

BSMEFFGS Post Processing with QGIS

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**28-30 JUN 2016, First Steering Committee Meeting (SCM 1) Black Sea and
Middle East Flash Flood Guidance (BSMEFFG) System
Tbilisi, Georgia**



World Meteorological Organization
(WMO)



Hydrologic Research Center
(HRC)

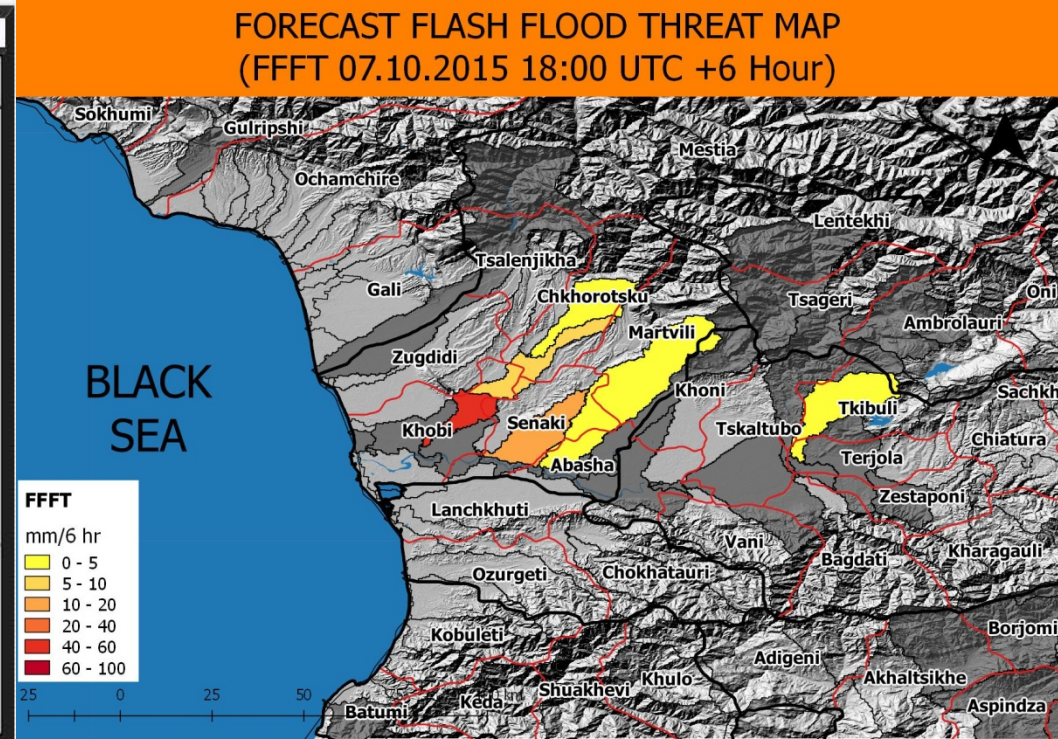
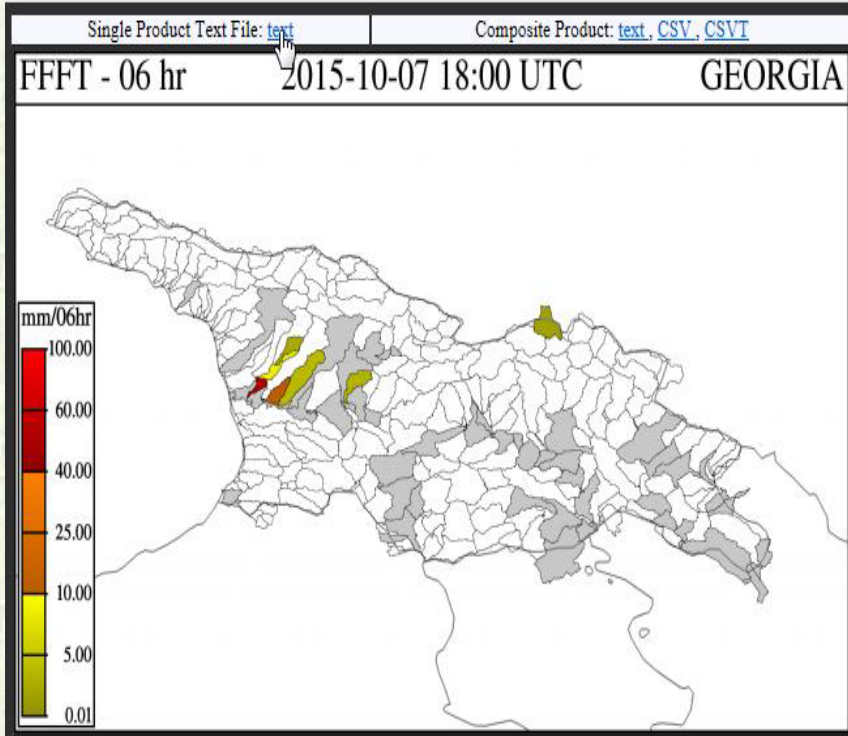


National Oceanic and Atmospheric
Administration (NOAA)



U.S. Agency for International
Development (USAID)

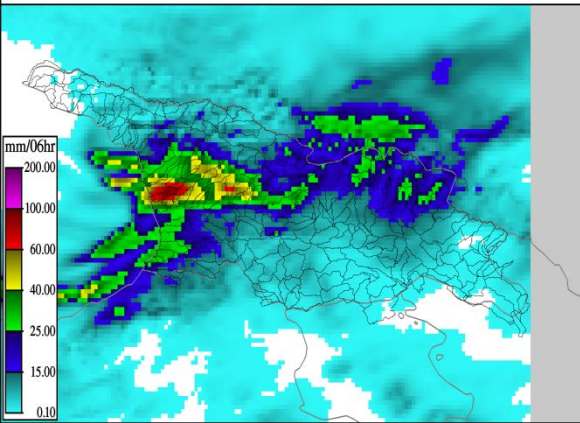
GOAL



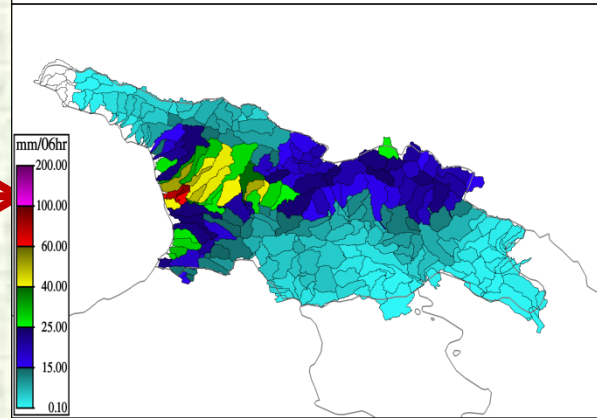
The goal of this study is to prepare maps for post processing of BSMEFFGS products by using QGIS.

EVALUATION OF THE CURRENT SITUATION

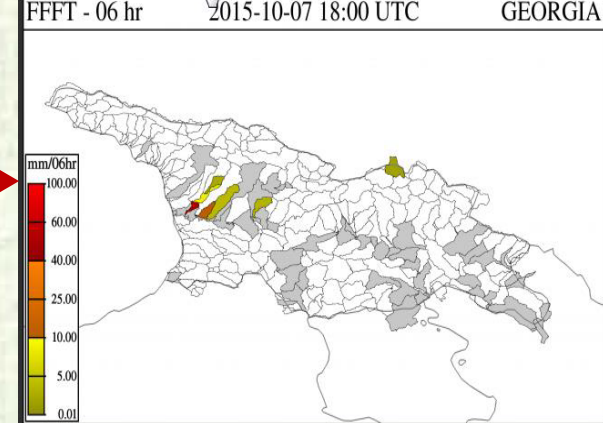
FORECAST - 06 hr 2015-10-07 18:00 UTC GEORGIA



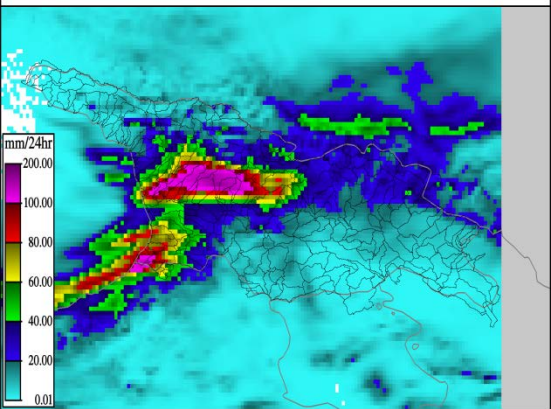
FMAP - 06 hr 2015-10-07 18:00 UTC GEORGIA



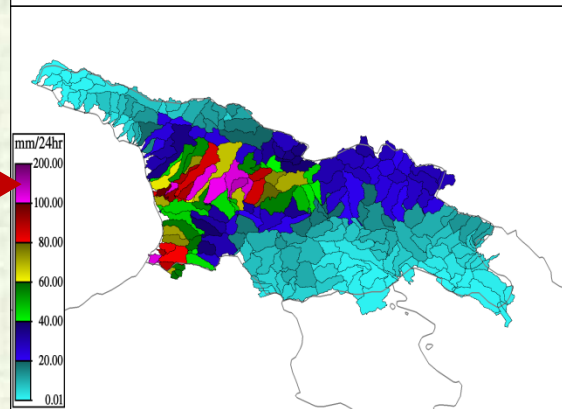
Single Product Text File: [text](#) Composite Product: [text_CSV_CSVI](#)
FFFT - 06 hr 2015-10-07 18:00 UTC GEORGIA



FORECAST - 24 hr 2015-10-07 18:00 UTC GEORGIA



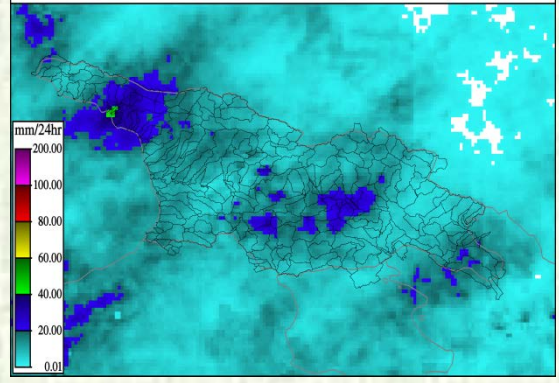
FMAP - 24 hr 2015-10-07 18:00 UTC GEORGIA



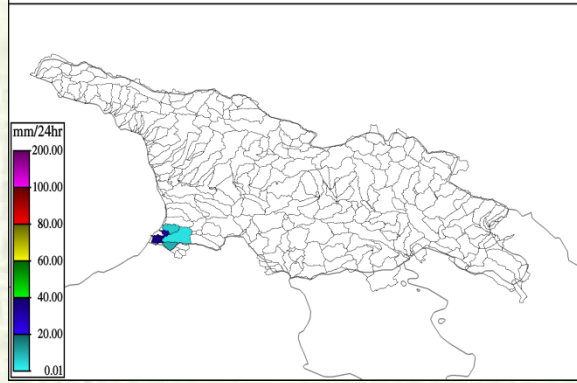
On the left side, the images provide 6-hour and 24-hour totals of forecast precipitation (mm) produced by using numerical forecasts from the Aladin Model. They show heavy rainfall is expected over Georgia. It is important to note that the majority of expected rainfall occur in the first 6 hours. In particular, there is heavy rainfall prediction in the northwest part.

EVALUATION OF THE CURRENT SITUATION

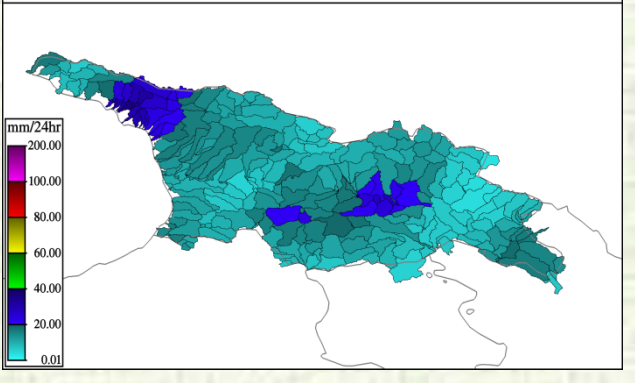
MWGHE - 24 hr 2015-10-07 18:00 UTC GEORGIA



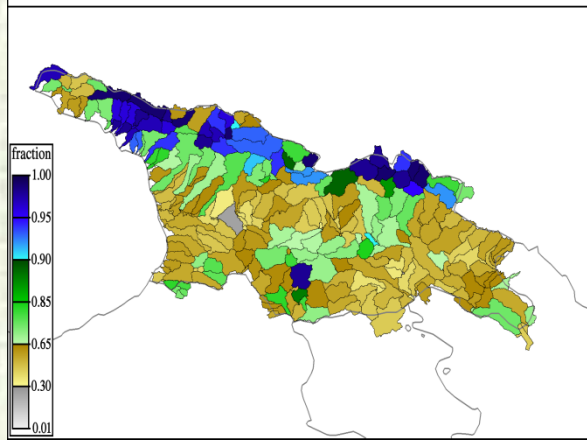
GMAP - 24 hr 2015-10-07 18:00 UTC GEORGIA



