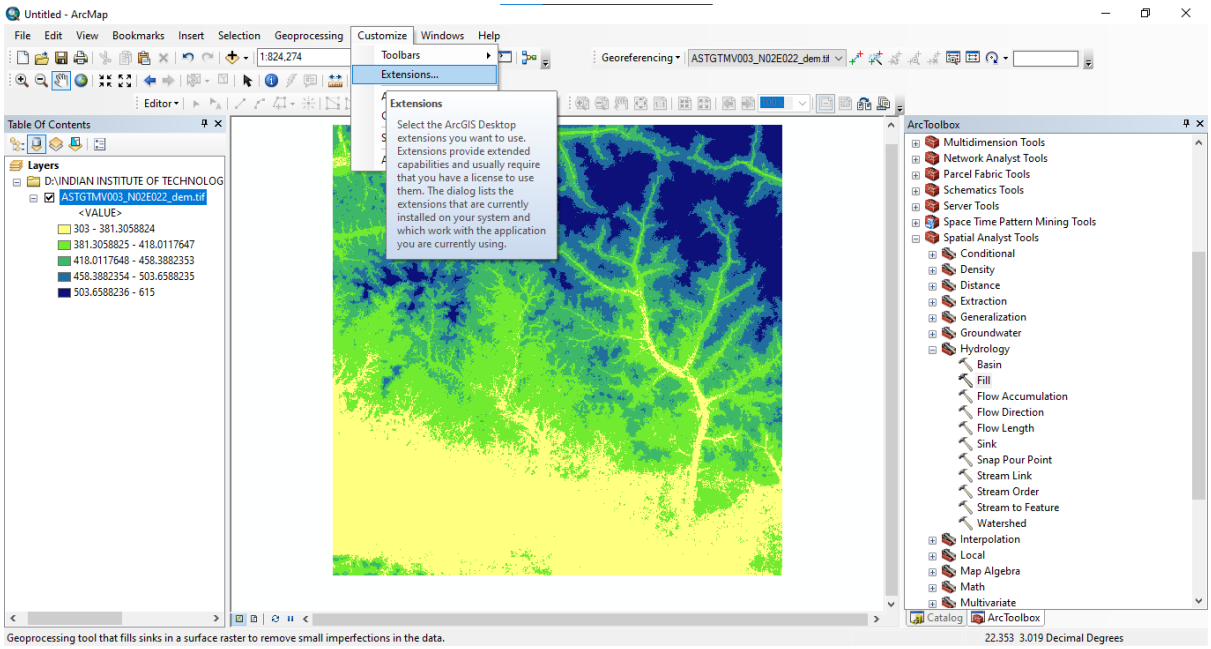
Watershed Delineation using ArcGIS from DEM








Untitled - ArcMap
File Edit View Bookmarks Insert Selection Geoprocessing Customize Windows Help
Toolbars
Extensions...
Extensions
Select the ArcGIS Desktop extensions you want to use. Extensions provide extended capabilities and usually require that you have a license to use them. The dialog lists the extensions that are currently installed on your system and which work with the application you are currently using.
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Layers
D:\INDIAN INSTITUTE OF TECHNOLOG
ASTGTMV003_N02E022_dem.tif
<VALUE>
303 - 381.3058824
381.3058825 - 418.0117647
418.0117648 - 458.3882353
458.3882354 - 503.6588235
503.6588236 - 615
ArcToolbox
Multidimension Tools
Network Analyst Tools
Parcel Fabric Tools
Schematics Tools
Server Tools
Space Time Pattern Mining Tools
Spatial Analyst Tools
Conditional
Density
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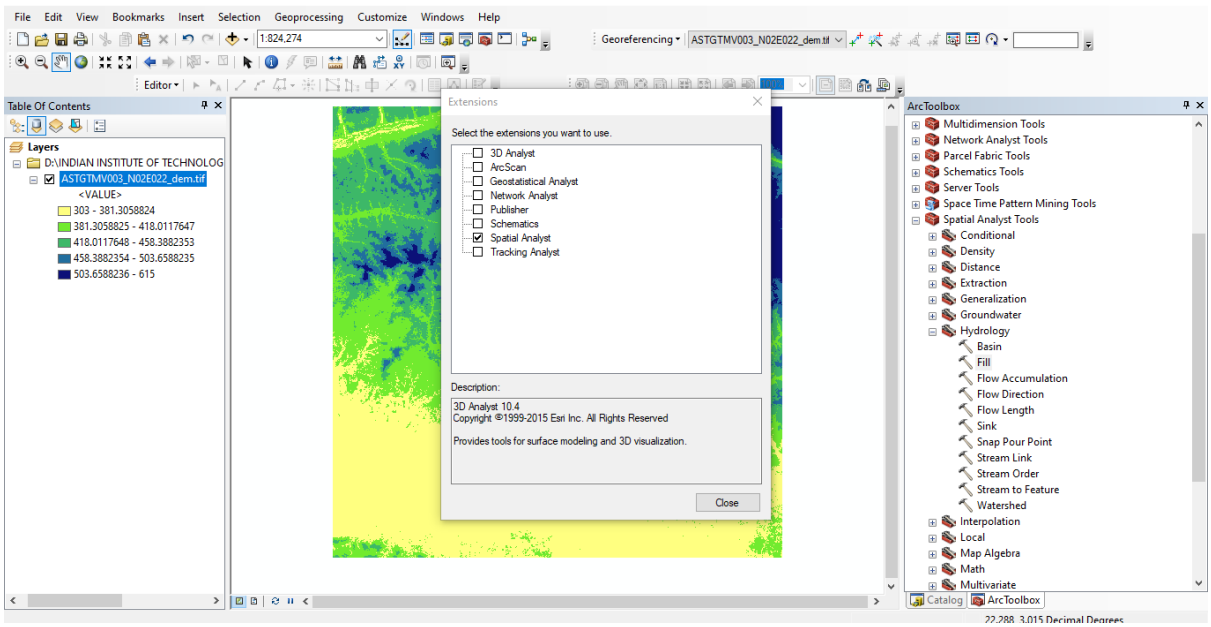
Groundwater
Hydrology
Basin
Fill
Flow Accumulation
Flow Direction
Flow Length
Sink
Snap Pour Point
Stream Link
Stream Order
Stream to Feature
Watershed
Interpolation
Local
Map Algebra
Math
Multivariate
Catalog
ArcToolbox
Geoprocessing tool that fills sinks in a surface raster to remove small imperfections in the data.
22.353 3.019 Decimal Degrees


File Edit View Bookmarks Insert Selection Geoprocessing Customize Windows Help
Extensions
Select the extensions you want to use.
3D Analyst
ArcScan
Geostatistical Analyst
Network Analyst
Publisher
Schematics
Spatial Analyst
Tracking Analyst
Description:
3D Analyst 10.4
Copyright ©1999-2015 Esri Inc. All Rights Reserved
Provides tools for surface modeling and 3D visualization.
Close
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Layers
D:\INDIAN INSTITUTE OF TECHNOLOG
ASTGTMV003_N02E022_dem.tif
<VALUE>
303 - 381.3058824
381.3058825 - 418.0117647
418.0117648 - 458.3882353
458.3882354 - 503.6588235
503.6588236 - 615
ArcToolbox
Multidimension Tools
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Parcel Fabric Tools
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Server Tools
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Hydrology
Basin
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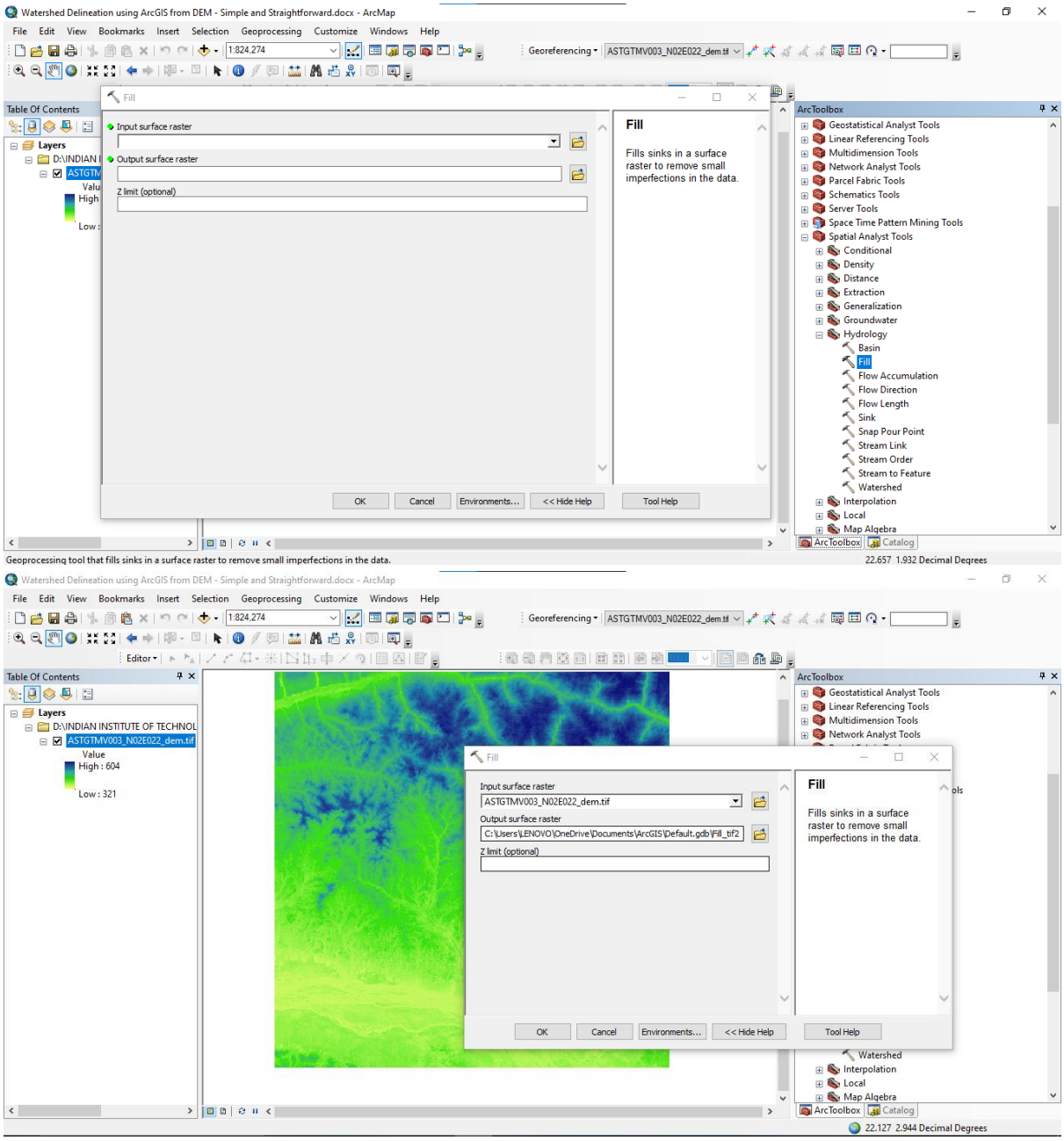
Flow Accumulation
Flow Direction
Flow Length
Sink
Snap Pour Point
Stream Link
Stream Order
Stream to Feature
Watershed
Interpolation
Local
Map Algebra
Math
Multivariate
Catalog
ArcToolbox
22.288 3.015 Decimal Degrees


Watershed Delineation using ArcGIS from DEM - Simple and Straightforward.docx - ArcMap
File Edit View Bookmarks Insert Selection Geoprocessing Customize Windows Help
Georeferencing
ASTGTMV003_N02E022_dem.tif
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Layers
Fill
Input surface raster
Output surface raster
Z limit (optional)
Fills sinks in a surface raster to remove small imperfections in the data.
OK
Cancel
Environments...
<< Hide Help
Tool Help
ArcToolbox
Geostatistical Analyst Tools
Linear Referencing Tools
Multidimension Tools
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Parcel Fabric Tools
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Server Tools
Space Time Pattern Mining Tools
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Watershed
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Catalog
Geoprocessing tool that fills sinks in a surface raster to remove small imperfections in the data.
22.657 1.932 Decimal Degrees

Watershed Delineation using ArcGIS from DEM - Simple and Straightforward.docx - ArcMap
File Edit View Bookmarks Insert Selection Geoprocessing Customize Windows Help
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ASTGTMV003_N02E022_dem.tif
Editor
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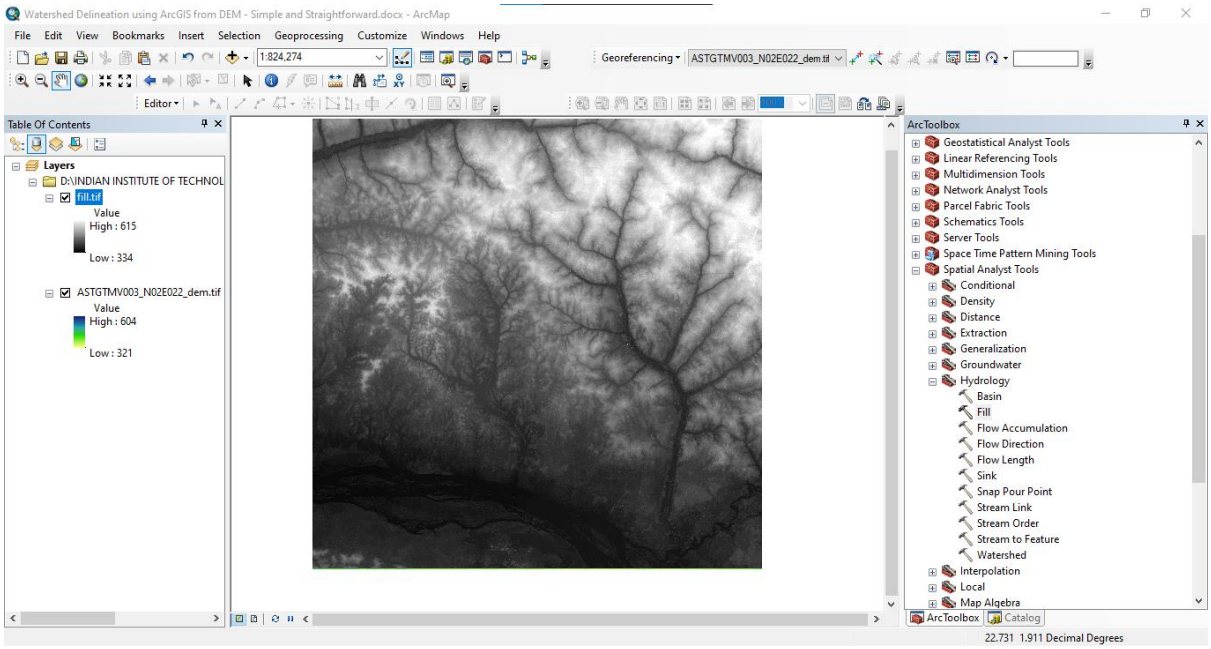
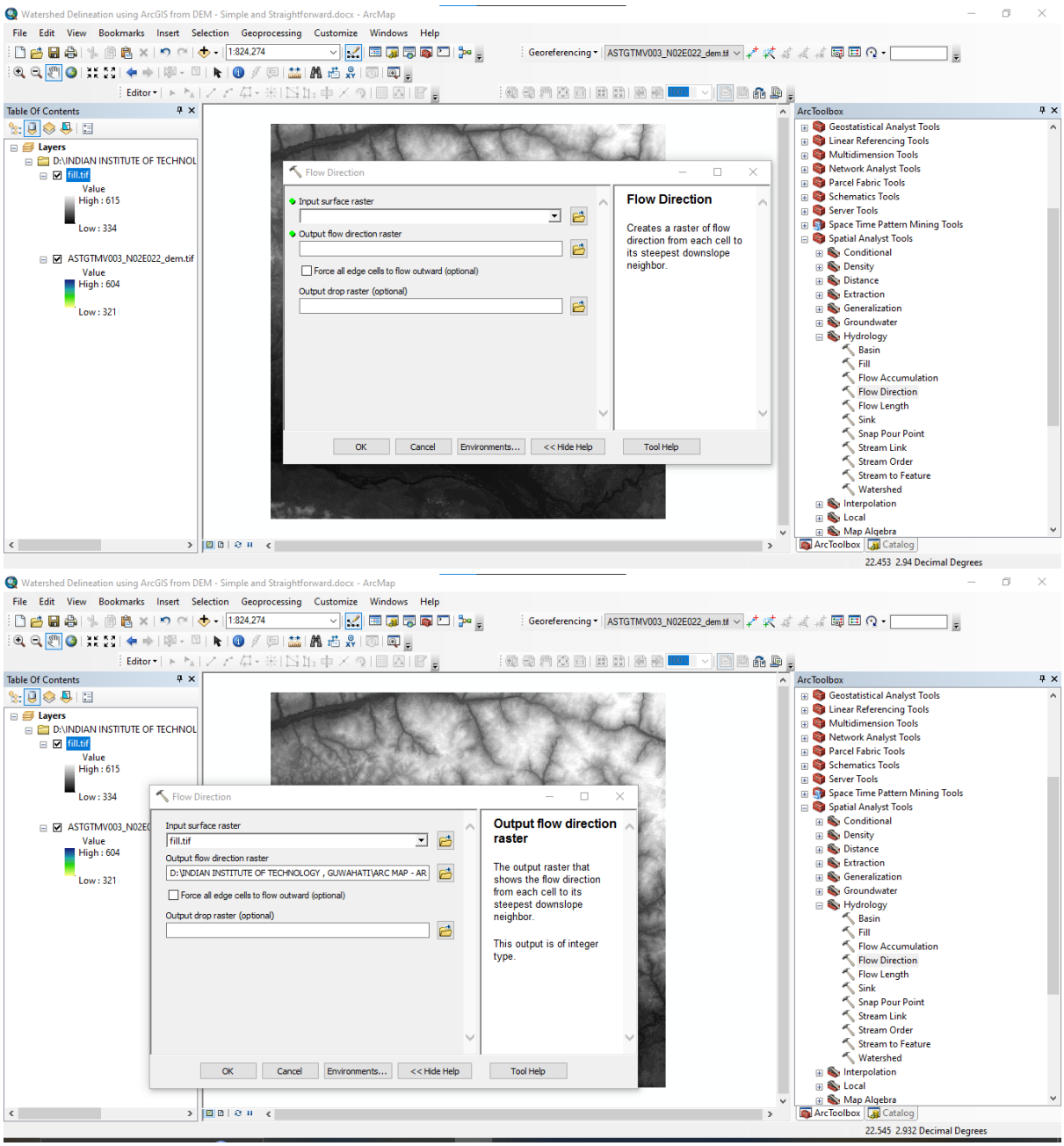
Layers
D:\INDIAN INSTITUTE OF TECHNOL
ASTGTMV003_N02E022_dem.tif
Value
High : 604
Low : 321
Fill
Input surface raster
ASTGTMV003_N02E022_dem.tif
Output surface raster
C:\Users\LENOVO\OneDrive\Documents\ArcGIS\Default.gdb\Fill_tif2
Z limit (optional)
Fills sinks in a surface raster to remove small imperfections in the data.
OK
Cancel
Environments...
<< Hide Help
Tool Help
ArcToolbox
Geostatistical Analyst Tools
Linear Referencing Tools
Multidimension Tools
Network Analyst Tools
Watershed
Interpolation
Local
Map Algebra
ArcToolbox
Catalog
22.127 2.944 Decimal Degrees



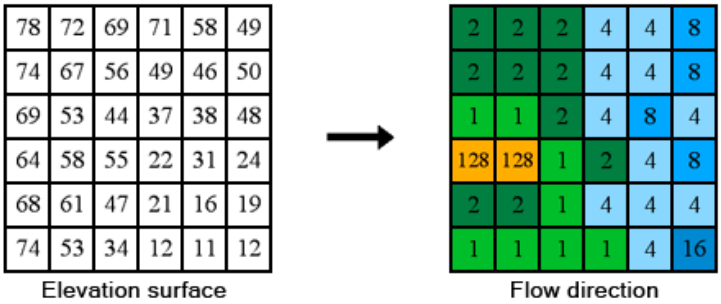
So what happens in this step is actually if there are any sinks present in the in the rhodium this algorithm will actually fill up those things so that we can proceed with the with the next steps that we need to do so

So after fill the second step would be to create a flow Direction roster so you double click on this one and as the input to this one we.



