Appendix 5

GIS operation guide （Hue）

GIS Operation Guide

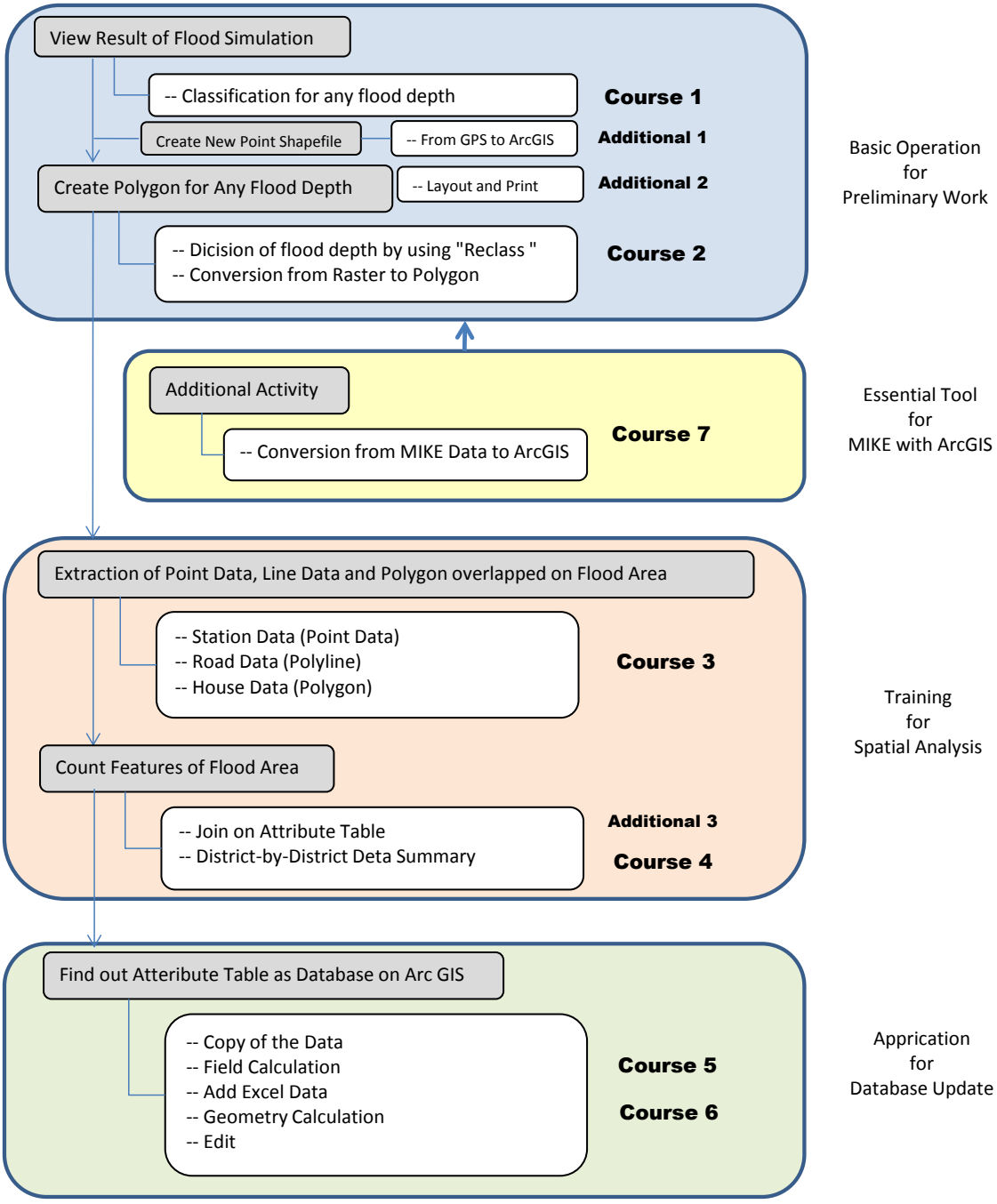
T.T. Hue Province

Contents

January 2012

JICA
Project Expert Team

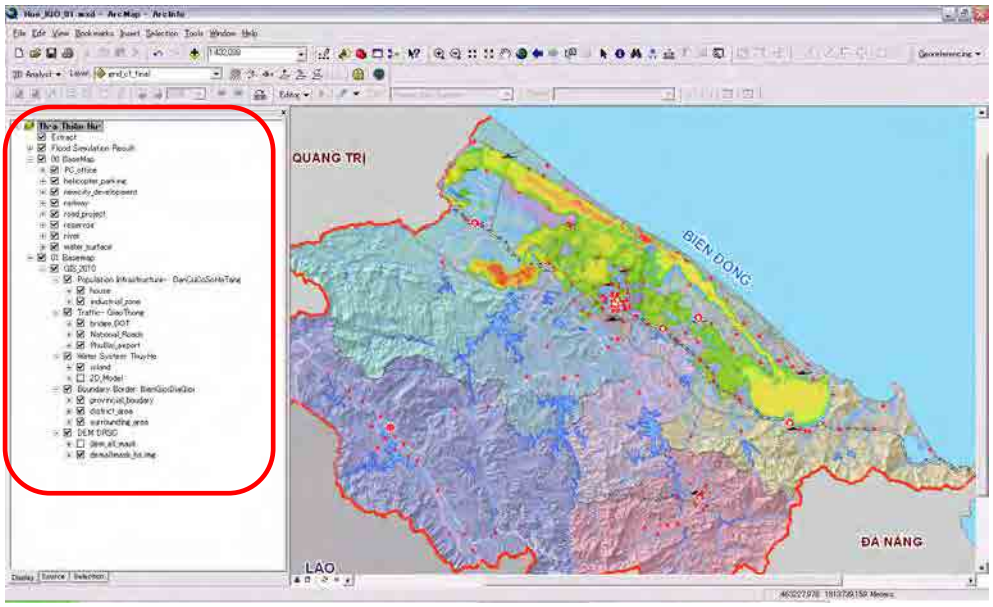
Object of Training Course



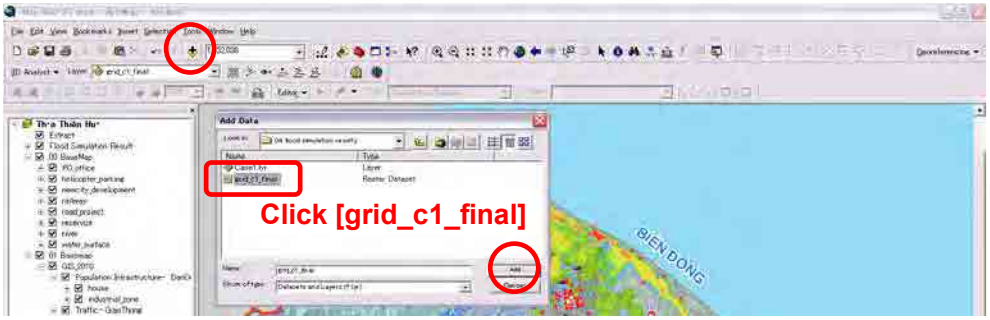
Course 1 View

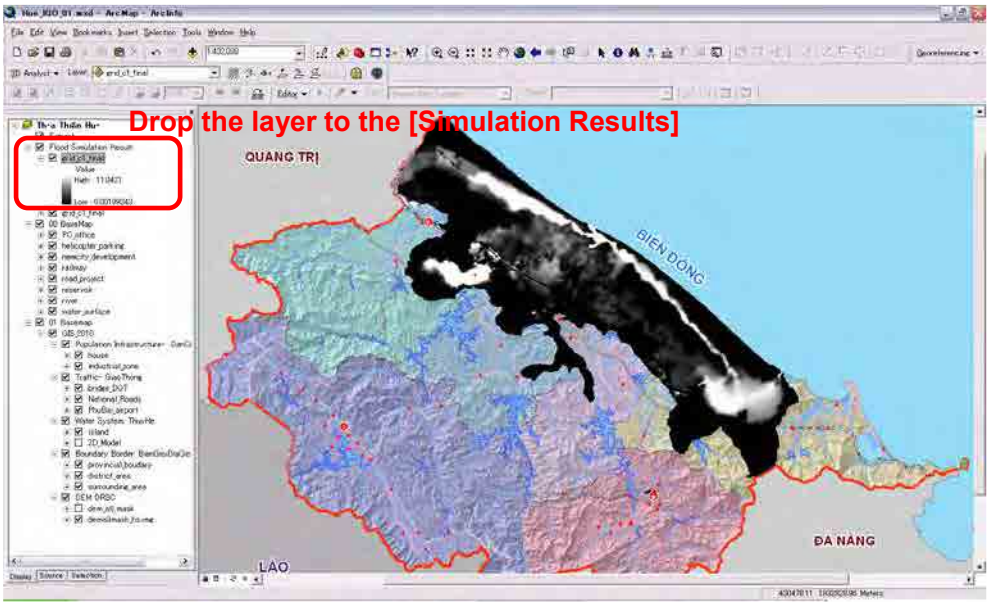
【1-1】　Base map

Confirm layers of T.T.Hue on the window.

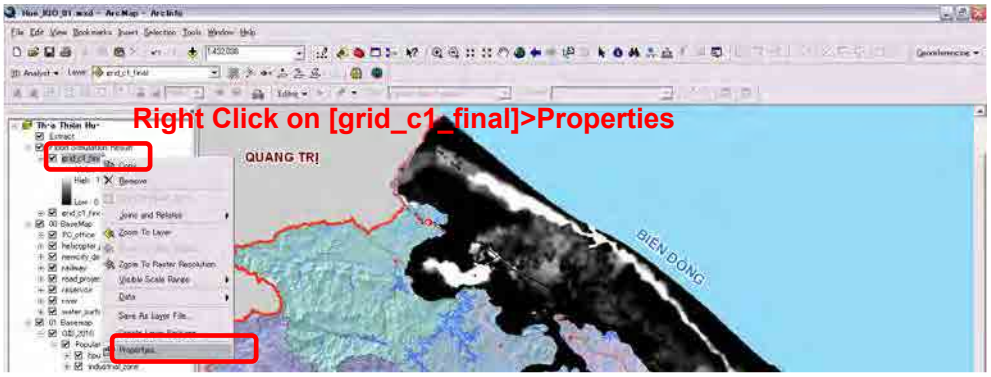


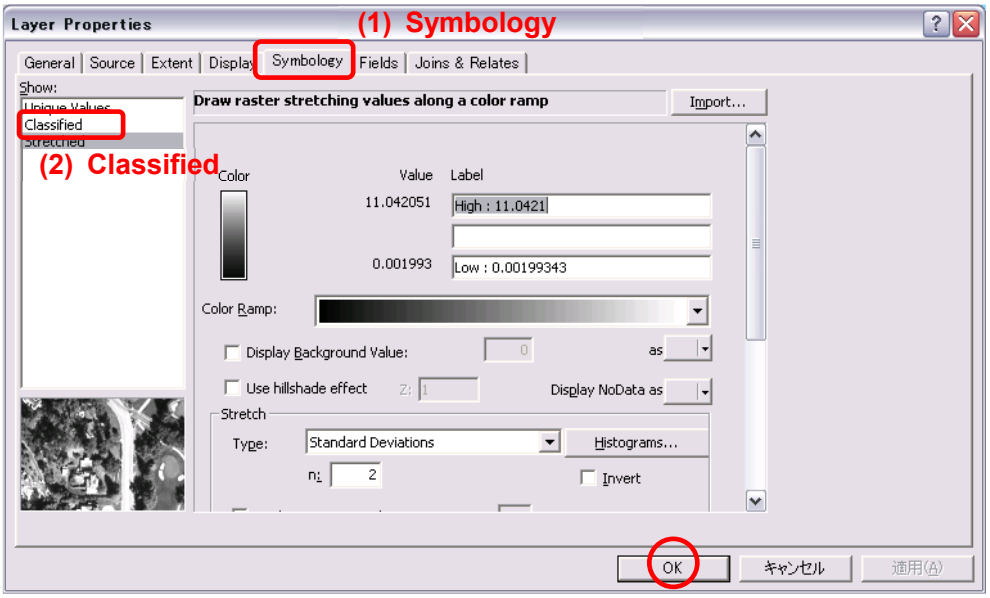
【1-2】　Add raster

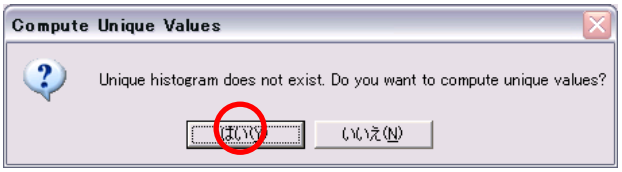


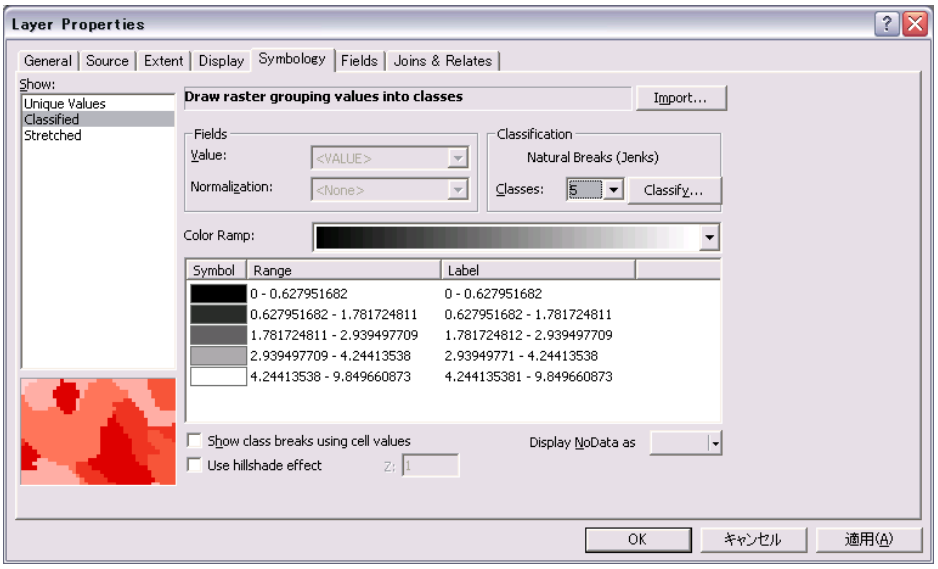


【1-3】　Setting up raster property

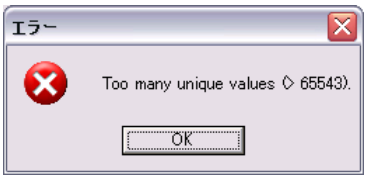




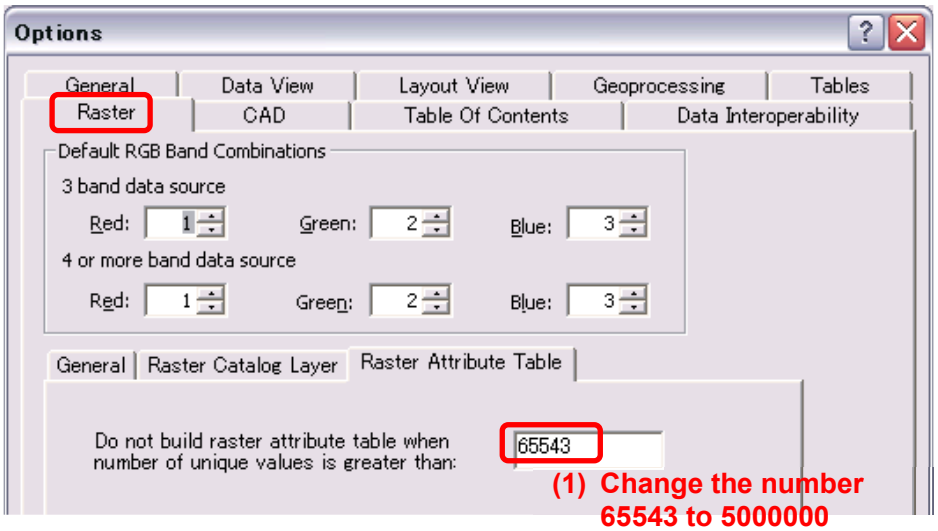


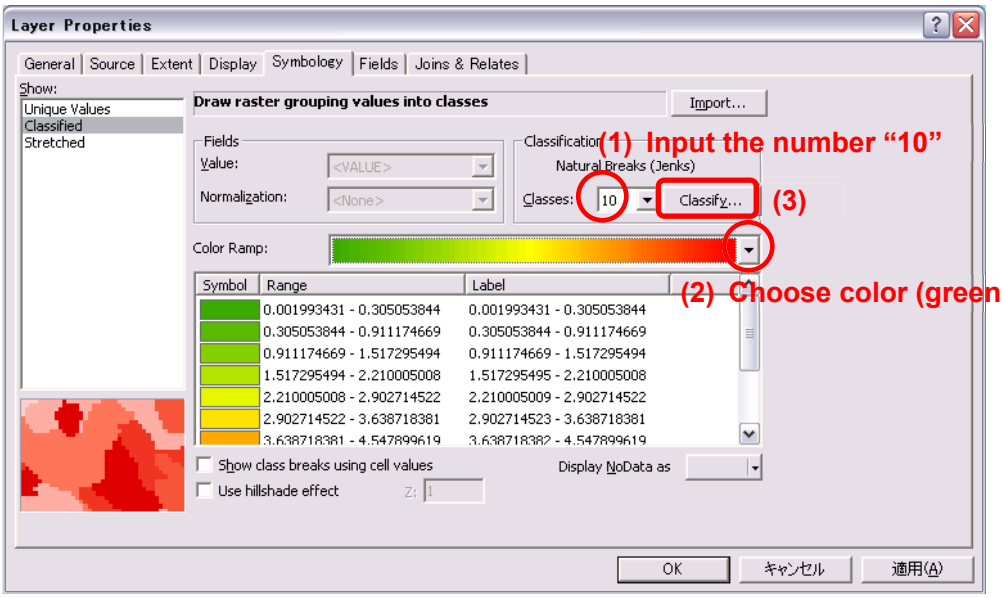


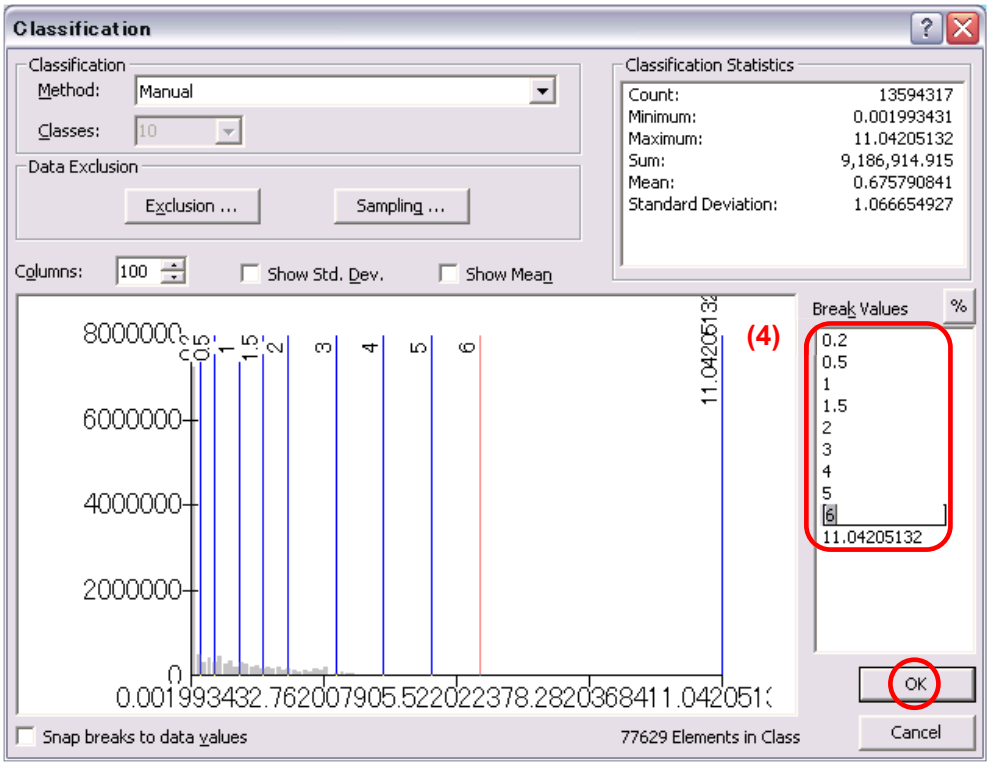
If this type of error is shown, you can change configuration.

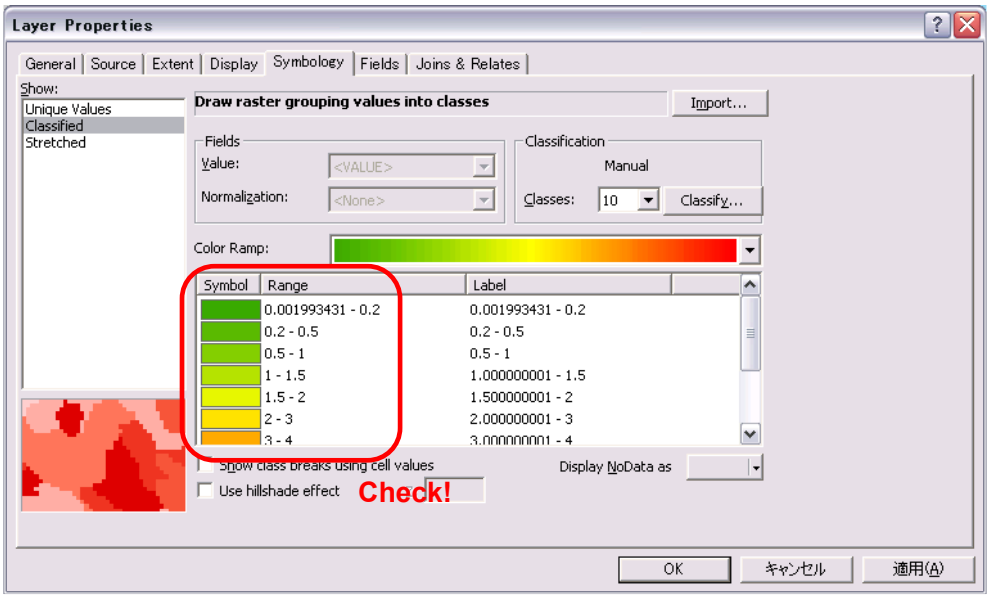


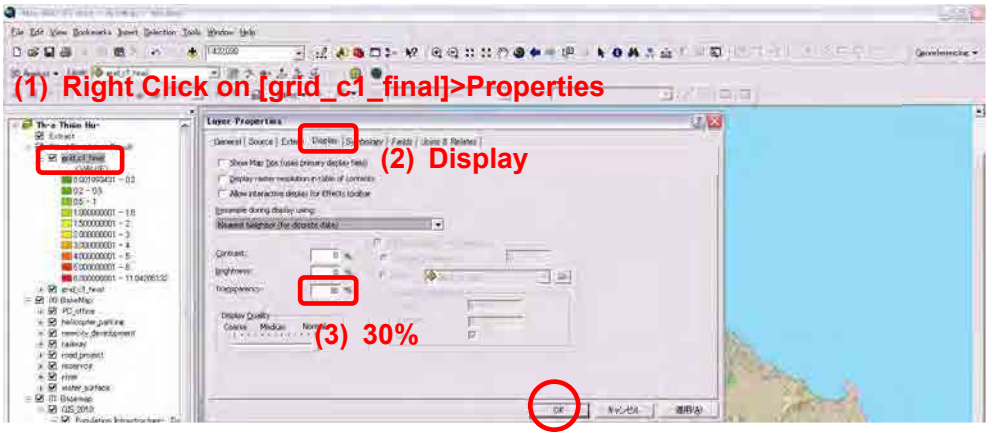
Tools>Options>Raster

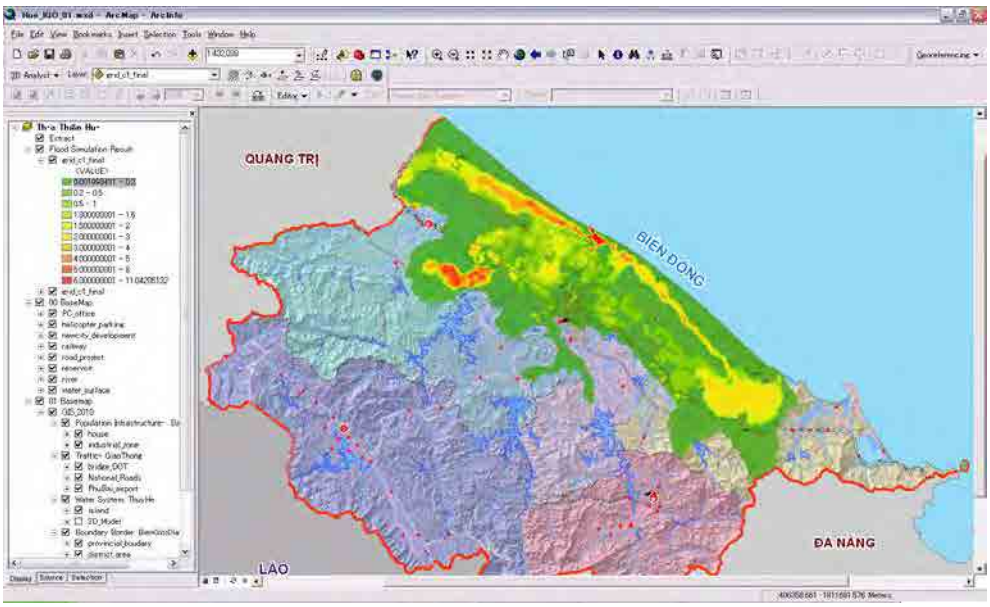



Layer Properties
General
Source
Extent
Display
Symbology
Fields
Joins & Relates
Show:
Unique Values
Classified
Stretched
Draw raster grouping values into classes
Import...
Fields
Value:
<VALUE>
Normalization:
<None>
Classification
Natural Breaks (Jenks)
Classes:
10
Classify...
(1) Input the number "10"
(3)
Color Ramp:
(2) Choose color (green to red)
Symbol
Range
Label
0.001993431 - 0.305053844
0.305053844 - 0.911174669
0.911174669 - 1.517295494
1.517295494 - 2.210005008
2.210005008 - 2.902714522
2.902714522 - 3.638718381
0.001993431 - 0.305053844
0.305053844 - 0.911174669
0.911174669 - 1.517295494
1.517295495 - 2.210005008
2.210005009 - 2.902714522
2.902714523 - 3.638718381
Show class breaks using cell values
Use hillshade effect
Z:
Display NoData as
OK
キャンセル
適用(A)

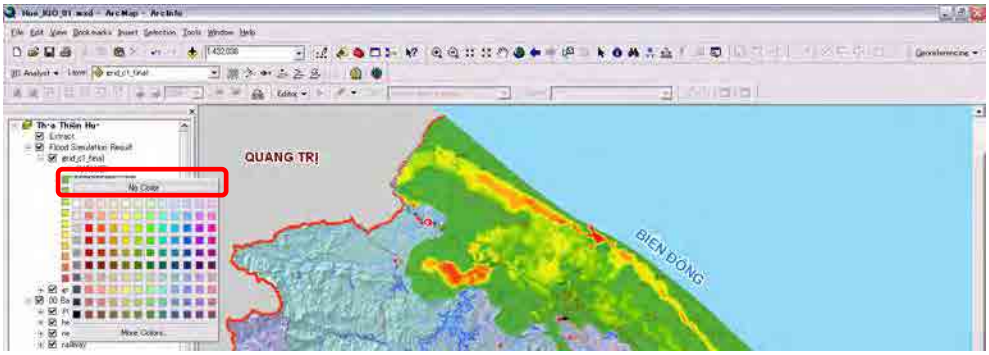

Classification
Classification
Method:
Manual
Classes:
10
Data Exclusion
Exclusion ...
Sampling ...
Classification Statistics
Count: 13594317
Minimum: 0.001993431
Maximum: 11.04205132
Sum: 9,186,914.915
Mean: 0.675790841
Standard Deviation: 1.066654927
Columns:
100
Show Std. Dev.
Show Mean
8000000
6000000
4000000
2000000
0
0.2
0.5
1
1.5
2
3
4
5
6
11.04205132
0.001993432.762007905.522022378.2820368411.042051
(4)
Break Values
%
0.2
0.5
1
1.5
2
3
4
5
6
11.04205132
OK
Cancel
Snap breaks to data values
77629 Elements in Class

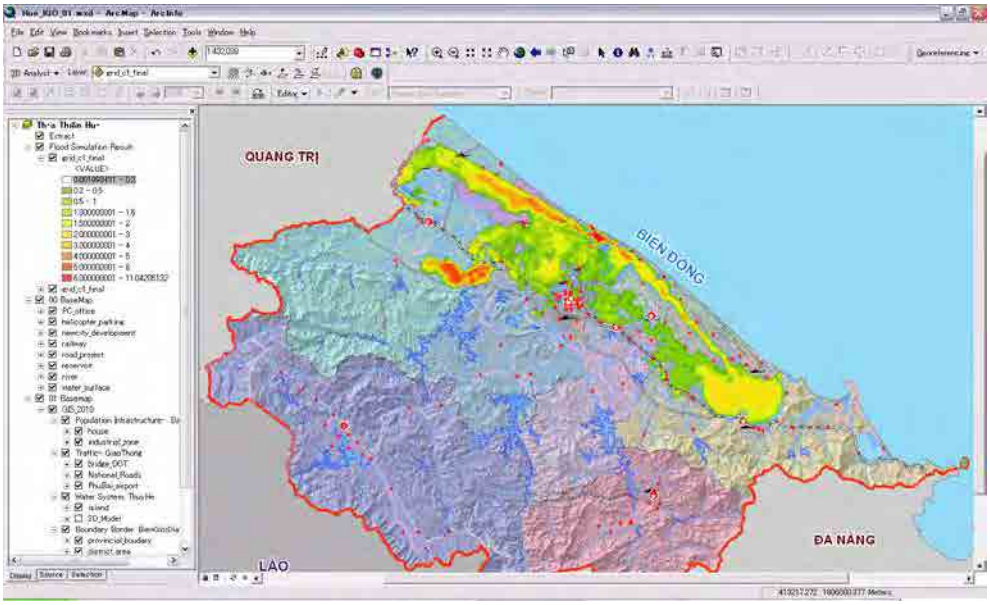

Layer Properties
General
Source
Extent
Display
Symbology
Fields
Joins & Relates
Show:
Unique Values
Classified
Stretched
Draw raster grouping values into classes
Import...
Fields
Value:
<VALUE>
Normalization:
<None>
Classification
Manual
Classes:
10
Classify...
Color Ramp:
Symbol
Range
Label
0.001993431 - 0.2
0.2 - 0.5
0.5 - 1
1 - 1.5
1.5 - 2
2 - 3
3 - 4
0.001993431 - 0.2
0.2 - 0.5
0.5 - 1
1.000000001 - 1.5
1.500000001 - 2
2.000000001 - 3
3.000000001 - 4
Show class breaks using cell values
Display NoData as
Use hillshade effect
Check!
OK
キャンセル
適用(A)


(1) Right Click on [grid_c1_final]>Properties
(2) Display
(3) 30%

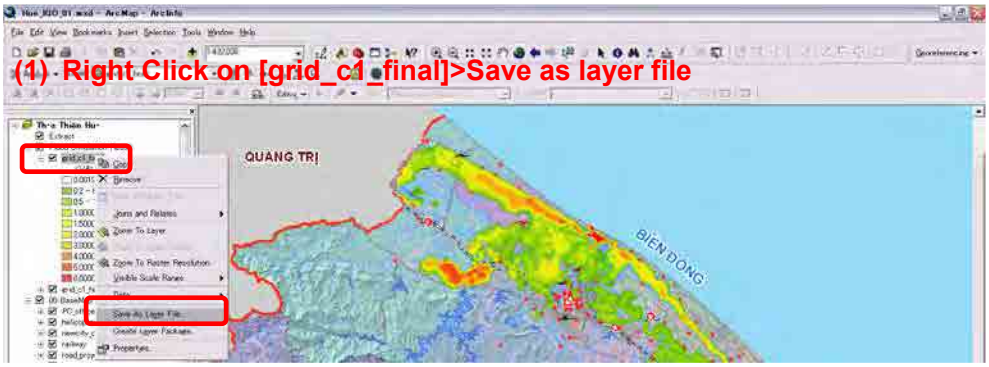

QUANG TRI
BIEN DONG
DA NANG
LAO

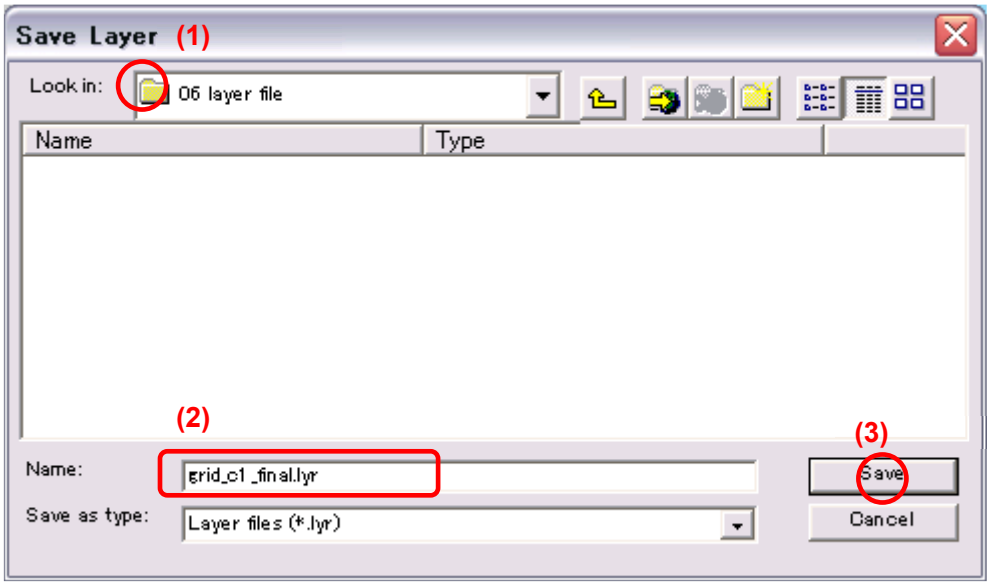
Remove “green” color on “0.001993431-0.2”





【1-4】 Save layer status

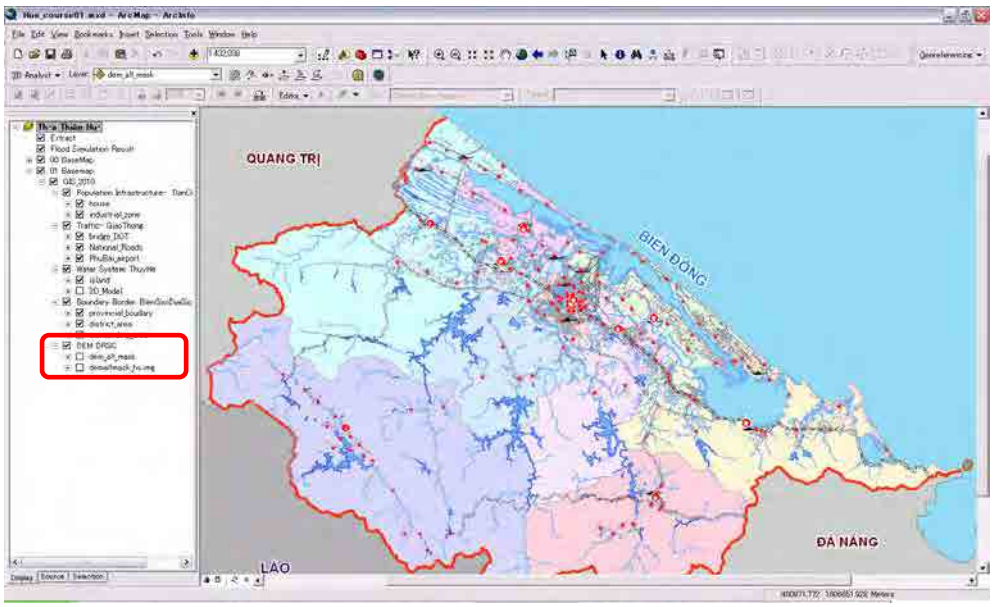



Save Layer (1)
Look in:
06 layer file
Name
Type
(2)
(3)
Name:
grid_c1 _final.lyr
Save as type:
Layer files (*.lyr)
Save
Cancel

Course 2 Reclass

【2-1】 Preparation

[Hide DEM Hill shade]

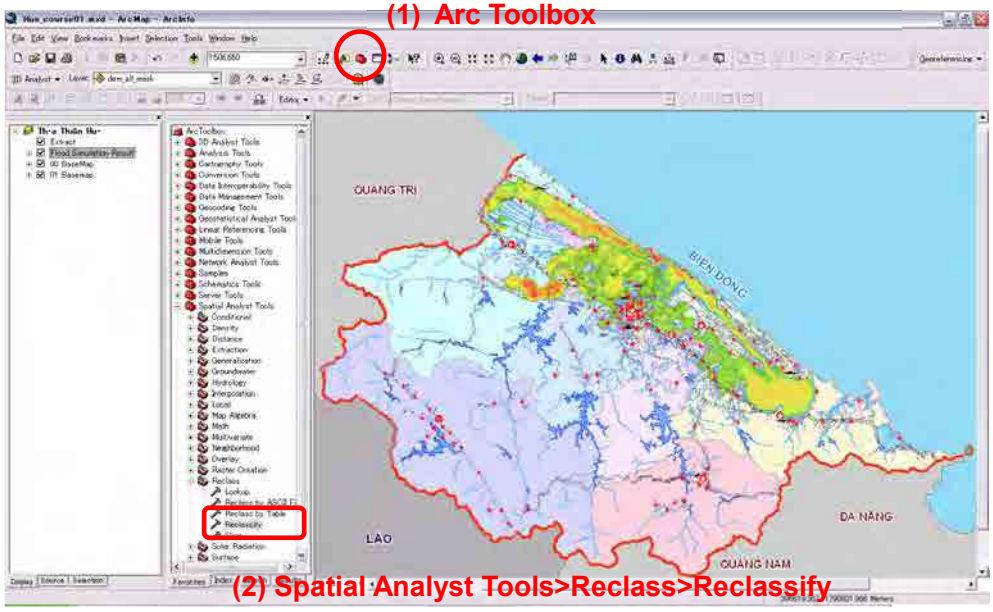


【2-2】 Reclass (2m)

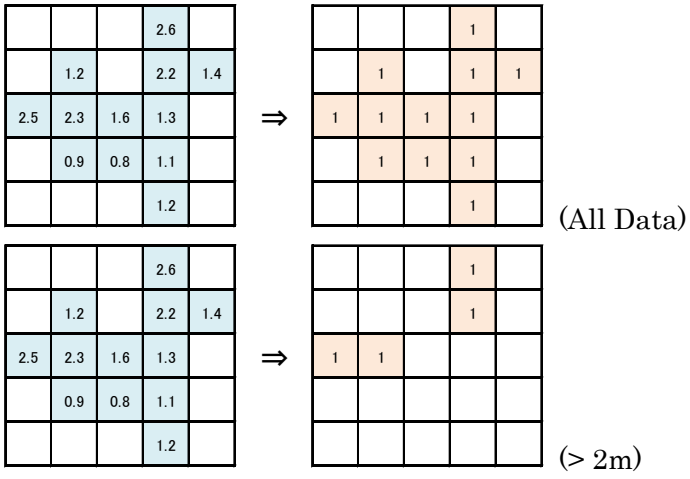
Let us extract **2m flooded area**.