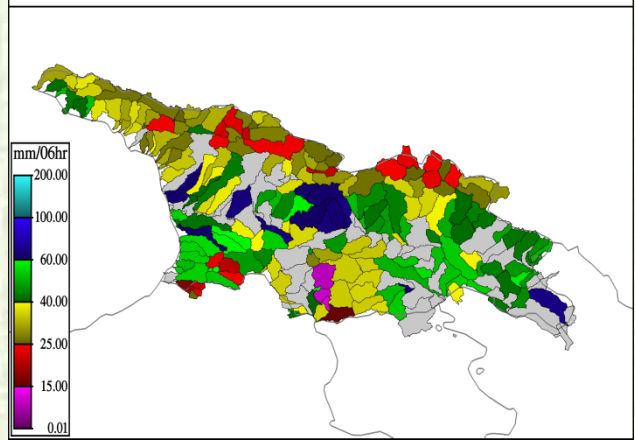
MAP - 24 hr 2015-10-07 18:00 UTC GEORGIA



ASM - 06 hr 2015-10-07 18:00 UTC GEORGIA

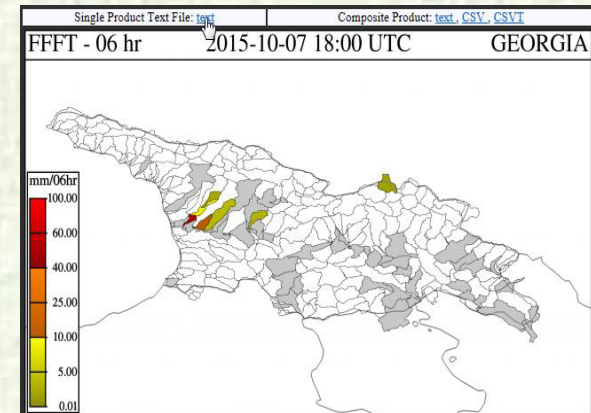
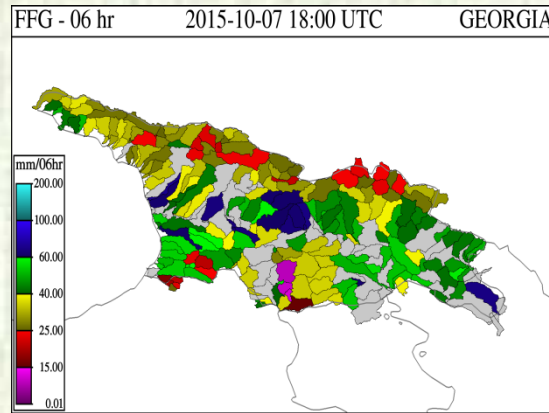
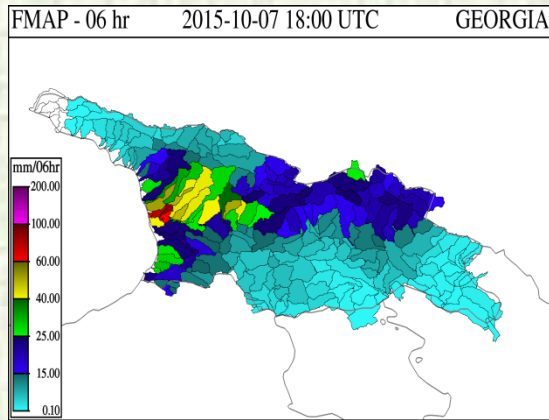


FFG - 06 hr 2015-10-07 18:00 UTC GEORGIA



Georgia received some precipitation in the last 24 hours from the gauge observation and satellite rainfall estimate maps. Accordingly, saturation of the soil moisture was increased while FFG threshold values were declined.

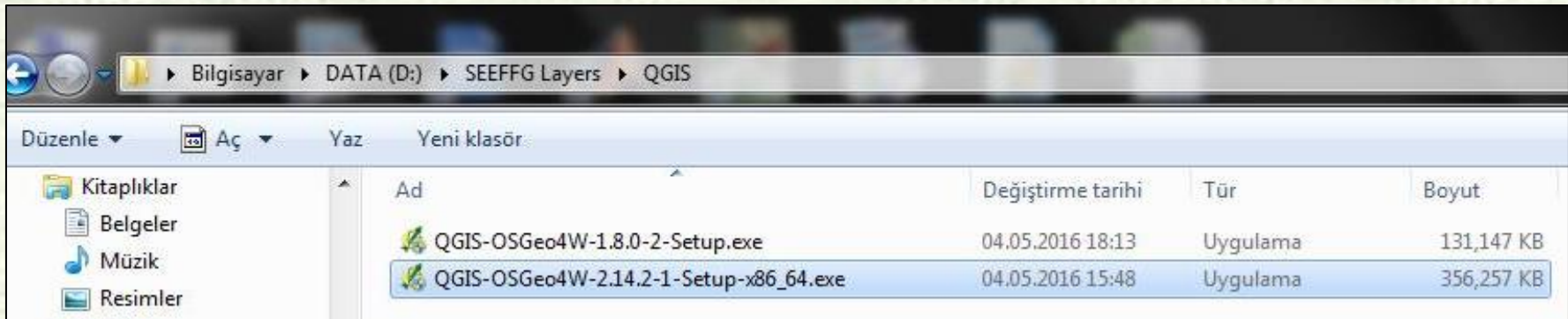
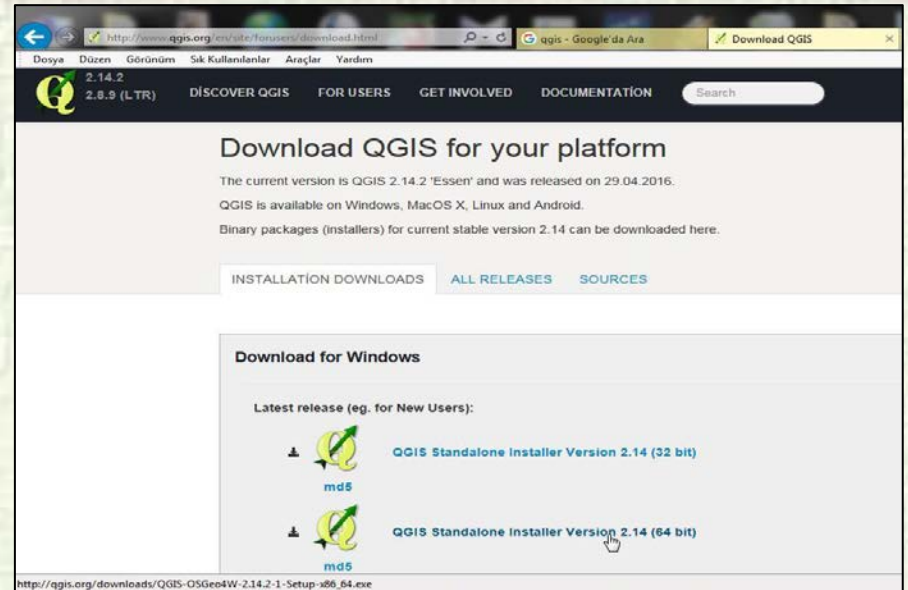
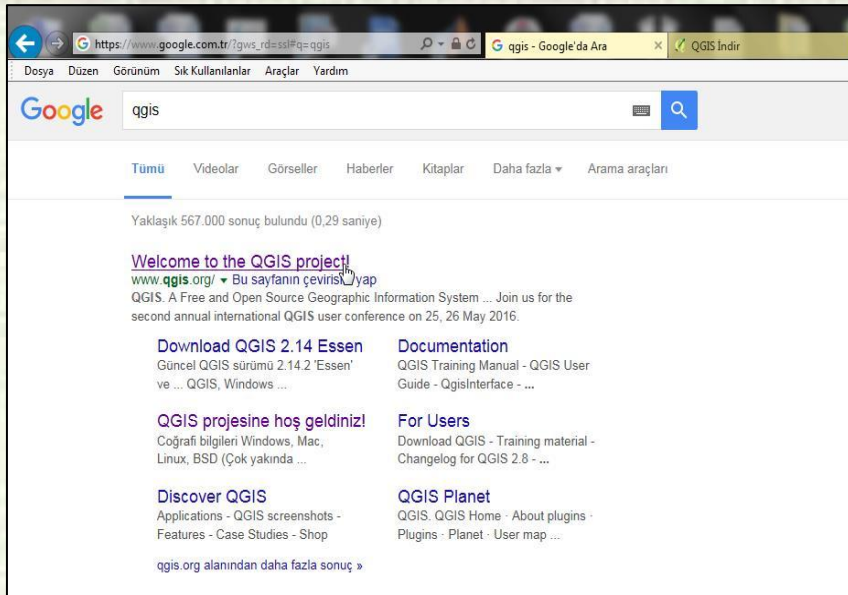
WARNING DECISION



$$\text{FMAP} - \text{FFG} = \text{FFFT}$$

In the preparation phase of a flash Flood Early Warning Bulletin, One can consider looking at the values of FFFT product (Here, Forecast Flash Flood Threat is equal to FMAP minus FFG). If 1,3,6 hour FFFT maps results in colored sub-basin, it means flash Flood Hazard is highly expected within the next these hours.

DOWNLOADING AND INSTALLING QGIS

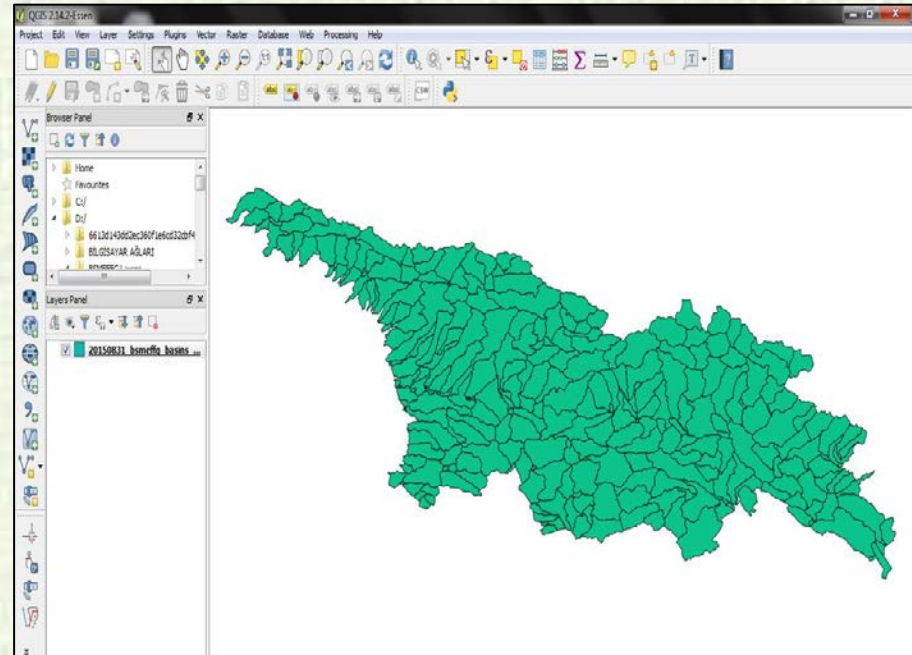


You can find [QGIS v.1.8.0-2](#) at the bottom of Static Resources tab. QGIS installation is quite simple. After **QGIS-OSGeo4W-2.14.2-1-Setup-x86_64.exe** file is downloaded, it is installed by double-clicking on the next-next.