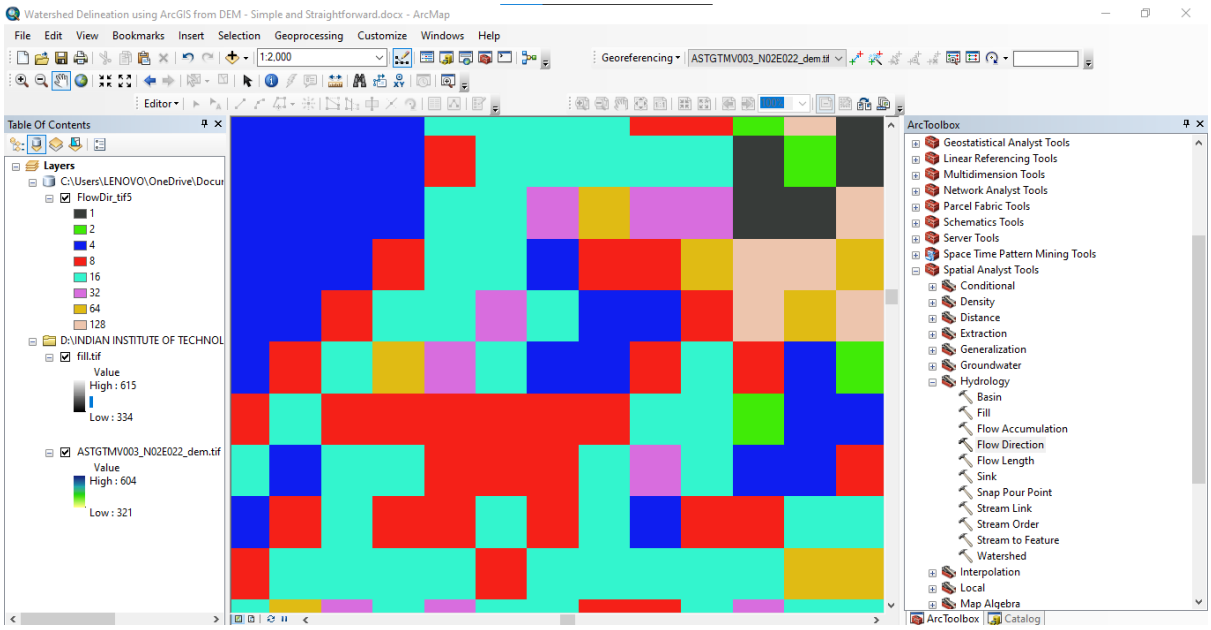
This tool takes a surface as input and outputs a raster showing the direction of flow out of each cell. If the **Output drop raster** option is chosen, an output raster is created showing a ratio of the maximum change in elevation from each cell along the direction of flow to the path length between centers of cells and is expressed in percentages. If the **Force all edge cells to flow outward** option is chosen, all cells at the edge of the surface raster will flow outward from the surface raster.

There are eight valid output directions relating to the eight adjacent cells into which flow could travel. This approach is commonly referred to as an eight-direction (D8) flow model and follows an approach presented in Jenson and Domingue (1988).

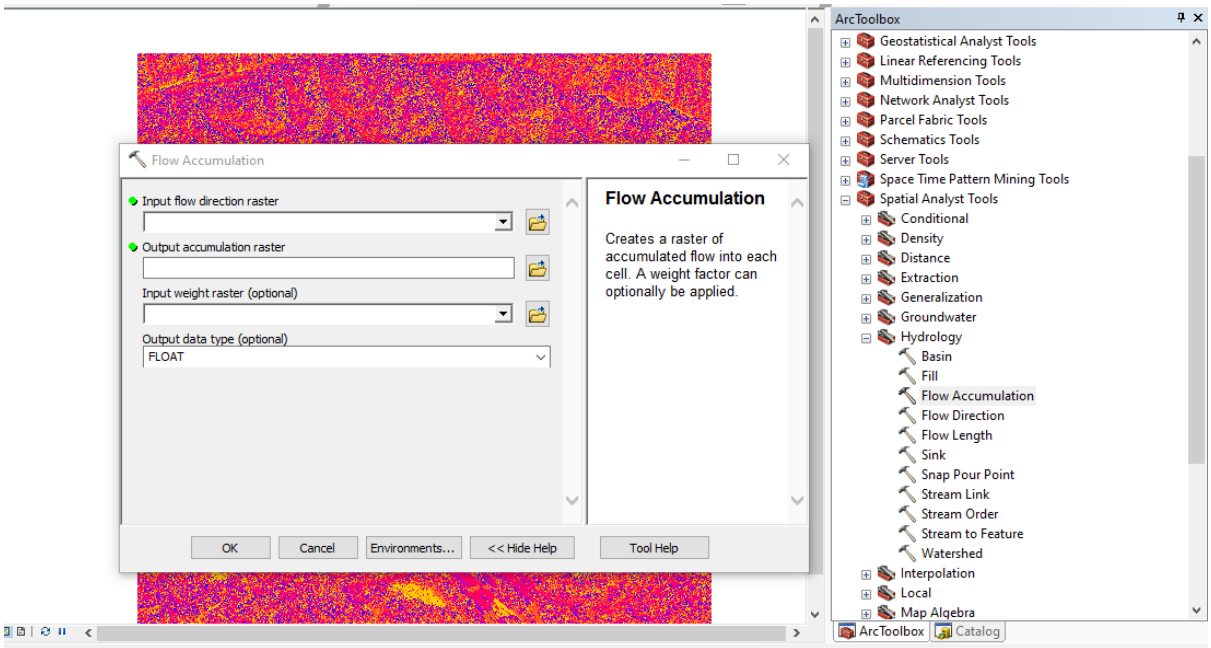


Direction coding

The coding of the direction of flow is shown.



These individual pixels actually take the color which is represented by each of these colors which also has the number which explains you actually the direction of the flow so that's actually the meaning of this flow direction roster so our next step would actually be to create the flow accumulation roster.


Flow Accumulation
Input flow direction raster
Output accumulation raster
Input weight raster (optional)
Output data type (optional)
FLOAT
Flow Accumulation
Creates a raster of accumulated flow into each cell. A weight factor can optionally be applied.
OK
Cancel
Environments...
<< Hide Help
Tool Help
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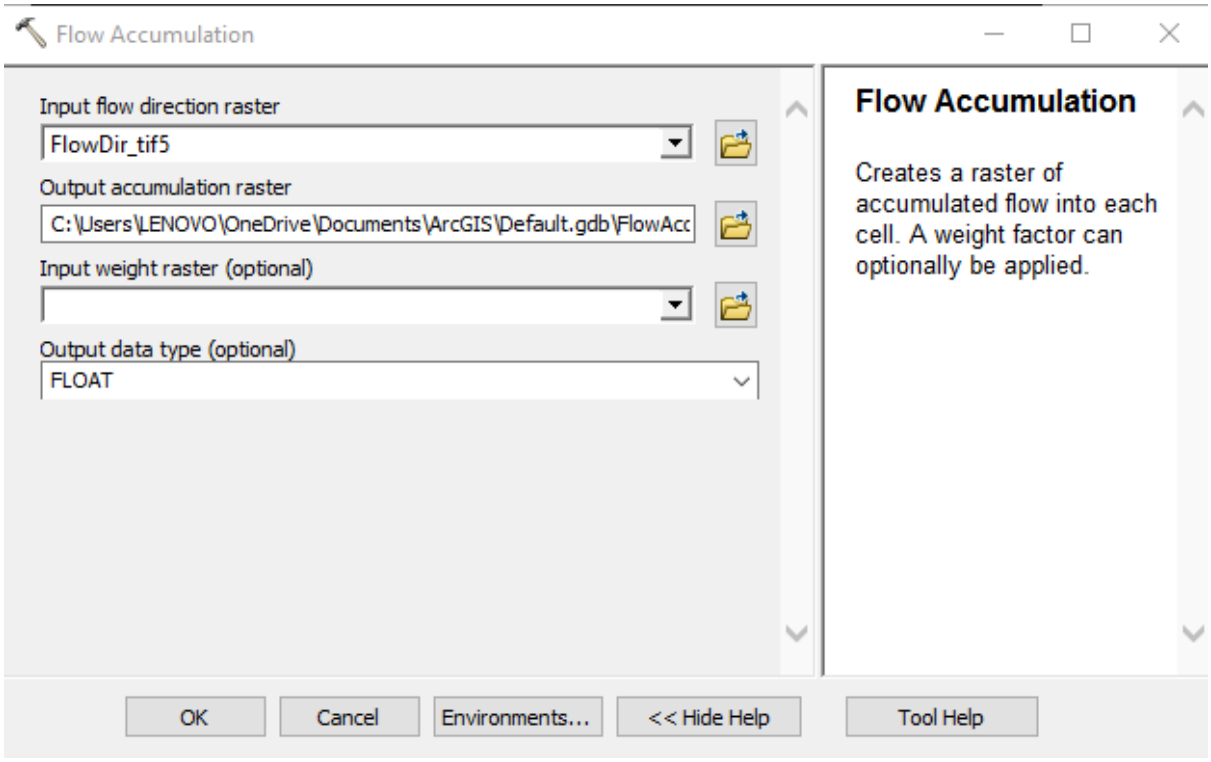
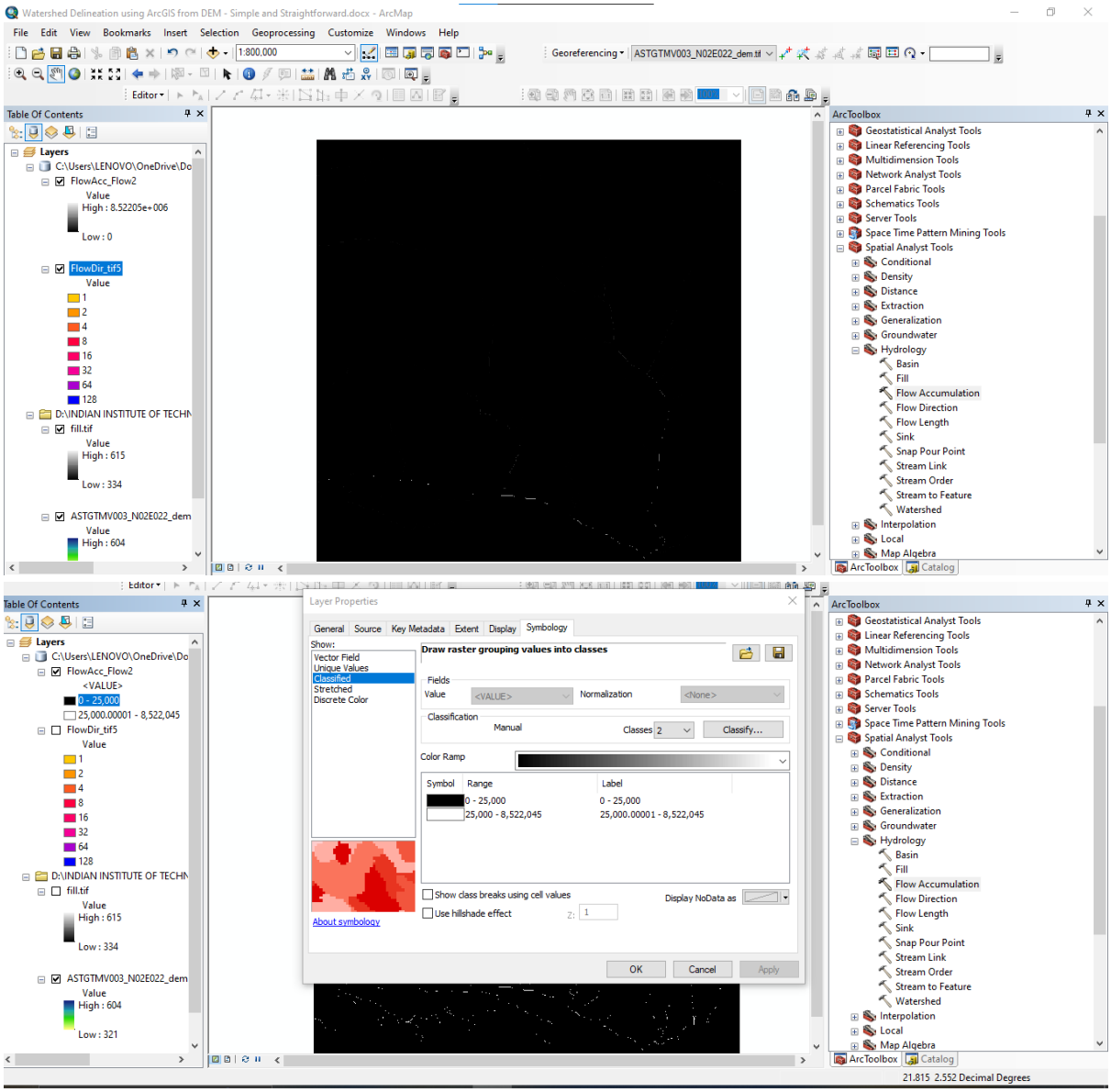
ArcToolbox
Catalog


