

# The European Commission's science and knowledge service

Joint Research Centre



# Proposals for new on-line tools for the REM database

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# Outline

## **a) REMdb**

## **b) REMdb on-line query**

1. Current on-line query
2. Requirements for improvements
3. New on-line query (first draft)
4. Future steps

## **c) REMdb webcheck**

1. Objective
2. What to check

# REMdb

The Radioactivity Environmental Monitoring data bank (REMdb) was created in the aftermath of the Chernobyl accident (1986) by the European Commission (EC) – DG Joint Research Centre (DG JRC).

- to keep a historical record of the Chernobyl accident;
- to store the radioactivity monitoring data gathered through the national environmental monitoring programs of the EU MSs



REMdb implements articles 36 and 39 of the Euratom Treaty

# REMdb

Unique collection of environmental radioactivity measurements from 1984 onwards → air, water, foodstuff;

Contains more than 5 million measurements from EU MS;

Datasets for scientific purposes (historical Chernobyl data);

**REMdb provides a valuable and unique archive of environmental radioactivity topics in Europe**



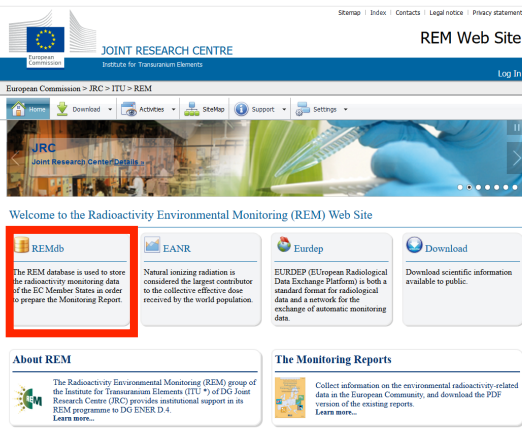
# REMdb on-line query

## Current on-line query

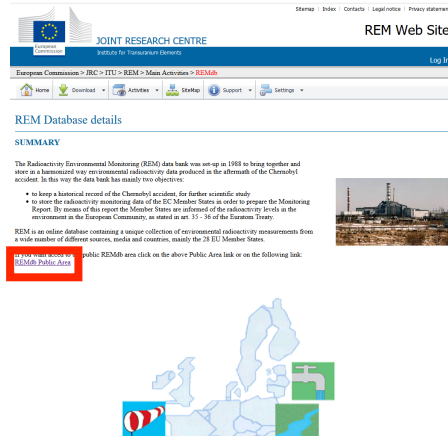
<https://rem.jrc.ec.europa.eu/RemWeb/RemDbPublic/RemDbPub.aspx>

**Not “easy” accessible**

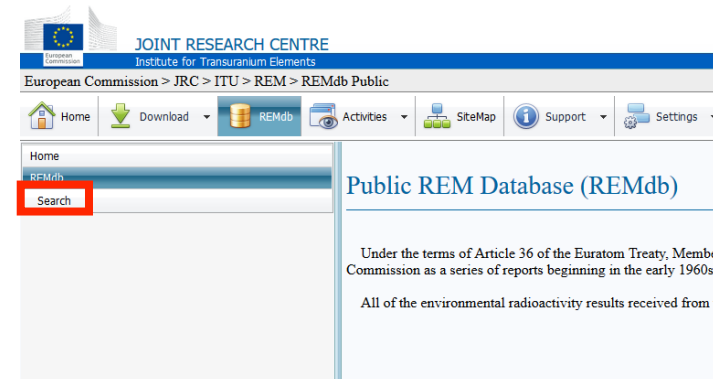
REM group webpage → REM database → Public REM database



The screenshot shows the homepage of the Radioactivity Environmental Monitoring (REM) Web Site. The header includes the logo of the Joint Research Centre and the text 'REM Web Site'. Below the header, there is a navigation bar with links for 'Home', 'Download', 'Activities', 'SiteMap', 'Support', and 'Settings'. The main content area features a large banner image and a section titled 'Welcome to the Radioactivity Environmental Monitoring (REM) Web Site'. Below this, there are several boxes: 'REMdb' (highlighted with a red box), 'EANR', 'Eurdep', and 'Download'. The 'REMdb' box contains the text: 'The REM database is used to store the radioactivity monitoring data of the EC Member States in order to prepare the Monitoring Report.' Below the main content, there are sections for 'About REM' and 'The Monitoring Reports'.



The screenshot shows the 'REM Database details' page. The header includes the logo of the Joint Research Centre and the text 'REM Web Site'. Below the header, there is a navigation bar with links for 'Home', 'Download', 'Activities', 'SiteMap', 'Support', and 'Settings'. The main content area features a section titled 'REM Database details' and a 'SUMMARY' section. The summary text states: 'The Radioactivity Environmental Monitoring (REM) data bank was set-up in 1988 to bring together and store in a harmonized way environmental radioactivity data produced in the aftermath of the Chernobyl accident. In this way the data bank has mainly two objectives: • to keep a historical record of the Chernobyl accident, for further scientific study • to store the radioactivity monitoring data of the EC Member States in order to prepare the Monitoring Report. By means of this report the Member States are informed of the radioactivity levels in the environment in the European Community, as stated in art. 31 - 34 of the Euratom Treaty'. Below the summary, there is a section titled 'Public REMdb access' with a red box around the text: 'Public REMdb are click on the above Public Area link or on the following link: REMdb Public Area'. At the bottom of the page, there is a map of Europe with a red box around the text: 'Public REMdb are click on the above Public Area link or on the following link: REMdb Public Area'.



