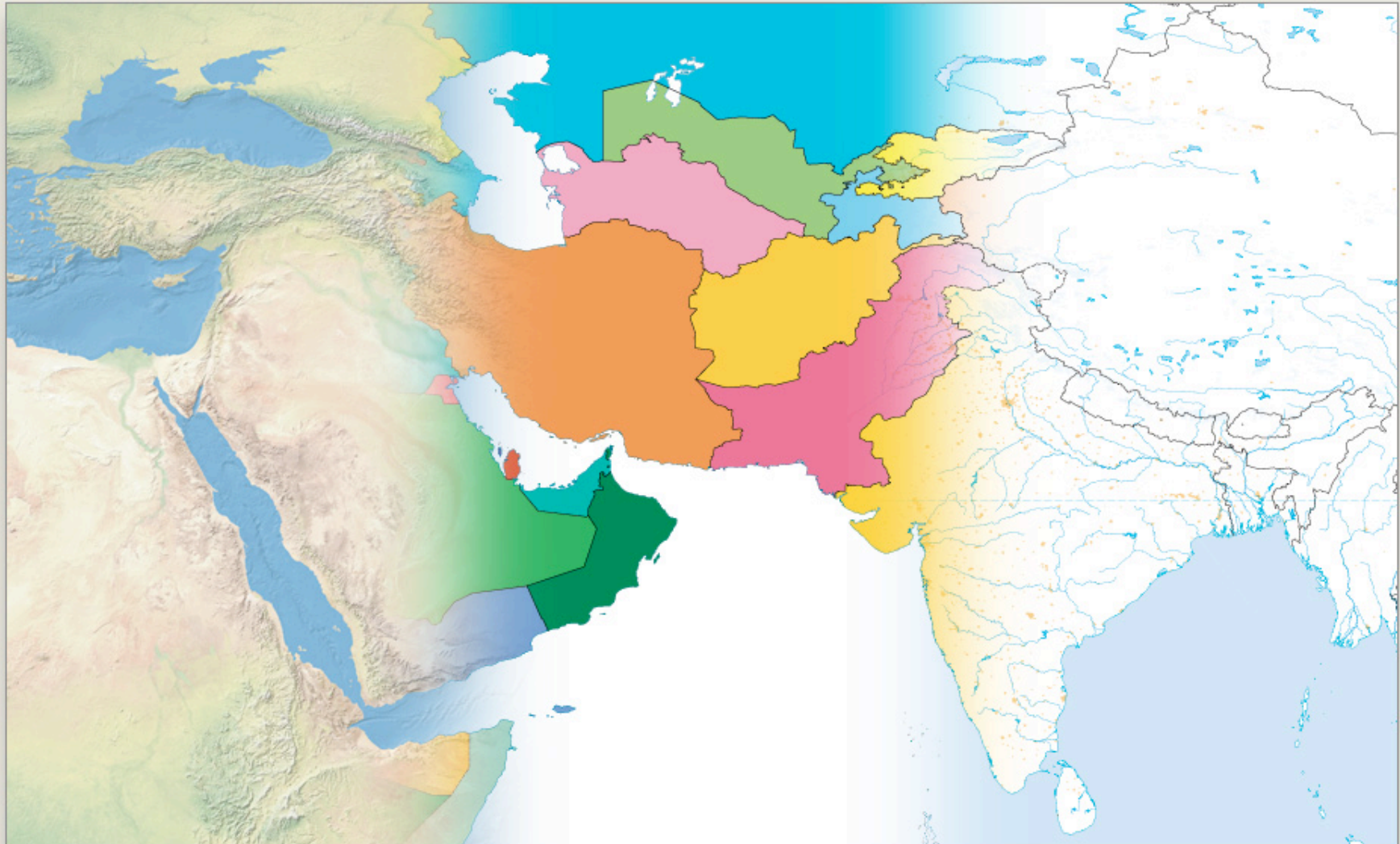




## Raster + Vector



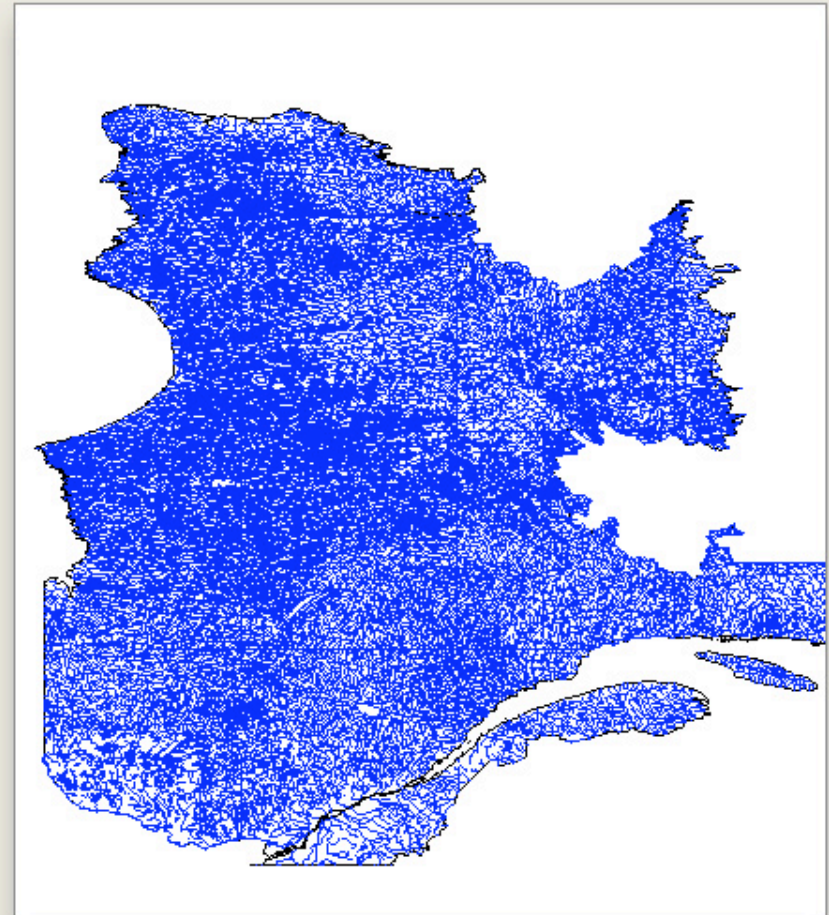
# Problem: data overload



The map you want



Raw DCW



# Solution: custom data

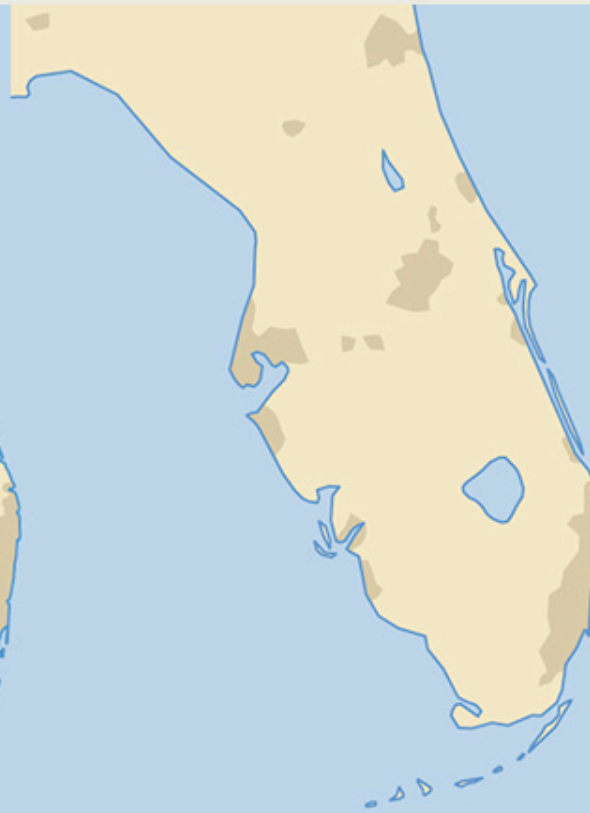


## Three map scales

1:10 million

1:50 million

1:110 million







## Raster

Natural Earth 1



Natural Earth 2





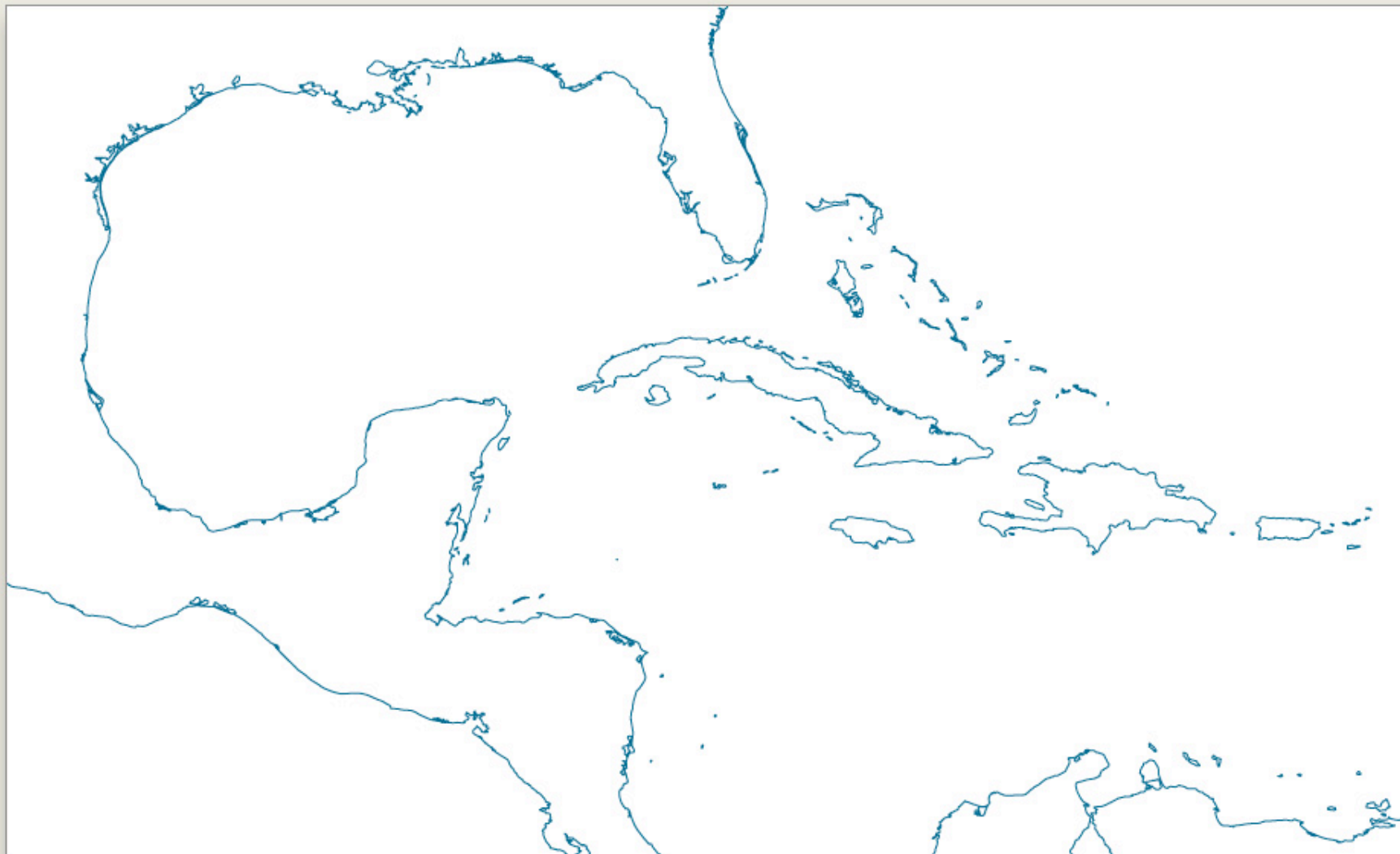
# Cross-blended hypsometric tints



# Data Tour



## Coastline





# Data Tour



## Land



# Data Tour



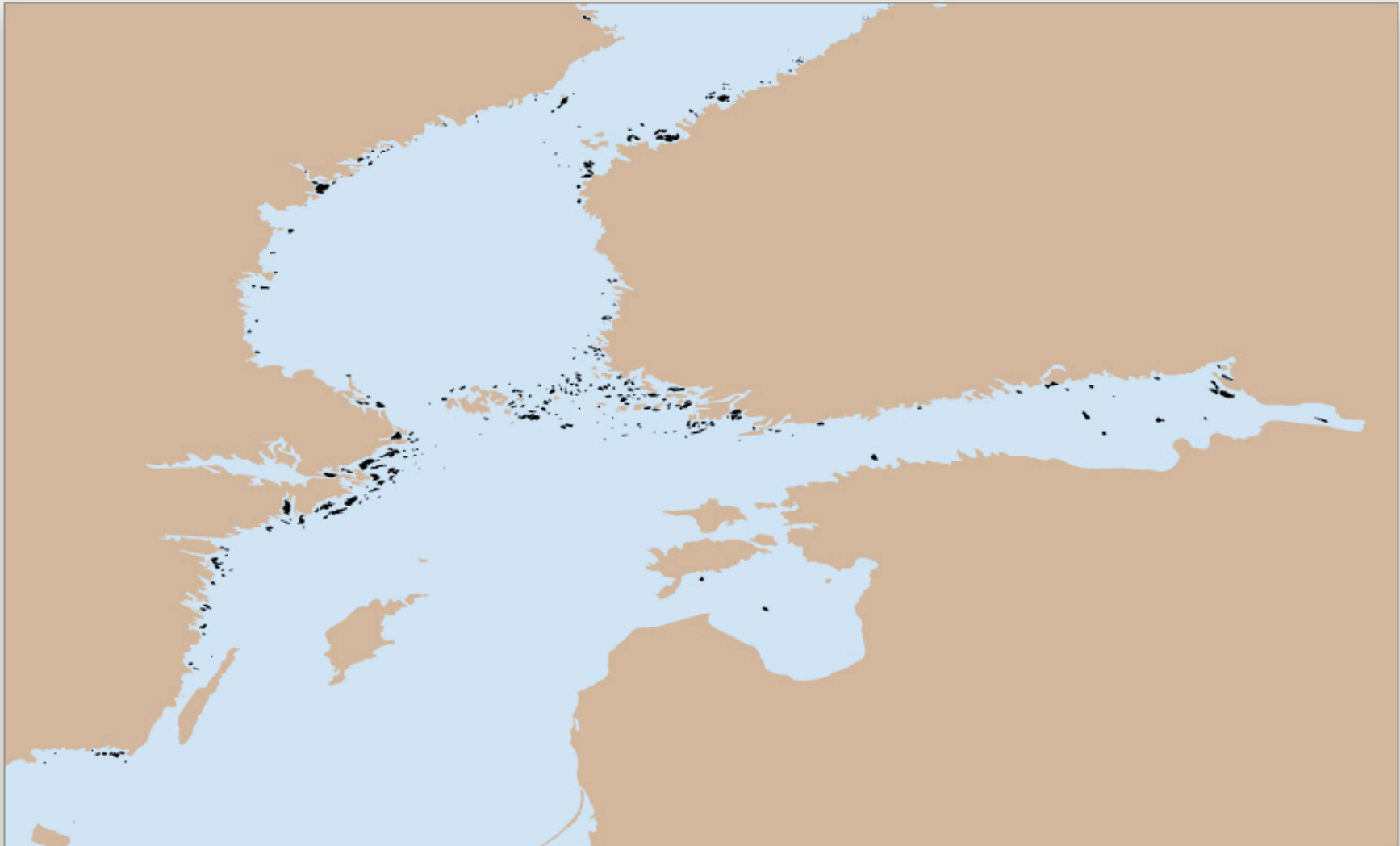
## Ocean







## Minor islands





## Reefs





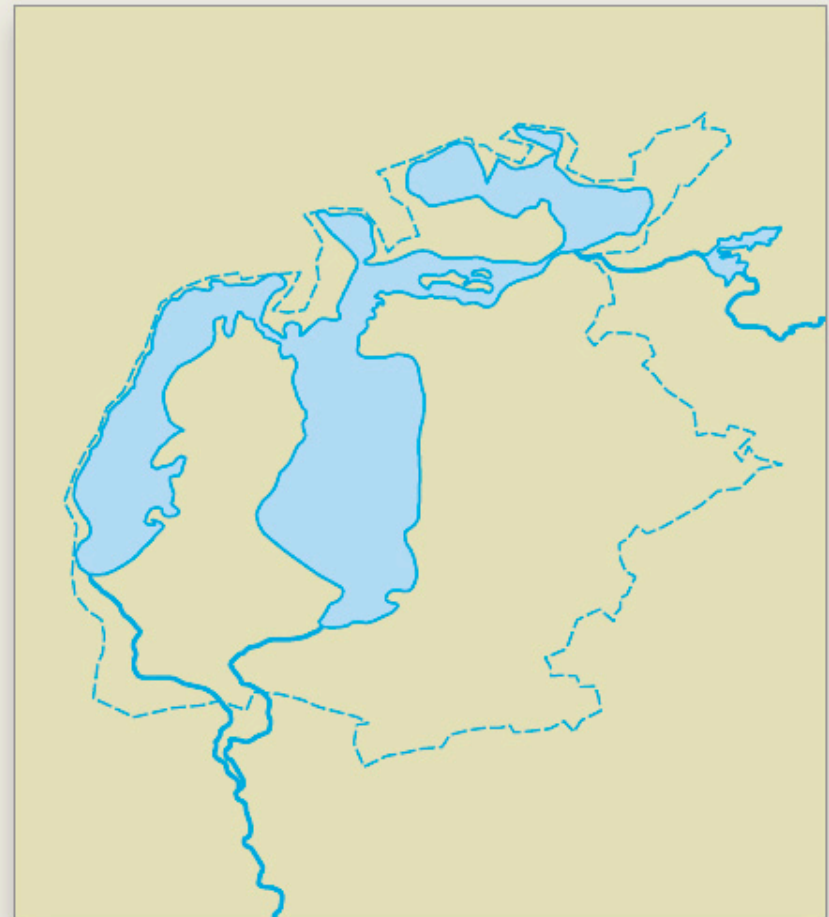


## Lakes

Playas



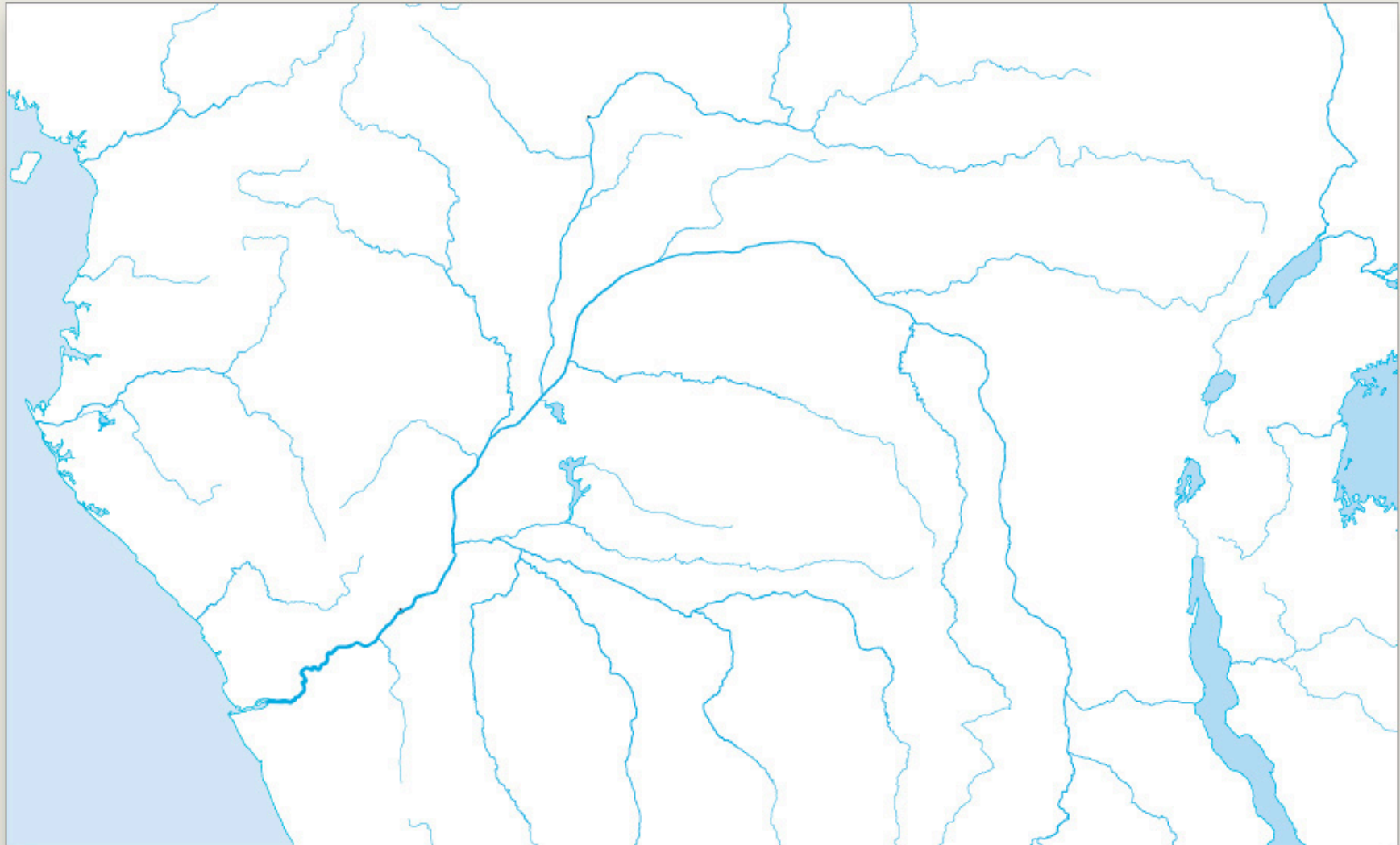
Historical extents



# Data Tour



## Tapered drainages



# Attributes - Rivers



MAP Attributes x

Layer: 50m-rivers-lake-centerlines\_line (1597 lines selected)

	R StrokeWeig	I ScaleRank	S FeatureCla	S Name1	S Name2
1	0.300000000		6 River	Potomac	
2	0.250000000		6 River	Potomac	
3	0.300000000		6 River	Pend Oreille	
4	0.300000000		6 Lake Centerline	Khatanga	
5	0.350000000		6 Lake Centerline	Min	
6	0.300000000		6 Lake Centerline	Min	
7	0.350000000		6 Lake Centerline	Songhua (Sungari)	
8	0.300000000		6 River	Songhua (Sungari)	
9	0.300000000		6 Lake Centerline	Ruki	
10	0.300000000		6 River	Sangha	
11	0.300000000		6 River	Tisa	
12	0.250000000		6 River	Tisa	
13	0.300000000		6 Lake Centerline	Great Pee Dee	
14	0.250000000		6 River	Great Pee Dee	
15	0.200000000		6 River	Great Pee Dee	
16	0.250000000		6 River	Kokemäenjoki	
17	0.250000000		6 River	Xiliao	
18	0.250000000		6 River	Göta älv	
19	0.300000000		6 River	Jubba	
20	0.250000000		6 River	Jubba	

