

New in WorldMap Version 1.5

Center for Geographic Analysis, Harvard

1.0 Overview

This document provides guidance for the new Version 1.5 WorldMap features. For information on the other parts of the system please use the Help document on the front page of WorldMap <http://worldmap.harvard.edu> which includes these items in addition to all other features.

In the new version, when searching for data, you will find many new Layers which reside on other systems, in addition to the standard WorldMap Layers. We are attempting to build a complete registry of public web map services, (both OGC and Esri REST) a task which will take time and the contributions of many, and like all registries of fast growing distributed data sources, (registries of web pages for example) it will become more comprehensive over time.

In this version is also a new capability for building and sharing spatio-temporal gazetteers or place name databases based on datasets loaded to WorldMap. These gazetteers may be queried and accessed from within WorldMap or from outside WorldMap.

There are a number of known issues which we are currently addressing:

- There are some layers which do not display.
- There are a number of layers which have incorrect bounding boxes resulting in a cluster at lat/long 0,0 and other anomalies.
- There are some layers which are not formatted correctly in the results list.
- Search results ranking must to be improved.
- The number of layers in the map tooltip readout does not include regional or global layers.
- Duplicate layers should be eliminated

2.0 Support

About WorldMap: <http://about.worldmap.harvard.edu>

WorldMap User Group: <http://groups.google.com/group/worldmap-users>

HHypermap User Group: <https://groups.google.com/forum/#!forum/hhypermap>

Contact: You can contact us at: worldmap@harvard.edu.

3.0 Adding Layers to your Map

There are several ways to add Layers to your map. Once you have created a map (or while you are within someone else's map, though you won't be able to save your changes) click on "Add Layers" link at the upper left. You will see 5 tabs:

1. **Search** – this lets you search for data which others have uploaded to the system as well as many Layers which reside on systems around the world, outside WorldMap.
2. **Upload Layer** – this is covered in the main documentation.
3. **Create Layer** – this is covered in the main documentation.
4. **Rectify Layer** – this is covered in the main documentation.
5. **Contribute Map Service URL** – This form http://worldmap.harvard.edu/maps/add_endpoint will be made available in a tab in Add Layers. For now please use this link. You must be logged in to submit a map service URL for loading to WorldMap. Currently URLs submitted will be loaded by hand for quality assurance. It is hoped that this process can eventually be automated.

***NOTE:** Please provide as much information as you have about the services you submit, the kind of maps they contain, the organization providing it. Also please provide your best estimate for the dates for layers in that service in terms of the year or year range of depiction.*

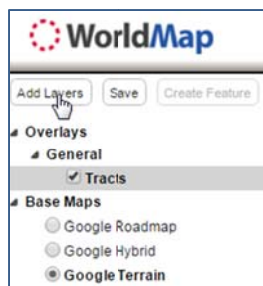
3.1 Search

This new search interface allows one to search for Layers in WorldMap as well as Layers on (potentially) any other public map server in the world. The database of Layers behind the scenes is called the Registry and the system which maintains the Registry and makes the contents available to WorldMap and other system is called HHypermap.

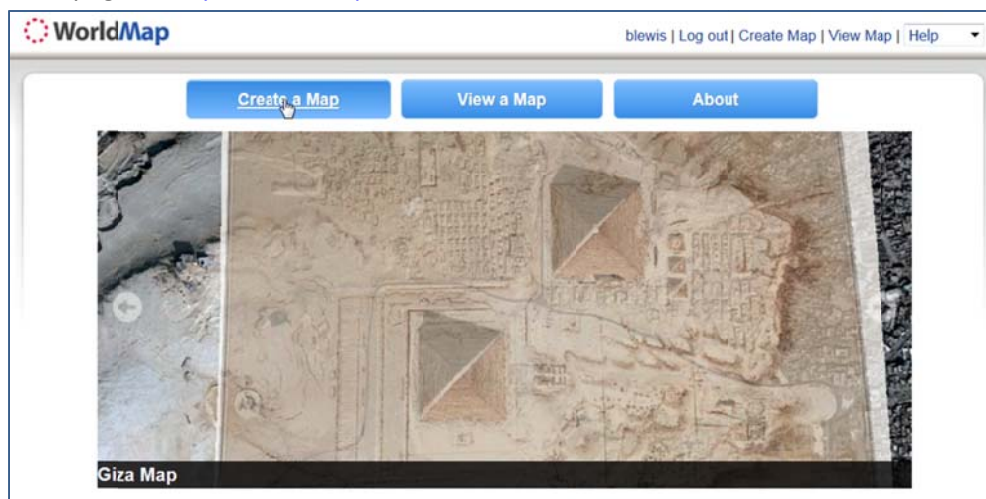
There are two main types of map Layers available for discovery in WorldMap: local Worldmap Layers and remote Layers which are hosted by other servers around the world. Local Layers are geographic datasets that have been uploaded to the WorldMap system. The actual data is stored on the WorldMap server. Because these Layers are local, they have more capabilities than remote Layers do. It is possible for example to change the symbology of local Layers, edit the data and metadata for them, and download them in a variety of formats. Remote Layers on the other hand are not (currently) editable, and symbology cannot be changed. Remote Layers can however be overlayed with other Layers, their transparency controlled, and they can be saved in maps and shared.

