



DOWNLOAD CORDEX DATA

د. إيهاب جناد

مدير إدارة المياه-اكساد

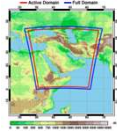
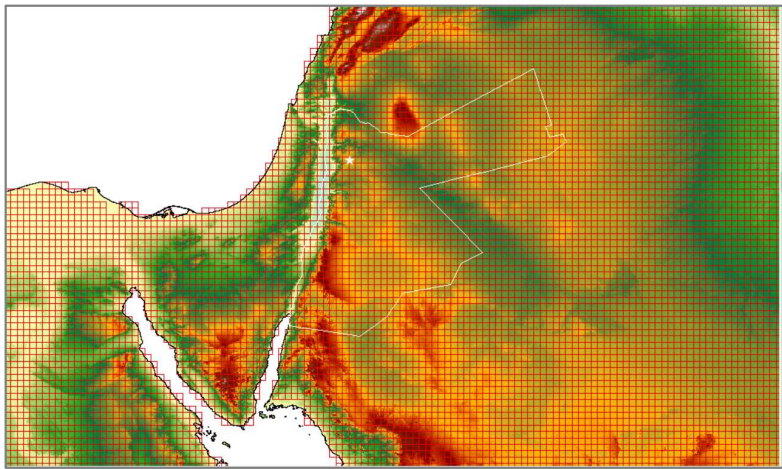
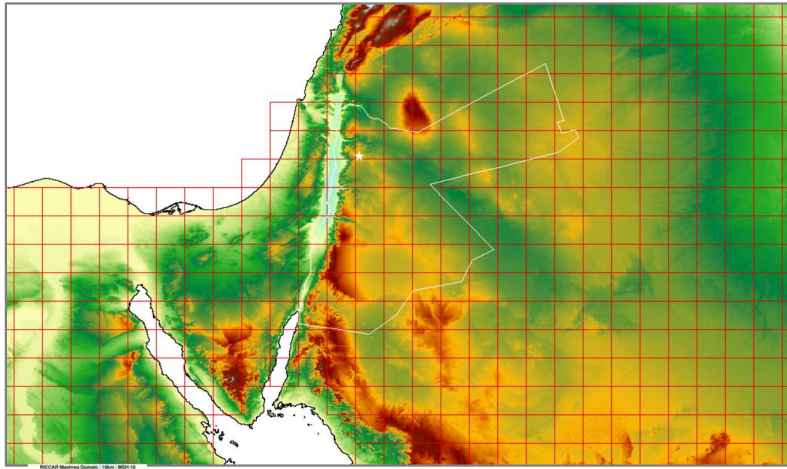
ihjnad@yahoo.com

المركز العربي لدراسات المناطق الجافة و الأراضي القاحلة

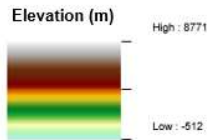
(ACSAD)