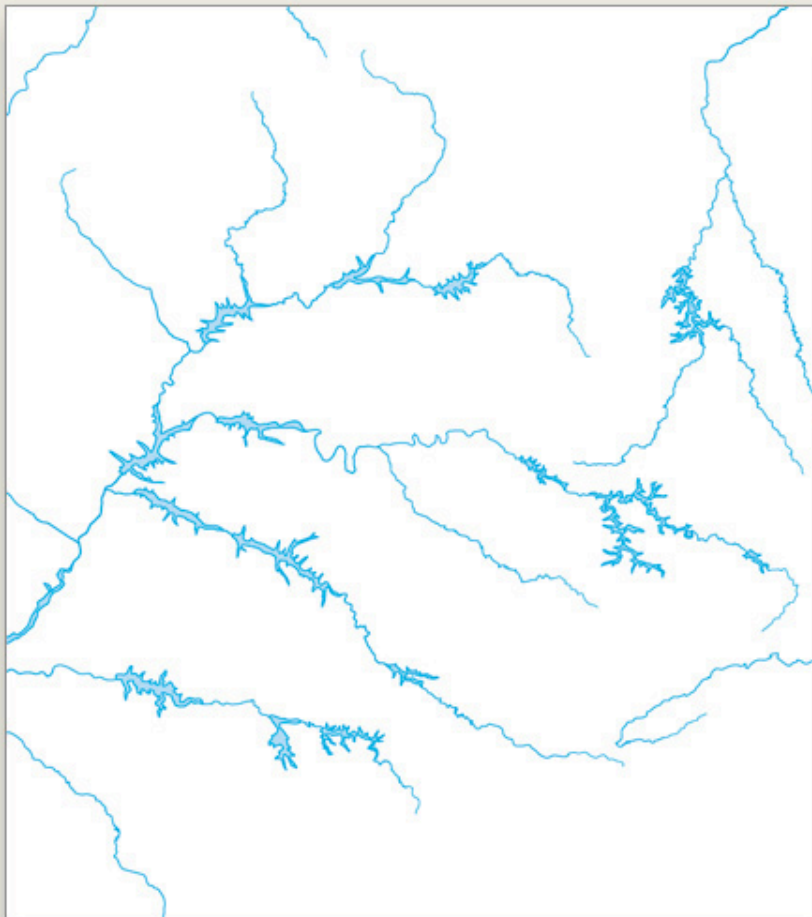
1597 lines selected

A screenshot of a software window titled 'MAP Attributes'. The window shows a table of attributes for a layer named '50m-rivers-lake-centerlines\_line' with 1597 lines selected. The table has columns for 'StrokeWeig', 'ScaleRank', 'FeatureCla', 'Name1', and 'Name2'. The rows list various rivers and lake centerlines with their respective values. The background of the slide is a world map with blue lines representing rivers and lake centerlines.