The screenshot shows the 'Public REM Database (REMdb)' page. The header includes the logo of the Joint Research Centre and the text 'Public REM Database (REMdb)'. Below the header, there is a navigation bar with links for 'Home', 'Download', 'REMdb', 'Activities', 'SiteMap', 'Support', and 'Settings'. The main content area features a search bar with a red box around the text 'Search'. Below the search bar, there is a section titled 'Public REM Database (REMdb)' and a paragraph of text: 'Under the terms of Article 36 of the Euratom Treaty, Member Commission as a series of reports beginning in the early 1960s All of the environmental radioactivity results received from'.

# REMdb on-line query

## Current on-line query

European Commission > JRC > ITU > REM > REMdb Public > Search

Home Download REMdb Activities SiteMap Support Settings

Home  
REMdb  
**Search**

**Search criteria**

**Locality (use \* for the wildcard)**  
Name:  ... map

**Administrative Codes (NUTS)**  
Country: (none)   
2 Level: (none)   
3 Level: (none)   
(some Countries doesn't have the Level 2)

**Sampling period (dd-mmm-yyyy ie:10-Dec-2005)**  
From:  To:

**Sample Type**  
1 Level: (none)   
2 Level: (none)   
3 Level: (none)   
4 Level: (none)   
5 Level: (none)

**Nucleides**  
Available values

#	Code	Description
<input type="checkbox"/>	(BA+LA)140	BARIUM-140 AND LANTHANUM-140 COMBINED
<input type="checkbox"/>	(NB+ZR)95	NIObIUM-95 AND ZIRCONIUM-95 COMBINED
<input type="checkbox"/>	(RU+RH)106	RUTHENIUM-106 AND RHODIUM-106 COMBINED
<input type="checkbox"/>	(TE+I)132	TELLURIUM-132 AND IODINE-132 COMBINED
<input type="checkbox"/>	AC-227	ACTINIUM-227

Page 1 of 18 (178 items) [1] 2 3 4 5 6 7 ... 16 17 18

Order By: Date Output: Display grid

Confirm Cancel

Selected Values  
  
[Clear selection](#)  
Selected count: 0

**Not user- friendly  
environment  
(Old technology 1990)**

# REMdb on-line query

## Current on-line query

The screenshot shows the REMdb online query interface. At the top, it displays the European Commission logo and the text 'JOINT RESEARCH CENTRE Institute for Transuranium Elements'. The breadcrumb navigation is 'European Commission > JRC > ITU > REM > REMdb Public > Search'. Below this is a navigation bar with icons for Home, Download, REMdb, Activities, SiteMap, Support, and Settings. A sidebar on the left contains 'Home', 'REMdb', and 'Search'. The main content area is titled 'Search criteria' and includes a 'Locality (use \* for the wildcard)' section with a 'Name:' field and a 'map' button. To the right is a 'Sampling period (dd-mmm-yyyy ie:10-Dec-2005)' section with 'From:' and 'To:' dropdowns. Two red boxes highlight the 'Administrative Codes (NUTS)' section, which has dropdowns for 'Country:', '2 Level:', and '3 Level:', and a note '(some Countries doesn't have the Level 2)'. Another red box highlights the 'Sample Type' section, which has dropdowns for '1 Level:' through '5 Level:'. Below these is a 'Nucides' section with a checkbox. The 'Available values' section contains a table with columns '#', 'Code', and 'Description'. The table lists several entries with checkboxes in the first column. At the bottom right, there is a 'Selected Values' section with a 'Clear selection' link and 'Selected count: 0'. The page footer shows 'Page 1 of 18 (178 items)' and 'Order By: Date'.

European Commission > JRC > ITU > REM > REMdb Public > Search

Home Download REMdb Activities SiteMap Support Settings

Home  
REMdb  
Search

**Hierarchical codes**

**Administrative Codes (NUTS)**

Country: (none) [v]  
2 Level: (none) [v]  
3 Level: (none) [v]  
(some Countries doesn't have the Level 2)

**Sample Type**

1 Level: (none) [v]  
2 Level: (none) [v]  
3 Level: (none) [v]  
4 Level: (none) [v]  
5 Level: (none) [v]

Nucides

#	Code	Description
<input type="checkbox"/>	(BA+LA)140	BARIIUM-140 AND LANTHANUM-140 COMBINED
<input type="checkbox"/>	(NB+ZR)95	NIObIUM-95 AND ZIRCONIUM-95 COMBINED
<input type="checkbox"/>	(RU+RH)106	RUTHENIUM-106 AND RHODIUM-106 COMBINED
<input type="checkbox"/>	(TE+I)132	TELLURIUM-132 AND IODINE-132 COMBINED
<input type="checkbox"/>	AC-227	ACTINIUM-227