DOWNLOAD BOUNDRIES OF SUB BASIN

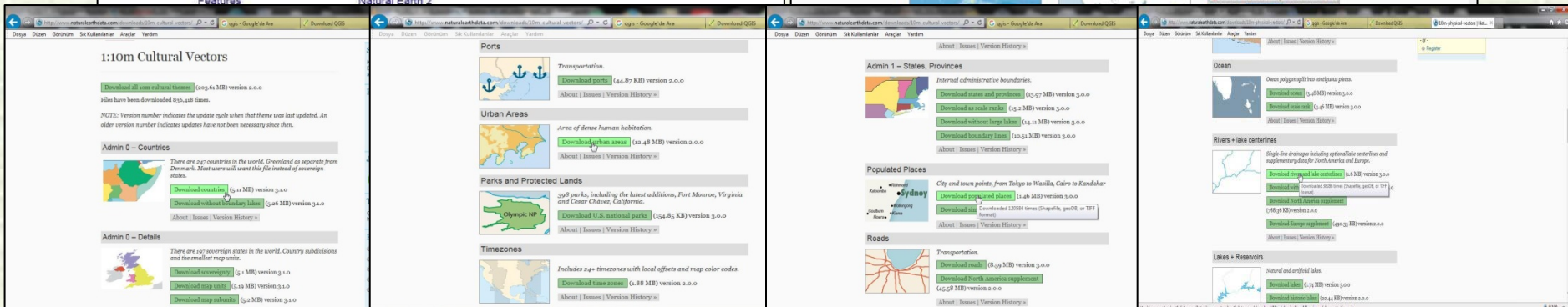
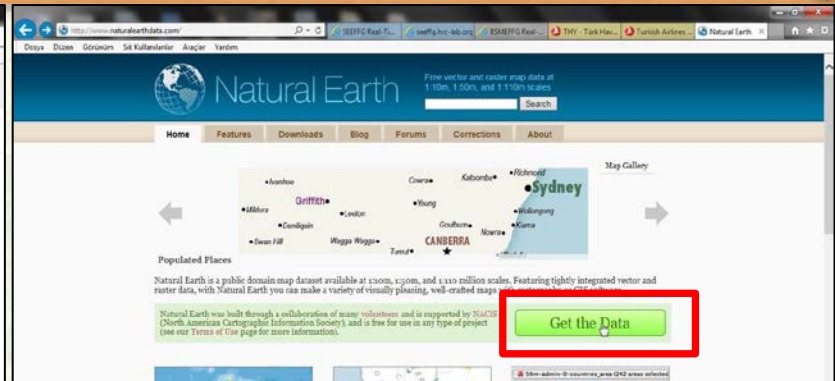
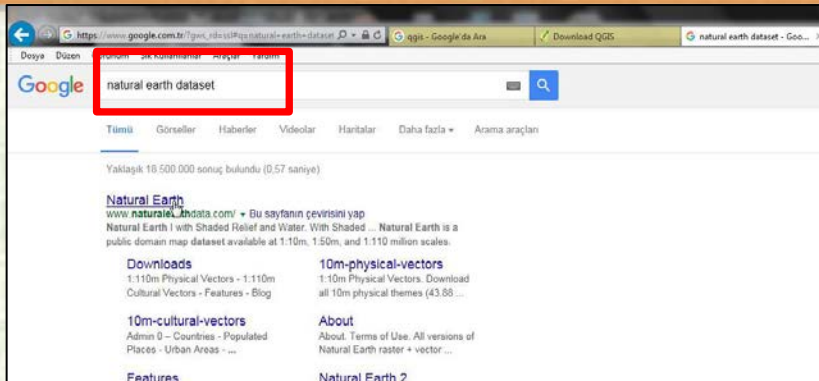
GIS Data Layer	Regional (All Nations) Sub-Basin Shapefile (11MB)	BSMEFFG Regional Shapefile	A zipped archive (*.zip) of the shapefile component files that provides Regional basin boundaries for all nations in a single shapefile layer.
GIS Data Layer	Armenia National Sub-Basin Shapefile (14KB)	BSMEFFG Armenia Shapefile	A zipped archive (*.zip) of the shapefile component files that provide basin boundaries for the Armenia National export sub-region.
GIS Data Layer	Azerbaijan National Sub-Basin Shapefile (64KB)	BSMEFFG Azerbaijan Shapefile	A zipped archive (*.zip) of the shapefile component files that provide basin boundaries for the Azerbaijan National export sub-region.
GIS Data Layer	Bulgaria National Sub-Basin Shapefile (60KB)	BSMEFFG Bulgaria Shapefile	A zipped archive (*.zip) of the shapefile component files that provide basin boundaries for the Bulgaria National export sub-region.
GIS Data Layer	Georgia National Sub-Basin Shapefile (19KB)	BSMEFFG Georgia Shapefile	A zipped archive (*.zip) of the shapefile component files that provide basin boundaries for the Georgia National export region.
GIS Data Layer	Iraq National Sub-Basin Shapefile (1.5MB)	BSMEFFG Iraq Shapefile	A zipped archive (*.zip) of the shapefile component files that provide basin boundaries for the Iraq National export region.
GIS Data Layer	Lebanon National Sub-Basin Shapefile (27KB)	BSMEFFG Lebanon Shapefile	A zipped archive (*.zip) of the shapefile component files that provide basin boundaries for the Lebanon National export region.

https://212.178.184.79/CONSOLE/static_resources/944PEFFG/basins/basins_04_georgia_operational.zip



All countries involved in the project have sub-basin boundaries in the shapefile format under the “Static Resources” tab of BSMEFFG interface. These files can be opened by GIS programs after unzipping them.

DOWNLOAD FREE GIS LAYERS



Many vector datasets can be downloaded from www.naturalearthdata.com address for free. There are many layers such as country borders, city centers and borders, such as rivers and lakes.

DOWNLOAD FREE GIS LAYERS

Google

Tümü Haberler Görseller Videolar Haritalar Daha fazla Ara ma araçları

Yaklaşık 439.000 sonuç bulundu (0,36 saniye)

İpucu: **Yalnızca Türkçe sonuçları arayın.** Arama dilinizi **Tercihler** sayfasında belirtebilirsiniz.

Shuttle Radar Topography Mission - JPL - NASA
www2.jpl.nasa.gov/srtm/ - Bu sayfanın çevirisini yap
 23 Eyl 2014 - Previously, SRTM data for regions outside the United States were sampled for public release at 3 arc-seconds, which is 1/1200th of a degree of ...
 SRTM Data Products - US Releases Enhanced ... - Data Products - PIA18813

cgiar-csi/srtm
srtm.csi.cgiar.org/ - Bu sayfanın çevirisini yap
 Bu sitenin robots.txt dosyası olduğundan, bu sonuç için açıklama bulunmamaktadır. Daha fazla bilgi edinin.

http://srtm.csi.cgiar.org/SELECTION/inputCoord.asp

Dosya Düzen Görünüm Sık Kullanılanlar Araçlar Yardım

Worldometers - Gerçek za... The UNIX School awk - 10... Orman ve Su İşleri Bakanlık... Çok Boyutlu Diziler Gelece... Broadcast Baron Critical ...

The CGIAR Consortium for Spatial Information (CGIAR-CSI)

Applying GeoSpatial Science for a Sustainable Future...

CGIAR-CSI HOME SRTM MAIN HELP

SRTM Data Selection Options Chinese users: [中国用户可通过中国科学院地理所站点下载](#)

1. Select Server: CGIAR-CSI (USA) HarvestChoice (USA) JRC (IT) King's College (UK) TerraScience (USA)

2. Data selection method: Multiple Selection Enable Mouse Drag Input Coordinates

Many files can be selected at random locations. These selected files are listed in the results page for download.

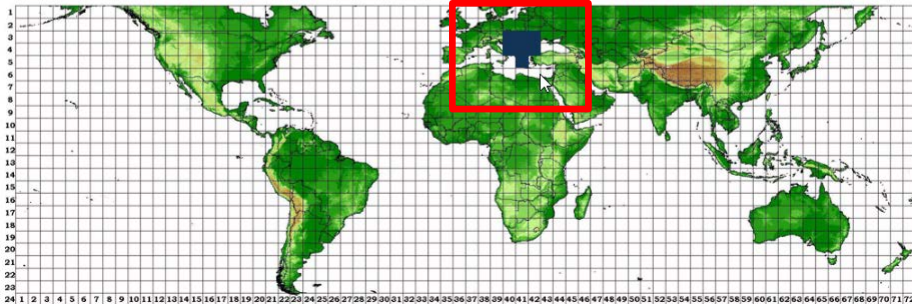
Decimal Degrees (e 34.5, -100.5) Degrees: Minutes: Seconds (e 34 30 00 N, 100 30 00 W)

Longitude - min: max: Longitude - min: max: East East

Latitude - min: max: Latitude - min: max: North North

Longitude: 28.33 Latitude: 38.95 Tile X: 42 Tile Y: 5

3. Select File Format: GeoTiff Arcinfo ASCII



SRTM Search Results - Go X

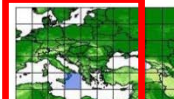
http://srtm.csi.cgiar.org/SELECTION/listImages.asp

The CGIAR Consortium for Spatial Information (CGIAR-CSI)

Applying GeoSpatial Science for a Sustainable Future...

CGIAR-CSI HOME CSI HOME SRTM MAIN HELP

10 Items have been Found.

Description	Location
Product : SRTM 90m DEM version 4 Data File Name : srtm_40_05.zip Mask File Name : srtm_mk_40_05.zip	

CGIAR-CSI SRTM 90m DEM X

← → ↻ srtm.csi.cgiar.org

The CGIAR Consortium for Spatial Information (CGIAR-CSI)

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CGIAR-CSI Content

- What is CGIAR-CSI ?
- CGIAR-CSI Members
- What's New ?
- CRU Climate Data

SRTM Content

- SRTM Data Search and Download**
- SRTM Data Processing Methodology

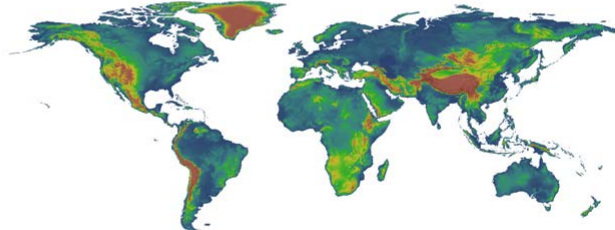
SRTM FAQ

- SRTM Quality Assessment (PDF File - 2.55 Mb)
- About SRTM Imagery
- CIAT Landuse Project
- How to Search for Data?
- Disclaimer
- Contact Us

GeoNetwork Project

- CGIAR-CSI Geonetwork Nodes
- GeoNetwork Support

SRTM 90m Digital Elevation Data

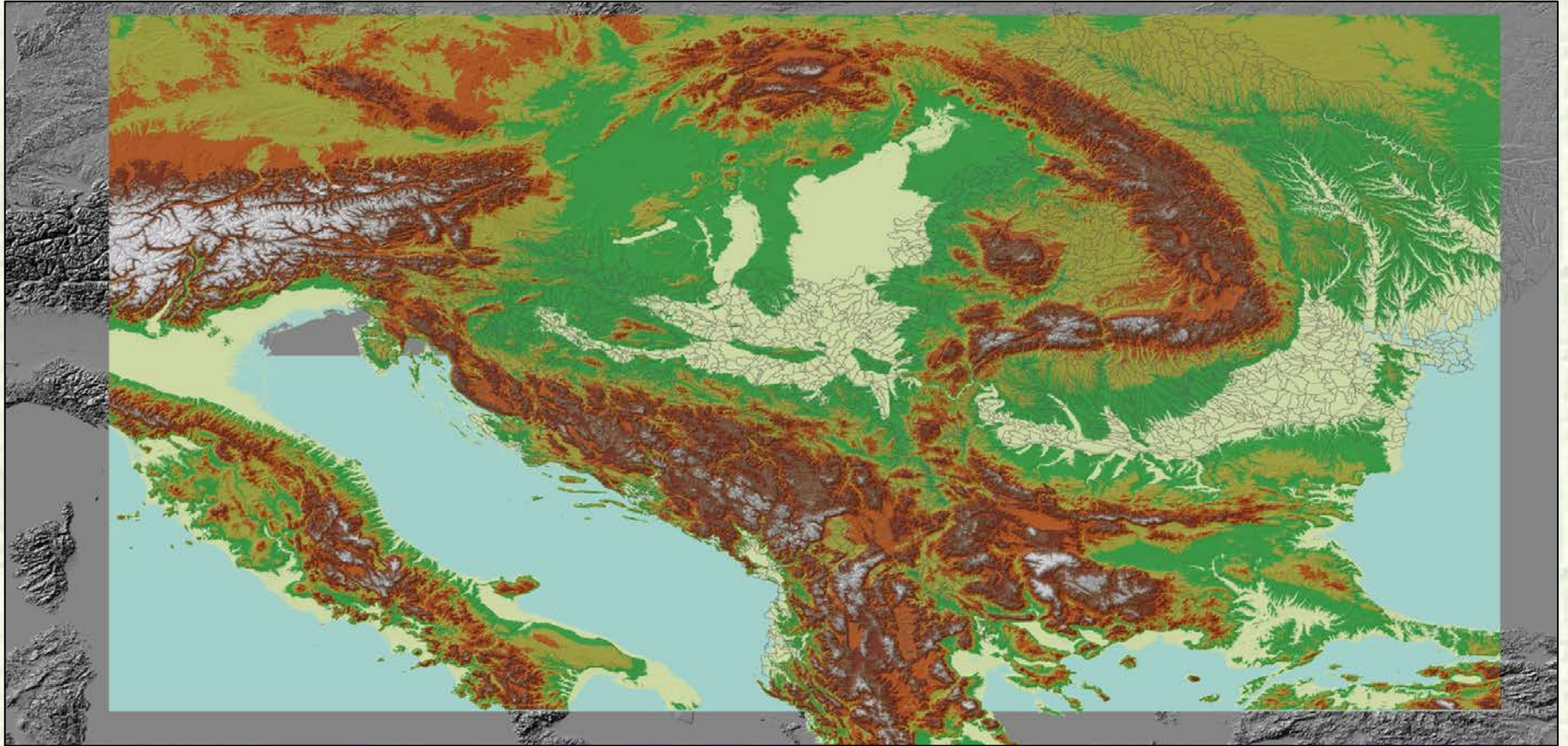


UPDATE - VER SION 4: THE SRTM DATA NOW AVAILABLE FROM THIS SITE HAS BEEN UPGRADED TO VERSION 4. THIS IS NOW THE HIGHEST QUALITY SRTM DATASET AVAILABLE

The CGIAR-CSI GeoPortal is able to provide SRTM 90m Digital Elevation Data for the entire world. The SRTM digital elevation areas of the developing world. The SRTM digital elevation data provided on this site has been processed to fill data voids, and to

Resampled SRTM data to 250m resolutions for the entire globe are available <https://hc.box.net/shared>

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90 meter Digital Elevation Model (source:<http://srtm.csi.cgiar.org/>) with hillshade

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1

Google open street map

Tümü Haberler Görseller Haritalar Videolar Daha fazla Ara

Yaklaşık 141.000.000 sonuç bulundu (0,36 saniye)

OpenStreetMap
https://www.openstreetmap.org/ Bu sayfanın çevirisini yap

openstreetmap.org sitesinden sonuçlar

2--> Export

OpenStreetMap

OpenStreetMap verileri, Open Data Commons Open Database License (ODbL) altında lisanslanmıştır.

Bu elan OpenStreetMap XML verisi olarak verilerine kadar büyüktür. Lütfen yakınlaştır veya daha küçük bir elan seç ya da aşağıdaki veriler diğer kaynakları kullan.

Overpass API
Download this bounding box from a mirror of the OpenStreetMap database

OSM Gezegeni
Regularly-updated copies of the complete OpenStreetMap database

Geofabrik (kaynaklar)
Regularly-updated extracts of continents, countries, and selected cities.