The Layer page for remote Layer is now not the same as the Layer page for WorldMap Layers. Currently remote Layers display the page from HHypermap which summarizes what is known about the Layer. The page for WorldMap Layers has not changed.

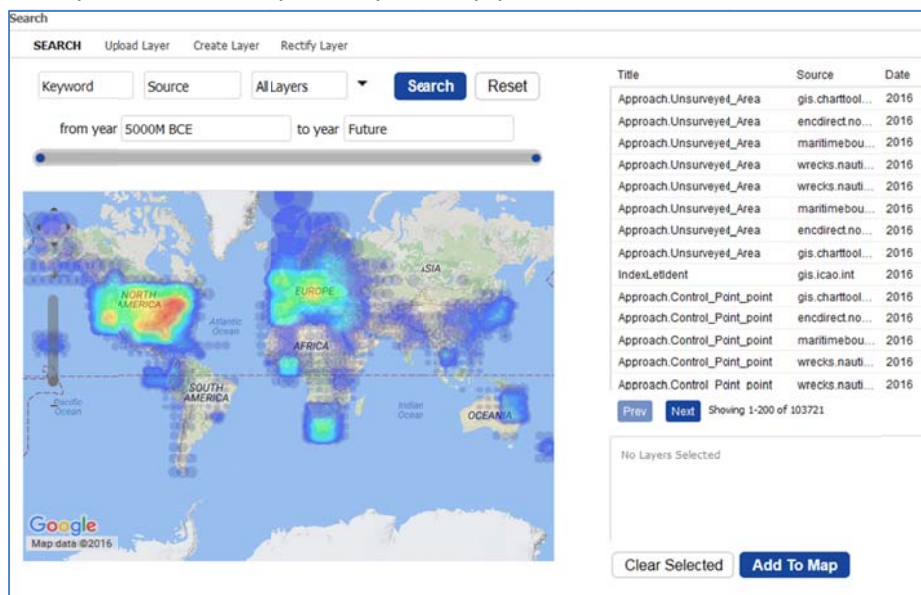
To use the new search capabilities, from a Map, click the "Add Layers" button.



If you don't yet have a Map and would like to create a new one, click "Create a Map" from the WorldMap front page at <http://worldmap.harvard.edu>.



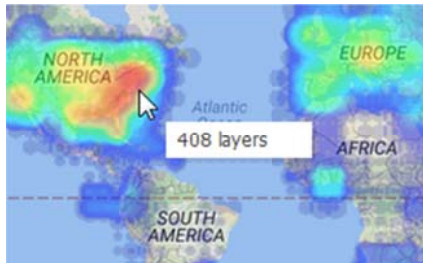
Once you click "Add Layers" in your Map you will see:



Note: The heatmap represents the distribution of the all local and remote Layers currently in the system. In this instance the total number of local (WorldMap) and remote Layers is 103,721. This number is expected to

grow over time as more map servers are added, but could shrink as quality control procedures become more refined. The heatmap displays the relative distribution of Layers for any query. Warmer colors mean more Layers with red the highest, and cooler colors means fewer Layers with blue the lowest. This is to alert the user to the regions where data is concentrated given a particular query.

Mouse over the map and you will see the number of Layers for any location:



Note: There is a bug in the count readout which we are addressing. The count does not currently include Layers which cover very large areas relative to the current view. For example in the current view, Layers which cover the entire globe are not included in the count.

When the user mouse's over items in the results list on the right, she will see map previews and metadata for each Layer:

Title	Source	Date
657 Crude Oil Refineries - Ret...	worldmap.h...	2006
Oil Refineries from IndustryAbout	worldmap.h...	2016
AGEAR	gis.icao.int	2016
AGEAR	gis.icao.int	2016
asianame	gis.icao.int	2016
World Natural Gas Flaring mu...	worldmap.h...	2014
Oil - existing	worldmap.h...	2016
UTIG Obs	Title: World Natural Gas flaring mu2 Source: worldmap.harvard.edu	
OSM Worldwide Gas	Abstract: Worldwide natural gas flaring information and an up to date map visit recorded by the VIIRS instrument aboard NPP satellite between 16 march and 31	
ARCGIS.WBO.EDI	flares are visuals	
ARCGIS.WBO.EDI	Date: Detected	
da	worldmap.h...	2016
LEIIRI Materials Pollution	worldmap.h...	2016

Note: All Layers should return a Layer preview but you may find some which do not. Please let us know about any problems you see: worldmap@harvard.edu.

