

# ARCGIS 9.3'TE ALTLIK HARİTANIN HAZIRLANMASI

Mesut DEMİRCAN  
Jeodezi ve Fotogrametri  
Mühendisi  
Klimatoloji Şube Müdürlüğü  
Araştırma Dairesi Başkanlığı



# T.C. ORMAN VE SU İŞLERİ BAKANLIĞI METEOROLOJİ GENEL MÜDÜRLÜĞÜ



Untitled - ArcMap

File Edit View Bookmarks Insert Selection Tools Window Help

1:1 527,208

3D Analyst Layer: Hawth's Tools

**1**

- New... Ctrl+N
- Open... Ctrl+O
- Save Ctrl+S
- Save As...
- Save A Copy
- Add Data...**
- Add Data From Resource Center...
- Page and Print Setup...
- Print Preview...
- Print...
- Document Properties...
- Import from ArcView project...
- Export Map...
- 1 D:\GIS\TR.mxd
- 2 D:\GIS\Turkiye.mxd
- 3 D:\GIS\worldcli...\PRJ\_prep.mxd
- 4 H:\batman\Dicle\Ye...\Dicle.mxd
- 5 D:\G...\FY2009Temperatures.mxd
- 6 H:\batman\kml\bat-bis.mxd
- Exit Alt+F4

ArcToolbox

- 3D Analyst Tools
- Analysis Tools
- Cartography Tools
- Conversion Tools
- Data Interoperability T...
- Data Management Toc...
- Geocoding Tools
- Geostatistical Analyst 1
- Linear Referencing Toc...
- Mobile Tools
- Multidimension Tools
- Network Analyst Tools
- Samples
- Schematics Tools
- Server Tools
- Spatial Analyst Tools
- Spatial Statistics Tools
- Tracking Analyst Tools

**2**

Add Data

Look in: **Turkiye.mdb**

Ankara_Secim99	Turkiye_Demiryolu	Turkiye_Saglik
cogbolge	Turkiye_Gol	Turkiye_Secim95
CORNE	Turkiye_il	
ortsicak	turkiye_iller_kbrs	
ortsicak_lcc	Turkiye_ilMerkez	
t2eraTR	Turkiye_Nehir	
turdissin_geo	Turkiye_Nufus2000	
Turkiye	Turkiye_Olum	
Turkiye_AnkKoy	Turkiye_Otoyol	

Name: cogbolge; turdissin\_geo; Turkiye; Turkiye\_il; Turkiye\_Gol; T...

Show of type: Datasets and Layers (\*.lyr)

**Add** Cancel

Display Source Selection Favorites Index Search

Drawing Anal 10 B I U

Change to a different font 31,623 39,174 Decimal Degrees



# T.C. ORMAN VE SU İŞLERİ BAKANLIĞI METEOROLOJİ GENEL MÜDÜRLÜĞÜ



Untitled - ArcMap

File Edit View Bookmarks Insert Selection Tools Window Help

Spatial Analyst Layer: 3D Analyst Layer:

**Layers**

- Turkiye\_Nehir
- cogbolge
- turdissin\_gec
- Turkiye
- Turkiye\_il
- Turkiye\_Gol

Copy  
Remove  
Open Attribute Table  
Joins and Relates  
Zoom To Layer  
Zoom To Make Visible  
Visible Scale Range  
Use Symbol Levels  
Selection  
Label Features  
Convert Labels to Annotation...  
Convert Features to Graphics...  
Convert Symbology to Representation...  
Data  
Save As Layer File...  
Properties...

Layer Properties

General | Source | Selection | Display | Symbology | Fields | Definition Query | Labels | Joins & Relates | HTML Popup

Show:  
Features  
Single symbol  
Categories  
Quantities  
Charts  
Multiple Attributes

Draw all features using the same symbol. Import...

Symbol

Legend

Label appearing next to the symbol in table of contents:

Description...