Flow Accumulation
Input flow direction raster
FlowDir_tif5
Output accumulation raster
C:\Users\LENOVO\OneDrive\Documents\ArcGIS\Default.gdb\FlowAcc
Input weight raster (optional)
Output data type (optional)
FLOAT
Flow Accumulation
Creates a raster of accumulated flow into each cell. A weight factor can optionally be applied.
OK
Cancel
Environments...
<< Hide Help
Tool Help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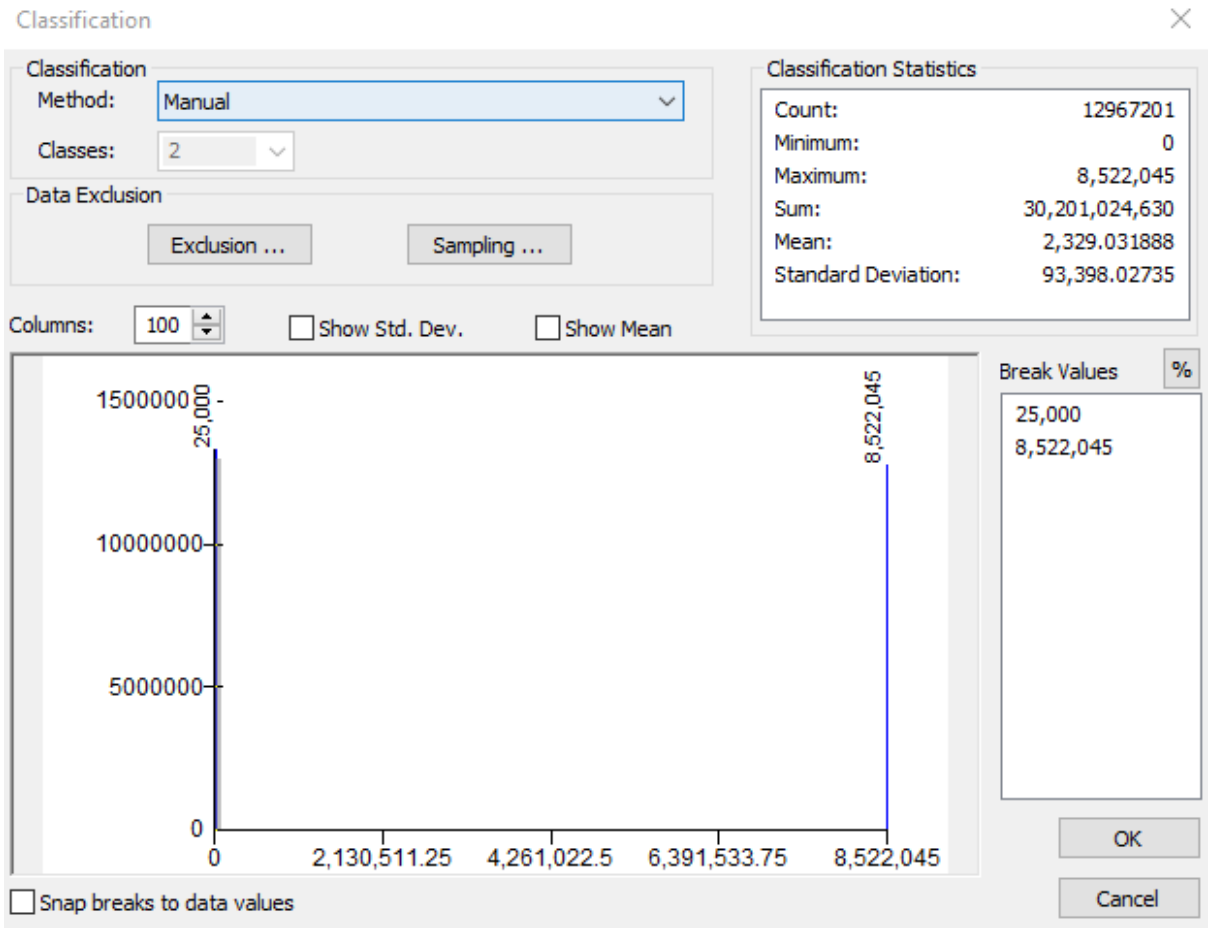
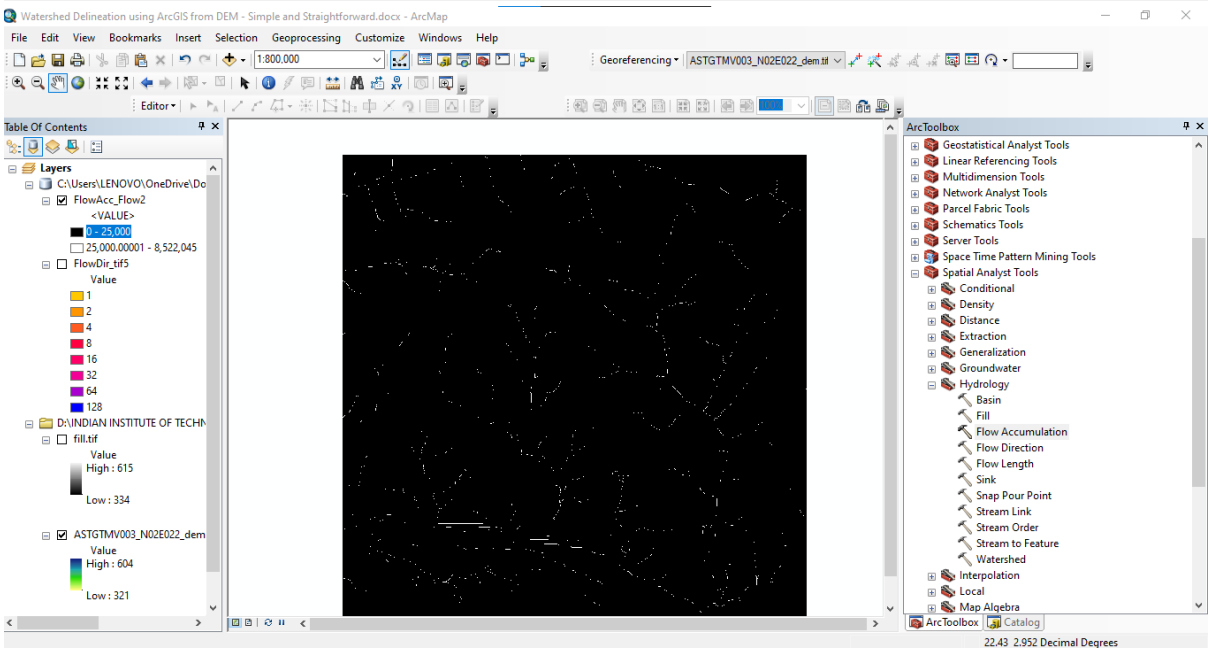
Layer Properties
General Source Key Metadata Extent Display Symbology
Show:
Vector Field
Unique Values
Classified
Stretched
Discrete Color
Draw raster grouping values into classes
Fields
Value
Normalization
Classification
Manual
Classes
Classify...
Color Ramp
Symbol Range Label
0 - 25,000 0 - 25,000
25,000 - 8,522,045 25,000.00001 - 8,522,045
Show class breaks using cell values
Use hillshade effect
Display NoData as
About symbology
OK Cancel Apply
21.815 2.552 Decimal Degrees


Classification
Classification
Method:
Manual
Classes:
2
Data Exclusion
Exclusion ...
Sampling ...
Classification Statistics
Count: 12967201
Minimum: 0
Maximum: 8,522,045
Sum: 30,201,024,630
Mean: 2,329.031888
Standard Deviation: 93,398.02735
Columns:
100
Show Std. Dev.
Show Mean
15000000
10000000
5000000
0
25,000
8,522,045
0
2,130,511.25
4,261,022.5
6,391,533.75
8,522,045
Break Values
%
25,000
8,522,045
OK
Cancel
Snap breaks to data values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Flow Accumulation
Flow Direction
Flow Length
Sink
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Stream Link
Stream Order
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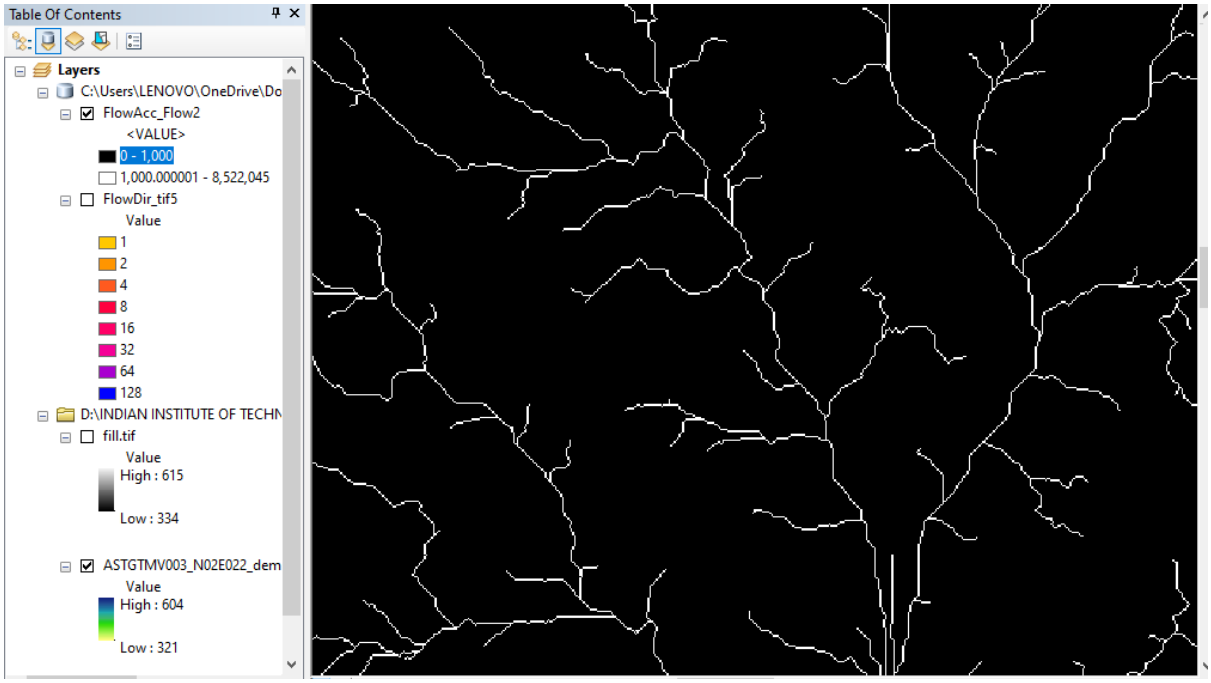
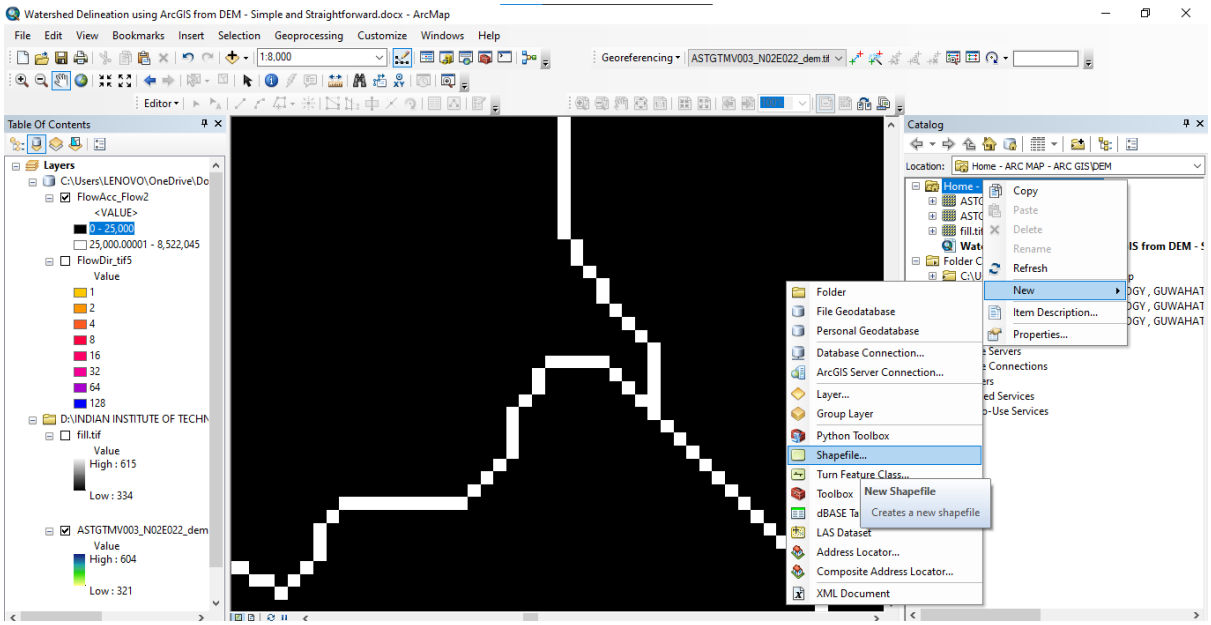
Watershed
Interpolation
Local
Map Algebra



Localised Riverline

Let's say around 25,000 and the rest I would like to represent that in white color so for this example let's assume that I need to have my catchment outlet somewhere over here and I would like to know what is the the the corresponding contributing drainage area for that that particular outlet from this particular sub catchment so what I'm going to do is first I need to create a new shapefile and define my define the exact location of my outlet and make sure that that outlet point is located exactly on top of this cell but not outside the range of this this white color cells so in order to do that you have to create a new shapefile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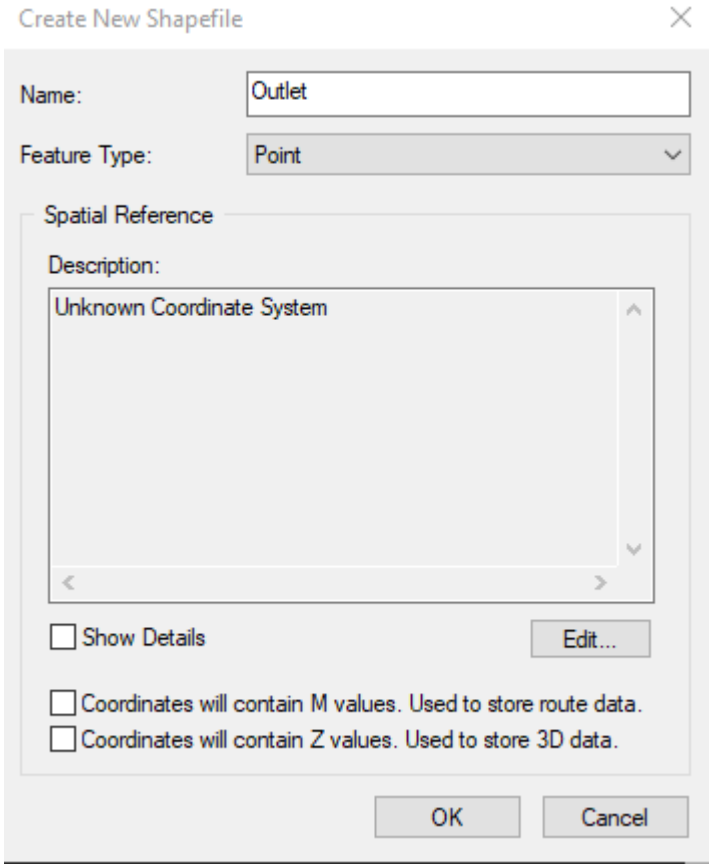
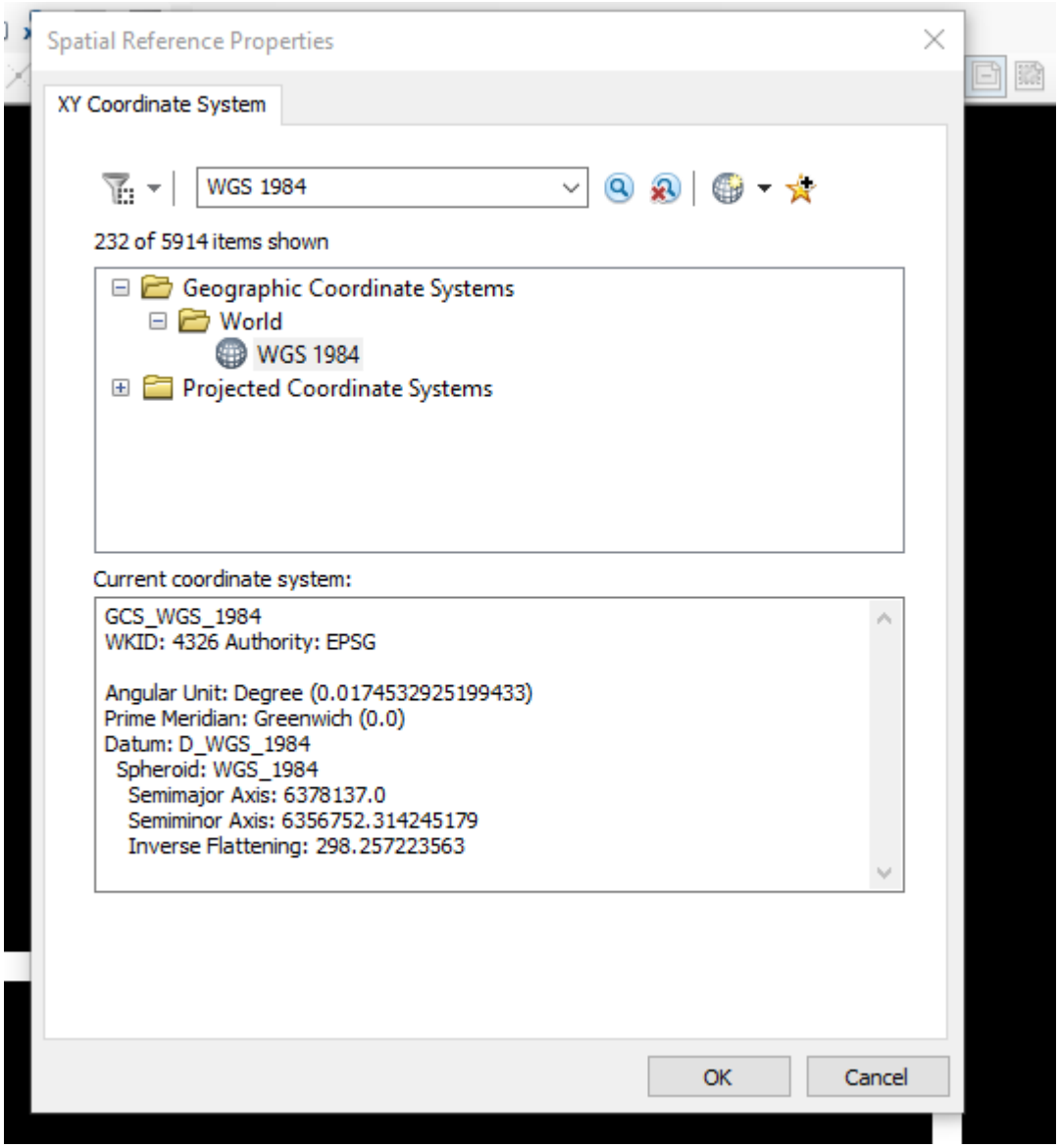
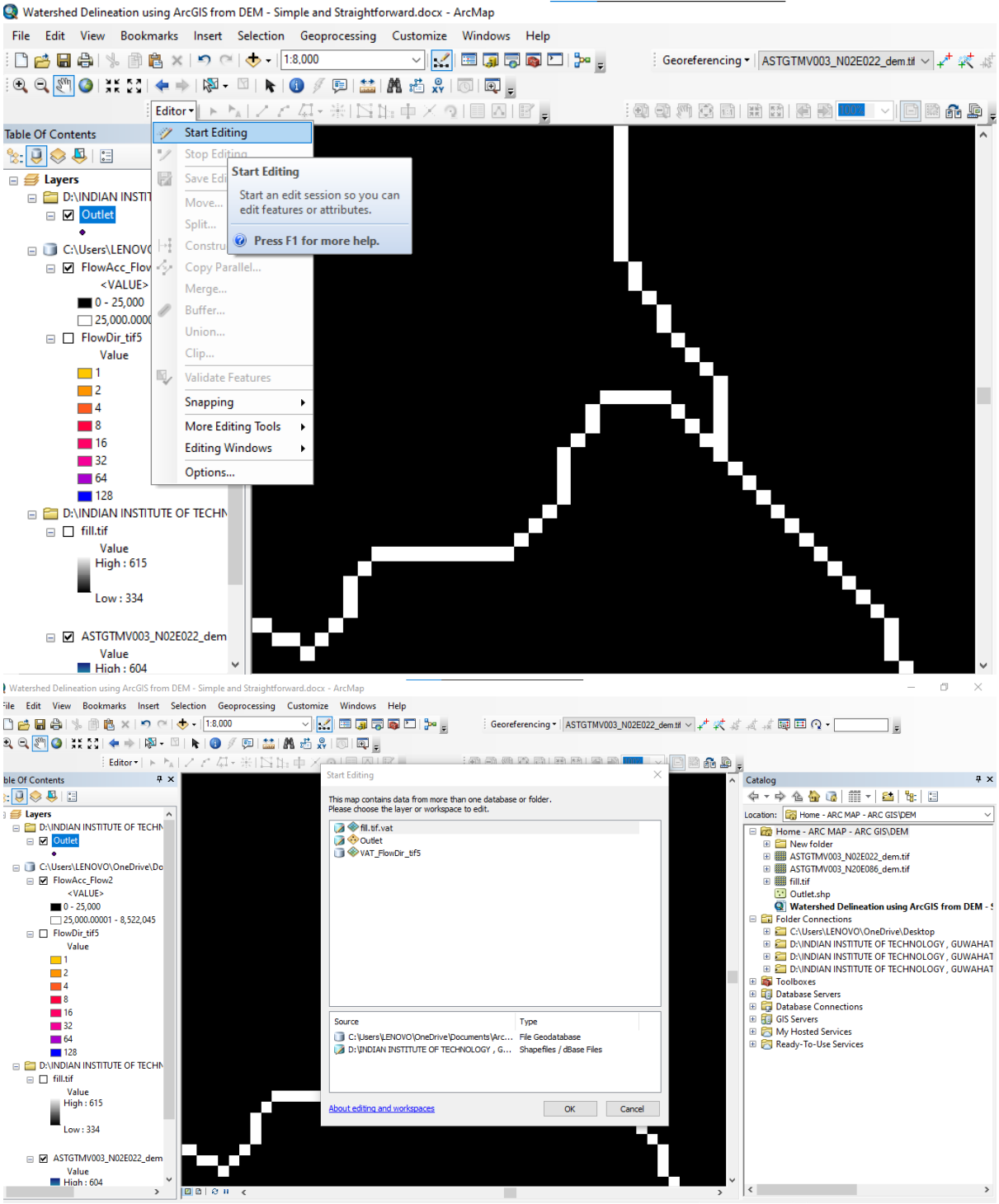
Layers
FlowAcc_Flow2
0 - 25,000
25,000.00001 - 8,522,045
FlowDir_tif5
Value
1
2
4
8
16
32
64
128
fill.tif
High : 615
Low : 334
ASTGTMV003_N02E022_dem
High : 604
Low : 321
Catalog
Location: Home - ARC MAP - ARC GIS\DEM
Copy
Paste
Delete
Rename
Refresh
New
Item Description...
Properties...
Folder
File Geodatabase
Personal Geodatabase
Database Connection...
ArcGIS Server Connection...
Layer...
Group Layer
Python Toolbox
Shapefile...
Turn Feature Class...
Toolbox
dBASE Ta
LAS Dataset
Address Locator...
Composite Address Locator...
XML Document
New Shapefile
Creates a new shapefile