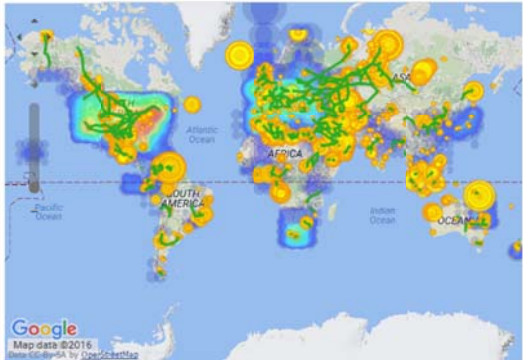
Click on a Layer in the list to add it to the cart. From there it can be added to the Map. Click again on the Layer name to remove it from the cart:

Search

SEARCH Upload Layer Create Layer Rectify Layer

Keyword Source All Layers Search Reset

from year 5000M BCE to year Future



Google
Map data ©2016
Data Courtesy by OpenStreetMap

Title	Source	Date
AGEAR	gis.icao.int	2015
AGEAR	gis.icao.int	2015
asianame	gis.icao.int	2015
World Natural Gas Flaring m...	worldmap.h...	2015
Oil - existing	worldmap.h...	2015
UTIG Obs	tuvalu.grda.no	2015
OSM Worldwide Gas Power ...	worldmap.h...	2015
ARCGIS.DBO.EDITadpoint	gis.icao.int	2015
ARCGIS.W.DBO.EDITadpoint	gis.icao.int	2015
ARCGIS.W.DBO.EDITadpoint	gis.icao.int	2015
da	worldmap.h...	2015
HMM Meteorite Collection	worldmap.h...	2015
HMM_MeteoriteCollection	worldmap.h...	2015
urban_areas	worldmap.h...	2015

Prev Next Showing 1-200 of 103722

World Natural Gas Flaring mu206
Oil - existing

Clear Selected Add To Map

Once the Layers you are interested in are in the cart, click “Add to Map” to load the Layers to your Map:

WorldMap New Map blewis | Sign out | Create Map | View Map | Help

Add Layers Save Create Feature Edit Feature Identify LRS Print Gazetteer About Notes Google Earth Street View

Overlays

General

☒ Oil - existing


☒ World Natural Gas Flaring mu206

0.24 - 5.12
5.13 - 14.39
14.40 - 26.09
26.90 - 52.45
52.46 - 90.04
90.05 - 149.5
149.51 - 234.34
234.95 - 326.86
326.47 - 440.1
440.41 - 553.04

Base Maps

☐ Google Roadmap
☐ Google Hybrid
☒ Google Terrain
☐ Google Satellite
☐ ESRI Light Gray Reference
☐ ESRI World Imagery
☐ ESRI World Street Map
☐ Stamen Toner
☐ Stamen Watercolor
☐ MapQuest OpenStreetMap
☐ OpenStreetMap
☐ No background

Worldwide natural gas flaring dataset for more information and an up to date map visit skytruth.org/data recorded by the VIIRS instrument aboard NOAA's Suomi NPP satellite between 16 march and 31 october 2014 The fires are visualized here by their radiant heat intensity in W/m2