Additional description appearing next to the symbol in your map's legend

Tamam

Symbol Selector

Category: All

Preview

Options

Color: [Green]

Width: 1.00

Highway Highway Ramp Expressway

Expressway Ramp Major Road Arterial Street

Collector Street Residential Street Railroad

River Boundary, National Boundary, State

Properties...  
More Symbols  
Save... Reset  
OK Cancel

1

1

2

3



# T.C. ORMAN VE SU İŞLERİ BAKANLIĞI METEOROLOJİ GENEL MÜDÜRLÜĞÜ



Turkiye.mxd - ArcMap - ArcInfo

File Edit View Bookmarks Insert Selection Tools Window Help

1:11.527.208

Spatial Analyst Layer: 3D Analyst Layer: HawthTools

**Layers**

- Türkiye\_Nehir
- cogbolge
- turdissin\_geo
- Türkiye
- Türkiye\_Gol
- Türkiye\_...

**ArcToolbox**

- 3D Analyst Tools
- Analysis Tools
- Cartography Tools
- Conversion Tools
- Data Interoperability Tools
- Management Tools
- Navigation Tools
- Statistical Analyst Tools
- Referencing Tools
- Tools
- Dimension Tools
- Analysis Tools

Copy

Remove

Open Attribute Table

Joins and Relates

**Zoom To Layer**

Zoom To Make Visible

Visible Scale Range

Use Symbol Levels

Selection

Label Features

Convert Labels to Annotation...

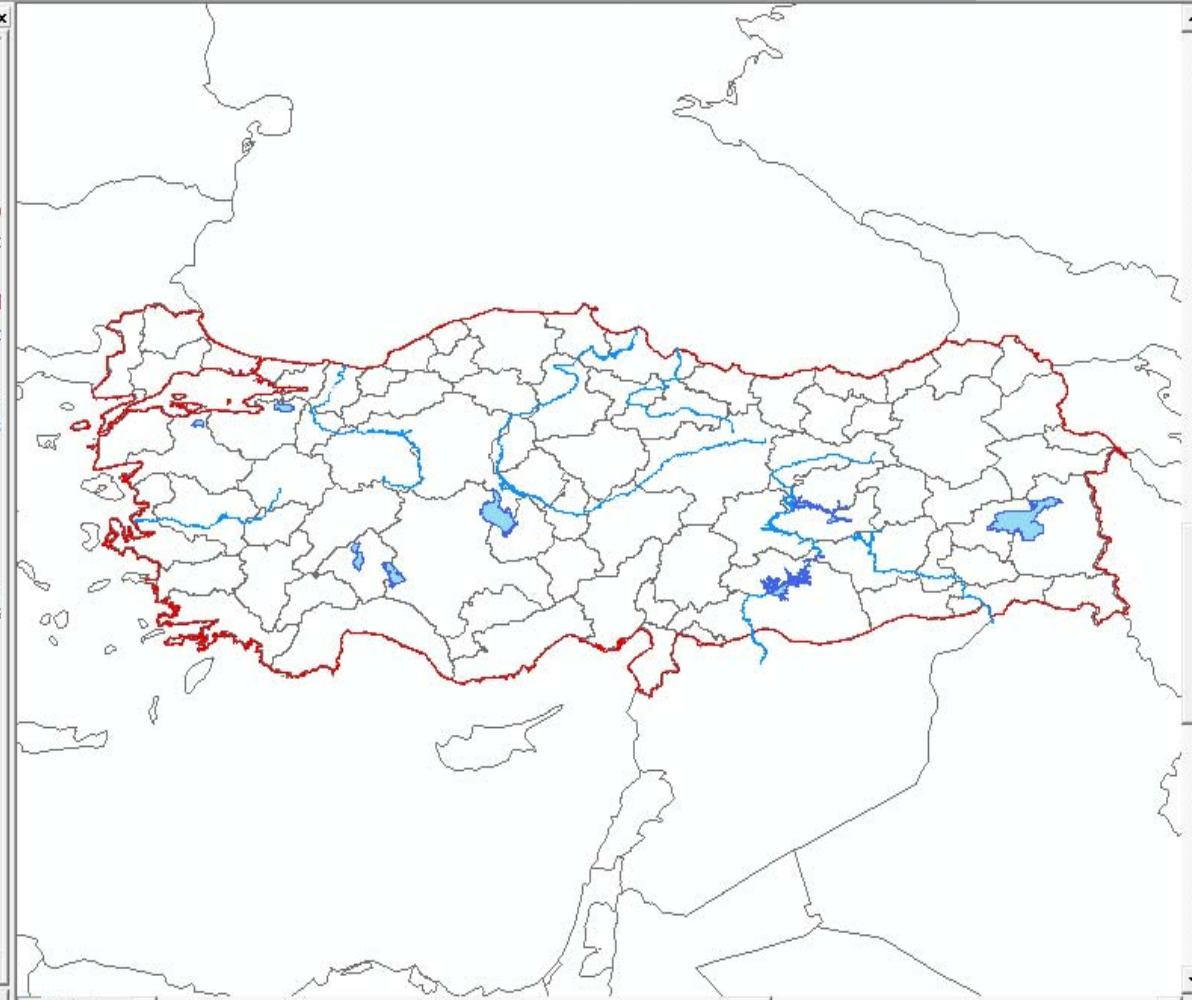
Convert Features to Graphics...