Page 1 of 18 (178 items) [1] 2 3 4 5 6 7 ... 16 17 18

Order By: Date Output: Display grid

Confirm Cancel

Not user-friendly environment

Not intuitive for laymen

Mainly oriented to experts



# REMdb on-line query

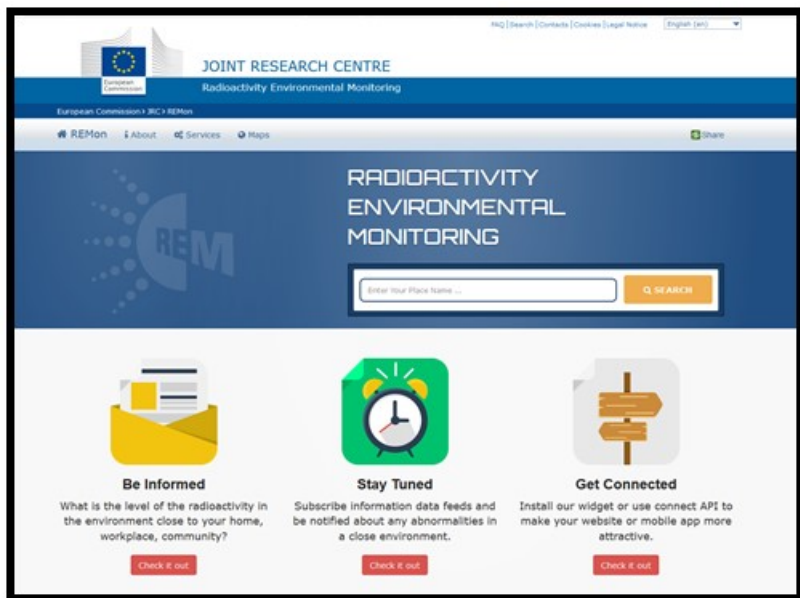
## Requirements for improvements

1. **Friendly** user-environment;
2. Makes REMdb data more **easily accessible and known** to experts;
3. Makes environmental radioactivity data **more transparent and understandable** for citizens;
4. **Centralize** environmental radioactivity issues in Europe (e.g. explanation of the radioactivity phenomenon, origin and methods of the radioactivity measurements, biological effects, reports...) → further implementation of Art39

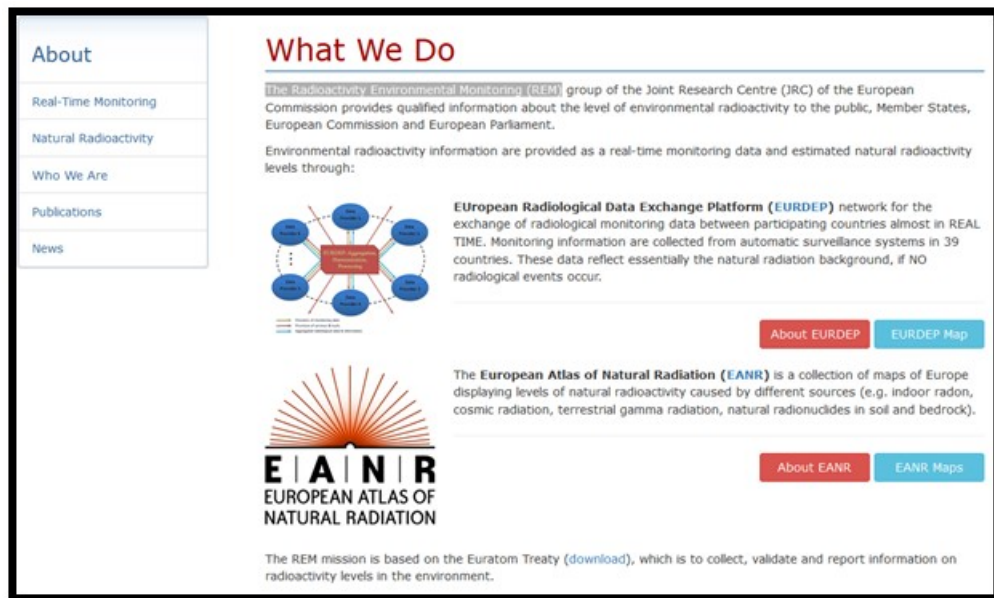
# REMdb on-line query

## New on-line query

Accessible in **REMon** → New REM group's web <https://remon.jrc.ec.europa.eu/>



The screenshot shows the homepage of the Radioactivity Environmental Monitoring (REM) website. At the top, it features the logo of the Joint Research Centre (JRC) and the European Commission. The main heading is "RADIOACTIVITY ENVIRONMENTAL MONITORING". Below this, there is a search bar with the placeholder text "Enter Your Place Name ..." and a "SEARCH" button. The page is divided into three main sections: "Be Informed" (with an envelope icon), "Stay Tuned" (with an alarm clock icon), and "Get Connected" (with a signpost icon). Each section includes a brief description and a "Check it out" button.