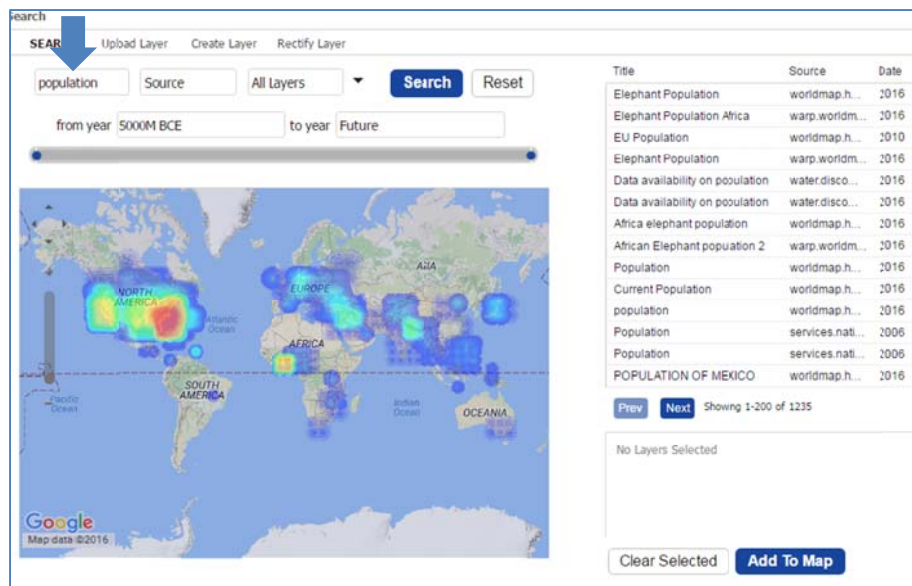


Google
Map data ©2016

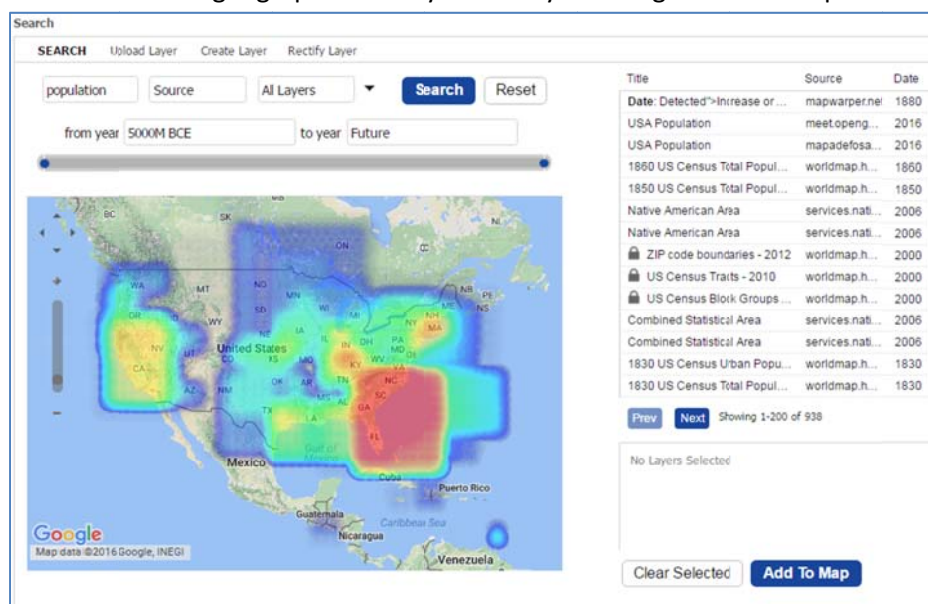
1: 139770641

To get back to search click “Add Layers” again.

One can filter in several ways. Here is a filter by “population” which returns 1,235 results.

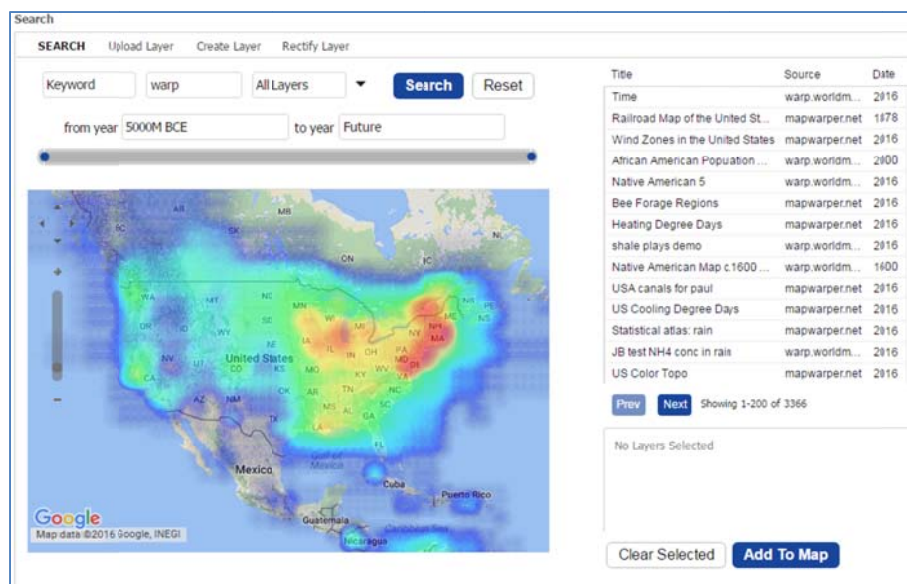


One can filter on geographic area by extent by zooming in on the map:



Here zooming in to the U.S. reduces the number of Layers selected to 938.

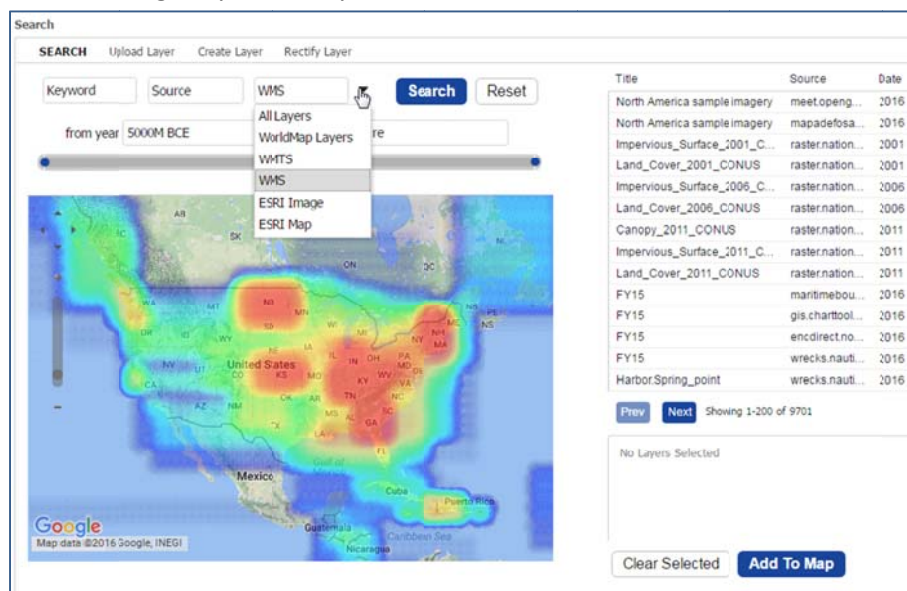
One can also filter by Source which queries against the domain name of the remote map server. For example, using "warp" in Source returns historic map Layers in the "mapwarper.net" and "warp.worldmap.harvard.edu" systems. Searching Source by "NYPL" will return historic Layers from the New York Public Library historic map georeferencing system at "maps.nypl.org".



One can also search by service type (use the “All Layers” pulldown menu). “WorldMap Layers” are local Layers. “WMS” is a service format defined by the Open Geospatial Consortium or OGC. “ESRI Image” and “ESRI Map” are service formats defined by the Esri mapping software company.