Convert Symbolology to Representation...

Data

Save As Layer File...

Properties...



Display Source Selection

Favorites Index Search

Drawing Anial 10 B I U A

Zoom to the extent of the selected layer

24,711 34,594 Decimal Degrees



# T.C. ORMAN VE SU İŞLERİ BAKANLIĞI METEOROLOJİ GENEL MÜDÜRLÜĞÜ



Turkiye.mxd - ArcMap - ArcInfo

File Edit View Bookmarks Insert Selection Tools Window Help

1:11.527.208

Spatial Analyst Layer: 3D Analyst Layer: HawthTools

- Layers
- Turkiye\_Nehir
- cogbolge
- turdissin\_geo
- Turkiye
- Turkiye\_Gol
- Turkiye\_ii

1

- Copy
- Remove
- Open Attribute Table
- Joins and Relates
- Zoom To Layer
- Zoom To Make Visible
- Visible Scale Range
- Use Symbol Levels
- Selection
- Label Features
- Convert Labels to Annotation...
- Convert Features to Graphics...
- Convert Symbology to Representation...
- Data

2

### Layer Properties

General | Source | Selection | Display | Symbology | Fields | Definition Query | Labels | Joins & Relates | HTML Popup

Label features in this layer

Method: Label all the features the same way.

All features will be labeled using the options specified.

Text String

Label Field: ADI

Text Symbol

Arial 8

AaBbYyZz

Other Options

Placement Properties... Scale Range... Label Styles...

Tamam

3

- Save As Layer File...
- Properties...

Display the properties of the selected layer.

24,821 37,721 Decimal Degrees



# T.C. ORMAN VE SU İŞLERİ BAKANLIĞI METEOROLOJİ GENEL MÜDÜRLÜĞÜ



Turkiye.mxd - ArcMap - ArcInfo

File Edit View Bookmarks Insert Selection Tools Window Help

Spatial Analyst Layer: 3D Analyst Layer: HawthTools

Layers: Türkiye\_Nehir, cogbolge, turdissin\_geo, Türkiye, Türkiye\_Gol, Türkiye\_il

ArcToolbox: 3D Analyst Tools, Analysis Tools, Cartography Tools, Conversion Tools, Data Interoperability Tools, Data Management Tools, Geocoding Tools, Geostatistical Analyst Tools, Linear Referencing Tools, Mobile Tools, Multidimension Tools, Network Analyst Tools, Proximity Tools, Query Tools, Reprocessing Tools, Spatial Analyst Tools, Spatial Statistics Tools, Tracking Analyst Tools

Export Data dialog: Export: Selected features, Output shapefile or feature class: D:\GIS\Ankara\Ankara\_Bölge.shp

ArcMap dialog: Do you want to add the exported data to the map as a layer?