The screenshot shows the "What We Do" page on the REM website. It features a navigation menu on the left with links to "About", "Real-Time Monitoring", "Natural Radioactivity", "Who We Are", "Publications", and "News". The main content area is titled "What We Do" and includes a paragraph about the REM group's mission. Below this, there is a diagram of the "European Radiological Data Exchange Platform (EURDEP)" network, which is a circular network of nodes representing different countries. To the right of the diagram, there is a section titled "European Radiological Data Exchange Platform (EURDEP) network for the exchange of radiological monitoring data between participating countries almost in REAL TIME." Below this, there is a section titled "The European Atlas of Natural Radiation (EANR)" which is a collection of maps of Europe displaying levels of natural radioactivity. At the bottom, there is a section titled "The REM mission is based on the Euratom Treaty (download), which is to collect, validate and report information on radioactivity levels in the environment."

# REMdb on-line query

## New on-line query

New access

### REM data bank (REMdb)

The Radioactivity Environmental Monitoring data bank (REMdb) was created in the aftermath of the Chernobyl accident (1986) with the aim to store the radioactivity monitoring data gathered through the national environmental monitoring programs of the Member States.

[MORE](#)



### Natural Radioactivity

The European Atlas of Natural Radiation is intended to familiarise the public with the radioactive environment, to give a more balanced view of the dose that it may receive from natural radioactivity.

[MORE](#)

# REMdb on-line query

## New on-line query

### REMdb Introduction

The **REM database (REMdb)** is used to store the radioactivity monitoring data of the EC Member States in order to prepare the Monitoring Report. It helps to integrate and preserve some of the vast quantities of data concerning artificial environmental radioactivity produced in the aftermath of the Chernobyl accident and with the overall aim of making them widely available in a coherent form for scientific study and for obtaining a European picture of the contamination situation.

The database is conceived as a series of data records, each containing a single measurement of a single radionuclide on a single sample. Included in the database are the results of radionuclide measurements of both environmental samples and foodstuffs, best represented are air, deposition, water, milk, meat and vegetables.

#### Dense database

The sampling locations which are distributed all over the Member States' territories.

#### Sparse network data

Representative locations in which high-sensitivity measurements are performed.

#### Sample Type

#### Nuclide

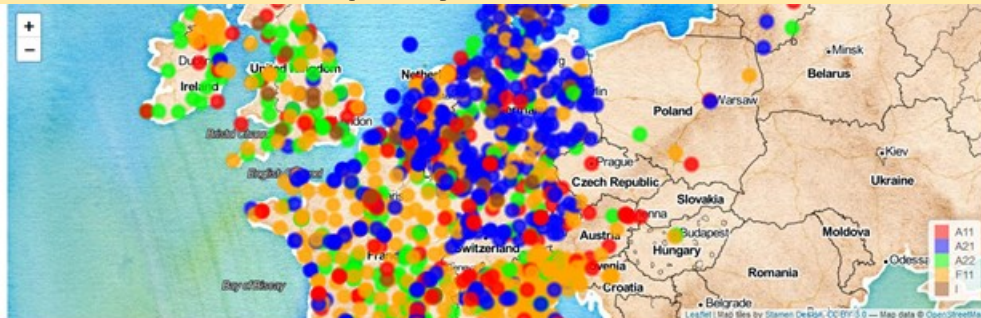
#### Years



#### File type:

- csv
- tsv
- xlsx

[Download Data](#)



<https://basicdataproducs.shinyapps.io/remdatavis/>



Show  entries

Search:

Year	RegionName	Locality	Sample Type	Nuclide	ActivityValue	Unit
1998	France	FORT DE FRANCE (MARTINIQUE)	A11	T-BETA	0.00034	BQ/M3
1999	France	FORT DE FRANCE	A11	T-BETA	0.00044	BQ/M3

# REMdb on-line query

## New on-line query

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#### Dense database

The sampling locations which are distributed all over the Member States' territories.

#### Sparse network data

Representative locations in which high-sensitivity measurements are performed.

#### Sample Type

#### Nuclide

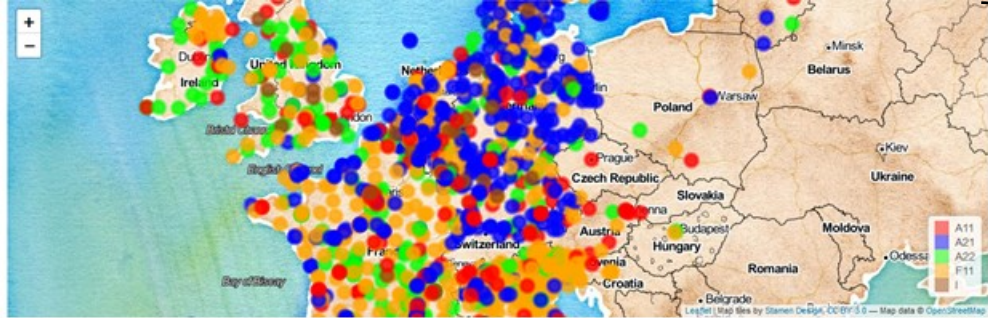
#### Years



#### File type:

- csv
- tsv
- xlsx

Download Data



Map of stations



# REMdb on-line query

## New on-line query

### REMdb Introduction

The REM database (REMdb) is used to store the radioactivity monitoring data of the EC Member States in order to prepare the Monitoring Report. It helps to integrate and preserve some of the vast quantities of data concerning artificial environmental radioactivity produced in the aftermath of the Chernobyl accident and with the overall aim of making them widely available in a coherent form for scientific study and for obtaining a European picture of the contamination situation.