Create New Shapefile
Name:
Outlet
Feature Type:
Point
Spatial Reference
Description:
Unknown Coordinate System
Show Details
Edit...
Coordinates will contain M values. Used to store route data.
Coordinates will contain Z values. Used to store 3D data.
OK
Cancel


Spatial Reference Properties
XY Coordinate System
WGS 1984
232 of 5914 items shown
Geographic Coordinate Systems
World
WGS 1984
Projected Coordinate Systems
Current coordinate system:
GCS_WGS_1984
WKID: 4326 Authority: EPSG
Angular Unit: Degree (0.0174532925199433)
Prime Meridian: Greenwich (0.0)
Datum: D_WGS_1984
Spheroid: WGS_1984
Semimajor Axis: 6378137.0
Semiminor Axis: 6356752.314245179
Inverse Flattening: 298.257223563
OK
Cancel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Save Edits
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Split...
Copy Parallel...
Merge...
Buffer...
Union...
Clip...
Validate Features
Snapping
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Options...
Start Editing
Start an edit session so you can edit features or attributes.
Press F1 for more help.
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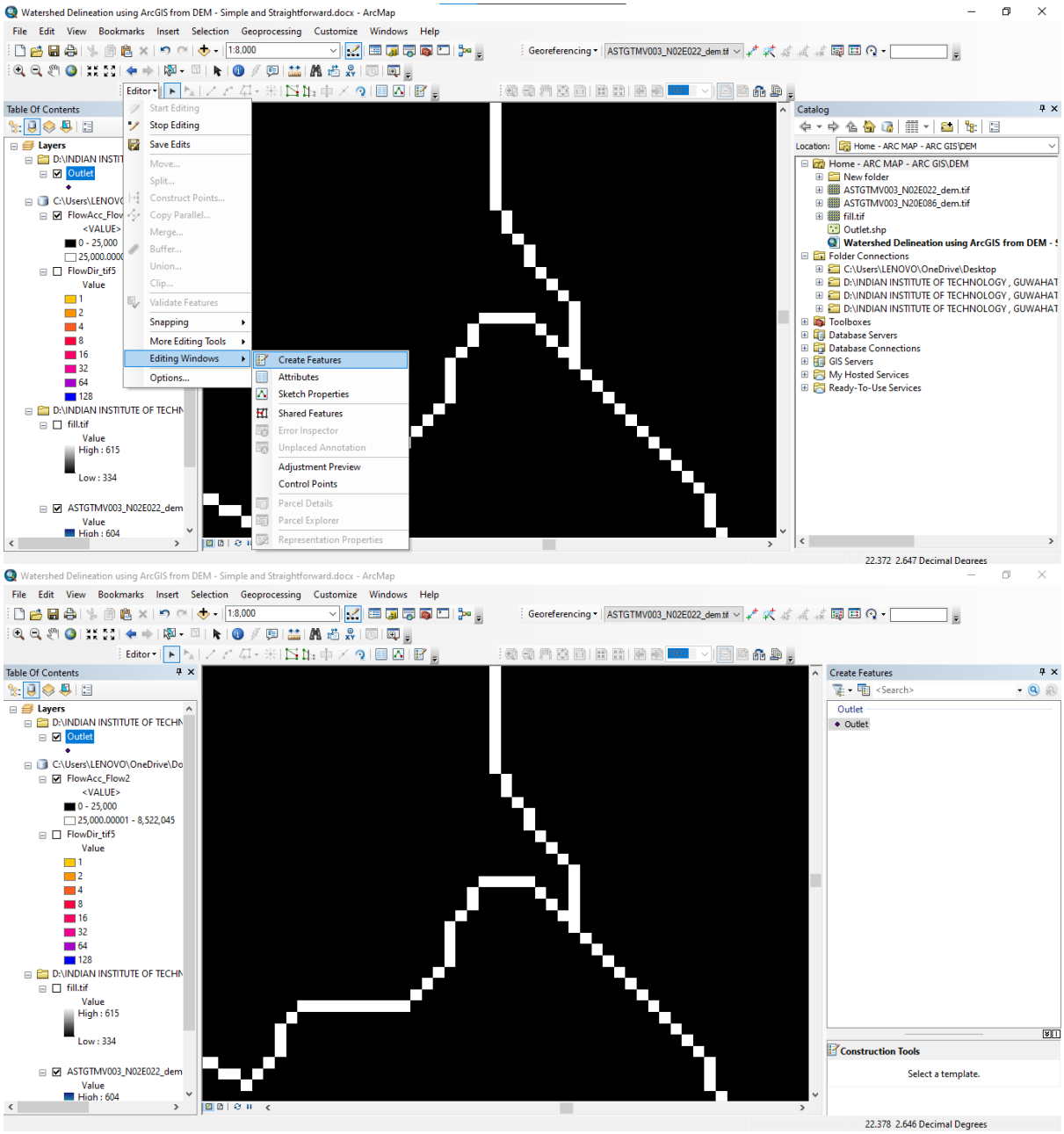
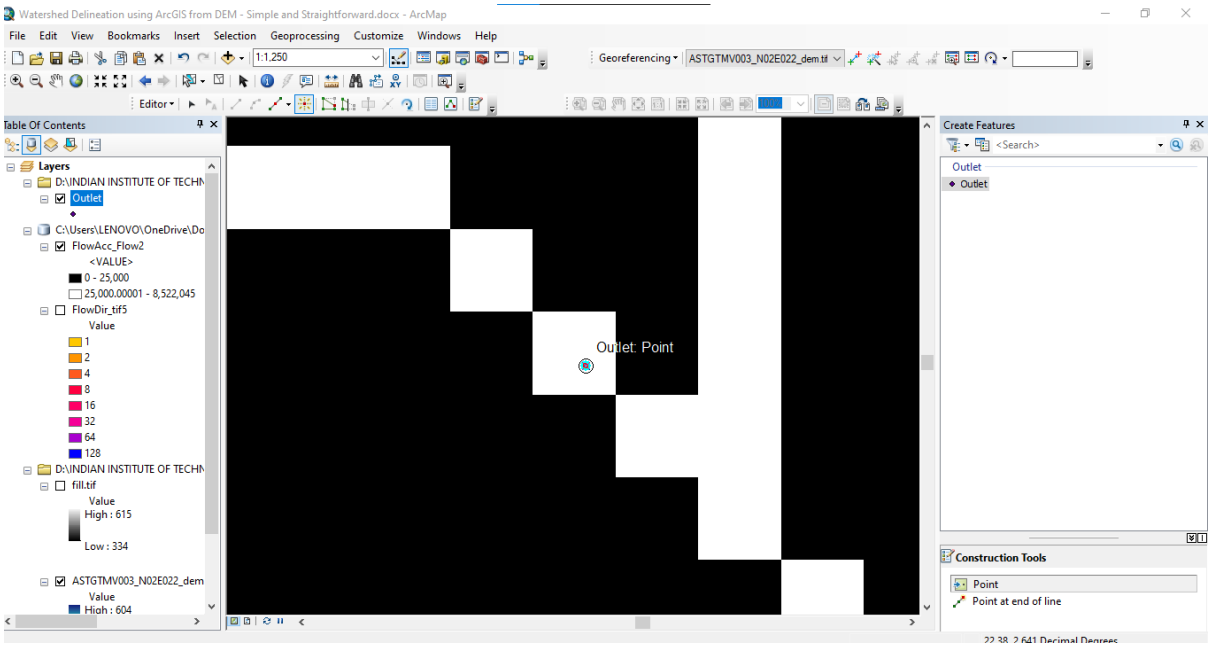
16
32
64
128
fill.tif
High : 615
Low : 334
ASTGTMV003_N02E022_dem
High : 604

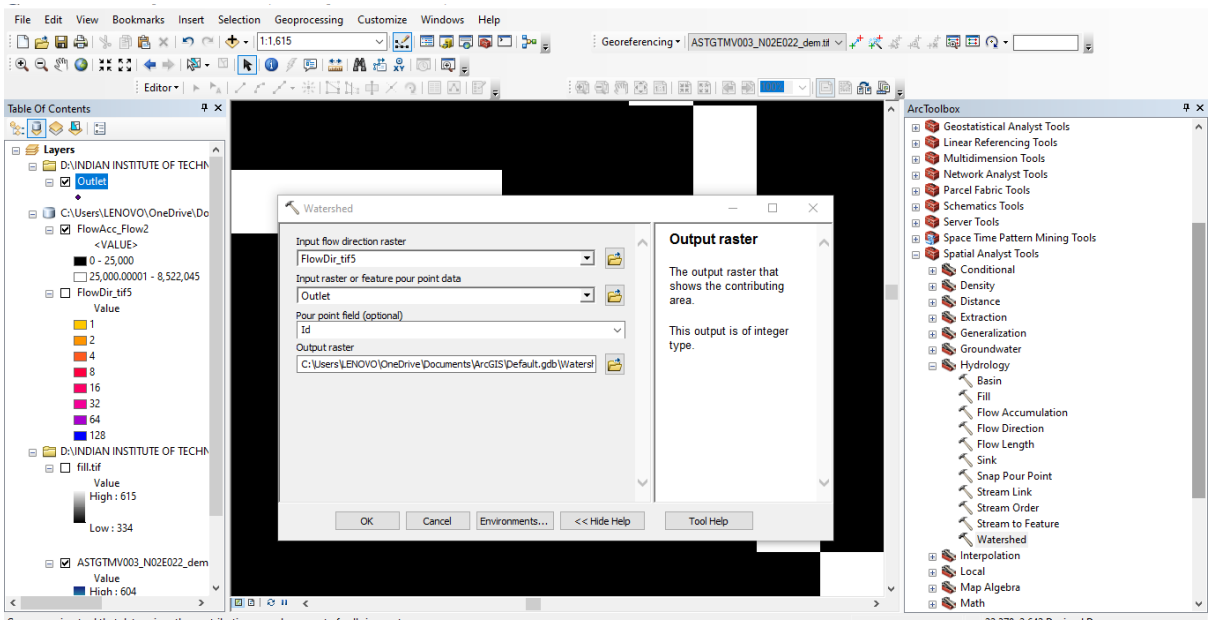
Start Editing
This map contains data from more than one database or folder.
Please choose the layer or workspace to edit.
fill.tif.vat
Outlet
VAT_FlowDir_tif5
Source
Type
File Geodatabase
Shapefiles / dBase Files
About editing and workspaces
OK
Cancel
Catalog
Location:
Home - ARC MAP - ARC GIS\DEM
New folder
ASTGTMV003_N02E022_dem.tif
ASTGTMV003_N20E086_dem.tif
fill.tif
Outlet.shp
Folder Connections
Toolboxes
Database Servers
Database Connections
GIS Servers
My Hosted Services
Ready-To-Use Services

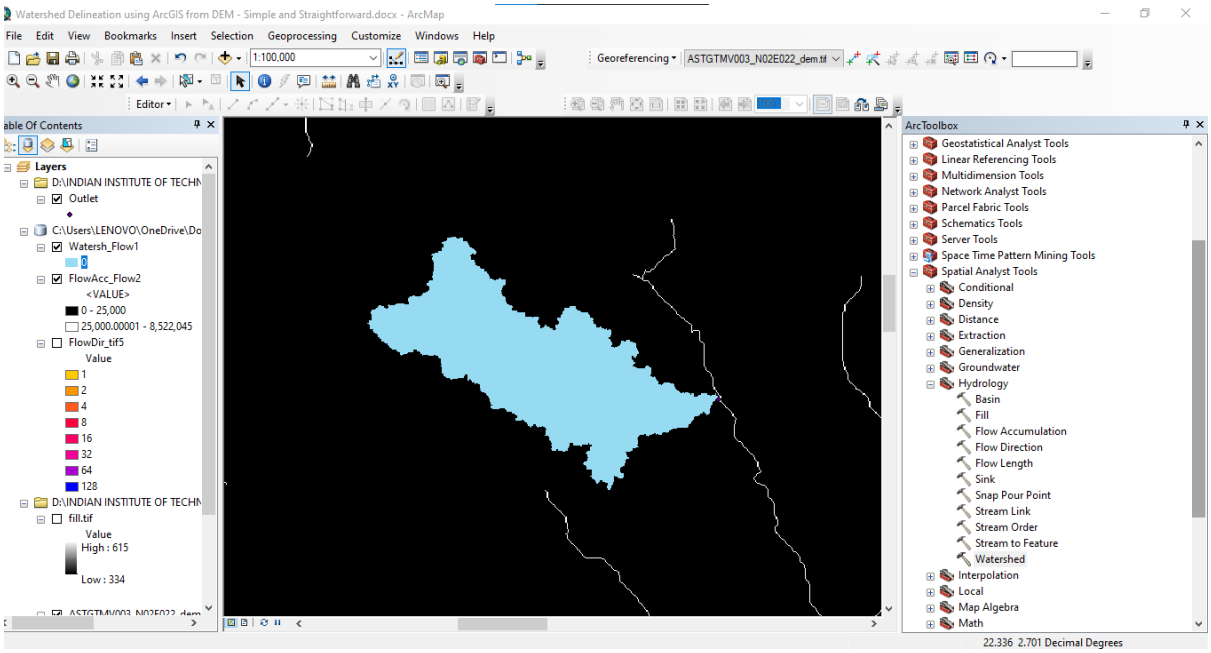


Trying to identify the contributing drainage basin for this particular River branch I'm going to zoom in to the point where this river connects to the main river and I'm going to place my point somewhere over here ok that's done let's go to editor and click stop editing and save your edits ok now you can see you have your point which we call as a pour point now get rid of this create features panel