Number of features selected: 8

6 39,795 Decimal Degrees

1

2

3

4



# T.C. ORMAN VE SU İŞLERİ BAKANLIĞI METEOROLOJİ GENEL MÜDÜRLÜĞÜ



Turkiye.mxd - ArcMap - ArcInfo

File Edit View Bookmarks Insert Selection Tools Window Help

New... Ctrl+N  
Open... Ctrl+O  
Save Ctrl+S  
Save As...  
Save A Copy...  
Add Data...  
Add Data From Resource Center...  
Page and Print Setup...  
Print Preview...  
Print...  
Document Properties...  
Import from ArcView project...  
Export Map...  
1 D:\GIS\Turkiye.mxd  
2 D:\GIS\worldcli...\PRJ\_prep.mxd  
3 H:\batman\Dicle\Ye...\Dicle.mxd  
4 D:\G...\FY2009Temperatures.mxd  
5 H:\batman\kml\bat-bis.mxd  
6 H:\batman...\batman\_nehir.mxd  
Exit Alt+F4

1:3.234.357  
3D Analyst Layer:  
HawthsTools

ArcToolbox

- 3D Analyst Tools
- Analysis Tools
- Cartography Tools
- Conversion Tools
- Data Interoperability T...
- Data Management Toc...
- Geocoding Tools
- Geostatistical Analyst 1...
- Linear Referencing Toc...
- Mobile Tools

Farklı Kaydet

Konum: Ankara

Ad	Değiştirme tarihi	Tür
Aramanızla eşleşen öge yok.		

Dosya Adı: Ankara Bölge.mxd

Kayıt türü: ArcMap Document (\*.mxd)

Kaydet İptal

Display Source Selection Favorites Index Search

Drawing Arial 10 B I U

Save the current map with a new name

29.38 39.5 Decimal Degrees



# T.C. ORMAN VE SU İŞLERİ BAKANLIĞI METEOROLOJİ GENEL MÜDÜRLÜĞÜ



Ankara\_Bölge.mxd - ArcMap - ArcInfo

File Edit View Bookmarks Insert Selection Tools Window Help

1:3.234.357

Spatial Analyst Layer: 3D Analyst Layer: HawthTools

**Layers**

- Türkiye\_Nehir
- Ankara Bölge
- cogbolge
- turdissin\_geo
- Türkiye
- Türkiye\_Gol
- Türkiye\_il

**Symbol Selector**

Category: All

Green	Blue	Sun
Hollow	Lake	Rose
Beige	Yellow	Olive
Green	Jade	Blue

Options

Fill Color:

Outline Width:

Outline Color:

OK Cancel

**Symbol Selector**

Options

Fill Color:

Outline Width:

Outline Color:

OK

Display Source Selection

Favorites Index Search

Drawing Arial 10 B I U

29,403 41,417 Decimal Degrees



T.C.  
ORMAN VE SU İŞLERİ BAKANLIĞI  
METEOROLOJİ GENEL MÜDÜRLÜĞÜ



Ankara\_Bölge.mxd - ArcMap - ArcInfo

File Edit View Bookmarks Insert Selection Tools Window Help

Spatial Analyst Layer: [ ]

Layers

- Turkiye\_Nehir
- Ankara\_Bölge**
- cogbolge
- turdiss\_n\_gec
- Turkiye
- Turkiye\_Gol
- Turkiye\_il

1

2

3

Layer Properties

General Source Selection Display Symbology Fields Definition Query Labels Joins & Relates HTML Popup

Label features in this layer

Method: Label all the features the same way.

All features will be labeled using the options specified.

Text String

Label Field: ADI

Text Symbol

Arial 8

AaBbYyZz

Other Options Default: Arial, 8 pt, Bottom, Center

Tamam

Attributes of Ankara\_Bölge

FID	Shape *	OBJECTID_1	OBJECTID	IL	YERLESIMKO	ADI	Shape Leng	Shape Area
0	Polygon	29	13581	06	37138	ANKARA	11,34638	2,657933
1	Polygon	36	1205	71	37234	KIRIKKALE	3,355627	0,497319
2	Polygon	21	1183	18	37180	ÇANKIRI	4,672869	0,776244
3	Polygon	22	3702	14	37177	BOLU	5,572507	0,897113
4	Polygon	5	1459	74	37229	BARTIN	2,407627	0,245524
5	Polygon	9	2701	67	37228	ZONGULD	2,860665	0,354198
6	Polygon	17	17	81	6928	DÜZCE	2,685327	0,285716
7	Polygon	8	1169	78	37230	KARABÜK	3,478321	0,434552