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#### Dense database

The sampling locations which are distributed all over the Member States' territories.

#### Sparse network data

Representative locations in which high-sensitivity measurements are performed.

#### Sample Type

-

#### Nuclide

-

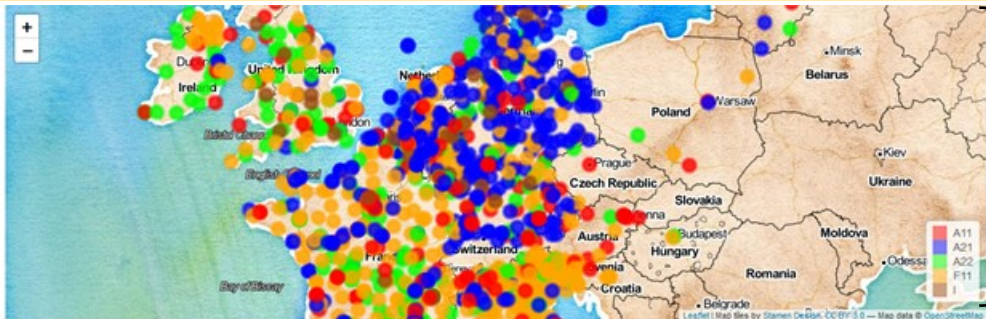
#### Years



#### File type:

- csv
- tsv
- xlsx

Download Data



Map of stations

Filters (sample type)

#### Sample Type

-

-

Outdoor Air

Surface Water

Drinking Water

Milk

Mixed Diet

1984 1987 1990 1993 1996 1999 2002 2005 2006



# REMdb on-line query

## New on-line query

### REMdb Introduction

The **REM database (REMdb)** is used to store the radioactivity monitoring data of the EC Member States in order to prepare the Monitoring Report. It helps to integrate and preserve some of the vast quantities of data concerning artificial environmental radioactivity produced in the aftermath of the Chernobyl accident and with the overall aim of making them widely available in a coherent form for scientific study and for obtaining a European picture of the contamination situation.

The database is conceived as a series of data records, each containing a single measurement of a single radionuclide on a single sample. Included in the database are the results of radionuclide measurements of both environmental samples and foodstuffs; best represented are air, deposition, water, milk, meat and vegetables.

#### Dense database

The sampling locations which are distributed all over the Member States' territories.

#### Sparse network data

Representative locations in which high-sensitivity measurements are performed.

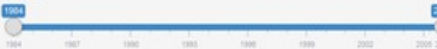
#### Sample Type

-

#### Nuclide

-

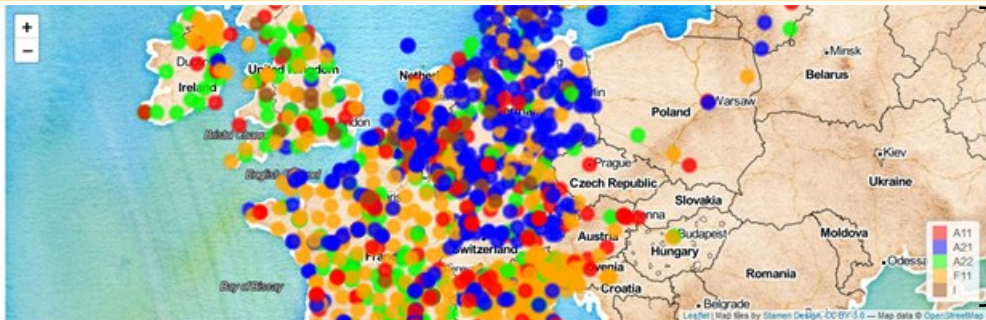
#### Years



#### File type:

- csv
- tsv
- xlsx

Download Data



Map of stations

Filters (sample type, nuclide)

#### Sample Type

Outdoor Air

#### Nuclide

- 
- CS-137
- CS-134
- I-131
- BE-7
- BA-140
- LA-140
- RU-103



# REMdb on-line query

## New on-line query

### REMdb Introduction

The REM database (REMdb) is used to store the radioactivity monitoring data of the EC Member States in order to prepare the Monitoring Report. It helps to integrate and preserve some of the vast quantities of data concerning artificial environmental radioactivity produced in the aftermath of the Chernobyl accident and with the overall aim of making them widely available in a coherent form for scientific study and for obtaining a European picture of the contamination situation.

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#### Dense database

The sampling locations which are distributed all over the Member States' territories.

#### Sparse network data

Representative locations in which high-sensitivity measurements are performed.