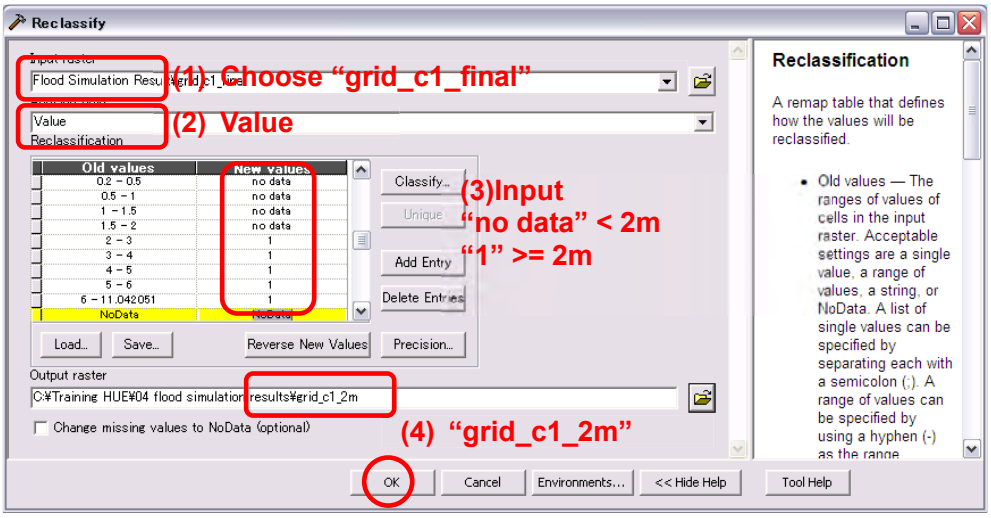
[Open the Arc Toolbox]

Spatial Analyst Tools>Reclass>Reclassify



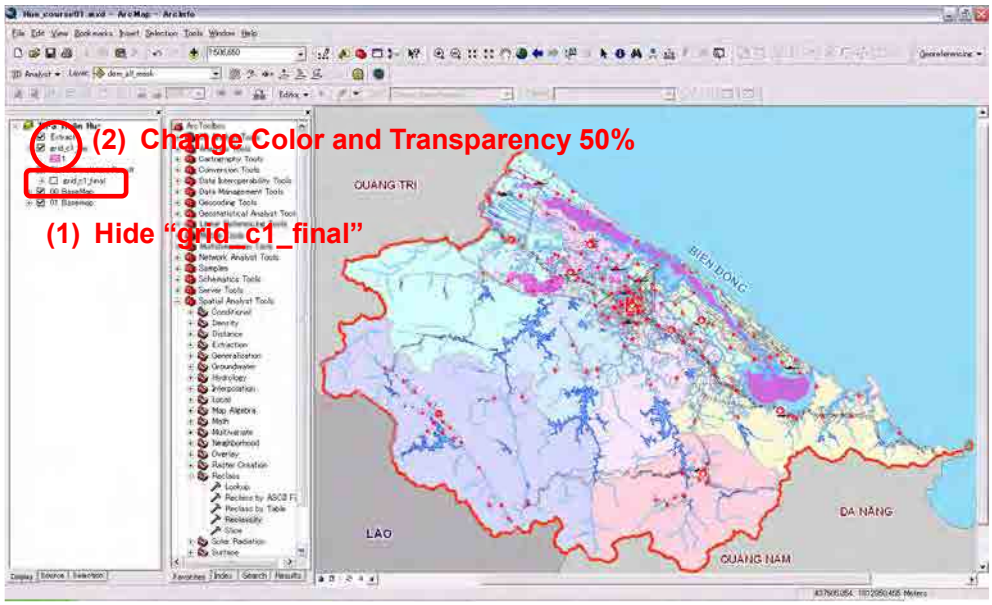
Concept of “Reclassify” on DEM

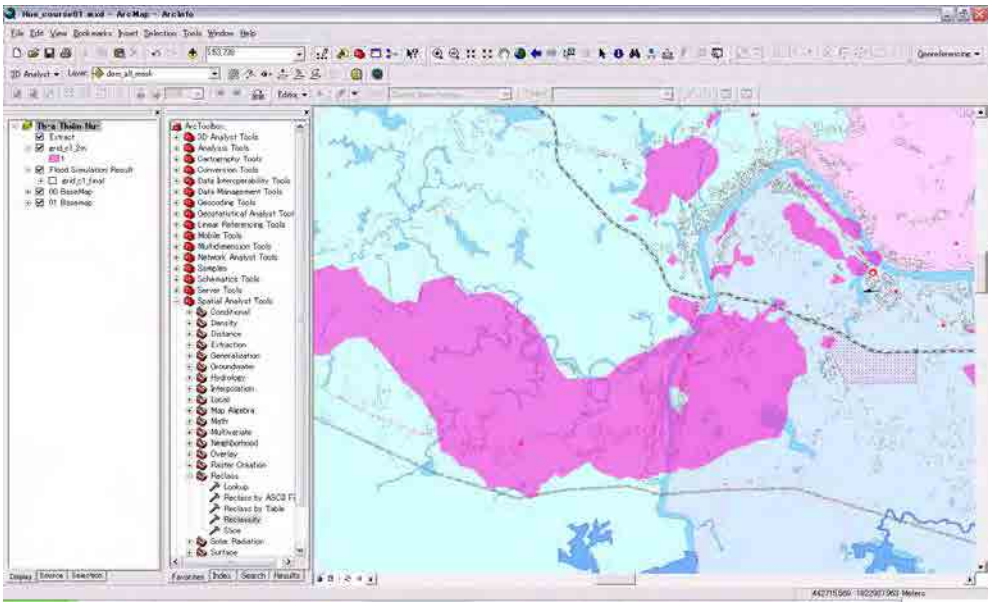




[Hide “grid_c1_final”]

[Change color to blue and transparency 50% on “grid_c1_2m”]

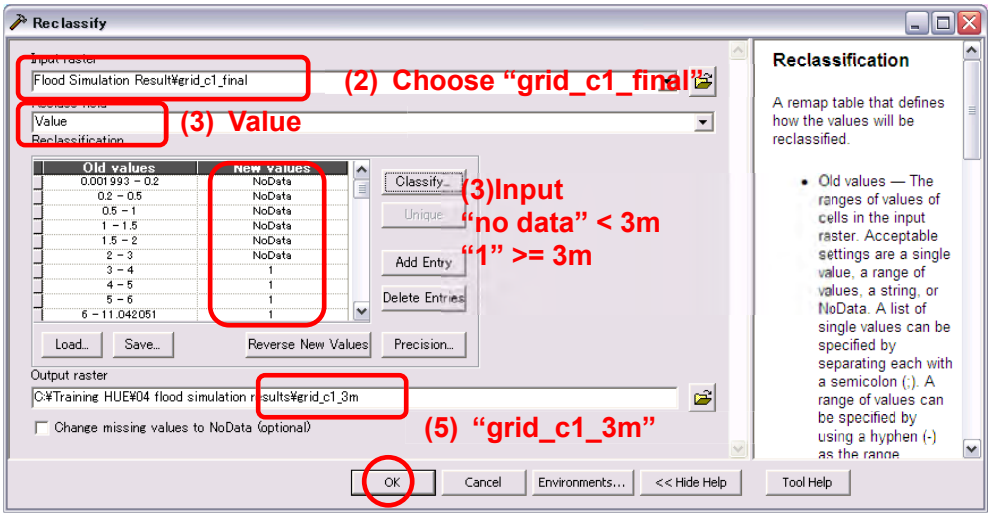




Look at the map more carefully.

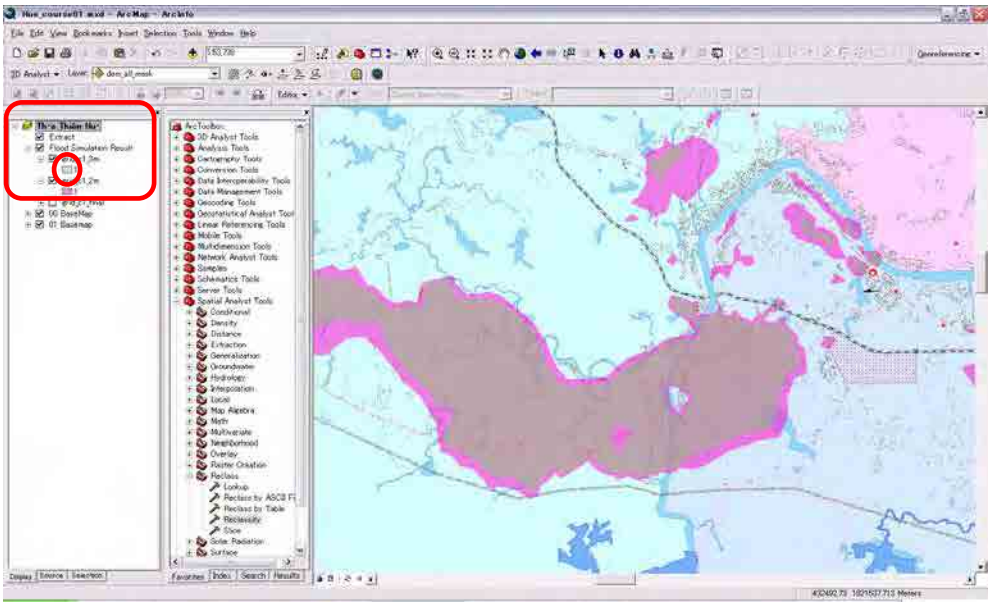
【2-3】 Reclass (3m)

Let us try to extract more than 3m flood on “grid_c1_final”.



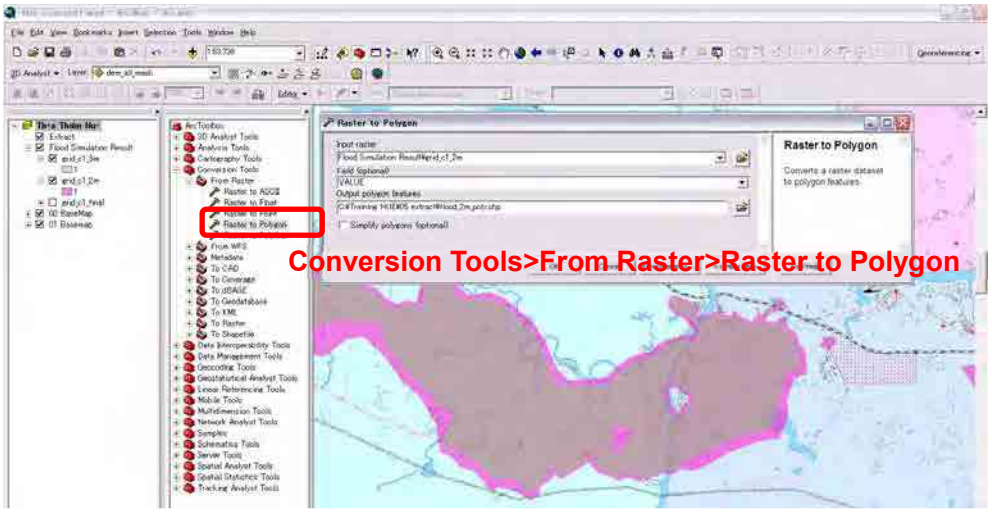
[Drop "grid_c1_2m" and "drid_c1_3m" layer to "Extract" group]

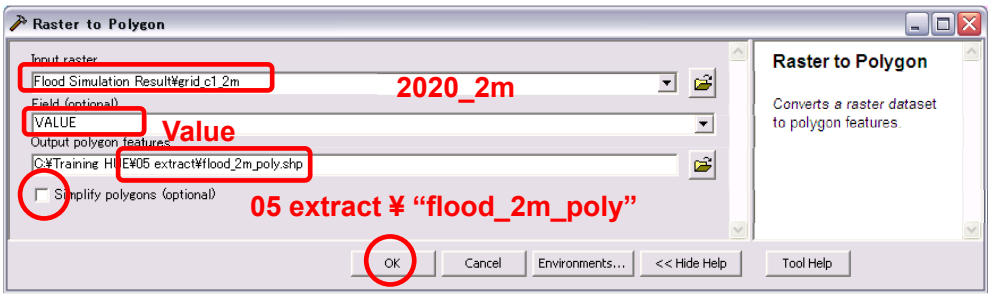
[Change transparency of "grid_c1_3m" to 50%.]

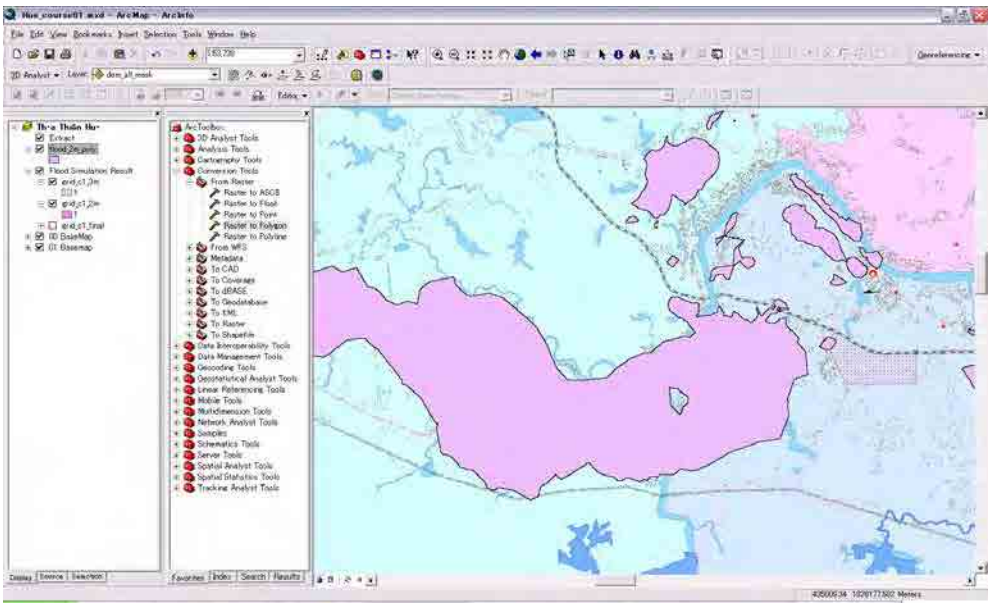


【2-4】 Raster to polygon

Conversion Tools>From Raster>Raster to Polygon



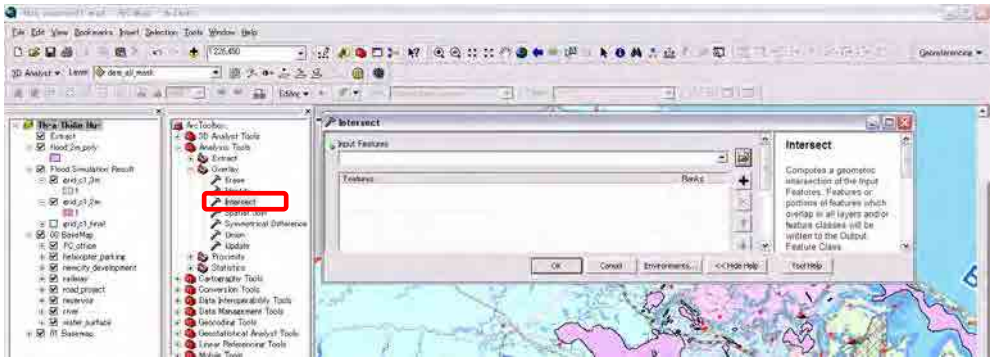




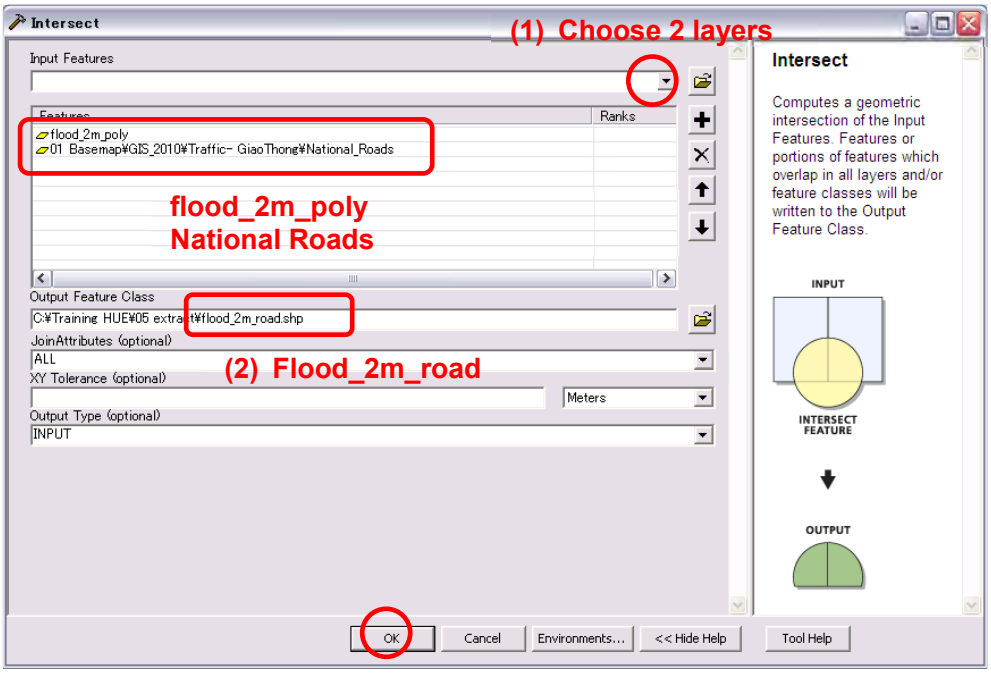
Course 3 Overlay

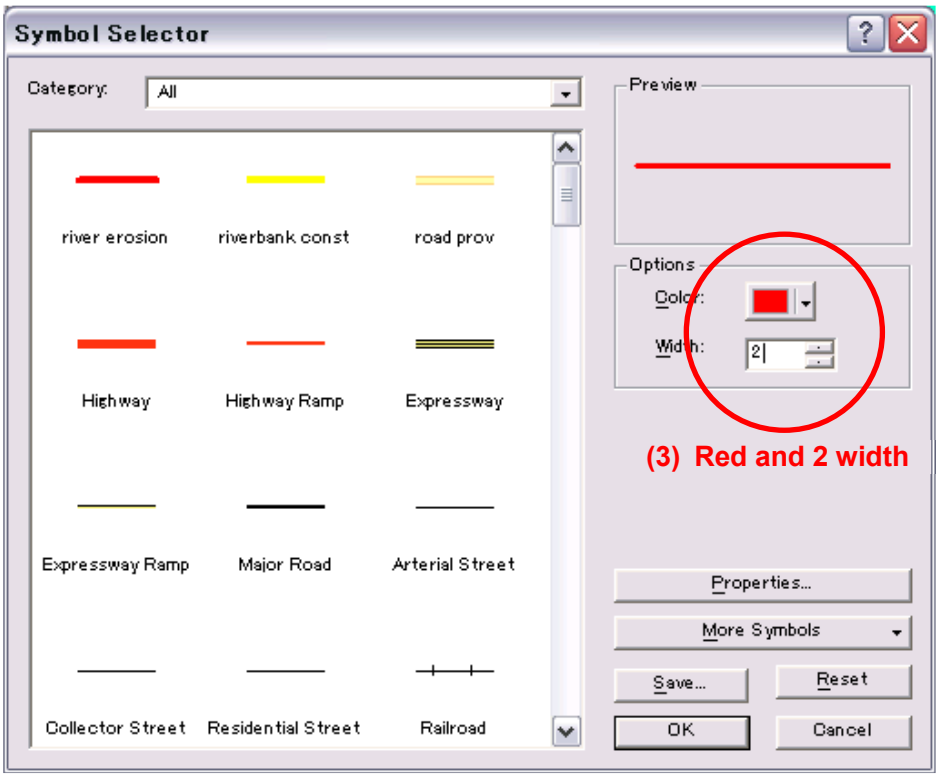
【3-1】 Preparation

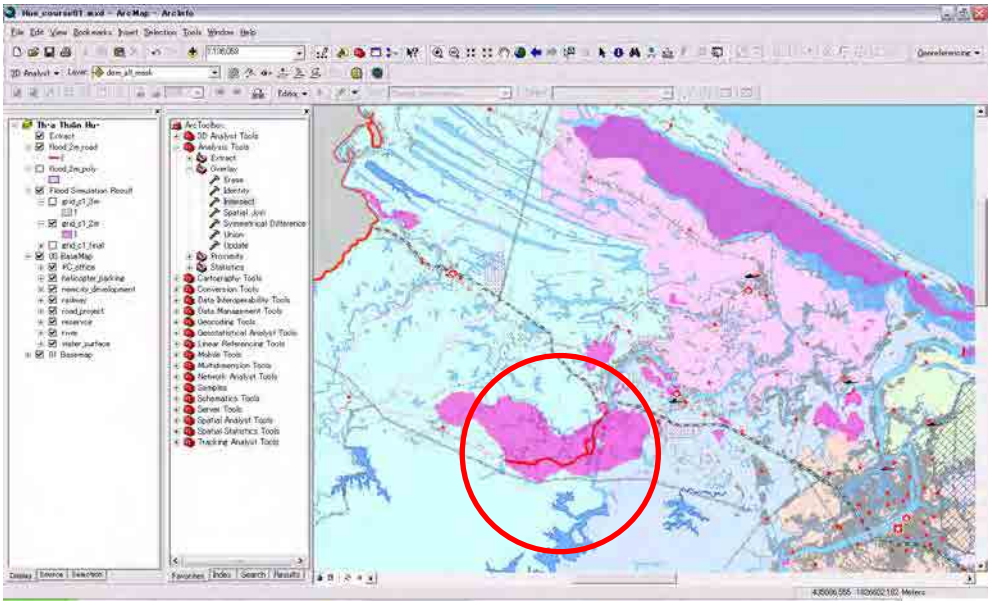
Analysis Tools> Overlay >Intersect



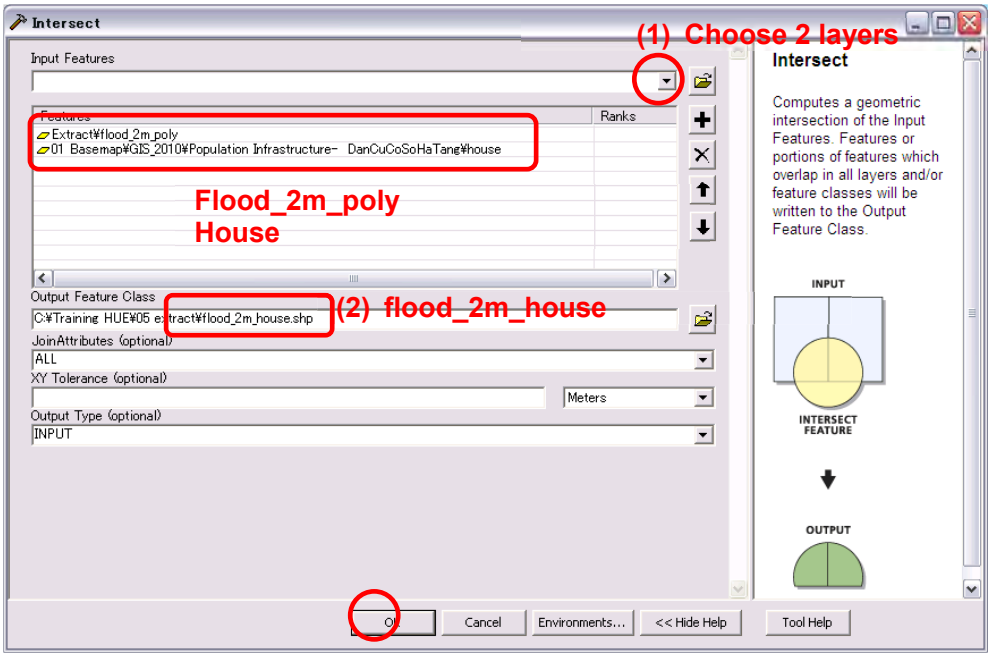
【3-2】 Intersect (Road and Flood 2m)

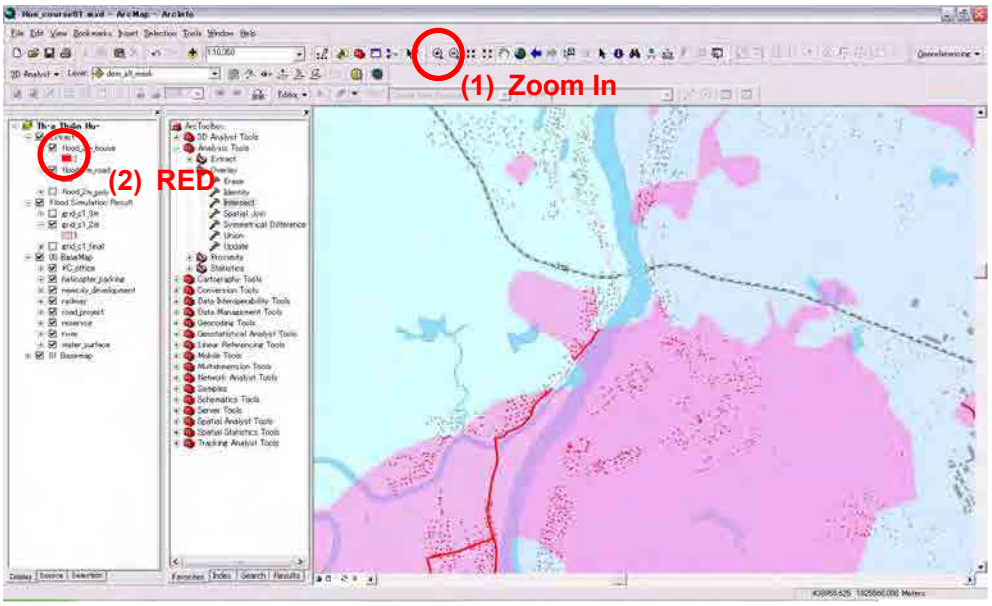



Symbol Selector
Category:
All
Preview
river erosion
riverbank const
road prov
Options
Color:
Width:
2
Highway
Highway Ramp
Expressway
(3) Red and 2 width
Expressway Ramp
Major Road
Arterial Street
Properties...
More Symbols
Save...
Reset
Collector Street
Residential Street
Railroad
OK
Cancel

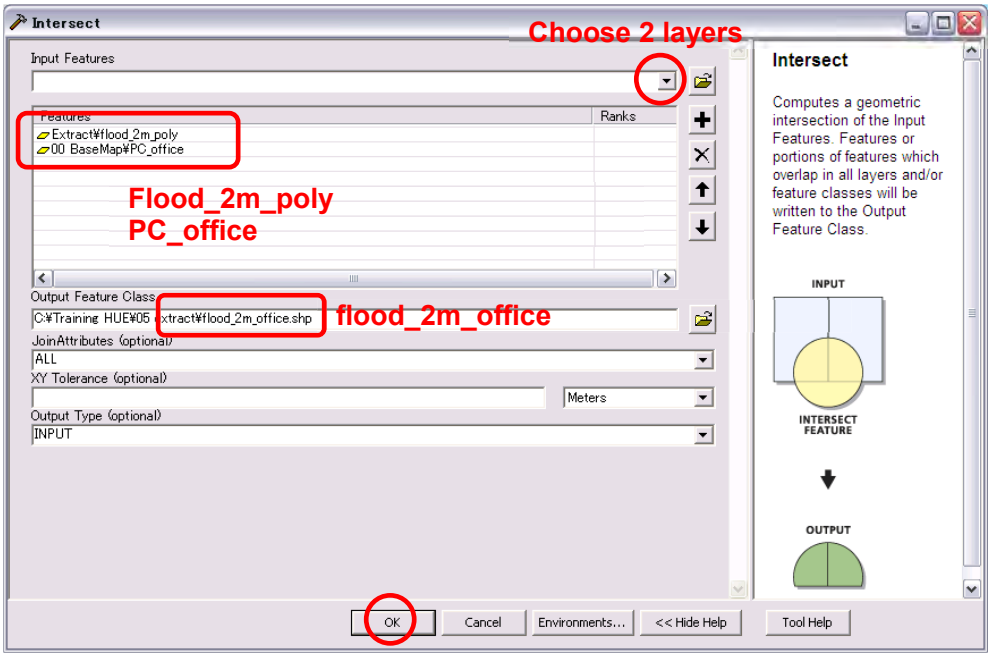


【3-3】 Intersect (Houses and Flood 2m)



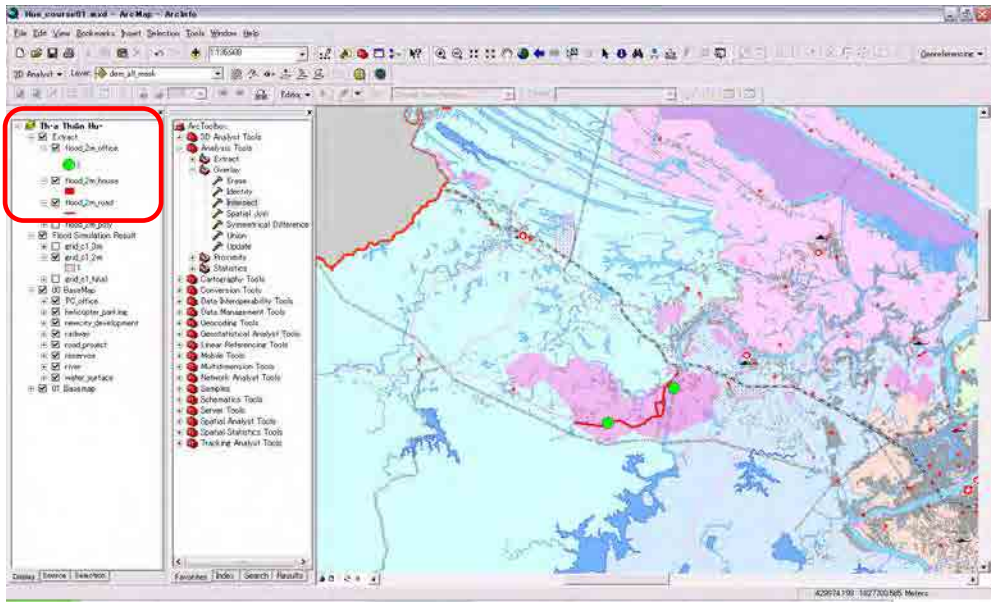


【3-4】　Intersect (Point Data and Flood 2m)



[Drop “station_2m” to “Extract” group]

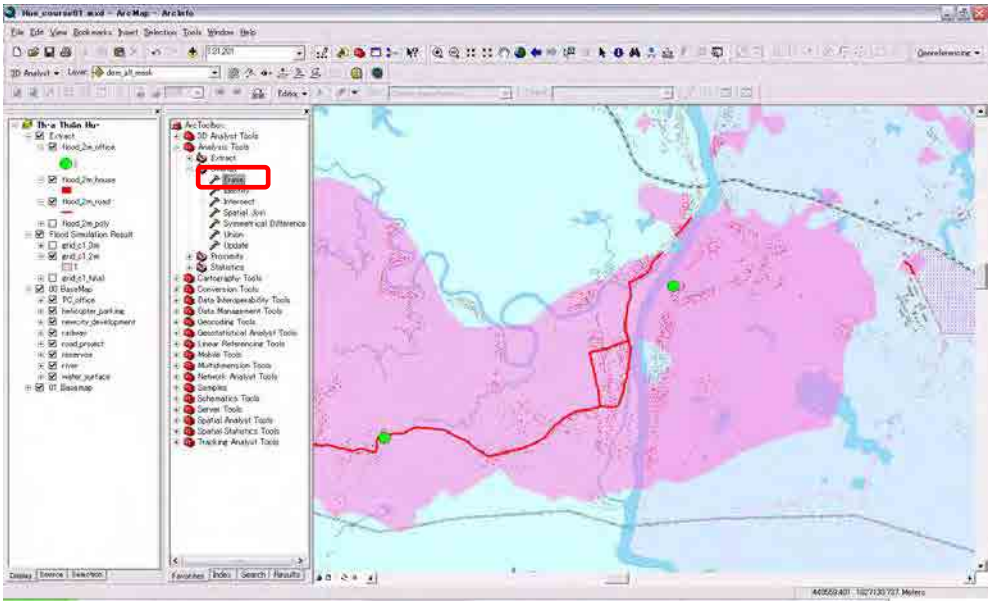
[Change color and symbol of the “flood_2m_office”]

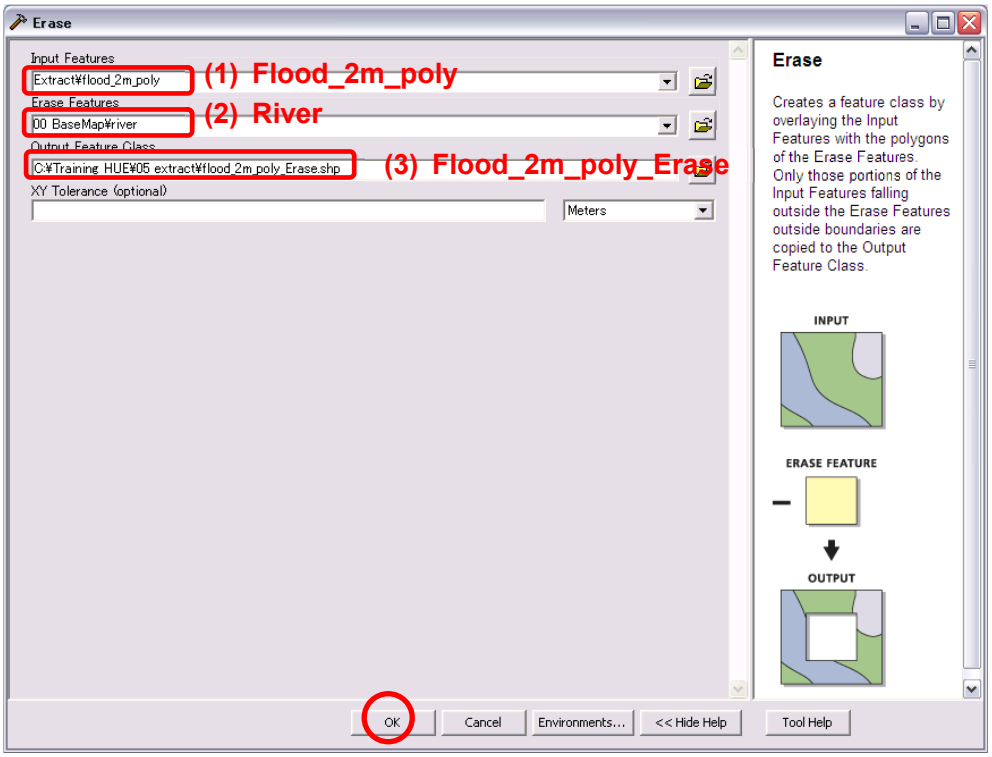


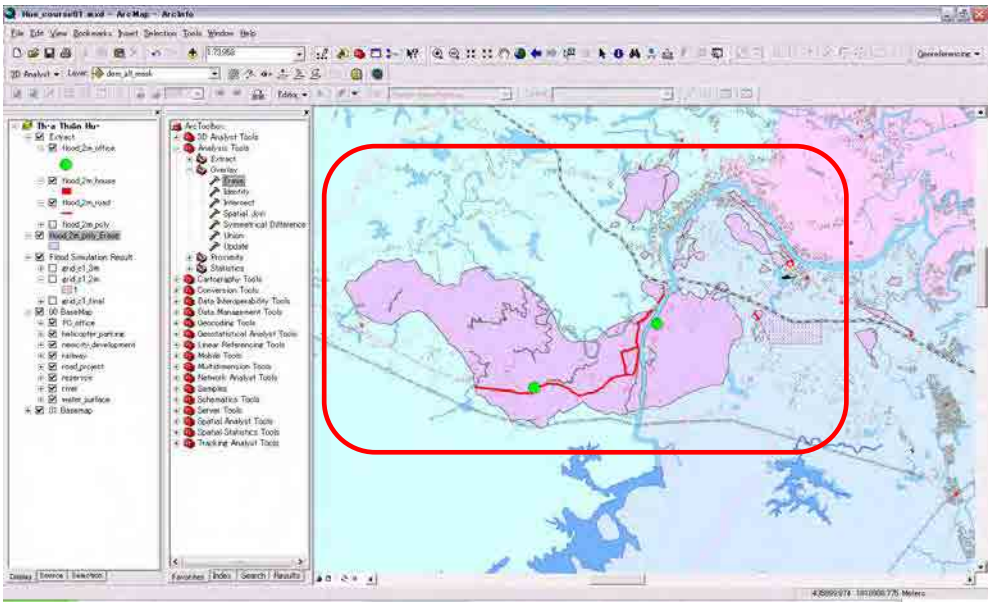
【3-5】　Erase

Analysis Tools>Overlay>Erase

[Zoon in to Thu Bon River]