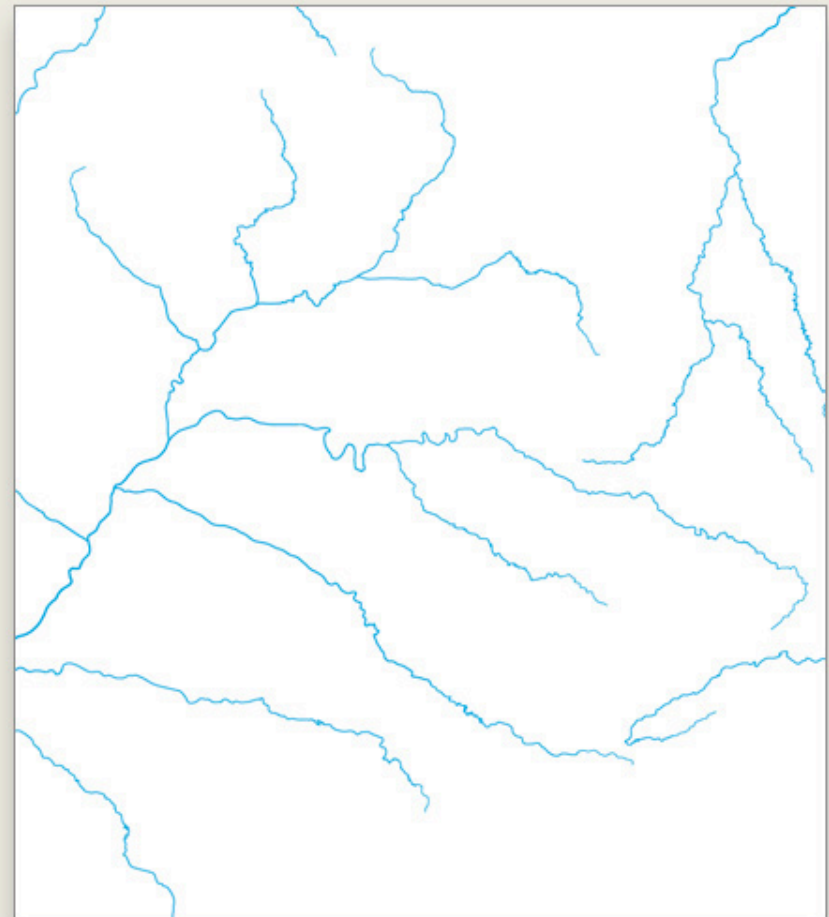


## Lake Centerlines

Rivers with lakes



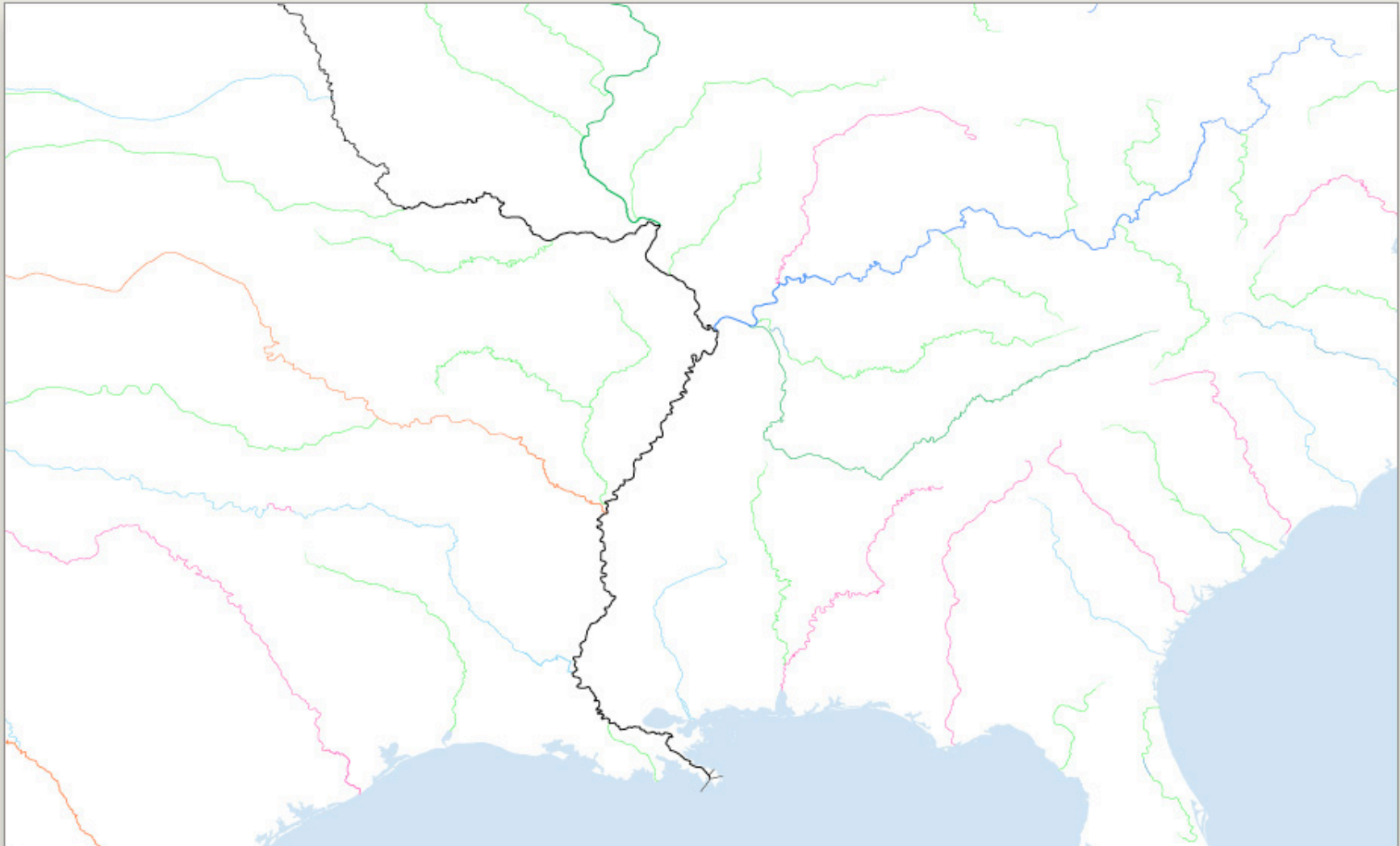
Rivers without lakes







## Ranked rivers



# Data Tour



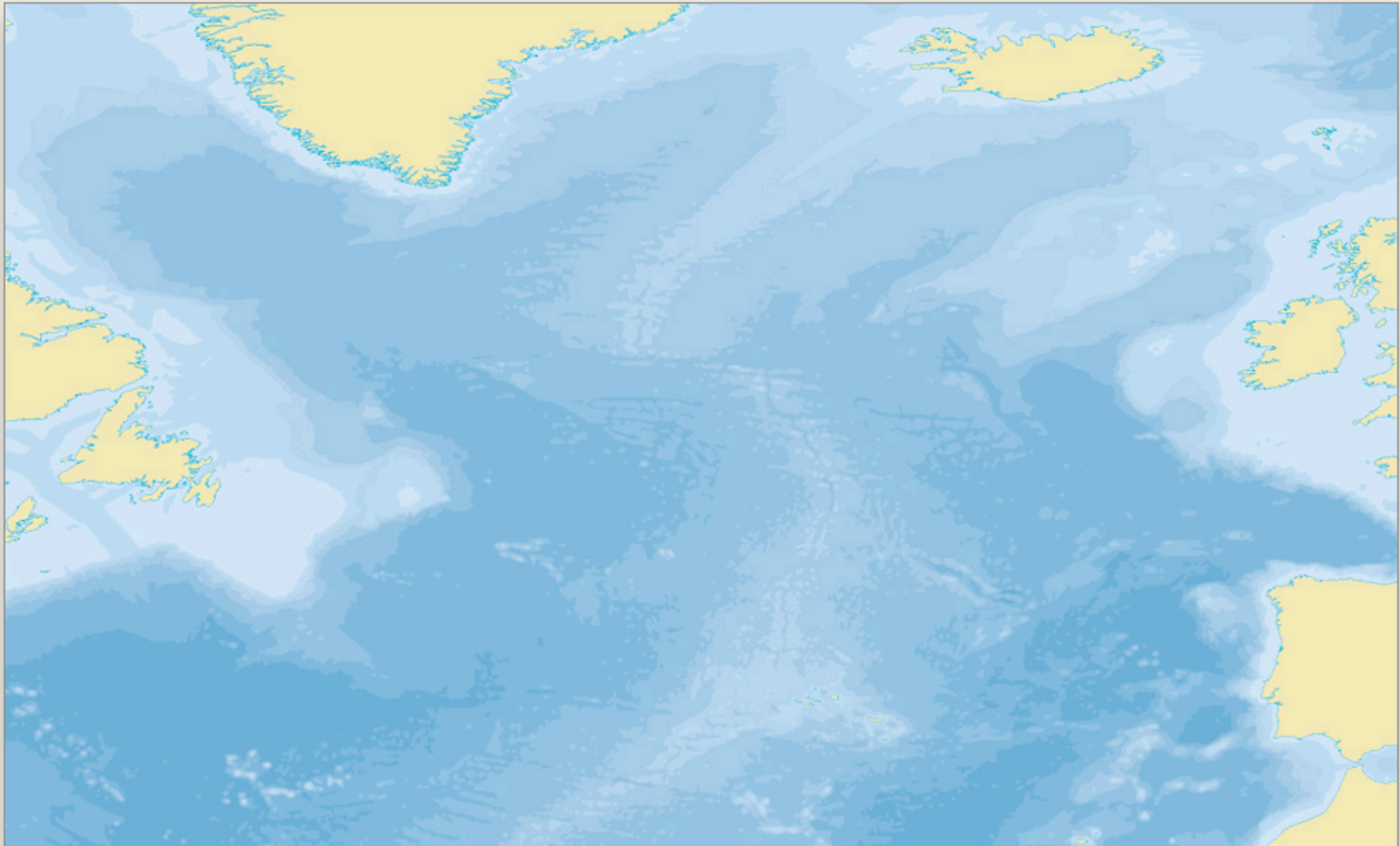
## Physical labels



# Data Tour



## Bathymetry



# Data Tour



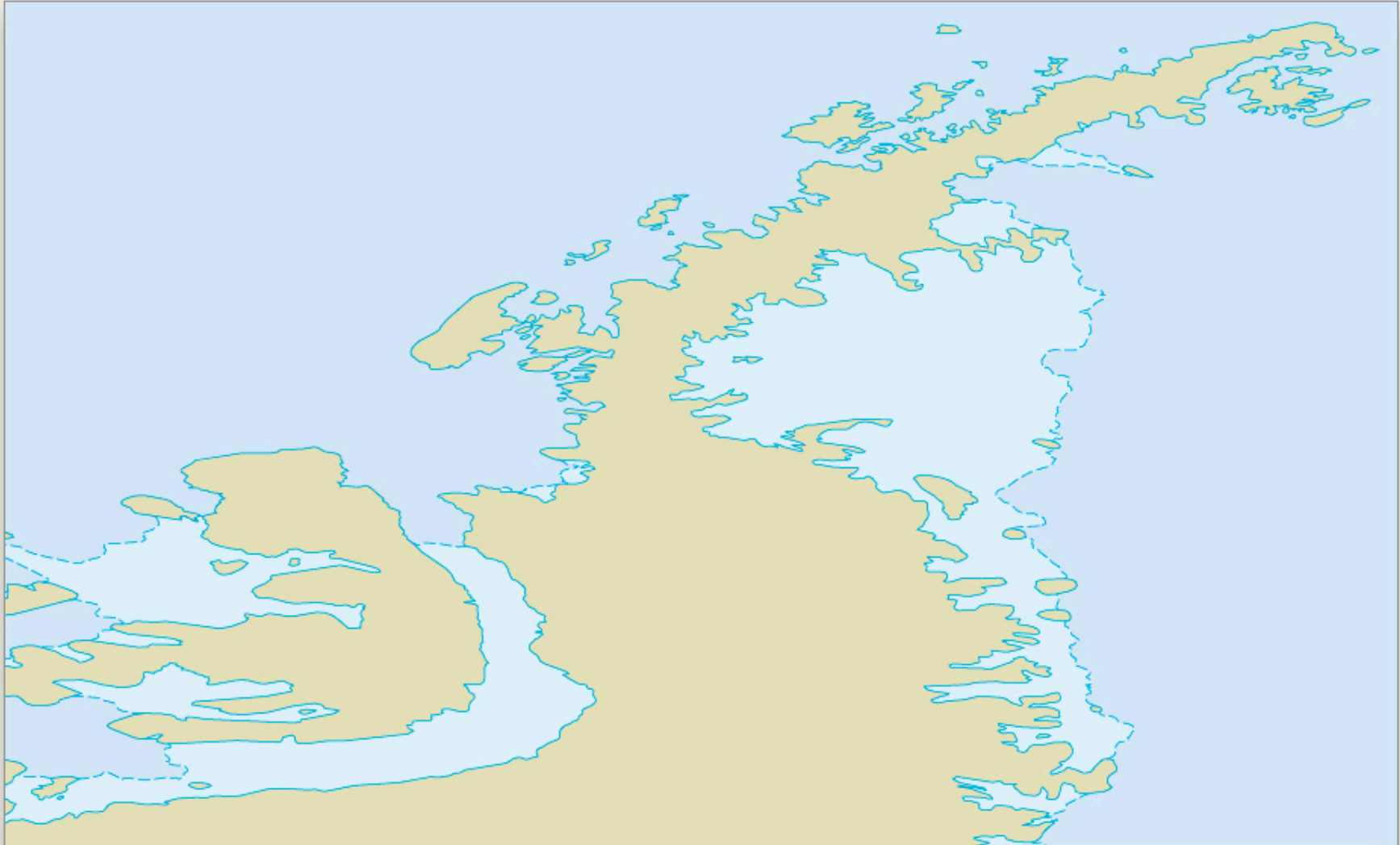
## Glaciated areas





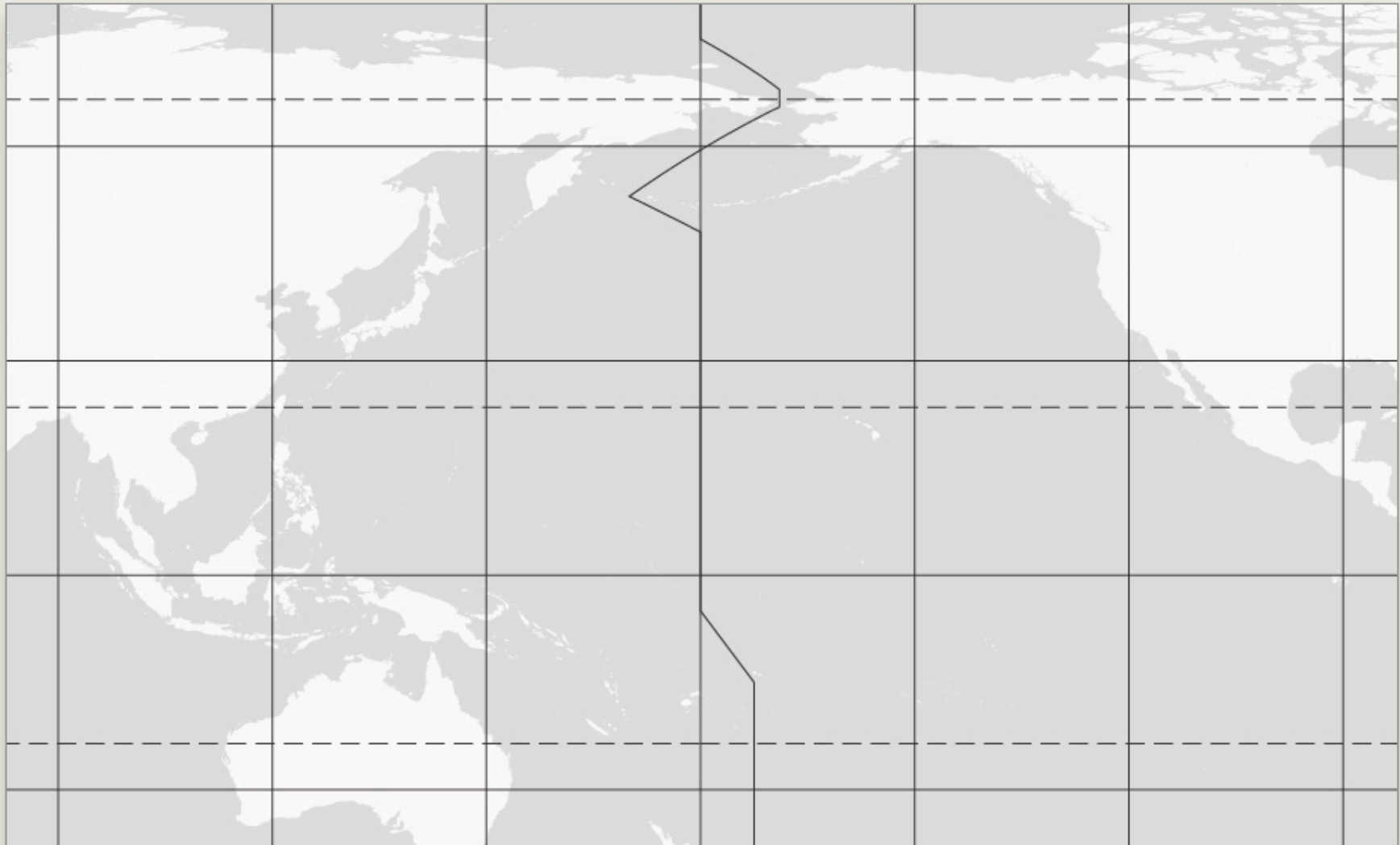


## Antarctic ice shelves





## Graticules and geographic lines



# Data Tour



## Generalization

Original data  
2,038 points



Douglas-Peucker  
318 points



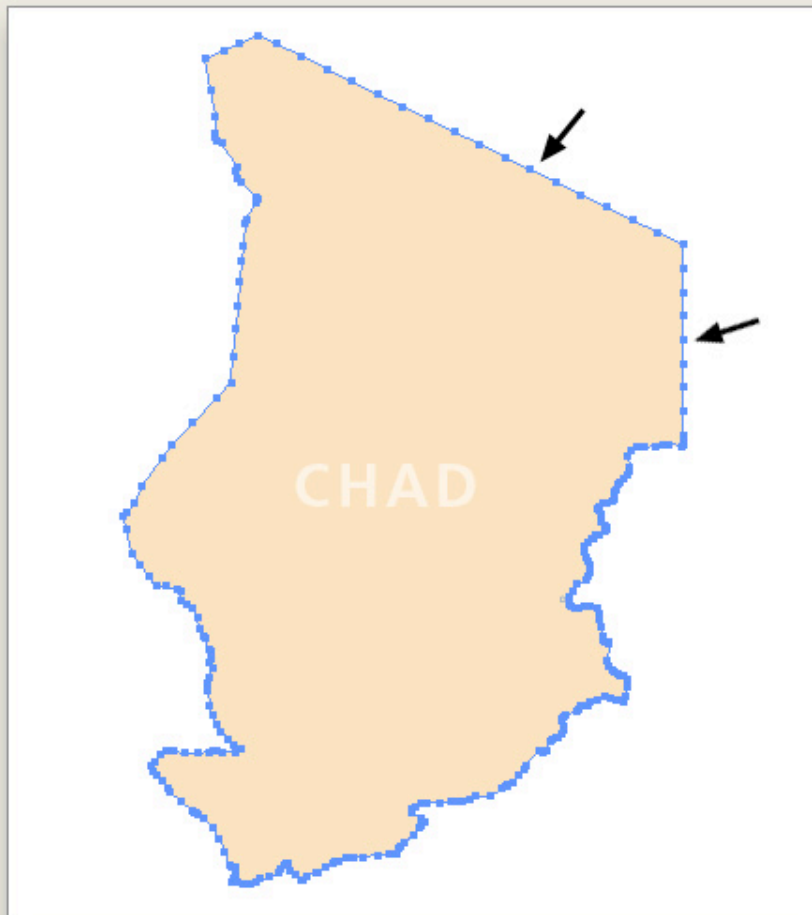
✓  
NEV 50 million  
293 points





## Vector preparation

Straight lines: extra points



Coincident lines

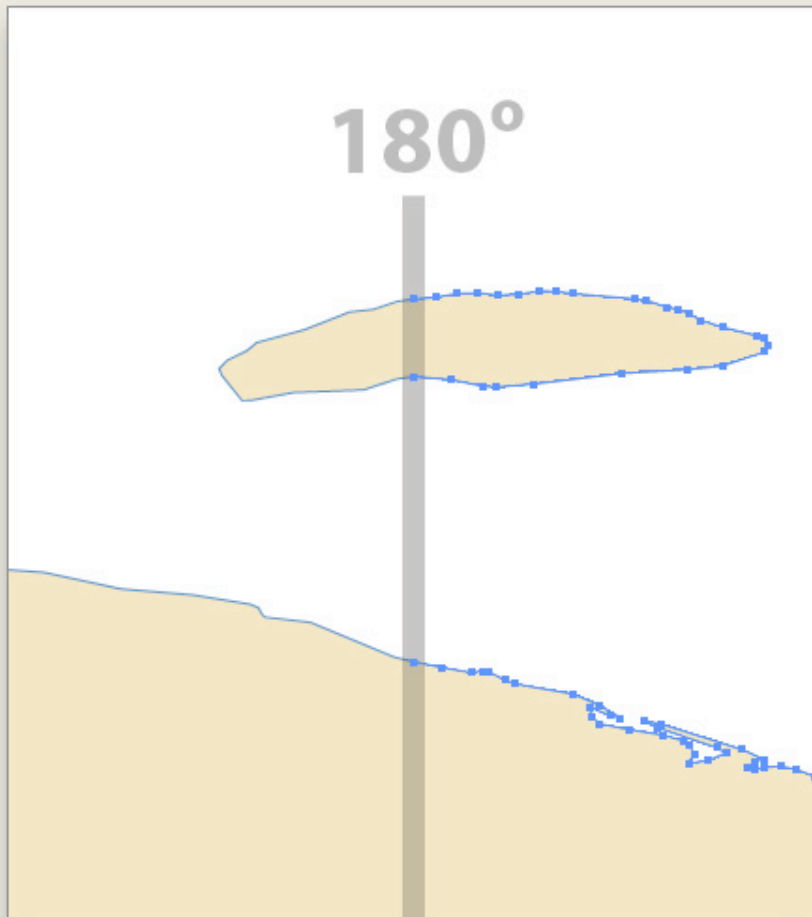




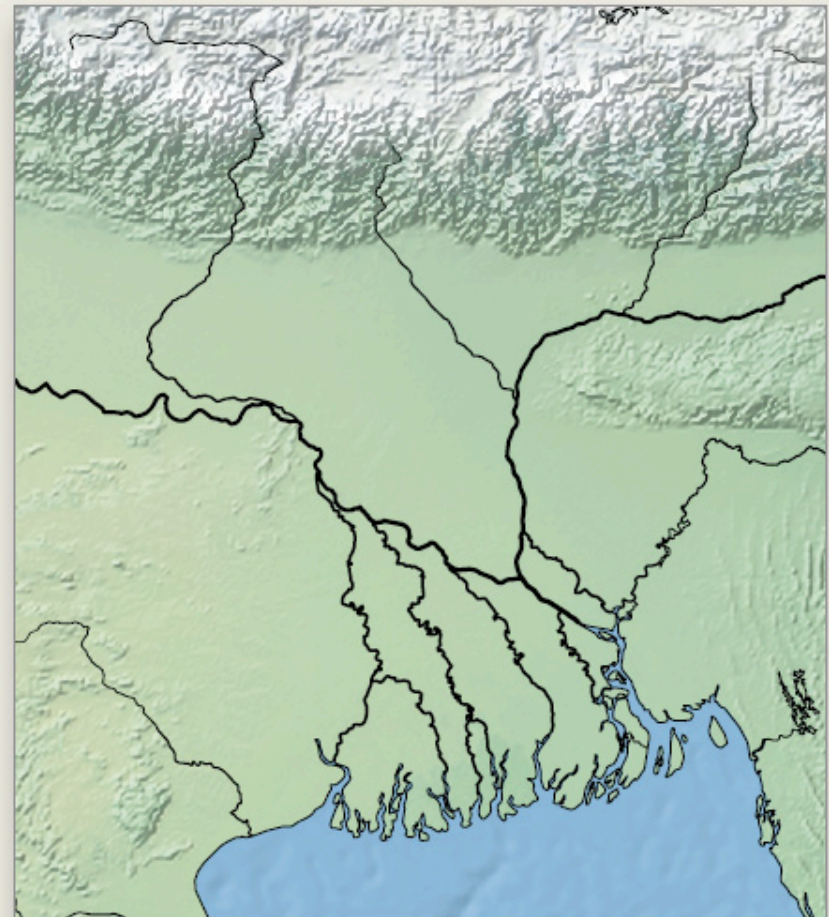