Record: 1 Show: All Selected Records (0 out of 8 Selected) Options

30,95 38,377 Decimal Degrees



# T.C. ORMAN VE SU İŞLERİ BAKANLIĞI METEOROLOJİ GENEL MÜDÜRLÜĞÜ



Ankara\_Bölge.mxd - ArcMap - ArcInfo

File Edit View Bookmarks Insert Selection Tools Window Help

Spatial Analyst Layer: [ ]

Layers

- Turkiye\_Nehir
- Ankara\_Bölge**
- cogbolge
- turdissin\_gec
- Turkiye
- Turkiye\_Gol
- Turkiye\_il

Copy  
Remove  
Open Attribute Table  
Joins and Relates  
Zoom To Layer  
Zoom To Make Visible  
Visible Scale Range  
Use Symbol Levels  
Selection  
Label Features  
Convert Labels to Annotation...  
Convert Features to Graphics...  
Convert Symbology to Representation...  
Data  
Save As Layer File...  
Properties...

Layer Properties

General Source Selection Display Symbology Fields Definition Query Labels Joins & Relates HTML Popup

Label features in this layer

Method: Label all the features the same way.

All features will be labeled using the options specified.

Text String  
Label Field: ADI

Text Symbol  
Arial 8  
AaBbYyZz

Other Options  
Default: Arial, 8 pt, Bottom, Center

Placement Properties... Scale Range... Label Styles...

Tamam

30,95 38,377 Decimal Degrees



# T.C. ORMAN VE SU İŞLERİ BAKANLIĞI METEOROLOJİ GENEL MÜDÜRLÜĞÜ



Ankara\_Bolge.mxd - ArcMap - ArcInfo

File Edit View Bookmarks Insert Selection Tools Window Help

1:5.749.967

Spatial Analyst 3D Analyst HawthTools

**Layers**

- Türkiye\_Nehir
- Türkiye\_Gol
- Ankara\_Bolge

**ArcToolbox**

- 3D Analyst Tools
- Analysis Tools
- Extract
  - Clip
  - Select
  - Split
  - Table Select
- Overlay
- Proximity
- Statistics
- Cartography Tools
- Conversion Tools
- Data Interoperability Tools
- Data Management Tools
- Geocoding Tools
- Geostatistical Analyst Tools
- Linear Referencing Tools
- Mobile Tools
- Multidimension Tools
- Network Analyst Tools
- Samples
- Schematics Tools
- Server Tools
- Spatial Analyst Tools
- Spatial Statistics Tools
- Tracking Analyst Tools

### Clip

Input Features

Clip Features

Output Feature Class

X,Y Tolerance (optional)

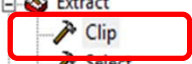
Decimal degrees

Extracts input features that overlay the clip features.

INPUT

CLIP FEATURE

OK Cancel Environments... << Hide Help Tool Help





# T.C. ORMAN VE SU İŞLERİ BAKANLIĞI METEOROLOJİ GENEL MÜDÜRLÜĞÜ



Ankara\_Bolge.mxd - ArcMap - ArcInfo

File Edit View Bookmarks Insert Selection Tools Window Help

1:5.749.967 100%

Spatial Analyst Layer: 3D Analyst Layer: HawththsTools

- Layers
  - AnkB\_Nehir
  - Turkiye\_Nehir
  - Turkiye\_Gol
  - Ankara\_Bolge

- ArcToolbox
  - 3D Analyst Tools
  - Analysis Tools
    - Extract
      - Clip
      - Select
      - Split
      - Table Select
    - Overlay
    - Proximity
    - Statistics
  - Cartography Tools
  - Conversion Tools
  - Data Interoperability Tools
  - Data Management Tools
  - Geocoding Tools
  - Geostatistical Analyst Tools
  - Linear Referencing Tools
  - Mobile Tools
  - Multidimension Tools
  - Network Analyst Tools
  - Samples
  - Schematics Tools
  - Server Tools
  - Spatial Analyst Tools
  - Spatial Statistics Tools
  - Tracking Analyst Tools