You don’t need to know about map service types to use them effectively so the best setting will most often be “All Layers”.

If you need to be able to download data however, choose “WorldMap Layers”, most of which are downloadable. All Layers not designated WorldMap Layers are remote layers and currently cannot be edited, changed symbolically, or downloaded.



One may also filter by depict date. Here is an example, focused on East Asia, filtered by date range 1000BCE to 1500CE. Hovering over a Layer from the Song dynasty, it is displayed in the map:

Title	Source	Date
1077 Prefectural Seat Comm...	worldmap.h...	1077
Northern Song Administrative ...	worldmap.h...	1080
Yuji b. 1136	worldmap.h...	1080
county pts 1080 chgis	worldmap.h...	1080
1080 county chgis	worldmap.h...	1081
Officials via Examination, 112...	worldmap.h...	1127
Yellow River 1128 CE-1368 CE	worldmap.h...	1128
Dynastic boundaries as of 11...	worldmap.h...	1142
Lv Zuqian 呂祖謙 - sacrificial ...	worldmap.h...	1181
Prefectures of Jin in 1200	worldmap.h...	1200
Southern Song Administrative ...	worldmap.h...	1200

Metadata for 'Southern Song Administrative Seats in 1200':
 Title: Southern Song Administrative Seats in 1200
 Source: worldmap.harvard.edu
 Abstract: Southern Song Administrative Seats in 1200 from R. Mostern Digital Gazetteer of the Song Dynasty
 Date: From Metadata

Note: Notice in the metadata for the Layer displayed it says “Date: From Metadata”. This means the depict date for the Layer was input explicitly by a person. Some Layers have instead the designation “Date: Detected”. This means the date was automatically recognized (using Time Miner software developed by Harvard CGA) within the Layer name or abstract. Most auto-detected dates are correct, but some are not. Please let us know of errors you find worldmap@harvard.edu.

One may sort results by any of the columns in the results list. Click on the column heading to sort. Here is the current view sorted by time:

Title	Source	Date
Warring States	worldmap.h...	-330
Other Mumun (c. 1500-300 B...	worldmap.h...	-300
Ancient coastline	worldmap.h...	-256
Yellow River in Shang and Zhou	worldmap.h...	-256
Zhou Territory	worldmap.h...	-256
East Asian Tribes 214 BCE	worldmap.h...	-214
Great Wall of China: early Han	warp.worldmap...	-206
Qin Dynasty 230 BCE	worldmap.h...	-206
Qin dynasty commanderies G...	worldmap.h...	-206
Qin dynasty commandery cap...	worldmap.h...	-206
Qin dynasty county (xian) seats	worldmap.h...	-206
Great Wall	worldmap.h...	-206
Great Wall	worldmap.h...	-206
Qin and the Warring States b...	worldmap.h...	-206

Behind the scenes the HHypermap backend <http://hh.worldmap.harvard.edu> maintains information on remote services so it can provide access to them via WorldMap and other systems. (HHypermap is a software platform developed by Harvard CGA with a grant from NEH to manage remote map services and

make them useful within mapping systems.) In this view we can see HHypermap is tracking more than 13 thousand remote map services which contain more than 170 thousand map Layers. All of these Layers are not yet available within search, due mostly to display issues relating to the great variety of map server configurations. As software improves over time, we expect the rest of these servers and others to become available for discovery in HHypermap.

HHypermap Home	
HHypermap Home Page	
We track health of 13,263 remote map services, containing a total of 170,244 layers.	
Catalogs: all (13263) Filter by: Catalogue Service for the Web (CSW) (0) Web Map Service (WMS) (1472) Web Map Tile Service (WMTS) (1) Tile Map Service (TMS) (0) ArcGIS REST MapServer (10920) ArcGIS REST ImageServer (886) Harvard WorldMap (1) Mapwarper (3)	
« previous 1 2 3 4 5 6 ... 1326 1327 1328 1329 next »	
Title	Layers
hypermap:bio.discomap.eea.europa.eu EcosystemMap_r1_1km_v2_1 http://bio.discomap.eea.europa.eu/arc... Web Map Service (WMS)	1
hypermap:bio.discomap.eea.europa.eu LifeProjects http://bio.discomap.eea.europa.eu/arc... Web Map Service (WMS)	5
hypermap:water.discomap.eea.europa.eu WISE_SoE_Statens_Density_Dyna_WML.mxd http://water.discomap.eea.europa.eu/arc... Web Map Service (WMS)	5
hypermap:maps.suagcenter.com Layers http://maps.suagcenter.com/ArcGISRe... ArcGIS REST MapServer	3
hypermap:maps.suagcenter.com Louisiana http://maps.suagcenter.com/ArcGISRe... ArcGIS REST MapServer	32
hypermap:bio.discomap.eea.europa.eu Article 17 http://bio.discomap.eea.europa.eu/arc... Web Map Service (WMS)	6

Clicking on a service, brings the user to the Layers within that service:









[HHypermap](#)
[Home](#)

Service details for: Article 17

[See full check stats](#)