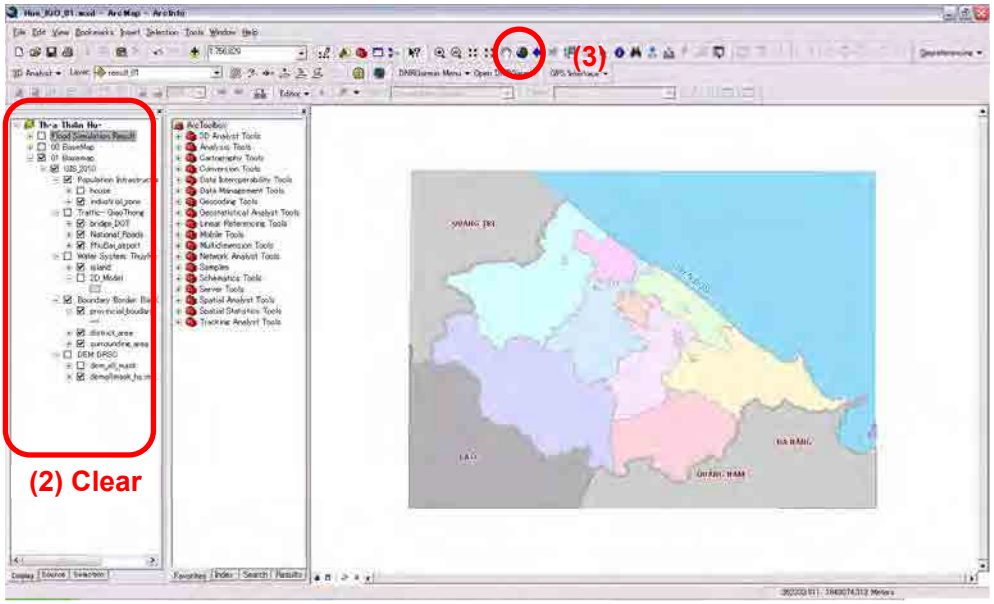


Course 4 Attribute Table

【4-1】 Preparation

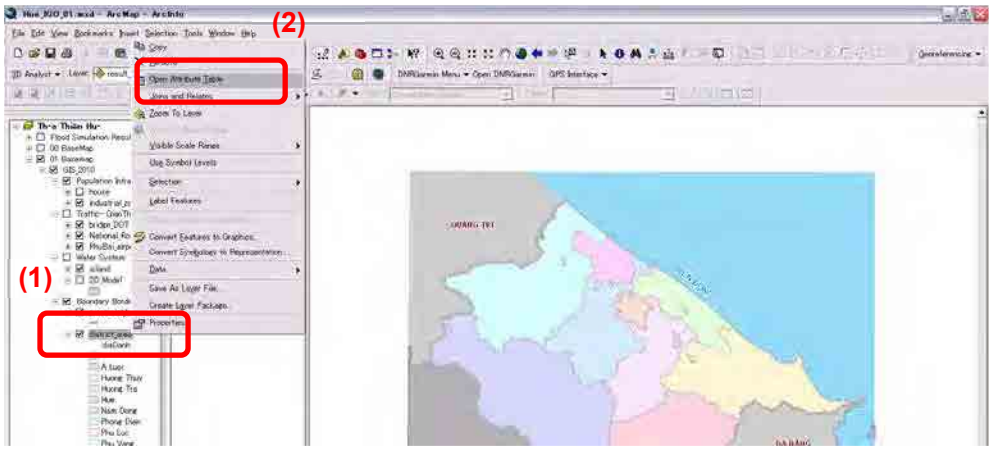
[Click the “Full Extent” button]

[Click off to clear data]

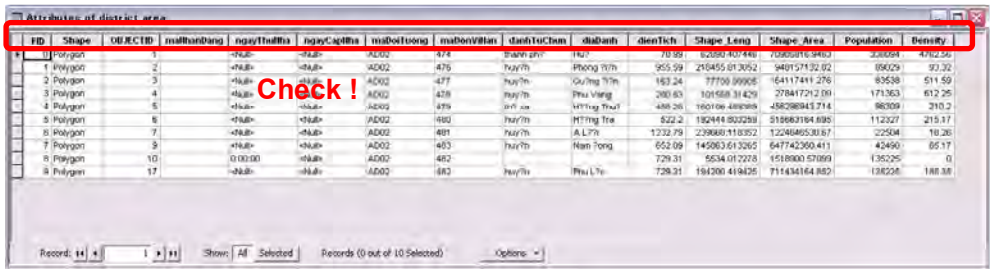


[Open Attribute Table]

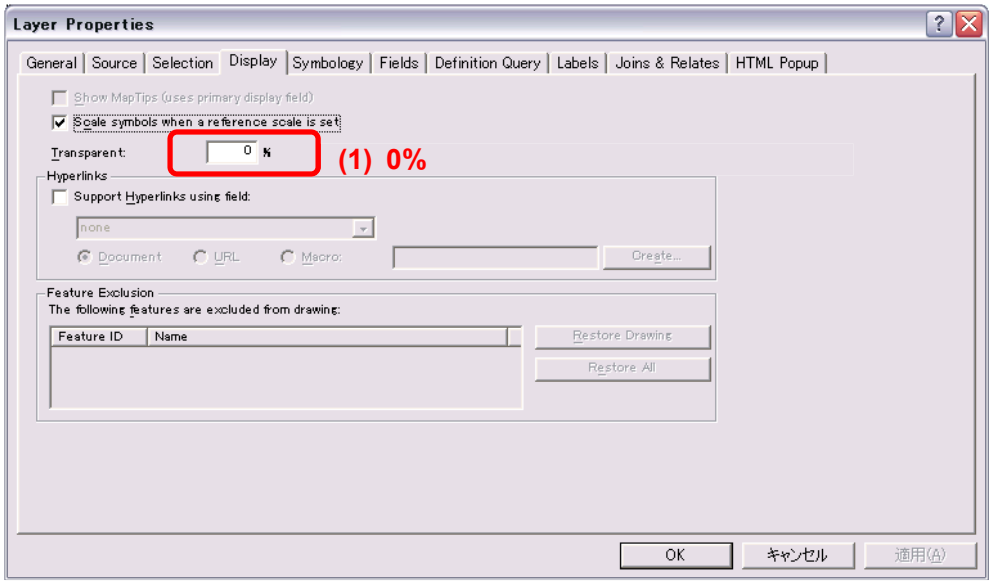
District_Area3



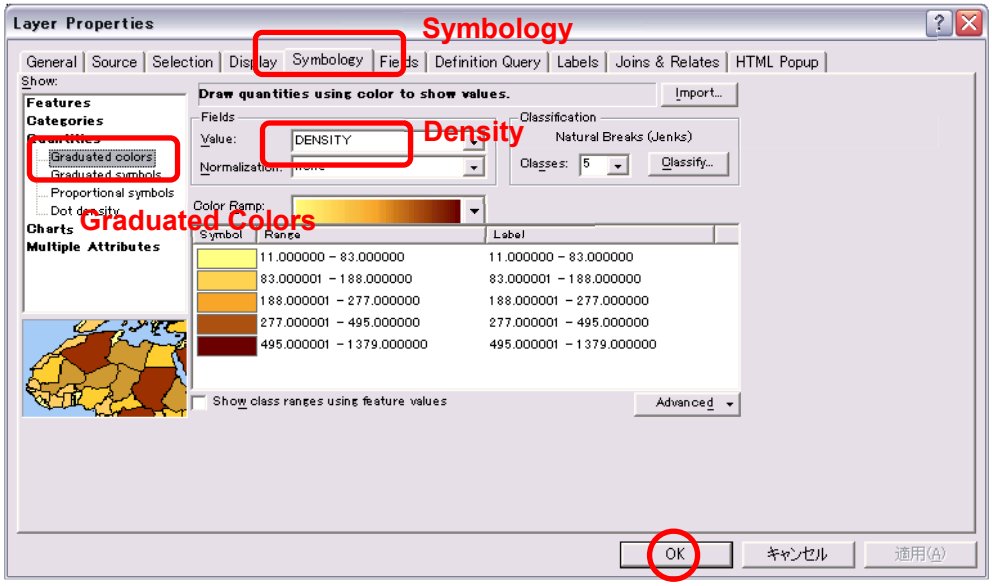
[Look at the Attribute Table]

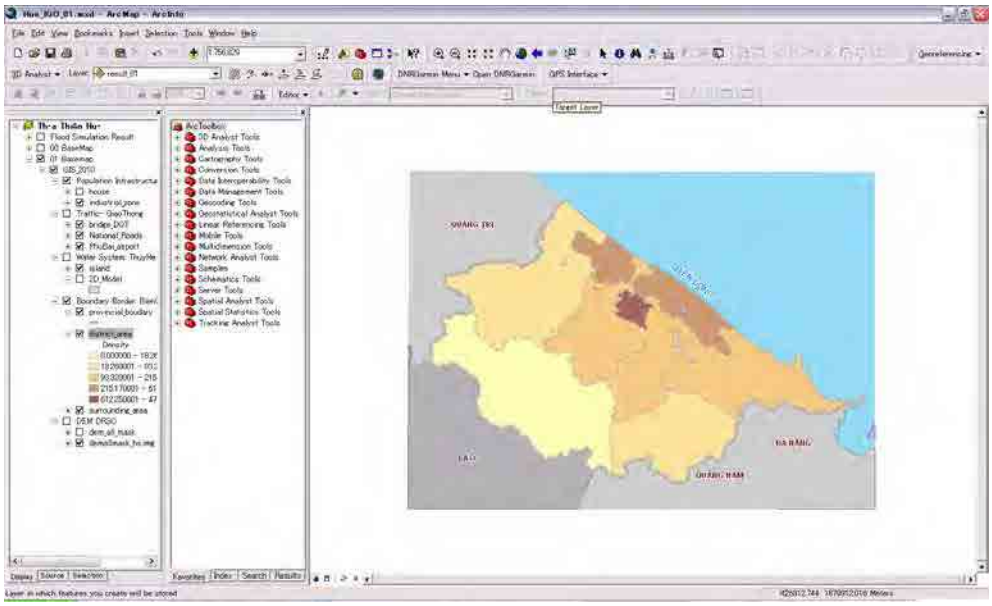


【4-2】　Change the Layer display



[Display the population density]

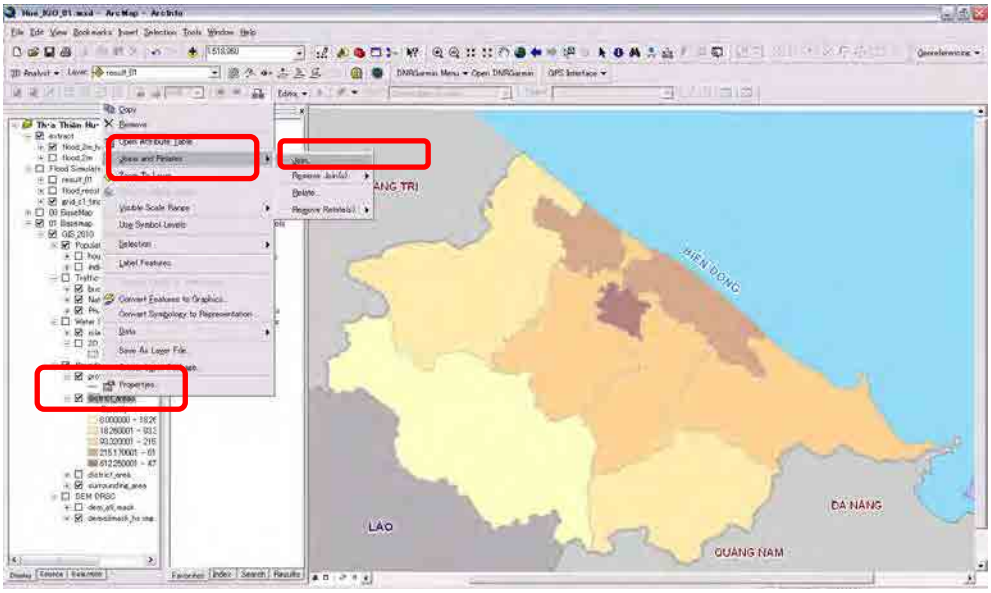


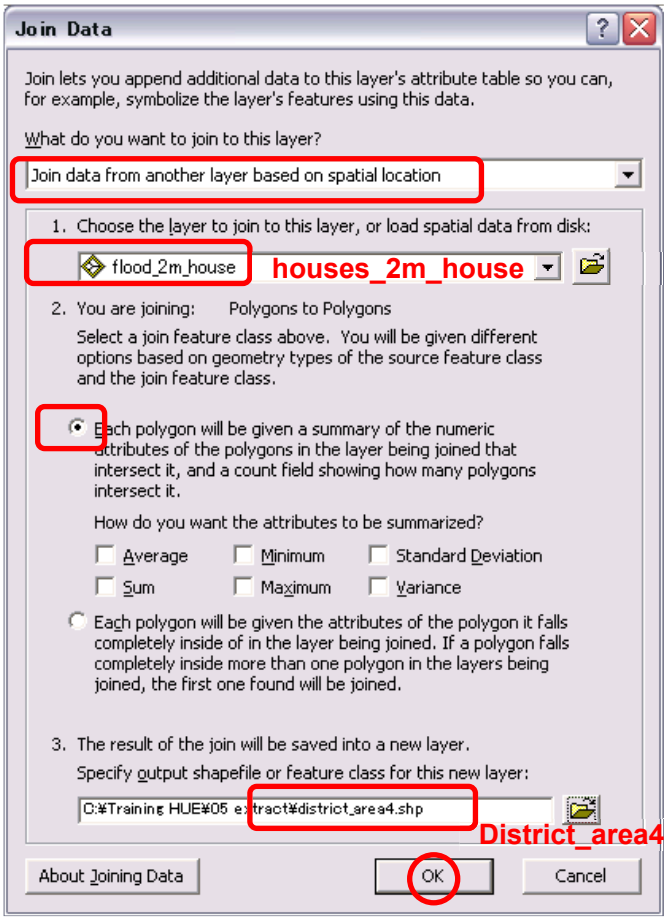


【4-3】　Counting

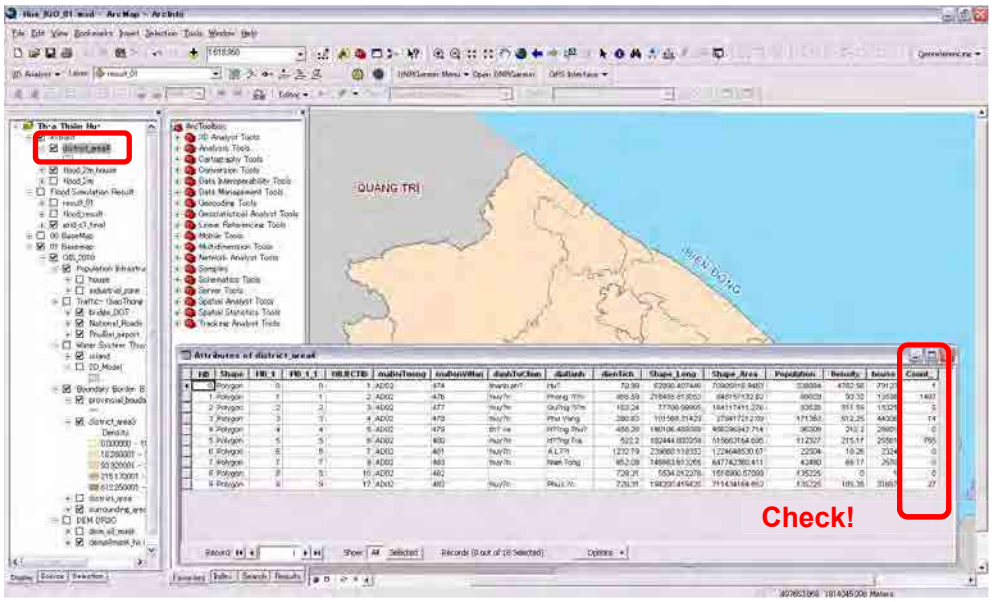
[Open the “Join” command]

Properties>Joins and Relates>Join





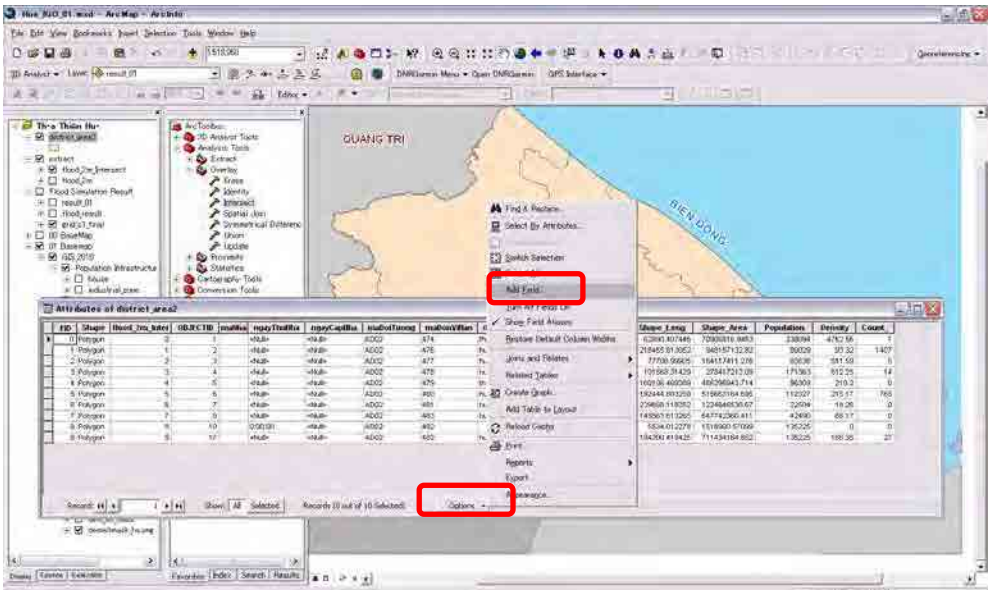
[Open the Attribute Table]

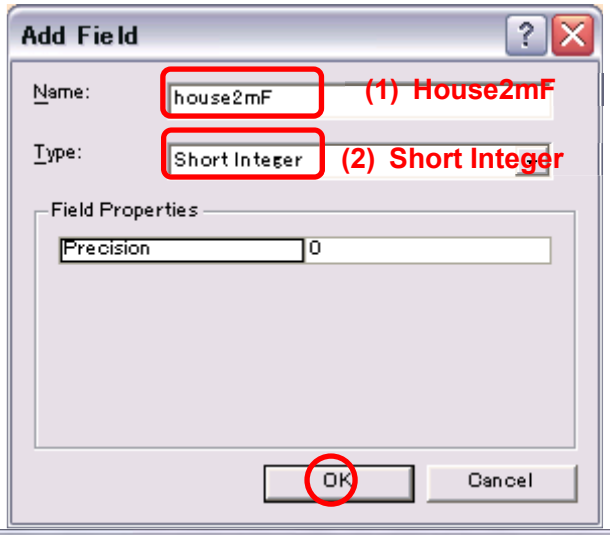


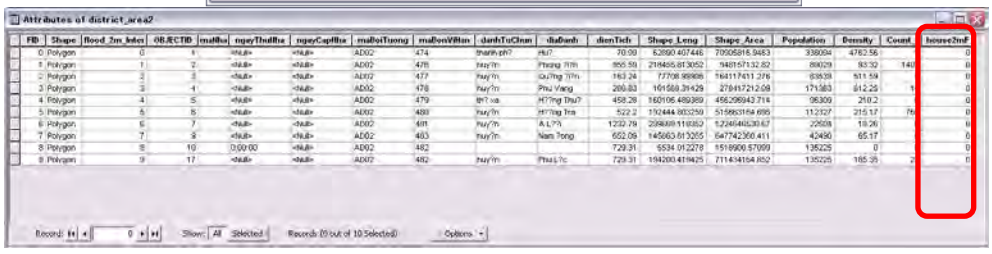
【4-4】　Rename of the “Field”

[Open “Add Field”]

Options>Add Field

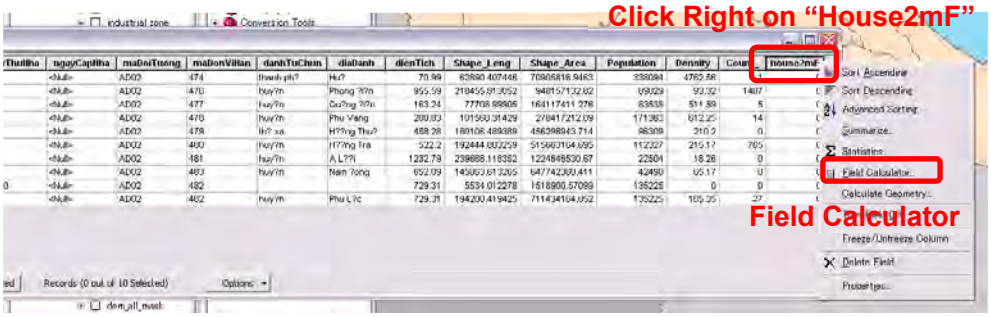


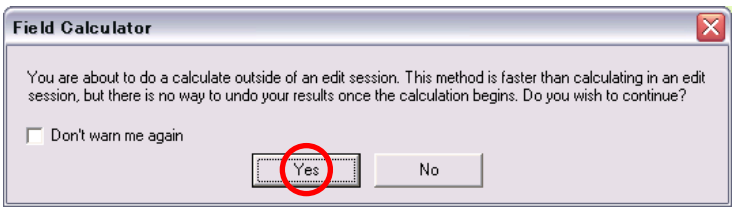


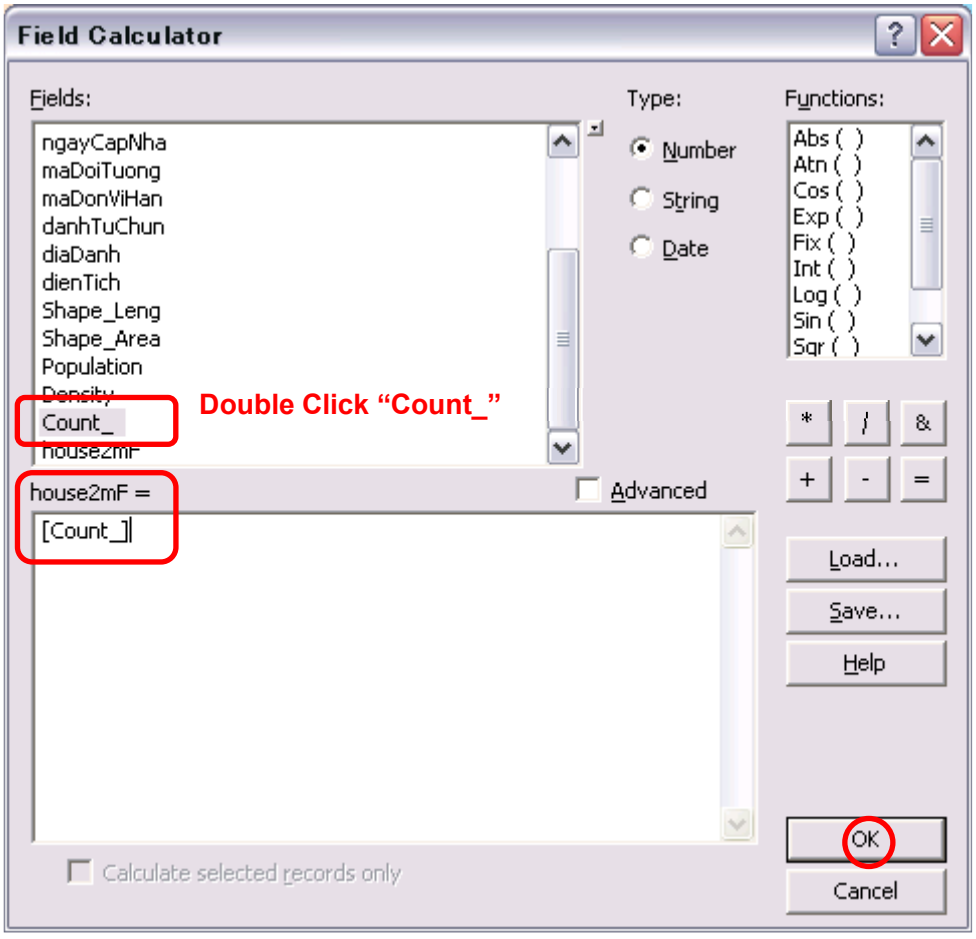


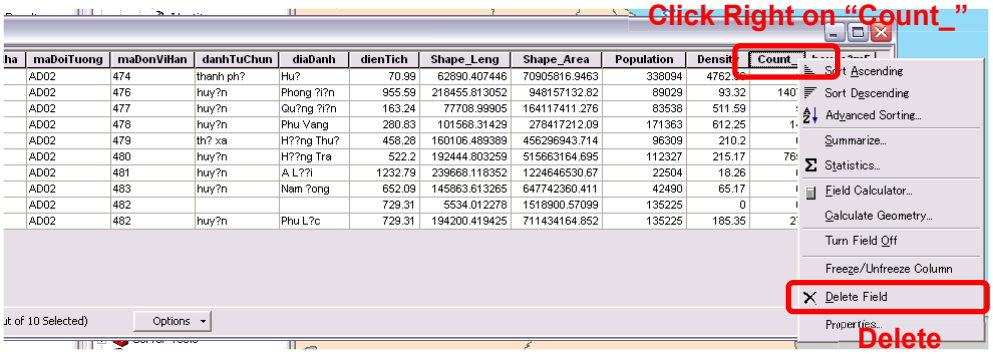
【4-5】 Field Calculator

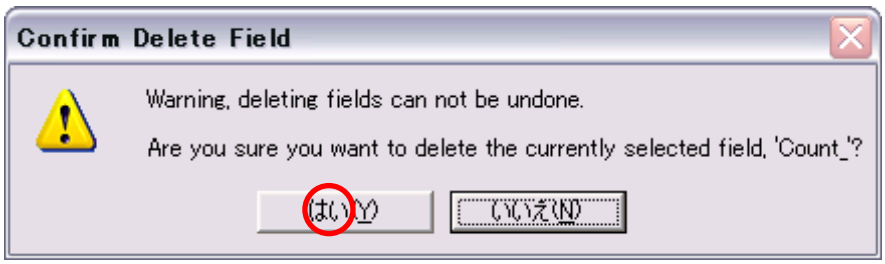
[Open “Field Calculator”]








Click Right on “Count_”
maDoiTuong
maDonViHan
danhTuChun
diaDanh
dienTich
Shape_Leng
Shape_Area
Population
Count_
AD02 474 thanh ph? Hu? 70.99 62890.407446 70905816.9463 338094
AD02 476 huy?n Phong ?i?n 955.59 218455.813052 948157132.82 89029 93.32
AD02 477 huy?n Qu?ng ?i?n 163.24 77708.99905 164117411.276 83538 511.59
AD02 478 huy?n Phu Vang 280.83 101568.31429 278417212.09 171363 612.25
AD02 479 th? xa H??ng Thu? 458.28 160106.489389 456296943.714 96309 210.2
AD02 480 huy?n H??ng Tra 522.2 192444.803259 515663164.695 112327 215.17
AD02 481 huy?n A L??i 1232.79 239668.118352 1224646530.67 22504 18.26
AD02 483 huy?n Nam ?ong 652.09 145863.613265 647742360.411 42490 65.17
AD02 482 729.31 5534.012278 1518900.57099 135225 0
AD02 482 huy?n Phu L?c 729.31 194200.419425 711434164.852 135225 185.35
Sort Ascending
Sort Descending
Advanced Sorting...
Summarize...
Statistics...
Field Calculator...
Calculate Geometry...
Turn Field Off
Freeze/Unfreeze Column
Delete Field
Properties...
Options
Delete

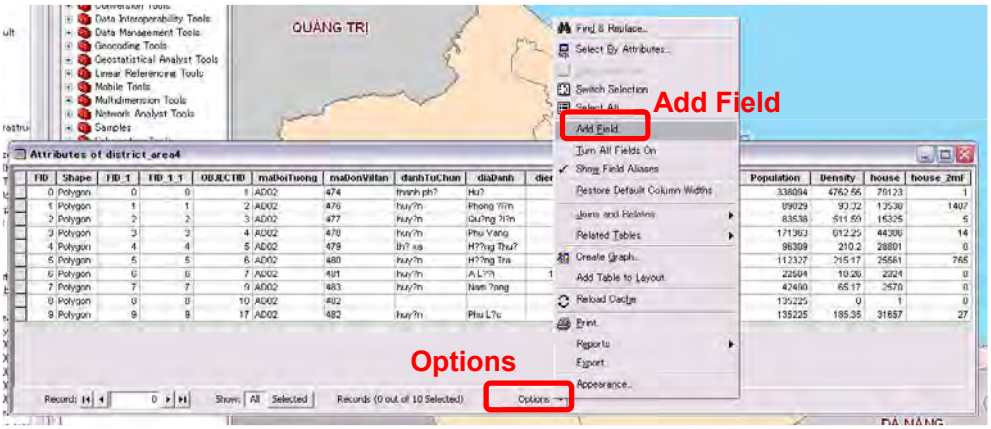

Confirm Delete Field
Warning, deleting fields can not be undone.
Are you sure you want to delete the currently selected field, 'Count_'?

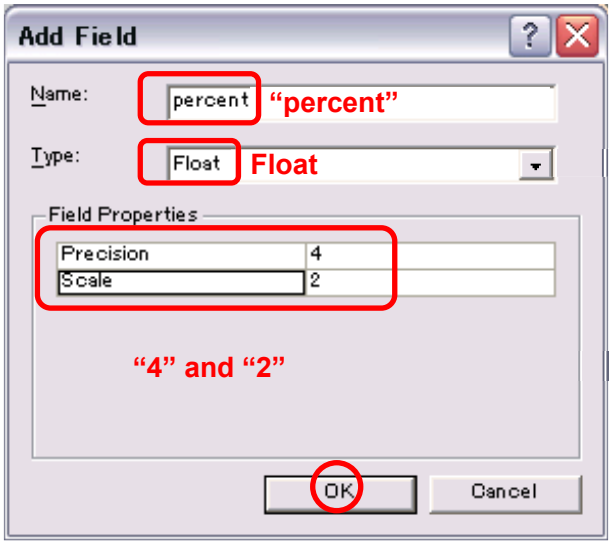
Course 5 Attribute Table (2)

【5-1】 Field Calculator

Open “Field calculator”

[Add “New Field”]





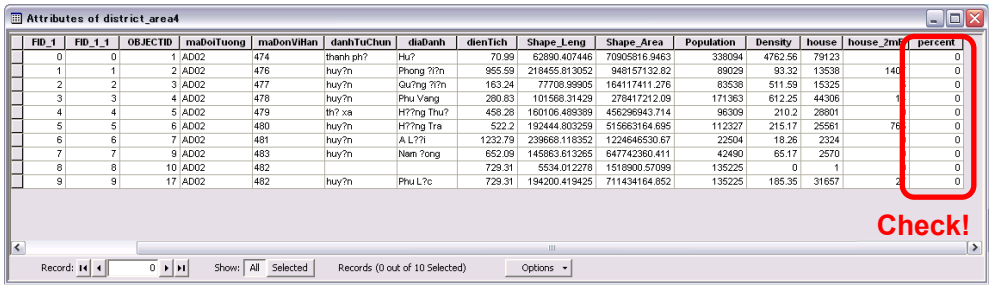
Keyword: Data Type

Short Integer -- -32,768 ~ 32767

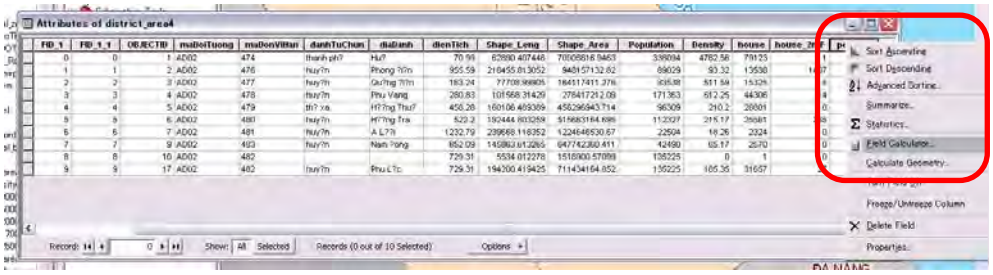
Long Integer -- -2,147,483,648 ~ 2,147,483,647

Float – Total Place (precision) 1~6, Decimal place (Scale) 1~6

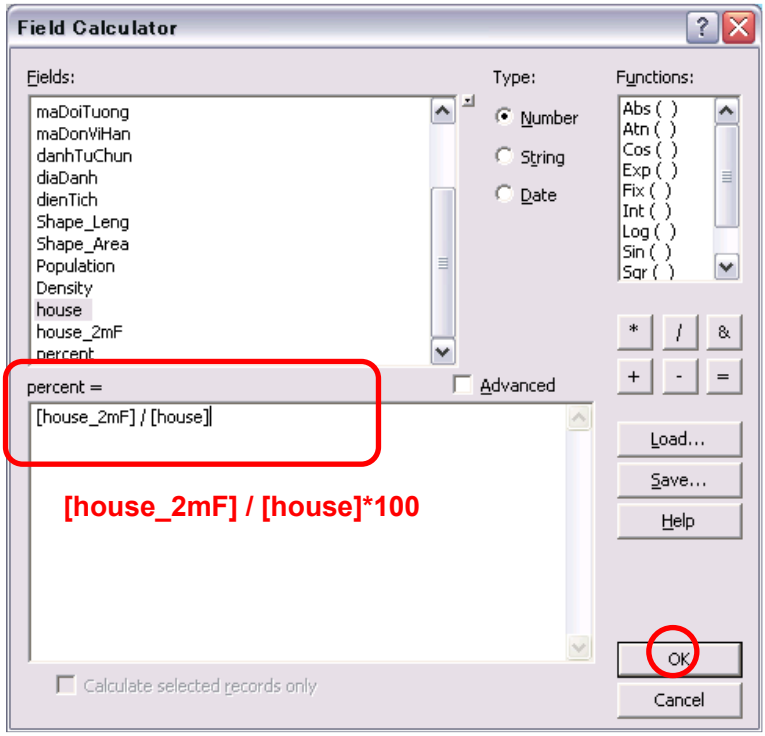
Double -- Total Place (precision) 7~, Decimal place (Scale) 0~

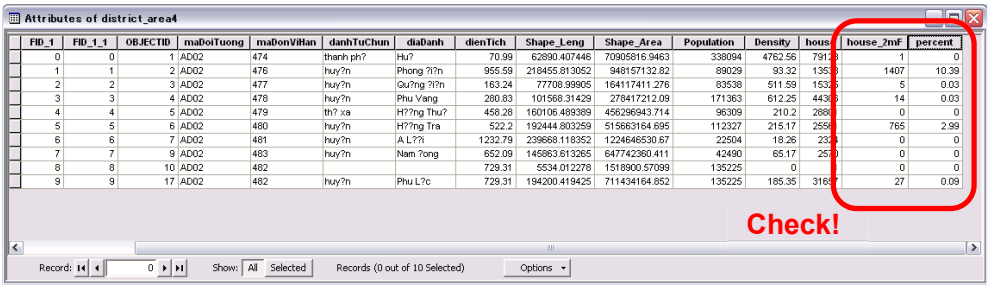


[Field Calculator]

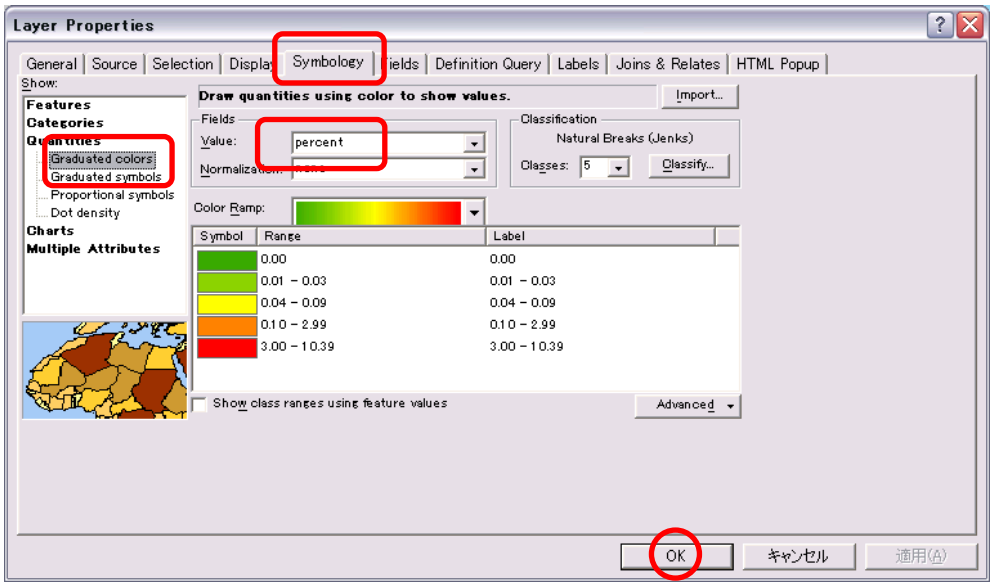


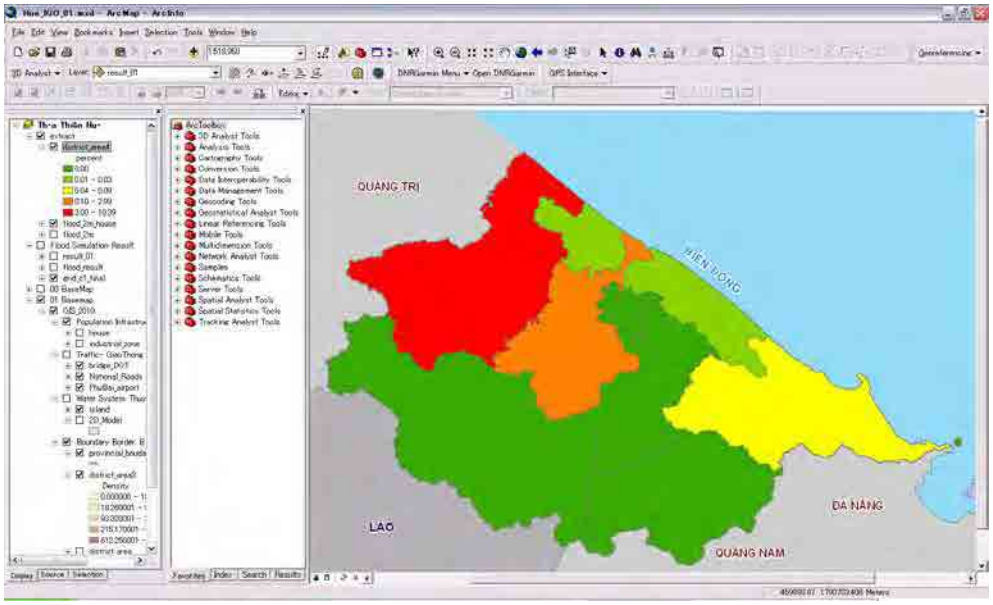
To calculate “risk percentage” of “flood 2m”