50 km²

10 km²

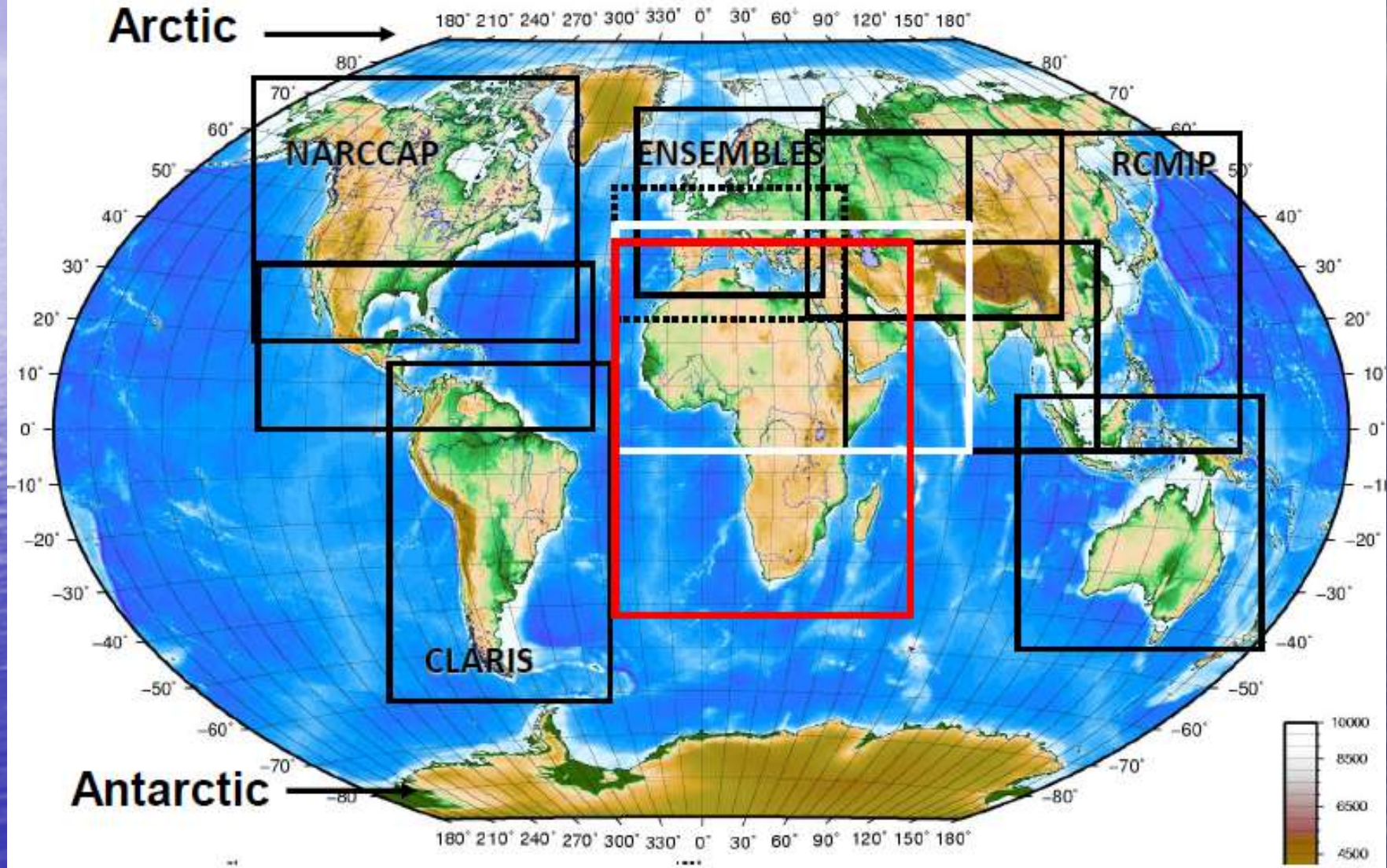


Six-member ensemble for SS-RCP 8.5 through 2070 at 10 km²

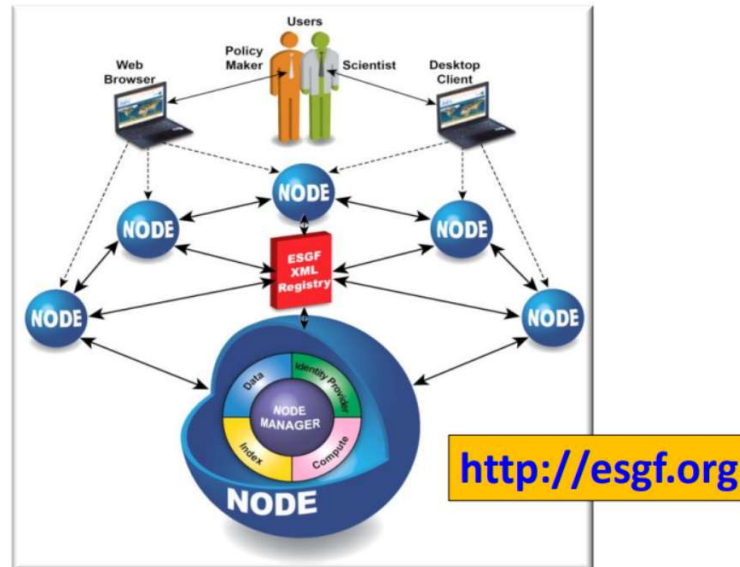


CORDEX Domains

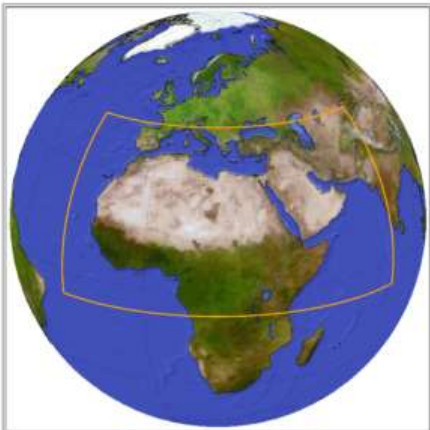
first focus on the African continent



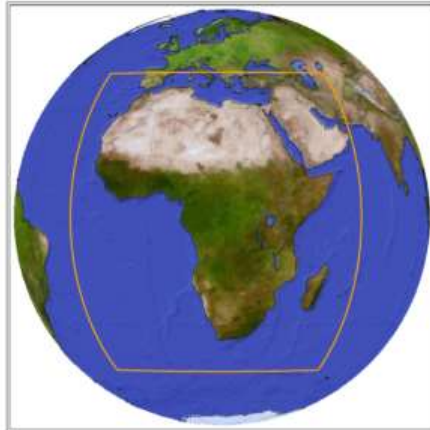
CORDEX data are available from different ESGF data nodes:



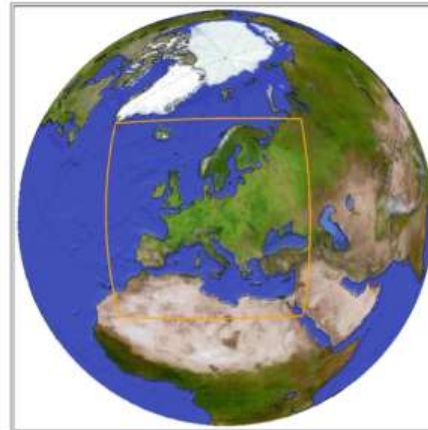
Region 13:
MENA **RICCAR domain**



Region 4:
Africa



Region 5:
Europe



Region 12:
Mediterranean



Middle East/North Africa CORDEX data (RICCAR Data)

MNA-22

- 0.22° / 25 km x 25 km resolution
- Native computational grid (rlon and rlat)
- Daily, monthly, and seasonal data

MNA-22i

- 0.22° / 25 km x 25 km resolution
- Interpolated to conventional grid (lon and lat)
- Monthly and seasonal data

MNA-44

- 0.44° / 50 km x 50 km resolution
- Native computational grid (rlon and rlat)
- Daily, monthly, and seasonal data

MNA-44i

- 0.44° / 50 km x 50 km resolution
- Interpolated to conventional grid (lon and lat)
- Monthly and seasonal data

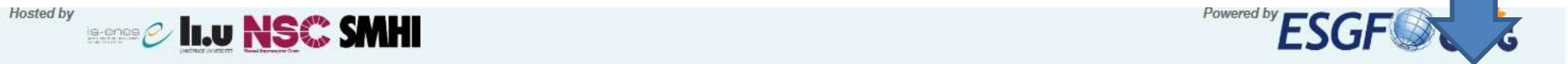
Some CORDEX climate parameters

Variable	Abbr.	Units
2-meter temperature	tas	K
Daily maximum 2-m temperature	tasmax	K
Daily minimum 2-m temperature	tasmin	K
Precipitation	pr	kg m ⁻² s ⁻¹
Mean sea level pressure	psl	Pa
Daily 10-meter wind speed	wspd	m s ⁻¹
Daily maximum 10-meter wind speed	wssmax	m s ⁻¹
Total cloudiness (Fraction)	clt	%
Sunshine duration	sund	s
Potential evapotranspiration	evspsblpot	kg m ⁻² s ⁻¹
Surface runoff	mrros	kg m ⁻² s ⁻¹
Subsurface runoff	mross	kg m ⁻² s ⁻¹
Total soil moisture content	mrso	kg m ⁻²

DOWNLOAD CORDEX DATA

1- open : esg-dn1.nsc.liu.se

2- Create new account .



Welcome, **Guest**. | [Login](#) | [Create Account](#)

ESGF@LiU in cooperation with SMHI

You are at the **ESG-DN1.NSC.LIU.SE** node

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Welcome to the ESGF Node @ LiU



Federated ESGF-CoG Nodes

- CoG-CU
- ESGF@CEDA
- ESGF@DKRZ
- ESGF@DOE/LLNL
- ESGF@IPSL
- ESGF@NASA/JPL
- ESGF@NCI
- ESGF@NOAA/ESRL
- ESGF@NOAA/GFDL

Search & Download Data ?

Simple Text Search

Search with options

Browse Projects

[This](#) [All](#) [My](#) [Tags](#)



Parent projects (0)

Peer projects (6)

- ESGF-CEDA
- ESGF-DKRZ
- ESGF-GFDL
- ESGF-IPSL
- ESGF-JPL
- ESGF-NCI

The Earth System Grid Federation (ESGF) maintains a global system of federated data centers that allow access to the largest archive of climate data world-wide. The ESGF datanode at the National Supercomputer Centre, Linköping, is Sweden's first datanode in the ESGF framework. It is a joint activity of NSC and the Swedish Meteorological and Hydrological Institute (SMHI). NSC is an independent organization within Linköping University (LiU), and is funded by the Swedish Research Council via SNIC (Swedish National Infrastructure for Computing).


- Fill the form
- Submit.