Büyükşehir Çıktıları
Büyükşehir ile banyülerin çıktıkları

3--> Geofabrik Downloads

4--> Choose Continent

OpenStreetMap Data Extracts

Welcome to Geofabrik's free download server. This server has data extracts from the OpenStreetMap database, updated every day. Select your continent and then your country of interest from the list below. If you are elsewhere and are not familiar with OpenStreetMap, we highly recommend that you read our OpenStreetMap introduction page. If you are familiar with OpenStreetMap, we recommend that you read our OpenStreetMap download service is offered for free by Geofabrik GmbH.

Willkommen auf dem Geofabrik-Downloads-Server. Hier gibt es Daten-Auszüge aus dem OpenStreetMap-Datenbank, aktualisiert werden. Wählen Sie aus dem Verzeichnis unten den Kontinent und ggf. das Land anderswo auf dieser Seite gelandet sind und von OpenStreetMap nichts wissen, dann ist unser OpenStreetMap Einführungsdokument für Sie. Wenn Sie mit dem OpenStreetMap-Datenbank vertraut zu machen, bevor Sie mit den Daten arbeiten.) Diese Downloads werden von Geofabrik GmbH kostenlos angeboten.

Click on the region name to see the overview page for that region, or select one of the following links to download the data for that region.

Sub-Region	.osm.pbf	Quick Links	.osm.bz2
Africa	[.osm.pbf]	[.shp.zip]	[.osm.bz2]
Antarctica	[.osm.pbf]	[.shp.zip]	[.osm.bz2]
Asia	[.osm.pbf]	[.shp.zip]	[.osm.bz2]
Australia and Oceania	[.osm.pbf]	[.shp.zip]	[.osm.bz2]
Central America	[.osm.pbf]	[.shp.zip]	[.osm.bz2]
Europe	[.osm.pbf]	[.shp.zip]	[.osm.bz2]
North America	[.osm.pbf]	[.shp.zip]	[.osm.bz2]
South America	[.osm.pbf]	[.shp.zip]	[.osm.bz2]

5

Download OpenStreetMap data for this region:
Europe

Commonly Used Formats

- europe-latest.osm.pbf, suitable for Osmium, Osmosis, imposm, osm2pgsql, mkgmap, and others. It contains all OSM data up to 2016-05-09T19:44:03Z. File size: 17.0 GB; MD5 sum: 5189e9c04fe6327480eefac4d730b0a
- europe-latest.shp.zip is not available for this region; try one of the sub-regions.

Other Formats and Auxiliary Files

- europe-latest.osm.bz2, yields OSM XML when decompressed; use for programs that can handle compressed data. File size: 26.2 GB; MD5 sum: 5189e9c04fe6327480eefac4d730b0a
- .poly file that describes the extent of this region.
- .osm.gz files that contain all changes in this region, suitable e.g. for Osmosis updates
- raw_directory.index, allowing you to see and download older files

Sub Regions

Click on the region name to see the overview page for that region, or select one of the following links to download the data for that region.

Sub Region	.osm.pbf	Quick Links	.shp.zip	.osm.bz2
Albania	[.osm.pbf] (16.9 MB)	[.shp.zip]	[.shp.zip]	[.osm.bz2]
Andorra	[.osm.pbf] (1.3 MB)	[.shp.zip]	[.shp.zip]	[.osm.bz2]
Austria	[.osm.pbf] (451 MB)	[.shp.zip]	[.shp.zip]	[.osm.bz2]
Azores	[.osm.pbf] (4.3 MB)	[.shp.zip]	[.shp.zip]	[.osm.bz2]
Belarus	[.osm.pbf] (136 MB)	[.shp.zip]	[.shp.zip]	[.osm.bz2]
Belgium	[.osm.pbf] (248 MB)	[.shp.zip]	[.shp.zip]	[.osm.bz2]

6--> Download

Dosya indirme bilgisi

URL: http://download.geofabrik.de/europe/albania-latest.shp.zip

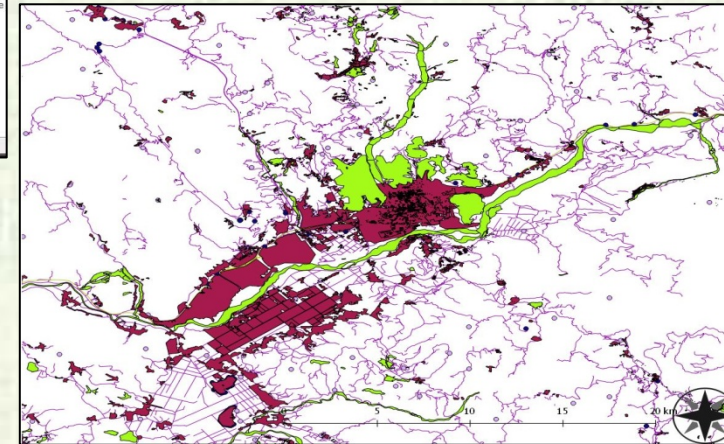
Kategori: Sıkıştırılmış

Farklı Kaydet: C:\Users\umut\Downloads\Compressed\albania-latest.shp.zip 28.55 MB

"Sıkıştırılmış" kategorisi için bu yolu habra

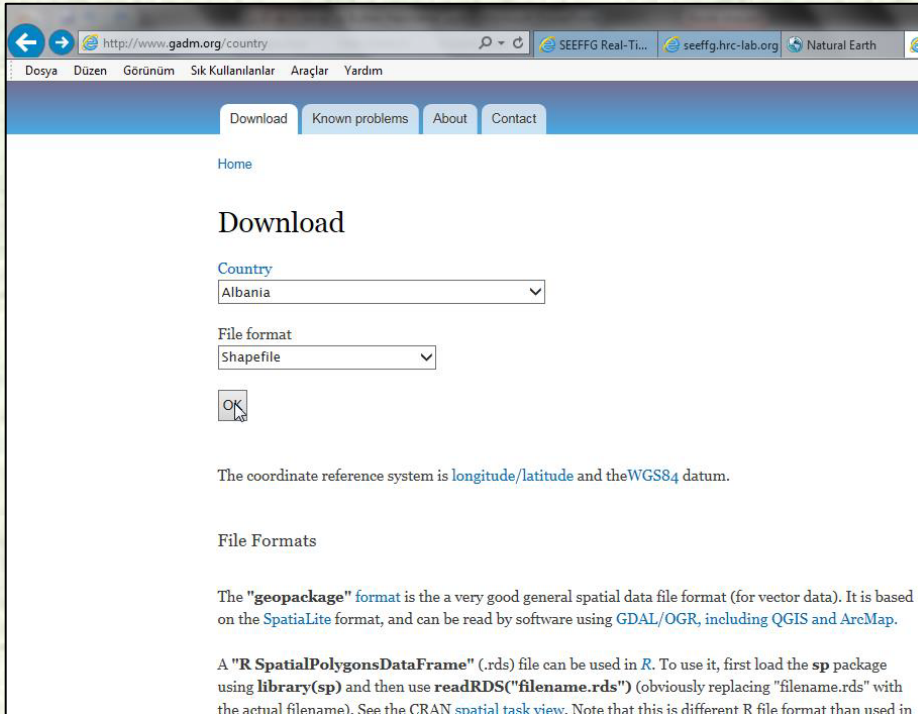
Açıklama

Daha sonra indir İndirmeyi Başlat İptal



This data contains buildings, landuse, natural, places, points, railways, roads and waterways.

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http://www.gadm.org/country

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Country
Albania

File format
Shapefile

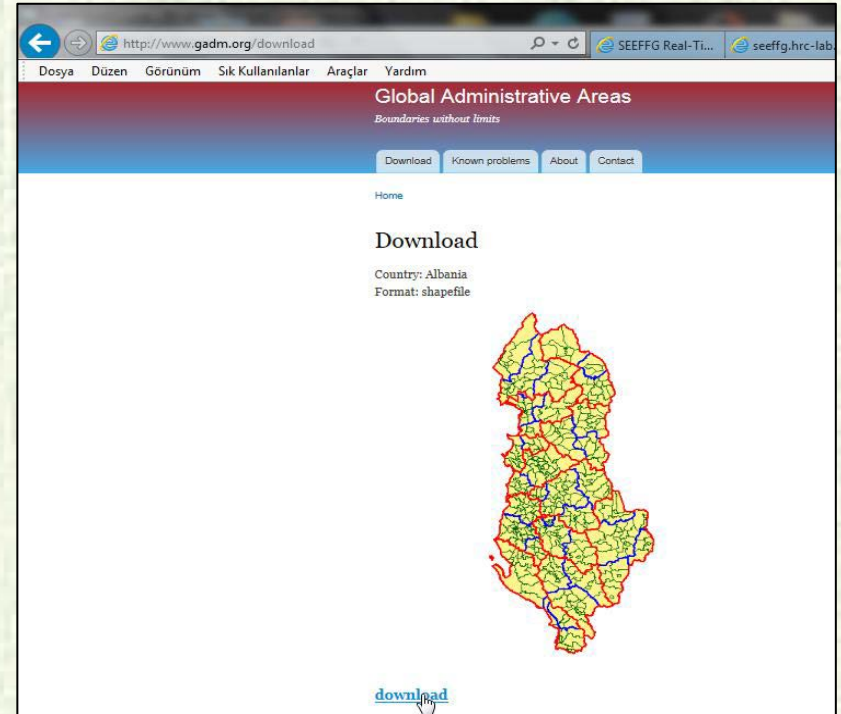
OK

The coordinate reference system is [longitude/latitude](#) and the [WGS84](#) datum.

File Formats

The "**geopackage**" format is the a very good general spatial data file format (for vector data). It is based on the [Spatialite](#) format, and can be read by software using [GDAL/OGR](#), including [QGIS](#) and [ArcMap](#).

A "**R SpatialPolygonsDataFrame**" (.rds) file can be used in *R*. To use it, first load the **sp** package using **library(sp)** and then use **readRDS("filename.rds")** (obviously replacing "filename.rds" with the actual filename). See the CRAN [spatial task view](#). Note that this is different R file format than used in



http://www.gadm.org/download

Dosya Düzen Görünüm Sık Kullanılanlar Araçlar Yardım

Global Administrative Areas


Boundaries without limits

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Country: Albania
Format: shapefile




[download](#)

You can download from Global Administrative Areas (www.gadm.org) web address to see the country, provincial, district and town limits in shapefile format.

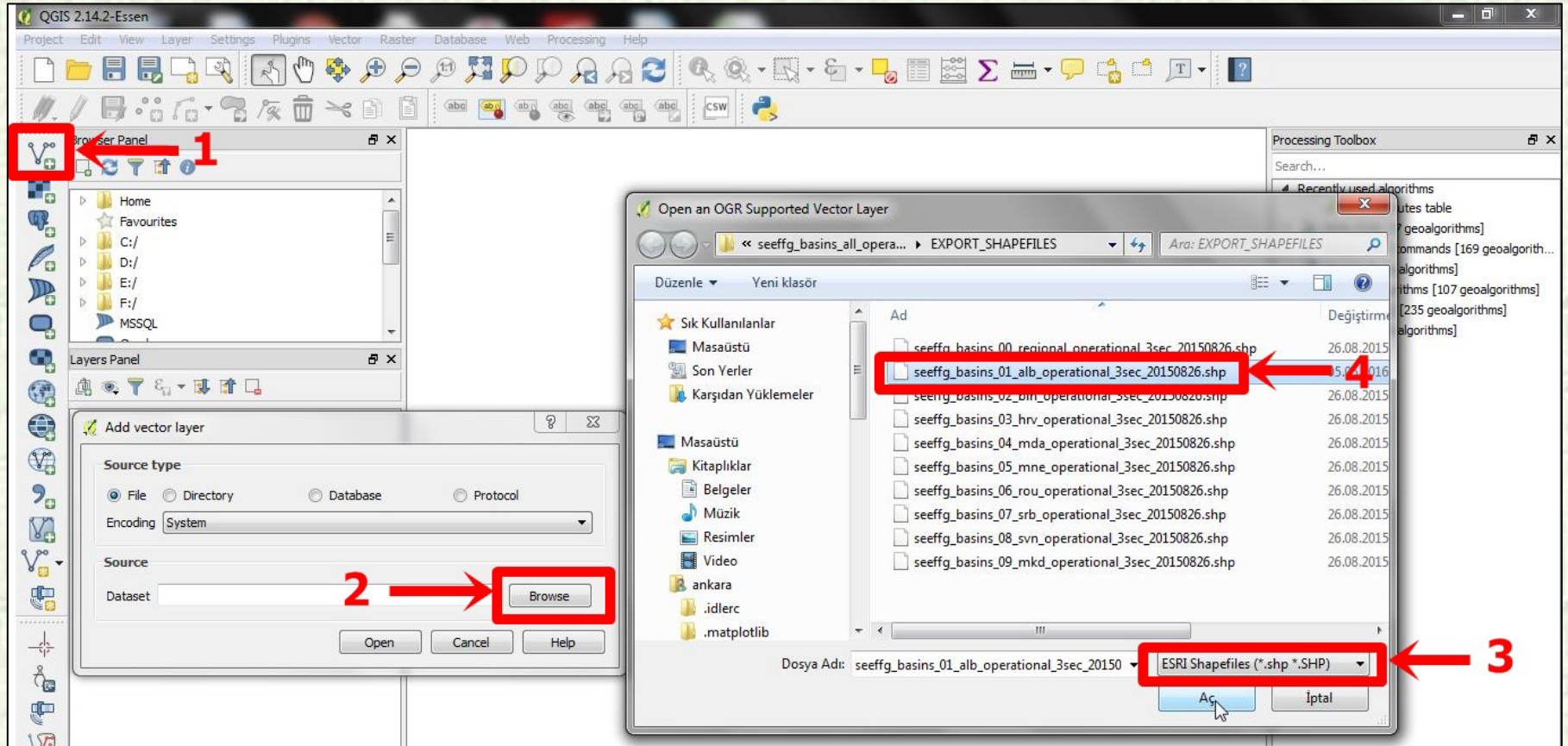
BEGINNING WORK WITH QGIS

Ad	Değiştirme tarihi	Tür	Boyut
 GRASS GIS 7.0.3	04.05.2016 20:23	Kısayol	2 KB
 OSGeo4W Shell	04.05.2016 20:26	Kısayol	2 KB
 QGIS Browser 2.14.2 with GRASS 7.0.3	04.05.2016 20:26	Kısayol	3 KB
 QGIS Browser 2.14.2	04.05.2016 20:26	Kısayol	3 KB
 QGIS Desktop 2.14.2 with GRASS 7.0.3	04.05.2016 20:26	Kısayol	3 KB
 QGIS Desktop 2.14.2	04.05.2016 20:26	Kısayol	3 KB
 Qt Designer with QGIS 2.14			
 SAGA GIS (2.1.2)			