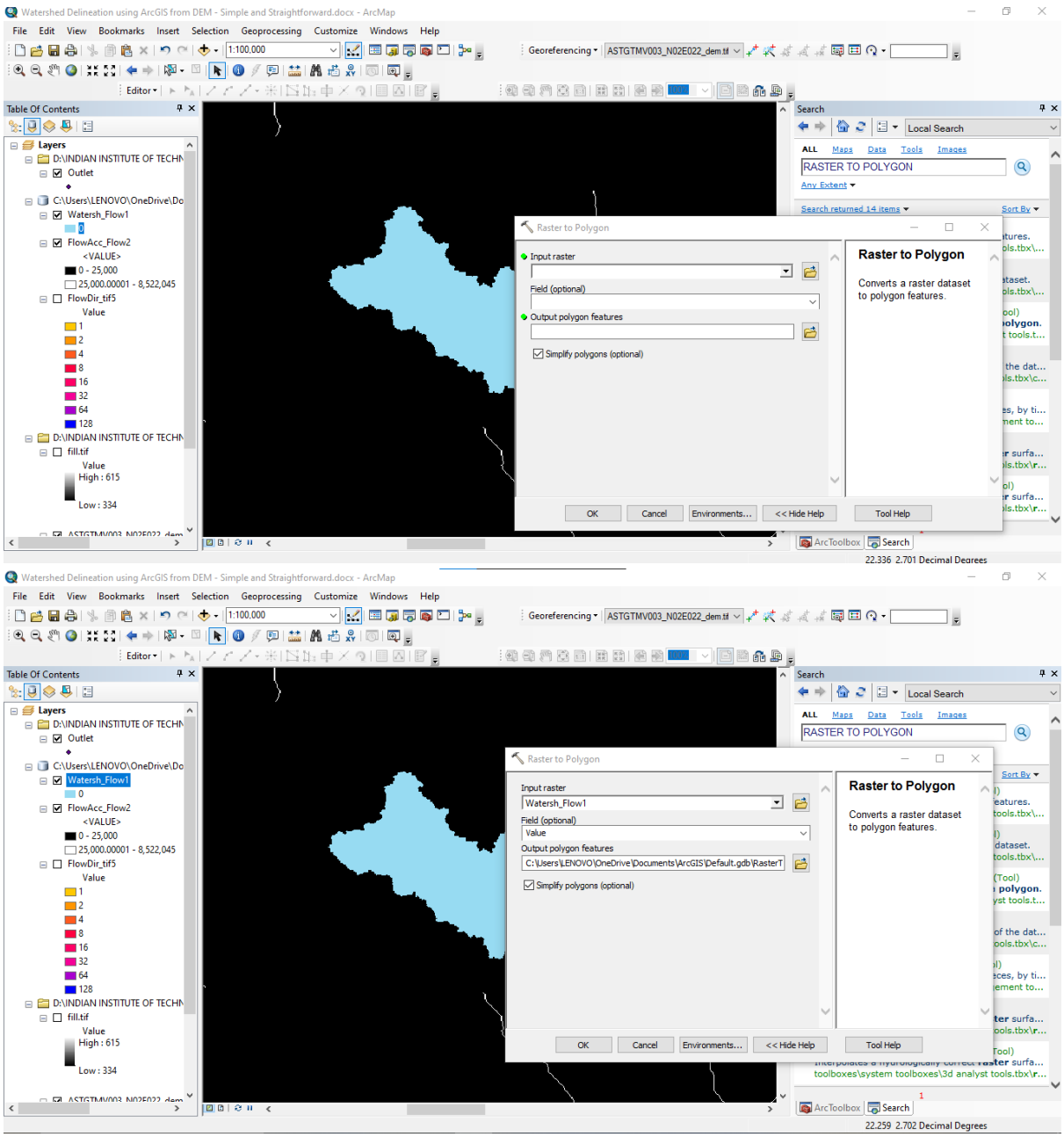


You have your point which we call as a pour point

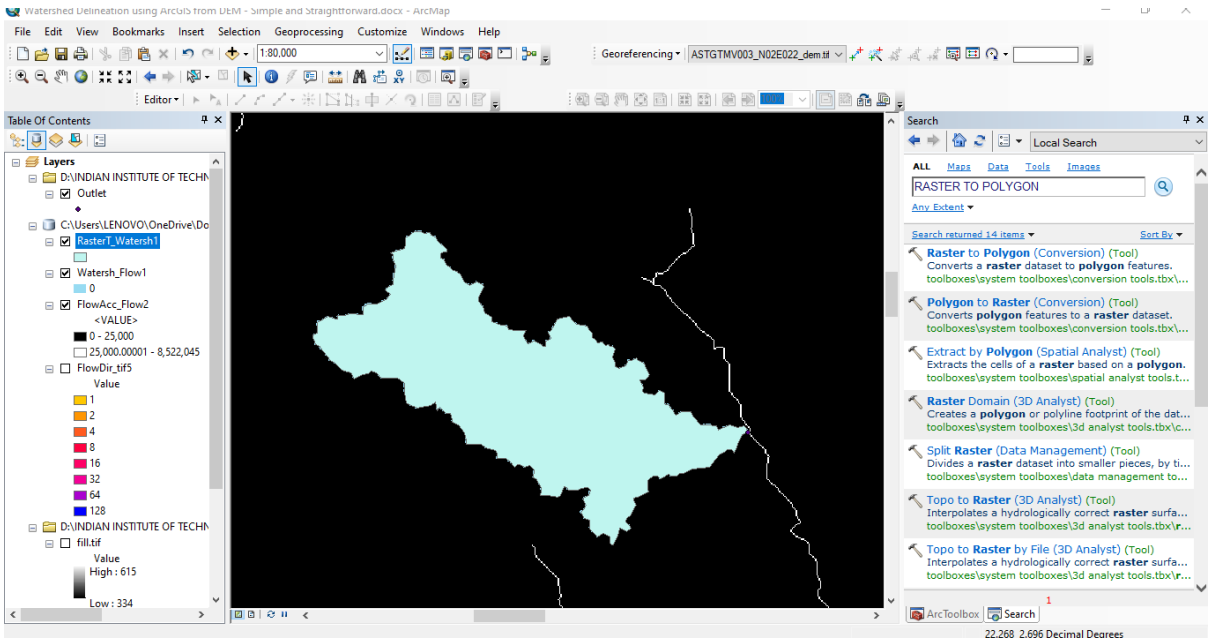


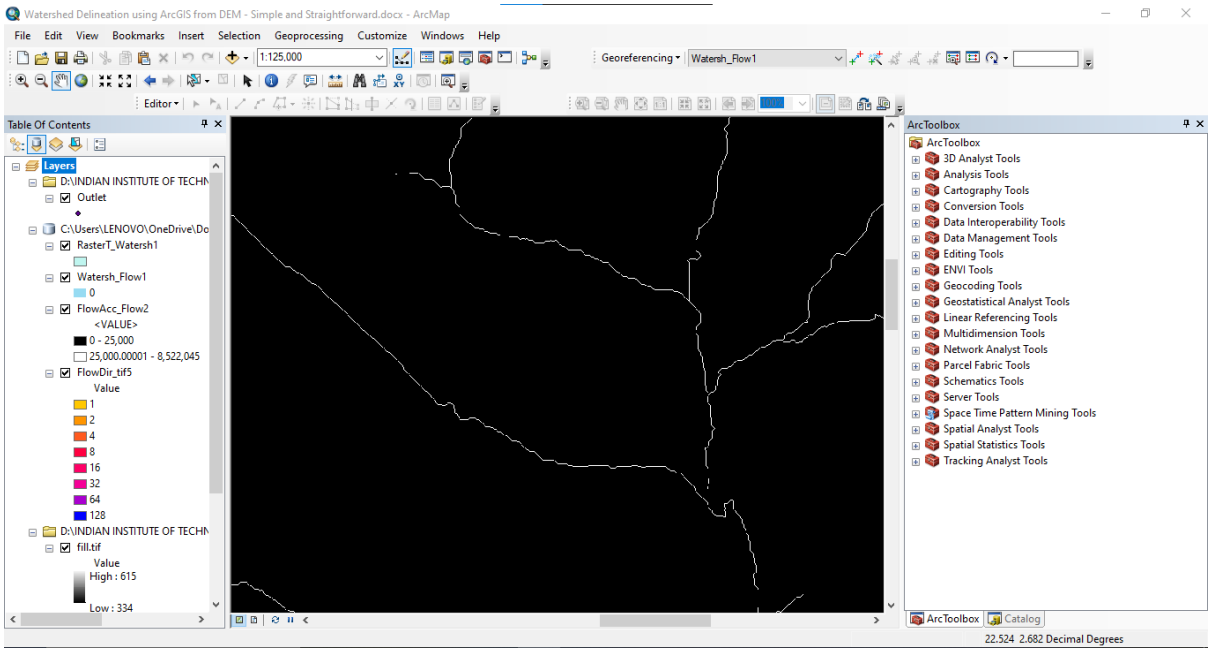


you can see that we already created the the catchment and it shows us actually the contributing area for this catchment outlet point based on this DM right and right now this catchment is actually still in the format of a raster if you go over here and if you open the attributes table you can see that is actually in the form of a roster for other analysis purposes normally it's required that you convert this raster into a polygon so you can do other analysis such as calculating the area or based on your requirements so what we do over here is we go to the search panel and we search raster to polygon and you can see and as you can see the first option is converting converting a roster into a polygon so I'm going to drag this raster and drop.

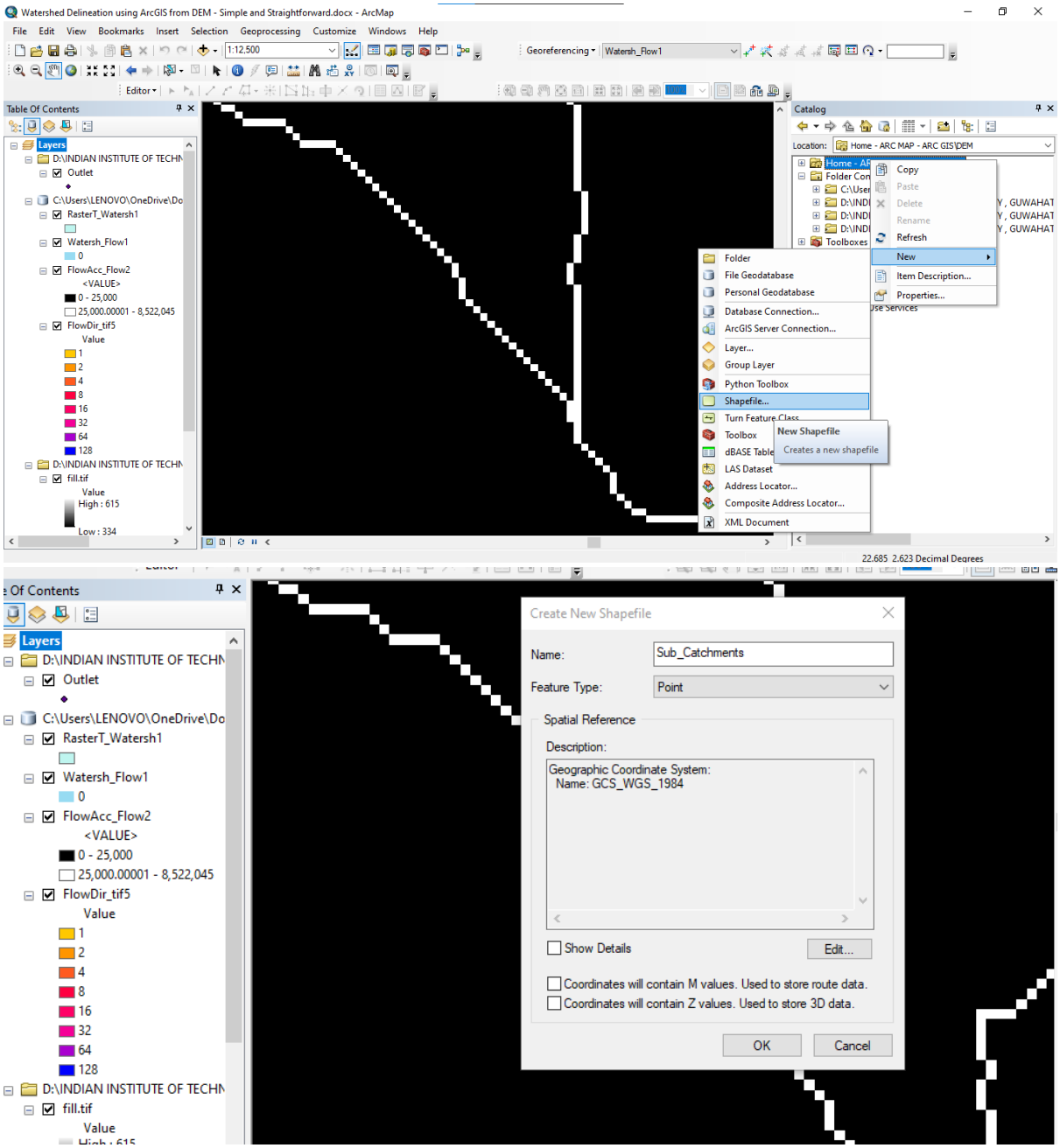


Raster which got generated based on the topography of the DM and I'm going to simplify the polygons as well what this does is actually in the in the at the edges of the catchment if you do not unseen Riis of the of the pixels in sort of rectangular format but if you click on this one it'll sort of simplify the polygons as well so and then click OK alright now you can see you successfully created your first watershed





Now you can more or less clearly see the the river network now for this tutorial I'm just going to create multiple watersheds in locations where I see that as outlets of sub reaches for example this small tributary is created by its own sub catchment and the same goes for this small river as well so I'm going to somehow delineate a multiple number of catchments sub catchments using using
method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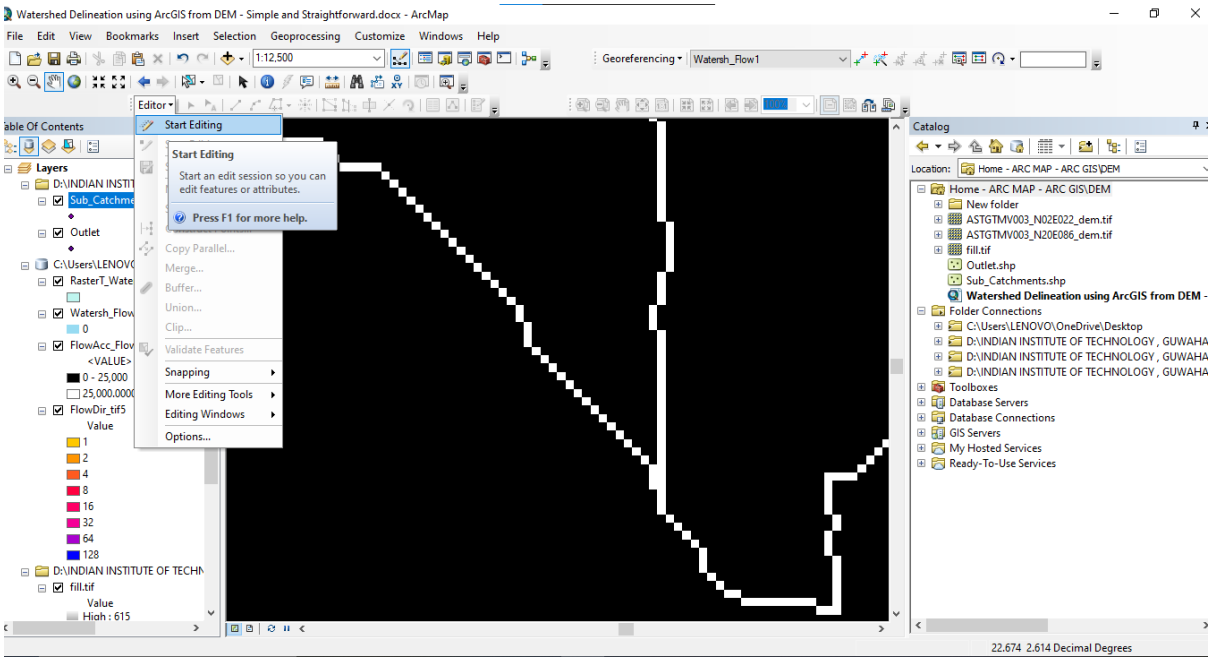
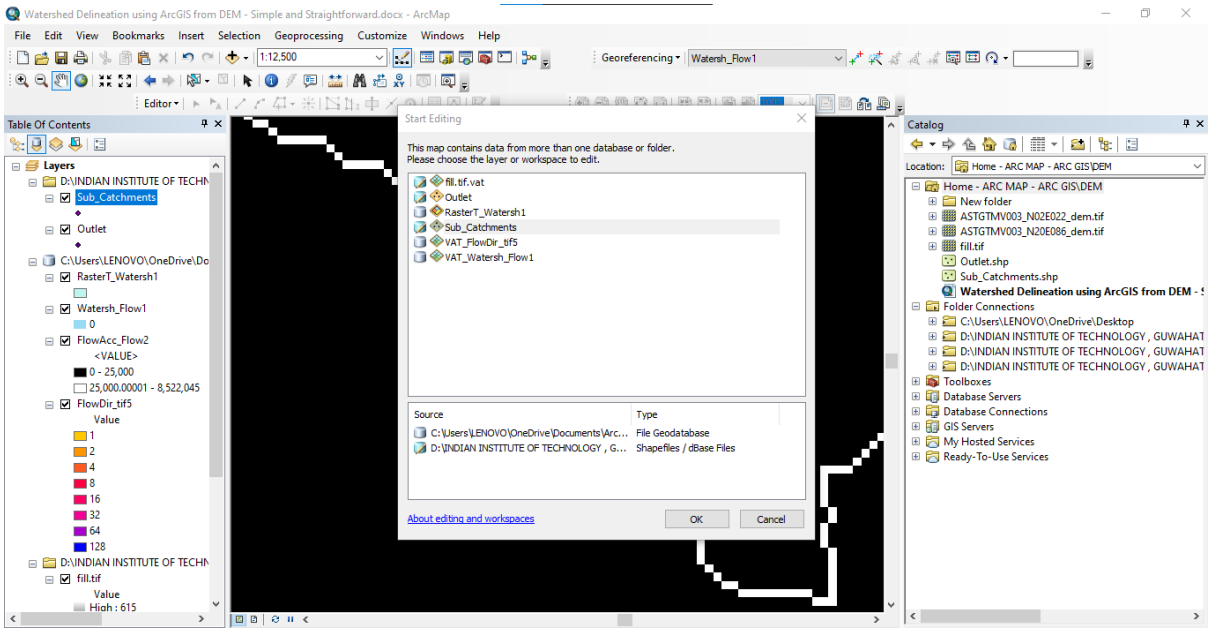
Layers
Outlet
RasterT_Watersh1
Watersh_Flow1
FlowAcc_Flow2
0 - 25,000
25,000.00001 - 8,522,045
FlowDir_tif5
fill.tif
Catalog
Folder
File Geodatabase
Personal Geodatabase
Database Connection...
ArcGIS Server Connection...
Layer...
Group Layer
Python Toolbox
Shapefile...
Turn Feature Class...
Toolbox
dBASE Table
LAS Dataset
Address Locator...
Composite Address Locator...
XML Document
New Shapefile
Creates a new shapefile
Copy
Paste
Delete
Rename
Refresh
New
Item Description...
Properties...
Create New Shapefile
Name:
Sub_Catchments
Feature Type:
Point
Spatial Reference
Description:
Geographic Coordinate System:
Name: GCS_WGS_1984
Show Details
Edit...
Coordinates will contain M values. Used to store route data.
Coordinates will contain Z values. Used to store 3D data.
OK
Cancel


Watershed Delineation using ArcGIS from DEM - Simple and Straightforward.docx - ArcMap
File Edit View Bookmarks Insert Selection Geoprocessing Customize Windows Help
Georeferencing
Watersh_Flow1
Editor
Start Editing
Start Editing
Start an edit session so you can edit features or attributes.
Press F1 for more help.
Copy Parallel...
Merge...
Buffer...
Union...
Clip...
Validate Features
Snapping
More Editing Tools
Editing Windows
Options...
Table Of Contents
Layers
Outlet
Value
1
2
4
8
16
32
64
128
fill.tif
Value
Catalog
Location:
Home - ARC MAP - ARC GIS\DEM
New folder
ASTGTMV003_N02E022_dem.tif
ASTGTMV003_N20E086_dem.tif
fill.tif
Outlet.shp
Sub_Catchments.shp
Watershed Delineation using ArcGIS from DEM -
Folder Connections
C:\Users\LENOVO\OneDrive\Desktop
Toolboxes
Database Servers
Database Connections
GIS Servers
My Hosted Services
Ready-To-Use Services
22.674 2.614 Decimal Degrees