## Vector preparation

East matches west



Vector/raster registration



# Data Tour



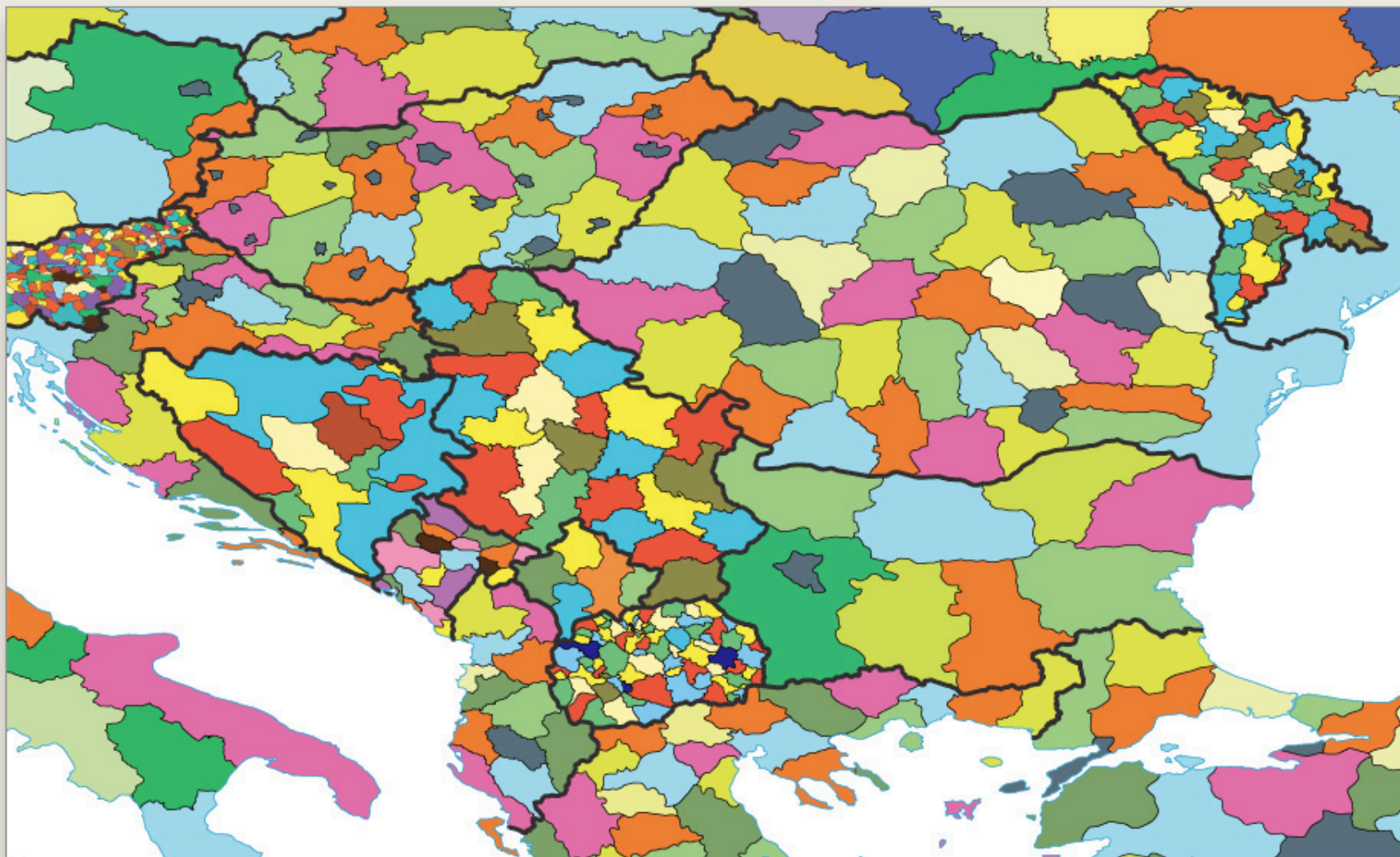
## Admin 0 – Countries



# Data Tour



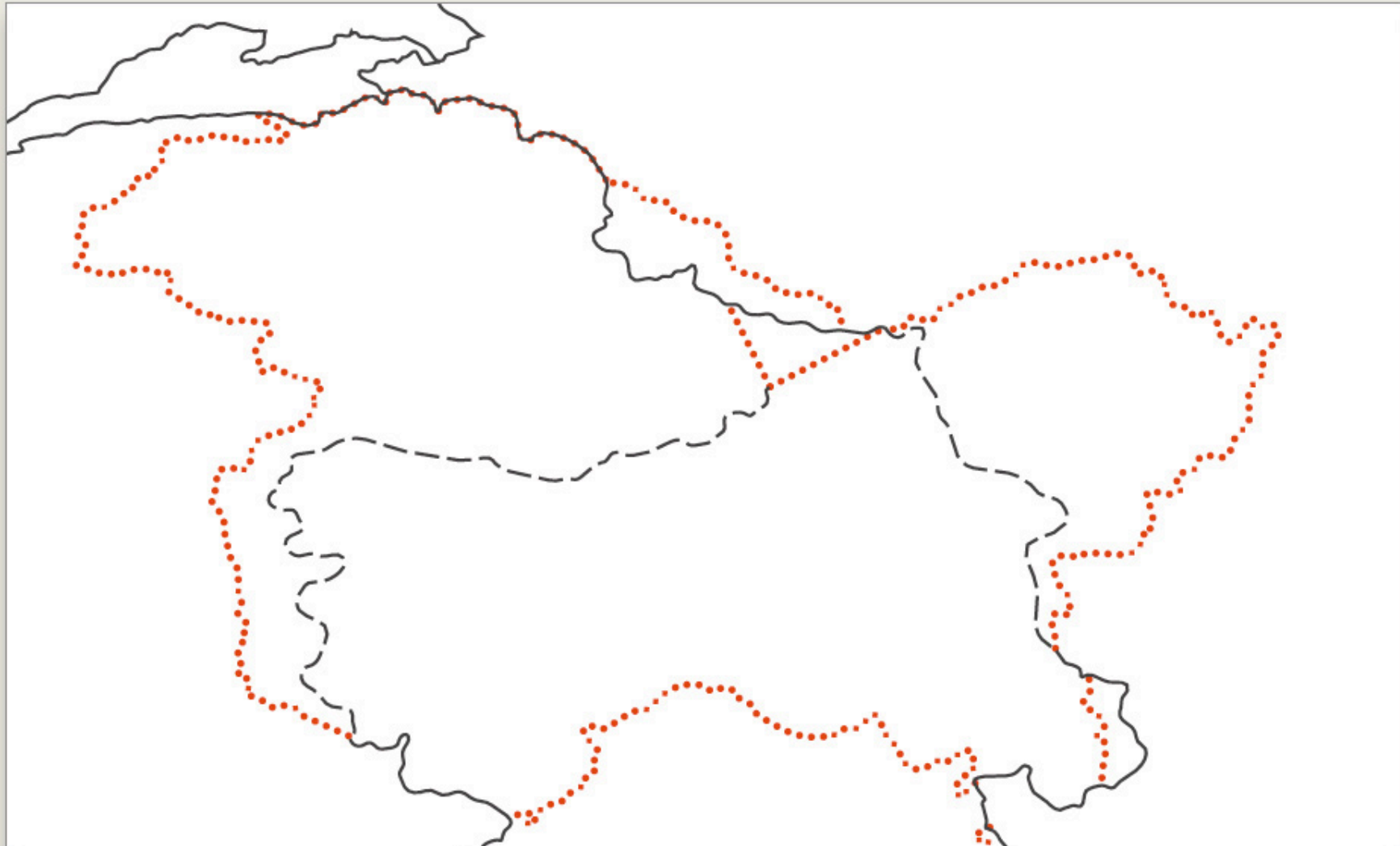
## Admin 1 – States, provinces







## Admin 0 – Breakaways, disputed Areas





# Data Tour



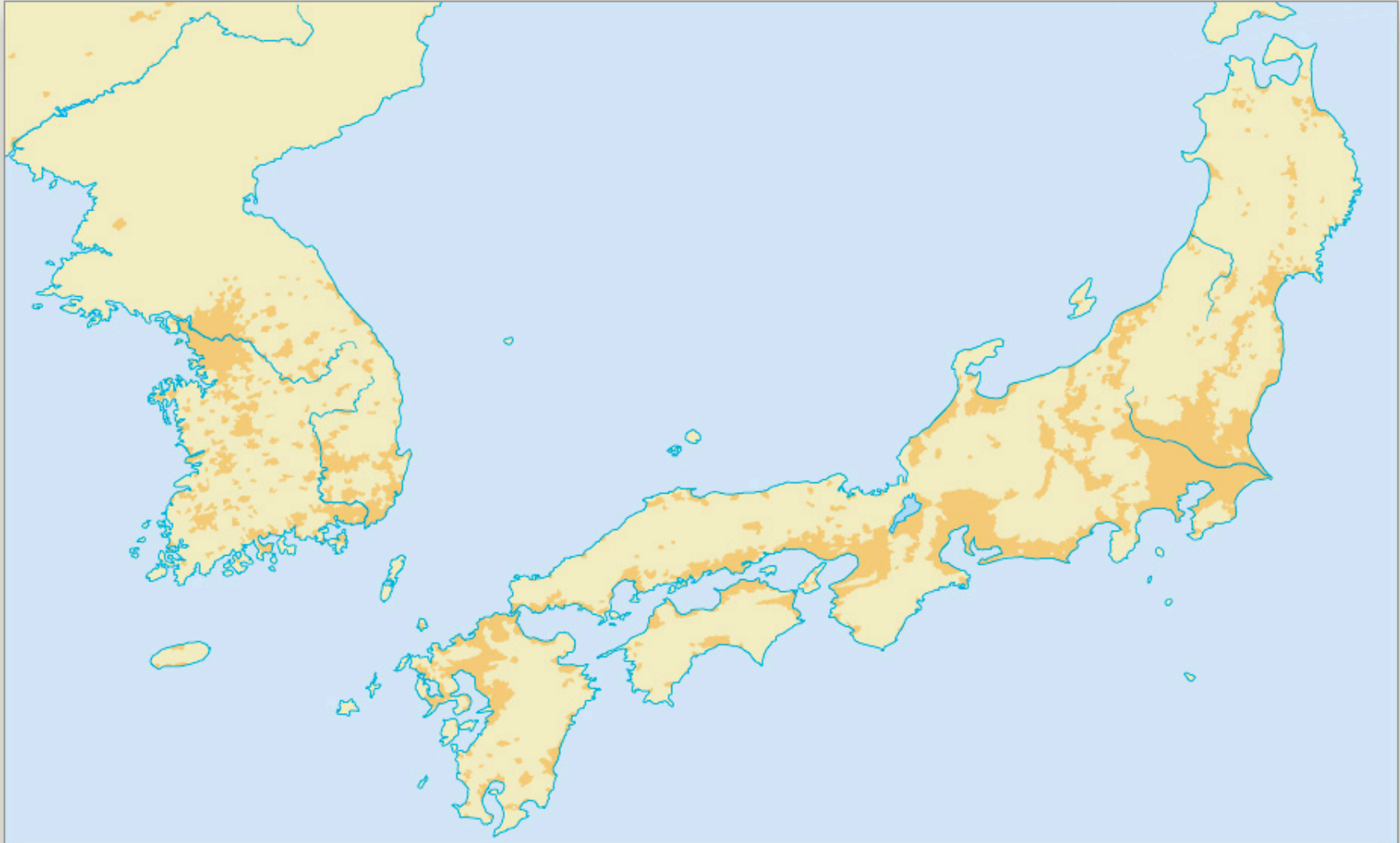
## Populated places



# Data Tour



## Urban areas



# Scale Ranks - 10m



# Scale Ranks - 10m





# Scale Ranks - 10m



# NaturalEarthData.com

The screenshot shows a web browser window with the URL <http://www.naturearthdata.com/downloads/>. The page features a blue header with the Natural Earth logo and a search bar. Below the header is a navigation menu with links for Home, Features, Downloads, Blog, Forums, Corrections, and