【5-2】 Change Layer Display

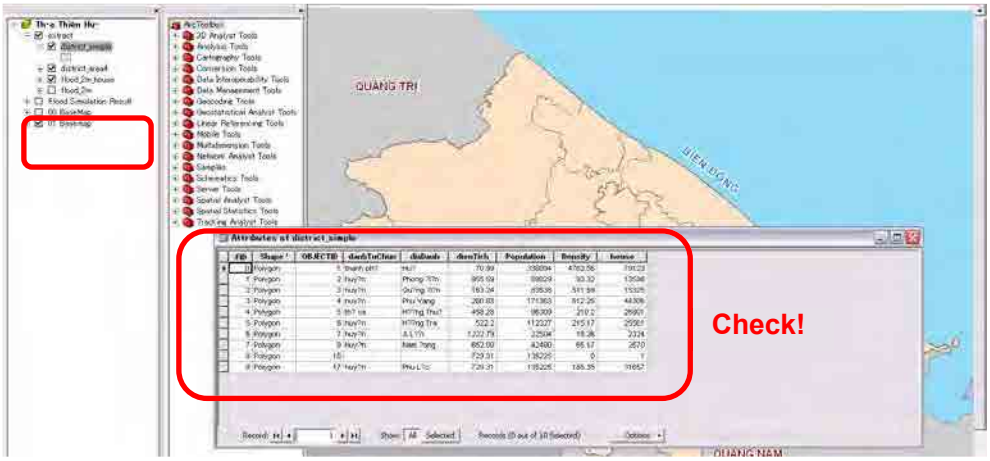




【5-3】 Join Attribute from Table (Excel Data)

[Add “district_simple” polygon]

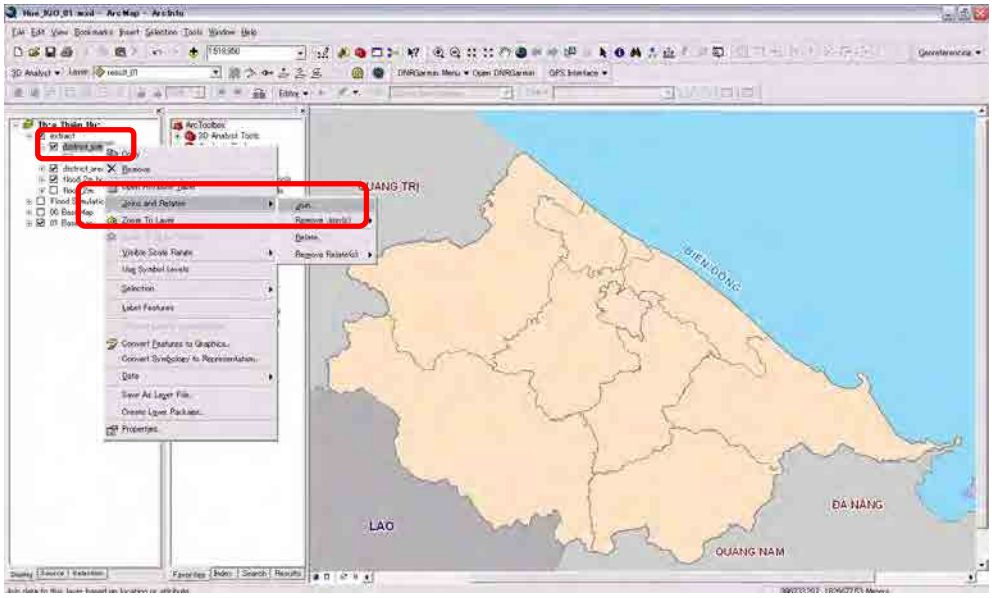
[Open Attribute Table of “district_simple”]

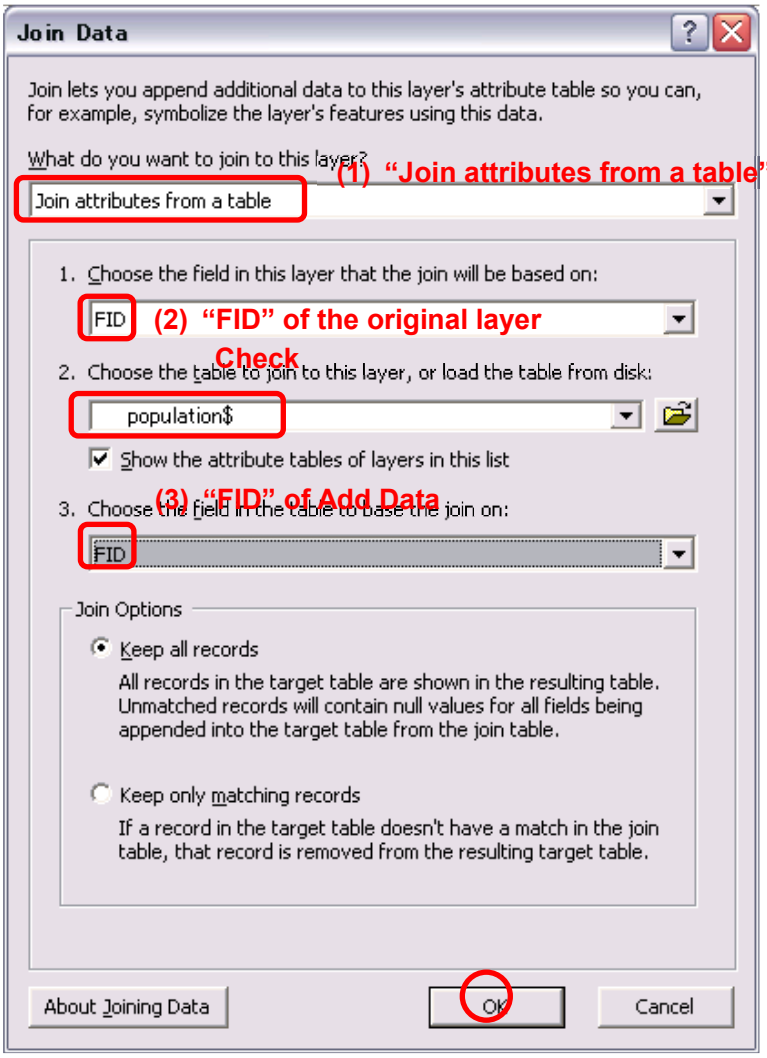


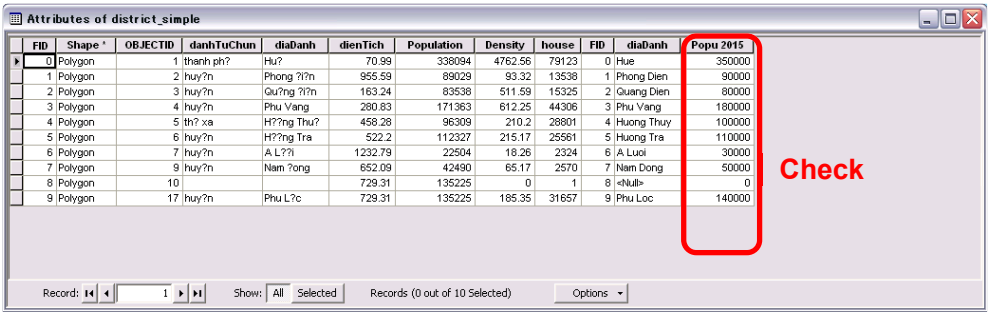
[To Update Database]This table is one of example on excel file.

FID	diaDanh	Popu 2015
0	Hue	350000
1	Phong Dien	90000
2	Quang Dien	80000
3	Phu Vang	180000
4	Huong Thuy	100000
5	Huong Tra	110000
6	A Luoi	30000
7	Nam Dong	50000
8		0
9	Phu Loc	140000

[Open Join of “district_simple”] Joins and Relates>Join



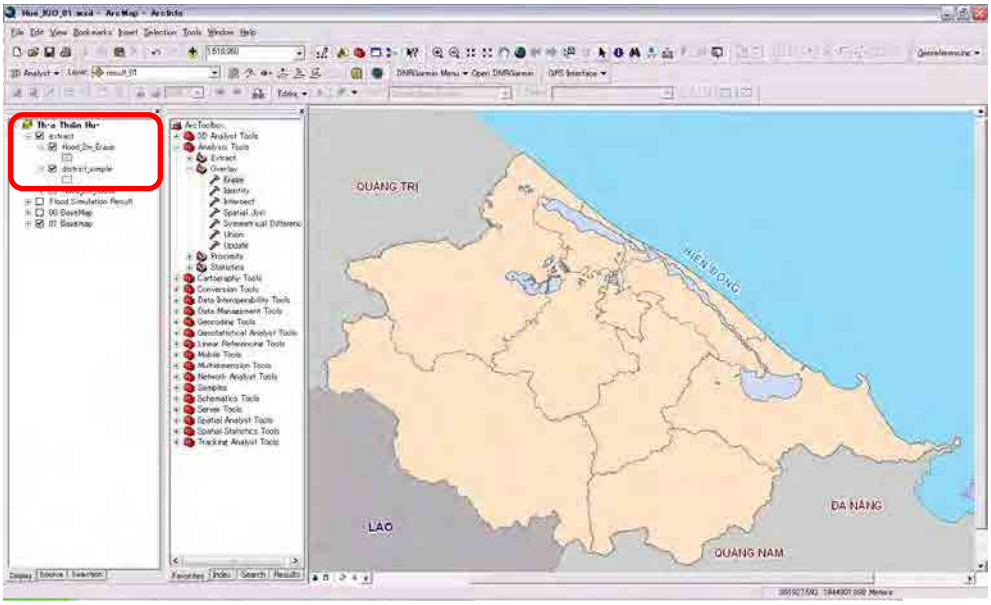

Join Data
Join lets you append additional data to this layer's attribute table so you can, for example, symbolize the layer's features using this data.
What do you want to join to this layer?
(1) "Join attributes from a table"
Join attributes from a table
1. Choose the field in this layer that the join will be based on:
FID
(2) "FID" of the original layer
Check
2. Choose the table to join to this layer, or load the table from disk:
population$
Show the attribute tables of layers in this list
(3) "FID" of Add Data
3. Choose the field in the table to base the join on:
FID
Join Options
Keep all records
All records in the target table are shown in the resulting table. Unmatched records will contain null values for all fields being appended into the target table from the join table.
Keep only matching records
If a record in the target table doesn't have a match in the join table, that record is removed from the resulting target table.
About Joining Data
OK
Cancel


Attributes of district_simple
FID | Shape * | OBJECTID | danhTuChun | diaDanh | dienTich | Population | Density | house | FID | diaDanh | Popu 2015
0 | Polygon | 1 | thanh ph? | Hu? | 70.99 | 338094 | 4762.56 | 79123 | 0 | Hue | 350000
1 | Polygon | 2 | huy?n | Phong ?i?n | 955.59 | 89029 | 93.32 | 13538 | 1 | Phong Dien | 90000
2 | Polygon | 3 | huy?n | Qu?ng ?i?n | 163.24 | 83538 | 511.59 | 15325 | 2 | Quang Dien | 80000
3 | Polygon | 4 | huy?n | Phu Vang | 280.83 | 171363 | 612.25 | 44306 | 3 | Phu Vang | 180000
4 | Polygon | 5 | th? xa | H??ng Thu? | 458.28 | 96309 | 210.2 | 28801 | 4 | Huong Thuy | 100000
5 | Polygon | 6 | huy?n | H??ng Tra | 522.2 | 112327 | 215.17 | 25561 | 5 | Huong Tra | 110000
6 | Polygon | 7 | huy?n | A L??i | 1232.79 | 22504 | 18.26 | 2324 | 6 | A Luoi | 30000
7 | Polygon | 9 | huy?n | Nam ?ong | 652.09 | 42490 | 65.17 | 2570 | 7 | Nam Dong | 50000
8 | Polygon | 10 | | | 729.31 | 135225 | 0 | 1 | 8 | <Null> | 0
9 | Polygon | 17 | huy?n | Phu L?c | 729.31 | 135225 | 185.35 | 31657 | 9 | Phu Loc | 140000
Record: 1
Show: All Selected
Records (0 out of 10 Selected)
Options
Check

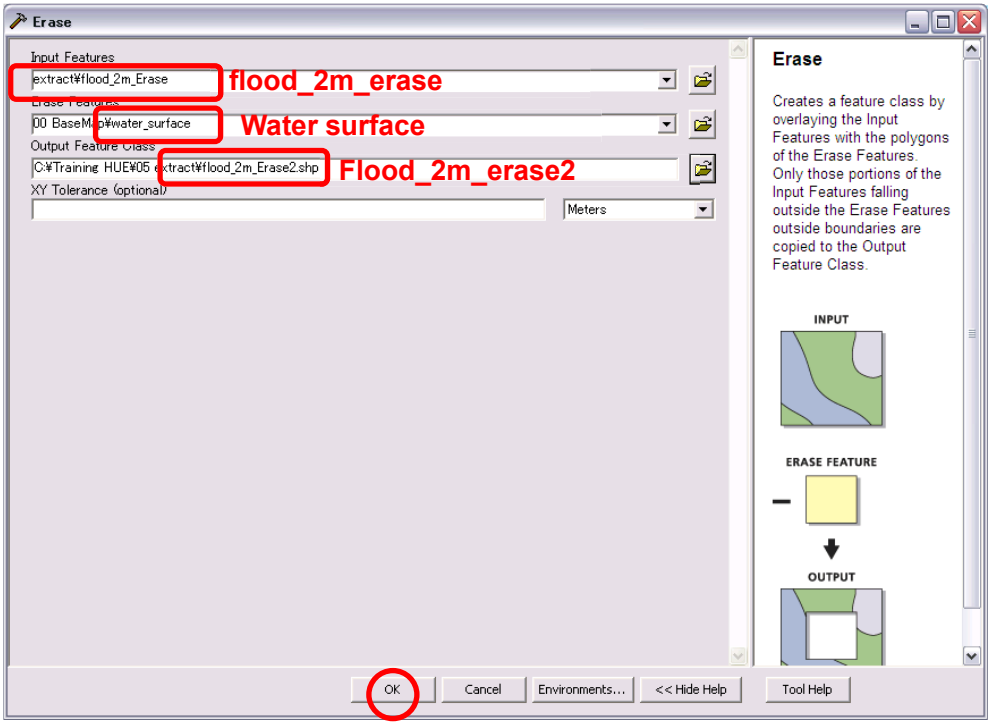
Course 6 Application of the Simulation Result

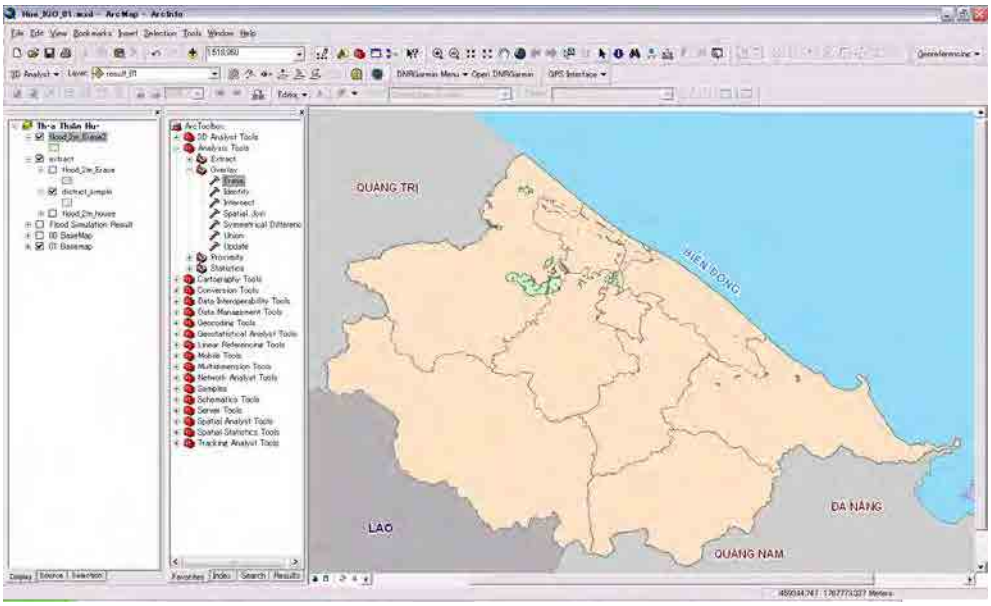
【6-1】 Erase

[Set 2 shape files “flood_2m_erase” and “district_simple”]



Erase by water surface.

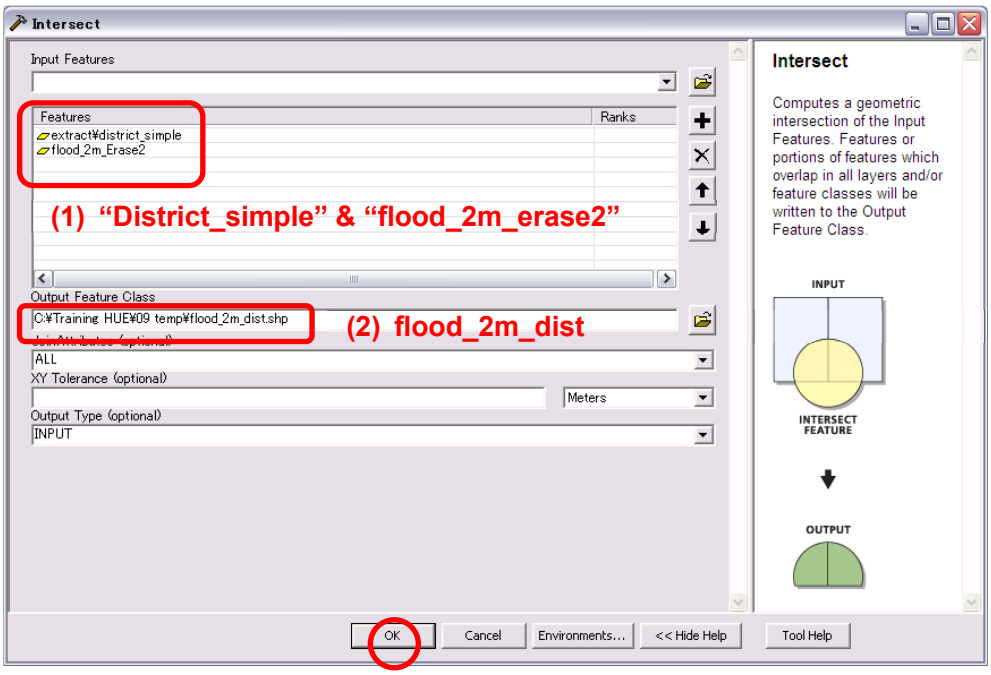




【6-2】 Intersect

Let us extract flood areas district-by-district.

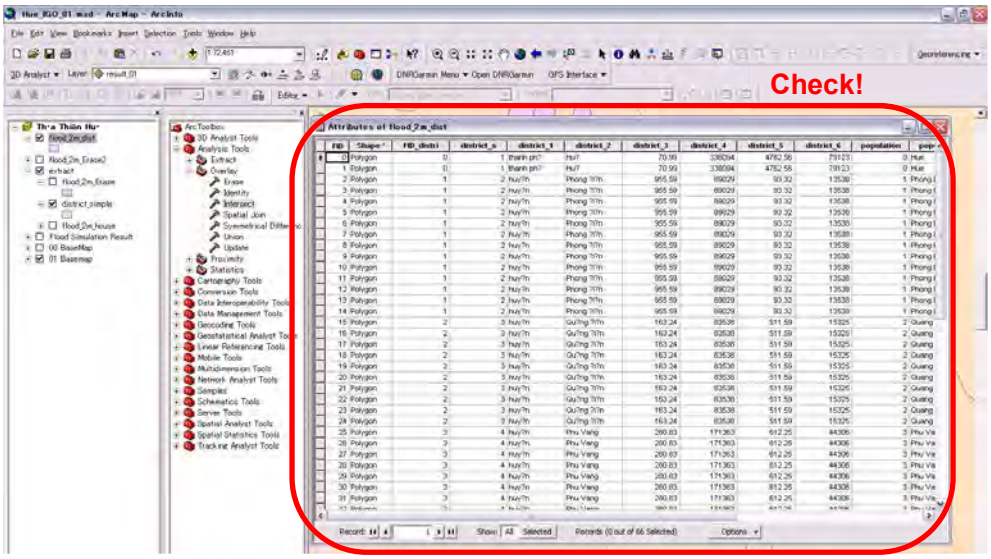
[Open the “Intersect” tool]

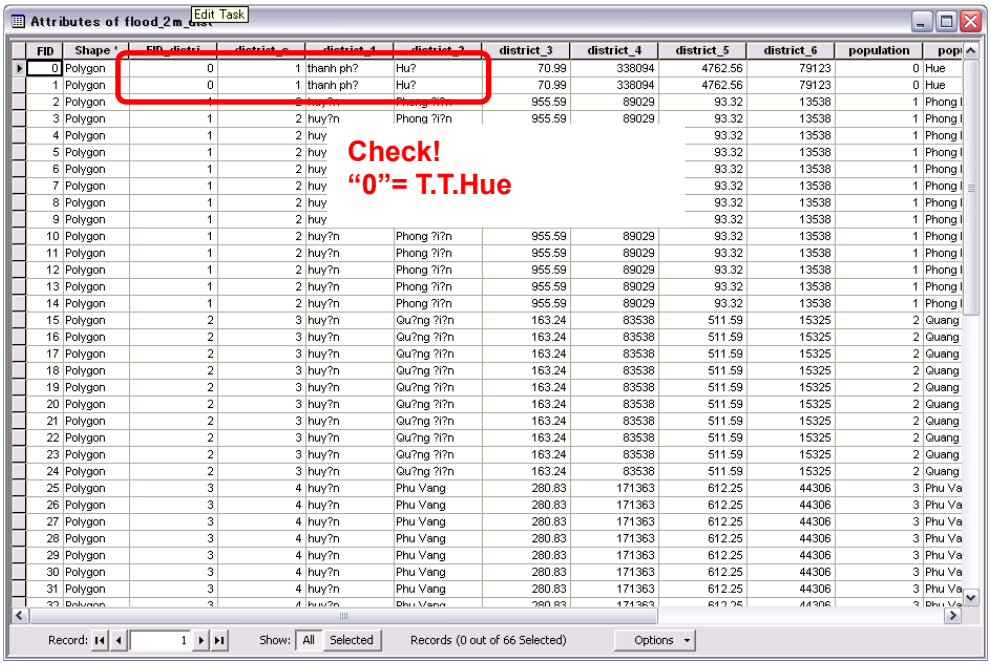


Let us look at the map.

【6-3】 Merge of Polygon

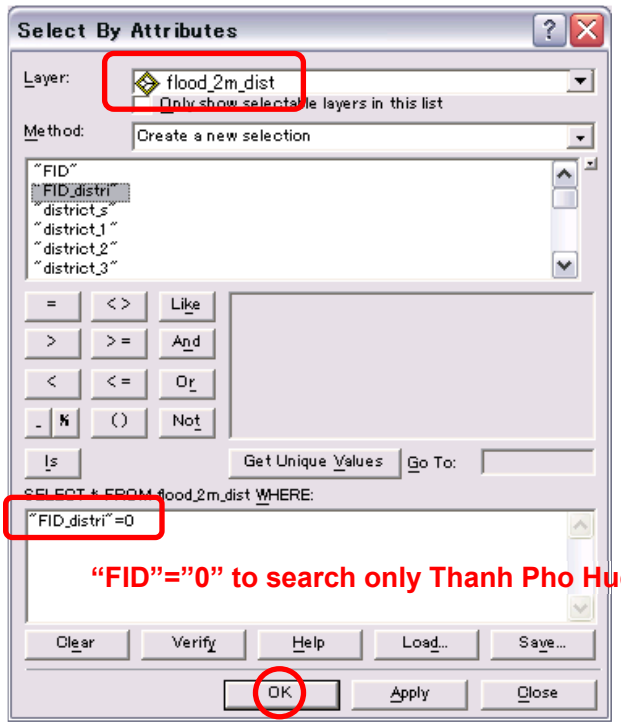
[Open the attribute table of “flood_2m_dist”]

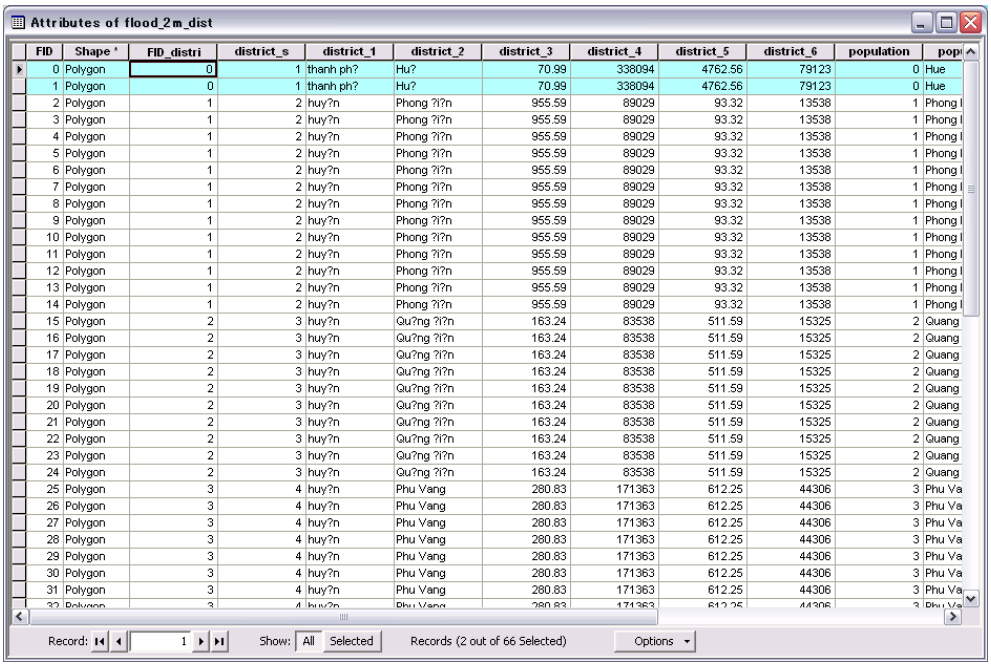




[Select by Attributes….]

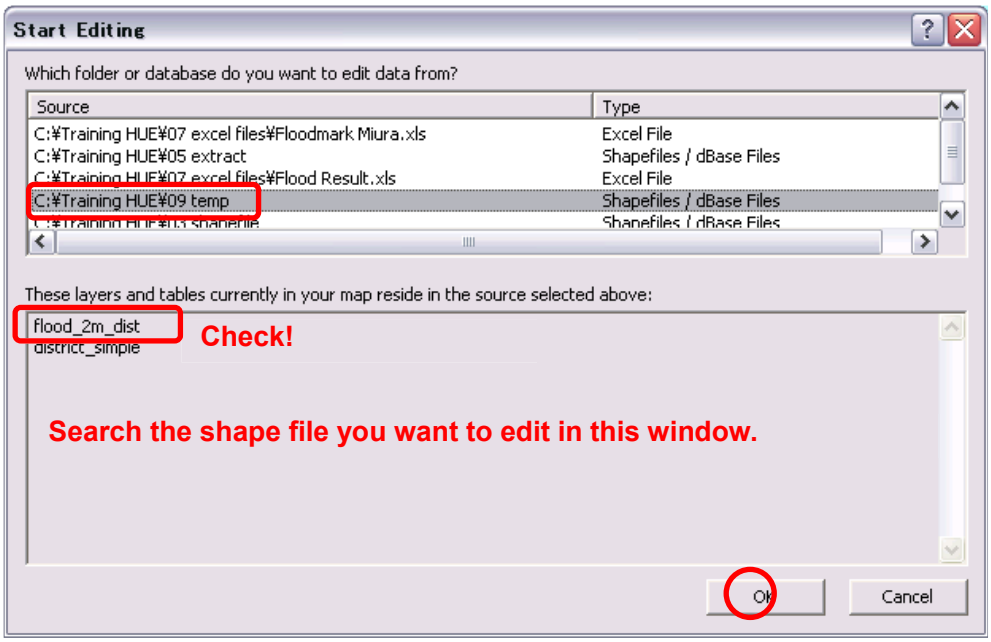
Selection>Select by attributes…





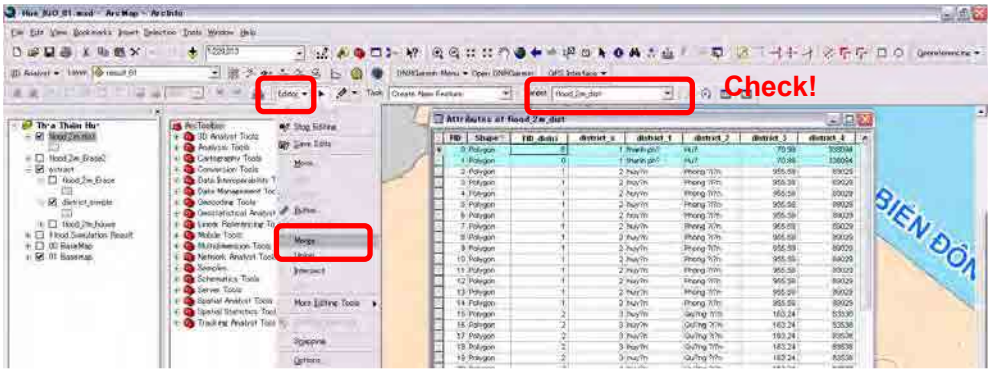
[Start Editing….]

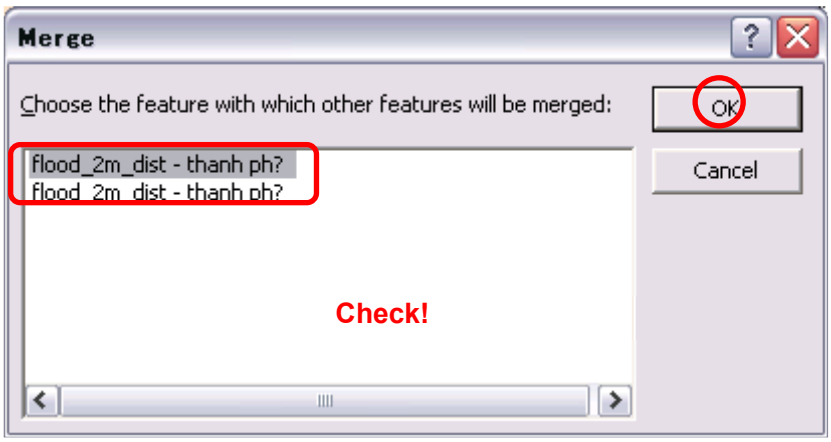
Editor>Start Editing

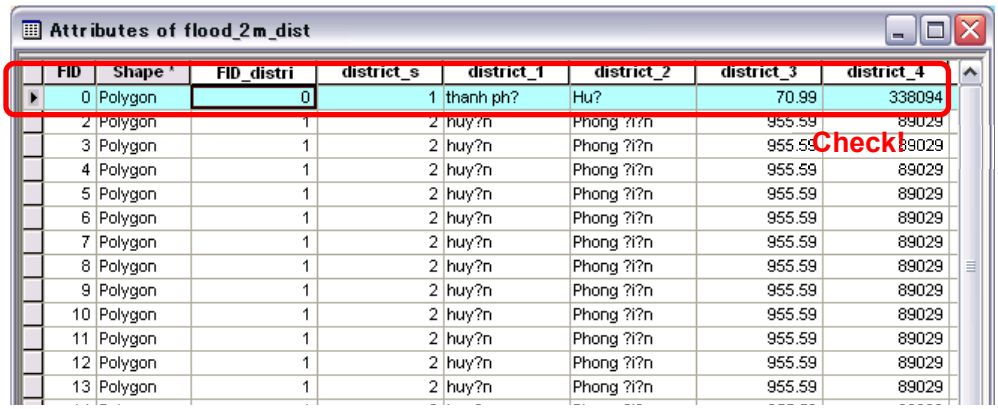


[Merge]

Editor>Merge

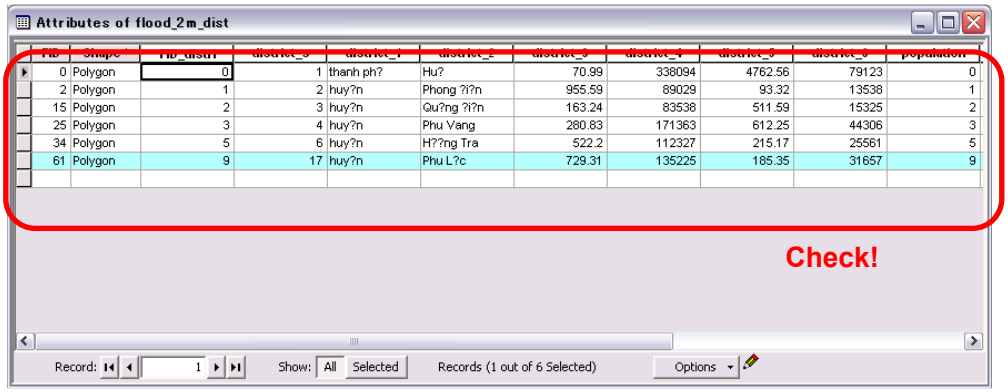






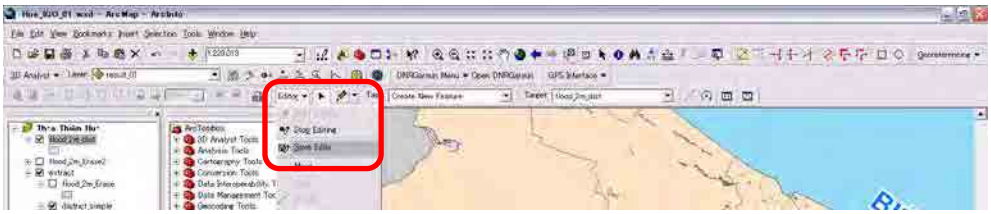
Please repeat this activity.

["1"=Phuong Dien], ["2"=Quang Dien], ["3"=Phu Vang], ["5"=Phuong Tra], ["9"=Phu Loc]



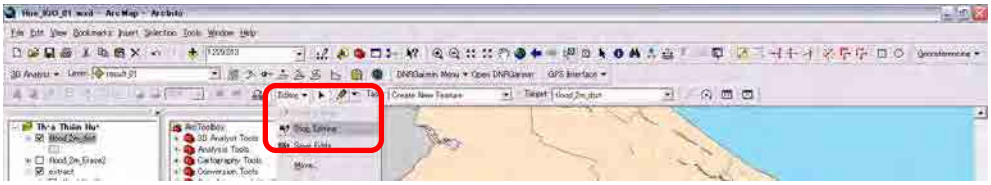
[Save Editing]

Editor>Save Editing

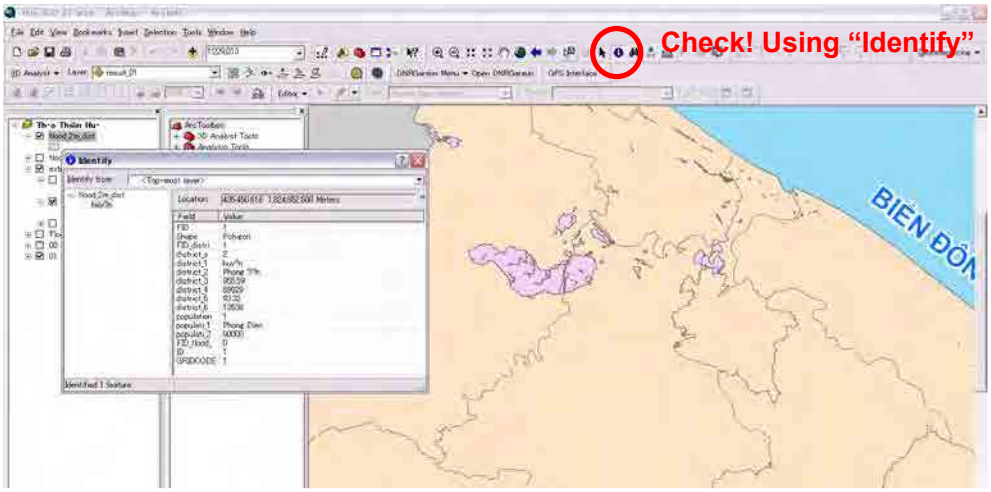


[Stop Editing]

Editor>Stop Editing



Let us look at the map.