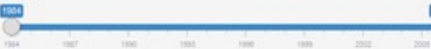
#### Sample Type

-

#### Nuclide

-

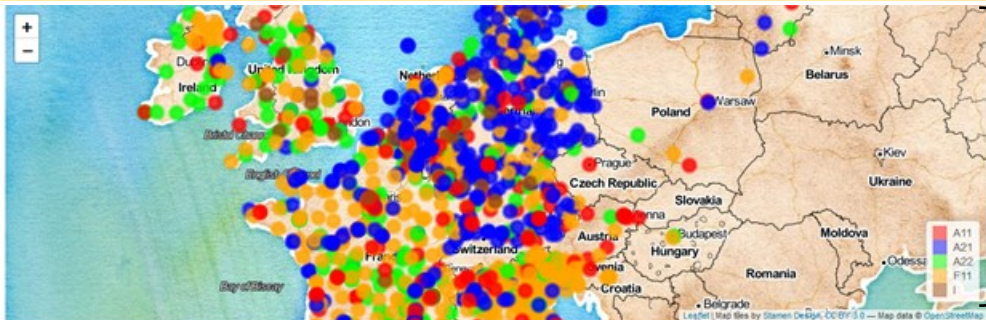
#### Years



#### File type:

- csv
- tsv
- xlsx

Download Data



Map of stations

Filters (sample type, nuclide, years)

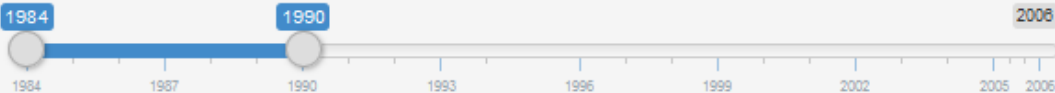
#### Sample Type

Outdoor Air

#### Nuclide

BE-7

#### Years





# REMdb on-line query

## New on-line query

Example:  
outdoor air,  
Be-7, 1984 – 1990

Representative locations in which high-sensitivity measurements are performed.

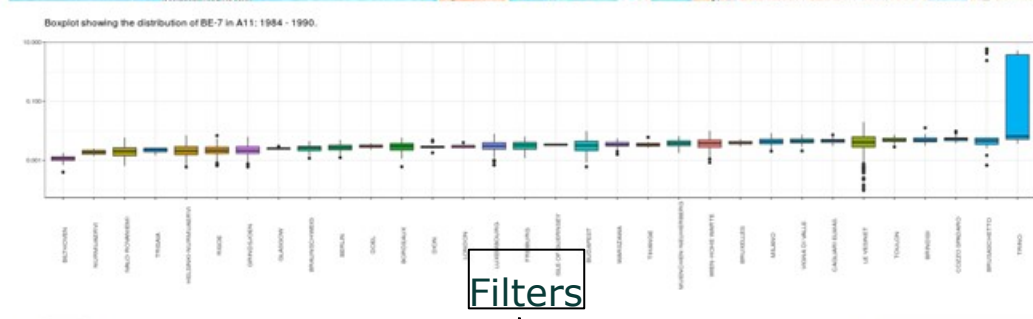
Sample Type  
Outdoor Air

Nuclide  
Be-7

Years  
1984 1990 2008

File type:  
 csv  
 tsv  
 xlsx

Download Data



Show 5 entries

Year	RegionName	Locality	Sample Type	Nuclide	ActivityValue	Unit
1984	All	All	All	All		
1988	Italy - South	COZZO SPADARO	A11	BE-7	0.004674	BQ/M3
1988	Italy - South	COZZO SPADARO	A11	BE-7	0.005603	BQ/M3
1988	Italy - South	COZZO SPADARO	A11	BE-7	0.005316	BQ/M3
1988	Italy - South	COZZO SPADARO	A11	BE-7	0.006914	BQ/M3

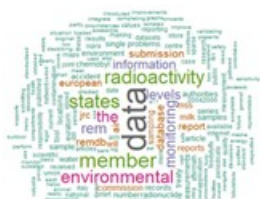


Table  
(all data)

Commission

# REMdb on-line query

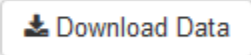
## New on-line query

**Sample Type**  
Outdoor Air

**Nuclide**  
BE-7

**Years**  
1984 1990

**File type:**  
 csv  
 tsv  
 xlsx



	A	B	C	D	E
64	1986,Italy - South,TRISAIA,A11,BE-7,0.002146,BQ/M3				
65	1986,Italy - South,TRISAIA,A11,BE-7,0.001468,BQ/M3				
66	1986,Italy - South,TRISAIA,A11,BE-7,0.00259,BQ/M3				
67	1986,Italy - South,TRISAIA,A11,BE-7,0.00259,BQ/M3				
68	1988,Italy - South,BRINDISI,A11,BE-7,0.004236,BQ/M3				
69	1988,Italy - South,BRINDISI,A11,BE-7,0.004784,BQ/M3				
70	1988,Italy - South,BRINDISI,A11,BE-7,0.004221,BQ/M3				
71	1988,Italy - South,BRINDISI,A11,BE-7,0.005794,BQ/M3				
72	1988,Italy - South,BRINDISI,A11,BE-7,0.005735,BQ/M3				
73	1988,Italy - South,BRINDISI,A11,BE-7,0.007221,BQ/M3				
74	1988,Italy - South,BRINDISI,A11,BE-7,0.007912,BQ/M3				
75	1988,Italy - South,BRINDISI,A11,BE-7,0.007205,BQ/M3				
76	1988,Italy - South,BRINDISI,A11,BE-7,0.005613,BQ/M3				
77	1988,Italy - South,BRINDISI,A11,BE-7,0.006364,BQ/M3				
78	1988,Italy - South,BRINDISI,A11,BE-7,0.00447,BQ/M3				