Watershed Delineation using ArcGIS from DEM - Simple and Straightforward.docx - ArcMap
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Watersh_Flow1
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FlowAcc_Flow2
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25,000.00001 - 8,522,045
FlowDir_tif5
Value
1
2
4
8
16
32
64
128
fill.tif
Value
High : 615
Start Editing
This map contains data from more than one database or folder.
Please choose the layer or workspace to edit.
fill.tif.vat
Outlet
RasterT_Watersh1
Sub_Catchments
VAT_FlowDir_tif5
VAT_Watersh_Flow1
Source
Type
C:\Users\LENOVO\OneDrive\Documents\Arc...
File Geodatabase
D:\INDIAN INSTITUTE OF TECHNOLOGY , G...
Shapefiles / dBase Files
About editing and workspaces
OK
Cancel
Catalog
Location:
Home - ARC MAP - ARC GIS\DEM
New folder
ASTGTMV003_N02E022_dem.tif
ASTGTMV003_N20E086_dem.tif
fill.tif
Outlet.shp
Sub_Catchments.shp
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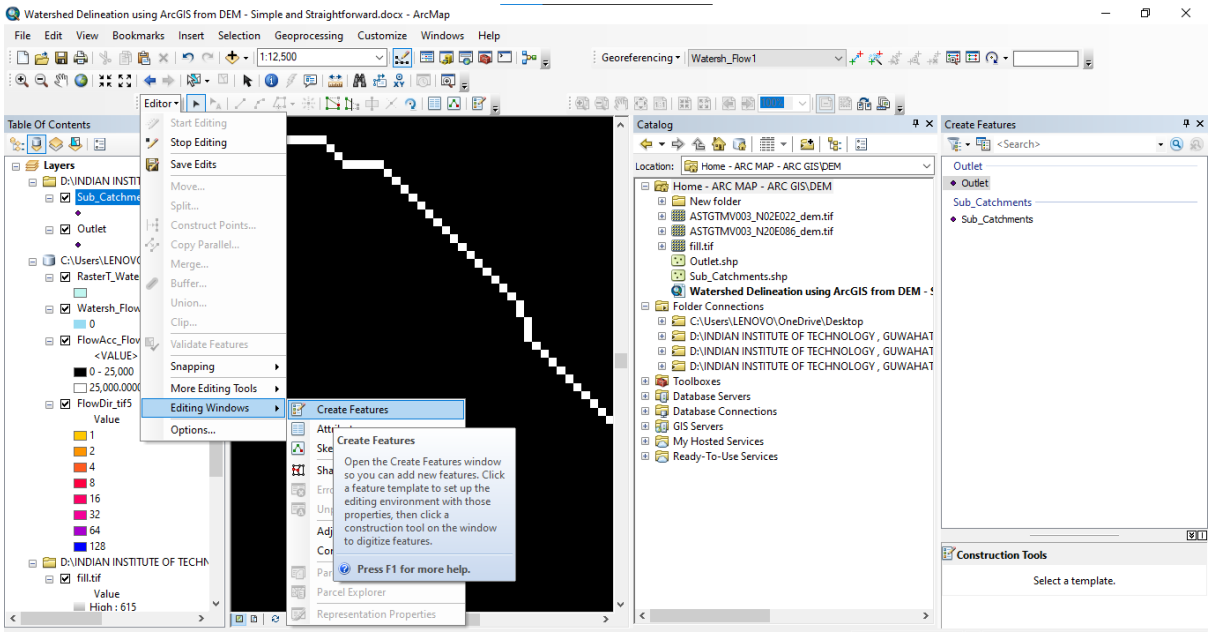
Database Servers
Database Connections
GIS Servers
My Hosted Services
Ready-To-Use Services


Watershed Delineation using ArcGIS from DEM - Simple and Straightforward.docx - ArcMap
File Edit View Bookmarks Insert Selection Geoprocessing Customize Windows Help
Editor
Start Editing
Stop Editing
Save Edits
Move...
Split...
Construct Points...
Copy Parallel...
Merge...
Buffer...
Union...
Clip...
Validate Features
Snapping
More Editing Tools
Editing Windows
Options...
Create Features
Parcel Explorer
Representation Properties
Create Features
Open the Create Features window so you can add new features. Click a feature template to set up the editing environment with those properties, then click a construction tool on the window to digitize features.
Press F1 for more help.
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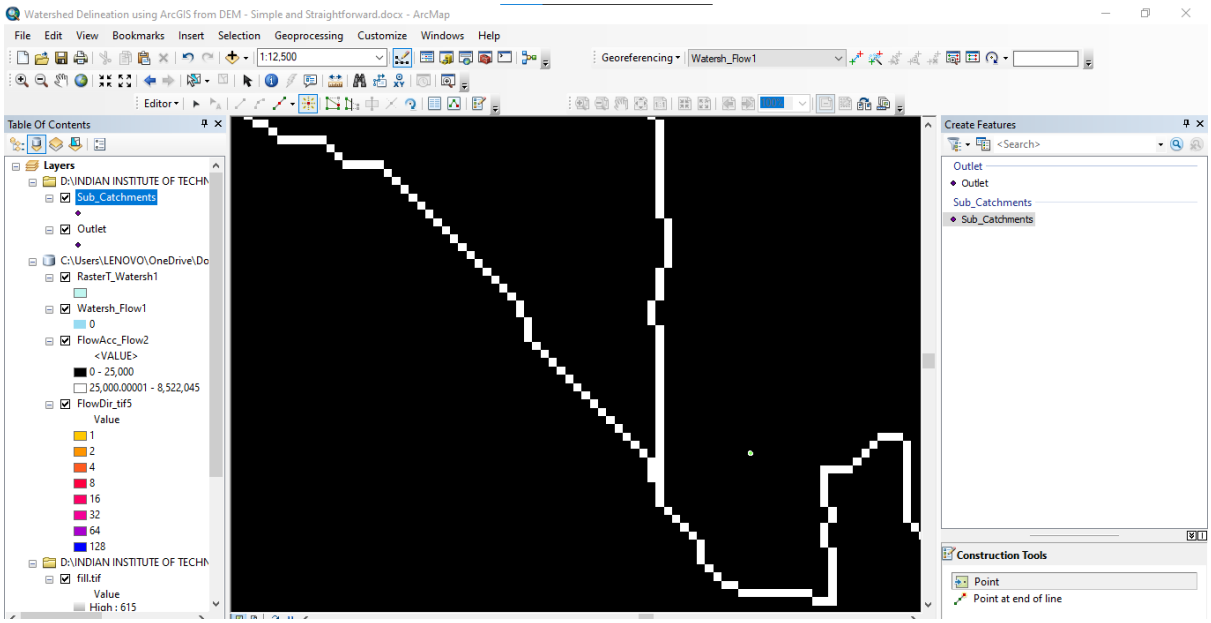
Catalog
Location: Home - ARC MAP - ARC GIS\DEM
Home - ARC MAP - ARC GIS\DEM
New folder
ASTGTMV003_N02E022_dem.tif
ASTGTMV003_N20E086_dem.tif
fill.tif
Outlet.shp
Sub_Catchments.shp
Folder Connections
Toolboxes
Database Servers
Database Connections
GIS Servers
My Hosted Services
Ready-To-Use Services
Create Features
Construction Tools
Select a template.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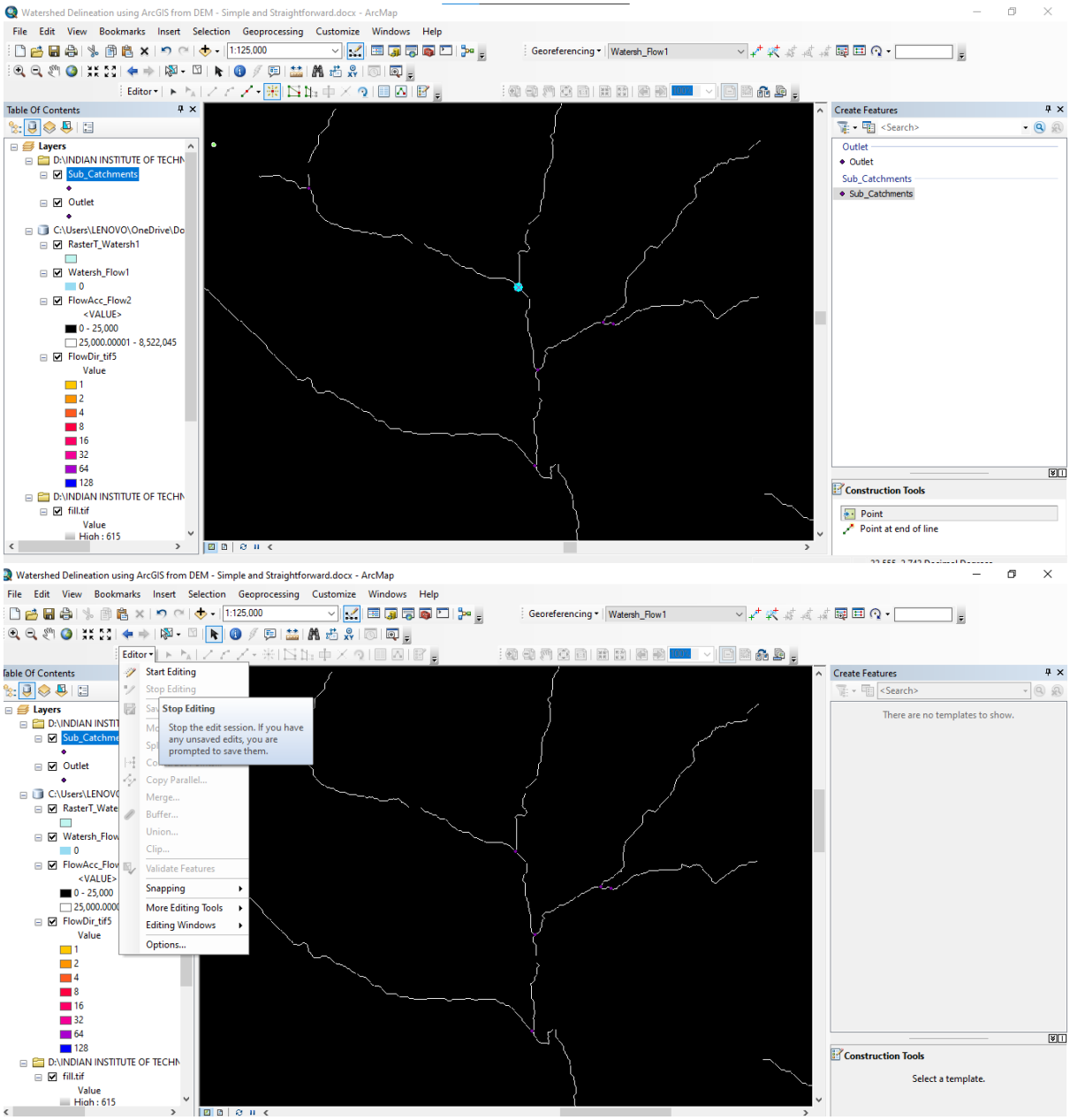
Watersh_Flow1
FlowAcc_Flow2
FlowDir_tif5
fill.tif
Create Features
Construction Tools
Point
Point at end of line


Watershed Delineation using ArcGIS from DEM - Simple and Straightforward.docx - ArcMap
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1:125,000
Georeferencing
Watersh_Flow1
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Watersh_Flow1
FlowAcc_Flow2
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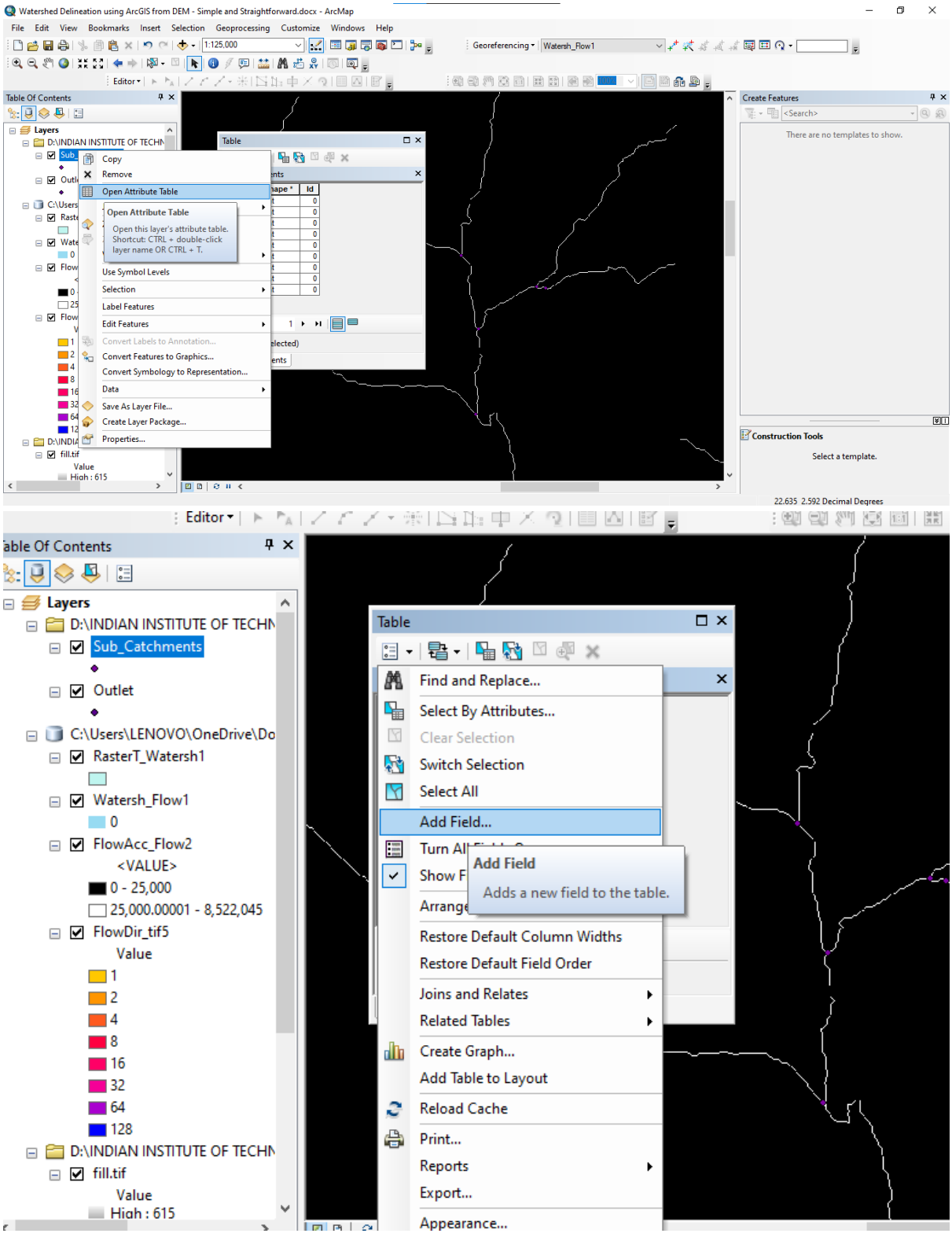
25,000.00001 - 8,522,045
FlowDir_tif5
Value
1
2
4
8
16
32
64
128
fill.tif
High : 615
Create Features
<Search>
Outlet
Sub_Catchments
Construction Tools
Point
Point at end of line
Start Editing
Stop Editing
Stop Editing
Stop the edit session. If you have any unsaved edits, you are prompted to save them.
Copy Parallel...
Merge...
Buffer...
Union...
Clip...
Validate Features
Snapping
More Editing Tools
Editing Windows
Options...
There are no templates to show.
Select a template.


Watershed Delineation using ArcGIS from DEM - Simple and Straightforward.docx - ArcMap
File Edit View Bookmarks Insert Selection Geoprocessing Customize Windows Help
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Layers
Copy
Remove
Open Attribute Table
Open Attribute Table
Open this layer's attribute table.
Shortcut: CTRL + double-click layer name OR CTRL + T.
Use Symbol Levels
Selection
Label Features
Edit Features
Convert Labels to Annotation...
Convert Features to Graphics...
Convert Symbology to Representation...
Data
Save As Layer File...
Create Layer Package...
Properties...
Table
Create Features
There are no templates to show.
Construction Tools
Select a template.
Editor
Layers
D:\INDIAN INSTITUTE OF TECHN
Sub_Catchments
Outlet
C:\Users\LENOVO\OneDrive\Do
RasterT_Watersh1
Watersh_Flow1
0
FlowAcc_Flow2
<VALUE>
0 - 25,000
25,000.00001 - 8,522,045
FlowDir_tif5
Value
1
2
4
8
16
32
64
128
D:\INDIAN INSTITUTE OF TECHN
fill.tif
Value
High : 615
Find and Replace...
Select By Attributes...
Clear Selection
Switch Selection
Select All
Add Field...
Add Field
Adds a new field to the table.
Restore Default Column Widths
Restore Default Field Order
Joins and Relates
Related Tables
Create Graph...
Add Table to Layout
Reload Cache
Print...
Reports
Export...
Appearance...