Display Source Selection

Favorites Index Search

Drawing Arial 10 B I U A

32,879 37,396 Decimal Degrees



# T.C. ORMAN VE SU İŞLERİ BAKANLIĞI METEOROLOJİ GENEL MÜDÜRLÜĞÜ



Ankara\_Bölge.mxd - ArcMap - ArcInfo

File Edit View Bookmarks Insert Selection Tools Window Help

1:3.611.139 100%

Spatial Analyst Layer: 3D Analyst Layer: HawththsTools

**Layers**

- AnkB\_Nehir
- AnkB\_Gol
- Turkiye\_Gol
- Ankara\_Bölge

**ArcToolbox**

- 3D Analyst Tools
- Analysis Tools
  - Extract
    - Clip
    - Select
    - Split
    - Table Select
  - Overlay
  - Proximity
  - Statistics
- Cartography Tools
- Conversion Tools
- Data Interoperability Tools
- Data Management Tools
- Geocoding Tools
- Geostatistical Analyst Tools
- Linear Referencing Tools
- Mobile Tools
- Multidimension Tools
- Network Analyst Tools
- Samples
- Schematics Tools
- Server Tools
- Spatial Analyst Tools
- Spatial Statistics Tools
- Tracking Analyst Tools

Display Source Selection Favorites Index Search

Drawing Arial 10 B I U A

30,597 41,622 Decimal Degrees



# T.C. ORMAN VE SU İŞLERİ BAKANLIĞI METEOROLOJİ GENEL MÜDÜRLÜĞÜ



Ankara\_Bölge.mxd - ArcMap - ArcInfo

File Edit View Bookmarks Insert Selection Tools Window Help



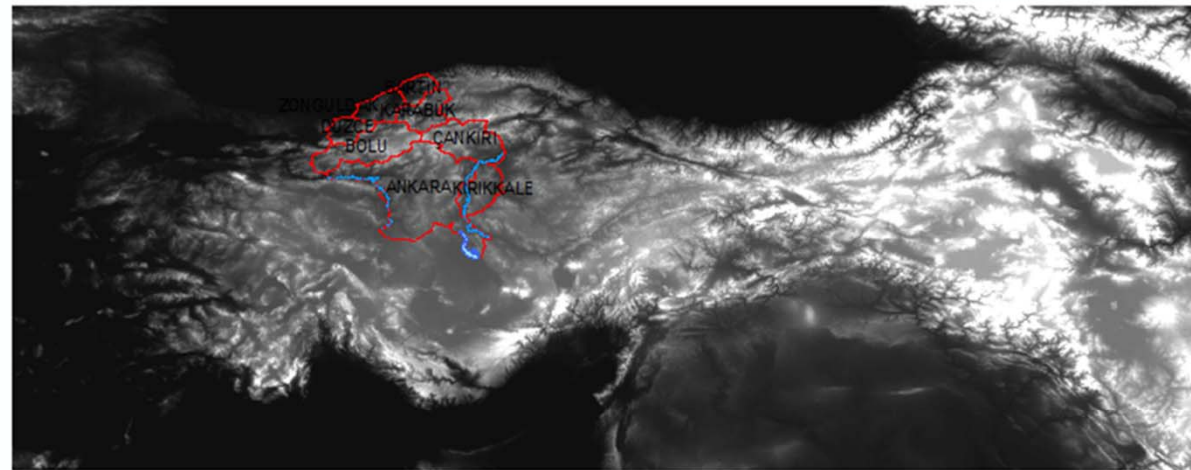
Spatial Analyst Layer: TurkSrtmDem\_Project.img 3D Analyst Layer: TurkSrtmDem\_Project.img HawthTools

**Layers**

- AnkB\_Nehir
- AnkB\_Gol
- Ankara\_Bölge
- TurkSrtmDem\_Project.img
  - Value
  - High : 5101
  - Low : -158

**ArcToolbox**

- 3D Analyst Tools
- Analysis Tools
- Cartography Tools
- Conversion Tools
- Data Interoperability Tools
- Data Management Tools
- Geocoding Tools
- Geostatistical Analyst Tools
- Linear Referencing Tools
- Mobile Tools
- Multidimension Tools
- Network Analyst Tools
- Samples
- Schematics Tools
- Server Tools
- Spatial Analyst Tools
- Spatial Statistics Tools
- Tracking Analyst Tools