Starting Python

ADD VECTOR DATA ON THE QGIS



1

2

3

4

Processing Toolbox

Recently used algorithms

Ad	Değiştirme
seeffg_basins_00_regional_operational_3sec_20150826.shp	26.08.2015
seeffg_basins_01_alb_operational_3sec_20150826.shp	5.7.2016
seeffg_basins_02_bir_operational_3sec_20150826.shp	26.08.2015
seeffg_basins_03_hrv_operational_3sec_20150826.shp	26.08.2015
seeffg_basins_04_mda_operational_3sec_20150826.shp	26.08.2015
seeffg_basins_05_mne_operational_3sec_20150826.shp	26.08.2015
seeffg_basins_06_rou_operational_3sec_20150826.shp	26.08.2015
seeffg_basins_07_srb_operational_3sec_20150826.shp	26.08.2015
seeffg_basins_08_svn_operational_3sec_20150826.shp	26.08.2015
seeffg_basins_09_mkd_operational_3sec_20150826.shp	26.08.2015

Dosya Adı: seeffg_basins_01_alb_operational_3sec_20150

ESRI Shapefiles (*.shp *.SHP)

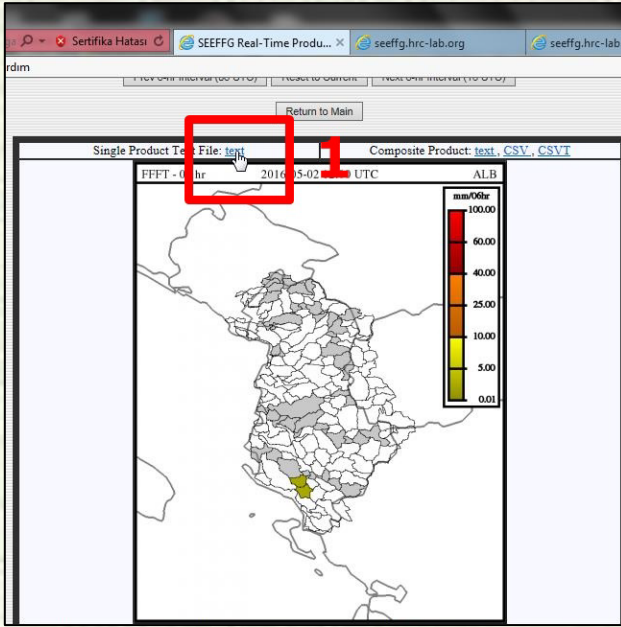
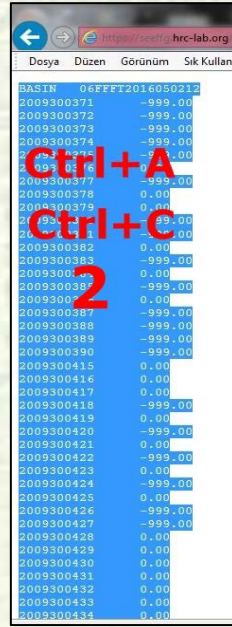
Ac İptal

PRODUCT TABLE

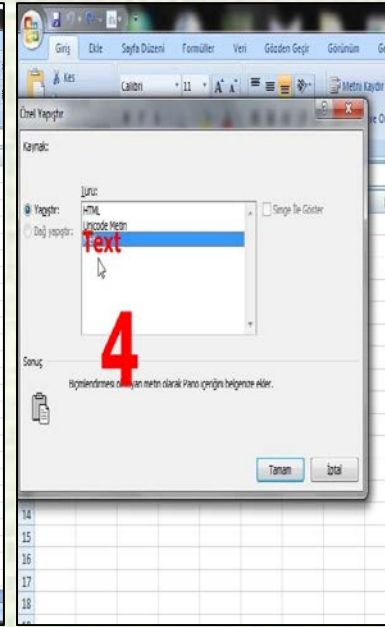
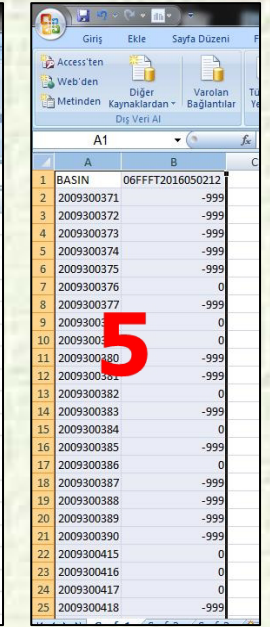
Images of existing products in the modern interface, updated times and data types are summarized in the table below.

Product's Name	01 hr	03 hr	6 hr	24 hr	4 hr	Numerical Data
RADAR Precipitation						
MWGHE Precipitation	+	+	+	+		+
GHE Precipitation	+	+	+	+		+
Gauge MAP			+	+		+
Merged MAP	+	+	+	+		+
ASM			+			+
FFG	+	+	+			+
IFFT	+	+	+			+
PFFT	+	+	+			+
ALADIN Forecast	+	+	+	+		
FMAP	+	+	+	+		+
FFFT	+	+	+			+
Gauge MAT			+			+
Latest IMS SCA				+		+
SWE			+			+
Melt				+	+	+

BSMEFFGS's TRANSFER DATA TO EXCEL

BASIN	06FFFT2016050212	
2009300371	-999.00	
2009300372	-999.00	
2009300373	-999.00	
2009300374	-999.00	
2009300375	-999.00	
2009300376	0.00	
2009300377	-999.00	
2009300378	0.00	
2009300379	0.00	
2009300380	-999.00	
2009300381	0.00	
2009300382	-999.00	
2009300383	-999.00	
2009300384	0.00	
2009300385	-999.00	
2009300386	0.00	
2009300387	-999.00	
2009300388	-999.00	
2009300389	-999.00	
2009300390	-999.00	
2009300415	0.00	
2009300416	0.00	
2009300417	0.00	
2009300418	-999.00	
2009300419	0.00	
2009300420	-999.00	
2009300421	0.00	
2009300422	-999.00	
2009300423	0.00	
2009300424	-999.00	
2009300425	0.00	
2009300426	-999.00	
2009300427	-999.00	
2009300428	0.00	
2009300429	0.00	
2009300430	0.00	
2009300431	0.00	
2009300432	0.00	
2009300433	0.00	
2009300434	0.00	

	A	B
1	BASIN	06FFFT2016050212
2		-999
3		-999
4		-999
5		-999
6		-999
7		0
8		-999
9		0
10		0
11		-999
12		-999
13		-999
14		-999
15		-999
16		-999
17		0
18		-999
19		-999
20		-999
21		0
22		-999
23		0
24		0
25		-999

To transfer the data of BSMEFFGS products into the excel file ;

1. Click on product blue txt
2. On the following page, copy data by pressing Ctrl +A and Ctrl +C
3. Right-click on the excel file to copy data with special paste,
- 4- select Text to paste it.
5. At the end of this process, we have two columns of data (BASIN, data)


QGIS 2.14.2-Essen

Project Edit View Layer Settings Plugins Vector Raster Database Web Processing Help

Bilgisayar > DATA (D:) > SEEFFG Layers > Albania

Ad	Değiştirme tarihi	Tür	Boyut
ALB_adm_gdb	05.05.2016 15:31	Dosya klasörü	
albania-latest.shp	05.05.2016 15:31	Dosya klasörü	
seeffg_basins_all_operational	07.05.2016 16:25	Dosya klasörü	
Alb FFFT 02052016 12UTC 6hr.xlsx	07.05.2016 16:40	Microsoft Office E...	11 KB
Alb FMAP 02052016 12UTC 6hr.xlsx	07.05.2016 16:38	Microsoft Office E...	12 KB
Alb FMAP 02052016 12UTC 24hr.xlsx	07.05.2016 16:36	Microsoft Office E...	12 KB
ALB_adm_gdb.zip	04.05.2016 17:39	WinRAR ZIP archive	612 KB
albania-latest.shp.zip	05.05.2016 15:20	WinRAR ZIP archive	29,157 KB

3 öğe seçili Başlık: Başlık ekle Boyut: 33.2 KB Etiketler: Etiket ekle
Yazarlar: Yazar ekle Değiştirme tarihi: 07.05.2016 16:36



You can add more algorithms
enable additional providers

Select some Excel files then, hold and drag over QGIS interface.

HOW TO JOIN EXCEL DATA TO A SHAPEFILE ?

Layer Properties - seeffg_basins_01_alb_operational_3sec_20150826 | Joins

Join layer	Join field	Target field	Memory cache	Prefix	Joined fields
Alb FFFT 02052016 12UTC 6hr Sayfa1 None	BASIN	value	✓		1
Alb FMAP 02052016 12UTC 24hr Sayfa1 None	BASIN	value	✓		1

Add vector join

Join layer: 4 Alb FMAP 02052016 12UTC 6hr Sayfa1 None

Join field: 5 123 BASIN

Target field: 6 123 value

Cache join layer in virtual memory

Create attribute index on join field

Choose which fields are joined

BASIN

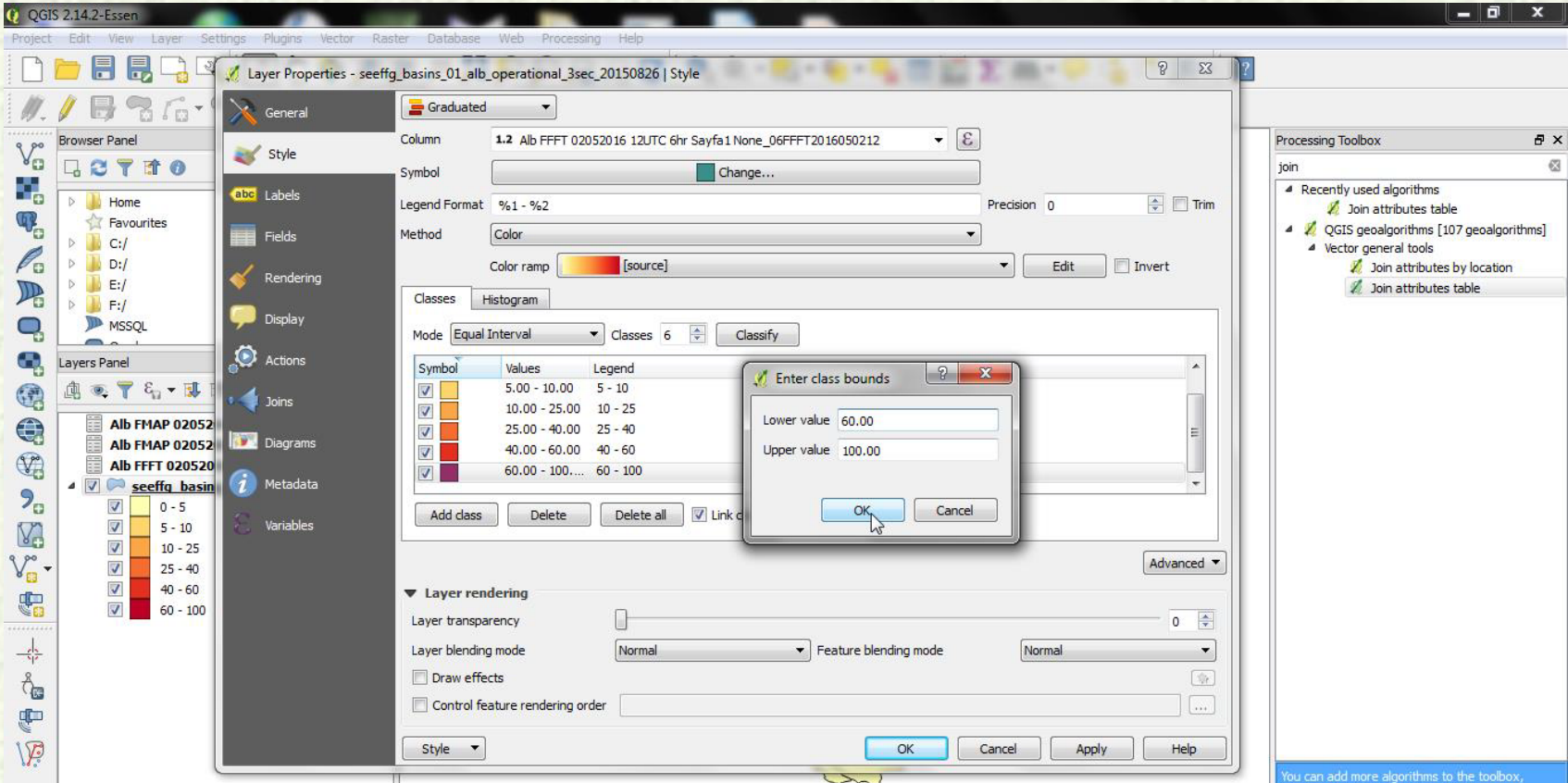
06FMAP2016050212

Custom field name prefix

8 OK

In the Add vector join dialog, select the Join layer. Next we have to select the field with unique ids in both the shapefile and the csv or excell. Select the Join field and Target field respectively. Click OK

HOW TO SET STYLE ?