# REMdb on-line query

## New on-line query

Example:  
 outdoor air, Be-7,  
 1984 – 1990  
 Wien



Sample Type  
 Outdoor Air

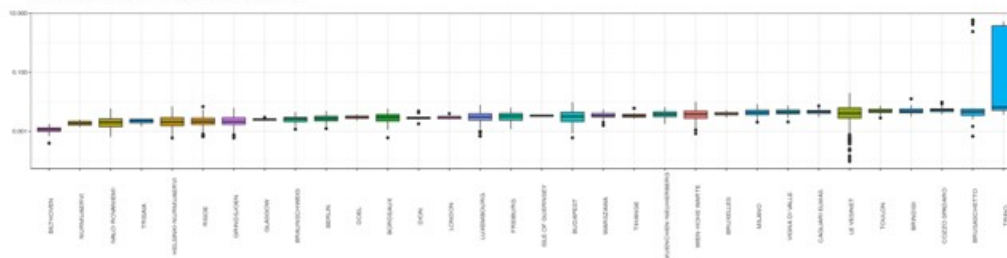
Nuclide  
 BE-7

Years  
 1984 1990 2000

File type:  
 csv  
 tsv  
 xlsx

Download Data

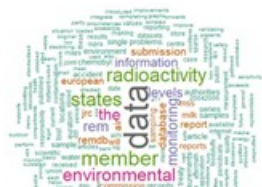
Boxplot showing the distribution of BE-7 in A11: 1984 - 1990.



Show 5 entries

Search:

Year	RegionName	Locality	Sample Type	Nuclide	ActivityValue	Unit
1988	Italy - South	COZZO SPADARO	A11	BE-7	0.004674	BQ/M3
1988	Italy - South	COZZO SPADARO	A11	BE-7	0.005603	BQ/M3
1988	Italy - South	COZZO SPADARO	A11	BE-7	0.005316	BQ/M3
1988	Italy - South	COZZO SPADARO	A11	BE-7	0.006914	BQ/M3

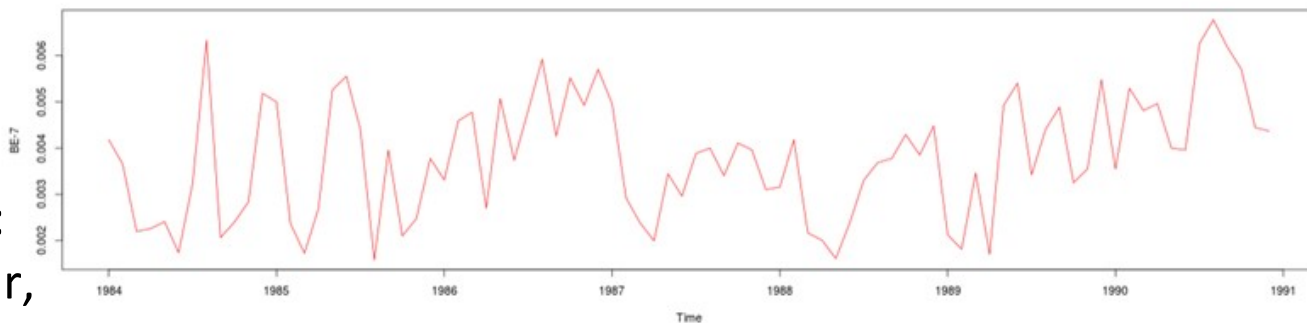


# REMdb on-line query

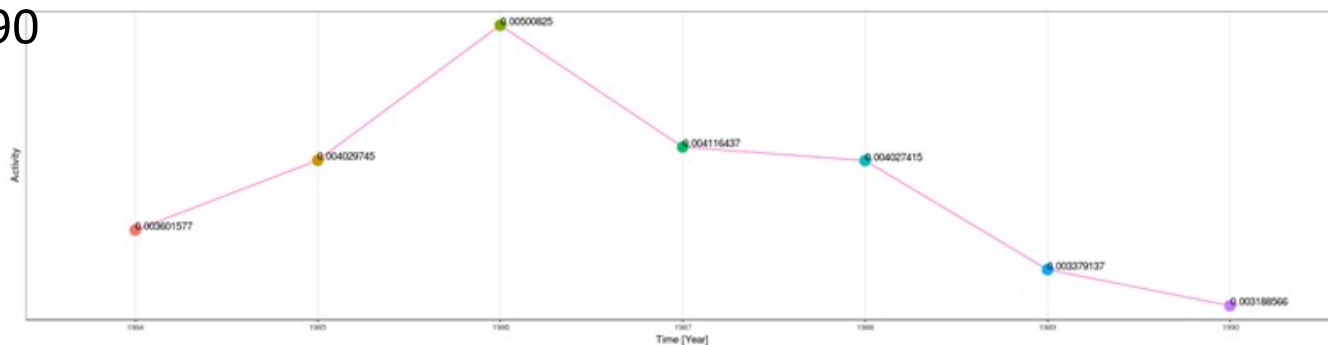
## New on-line query

Example:  
outdoor air,  
Be-7,  
1984 – 1990  
Wien

Time series of BE-7 In A11: WIEN-HOHE WARTE 1984 - 1990.