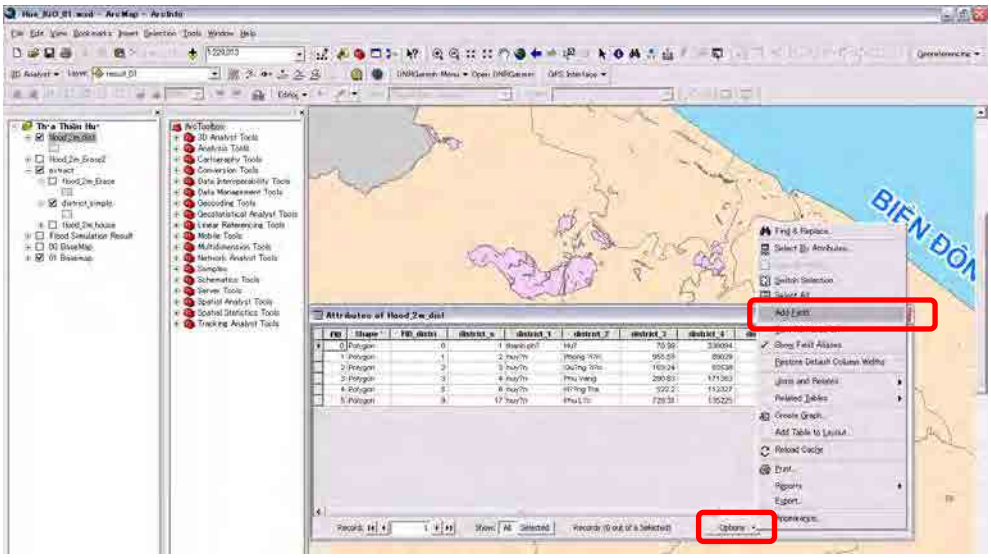


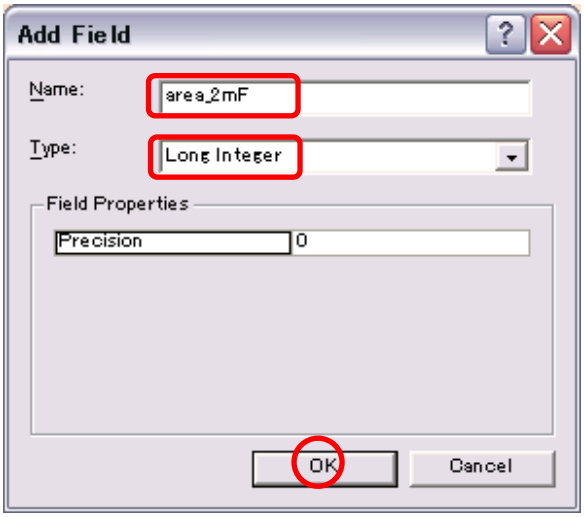
【6-4】 Calculate Geometry

Open the “Attribute Table” of the flood_2m_dist layer.

[Add Field]

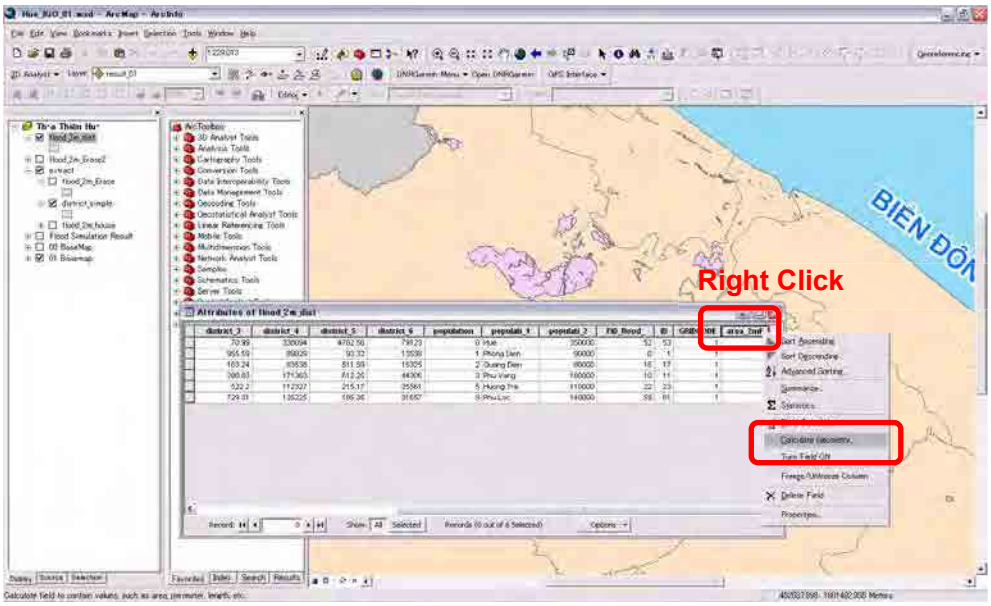
Options>Add Field

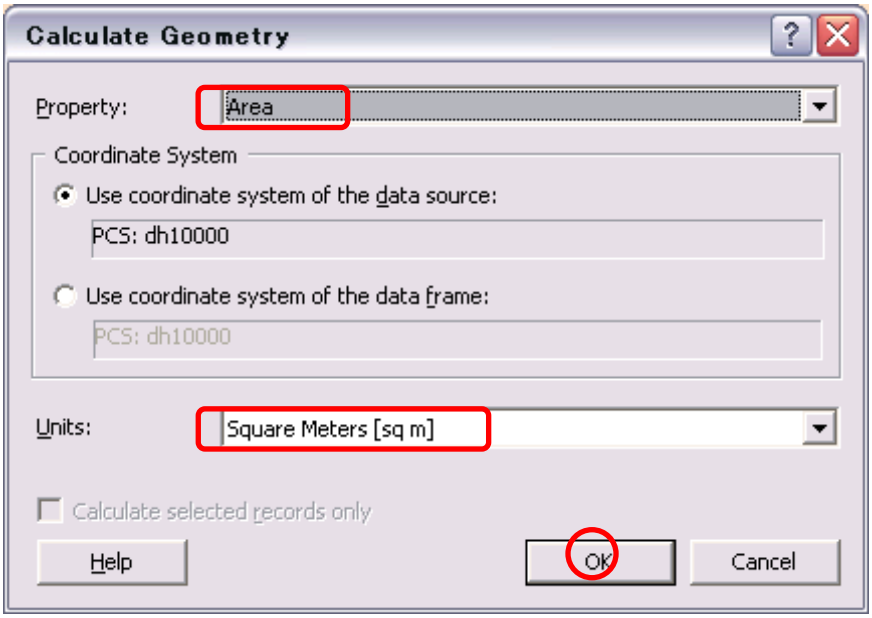


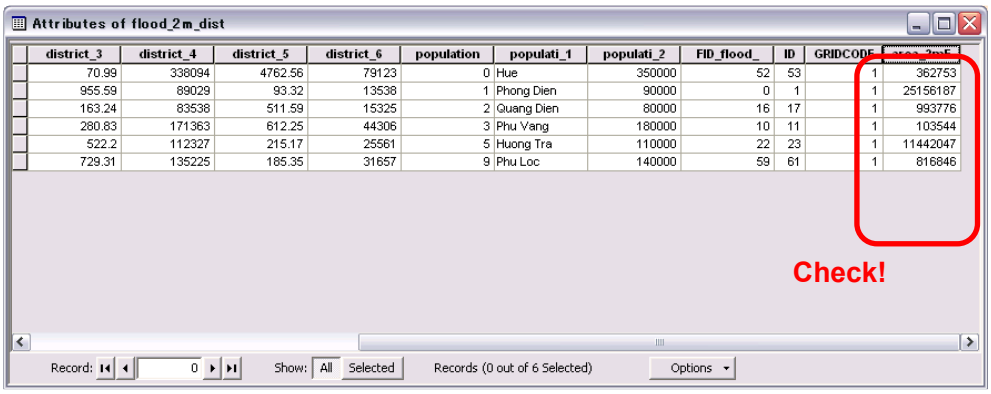


[Calculate Geometry]

Right Click on the Field>Calculate Geometry

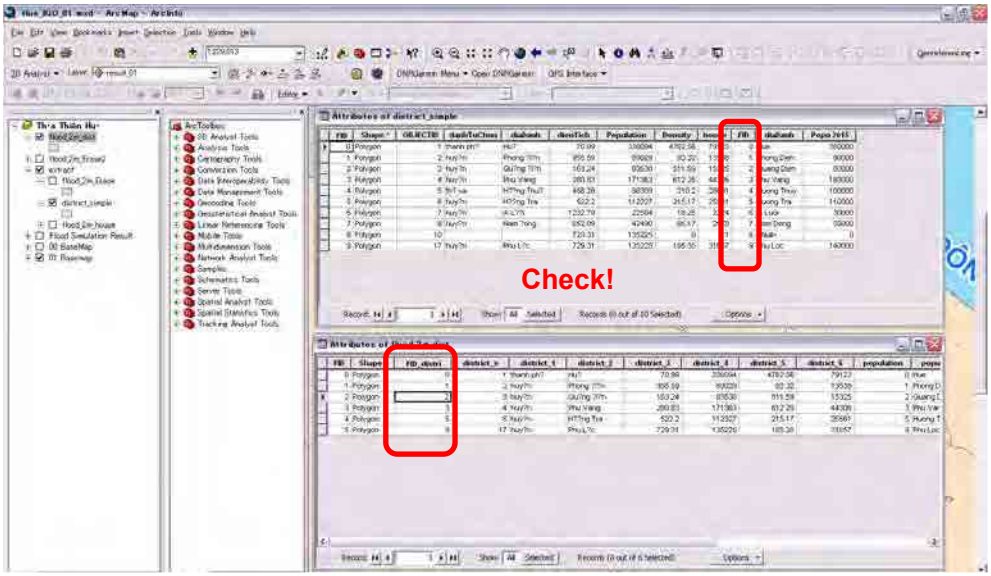



Calculate Geometry
Property:
Area
Coordinate System
Use coordinate system of the data source:
PCS: dh10000
Use coordinate system of the data frame:
PCS: dh10000
Units:
Square Meters [sq m]
Calculate selected records only
Help
OK
Cancel

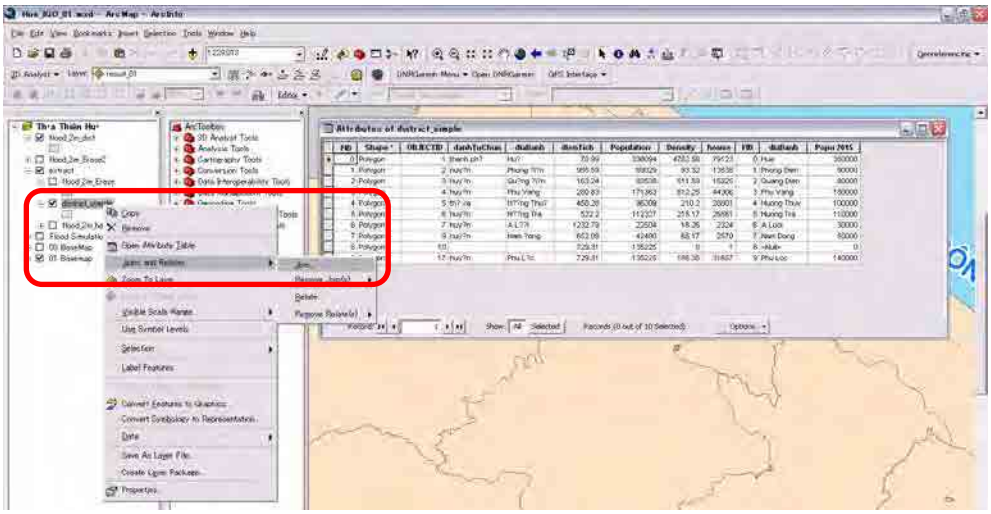

Attributes of flood_2m_dist
district_3 district_4 district_5 district_6 population populati_1 populati_2 FID_flood_ ID GRIDCODE
70.99 338094 4762.56 79123 0 Hue 350000 52 53 1 362753
955.59 89029 93.32 13538 1 Phong Dien 90000 0 1 1 25156187
163.24 83538 511.59 15325 2 Quang Dien 80000 16 17 1 993776
280.83 171363 612.25 44306 3 Phu Vang 180000 10 11 1 103544
522.2 112327 215.17 25561 5 Huong Tra 110000 22 23 1 11442047
729.31 135225 185.35 31657 9 Phu Loc 140000 59 61 1 816846
Check!
Record: 0
Show: All Selected
Records (0 out of 6 Selected)
Options

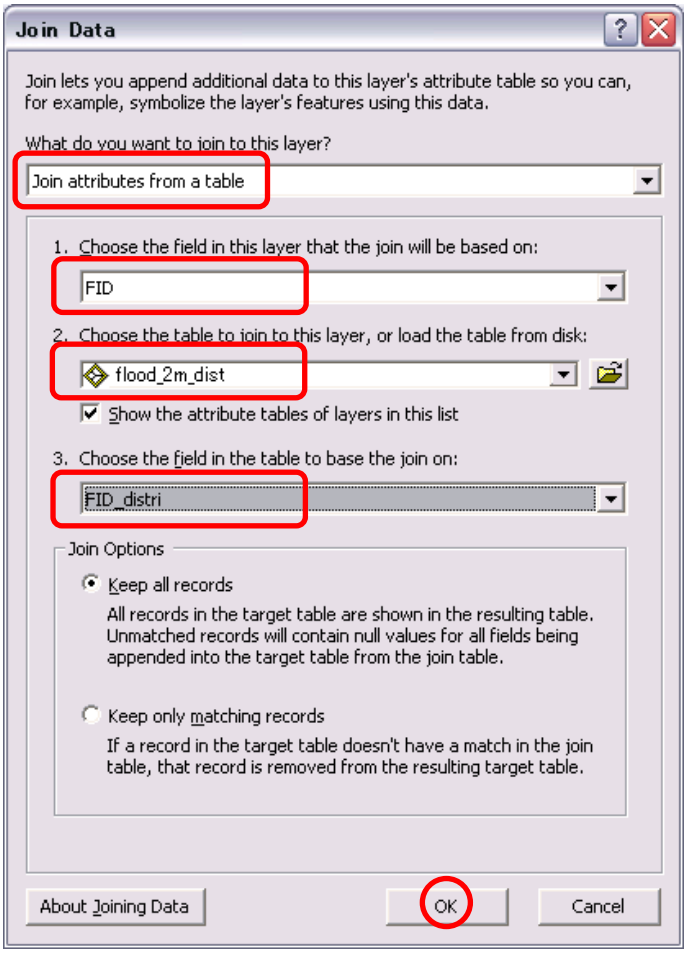
【6-5】 Finalize

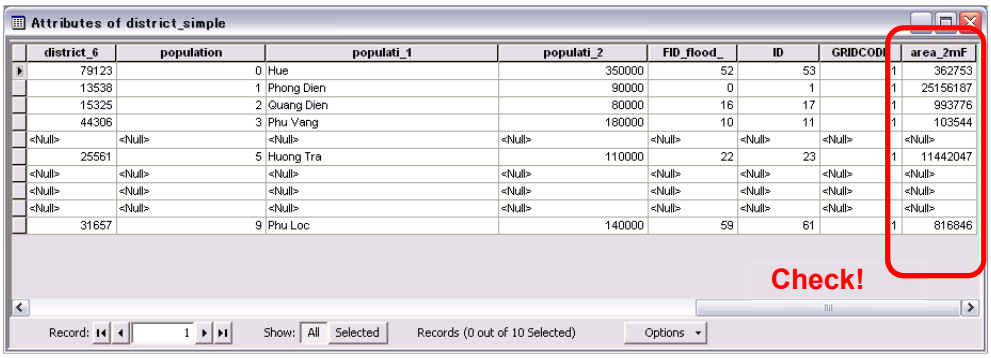
Open the attribute table of “flood_2m_dist” and “district_simple” layer.



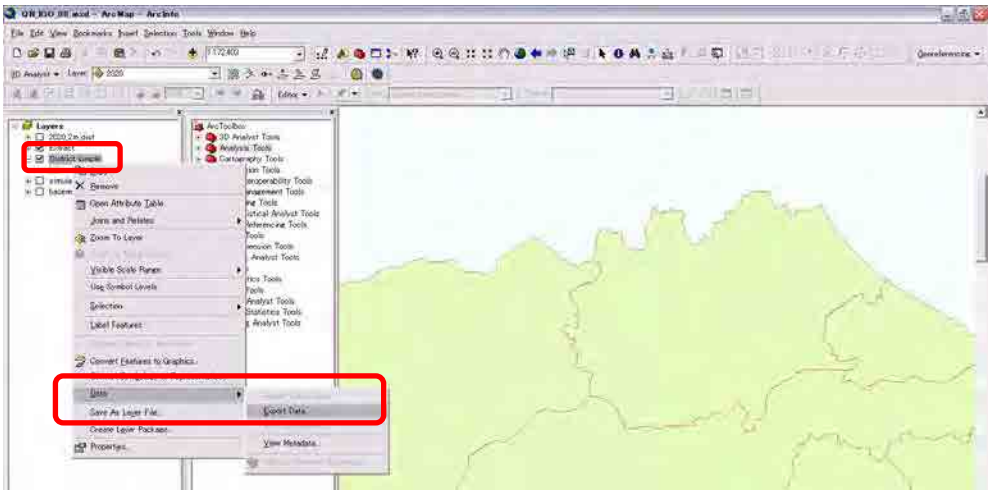
[Open “Join” on” district_simple” layer]

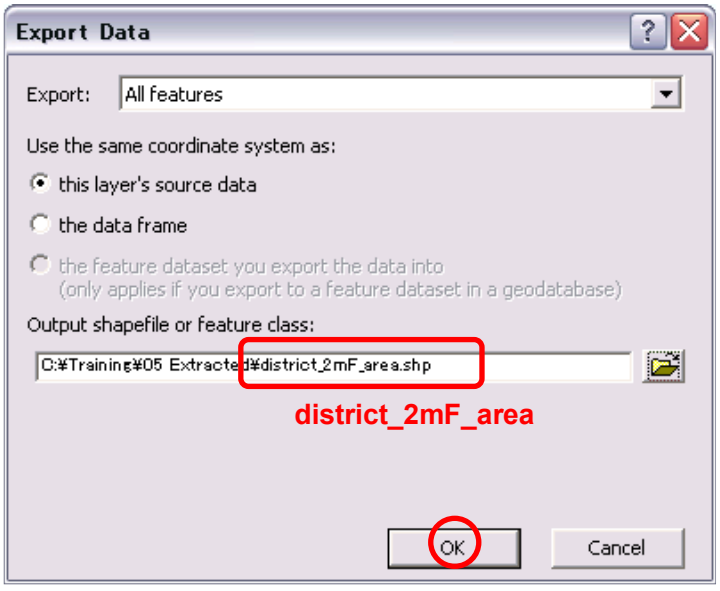



Join Data
Join lets you append additional data to this layer's attribute table so you can, for example, symbolize the layer's features using this data.
What do you want to join to this layer?
Join attributes from a table
1. Choose the field in this layer that the join will be based on:
FID
2. Choose the table to join to this layer, or load the table from disk:
flood_2m_dist
Show the attribute tables of layers in this list
3. Choose the field in the table to base the join on:
FID_distri
Join Options
Keep all records
All records in the target table are shown in the resulting table. Unmatched records will contain null values for all fields being appended into the target table from the join table.
Keep only matching records
If a record in the target table doesn't have a match in the join table, that record is removed from the resulting target table.
About Joining Data
OK
Cancel

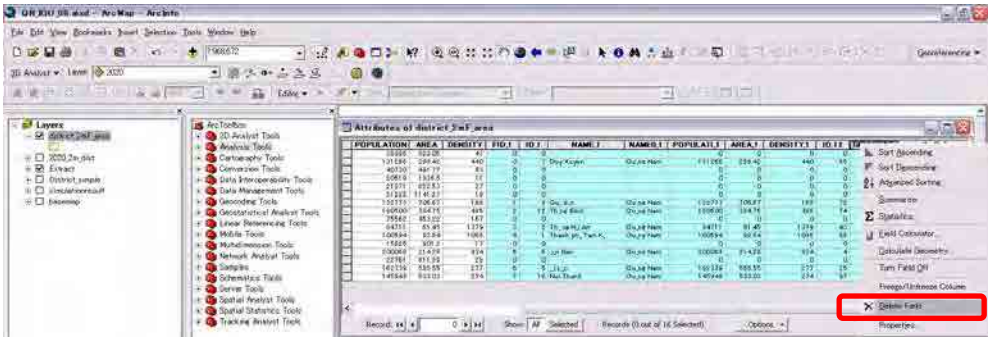


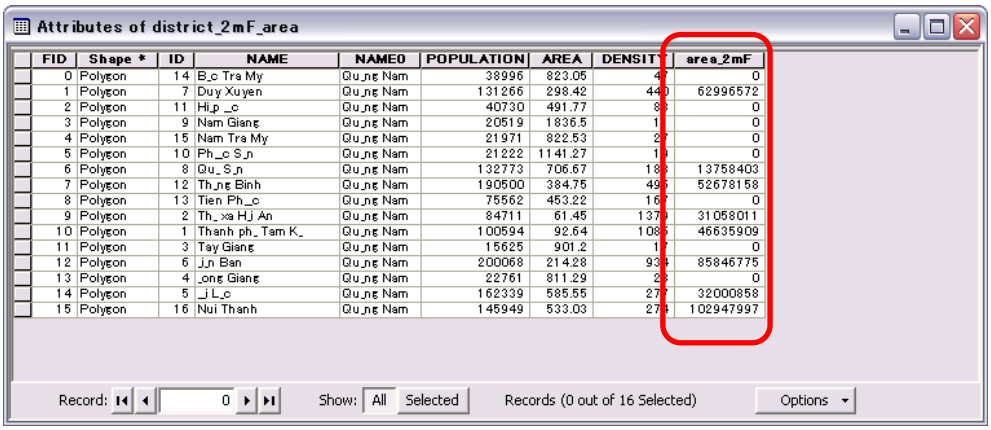
[Export Data from “district_simple”]





[Delete fields]





Attributes of district_2mF_area

FID	Shape *	ID	NAME	NAME0	POPULATION	AREA	DENSIT	ares_2mF
0	Polygon	14	B_c Tra My	Qu_ng Nam	38996	823.05	47	0
1	Polygon	7	Duy Xuyen	Qu_ng Nam	131266	298.42	440	62996572
2	Polygon	11	Hi_p _c	Qu_ng Nam	40730	491.77	83	0
3	Polygon	9	Nam Giang	Qu_ng Nam	20519	1836.5	11	0
4	Polygon	15	Nam Tra My	Qu_ng Nam	21971	822.53	27	0
5	Polygon	10	Ph_c S_n	Qu_ng Nam	21222	1141.27	19	0
6	Polygon	8	Qu_ S_n	Qu_ng Nam	132773	706.67	188	13758403
7	Polygon	12	Th_ng Binh	Qu_ng Nam	190500	384.75	495	52678158
8	Polygon	13	Tien Ph_c	Qu_ng Nam	75562	453.22	167	0
9	Polygon	2	Th_ xa H_i An	Qu_ng Nam	84711	61.45	1379	31058011
10	Polygon	1	Thanh ph_ Tam K_	Qu_ng Nam	100594	92.64	1086	46635909
11	Polygon	3	Tay Giang	Qu_ng Nam	15625	901.2	17	0
12	Polygon	6	_i_n Ban	Qu_ng Nam	200068	214.28	934	85846775
13	Polygon	4	_ong Giang	Qu_ng Nam	22761	811.29	28	0
14	Polygon	5	_i L_c	Qu_ng Nam	162339	585.55	277	32000858
15	Polygon	16	Nui Thanh	Qu_ng Nam	145949	533.03	274	102947997

Record: 0 Show: All Selected Records (0 out of 16 Selected) Options

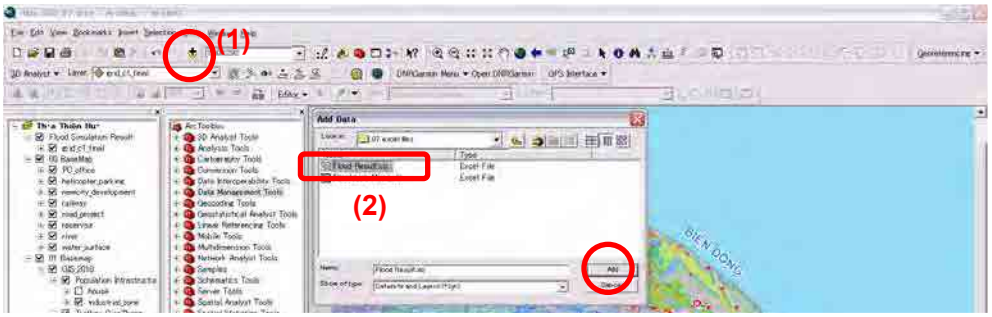
Course 7 Conversion from Simulation Results of MIKE

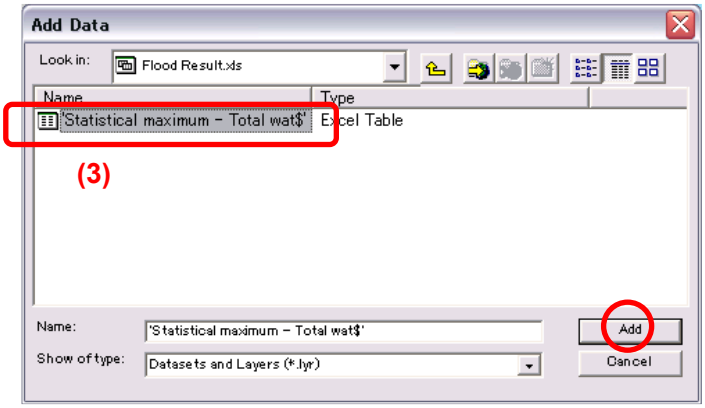
【7-1】 Add Excel Data

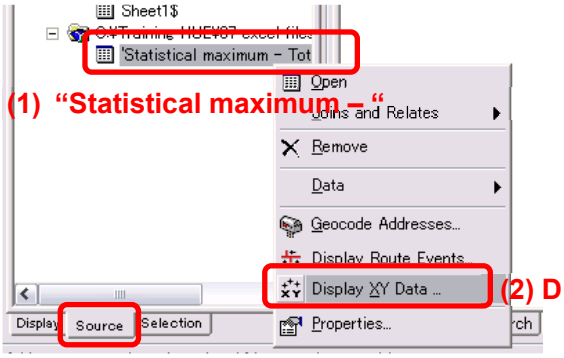
Open the “Flood result.xlsx”.

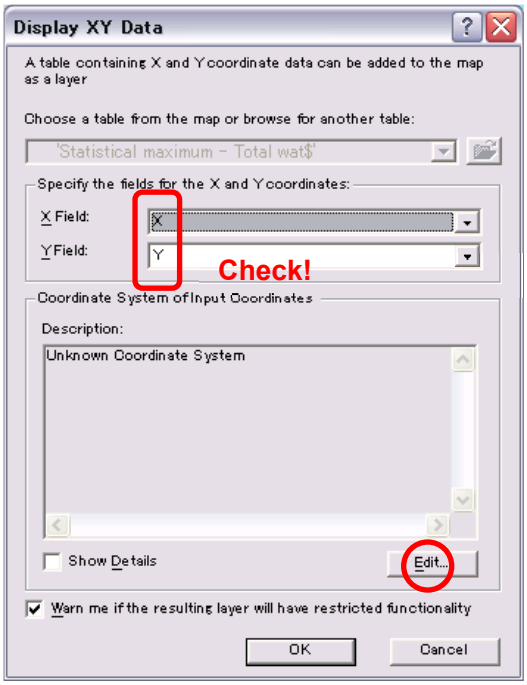
	A	B	C	D	E
	X	Y	Z	Depth	Check!
	444005.9	1826142	6.298789	0.015756	
	444100.1	1826111	5.99089	0.015756	
	444021.7	1826160	7.107442	0.015756	
	444333.8	1826002	5.557705	0.015756	
	444283.6	1826037	5.821074	0.015756	
	443668.1	1828252	2.377605	1.303079	
	443462.5	1827619	4.040099	0.623622	
	444198.6	1826086	5.799091	0.0173	
	443979.1	1826182	7.769981	0.015756	
	444115.3	1826129	6.520854	0.015756	
	444072.4	1826153	7.204498	0.015756	
	443883.2	1826246	8.864258	0.015756	
	448650.5	1823471	2.601635	0.456396	
	448854.5	1823988	2.07561	0.970245	
	450408.6	1827645	0.911355	1.415193	
	450491.3	1827700	0.700056	1.626304	

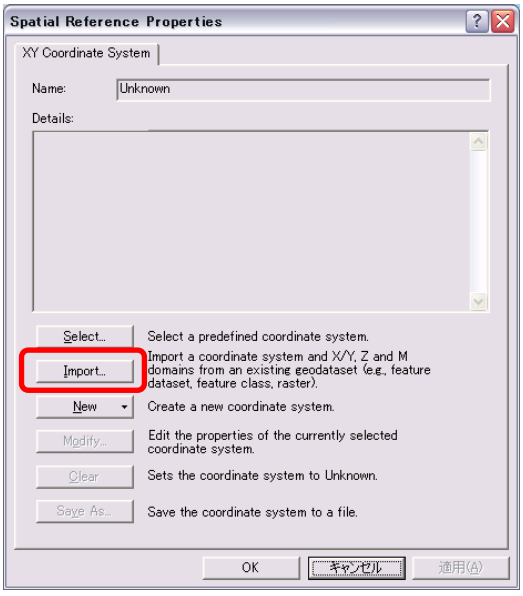
Add Data

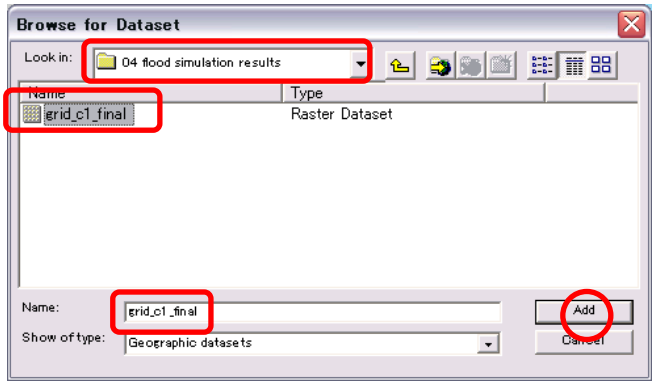


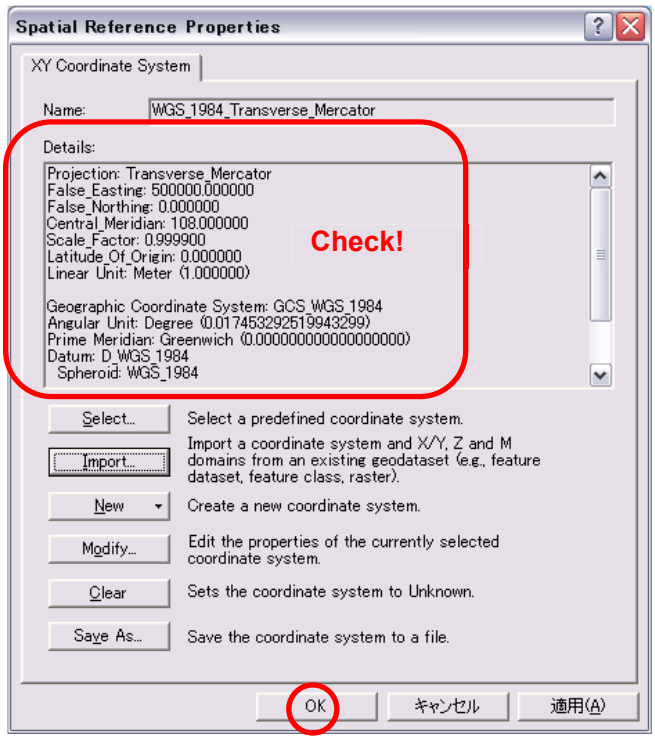


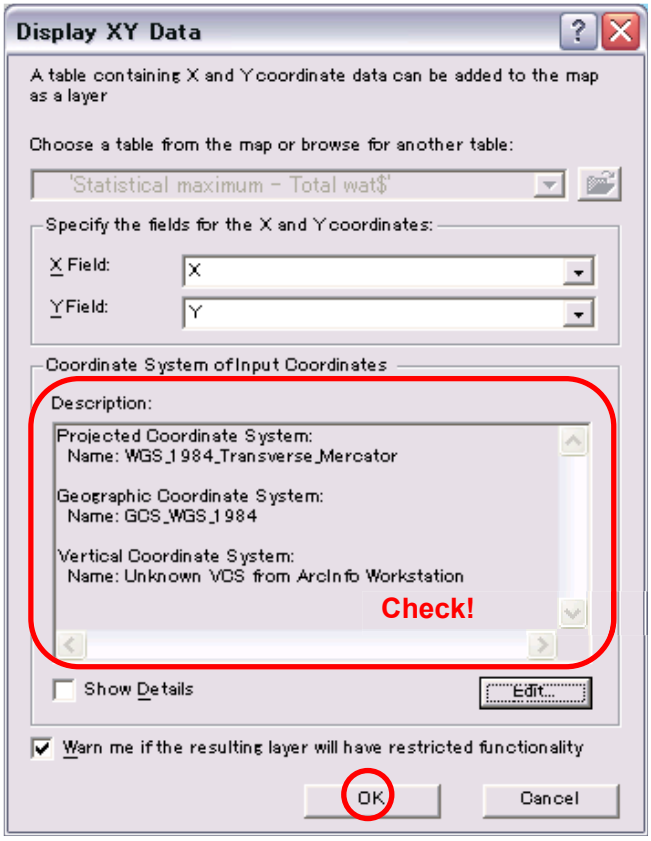

Sheet1$
'Statistical maximum - Tot
(1) “Statistical maximum – “
Open
Joins and Relates
Remove
Data
Geocode Addresses...
Display Route Events...
Display XY Data ...
(2) Display XY data
Properties...
Display
Source
Selection

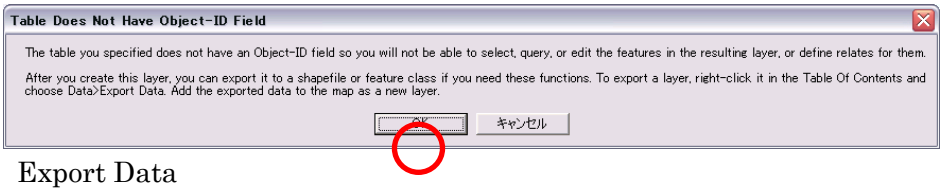

Display XY Data
A table containing X and Y coordinate data can be added to the map as a layer
Choose a table from the map or browse for another table:
'Statistical maximum - Total wat$'
Specify the fields for the X and Y coordinates:
X Field:
X
Y Field:
Y
Check!
Coordinate System of Input Coordinates
Description:
Unknown Coordinate System
Show Details
Edit...
Warn me if the resulting layer will have restricted functionality
OK
Cancel


Spatial Reference Properties
XY Coordinate System
Name:
Unknown
Details:
Select...
Select a predefined coordinate system.
Import...
Import a coordinate system and X/Y, Z and M domains from an existing geodataset (e.g., feature dataset, feature class, raster).
New
Create a new coordinate system.
Modify...
Edit the properties of the currently selected coordinate system.
Clear
Sets the coordinate system to Unknown.
Save As...
Save the coordinate system to a file.
OK
キャンセル
適用(A)

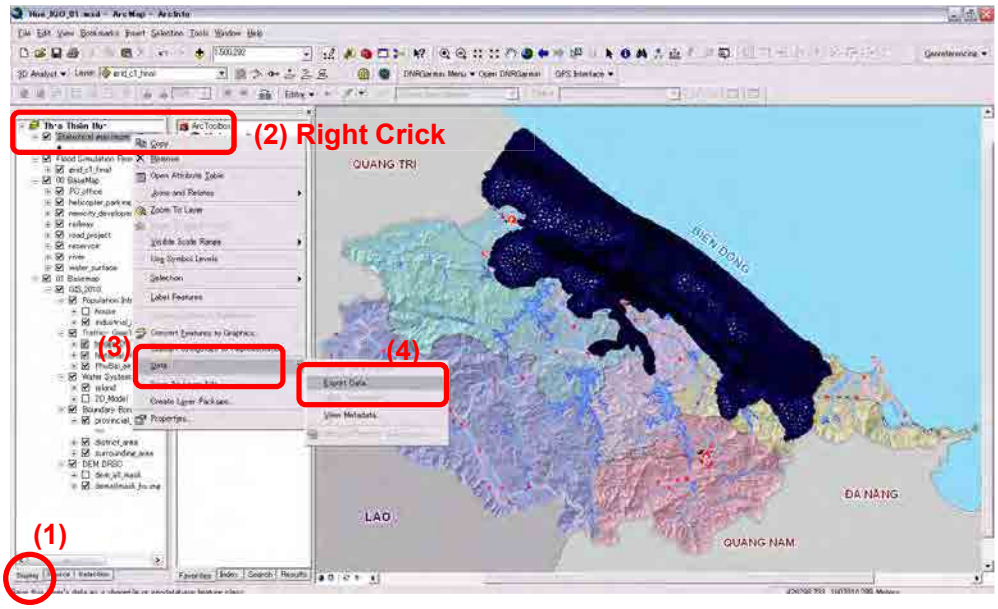

Browse for Dataset
Look in:
04 flood simulation results
Name
Type
grid_c1_final
Raster Dataset
Name:
grid_c1_final
Add
Show of type:
Geographic datasets
Cancel