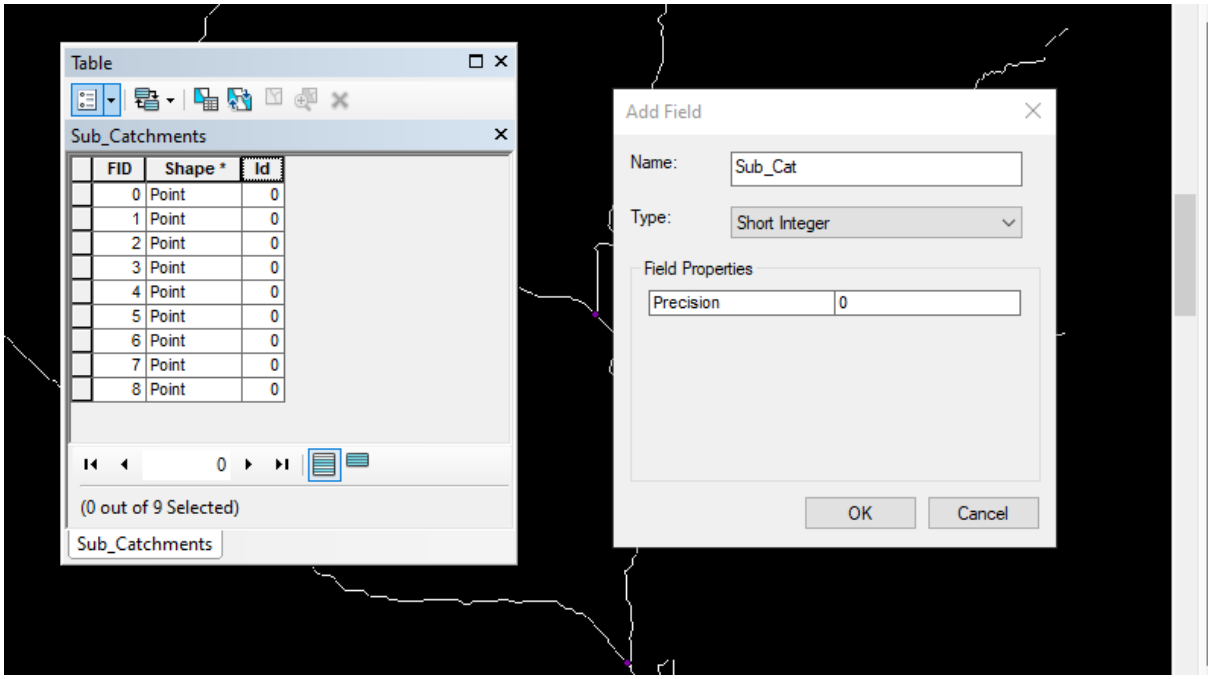
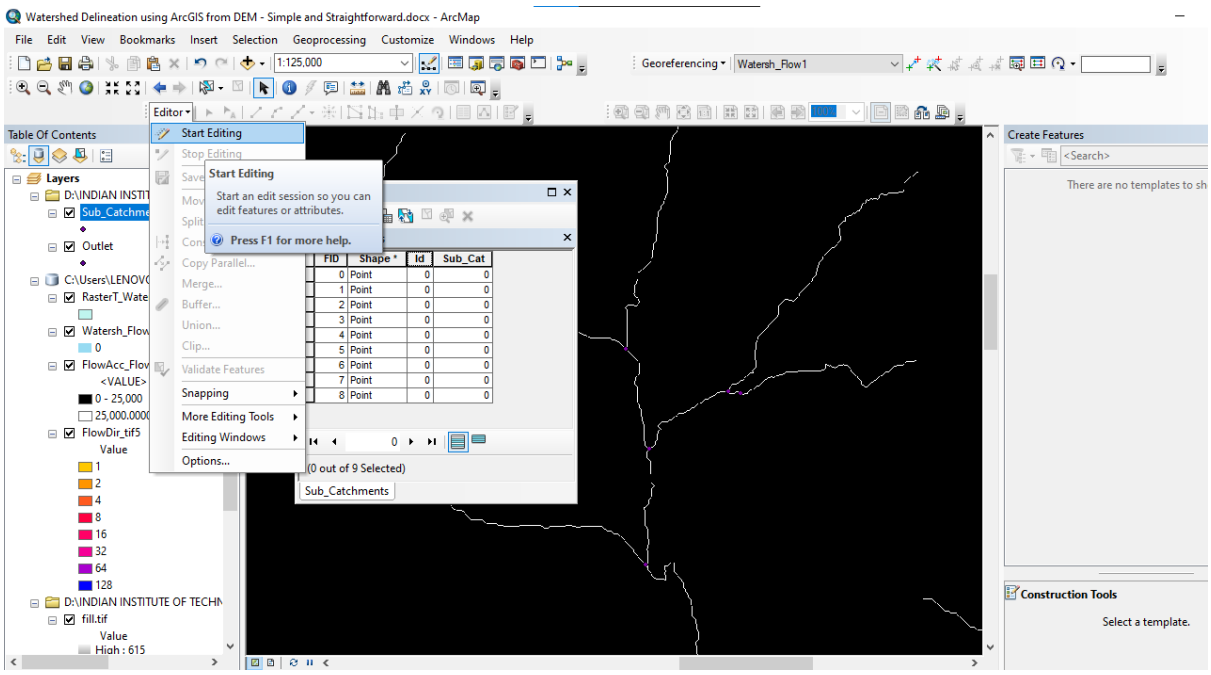


Table
Sub_Catchments
FID Shape * Id
0 Point 0
1 Point 0
2 Point 0
3 Point 0
4 Point 0
5 Point 0
6 Point 0
7 Point 0
8 Point 0
0
(0 out of 9 Selected)
Sub_Catchments
Add Field
Name:
Sub_Cat
Type:
Short Integer
Field Properties
Precision
0
OK
Cancel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File Edit View Bookmarks Insert Selection Geoprocessing Customize Windows Help
1:125,000
Georeferencing
Watersh_Flow1
Editor
Start Editing
Stop Editing
Start Editing
Start an edit session so you can edit features or attributes.
Press F1 for more help.
Copy Parallel...
Merge...
Buffer...
Union...
Clip...
Validate Features
Snapping
More Editing Tools
Editing Windows
Options...
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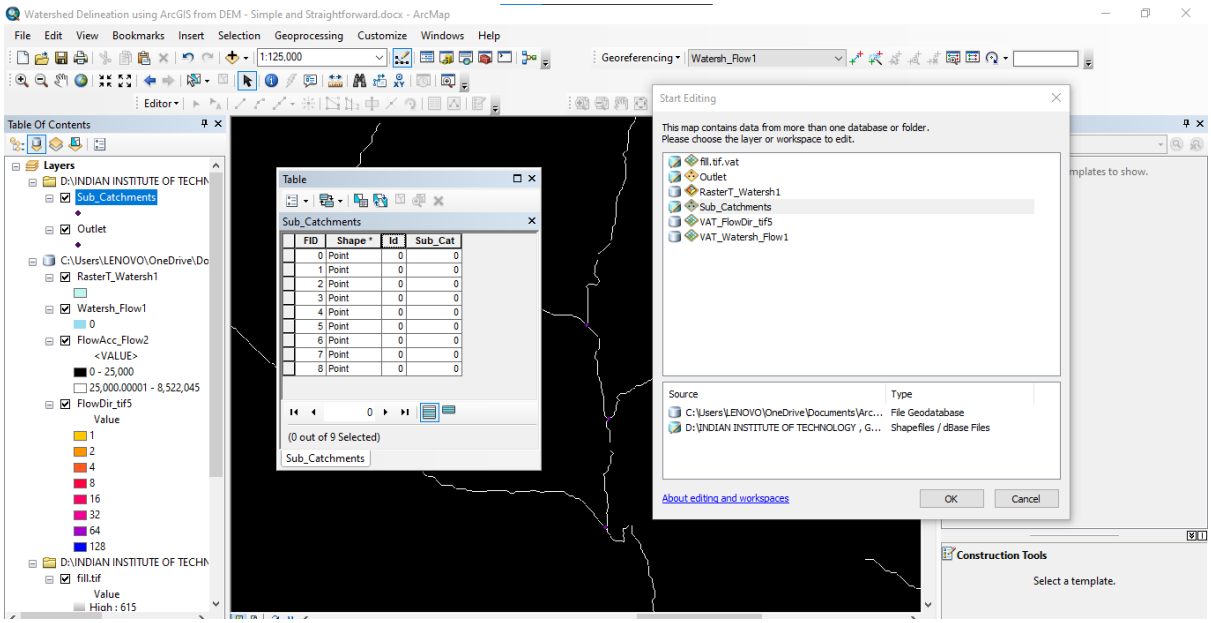
Watersh_Flow
FlowAcc_Flow
FlowDir_tif5
Value
1
2
4
8
16
32
64
128
fill.tif
Value
Create Features
There are no templates to sh
Construction Tools
Select a template.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FlowAcc_Flow2
FlowDir_tif5
fill.tif
Table
Sub_Catchments
FID Shape * Id Sub_Cat
(0 out of 9 Selected)
Start Editing
This map contains data from more than one database or folder.
Please choose the layer or workspace to edit.
fill.tif.vat
Outlet
RasterT_Watersh1
Sub_Catchments
VAT_FlowDir_tif5
VAT_Watersh_Flow1
Source
Type
File Geodatabase
Shapefiles / dBase Files
About editing and workspaces
OK
Cancel
Construction Tools
Select a template.

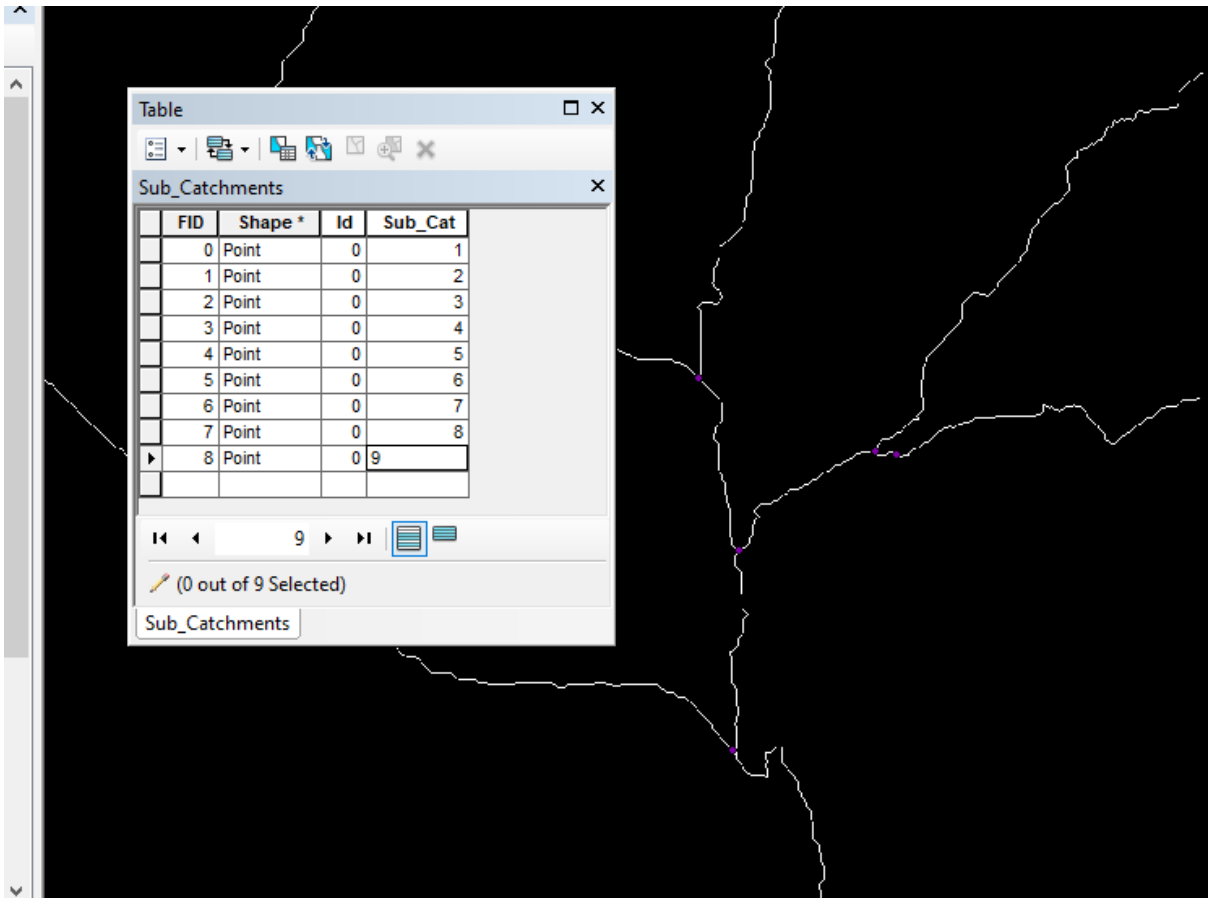
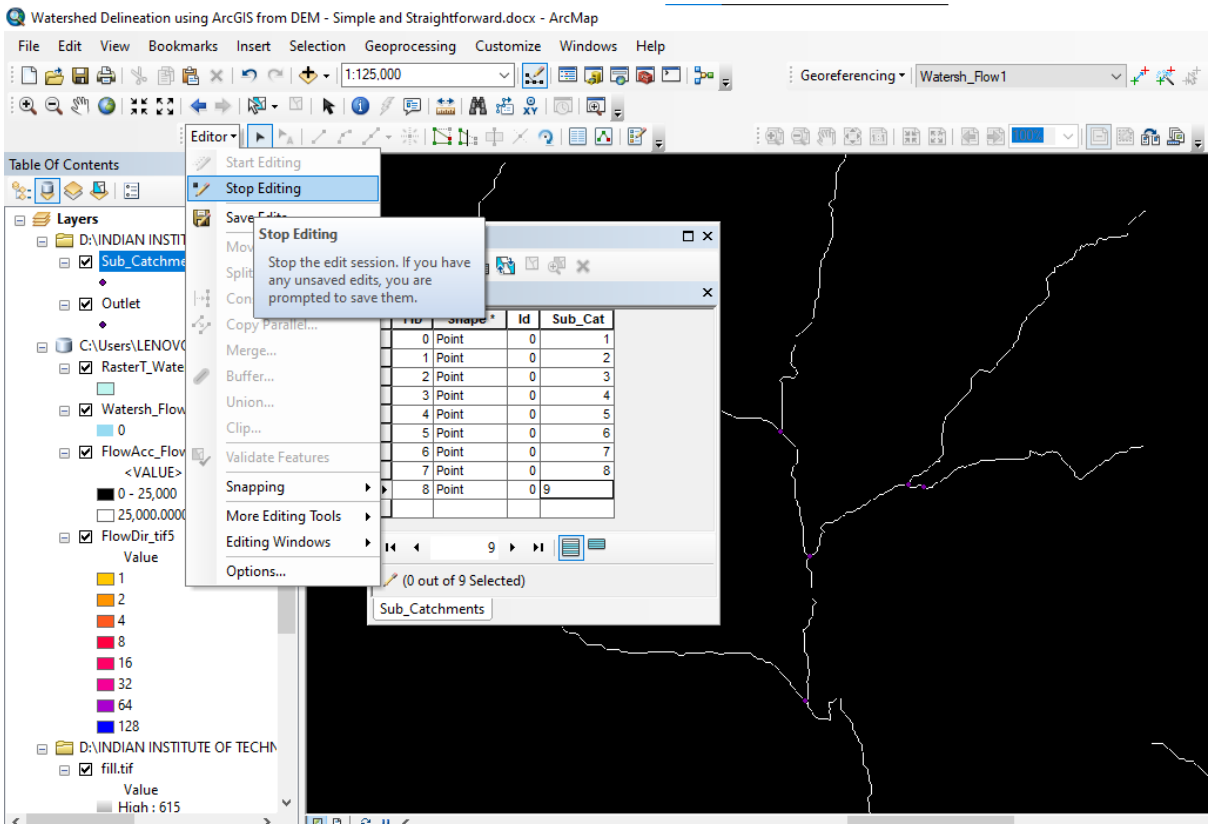


Table
Sub_Catchments
FID Shape * Id Sub_Cat
0 Point 0 1
1 Point 0 2
2 Point 0 3
3 Point 0 4
4 Point 0 5
5 Point 0 6
6 Point 0 7
7 Point 0 8
8 Point 0 9
9
(0 out of 9 Selected)
Sub_Catchments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File Edit View Bookmarks Insert Selection Geoprocessing Customize Windows Help
Editor
Start Editing
Stop Editing
Stop Editing
Stop the edit session. If you have any unsaved edits, you are prompted to save them.
Copy Parallel...
Merge...
Buffer...
Union...
Clip...
Validate Features
Snapping
More Editing Tools
Editing Windows
Options...
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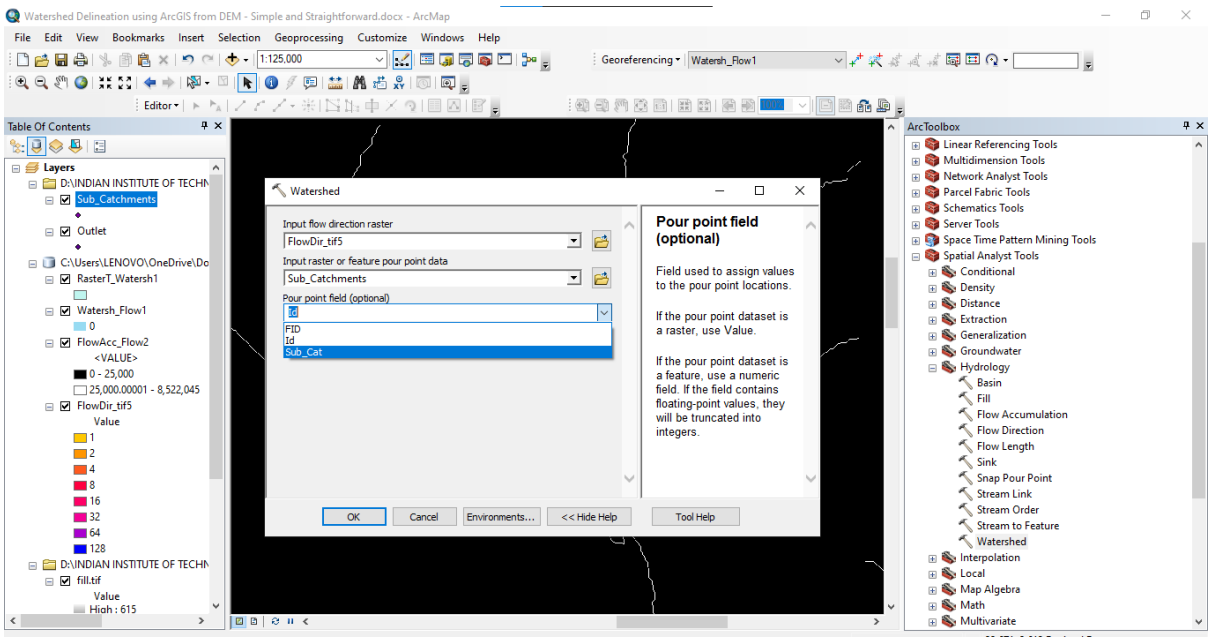
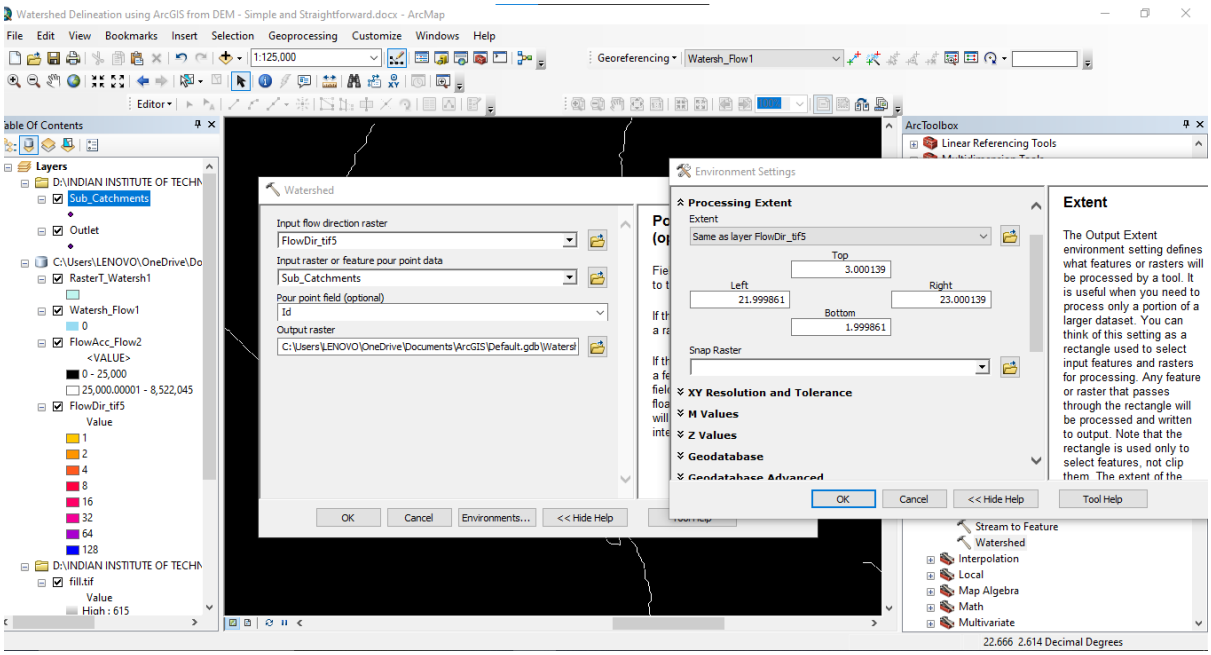
Outlet
RasterT_Watersh1
Watersh_Flow1
FlowAcc_Flow2
FlowDir_tif5
fill.tif
Sub_Catchments
(0 out of 9 Selected)