Display Source Selection Favorites Index Search

Drawing Arial 10 B I U

29,924 40,389 Decimal Degrees



# T.C. ORMAN VE SU İŞLERİ BAKANLIĞI METEOROLOJİ GENEL MÜDÜRLÜĞÜ



Ankara\_Bolge.mxd - ArcMap - ArcInfo

File Edit View Bookmarks Insert Selection Tools Window Help

Spatial Analyst Layer: TurkSrtmDem\_Project.img

**1** [Spatial Analyst icon]

**2** [Extract by Mask tool icon]

**3** [Input raster: TurkSrtmDem Projct.img]

**4** [Input raster or feature mask data: Ankara\_Bolge]

**5** [Output raster: D:\GIS\Ankara\ankara\_bolgee]

**6** [OK button]

### Extract by Mask

Extracts the cells of a raster that correspond to the areas defined by a mask.

OK Cancel Environments... << Hide Help Tool Help

23,899 37,497 Decimal Degrees

Layer Properties

General | Source | Extent | Display | Symbology | Fields | Joins & Relates

Draw raster grouping values into classes

Fields: VALUE

Classification: Natural Breaks (Jenks)

Classes: 5

Classification

Method: Defined Interval

Classes: 6 Interval size: 100

Classification Statistics

Count:	8853946
Minimum:	-31
Maximum:	2.399
Sum:	8.697.535.275
Mean:	982,3343484
Standard Deviation:	362,6246404

Break Values %

0	%
479,8	
959,6	
1.439,4	
1.919,2	
2.399	

OK

1 2 3 4 5 6 7



Layer Properties

General Source Extent Display Symbology Fields Joins & Relates

- Show:
- Unique Values
- Classified**
- Stretched
- Discrete Color

Draw raster grouping values into classes

Fields: Value: VALUE

Classification: Defined Interval

Normalization: <None>

Classes: 25

Color Ramp:

Symbol	Range
[Black]	-31 - 0
[Dark Blue]	0 - 100
[Light Blue]	100 - 200
[Cyan]	200 - 300
[Green]	300 - 400
[Yellow-Green]	400 - 500
[Yellow]	500 - 600



Show class breaks using cell values

Use hillshade effect Z: 1

Tamam iptal Uygula

Color Ramp:

Symbol	Range	Label
[Light Blue]	-31 - 0	-31 - 0
[Cyan]	0 - 100	0 - 100
[Green]	100 - 200	100,0000001 - 200,0000001
[Yellow-Green]	200 - 300	200,0000001 - 300,0000001
[Yellow]	300 - 400	300,0000001 - 400,0000001
[Orange]	400 - 500	400,0000001 - 500,0000001
[Red]	500 - 600	500,0000001 - 600,0000001

- Reverse Sorting
- Format Labels...**
- Edit Description...