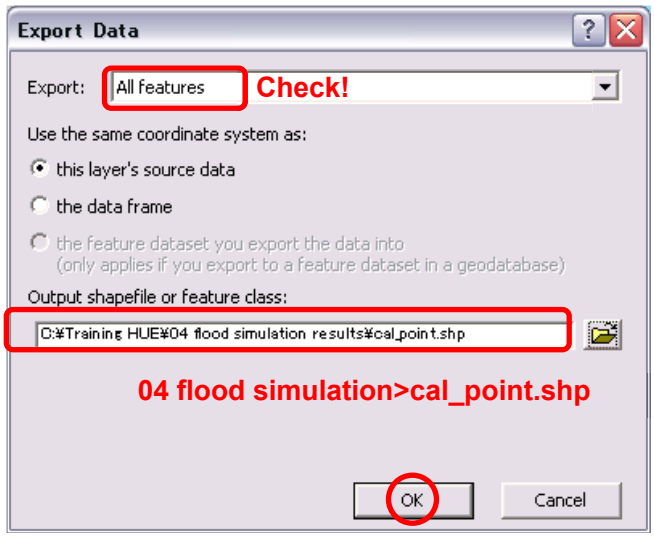

Spatial Reference Properties
XY Coordinate System
Name:
WGS_1984_Transverse_Mercator
Details:
Projection: Transverse_Mercator
False_Easting: 500000.000000
False_Northing: 0.000000
Central_Meridian: 108.000000
Scale_Factor: 0.999900
Latitude_Of_Origin: 0.000000
Linear Unit: Meter (1.000000)
Geographic Coordinate System: GCS_WGS_1984
Angular Unit: Degree (0.0174532925199433299)
Prime Meridian: Greenwich (0.000000000000000000)
Datum: D_WGS_1984
Spheroid: WGS_1984
Check!
Select...
Select a predefined coordinate system.
Import...
Import a coordinate system and X/Y, Z and M domains from an existing geodataset (e.g., feature dataset, feature class, raster).
New
Create a new coordinate system.
Modify...
Edit the properties of the currently selected coordinate system.
Clear
Sets the coordinate system to Unknown.
Save As...
Save the coordinate system to a file.
OK
キャンセル
適用(A)

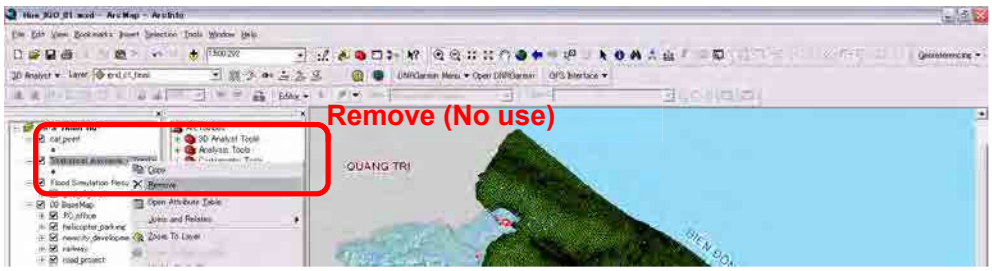


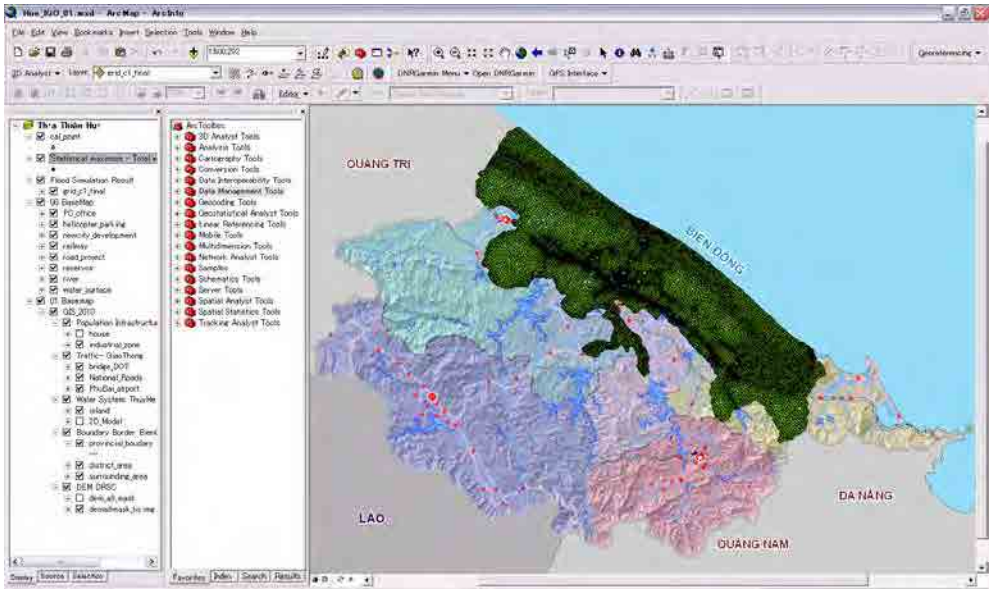


【7-2】 Export Data



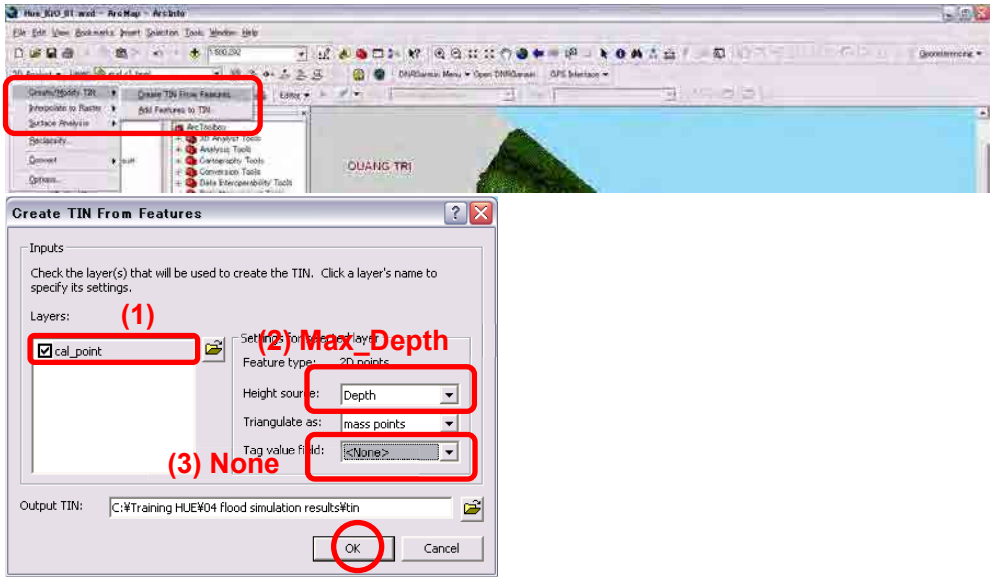

Export Data
Export:
All features
Check!
Use the same coordinate system as:
this layer's source data
the data frame
the feature dataset you export the data into
(only applies if you export to a feature dataset in a geodatabase)
Output shapefile or feature class:
C:¥Training HUE¥04 flood simulation results¥cal_point.shp
04 flood simulation>cal_point.shp
OK
Cancel

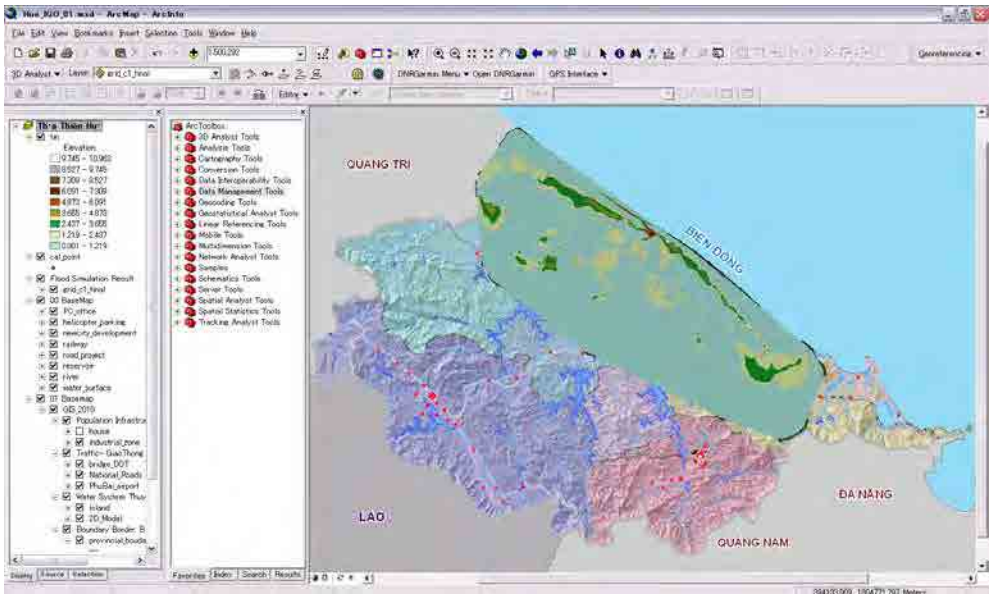

Remove (No use)
QUANG TRI


QUANG TRI
BIEN DONG
DA NANG
LAO
QUANG NAM

【7-3】 Point Data to TIN

[Create TIN from Feature by using 3D Analyst]

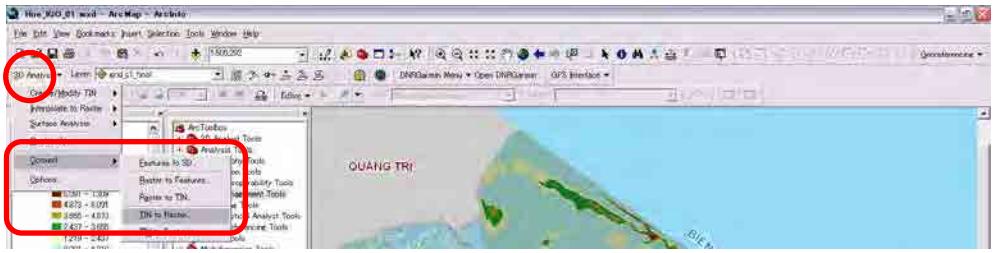


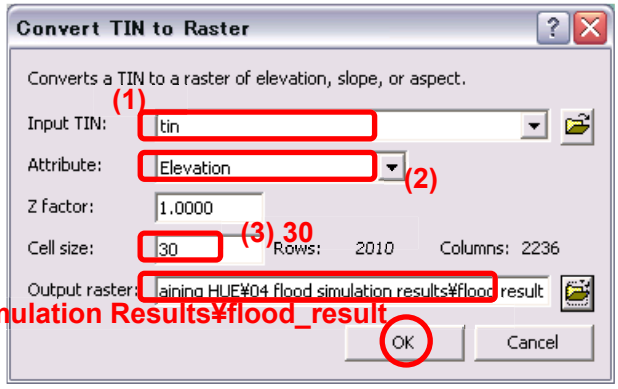


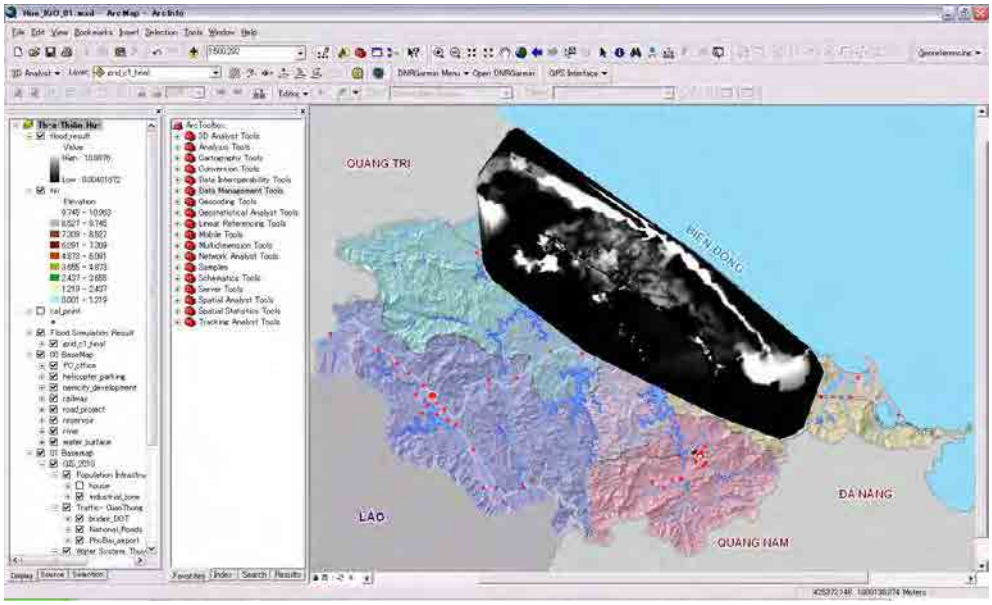
【7-4】 TIN to Raster

[Click off the “cal_point”]

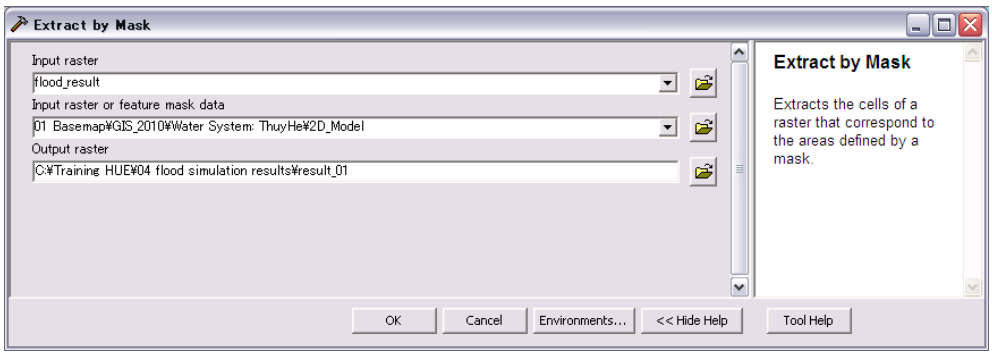
3D Analyst>Convert>Tin to Raster

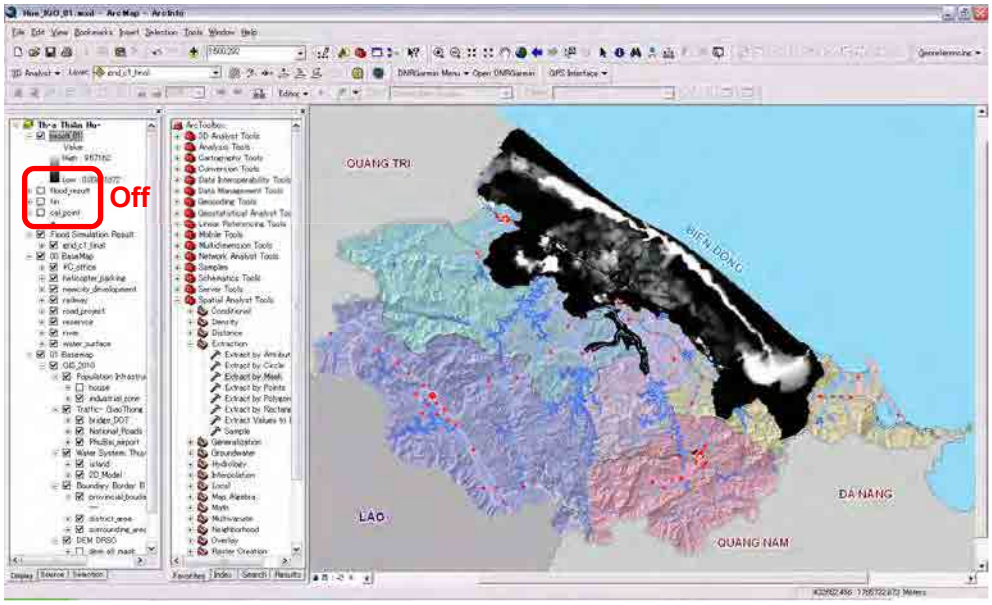




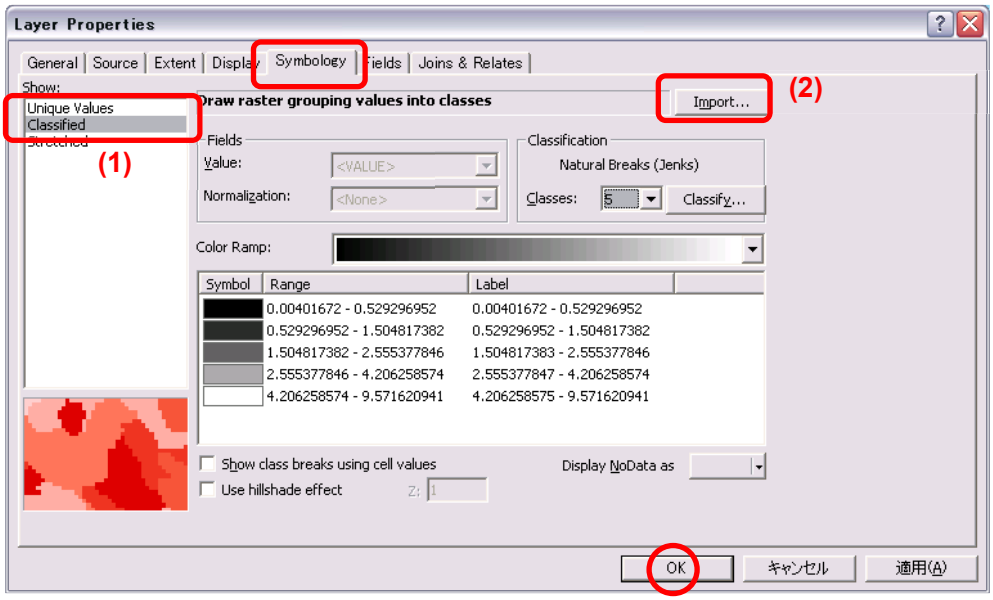


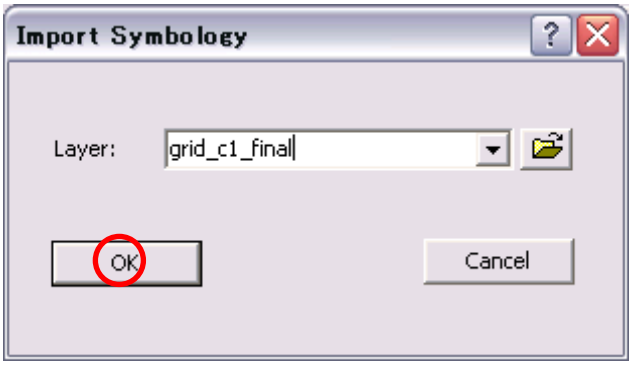
[Clip the 2D area] by Using "**Extract by Mask**" Tool.

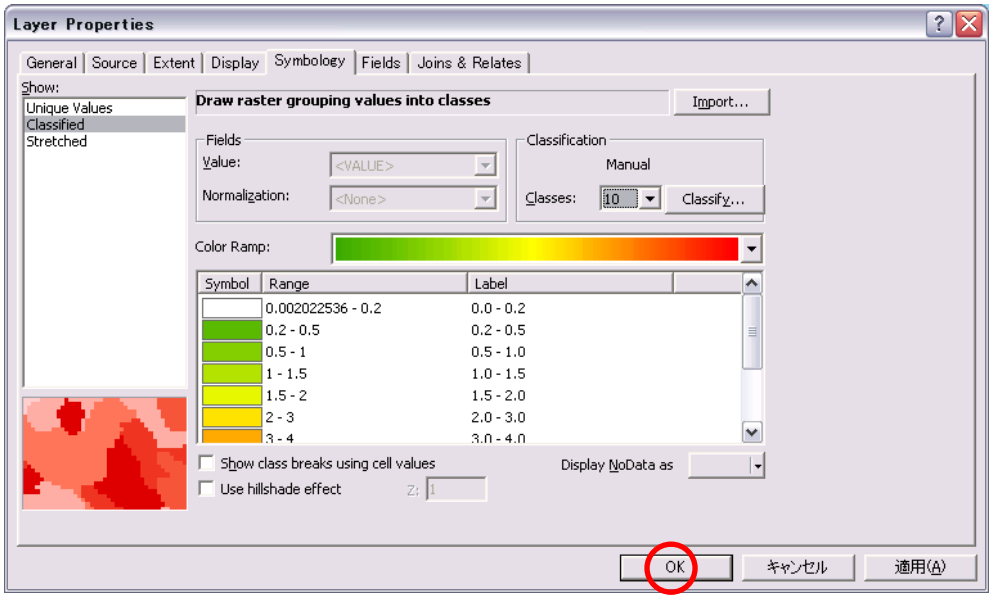


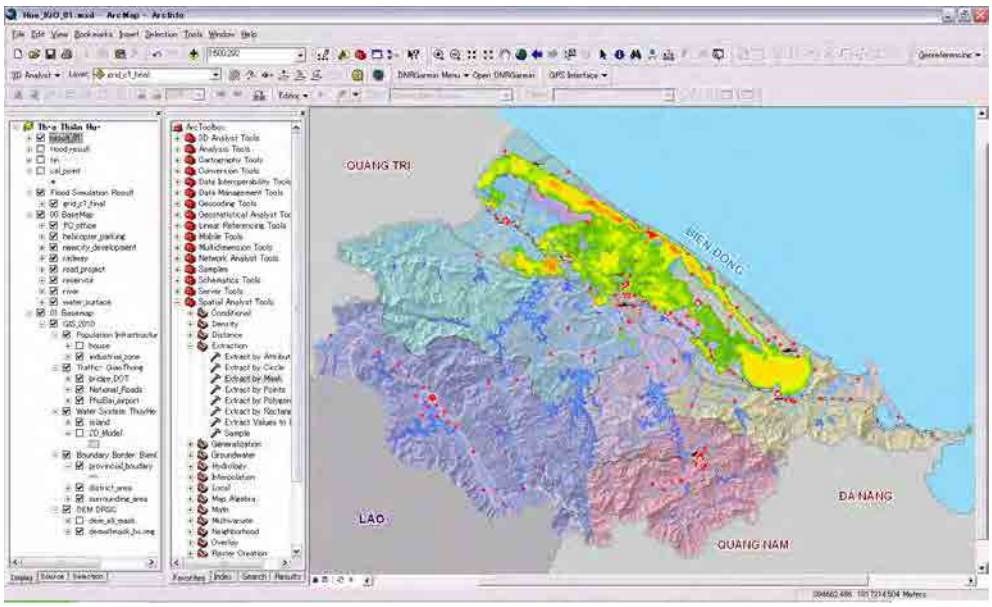


【7-5】 Import Layer File




Import Symbology
Layer:
grid_c1_final
OK
Cancel

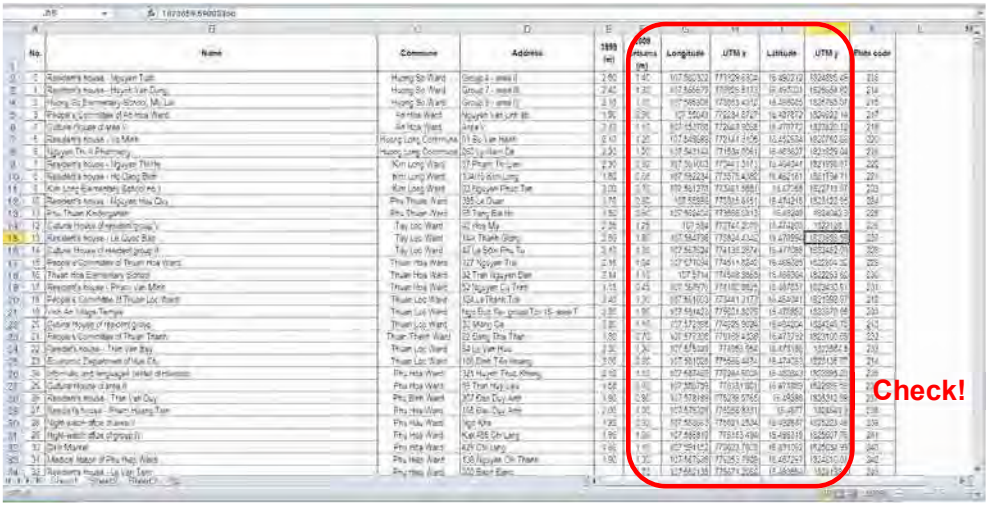

Layer Properties
General
Source
Extent
Display
Symbology
Fields
Joins & Relates
Show:
Unique Values
Classified
Stretched
Draw raster grouping values into classes
Import...
Fields
Value:
<VALUE>
Normalization:
<None>
Classification
Manual
Classes:
10
Classify...
Color Ramp:
Symbol
Range
Label
0.002022536 - 0.2
0.0 - 0.2
0.2 - 0.5
0.2 - 0.5
0.5 - 1
0.5 - 1.0
1 - 1.5
1.0 - 1.5
1.5 - 2
1.5 - 2.0
2 - 3
2.0 - 3.0
3 - 4
3.0 - 4.0
Show class breaks using cell values
Display NoData as
Use hillshade effect
OK
キャンセル
適用(A)

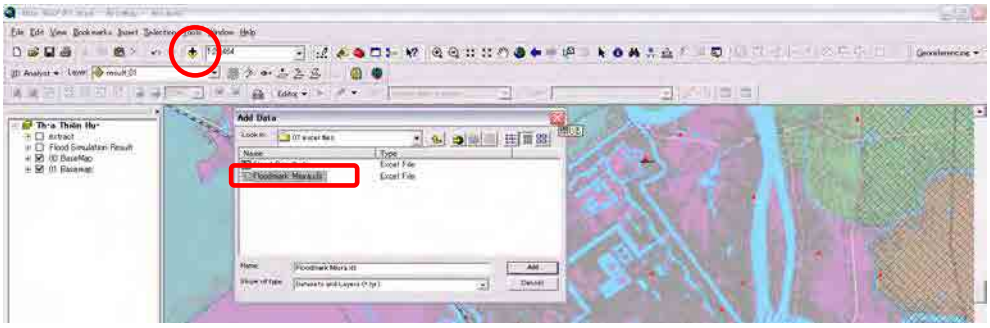

QUANG TRI
BIEN DONG
DA NANG
LAO
QUANG NAM

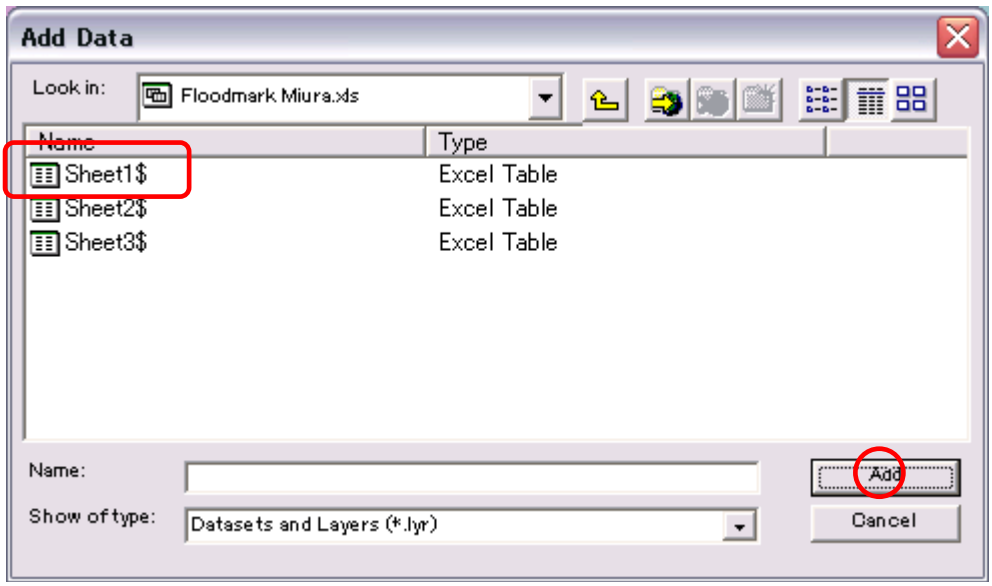
Course Add-1 Add Point Shapefile from GPS

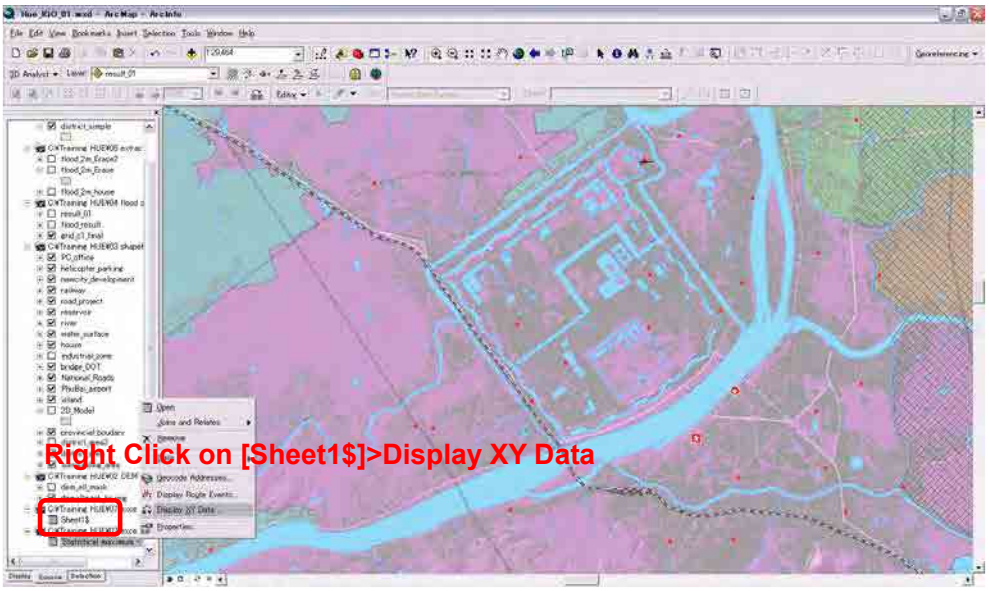
【A1-1】Add point data from Excel Table

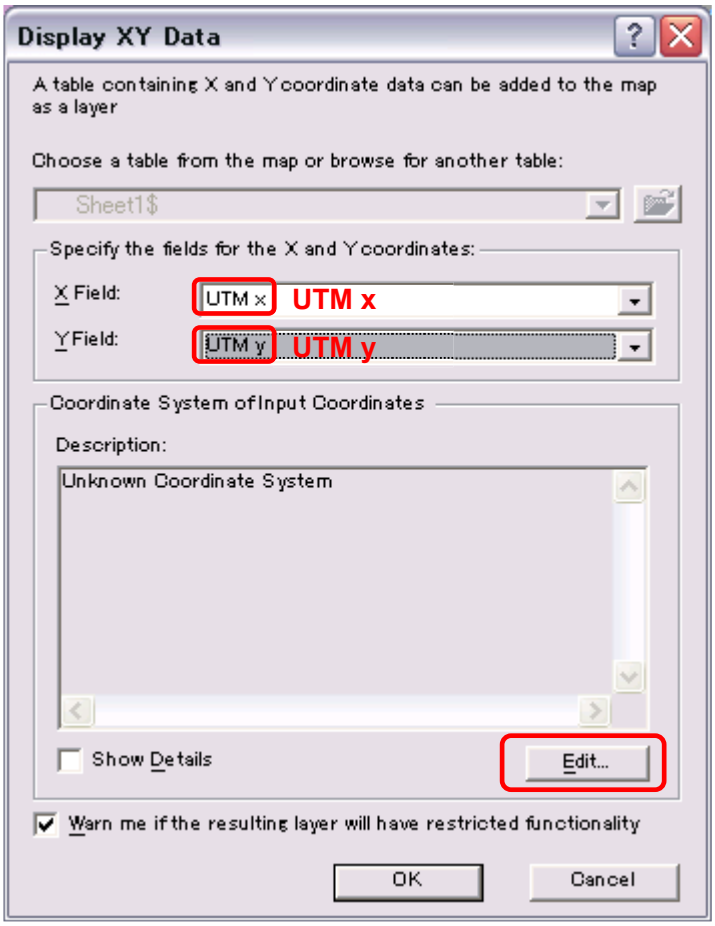
Open the excel file of “Floodmark Miura.xlsx”.

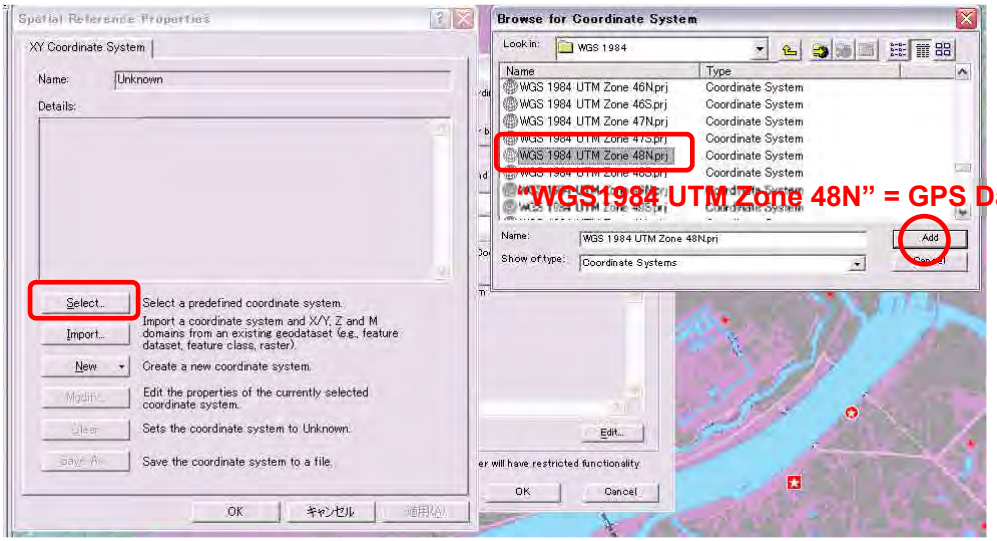


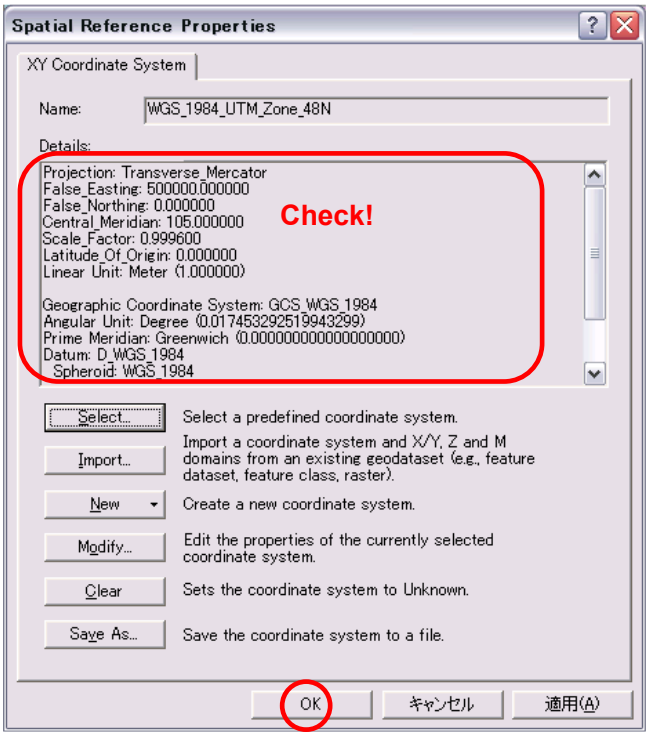


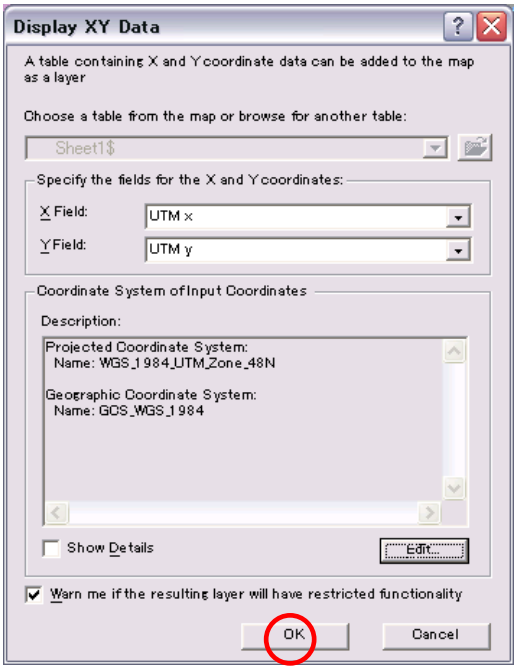


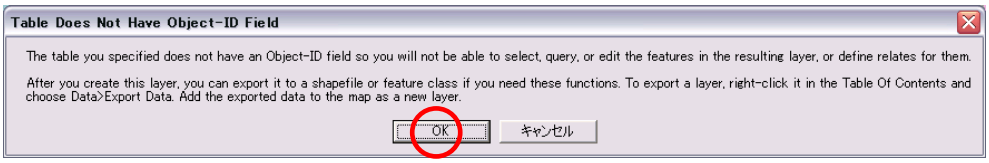

Right Click on [Sheet1$]>Display XY Data


Display XY Data
A table containing X and Y coordinate data can be added to the map as a layer
Choose a table from the map or browse for another table:
Sheet1$
Specify the fields for the X and Y coordinates:
X Field:
UTM x
UTM x
Y Field:
UTM y
UTM y
Coordinate System of Input Coordinates
Description:
Unknown Coordinate System
Show Details
Edit...
Warn me if the resulting layer will have restricted functionality
OK
Cancel