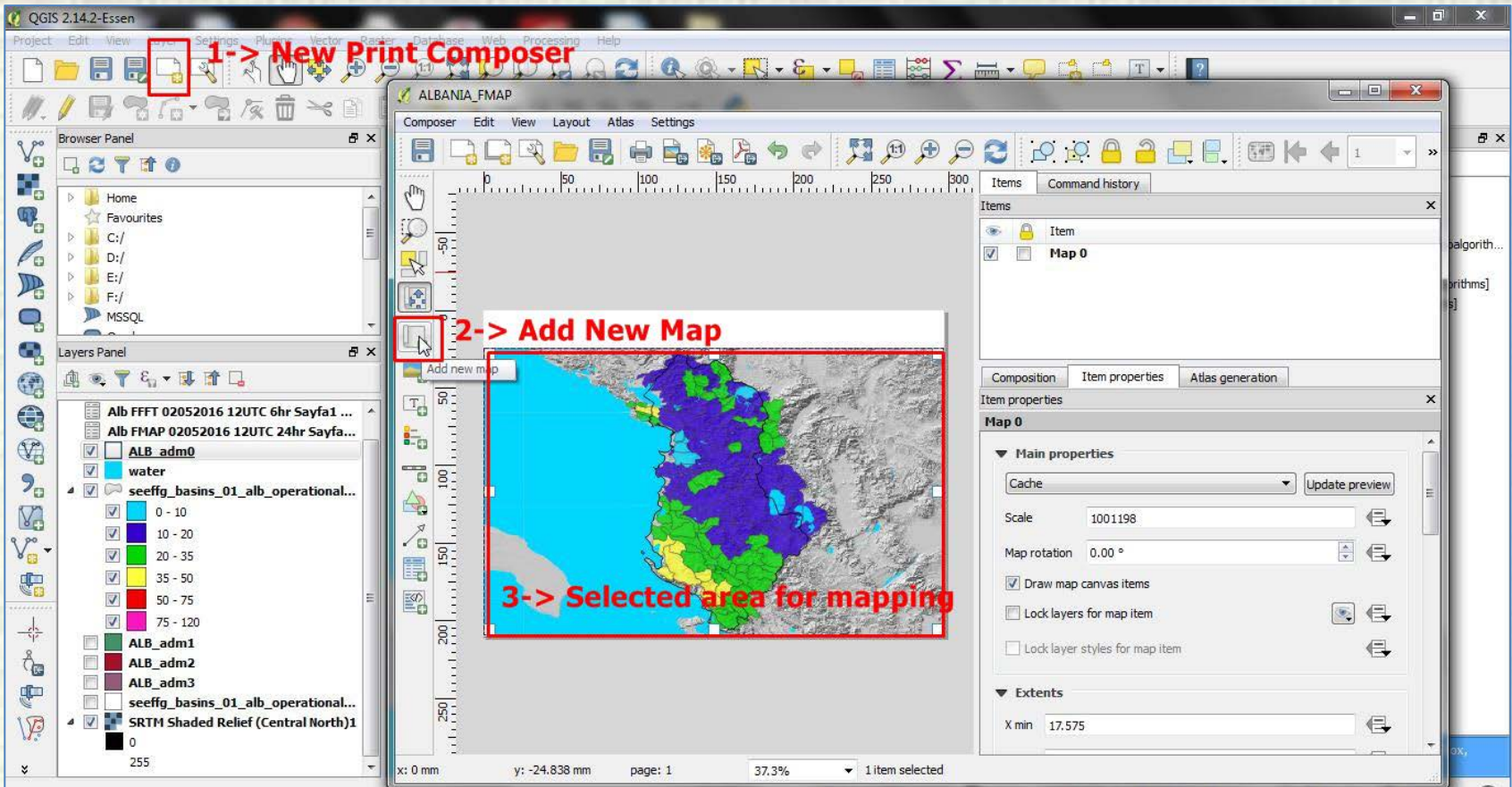
The screenshot shows the QGIS 2.14.2-Essen interface. The 'Layer Properties' dialog for the layer 'seefg_basins_01_alb_operational_3sec_20150826' is open, with the 'Style' tab selected. The 'Graduated' classification method is chosen. The 'Column' is set to '1.2 Alb FFFT 02052016 12UTC 6hr Sayfa1 None_06FFFT2016050212'. The 'Legend Format' is '%1 - %2' and the 'Method' is 'Color'. The 'Color ramp' is set to '[source]'. The 'Classes' section shows a 'Histogram' mode with 'Equal Interval' classification, 6 classes, and a 'Classify' button. A table lists the classes with their values and legends:

Symbol	Values	Legend
<input checked="" type="checkbox"/>	5.00 - 10.00	5 - 10
<input checked="" type="checkbox"/>	10.00 - 25.00	10 - 25
<input checked="" type="checkbox"/>	25.00 - 40.00	25 - 40
<input checked="" type="checkbox"/>	40.00 - 60.00	40 - 60
<input checked="" type="checkbox"/>	60.00 - 100.00	60 - 100

An 'Enter class bounds' dialog is open, showing 'Lower value: 60.00' and 'Upper value: 100.00'. The 'Layer rendering' section is also visible, with 'Layer transparency' set to 0, 'Layer blending mode' set to 'Normal', and 'Feature blending mode' set to 'Normal'. The 'Style' button is highlighted at the bottom of the dialog.

In QGIS, double click on the layer you are dealing with. Then go to the Style menu. In the Style menu, set your classification to “Graduated”. After you can set class bounds and colours.

EDITING THE MAP OUT



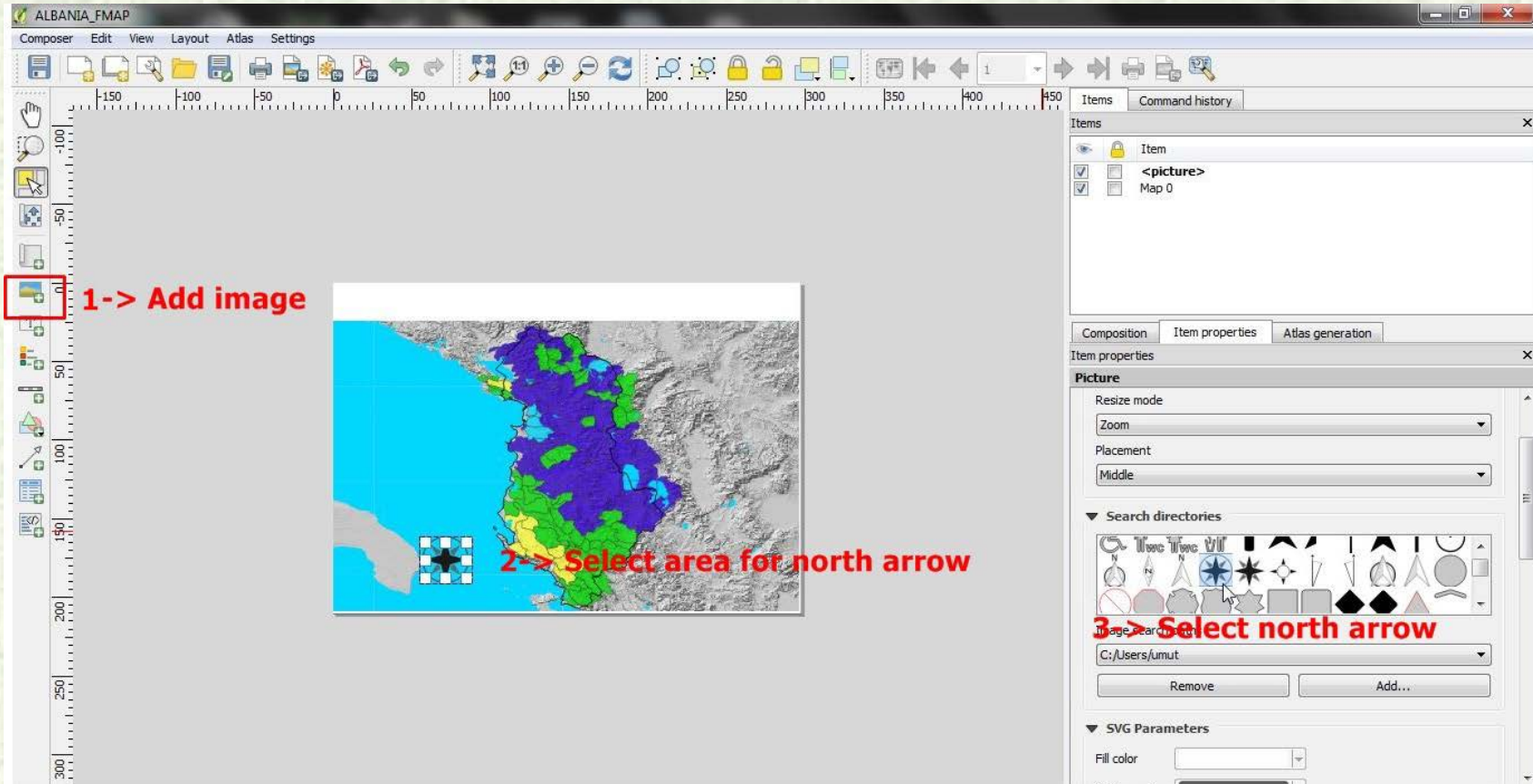
1 -> New Print Composer

2 -> Add New Map

3 -> Selected area for mapping

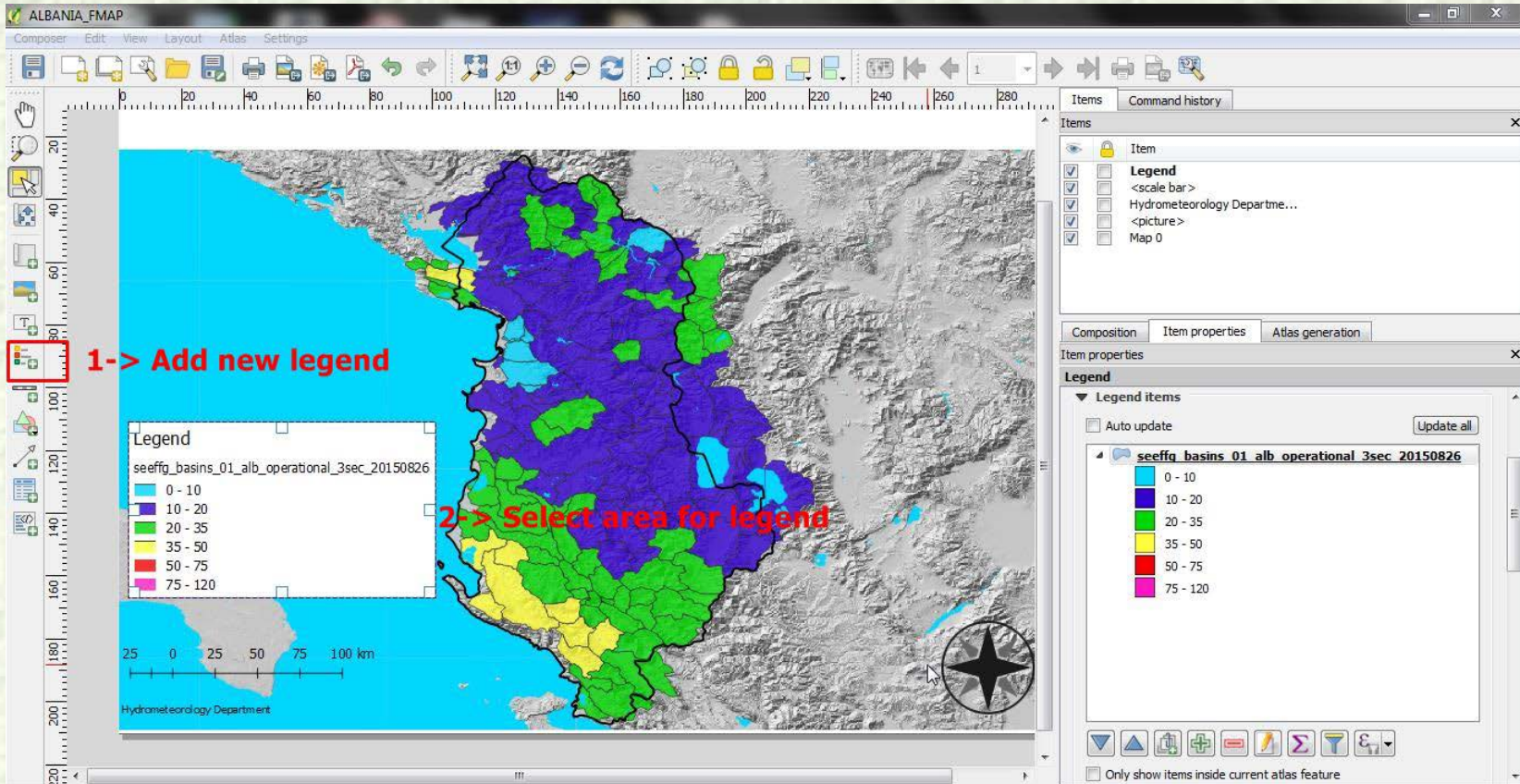
The screenshot displays the QGIS 2.14.2-Essen interface. The main window shows a map of Albania with various layers. The Print Composer window is open, showing a map of the same area. The Composer window has a toolbar with an 'Add new map' button highlighted. The Layers Panel on the left shows several layers, including 'ALB_adm0', 'water', 'seeffg_basins_01_alb_operational...', and 'SRTM Shaded Relief (Central North)1'. The Composer window shows the 'Map 0' item selected in the 'Items' panel. The 'Main properties' panel for 'Map 0' is visible, showing settings for 'Cache', 'Scale', 'Map rotation', and 'Extents'.