Number Format

Category: Numeric

Rounding: Number of significant digits

10

Alignment: Left

12 characters

Show thousands separators

Pad with zeros

Show plus sign

General options for the display of numbers

OK Cancel



# T.C. ORMAN VE SU İŞLERİ BAKANLIĞI METEOROLOJİ GENEL MÜDÜRLÜĞÜ



Ankara\_Bölge.mxd - ArcMap - ArcInfo

File Edit View Bookmarks Insert Selection Tools Window Help

1:2.538.727

Spatial Analyst Layer: Ankara\_Bölge 3D Analyst Layer: Ankara\_Bölge HawthTools

**Layers**

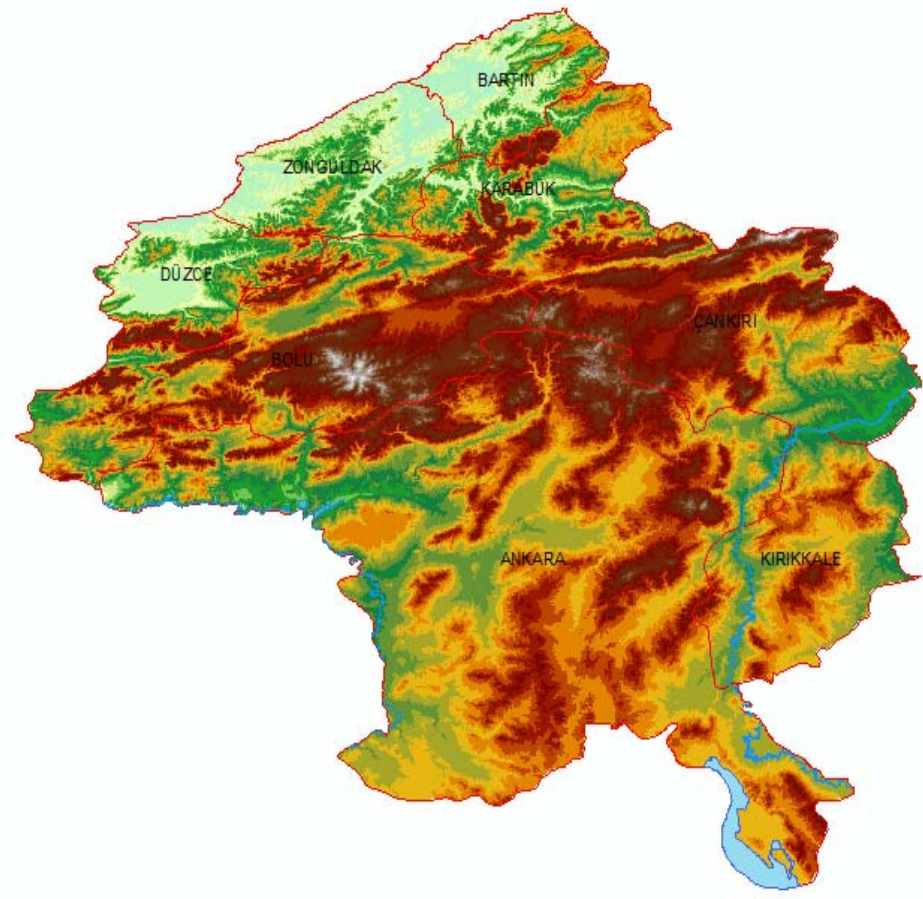
- AnkB\_Nehir
- AnkB\_Gol
- Ankara\_Bölge
- Ankara\_Bölge

VALUE

-31 - 0
1 - 100
101 - 200
201 - 300
301 - 400
401 - 500
501 - 600
601 - 700
701 - 800
801 - 900
901 - 1.000
1.001 - 1.100
1.101 - 1.200
1.201 - 1.300
1.301 - 1.400
1.401 - 1.500
1.501 - 1.600
1.601 - 1.700
1.701 - 1.800
1.801 - 1.900
1.901 - 2.000

**Spatial Analyst Tools**

- Geocoding Tools
- Geostatistical Analyst Tools
- Linear Referencing Tools
- Mobile Tools
- Multidimension Tools
- Network Analyst Tools
- Samples
- Schematics Tools
- Server Tools
- Spatial Analyst Tools
  - Conditional
  - Density
  - Distance
  - Extraction
    - Extract by Attributes
    - Extract by Circle
    - Extract by Mask
    - Extract by Points
    - Extract by Polygon
    - Extract by Rectangle
    - Extract Values to Points
    - Sample
  - Generalization
  - Groundwater
  - Hydrology
  - Interpolation
  - Local
  - Map Algebra
  - Math
  - Multivariate



Display Source Selection Favorites Index Search Results Drawing Arial 10 B I U A

30,489 39,711 Decimal Degrees

# ARCGIS 9.3'TE ALTLIK HARİTANIN HAZIRLANMASI

# TEŞEKKÜRLER...

Mesut DEMİRCAN  
Jeodezi ve Fotogrametri Mühendisi  
Klimatoloji Şube Müdürlüğü  
Araştırma Dairesi Başkanlığı

İletişim : [mdemircan@mgm.gov.tr](mailto:mdemircan@mgm.gov.tr)  
0 312 302 26 86