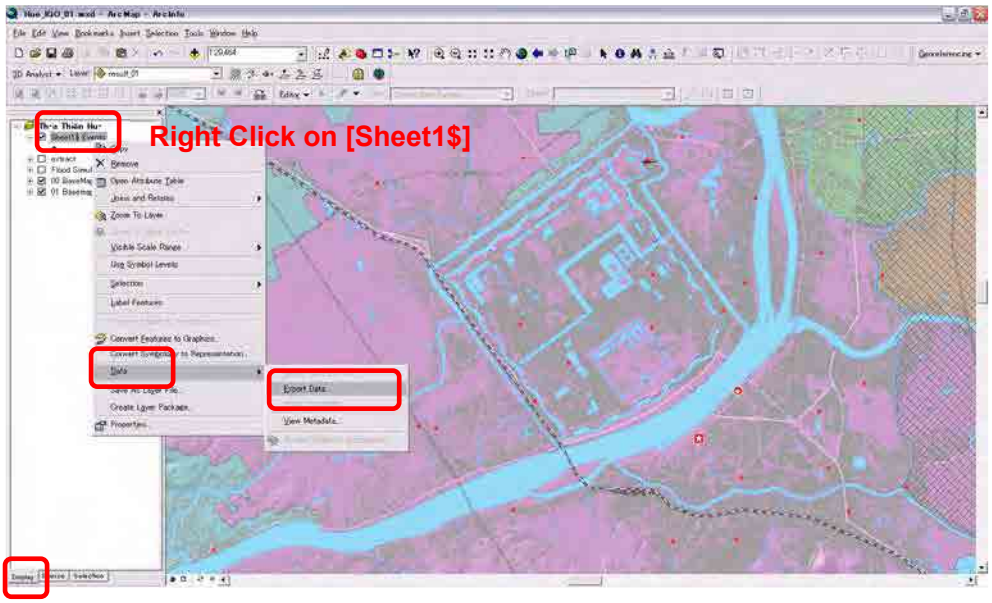

Spatial Reference Properties
XY Coordinate System
Name: Unknown
Details:
Select...
Import...
New
Modify...
Clear
Save As...
Select a predefined coordinate system.
Import a coordinate system and X/Y, Z and M domains from an existing geodataset (e.g., feature dataset, feature class, raster).
Create a new coordinate system.
Edit the properties of the currently selected coordinate system.
Sets the coordinate system to Unknown.
Save the coordinate system to a file.
OK
キャンセル
適用(A)
Browse for Coordinate System
Look in: WGS 1984
Name
Type
WGS 1984 UTM Zone 46N.prj
WGS 1984 UTM Zone 46S.prj
WGS 1984 UTM Zone 47N.prj
WGS 1984 UTM Zone 47S.prj
WGS 1984 UTM Zone 48N.prj
WGS 1984 UTM Zone 48S.prj
Coordinate System
Name: WGS 1984 UTM Zone 48N.prj
Show of type: Coordinate Systems
Add
Cancel
Edit...
OK
Cancel
"WGS1984 UTM Zone 48N" = GPS Data

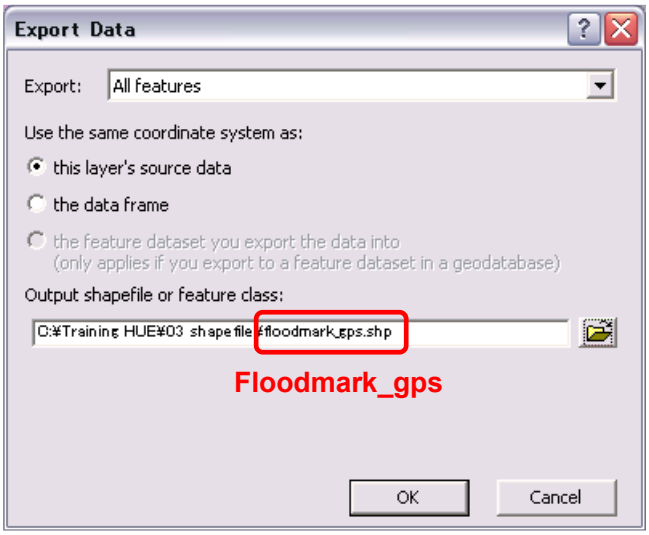

Spatial Reference Properties
XY Coordinate System
Name: WGS_1984_UTM_Zone_48N
Details:
Projection: Transverse_Mercator
False_Easting: 500000.000000
False_Northing: 0.000000
Central_Meridian: 105.000000
Scale_Factor: 0.999600
Latitude_Of_Origin: 0.000000
Linear Unit: Meter (1.000000)
Geographic Coordinate System: GCS_WGS_1984
Angular Unit: Degree (0.0174532925199433299)
Prime Meridian: Greenwich (0.000000000000000000)
Datum: D_WGS_1984
Spheroid: WGS_1984
Check!
Select...
Import...
New
Modify...
Clear
Save As...
Select a predefined coordinate system.
Import a coordinate system and X/Y, Z and M domains from an existing geodataset (e.g., feature dataset, feature class, raster).
Create a new coordinate system.
Edit the properties of the currently selected coordinate system.
Sets the coordinate system to Unknown.
Save the coordinate system to a file.
OK
キャンセル
適用(A)

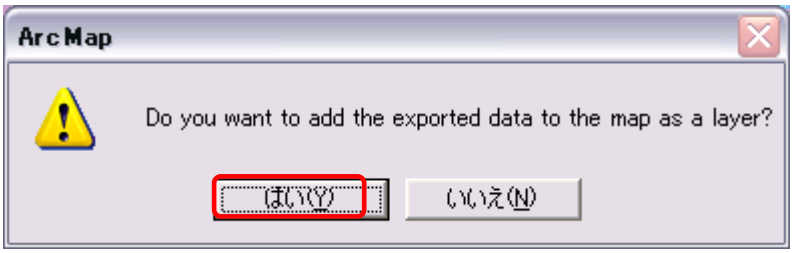


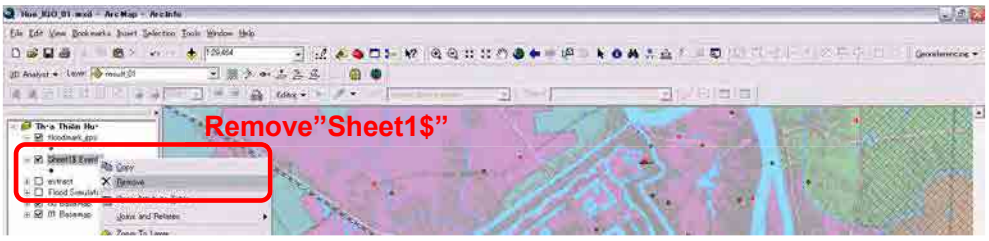


Export Data of “Sheet1$”



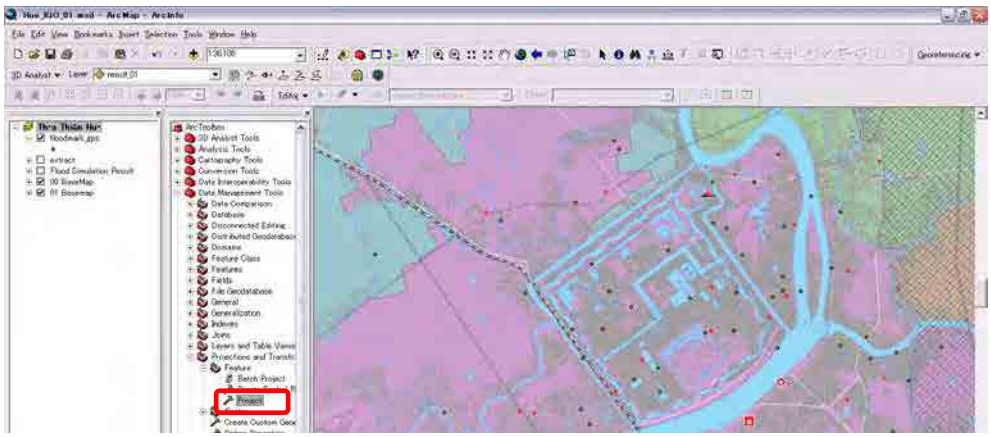


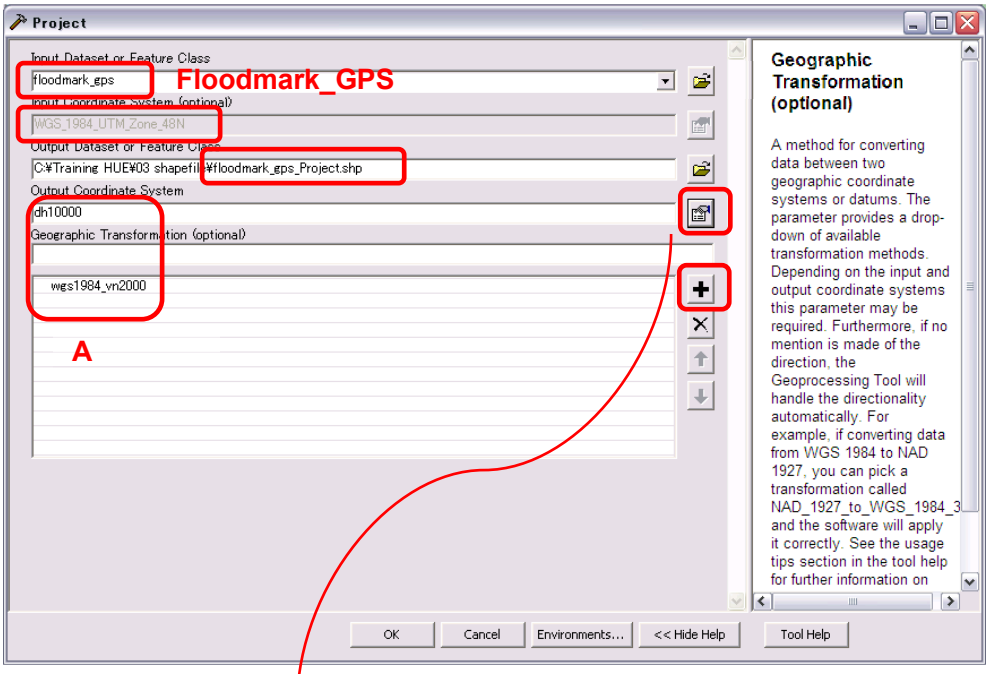


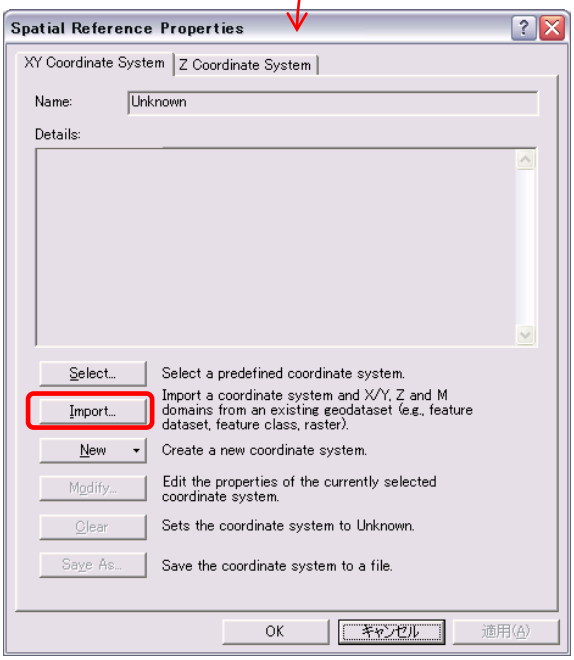


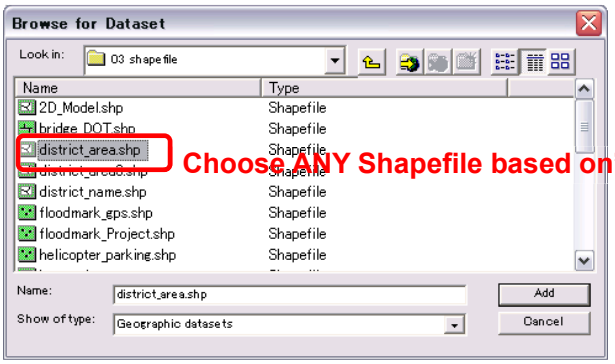
【A1-2】Change coordinate system from WGS84 to VN2000

Data Management Tools>Projections and Transformation>Feature>***Project***

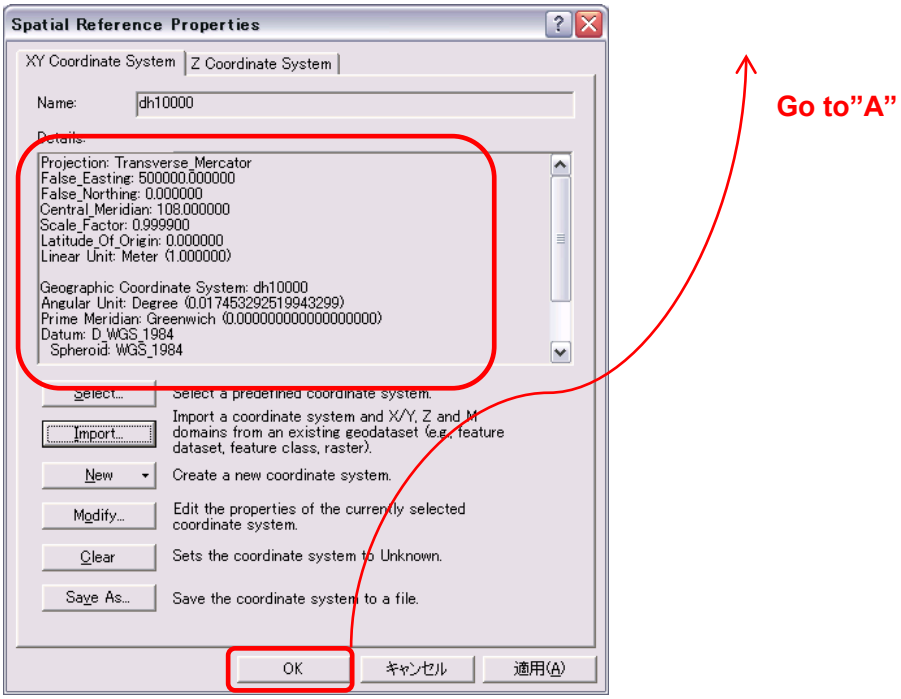




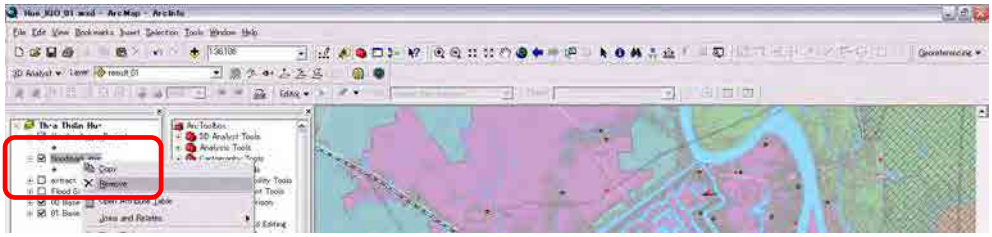


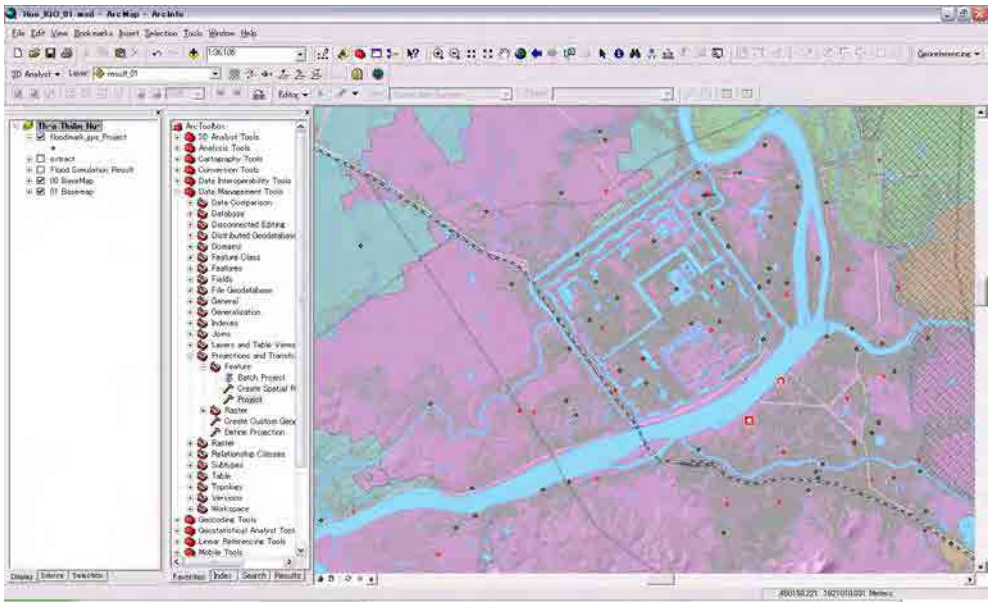


Choose ANY Shapefile based on"VN2000"



Remove “Floodmark_GPS”

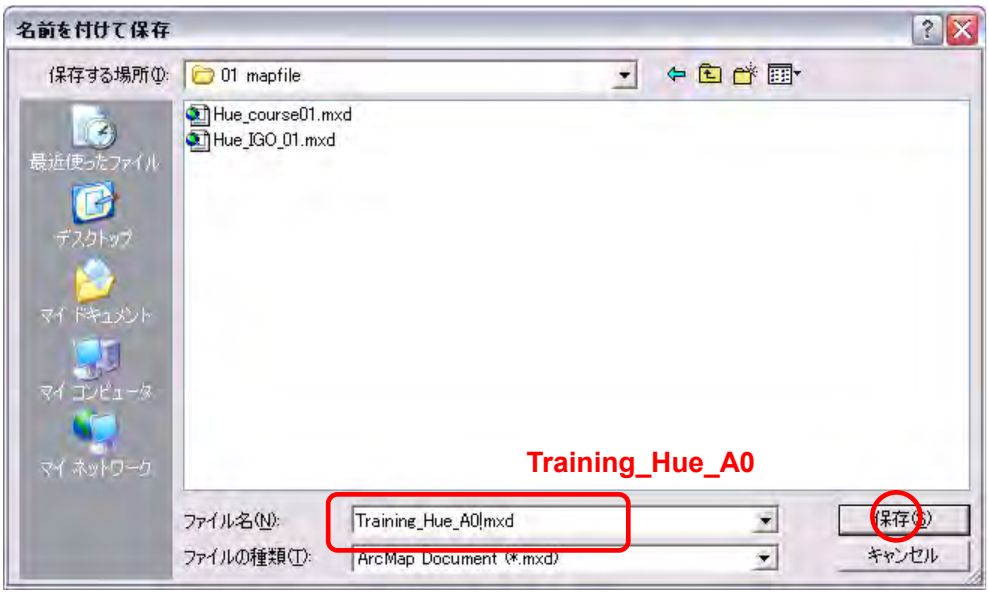




Course Add-2 Layout and Printing

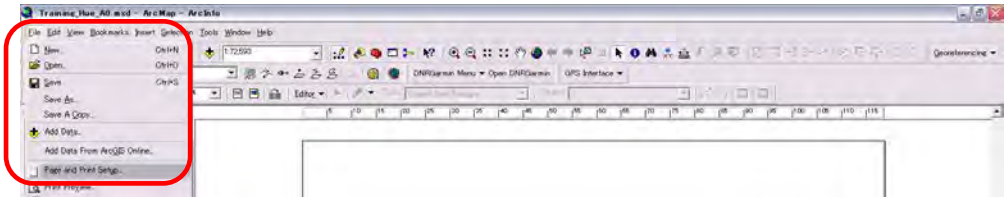
【1】Mapfile

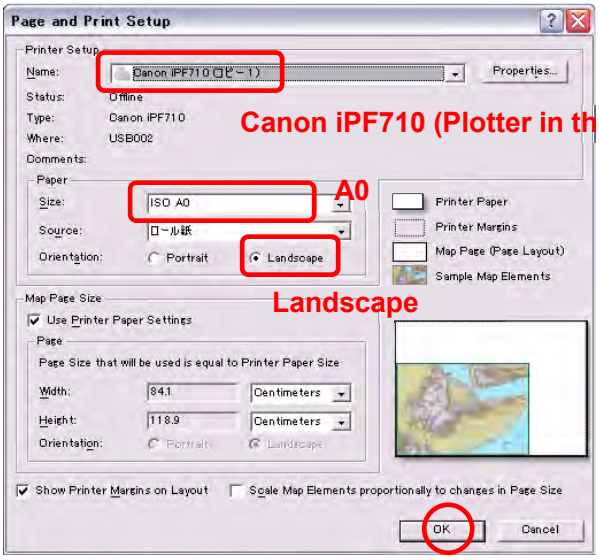
Save as “new mapfile” to layout this training case.

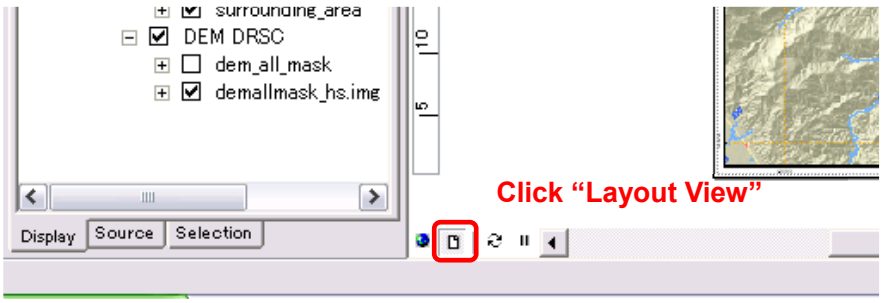


【2】Page and Print Setup

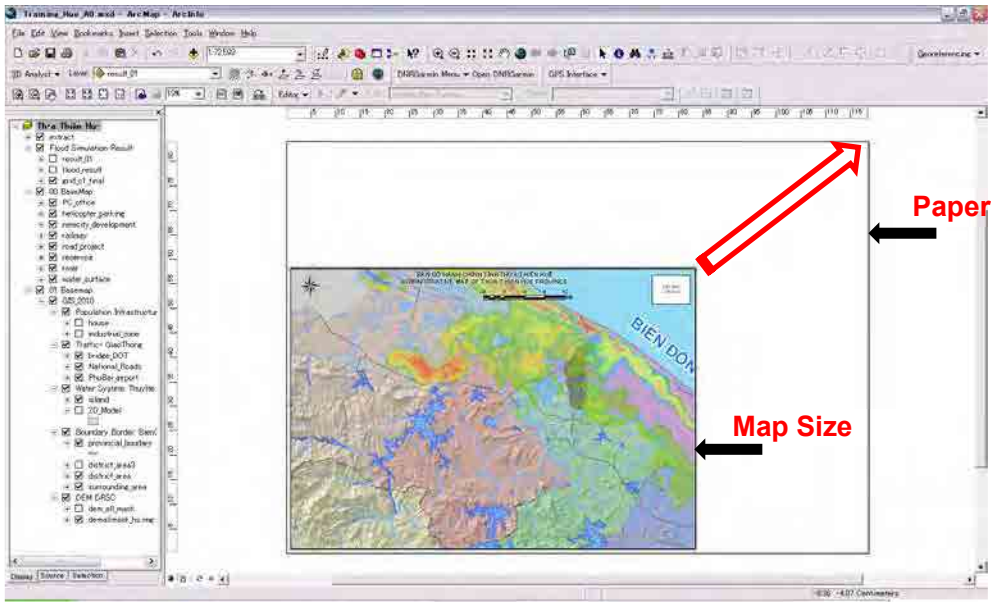
File>Page and Print Setup

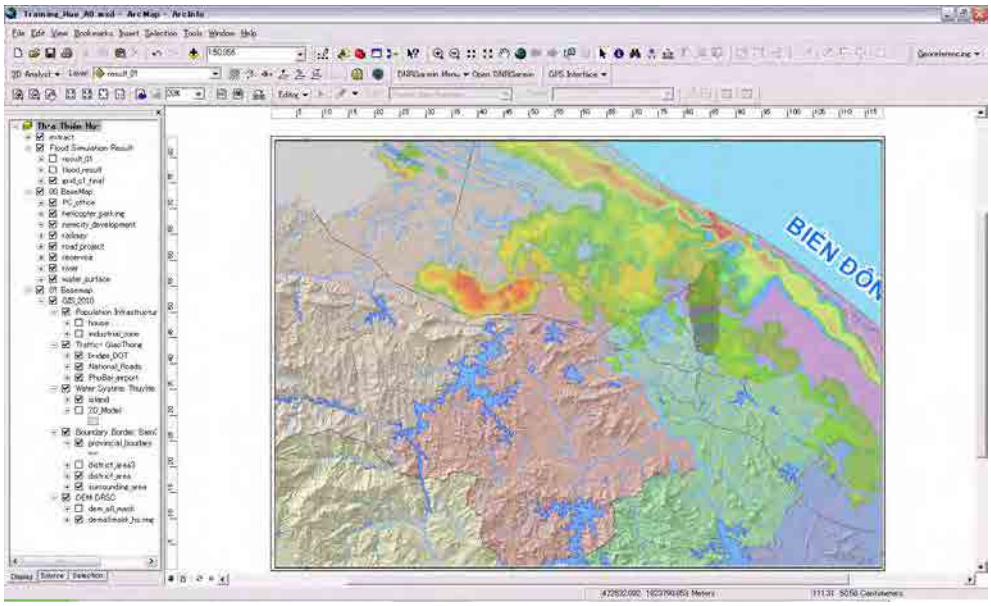






Adjust the map size to paper size.

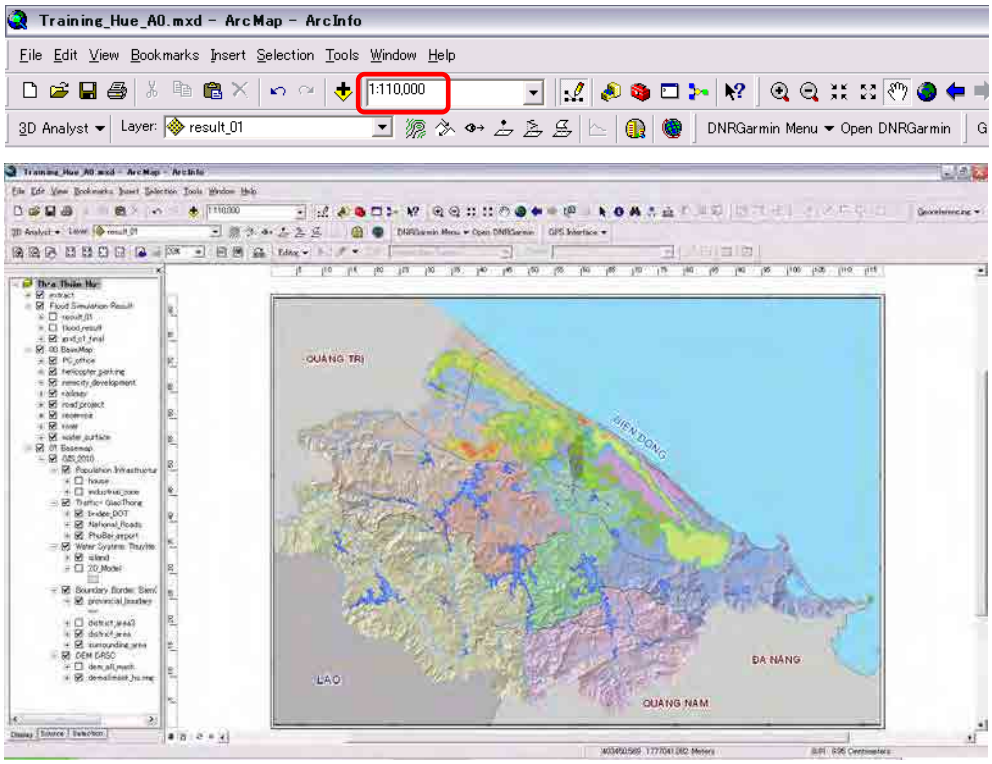




【3】Scale

You can choose any scale on this command.

In this training you choose **"1:110,000"**.

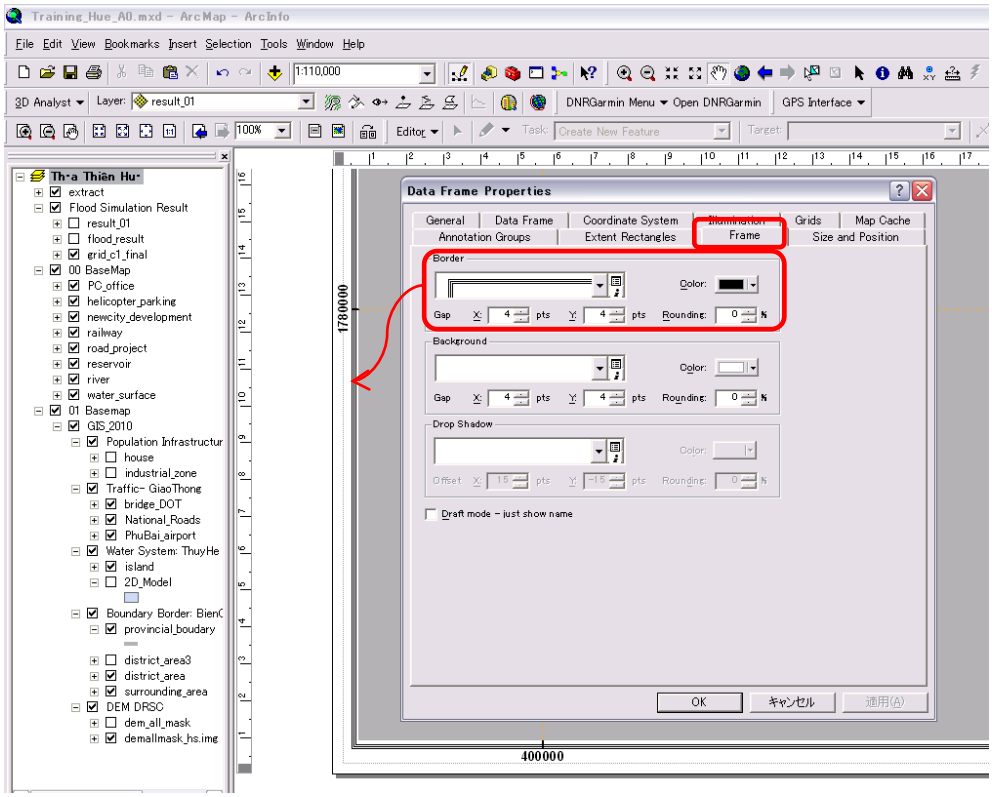


【4】Data Frame Setting

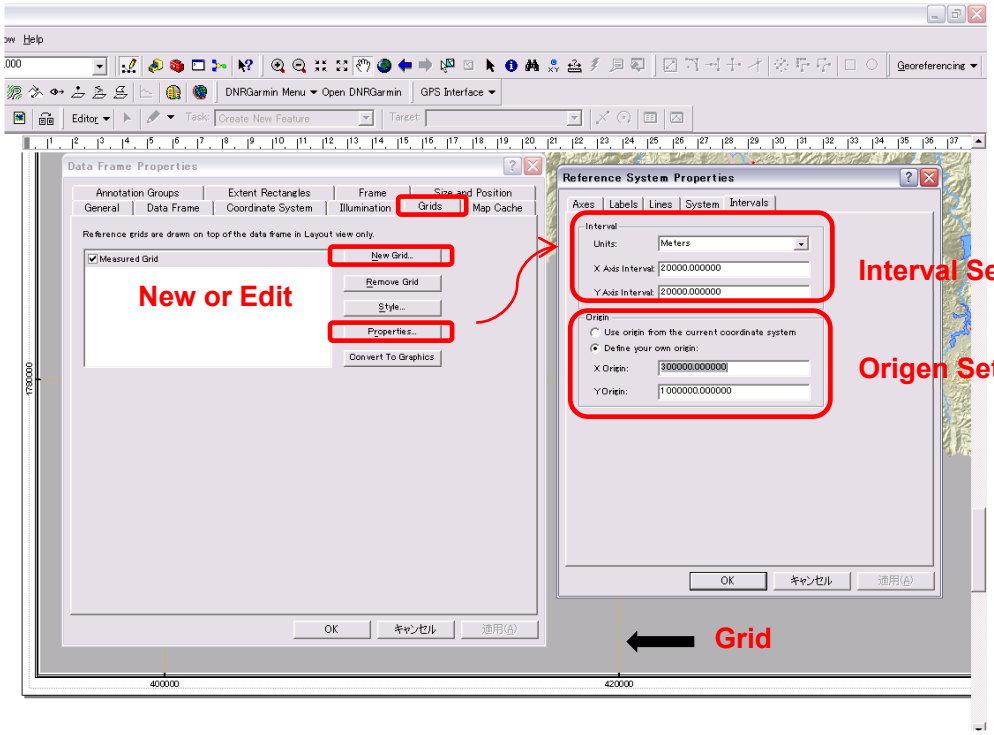
Right click on the "Thua Thien Hue" data frame.