Watershed
Input flow direction raster
FlowDir_tif5
Input raster or feature pour point data
Sub_Catchments
Pour point field (optional)
FID
Id
Sub_Cat
Pour point field (optional)
Field used to assign values to the pour point locations.
If the pour point dataset is a raster, use Value.
If the pour point dataset is a feature, use a numeric field. If the field contains floating-point values, they will be truncated into integers.
OK
Cancel
Environments...
<< Hide Help
Tool Help
ArcToolbox
Linear Referencing Tools
Multidimension Tools
Network Analyst Tools
Parcel Fabric Tools
Schematics Tools
Server Tools
Space Time Pattern Mining Tools
Spatial Analyst Tools
Conditional
Density
Distance
Extraction
Generalization
Groundwater
Hydrology
Basin
Fill
Flow Accumulation
Flow Direction
Flow Length
Sink
Snap Pour Point
Stream Link
Stream Order
Stream to Feature
Watershed
Interpolation
Local
Map Algebra
Math
Multivariate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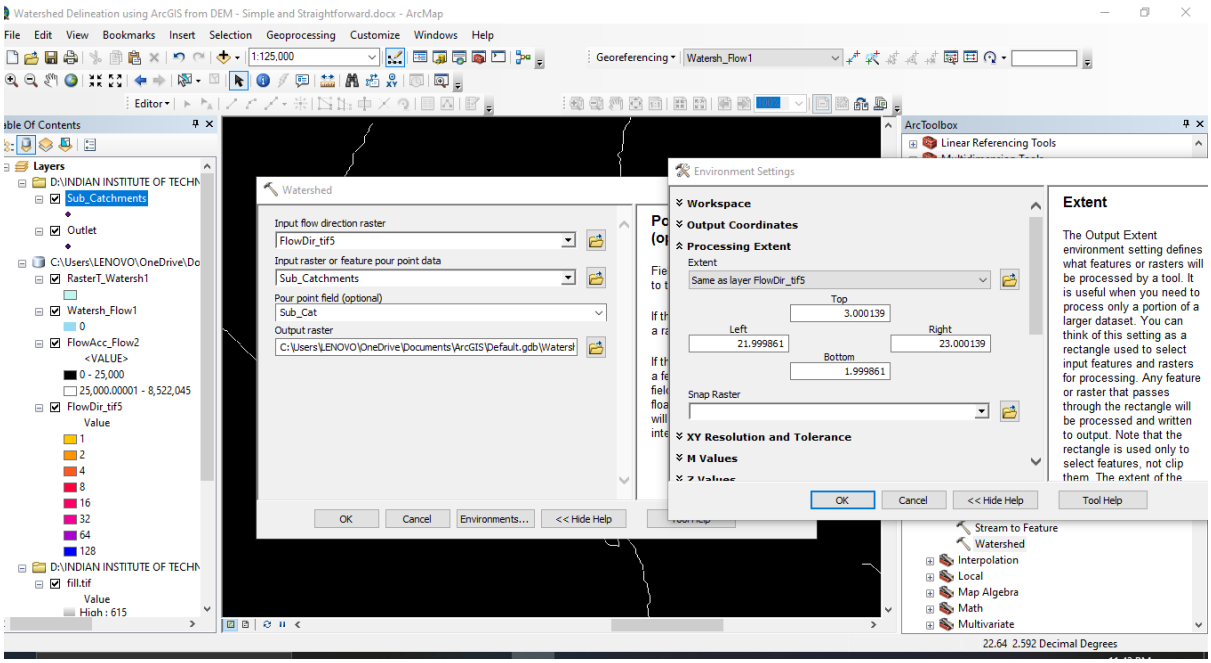
FlowDir_tif5
fill.tif
ArcToolbox
Linear Referencing Tools
Watershed
Input flow direction raster
FlowDir_tif5
Input raster or feature pour point data
Sub_Catchments
Pour point field (optional)
Id
Output raster
OK
Cancel
Environments...
<< Hide Help
Environment Settings
Processing Extent
Extent
Same as layer FlowDir_tif5
Top
3.000139
Left
21.999861
Right
23.000139
Bottom
1.999861
Snap Raster
XY Resolution and Tolerance
M Values
Z Values
Geodatabase
Geodatabase Advanced
Tool Help
Extent
The Output Extent environment setting defines what features or rasters will be processed by a tool. It is useful when you need to process only a portion of a larger dataset. You can think of this setting as a rectangle used to select input features and rasters for processing. Any feature or raster that passes through the rectangle will be processed and written to output. Note that the rectangle is used only to select features, not clip
Stream to Feature
Watershed
Interpolation
Local
Map Algebra
Math
Multivariate
22.666 2.614 Decimal Degrees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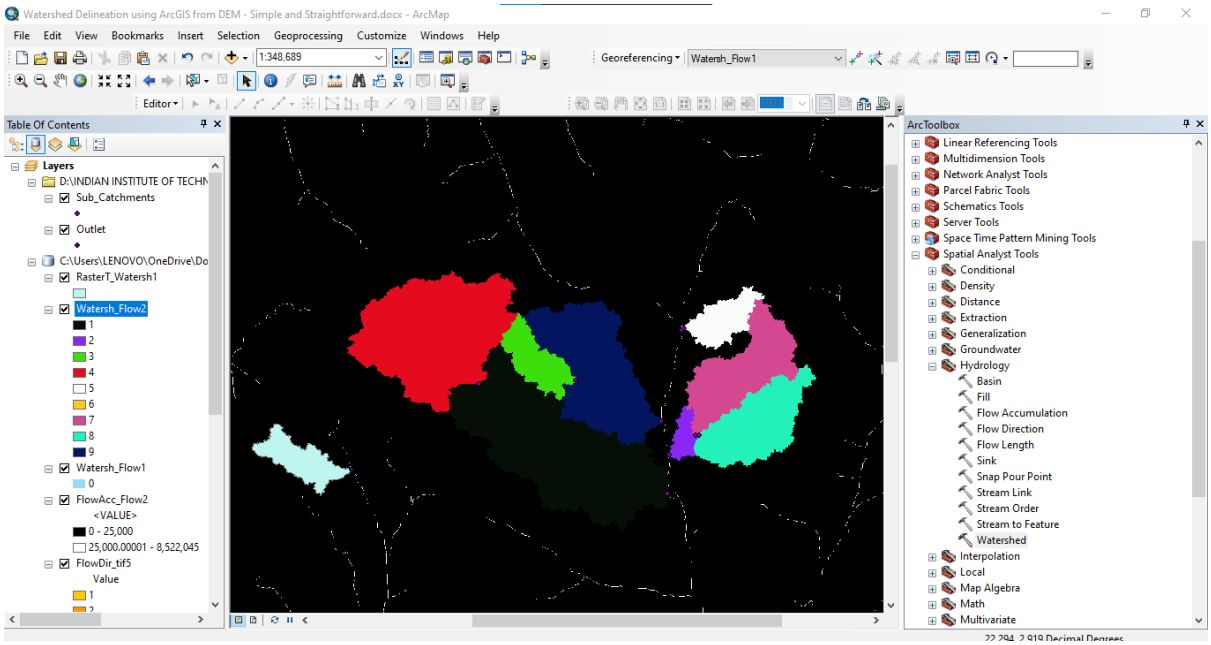
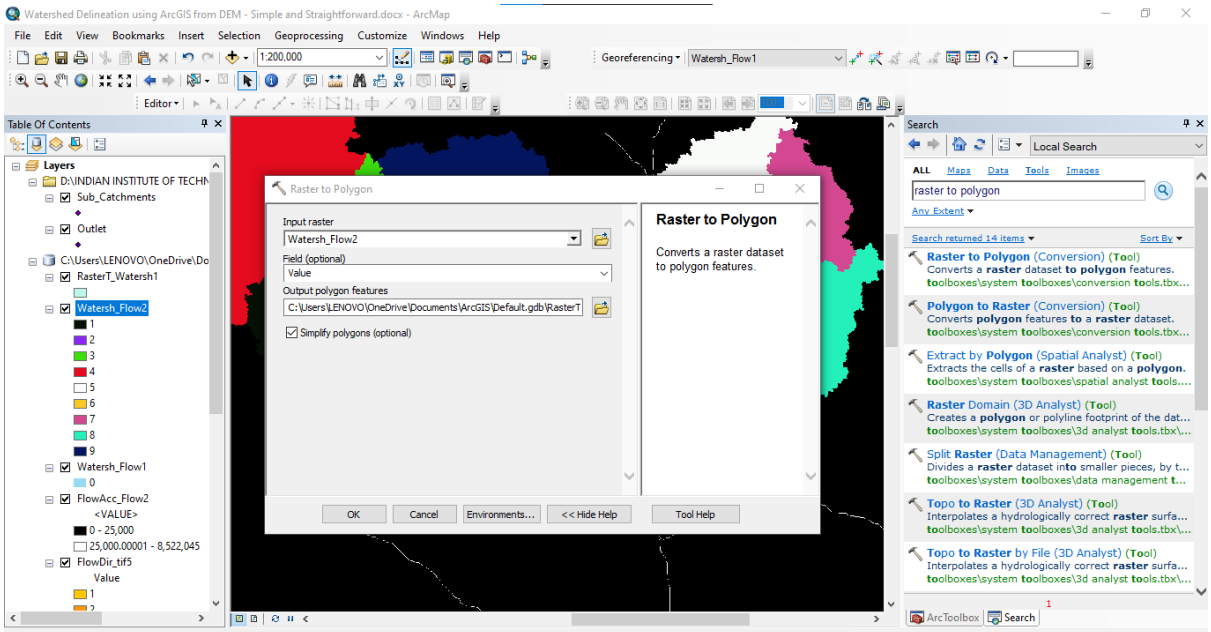
FlowDir_tif5
fill.tif
ArcToolbox
Linear Referencing Tools
Watershed
Input flow direction raster
FlowDir_tif5
Input raster or feature pour point data
Sub_Catchments
Pour point field (optional)
Sub_Cat
Output raster
OK
Cancel
Environments...
<< Hide Help
Environment Settings
Workspace
Output Coordinates
Processing Extent
Extent
Same as layer FlowDir_tif5
Top
3.000139
Left
21.999861
Right
23.000139
Bottom
1.999861
Snap Raster
XY Resolution and Tolerance
M Values
Tool Help
Extent
The Output Extent environment setting defines what features or rasters will be processed by a tool. It is useful when you need to process only a portion of a larger dataset. You can think of this setting as a rectangle used to select input features and rasters for processing. Any feature or raster that passes through the rectangle will be processed and written to output. Note that the rectangle is used only to select features, not clip
Stream to Feature
Watershed
Interpolation
Local
Map Algebra
Math
Multivariate
22.64 2.592 Decimal Degrees



Successfully generated four sub catchments which corresponds to those four four river branches the sub branches and normally what we do not know is in case if you need to do any further analysis on these on these sub catchments you need to export these sub catchments into a polygon because right now it's in a raster format so we just go ahead over here and search raster to polygon and you can see the first option is actually to create to convert the raster into a polygon so I'm going to drag this watershed flow raster and simplify the polygons as well check this box and click OK all right now you can see that we successfully created four different polygons now if you want to do any further analysis you can actually proceed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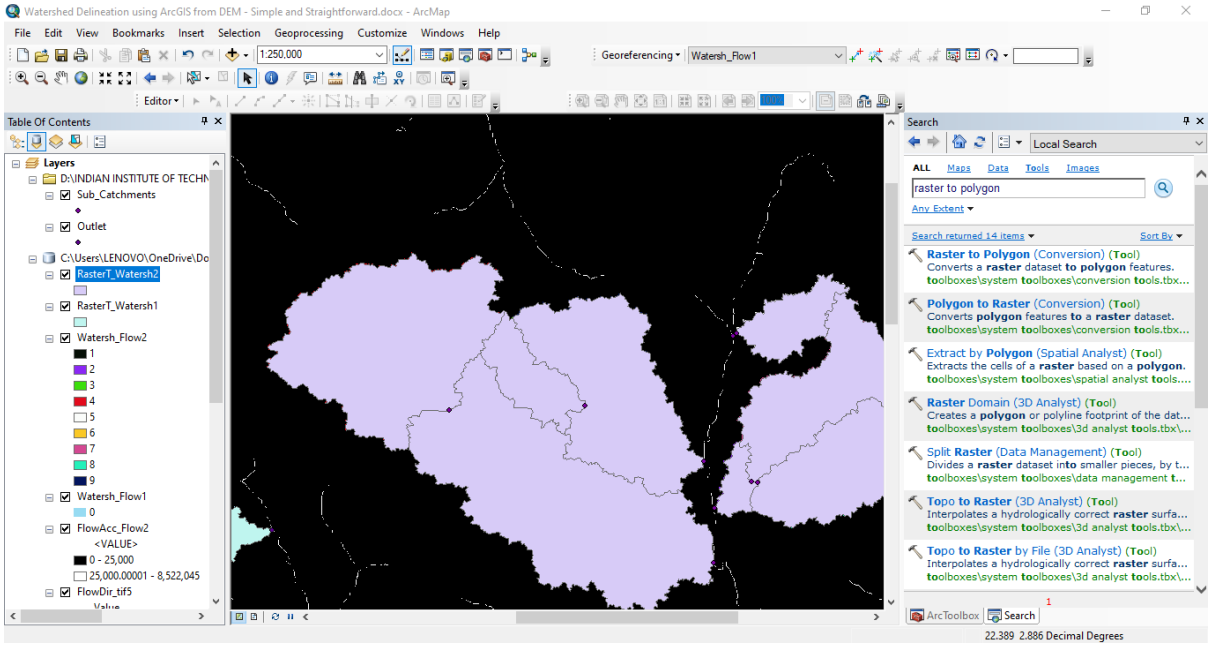
RasterT_Watersh1
Watersh_Flow2
Watersh_Flow1
FlowAcc_Flow2
FlowDir_tif5
Raster to Polygon
Input raster
Watersh_Flow2
Field (optional)
Value
Output polygon features
C:\Users\LENOVO\Documents\ArcGIS\Default.gdb\RasterT
Simplify polygons (optional)
OK
Cancel
Environments...
<< Hide Help
Tool Help
Raster to Polygon
Converts a raster dataset to polygon features.
Search
Local Search
raster to polygon
Any Extent
Raster to Polygon (Conversion) (Tool)
Converts a raster dataset to polygon features.
Polygon to Raster (Conversion) (Tool)
Converts polygon features to a raster dataset.
Extract by Polygon (Spatial Analyst) (Tool)
Raster Domain (3D Analyst) (Tool)
Split Raster (Data Management) (Tool)
Topo to Raster (3D Analyst) (Tool)
Topo to Raster by File (3D Analyst) (Tool)
ArcToolbox
Search
22.493 2.782 Decimal Degrees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RasterT_Watersh1
Watersh_Flow2
Watersh_Flow1
FlowAcc_Flow2
FlowDir_tif5
Search
Local Search
raster to polygon
Any Extent
Raster to Polygon (Conversion) (Tool)
Converts a raster dataset to polygon features.
Polygon to Raster (Conversion) (Tool)
Converts polygon features to a raster dataset.
Extract by Polygon (Spatial Analyst) (Tool)
Raster Domain (3D Analyst) (Tool)
Split Raster (Data Management) (Tool)
Topo to Raster (3D Analyst) (Tool)
Topo to Raster by File (3D Analyst) (Tool)
ArcToolbox
Search
22.389 2.886 Decimal Degrees