Type	Web Map Service (WMS)
Is valid?	True
Name	Article 17
Abstract	<p>The Habitats Directive (92/43/EEC), together with the Birds Directive (79/409/EEC), is the most important European legislation aimed at the conservation of the European Union's wildlife. The Directive is presented as a series of articles together with a number of annexes. Article 11 requires Member States to monitor the habitats and species listed in the annexes and Article 17 requires a report to be sent to the European Commission every 6 years following an agreed format – hence 'Article 17 reporting'. The Article 17 report presented on these pages covers the period from 2001 to 2005. A major part of the report is an assessment of the conservation status of all the habitats and species listed on: Annexes I & II of the Directive (those for which the Member States must propose & designate sites forming part of the Natura 2000 network and known as Special Areas of Conservation) Annex IV (species strictly protected) Annex V (species whose exploitation may be subject to management). The Article 17 reporting covers the habitat types and species in the whole territory of the Member State concerned, not only those within Natura 2000 sites. Data source: http://bd.eionet.europa.eu/activities/Reporting/Article_17/reference_portal. http://bd.eionet.europa.eu/activities/Reporting/Article_17/Reporting_Tool/Reporting_tool_Software</p>
Monitoring Period	<ul style="list-style-type: none"> First Check: Aug. 25, 2016, 9:33 a.m. Last Check: Nov. 19, 2016, 12:47 p.m. Total Checks: 2 Reliability: 50.0

Layers (6)

	Is Valid?	Tot Checks	Last Check	Status	Response Times	Reliability
 <ul style="list-style-type: none"> Name: Biogeographical Region per species Title: Biogeographical Region per species Abstract: None 		2	<ul style="list-style-type: none"> Nov. 11, 2016, 3:08 p.m. 3.70s 		<ul style="list-style-type: none"> Min: 1.37s Average: 2.55s Max: 3.70s 	
 <ul style="list-style-type: none"> Name: 2 Title: Biogeographical Region/Country per species Abstract: None 		2	<ul style="list-style-type: none"> Nov. 11, 2016, 3:08 p.m. 7.92s 		<ul style="list-style-type: none"> Min: 1.56s Average: 4.74s Max: 7.92s 	

Clicking on a Layer brings one into the metadata for that Layer.

[HHypermap](#)
[Home](#)

Layer details for: Biogeographical Region per species

- Go to service page
- Go to MapProxy demo page
- Go to MapProxy configuration

No thumbnail is available for this layer

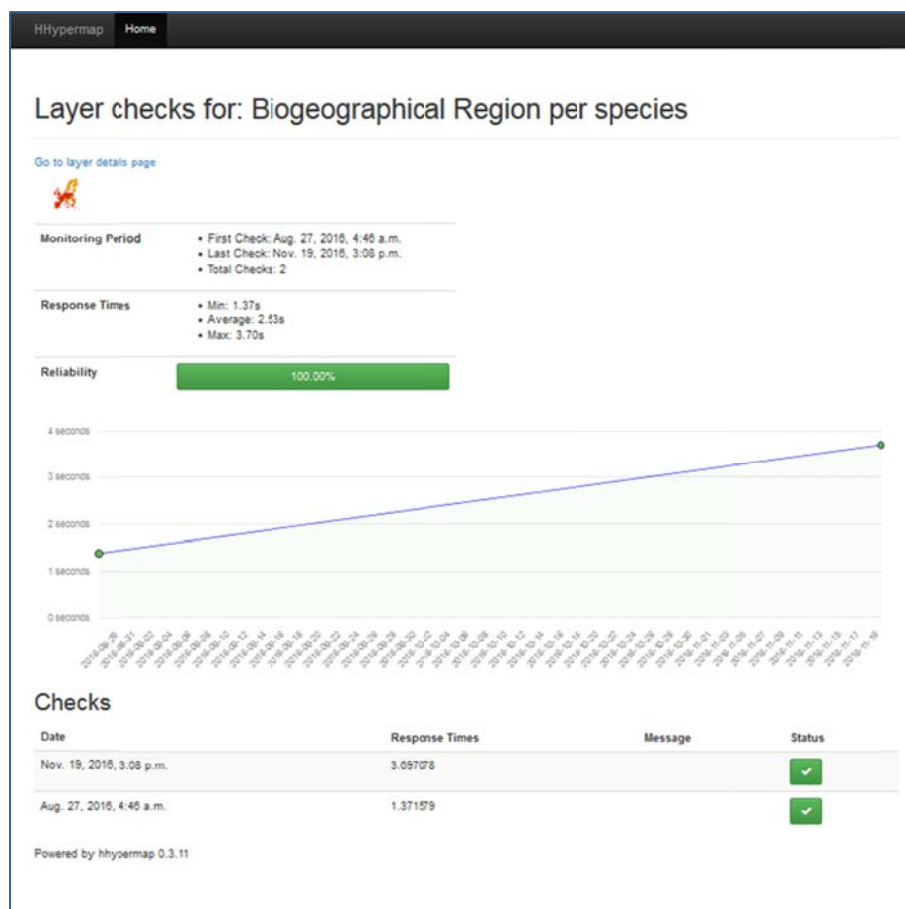
Endpoints

- Service Hypermap Page: [Article 17](#)
- Layer Page: <http://hh.worldmap.harvard.edu/registry/hypermap/layer/167726/>
- Layer Hypermap EndPoint: registry/hypermap/layer/167726/map/wmts/1.0.0/WMTSCapabilities.xml