User Information	
User Name	Ghazoan <small>[5 to 30 characters, letters, digits and @/./_ only. Please note that the username is used to build a unique OpenID that you will use to login. If your chosen username is not available, you will be automatically assigned a similar one.]</small>
First Name	Ghazoan
Last Name	Naser
Email	gnv64@gmail.com
Password	***** <small>[At least 8 characters, including one lower case letter, one upper case letter, one number, and one special symbol. All characters are allowed EXCEPT for () " .]</small> Password score: weak. Estimated time to crack password: 18 minutes
Confirm Password	***** <small>[Must match the password above.]</small>
Institution	GORS
Department	
City	DAMASCUS
State	
Country	SYRIAN ARAB REPUBLIC
Interest Keywords	<small>[A short list of science fields you are involved with (60 characters maximum). Example: Software Engineering, Grid Computing, Climate Change.]</small>
Interest Statement	<small>[A short paragraph describing your professional interests (1000 characters maximum).]</small>
Subscribe to COG Email List?	<input type="checkbox"/> <small>['cog_info', low traffic list]</small>
Do not list me among project members	<input type="checkbox"/>
User Picture	
	Note: You may upload a picture to your profile after you login for the first time.
Please type the letters in the image to prove you are human: 	
<input type="text" value="aopk"/>	
<input type="button" value="Cancel"/> <input type="button" value="Submit"/>	



- You get OpenId and information mail

CoG Account Creation Inbox x

 **esg-admin@nsc.liu.se**
to me ▾

Thank you for creating a new ESGF-CoG account.


Your User Name is: Ghazoan
Your OpenID is: <https://esg-dn1.nsc.liu.se/esgf-idp/openid/Ghazoan>

Please note that you will need your OpenID to login.

CoG Tutorials: https://www.earthsystemcog.org/projects/cog/tutorials_web

CoG Support: cog_support@list.woc.noaa.gov

- To login as shown

ESG-DN1.NSC.LIU.SE HomeYOU ARE AT IT 

Thank you for creating an account. You can now login.

OpenID Login

Enter your OpenID in the text box below or select your OpenID provider (if listed) from the pulldown menu.

Please note: if you have an older OpenID from the Earth System Grid Federation, you may have to [create a new account](#).

For the best experience, please use Firefox, Chrome, or Internet Explorer. These are the browsers we support.

Please note that ESGF OpenIDs are case-sensitive.

ESGF-CoG Login

OpenID


Login

↓

[Forgot OpenID?](#) [Forgot Password?](#) [Login Help](#) [Create Account](#)

Provide password
submit

Status: not logged-in



Your OpenID: <https://esg-dn1.nsc.liu.se/esgf-idp/openid/Ghazoan>

Password:



done

Press cordex



The Earth System Grid Federation (ESGF) maintains a global system of federated data centers that allow access to the largest archive of climate data. The National Supercomputer Centre, Linköping, is Sweden's first data node in the ESGF framework. It is a joint activity of NSC and the Swedish Meteorological and Hydrological Institute (SMHI). NSC is an independent organization within Linköping University (LiU), and is funded by the Swedish Research Council for Infrastructure for Computing).

Search Data

The following projects require an **ESGF Account** ([create account](#)) and some also require a **Group Registration** (see links in table below) to access data.

Search data for...	Register to...
All projects	(see below for project-specific registration details)
CMIP5 Coupled Model Intercomparison Project Phase 5	CMIP5 Research CMIP5 Commercial
CORDEX Coordinated Regional Climate Downscaling Experiment	Please perform an HTTP download of a single file to register. Registration links will follow soon.
SPECS Seasonal-to-decadal climate Prediction for the improvement of European Climate Services	Please perform an HTTP download of a single file to register. Registration links will follow soon.
CLIPC CLIPC: Climate Information Platform for Copernicus	This data is publicly available without registration.



The faceted data search is accessible from the "Search and Download Data" widget on the right of the page through the "Search with

Search platform

ESGF@LIU/CORDEX

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Last Search |  My Data Cart (0)

Project	+
Product	+
Domain	+
Institute	+
Driving Model	+
Experiment	+
Experiment Family	+
Ensemble	+
RCM Model	+
Downscaling realisation	+
Time Frequency	+
Variable	+
Variable Long Name	+
CF Standard Name	+
Datanode	+

Enter Text:



Search

Reset

Display 10



results per page

[\[More Search Options \]](#)

Show All Replicas Show All Versions Search Local Node Only (Including All Replicas)

The search returned 0 results.

Search example:

choose parameters for search:

Domain: EUR 11i

Driving model: e.g. : ICHEC-EC-EARTH

Experiment: e.g. historical or rcp45 or rcp85 or the three together.

Time frequency : mon (monthly)

Variable: PR for precipitation, tas for Temperature... etc

Then press search

(full list variables info: see

http://is-enes-data.github.io/CORDEX_variables_requirement_table.pdf

The screenshot shows a search interface with the following elements:

- On the left, a vertical list of filters: "Project" with a "+" icon, "Product" with a "+" icon, and "Domain" with a "-" icon.
- In the center, a text input field labeled "Enter Text:".
- On the right, a yellow search bar containing a help icon (?), a "Search" button, a "Reset" button, a "Display" dropdown menu set to "10", and a "results" label.
- Below the search bar, there are three checkboxes: "Show All Datasets", "Show All Versions", and "Search Local Mode Only (beta)".
- A blue arrow points upwards from the bottom center towards the "Search" button.