About. The main content area is titled "Downloads" and includes a paragraph explaining that data themes are available in three levels of detail. It then presents three columns of download options, each with a map of New York, a list of available categories (Cultural, Physical, Raster), a description of the data's suitability, and scale information.




Downloads

Free vector and raster map data at 1:10m, 1:50m, and 1:110m scales

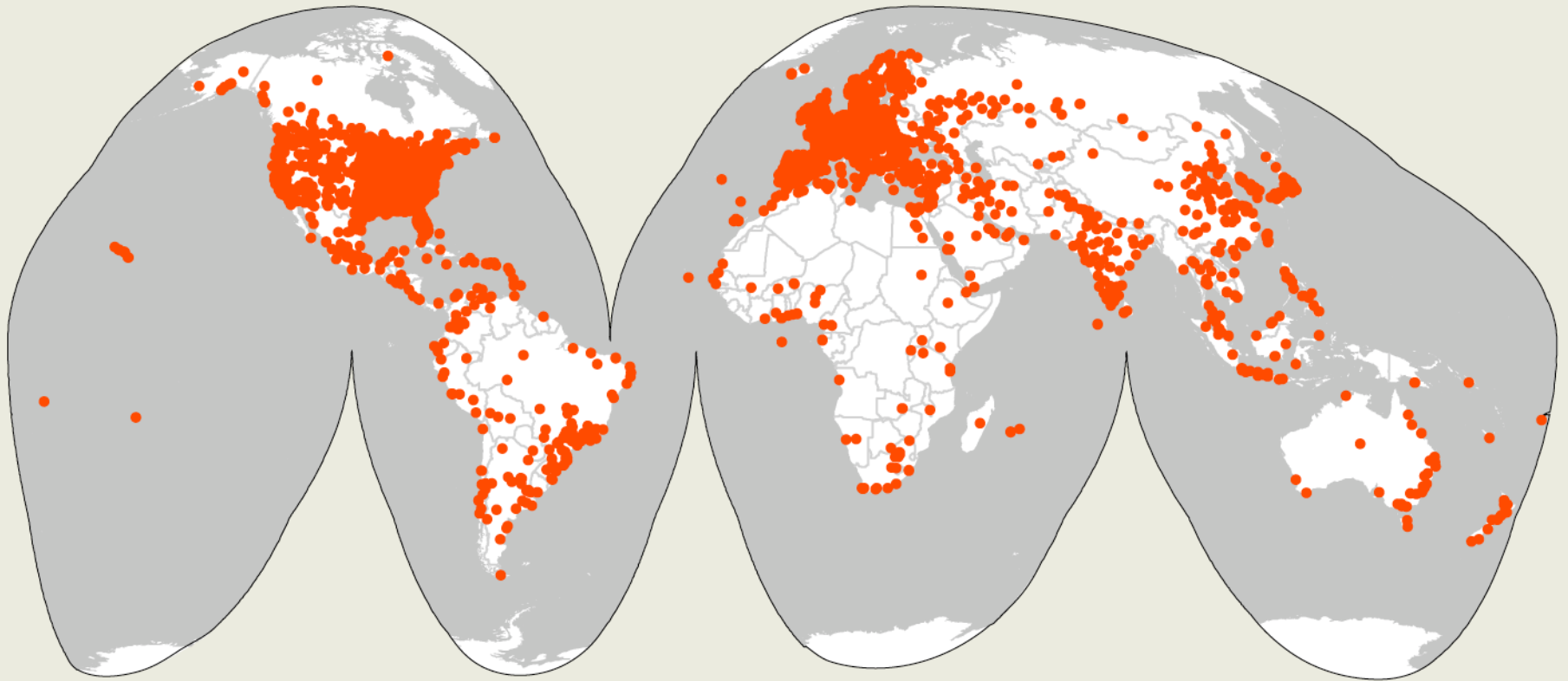
Home Features Downloads Blog Forums Corrections About

## Downloads

Data themes are available in three levels of detail. For each scale, themes are listed on Cultural, Physical, and Raster category pages.

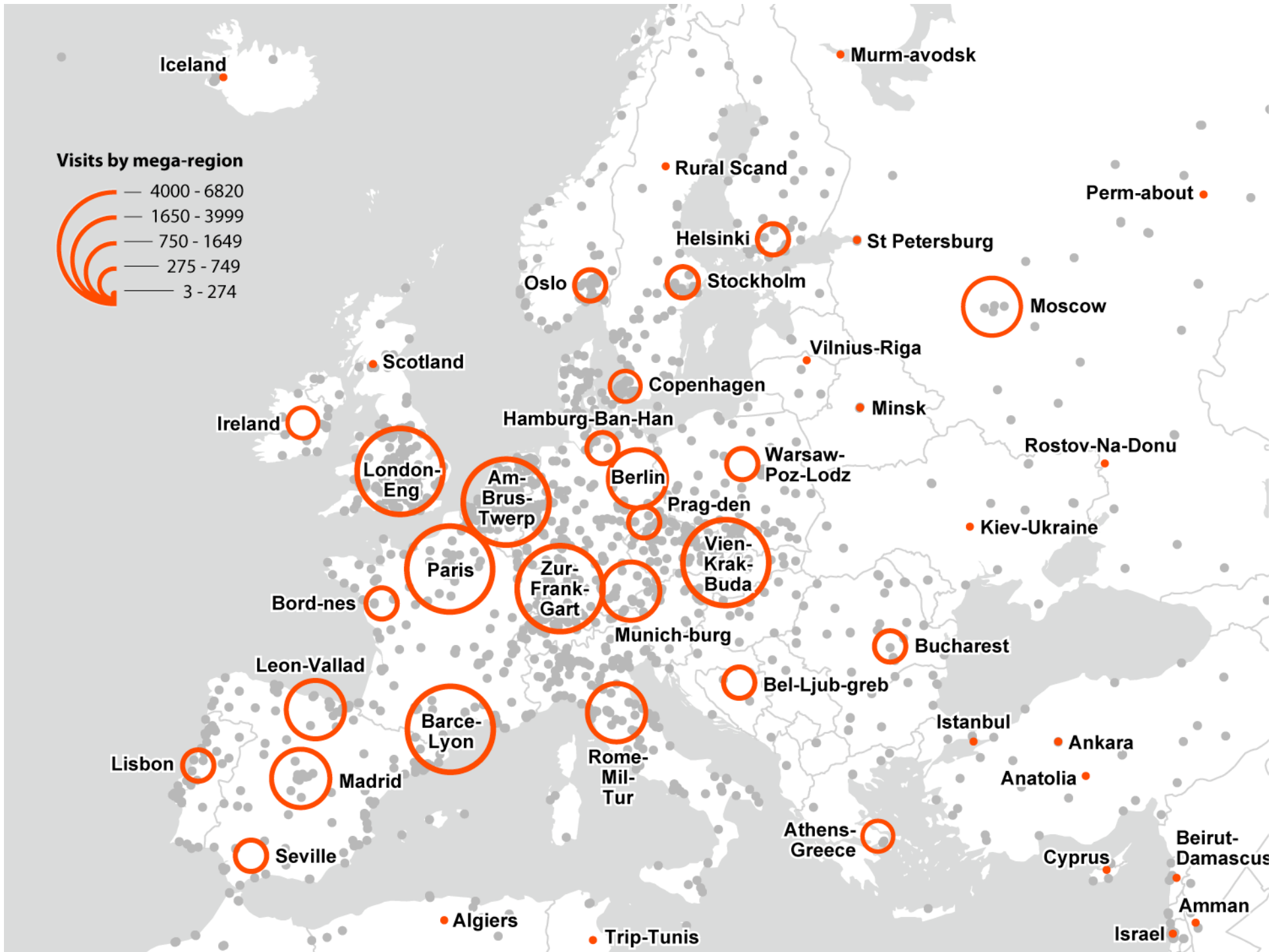
Large scale data, 1:10m	Medium scale data, 1:50m	Small scale data, 1:110m
		