Name	1
uuid	c82d881-052b-41ad-a124-904e010dd86d
Title	Biogeographical Region per species
Abstract	None
Keywords	
Is Public?	True
Is Monitored?	True
Is Valid?	True
Dates	Nodates for this layer
Spatial Reference Systems	<ul style="list-style-type: none"> CRS:84 EPSG:102100 EPSG:3857 EPSG:4326
Bounding Box (x0, y0, x1, y1)	-3127549000, 27.63915600, 34.5H458200, 70.09227000
Monitoring Period	<ul style="list-style-type: none"> First Check: Aug. 27, 2016, 4:46 a.m. Last Check: Nov. 19, 2016, 3:08 p.m. Total Checks: 2 Reliability: 100.0 See full check stats
Was deleted?	False
Last Updated	Nov. 19, 2016, 3:08 p.m.

Powered by hhypermap 0.3.11

Clicking on “See full check stats” displays the results of any checks which have been made on this Layer. Uptime statistics are gathered for each Layer and service and these are being used to ensure that the Layers in the system are dependable. Once the system has been in production for some time these charts will become more useful.



3.2 Submit Map Service URL

If you know about a map server that is not yet included in WorldMap, and you would like it to be available, please tell us about it: http://worldmap.harvard.edu/maps/add_endpoint. This link will be made available within a “Submit Map Service URL” tab in the “Add Layers” form in the near future.

WorldMap News | Log out | Create Map | View Map | Help

Submit Map Service URL

Please describe the type of mapping within the map service (i.e. roads, water features, historic maps, satellite imagery, etc.), the name of the organization hosting the map service, the source of the data, and the year or year range the data represents.

Service harvesting and loading to WorldMap is currently a manual process so it may take some time for your map service layers to appear in search.

The system currently supports OGC WMS and CSW, as well as Esri Image and Map service endpoint types. If you are not sure what you have, feel free to submit it and we will attempt to load it.

Write us at worldmap@harvard.edu if you have any questions. Thank you for your contribution.

Map service URL:

Describe Map Service:

Once you submit a URL we will add it to WorldMap. Please only submit Esri or OGC type service endpoints (URLs). If you know of a server that you think contains Esri or OGC Layers that you are interested in using but don't know the format of the URL to provide, send us the information you have and we will see what we can do. Feel free to check up on a service you have submitted worldmap@harvard.edu.

4.0 Creating a Custom Gazetteer

Gazetteers in WorldMap are accessible from within the Map page in WorldMap and are also accessible by applications outside WorldMap via a RESTful API.

4.1 Adding Content to a Gazetteer

To add content to your own gazetteer you will choose a layer you have already uploaded to WorldMap containing the place name data you wish to add. To start, right click on the Layer in the Map and select "Share Layer". On the Layer page, look to the lower right part of the page where you will see the "Manage Layer".

Manage Layer

- [Update the description of this data](#)
- [Update the contacts for this data](#)
- [Upload a new version of this data](#)
- [Remove](#)

Click on "Update the description of this data".

At the bottom of the metadata update page you will see an option for “Include in gazetteer”.

Attributes

☐ Include in gazetteer

Attribute	Display Title	Display Order	Visible?	Searchable?
PeopleName	People Name	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Country	Country	2	<input type="checkbox"/>	<input type="checkbox"/>
ID_FIPS	FIPS ID	3	<input type="checkbox"/>	<input type="checkbox"/>
PEID	Int'l Mission Board ID	4	<input type="checkbox"/>	<input type="checkbox"/>
PeopleID3	People-Group-Across-Co	5	<input type="checkbox"/>	<input type="checkbox"/>
ROP3	Rop3	6	<input type="checkbox"/>	<input type="checkbox"/>
ROG3	FIPS-2 country code	7	<input type="checkbox"/>	<input type="checkbox"/>
PeopleID_1	Affinity Boc Code	8	<input type="checkbox"/>	<input type="checkbox"/>
ROP1	Rop1	9	<input checked="" type="checkbox"/>	<input type="checkbox"/>
AffinityBI	Affinity Boc	10	<input type="checkbox"/>	<input type="checkbox"/>
PeopleID2	People Cluster Code	11	<input type="checkbox"/>	<input type="checkbox"/>
iROP2	Rop2	12	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iPeopleClu	People Cluster	13	<input type="checkbox"/>	<input type="checkbox"/>
ROL3	Ethno Language Code	14	<input type="checkbox"/>	<input type="checkbox"/>
Language	Language	15	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
RLG3	Primary Religion Code	16	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Religion	Religion	17	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Category	Category	18	<input type="checkbox"/>	<input type="checkbox"/>
Populati_1	Population	19	<input type="checkbox"/>	<input type="checkbox"/>
TextPop	Population in Text	20	<input type="checkbox"/>	<input type="checkbox"/>
JPScale	JP Progrss	21	<input type="checkbox"/>	<input type="checkbox"/>
JPScaleLe	JP Progrss Level	22	<input type="checkbox"/>	<input type="checkbox"/>
PGICSource	Pgicsource	23	<input type="checkbox"/>	<input type="checkbox"/>
Point_X	X	24	<input type="checkbox"/>	<input type="checkbox"/>
Point_Y	Y	25	<input type="checkbox"/>	<input type="checkbox"/>
Source	Source	26	<input type="checkbox"/>	<input type="checkbox"/>
Confidence	Confidence	27	<input type="checkbox"/>	<input type="checkbox"/>
Contributo	Contributo	28	<input type="checkbox"/>	<input type="checkbox"/>
UpdateDate	Updatedate	29	<input type="checkbox"/>	<input type="checkbox"/>