Search output

3 products

Project	+
Product	+
Domain	-
<input checked="" type="checkbox"/> EUR-11i (3)	
Institute	+
Driving Model	-
<input checked="" type="checkbox"/> ICHEC-EC-EARTH (3)	
Experiment	-
<input checked="" type="checkbox"/> historical (1)	
<input checked="" type="checkbox"/> rcp45 (1)	
<input checked="" type="checkbox"/> rcp85 (1)	
Experiment Family	+
Ensemble	+
RCM Model	+
Downscaling realisation	+
Time Frequency	-
<input checked="" type="checkbox"/> mon (3)	
Variable	-
<input checked="" type="checkbox"/> pr (3)	
Variable Long Name	+
CF Standard Name	+
Datanode	+

Enter Text:

Display results per page [\[More Search Options \]](#)

Show All Replicas Show All Versions Search Local Node Only (Including All Replicas)

Search Constraints: ✖ EUR-11i | ✖ ICHEC-EC-EARTH | ✖ historical,rcp45,rcp85 | ✖ mon | ✖ pr

Total Number of Results: 3

-1-

[Add all displayed results to Data Cart](#) [Remove all displayed results from Data Cart](#)
Expert Users: you may display the search URL and return results as XML or return results as JSON

1. **cordex.output.EUR-11i.SMHI.ICHEC-EC-EARTH.historical.r12i1p1.RCA4.v1.mon.pr**

Data Node: esg-dn1.nsc.liu.se

Version: 20131026

Total Number of Files (for all variables): 5

[\[Show Metadata \]](#) [\[Show Files \]](#) [\[THREDDS Catalog \]](#) [\[WGET Script \]](#)

[Add to Data Cart](#)

2. **cordex.output.EUR-11i.SMHI.ICHEC-EC-EARTH.rcp45.r12i1p1.RCA4.v1.mon.pr**

Data Node: esg-dn1.nsc.liu.se

Version: 20131026

Total Number of Files (for all variables): 10

[\[Show Metadata \]](#) [\[Show Files \]](#) [\[THREDDS Catalog \]](#) [\[WGET Script \]](#)

[Add to Data Cart](#)

3. **cordex.output.EUR-11i.SMHI.ICHEC-EC-EARTH.rcp85.r12i1p1.RCA4.v1.mon.pr**

Data Node: esg-dn1.nsc.liu.se

Version: 20131026

Total Number of Files (for all variables): 10

[\[Show Metadata \]](#) [\[Show Files \]](#) [\[THREDDS Catalog \]](#) [\[WGET Script \]](#)

[Add to Data Cart](#)

Hit show files to see files, then choose what to download (hit httpserver)

1. cordex.output.EUR-11i.SMHI.ICHEC-EC-EARTH.historical.r12i1p1.RCA4.v1.mon.pr

Data Node: esg-dn1.nsc.liu.se

Version: 20131026

Total Number of Files (for all variables): 5

[[Show Metadata](#)] [[Hide Files](#)] [[THREDDS Catalog](#)] [[WGET Script](#)]

Total Number of Files: 5

- | | | |
|---|---|-------------------------|
| 1 | <p>pr_EUR-11i_ICHEC-EC-EARTH_historical_r12i1p1_SMHI-RCA4_v1_mon_200101-200512.nc
Checksum: 54a438375830e7ff554dd7fe08c18369244cc61a090cb30260499b856886b457
Size: 39828616
Tracking Id: 5200eac2-04fe-4ca5-b4b1-30ae5245e491
[More File Metadata]</p> | HTTPServer
OPENDAP ← |
| 2 | <p>pr_EUR-11i_ICHEC-EC-EARTH_historical_r12i1p1_SMHI-RCA4_v1_mon_197101-198012.nc
Checksum: 856aa871d9a3a543215a5659d78d2507b1a710e828ff3a8041e981430f2c2a88
Size: 79599849
Tracking Id: b6a4e224-c165-4c27-8128-d7928267ce49
[More File Metadata]</p> | HTTPServer
OPENDAP ← |
| 3 | <p>pr_EUR-11i_ICHEC-EC-EARTH_historical_r12i1p1_SMHI-RCA4_v1_mon_199101-200012.nc
Checksum: ada218254a1b46f0da55820844be265bf6a5f290f840d8bd22a6a259f338181f
Size: 79693422
Tracking Id: 8c240870-90f4-4c67-9536-577257751115
[More File Metadata]</p> | HTTPServer
OPENDAP ← |
| 4 | <p>pr_EUR-11i_ICHEC-EC-EARTH_historical_r12i1p1_SMHI-RCA4_v1_mon_198101-199012.nc
Checksum: e88857a172d826d296277adca29d8885c0336ba72ad7e566d900c5ozde0cc9oz
Size: 79748862
Tracking Id: 3c0d3e77-1899-47e4-bb96-720ea581cfd8
[More File Metadata]</p> | HTTPServer
OPENDAP ← |
| 5 | <p>pr_EUR-11i_ICHEC-EC-EARTH_historical_r12i1p1_SMHI-RCA4_v1_mon_197001-197012.nc
Checksum: dce0eff816dad02f4adc1ff64cfb159a3e330d4f0100e33f3b75ab5f4450caef
Size: 7969779
Tracking Id: c76359e0-ca73-4e6b-8da2-415cb3700fbe
[More File Metadata]</p> | HTTPServer
OPENDAP ← |