Right Click>Properties

[Frame]

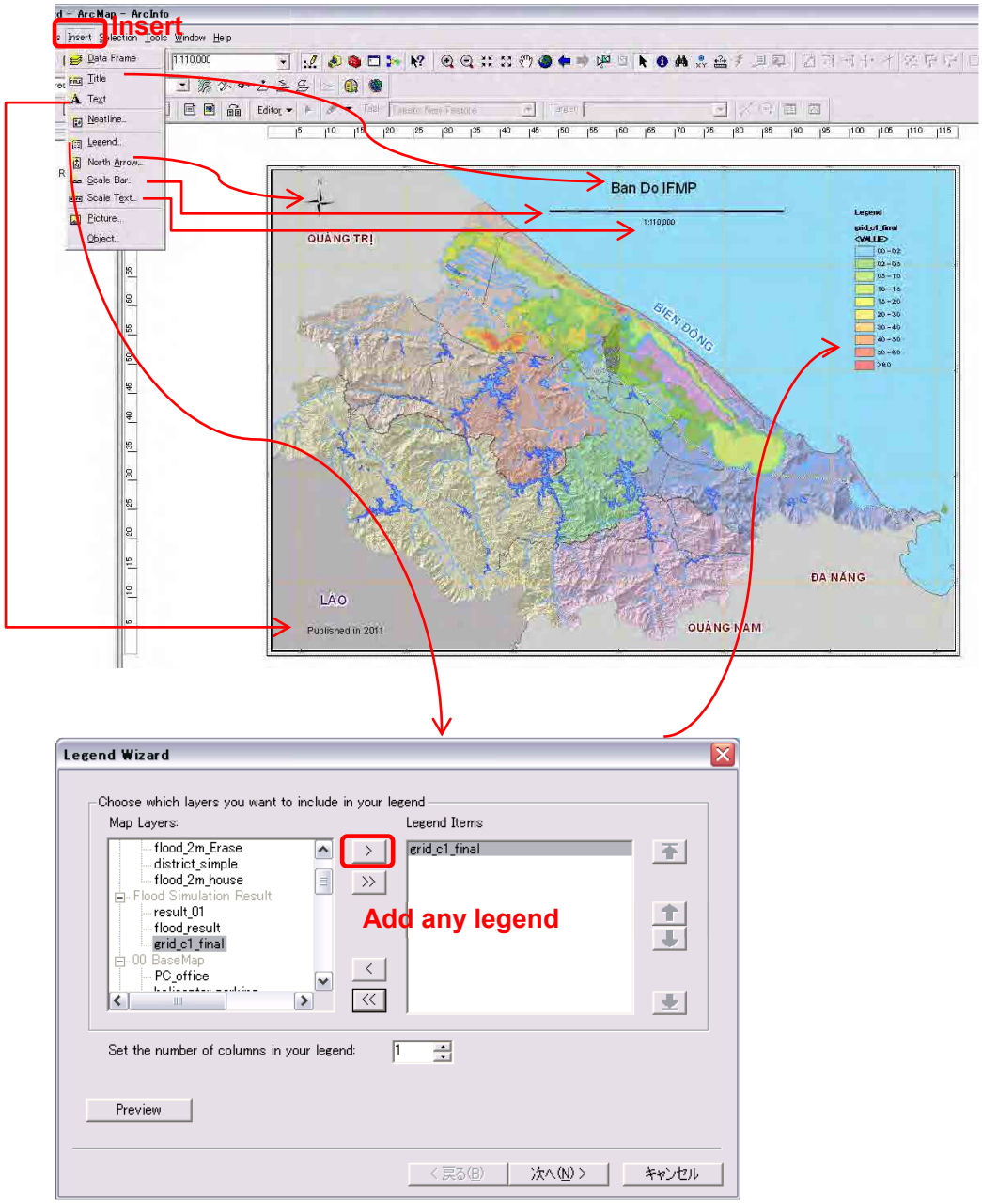

Training_Hue_A0.mxd - ArcMap - ArcInfo
Data Frame Properties
General
Data Frame
Coordinate System
Illumination
Grids
Map Cache
Annotation Groups
Extent Rectangles
Frame
Size and Position
Border
Color:
Gap
Rounding:
Background
Drop Shadow
Draft mode - just show name
OK
キャンセル
適用(A)
1780000
400000

[Grids]


Data Frame Properties
Reference System Properties
Reference grids are drawn on top of the data frame in Layout view only.
Measured Grid
New Grid...
Remove Grid
Style...
Properties...
Convert To Graphics
New or Edit
Axes
Labels
Lines
System
Intervals
Interval
Units:
Meters
X Axis Interval:
Y Axis Interval:
Origin
Use origin from the current coordinate system
Define your own origin:
X Origin:
Y Origin:
Interval Setting
Origen Setting
Grid
OK
キャンセル
適用(A)
400000
420000

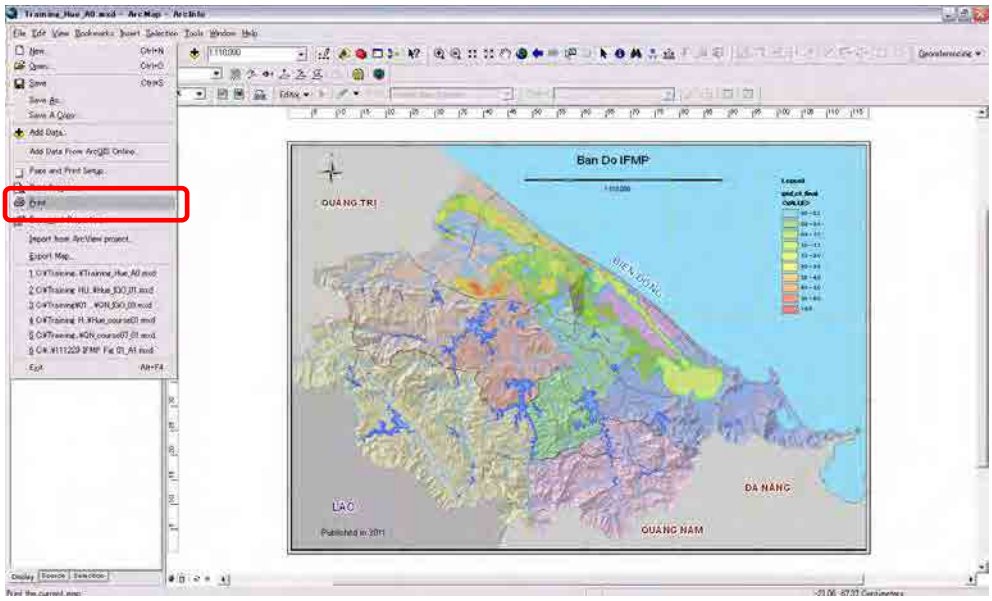
[Layout Toolbar]

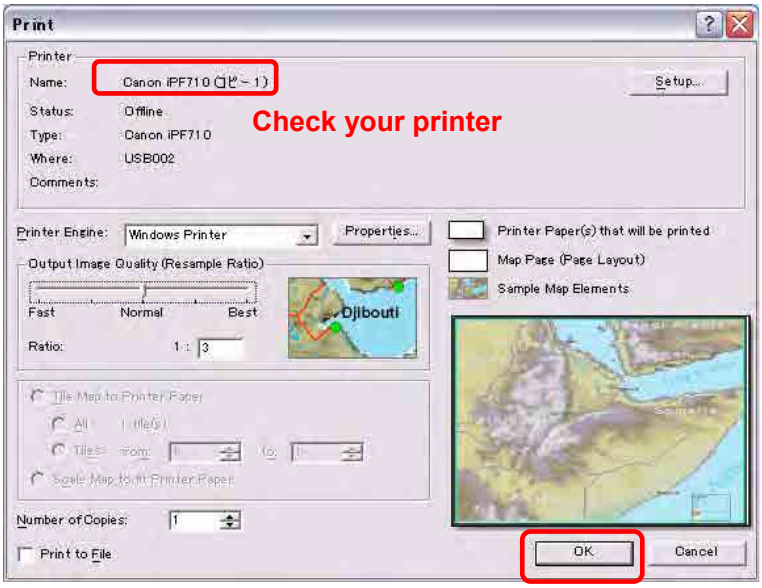
【5】Layout of the Map



【6】Printing

File>Print



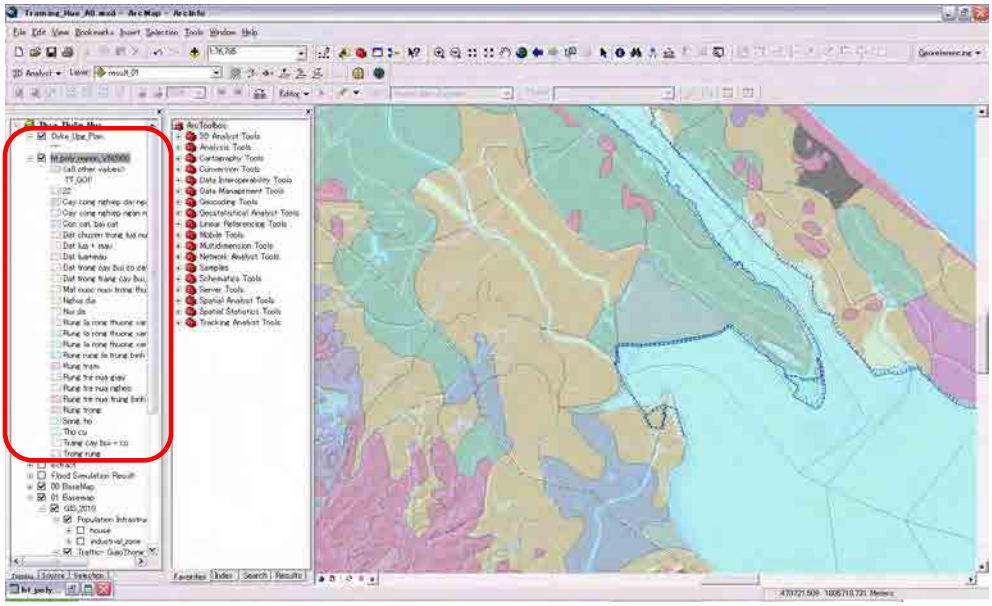


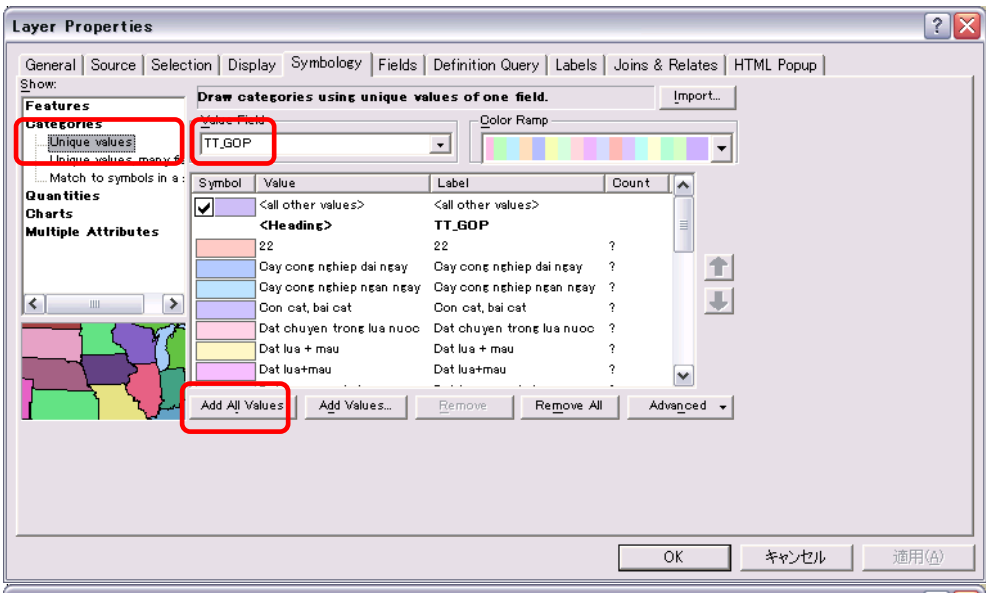
Course Add-3 Dyke and Land Use

【1】Preparation

Add “Dyke_Upg_Plan” line data.

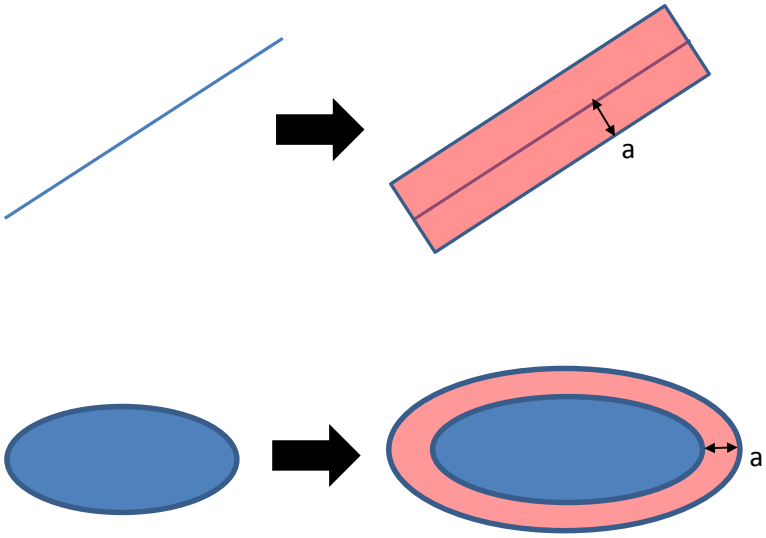
Add “ht_poly_region_VN2000” polygon data.



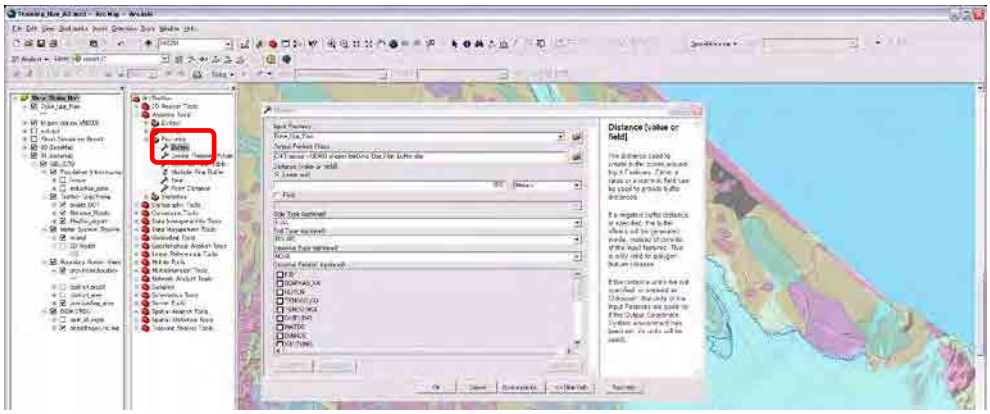


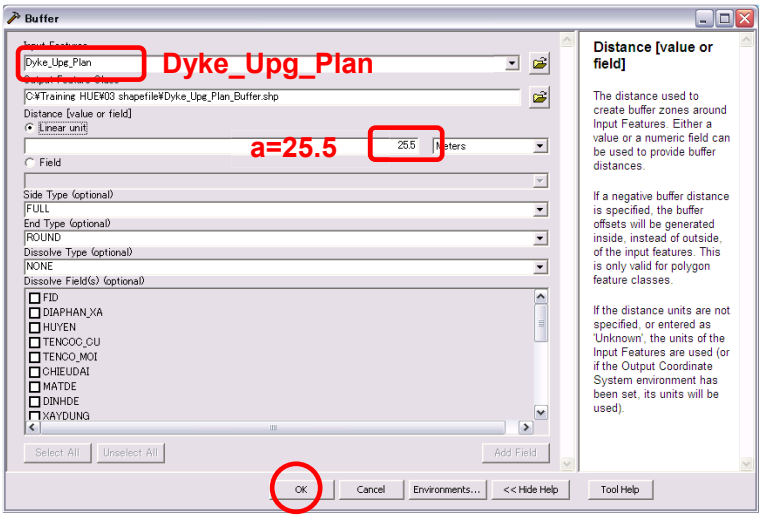
【2】Buffer

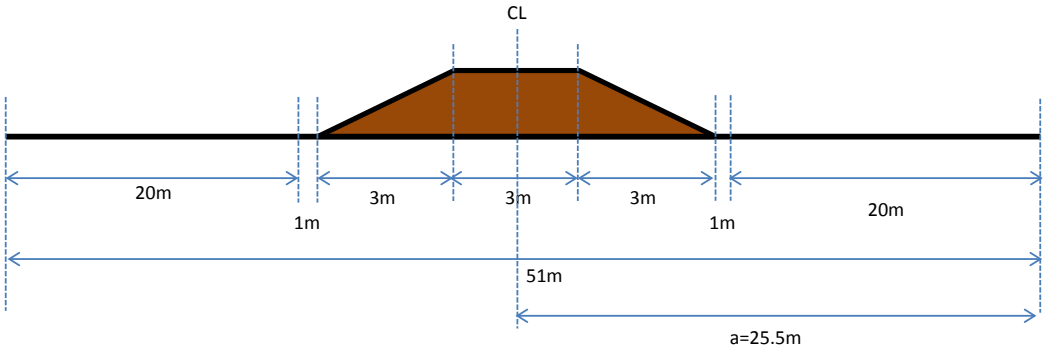
Arc Toolbox>Analysis Tools>Proximity>***Buffer***



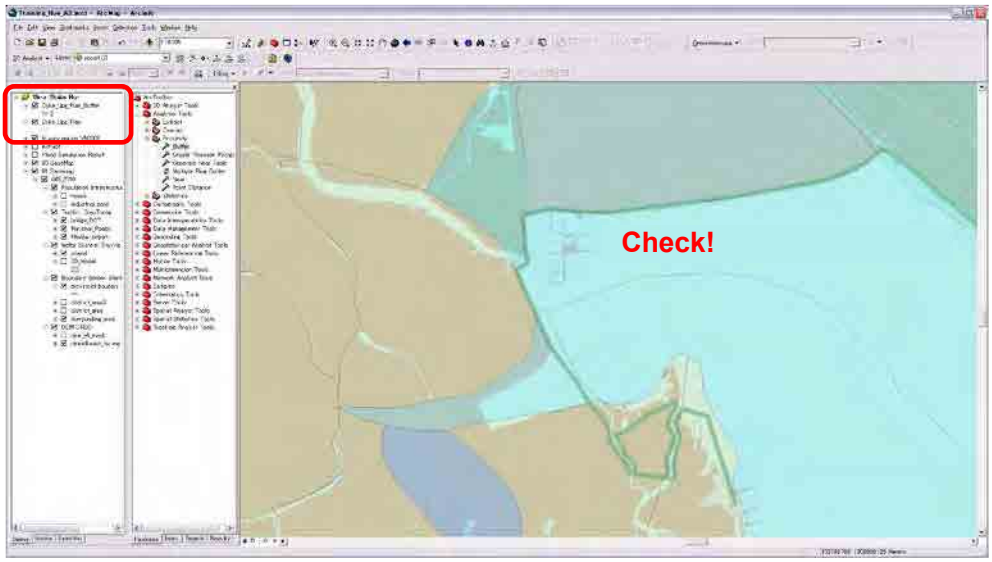
Buffer



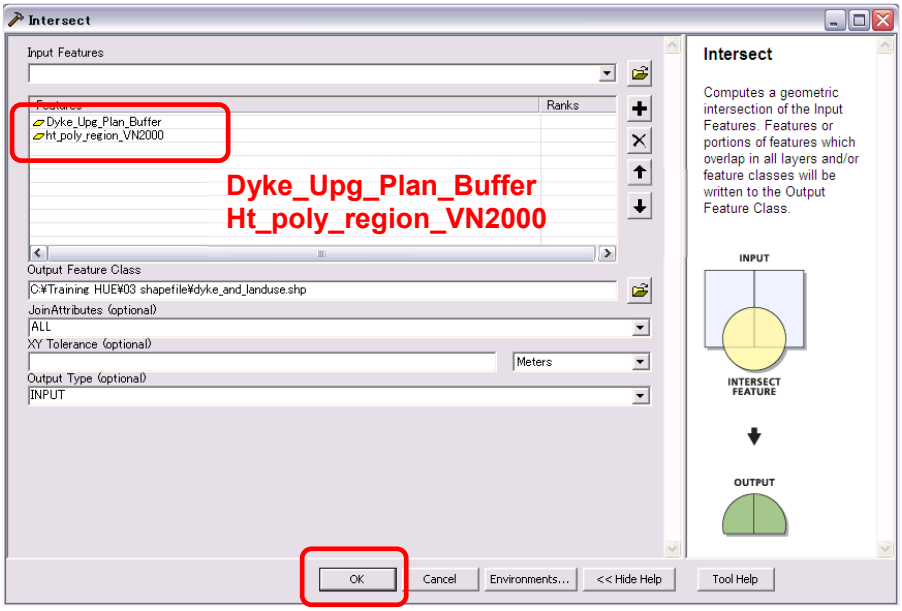




Change Color and Line of “Dyke_Upg_Plan” and “Dyke_Upg_Plan_Buffer” And Zoom in.

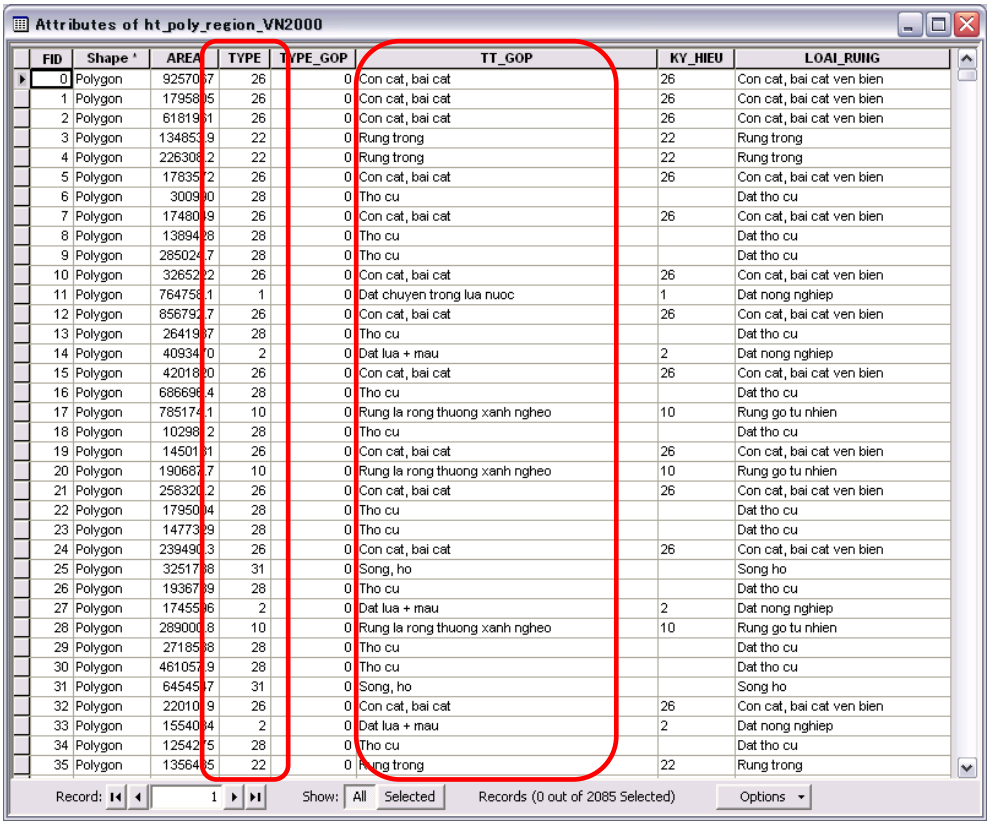


【3】Intersect



【4】Attribute Table

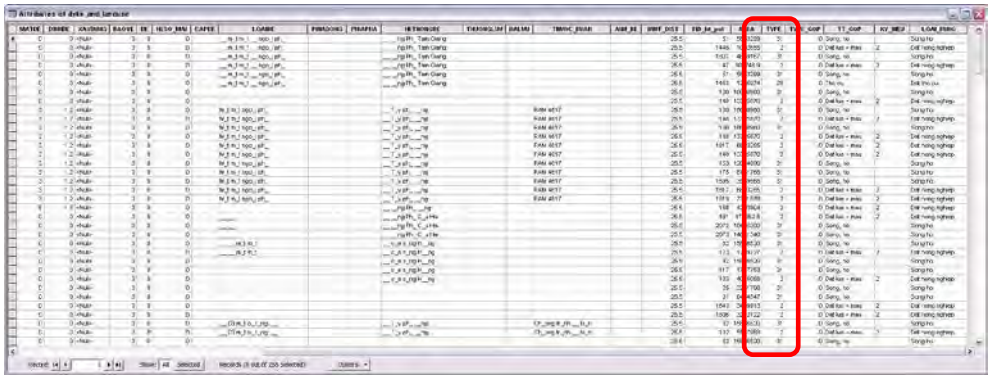
Open attribute Table of Land Use layer, "**ht_poly_region_VN2000**".



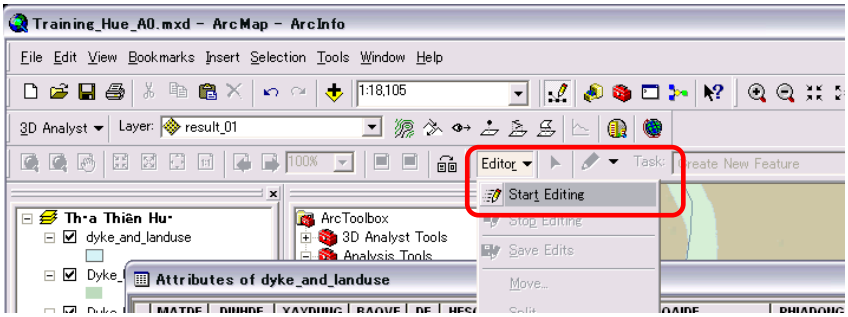
The column **"TYPE"** is best ID to identify land use.

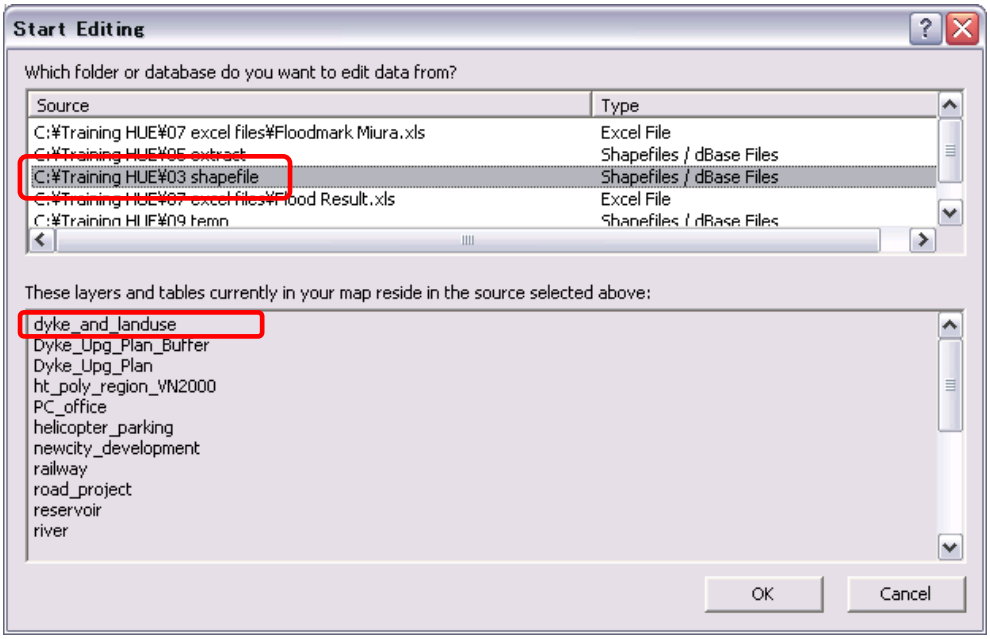
【5】Merge

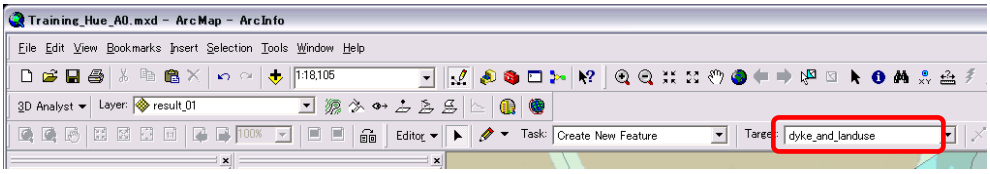
Open attribute table of "**dyke_and_landuse**".



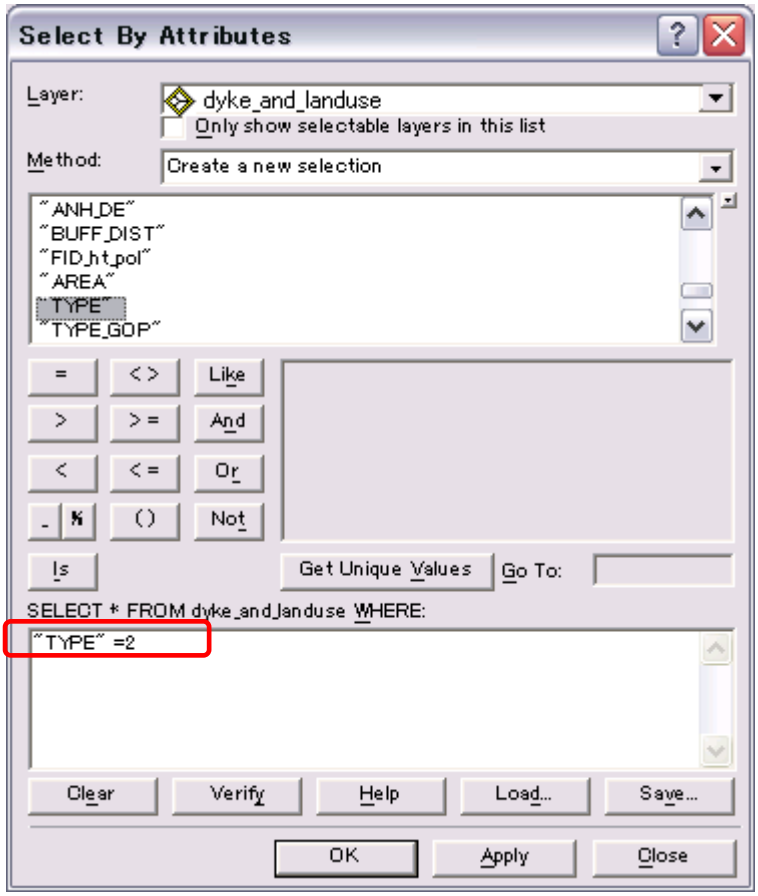
Start Editing



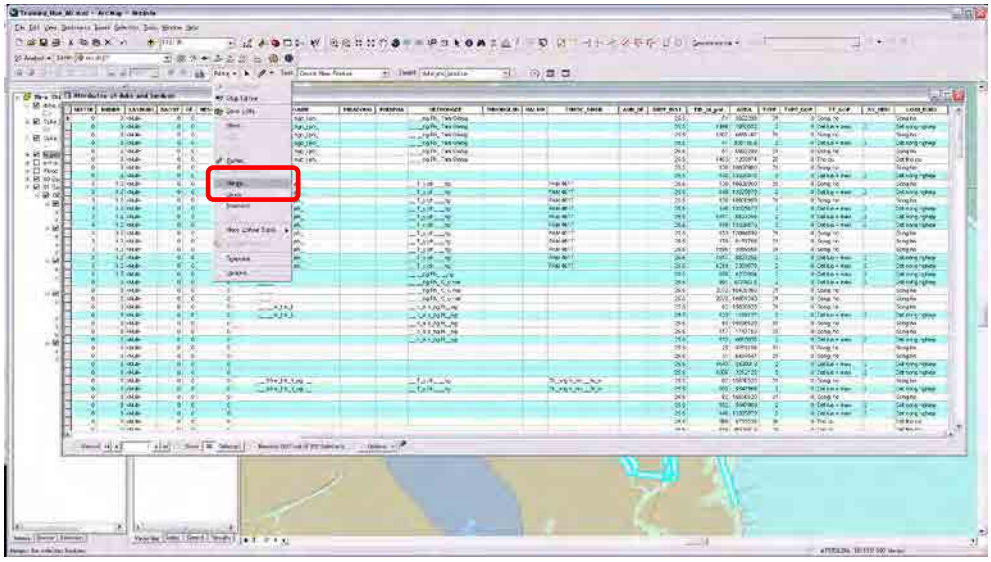


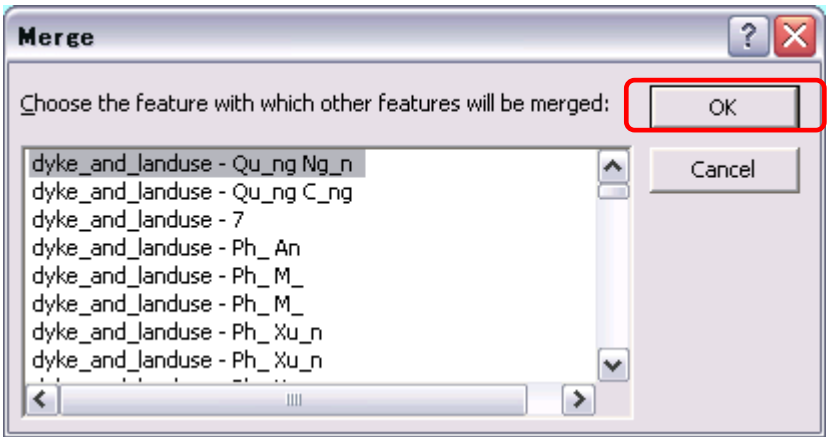


Select By Attribute

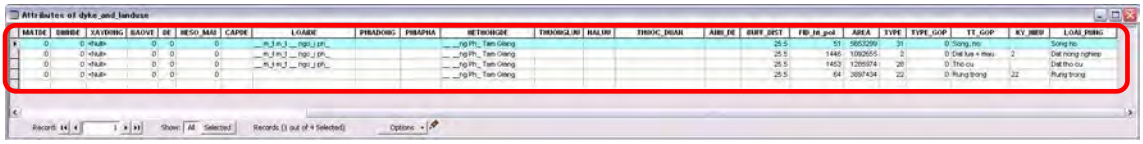

Select By Attributes
Layer:
dyke_and_landuse
Only show selectable layers in this list
Method:
Create a new selection
"ANH_DE"
"BUFF_DIST"
"FID_ht_pol"
"AREA"
"TYPE"
"TYPE_GOP"
=
< >
Like
>
> =
And
<
< =
Or
_
%
( )
Not
Is
Get Unique Values
Go To:
SELECT * FROM dyke_and_landuse WHERE:
"TYPE" =2
Clear
Verify
Help
Load...
Save...
OK
Apply
Close

Merge



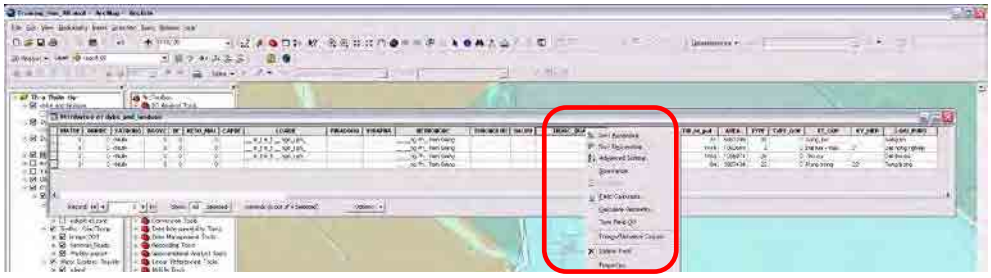


Continue merging by using the columns “22”, “28”, “31”.



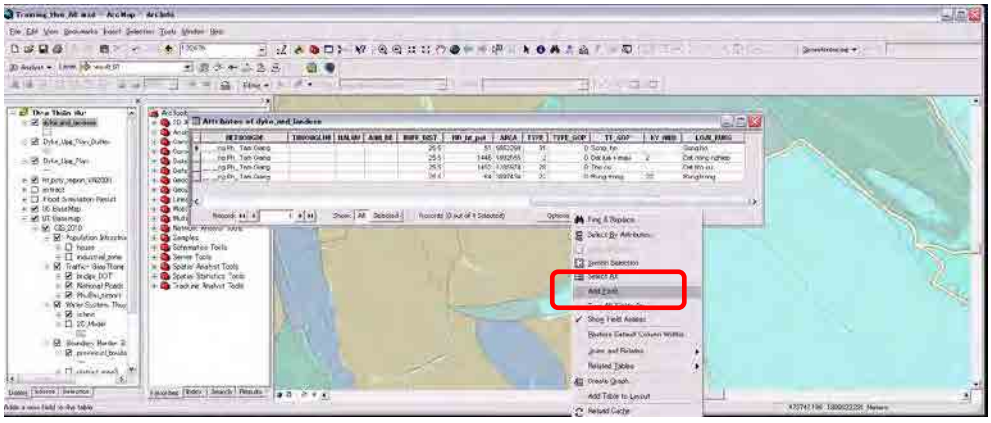
Save Edits and Stop Editing.

Delete Unnecessary Fields.

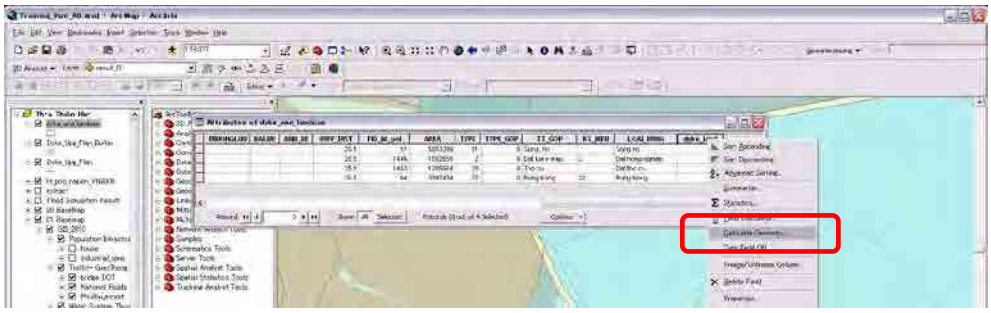


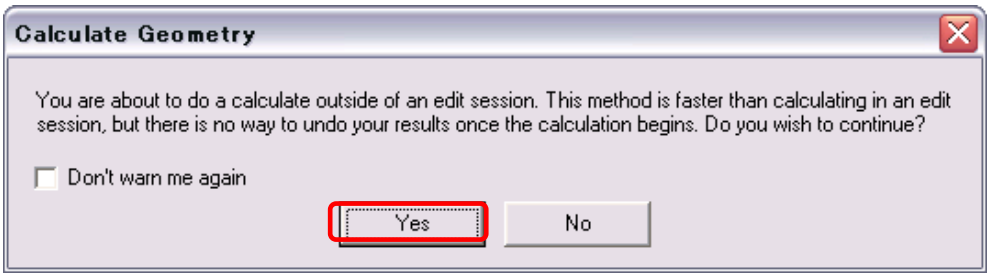
【6】Calculate Geometry

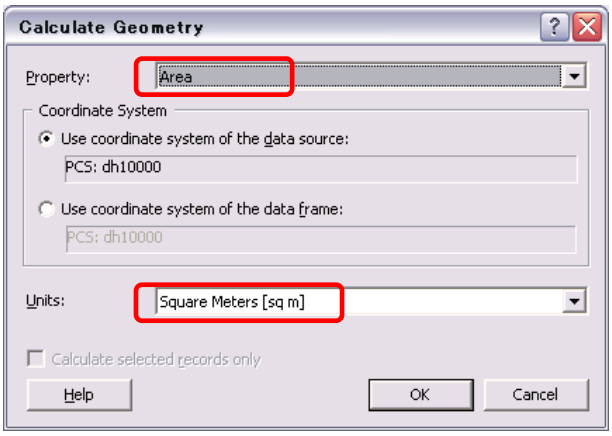
Add Field.

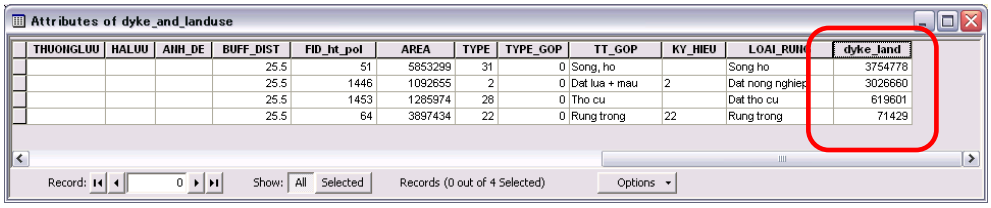


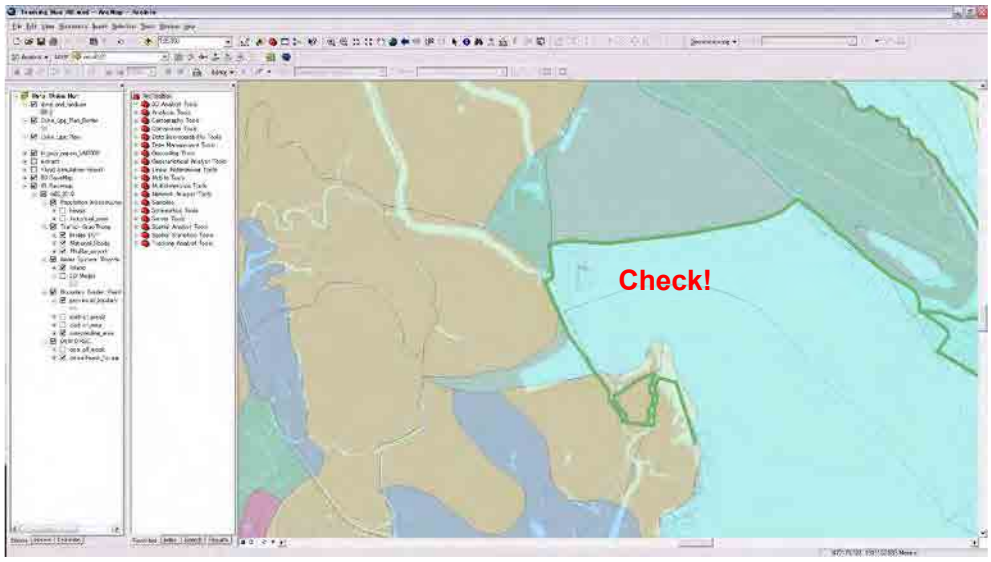
Calculate Geometry








Attributes of dyke_and_landuse
THUONGLUU
HALUU
ANH_DE
BUFF_DIST
FID_ht_pol
AREA
TYPE
TYPE_GOP
TT_GOP
KY_HIEU
LOAI_RUN
dyke_land
25.5 51 5853299 31 0 Song, ho Song ho 3754778
25.5 1446 1092655 2 0 Dat lua + mau 2 Dat nong nghiep 3026660
25.5 1453 1285974 28 0 Tho cu Dat tho cu 619601
25.5 64 3897434 22 0 Rung trong 22 Rung trong 71429
Record: 0
Show: All Selected
Records (0 out of 4 Selected)
Options


Check!