<a href="#">Cultural</a> <a href="#">Physical</a> <a href="#">Raster</a>	<a href="#">Cultural</a> <a href="#">Physical</a> <a href="#">Raster</a>	<a href="#">Cultural</a> <a href="#">Physical</a>
The most detailed. Suitable for making zoomed-in maps of countries and regions. Show the world on a large wall poster.	Suitable for making zoomed-out maps of countries and regions. Show the world on a tabloid size page.	Suitable for schematic maps of the world on a postcard or as a small locator globe.
1:10,000,000 1" = 158 miles 1 cm = 100 km	1:50,000,000 1" = 790 miles 1 cm = 500 km	1:110,000,000 1" = 1,736 miles 1 cm = 1,100 km

# 90,000 downloads by 75,000 visitors

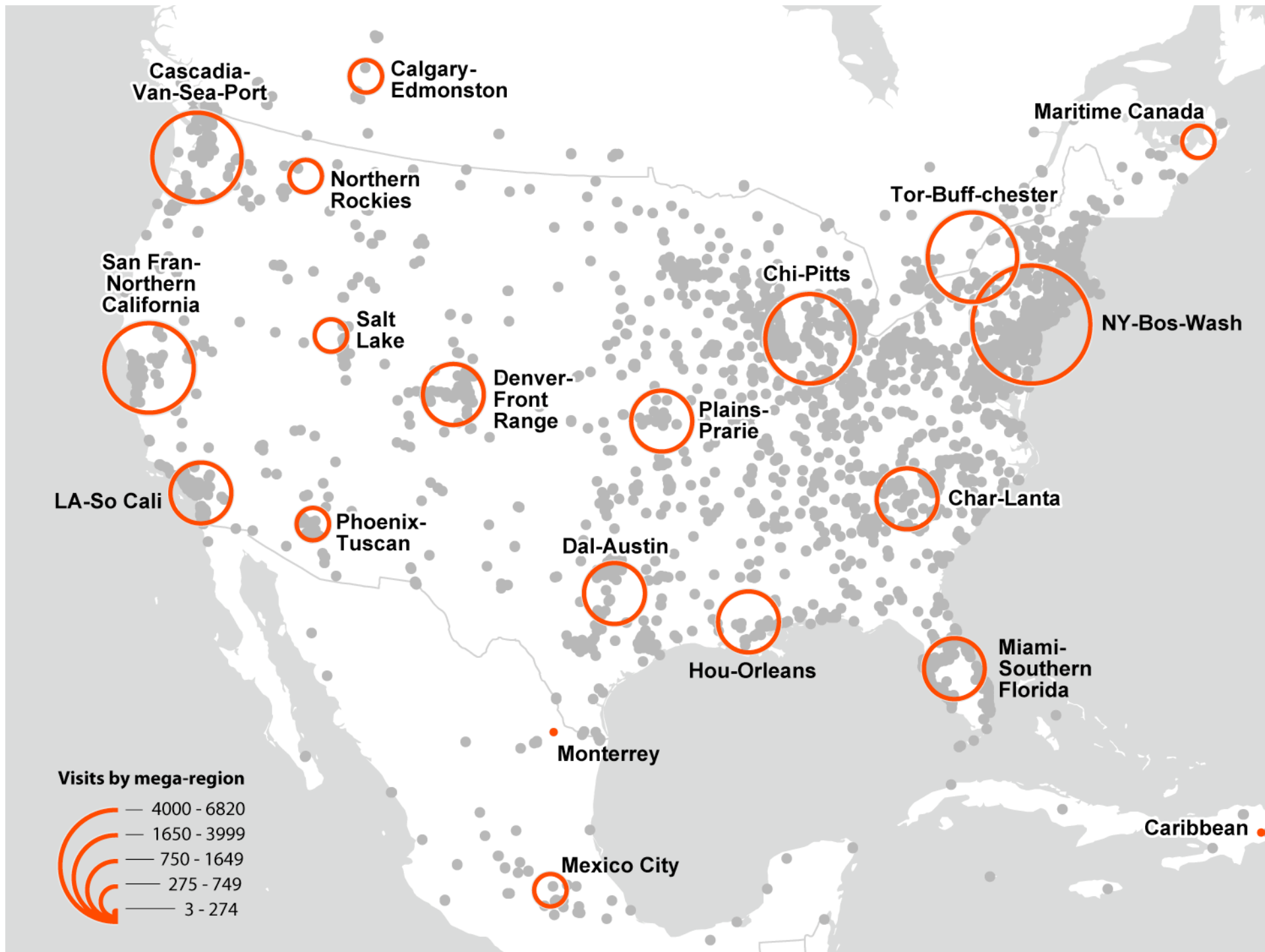


United States	26,190	France	3,914	India	1,064
Germany	4,658	Australia	1,787	Switzerland	1,054
Spain	4,443	Italy	1,642	Poland	1,004
United Kingdom	4,287	Russia	1,519	Austria	997
Canada	4,153	Netherlands	1,259	Indonesia	949

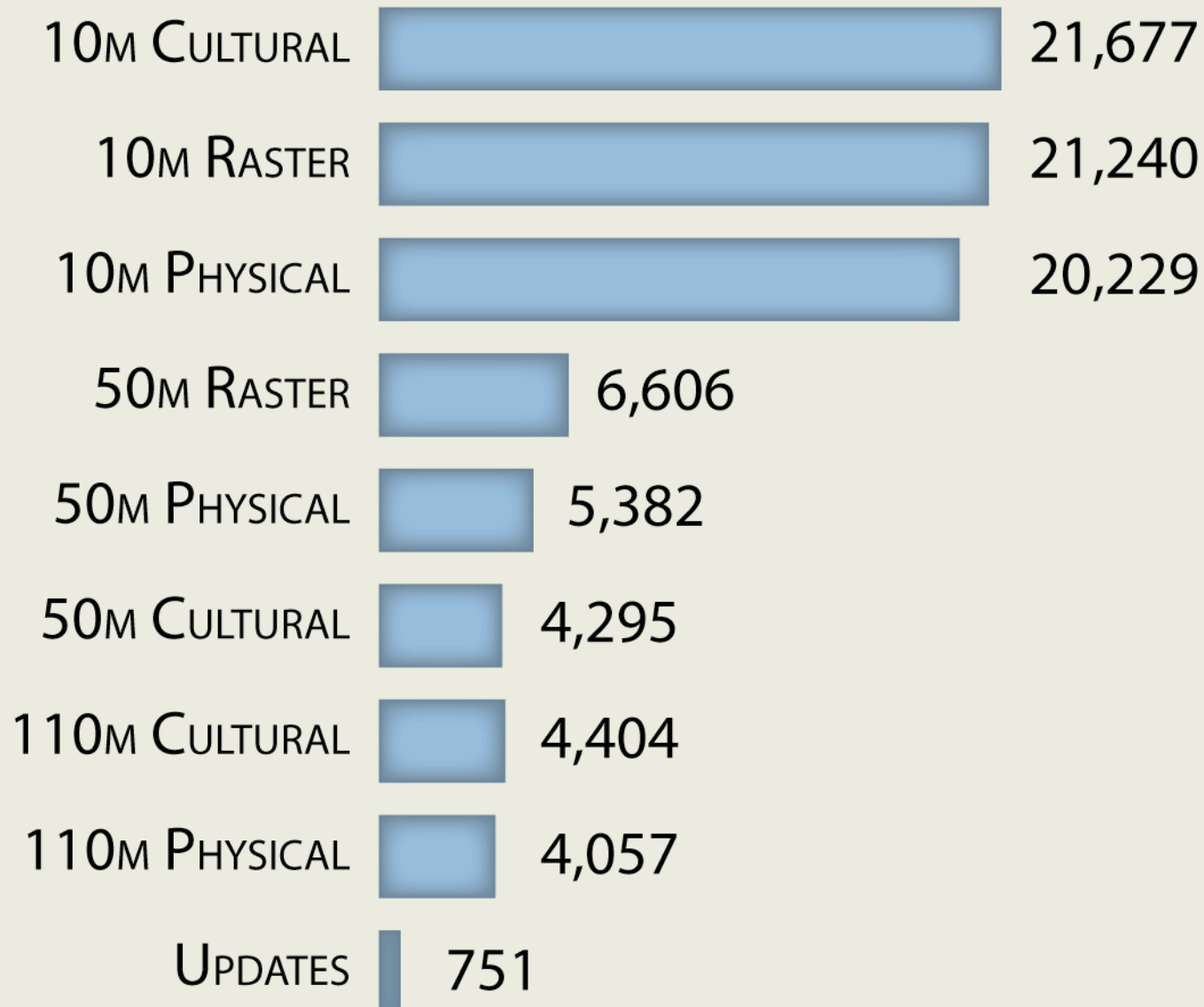




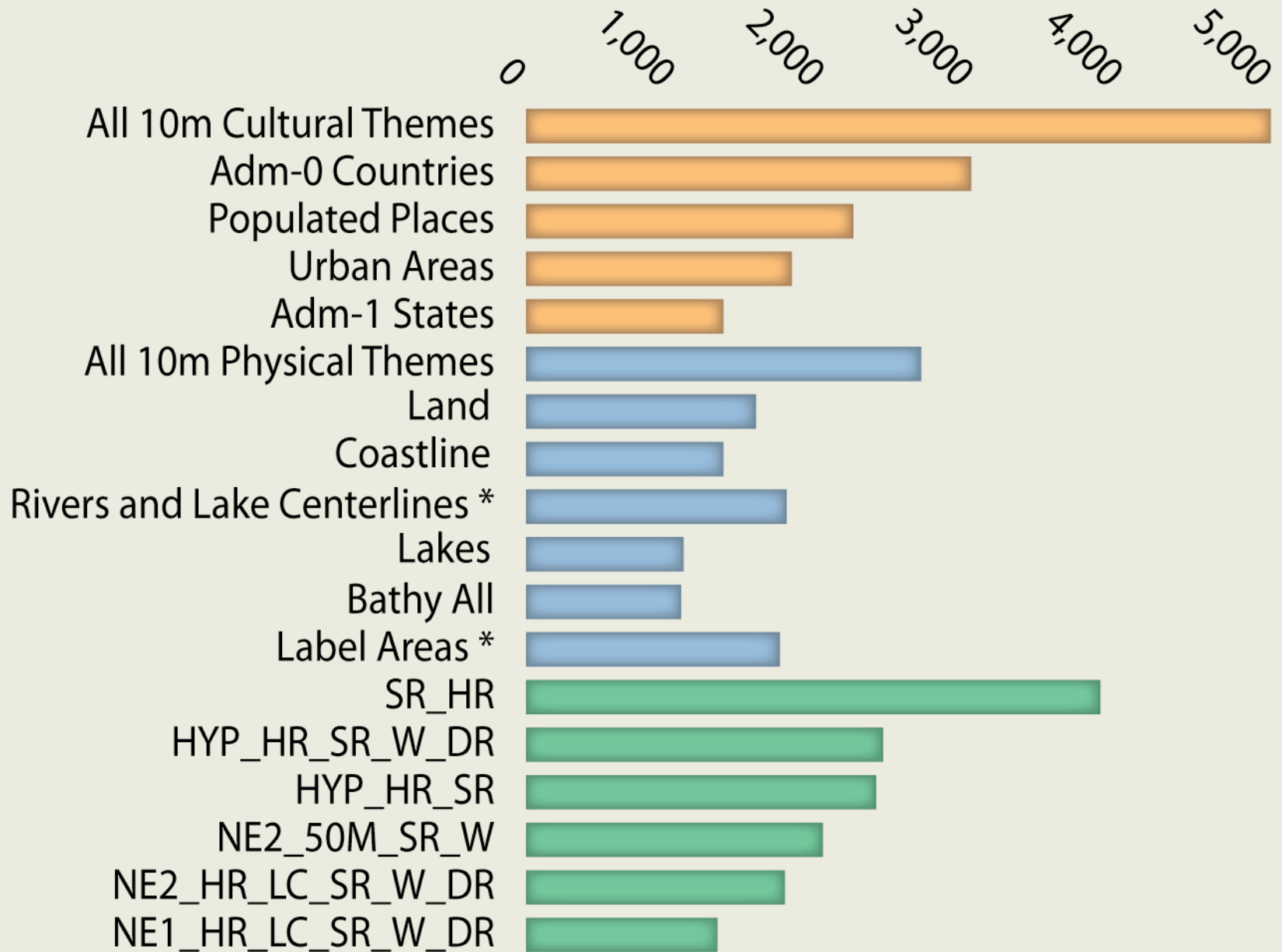




# Downloads by map scale and theme



# Selected downloads



**Want to help?**

- **Parks...**
- **Roads...**
- **Rivers...**
- **Urban Areas...**
- **Populated Places...**
- **Admin-2 / NUTS...**