 Add to Data Cart

2. cordex.output.EUR-11i.SMHI.ICHEC-EC-EARTH.rcp45.r12i1p1.RCA4.v1.mon.pr

Data Node: esg-dn1.nsc.liu.se

Version: 20131026

Total Number of Files (for all variables): 10

Provide openID

Data Access Login

The following URL requires authentication:

https://esg-dn1.nsc.liu.se/thredds/fileServer/esg_dataroot1/cordexdata/cordex/output/EUR-11i/SMHI/ICHEC-EC-EARTH/historical/r12i1p1/SMHI-RCA4/v1/mon/pr/v20131026/pr_EUR-11i_ICHEC-EC-EARTH_historical_r12i1p1_SMHI-RCA4_v1_mon_200101-200512.nc

Please type in your OpenID URL at the OpenID prompt below or select your home OpenID Provider from one of the options provided in the drop-down list

Status: not logged-in



OpenID

Remember my OpenID on this computer

After logging in, you will be redirected to:

https://esg-dn1.nsc.liu.se/thredds/fileServer/esg_dataroot1/cordexdata/cordex/output/EUR-11i/SMHI/ICHEC-EC-EARTH/historical/r12i1p1/SMHI-RCA4/v1/mon/pr/v20131026/pr_EUR-11i_ICHEC-EC-EARTH_historical_r12i1p1_SMHI-RCA4_v1_mon_200101-200512.nc

Provide password

ESGF OpenID Login

Status: not logged-in



Your OpenID: **<https://esg-dn1.nsc.liu.se/esgf-idp/openid/Ghazoan>**

Password:

Done

Process Cordex Data : arcgis

The screenshot displays the ArcGIS interface with the 'Make NetCDF Raster Layer' tool open. The tool's parameters are as follows:

- Input netCDF File: C:\Users\Ghazy\Downloads\pr_EUR-11_ICHEC-EC-EARTH_historical_r12i1p1_SMHI-RCA4_v1_mon_200101-200
- Variable: pr
- X Dimension: lon
- Y Dimension: lat
- Output Raster Layer: 2001_2005
- Band Dimension (optional):
- Dimension Values (optional):
- Value Selection Method (optional): BY_VALUE

The 'Output Raster Layer' section on the right contains the text: 'The name of the output raster layer.'

The ArcToolbox panel on the right side of the screen shows the following tool list:

- ArcToolbox
 - 3D Analyst Tools
 - Analysis Tools
 - Cartography Tools
 - Conversion Tools
 - Data Interoperability Tools
 - Data Management Tools
 - Editing Tools
 - Geocoding Tools
 - Geostatistical Analyst Tools
 - Linear Referencing Tools
 - Multidimension Tools
 - Feature to NetCDF
 - Make NetCDF Feature Layer
 - Make NetCDF Raster Layer
 - Make NetCDF Table View
 - Make OPeNDAP Raster Layer
 - Raster to NetCDF
 - Select by Dimension
 - Table to NetCDF
 - Network Analyst Tools
 - Parcel Fabric Tools
 - Schematics Tools
 - Server Tools
 - Space Time Pattern Mining Tools
 - Spatial Analyst Tools
 - Spatial Statistics Tools
 - Tracking Analyst Tools

Red arrows indicate the 'Make NetCDF Raster Layer' tool in the ArcToolbox and the 'OK' button at the bottom of the tool dialog.