EDITING THE MAP OUT



The screenshot shows the ALBANIA_FMAP software interface. The main window displays a map of Albania with a grid overlay. The interface includes a menu bar (Composer, Edit, View, Layout, Atlas, Settings), a toolbar with various editing tools, and a vertical ruler on the left. A red box highlights the 'Add image' icon in the toolbar, with the text '1 -> Add image' next to it. A red arrow points to a specific area on the map, with the text '2 -> Select area for north arrow' next to it. A red arrow points to a north arrow icon in the 'Search directories' panel, with the text '3 -> Select north arrow' next to it. The right-hand side of the interface shows the 'Items' and 'Item properties' panels. The 'Items' panel lists 'Item', '<picture>', and 'Map 0'. The 'Item properties' panel shows settings for the 'Picture' item, including 'Resize mode' (Zoom), 'Placement' (Middle), and 'Search directories' (C:/Users/umut).

EDITING THE MAP OUT



The screenshot displays the ALBANIA_FMAP software interface. The main map area shows a topographic map of Albania with a legend overlay. The legend is titled "Legend" and lists six categories with corresponding color swatches: 0 - 10 (light blue), 10 - 20 (dark blue), 20 - 35 (green), 35 - 50 (yellow), 50 - 75 (red), and 75 - 120 (magenta). The legend is titled "seeffq_basins_01_alb_operational_3sec_20150826".

Two red annotations are present:

- 1 -> Add new legend**: A red box highlights the legend icon in the left-hand toolbar.
- 2 -> Select area for legend**: A red box highlights a specific area on the map, likely indicating the selection process for the legend.

The software interface includes a menu bar (Composer, Edit, View, Layout, Atlas, Settings), a toolbar with various editing tools, and a status bar at the bottom. The right-hand side of the interface features a "Legend" panel with "Legend items" and a "Legend" panel with "Legend items" and a "Legend" panel with "Legend items".

Color	Value Range
Light Blue	0 - 10
Dark Blue	10 - 20
Green	20 - 35
Yellow	35 - 50
Red	50 - 75
Magenta	75 - 120

EDITING THE MAP OUT

The screenshot displays the ALBANIA_FMAP software interface. The main map area shows a forecast of mean areal precipitation for Albania on 02.05.2016 at 12:00 UTC +24 hr. The map is color-coded by precipitation intensity, with a legend in the bottom-left corner. A scale bar and a north arrow are also present on the map.

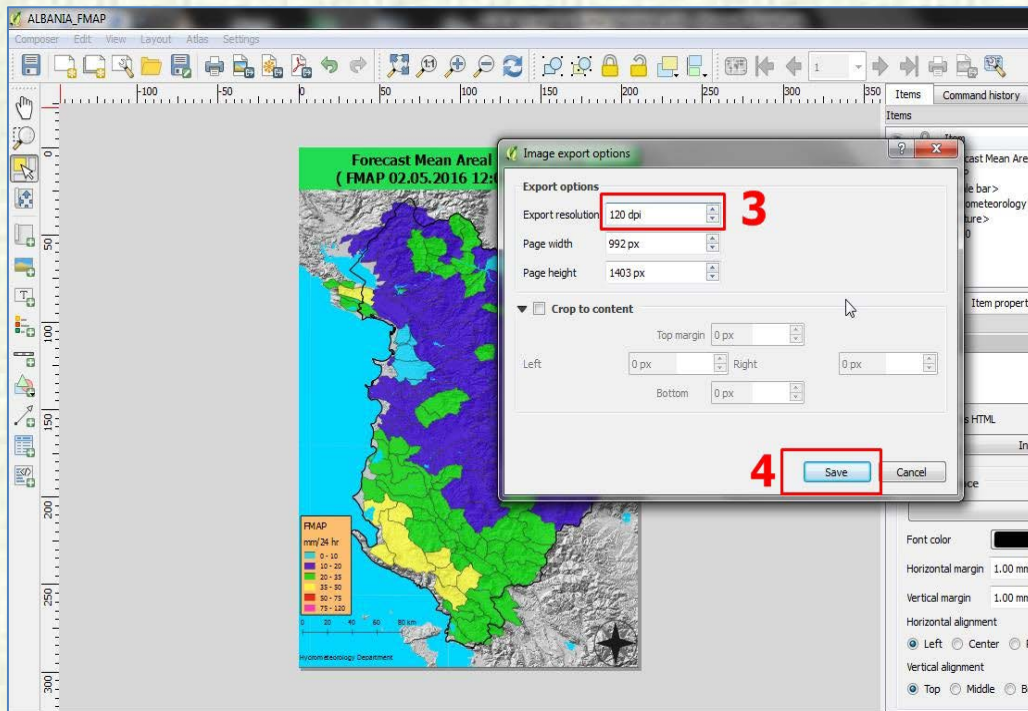
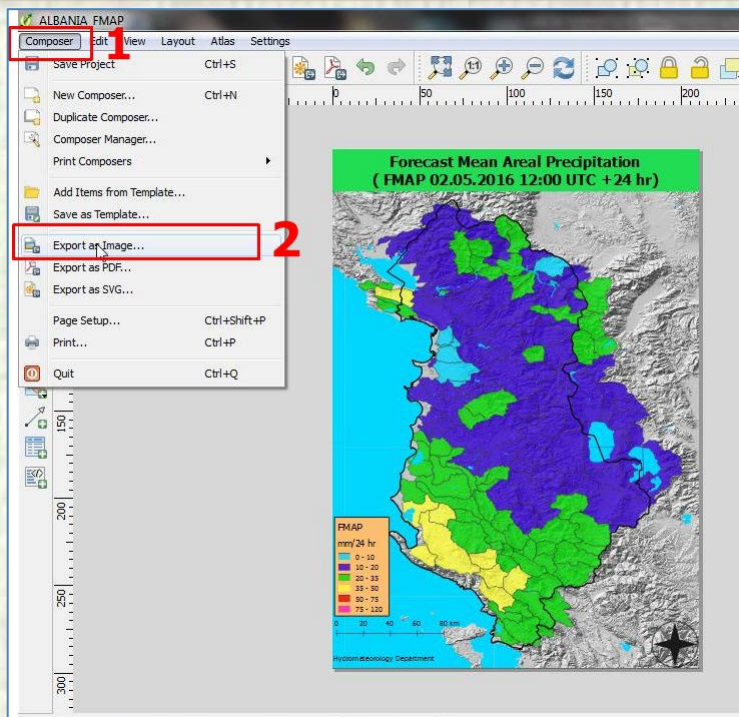
Annotations on the map include:

- Forecast Mean Areal Precipitation (FMAP 02.05.2016 12:00 UTC +24 hr) --> Label**: A green box at the top of the map.
- > Add new label**: A red box pointing to the 'Add new label' icon in the left toolbar.
- > Add new scalebar**: A red box pointing to the 'Add new scalebar' icon in the left toolbar.
- > Scalebar**: A red box pointing to the scale bar on the map.
- > Label**: A red box pointing to the 'Hydrometeorology Department' text at the bottom of the map.

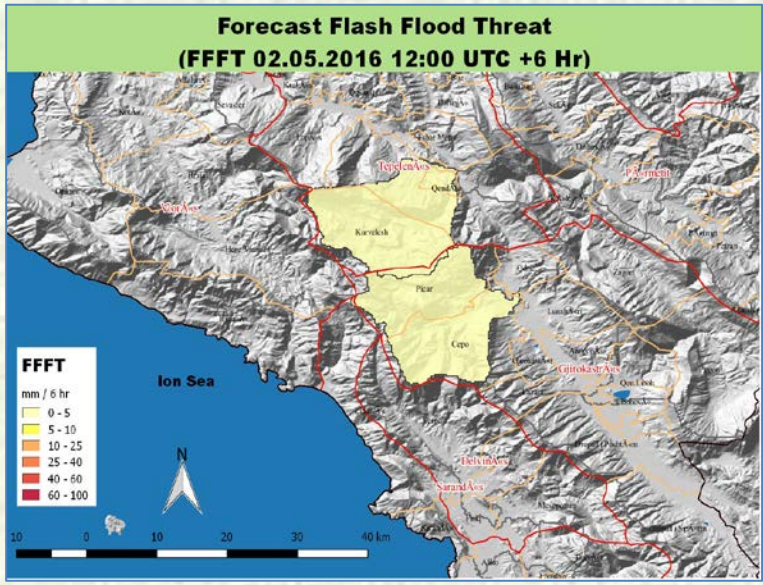
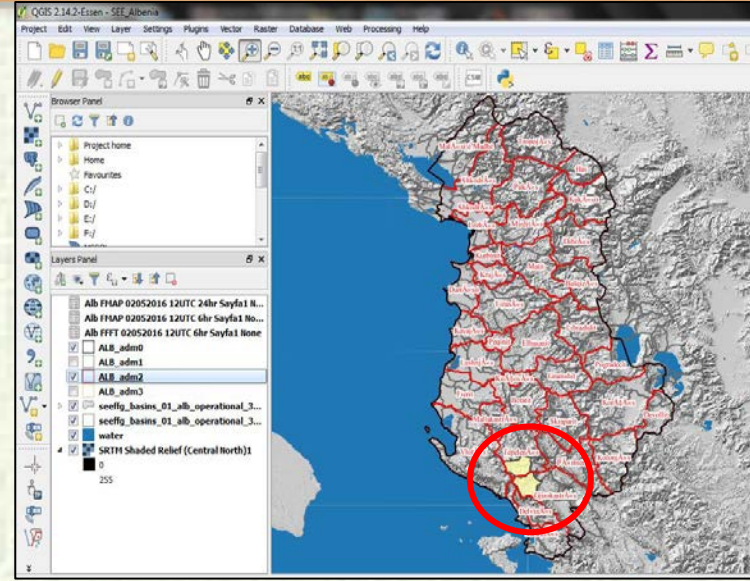
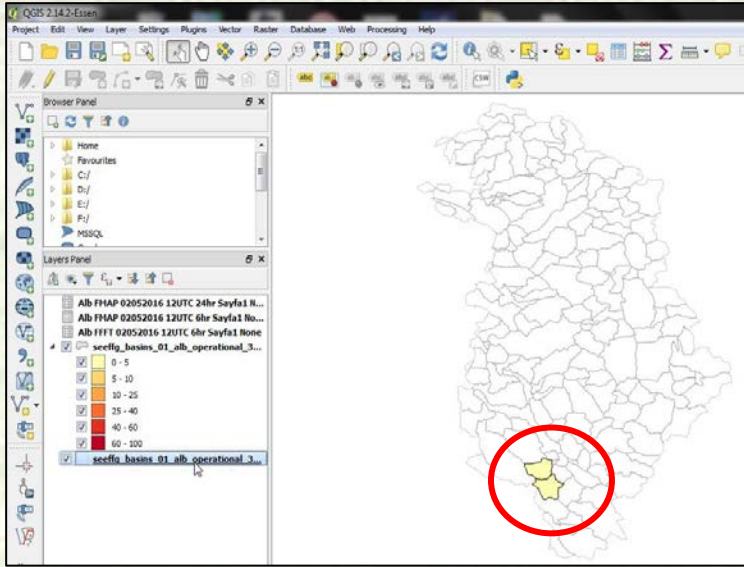
The software interface includes a menu bar (Composer, Edit, View, Layout, Atlas, Settings), a toolbar with various editing tools, and two panels on the right:

- Items**: A list of map items including 'Forecast Mean Areal Preci...', 'FMAP', '<scale bar>', 'Hydrometeorology Departme...', '<picture>', and 'Map 0'.
- Item properties**: A panel for 'Map 0' with 'Main properties' (Cache, Scale: 1001198, Map rotation: 0.00°) and 'Extents' (X min: 17.575, Y min: 39.620, X max: 22.492).