# Contributors

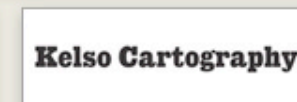
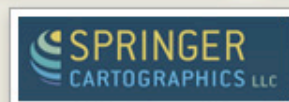
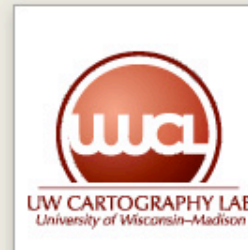
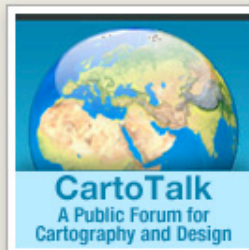


## Thank you!

Anu  
Sarah Bennett  
Tanya Buckingham  
Aileen Buckley  
Ben Coakley  
Louis Cross  
Leo Dillon  
Ted Florence  
Charlie Frye  
Dick Furno  
Martin Gamache

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Vince Osier  
Will Pringle  
Beth Robertson  
Nick Springer  
Gene Thorp  
Kimi Watanabe  
Scott Zillmer



**@kelsosCorner**

**kelso.it/blog**



# Attributes - Admin 0



MAP Attributes x

Layer: A 50m-admin-0-countries\_area (242 areas selected)

	S COUNTRYNAM	R SCALERANK	S FEATURECLA	S SOVEREIGNN
1	Afghanistan	1.00000000000	Countries	Afghanistan
2	Aland	3.00000000000	Countries	Finland
3	Albania	1.00000000000	Countries	Albania
4	Algeria	1.00000000000	Countries	Algeria
5	American Samoa	3.00000000000	Countries	United States of...
6	Andorra	3.00000000000	Countries	Andorra
7	Angola	1.00000000000	Countries	Angola
8	Anguilla	1.00000000000	Countries	United Kingdom
9	Antarctica	1.00000000000	Countries	Antarctica
10	Antigua and Bar...	1.00000000000	Countries	Antigua and Bar...
11	Argentina	1.00000000000	Countries	Argentina
12	Armenia	1.00000000000	Countries	Armenia
13	Aruba	3.00000000000	Countries	Netherlands
14	Ashmore and C...	5.00000000000	Countries	Australia
15	Australia	1.00000000000	Countries	Australia
16	Austria	1.00000000000	Countries	Austria
17	Azerbaijan	1.00000000000	Countries	Azerbaijan
18	Bahamas, The	1.00000000000	Countries	Bahamas, The
19	Bahrain	1.00000000000	Countries	Bahrain
20	Bangladesh	1.00000000000	Countries	Bangladesh

242 areas selected



# NaturalEarthData.com

The screenshot shows a web browser window with the URL <http://www.naturearthdata.com/forums/>. The page features a blue header with the Natural Earth logo, a 'BETA' badge, and the text 'Free vector and raster map data at 1:10m, 1:50m, and 1:110m scales'. A navigation menu includes links for Home, Features, Downloads, Blog, Forums, Corrections, and About. The main content area has a login section with fields for Username (filled with 'Jay Leno') and Password (masked with dots), a 'Remember me' checkbox, and a 'Log in »' button. A search box is also present. Below the login section is a 'Hot Tags' section and a 'Forums' section with a table listing various forum categories.

Forums

Register or log in - [lost password?](#)

Username:  Password:

Remember me

Search »

## Hot Tags


## Forums

Main Theme	Topics	Posts
<a href="#">General</a>		
<a href="#">Natural Earth Map Data</a>		
<a href="#">Cultural Vectors</a>		
<a href="#">Physical Vectors</a>		
<a href="#">Raster</a>		
<a href="#">Advice &amp; Tutorials</a>		

# NaturalEarthData.com

Corrections

http://www.naturalearthdata.com/corrections/ RSS Google

 **Natural Earth** BETA Free vector and raster map data at 1:10m, 1:50m, and 1:110m scales

[Home](#) [Features](#) [Downloads](#) [Blog](#) [Forums](#) [Corrections](#) [About](#)

## Submit a ticket

[Home](#) > [Corrections](#) > Submit a ticket

Please use the form below to submit a ticket. Required fields are marked with \*

Name: \*

E-mail: \*

Category: \*

Priority: \*

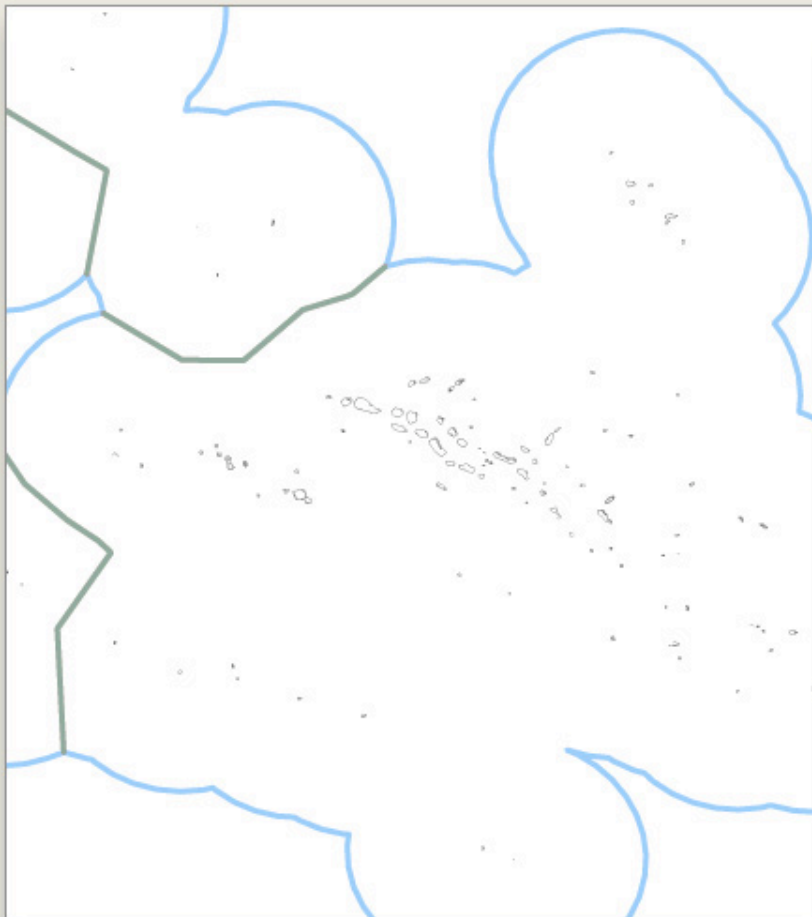
Subject: \*

Message: \*



## Admin 0 – Maritime boundaries

200-mile nautical limits



Pacific groupings





## Raster

Shaded relief

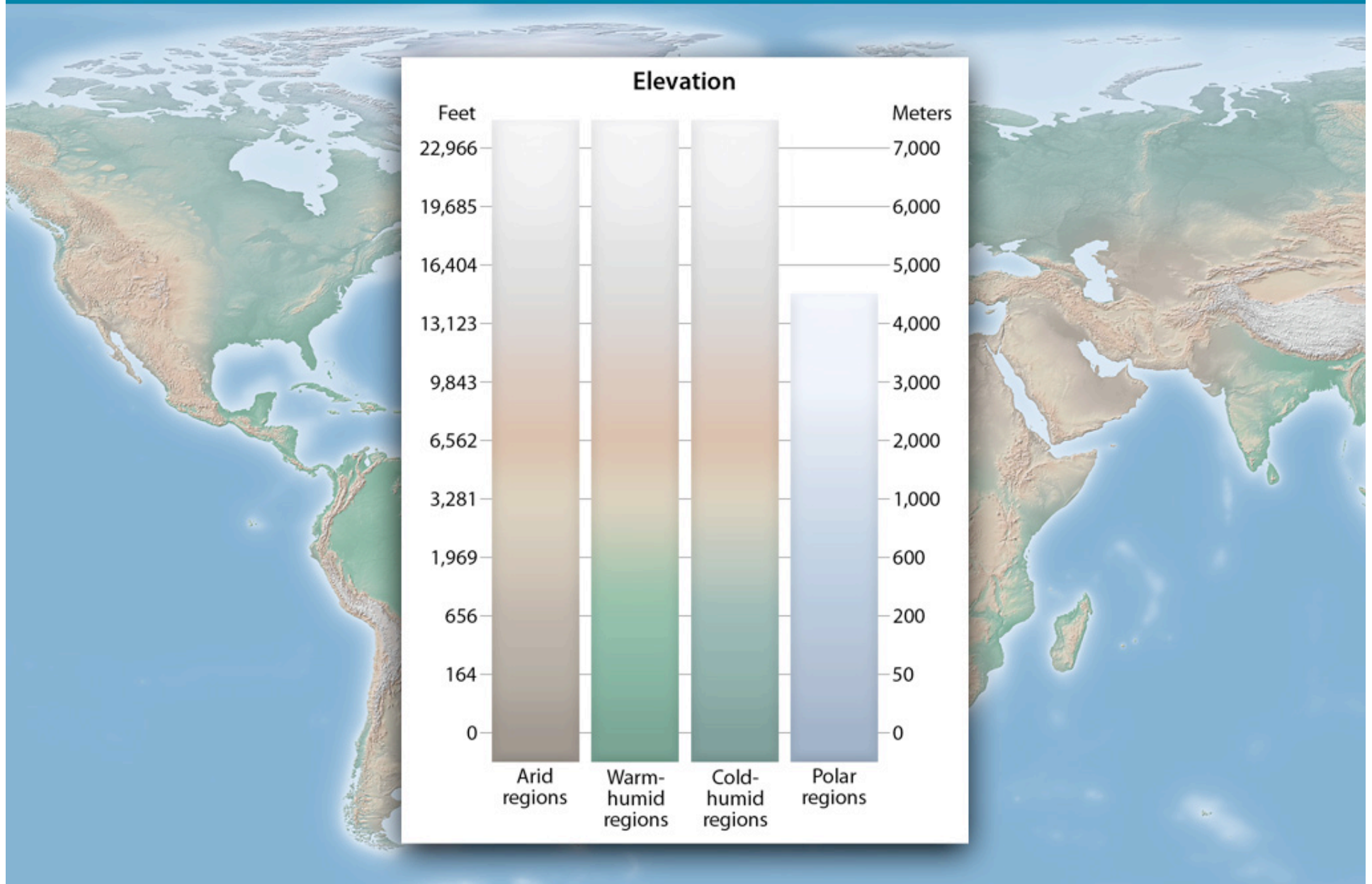


Ocean bottom





# Cross-blended hypsometric tints





# Scale Ranks - 110m





# Scale Ranks - 110m





# Scale Ranks - 110m



# Scale Ranks - 110m



# Scale Ranks - 110m





# Scale Ranks - 50m





# Scale Ranks - 50m



0 500  
MILES

# Scale Ranks - 50m





# Scale Ranks - 50m



# Scale Ranks - 50m





# Scale Ranks - 50m