Output

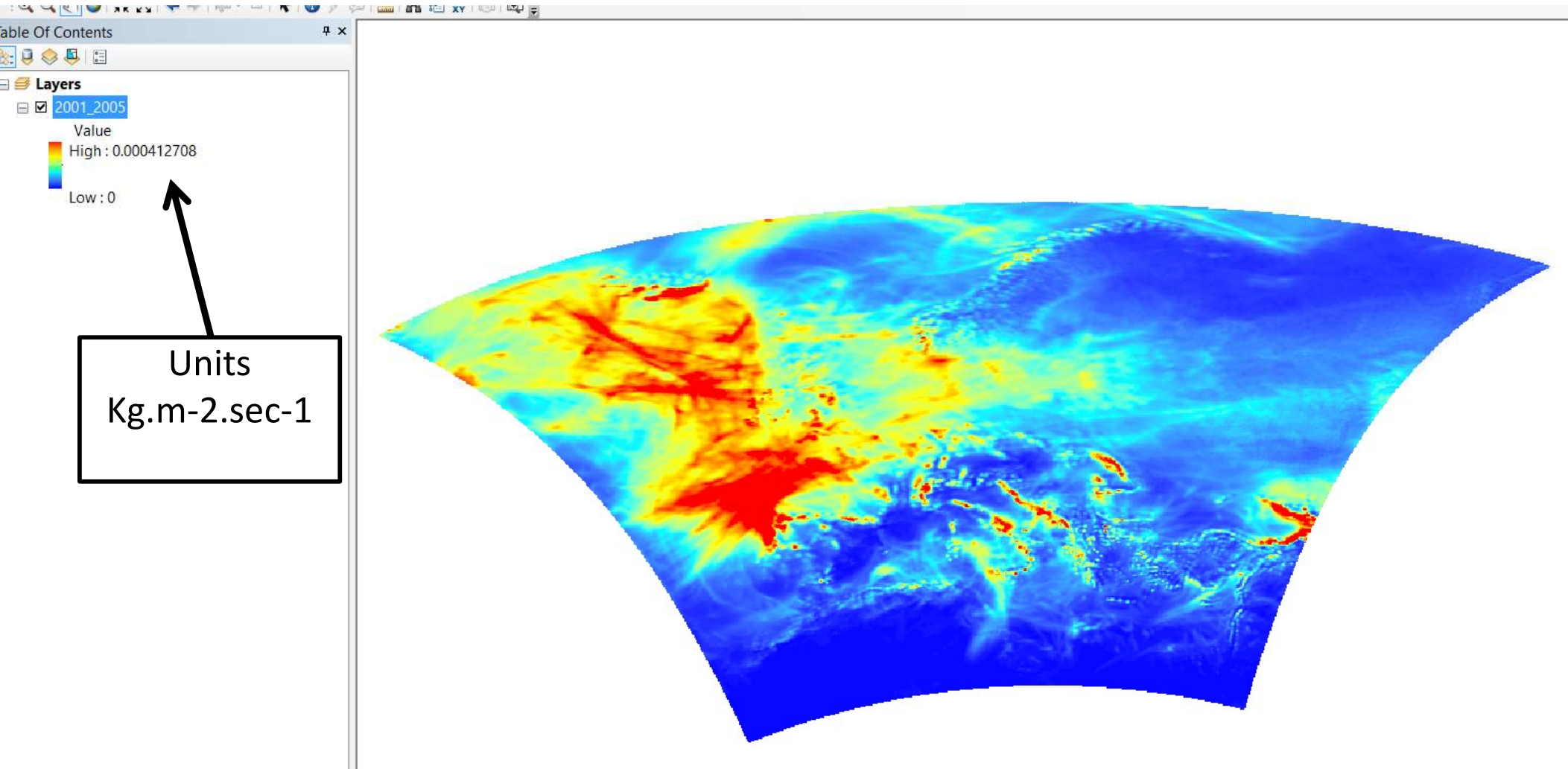


Table of Contents

Layers

- 2001_2005

Value

High : 0.000412708

Low : 0

Layer Properties

General | Source | Extent | Display | Symbology | NetCDF | Time

Variable: pr

X Dimension: lon

Y Dimension: lat

Band Dimension: time

Dimension Values:

Dimension	Value
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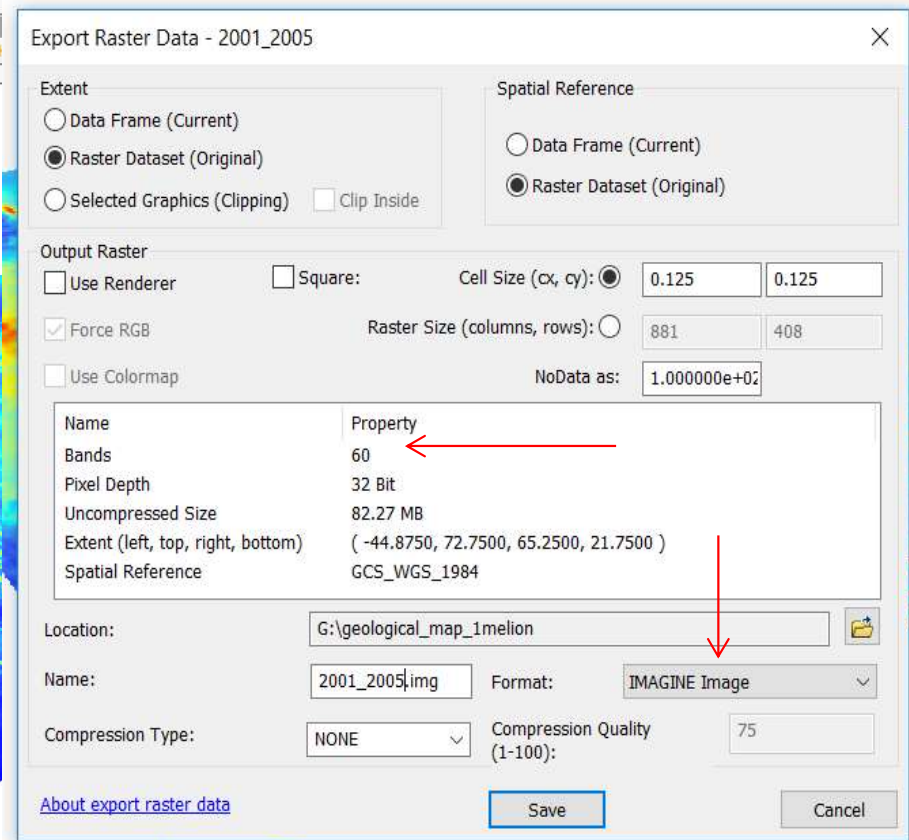
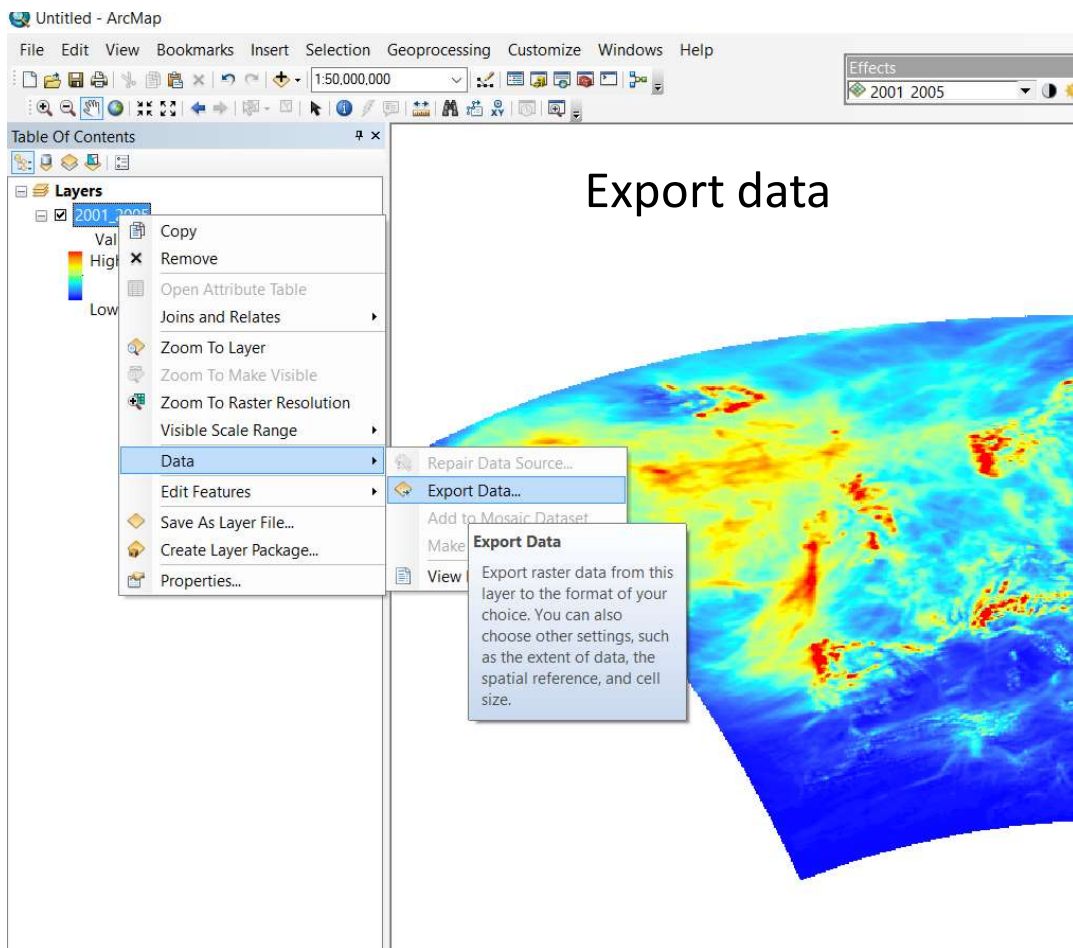
Vertical Dimension:

OK Cancel Apply



Change to time





Output: 60 band image
Each represents one month