EXPORT THE MAP

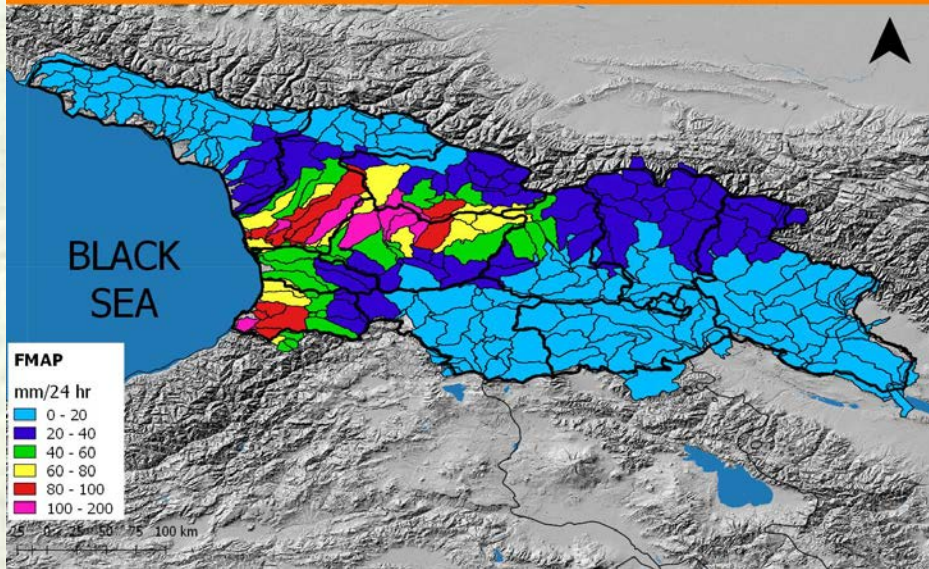


ZOOM TO THREAT AREA

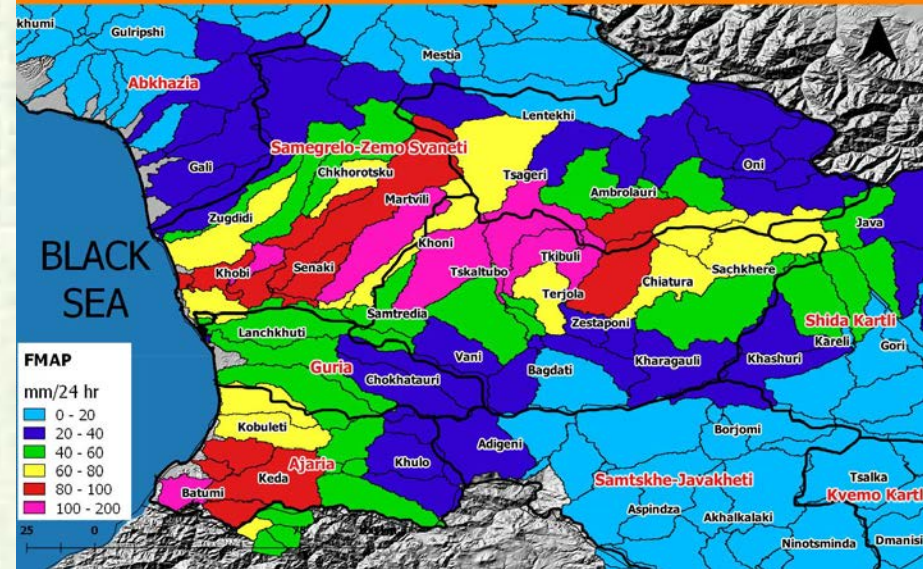


OTHER MAPS

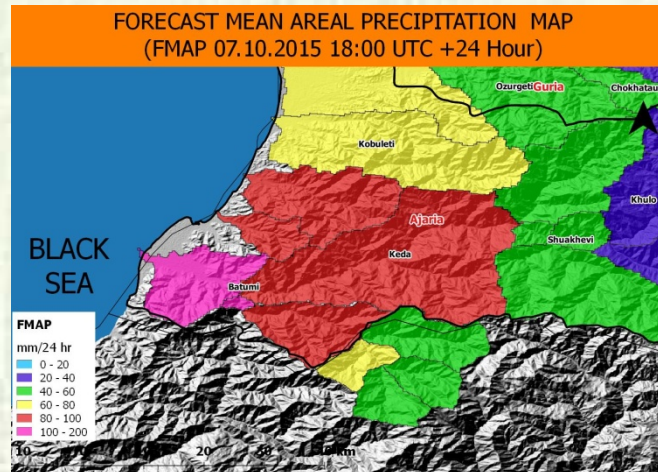
FORECAST MEAN AREAL PRECIPITATION MAP
(FMAP 07.10.2015 18:00 UTC +24 Hour)



FORECAST MEAN AREAL PRECIPITATION MAP
(FMAP 07.10.2015 18:00 UTC +24 Hour)



FORECAST MEAN AREAL PRECIPITATION MAP
(FMAP 07.10.2015 18:00 UTC +24 Hour)

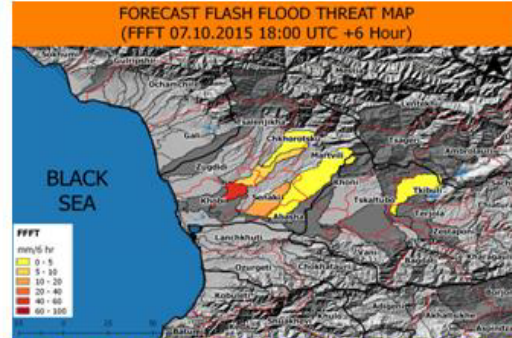


FLASH FLOOD GUIDANCE BULLETIN

GEORGIAN METEOROLOGY SERVICE



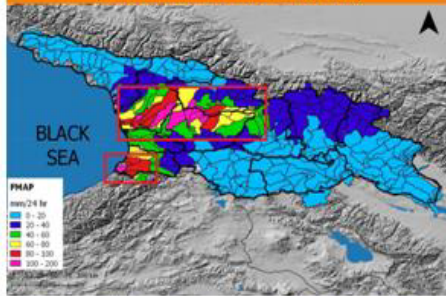
FLASH FLOOD BULLETIN
07 OCTOBER 2015
(18:00 UTC)



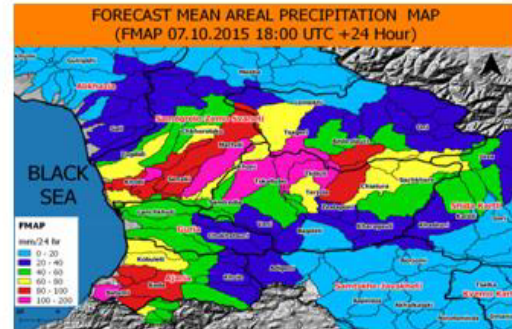
It should be aware of flash flood events are expected in Khobi, Senaki, Abasha, Martvili and Chkhorotsku districts of Samegrelo-Zemo Svaneti province and also Tkibuli districts of Imereti province for next 6 hours since forecasted heavy and intensity precipitation with respect to BSMEFFG system's Forecast Flash Flood Threat (FFFT) map.

BSMEFFG SYSTEM FORECAST MEAN AREAL PRECIPITATION MAP
(24.08.2015 06:00 UTC + 24 HOUR)

FORECAST MEAN AREAL PRECIPITATION MAP
(FMAP 07.10.2015 18:00 UTC +24 Hour)



It is expected that heavy and intensity precipitation may cause flash flood events in 24 hours according to BSMEFFG system's Forecast Mean Areal Precipitation (FMAP) map.



Citizen should be cautious for any flash flood event because of expected heavy and intensity precipitation in 24 hours who lives in Samegrelo-Zemo Svaneti, Imereti, Guria province and Ajaria province according to BSMEFFG system's Forecast Mean Areal Precipitation (FMAP) map.

GENERAL EVALUATION

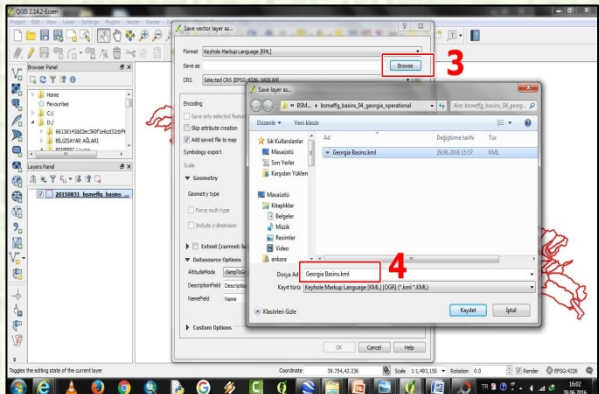
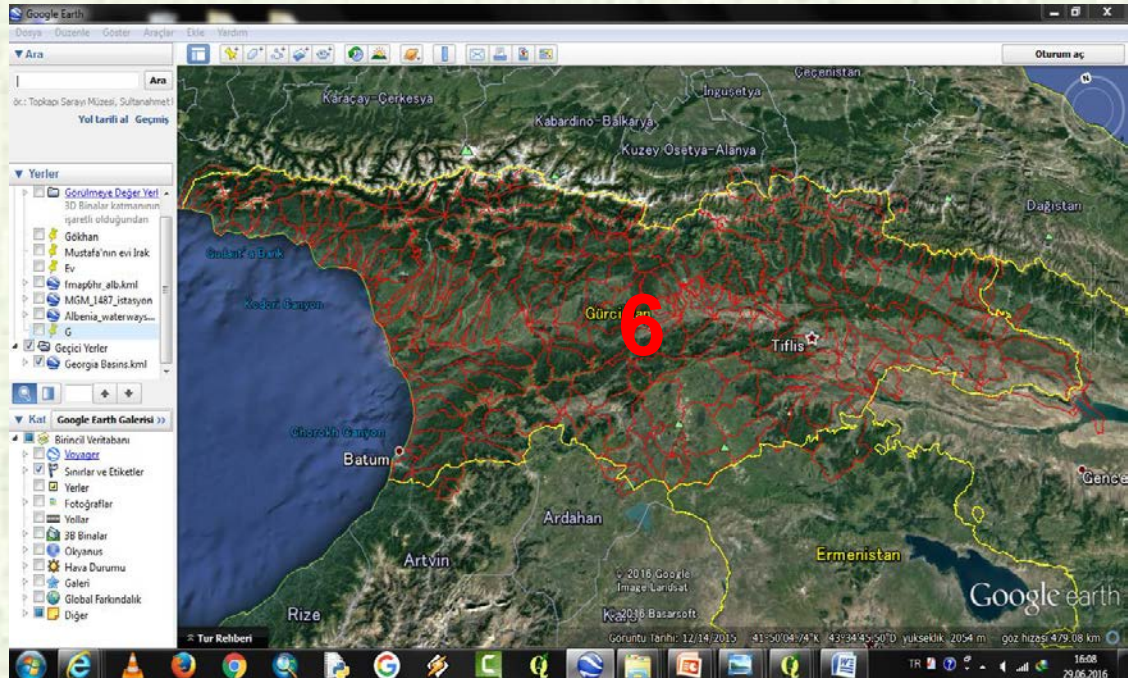
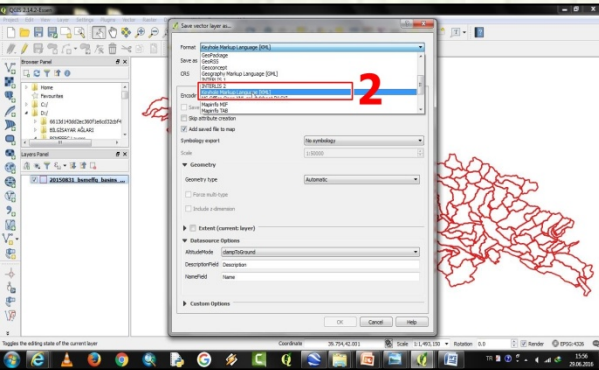
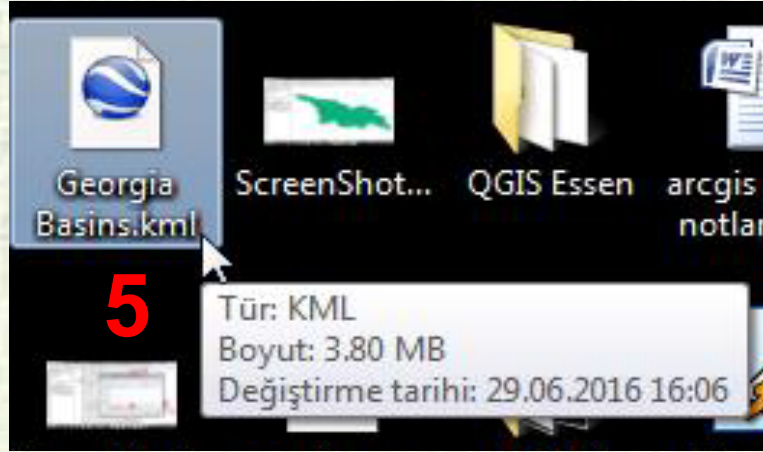
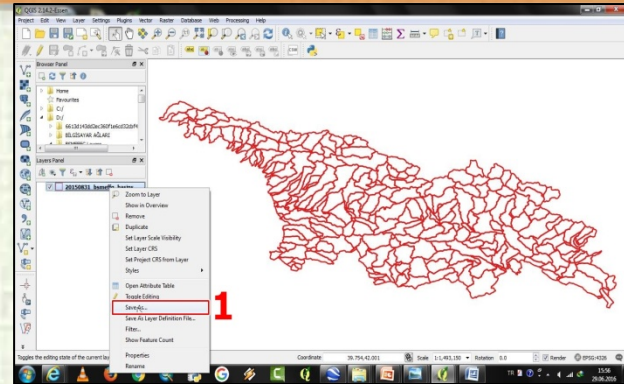
(07.10.2015 18:00 UTC + 6 Hour)

It should be aware of flash flood events are expected in Khobi, Senaki, Abasha, Martvili and Chkhorotsku districts of Samegrelo-Zemo Svaneti province and also Tkibuli districts of Imereti province for next 6 hours since forecasted heavy and intensity precipitation with respect to BSMEFFG system's Forecast Flash Flood Threat (FFFT) map.

(07.10.2015 18:00 UTC +24 Hour)

Citizen should be cautious for any flash flood event because of expected heavy and intensity precipitation in 24 hours who lives in Samegrelo-Zemo Svaneti, Imereti, Guria province and Ajaria province according to BSMEFFG system's Forecast Mean Areal Precipitation (FMAP) map.

SHAPE TO KML





Thank you for your attentetion