Update

Select “include in gazetteer” and you will see:

Attributes

☒ Include in gazetteer

***NOTE:** By adding your layer features to the gazetteer, they will be searchable and viewable by anyone regardless of your layer's security permissions.

If you do not choose at least one depict-date field, the system will use the depict-date in the layer metadata (if any).

Optional:

Custom Gazetteer Name (Project Name):

Start depict-date field:

End depict-date field:

Please see Section 7.1 of the Help document (link is at upper right) for details on accessing all gazetteers via a RESTful API.

Attribute	Display Title	Display Order	Visible?	Searchable?	Add to Gazetteer?
PeopleName	People Name	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Country	Country	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ID_FIPS	FIPS ID	3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PEID	Int'l Mission Board ID	4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PeopleID3	People-Group-Across-Co	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ROP3	Rop3	6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Input the name of the temporal gazetteer you would like to create for “Custom Gazetteer Name”. Enter the fields containing the start depict-date and the end depict-date.

Start depict-date field:

End depict-date field:

NOTE: If you only have one date field that will be used. If you do not include any fields, the date within the Layer's metadata above in the metadata form will be used.



Temporal Extent Start Date:

Temporal Extent End Date:

A user may submit multiple Layers to the same custom gazetteer.

Each field value in the dataset submitted will get its own row in the gazetteer. For example, if a Layer has 'full_name' and 'abbreviation' fields that are both added to the gazetteer, then a feature with full_name="United States of America", abbreviation="USA" would result in two gazetteer rows.

When a Layer used to add records to a gazetteer is deleted from WorldMap, the records in the gazetteer will also be deleted.

If line or polygon features are used, only the centroid of the line or polygon will be included in the gazetteer.

All features added to a custom gazetteer will also be added to the general WorldMap gazetteer.

Negative dates are supported and are stored both as text and as integers (Julian dates).

NOTE: Any features added to a gazetteer will become public even if the Layer is private.

4.2 Gazetteer API

A RESTful API to the gazetteer which makes it possible for remote applications to use custom gazetteers and the WorldMap gazetteer.

Matching items and their attributes are returned in JSON format (add "/xml" at the end of the URL to get it in XML format). There is a limit of 500 records that the system can return at a time.

Below is the specification for making gazetteer requests:

URL's begin with <http://worldmap.harvard.edu/gazetteer/><search_term> followed by any or all or none of the following:

- /<search term>/Service (Possible values include any/all of worldmap, google, nominatum, geonames)
 - Example: <http://worldmap.harvard.edu/gazetteer/Buena/Services/google,nominatum>
- /<search term>/Project/<custom gazetteer name> (Only return results affiliated with a particular custom gazetteer name (bentest3) matching search string "plymouth")
 - Example: <http://worldmap.harvard.edu/gazetteer/plymouth/Project/bentest3>

- /<search term>/Map/<map_id> (Only return results from Layers on a specific Map. Go to “Share Map” page to find the Map ID number)
 - Example: <http://worldmap.harvard.edu/gazetteer/Roanoke/Map/238>
- /<search term>/Layer/<Layer_typename> (Only return results from a specific Layer)
 - Example: http://worldmap.harvard.edu/gazetteer/Canary/Layer/ports_sale_confident_ggx
- /<search term>/StartDate/<date> (Only return results with a start date <= specified date (or null) and end date >= start date (or null))
 - Examples:
 - <http://worldmap.harvard.edu/gazetteer/Xiangwu%20Xian/StartDate/500-01-01>
 - <http://worldmap.harvard.edu/gazetteer/Xiangwu%20Xian/StartDate/500%20AD>
 - <http://worldmap.harvard.edu/gazetteer/Xiangwu%20Xian/StartDate/100-01-01%20BC>
- /<search term>/EndDate/<date> (Only return results with a start date <= specified date (or null) and end date <= start date (or null))
 - Examples:
 - <http://worldmap.harvard.edu/gazetteer/Xiangwu%20Xian/EndDate/760%20AD>
 - <http://worldmap.harvard.edu/gazetteer/Xiangwu%20Xian/EndDate/765%20AD>

Sample combination query:

<http://worldmap.harvard.edu/gazetteer/Xiangwu%20Xian/Service/google/Map/79/StartDate/10%20BC/EndDate/1>

Any use of multiple parameters must be in this order:

http://worldmap.harvard.edu/gazetteer/<search_string>/Service/Project/Map/Layer/StartDate/EndDate

Any space within in any value such as Search String (see “Xiangwu Xian” example above) must be replaced by “%20” to create a valid request URL.

There is currently an upper limit of 500 results.