Annual Average Distribution of BE-7 in A11: WIEN-HOHE WARTE 1984 - 1990.



# REMdb on-line query

## Future steps

1. Integrate the access to radioactivity reports (published already);
2. Collect and include environmental radioactivity, safety and health documentation and information referred to Articles 35 and 36;
3. Improvements over the time taking into account the feedback of the users (experts).

# REMdb on-line query

## Future steps

3. Improvements over the time taking into account the feedback of the users (experts).

### Suggestions/comments/modifications

Deadline : December 2018



Report : March 2019

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[Marc.DE-CORT@ec.europa.eu](mailto:Marc.DE-CORT@ec.europa.eu)

# REMdb webcheck

## REMdb submission tool

What it is used for

Submitting environmental radioactivity data to the REM Database.



How the data are used

Compilations of the information received from the Member States are published by the Commission as a series of annual monitoring reports.



# REMdb webcheck

## REMdb submission tool

What it is used for

Submitting environmental radioactivity data to the REM Database.



How the data are used

Compilations of the information received from the Member States are published by the Commission as a series of annual monitoring reports.





# REMdb webcheck

## REMdb submission tool

What it is used for

Submitting environmental radioactivity data to the REM Database.

Inconsistencies in the environmental radioactivity data (values, units, sample, location...)

## REMdb webcheck

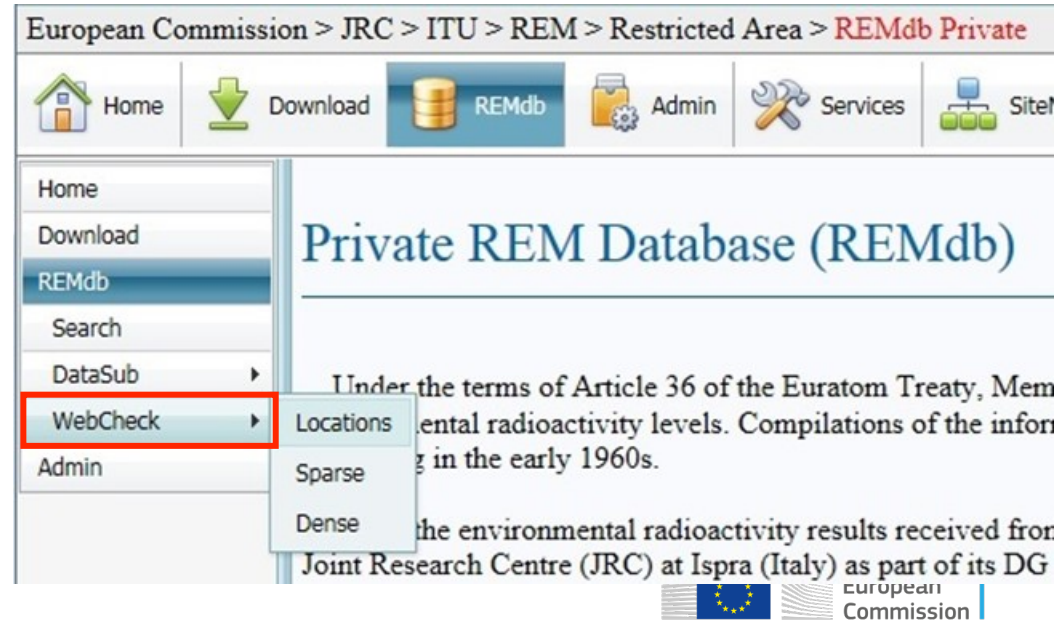
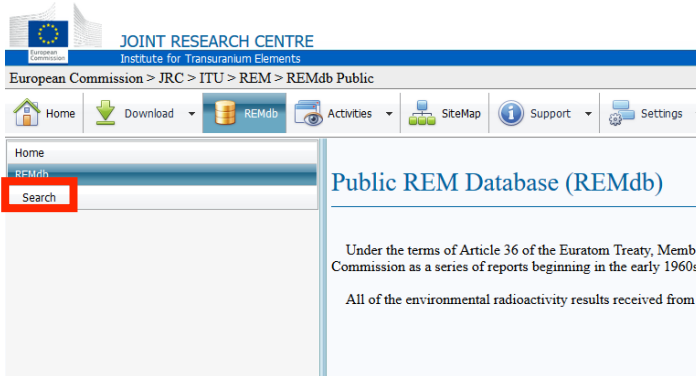
**What:** It allows users to verify and AGREE on the way the data will be presented in the monitoring report

**Who:** Data providers (researchers/ laboratories of EU and non-EU Member States)

# REMdb webcheck

## Objective

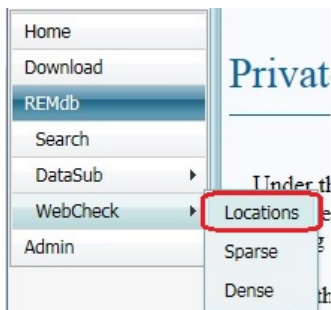
The WebCheck Service allows users to check the data after the submission via the REM Web Site, with the help of graphs and maps.



# REMdb webcheck

## What to check?

### Example: Locations



### View Locations by Submission

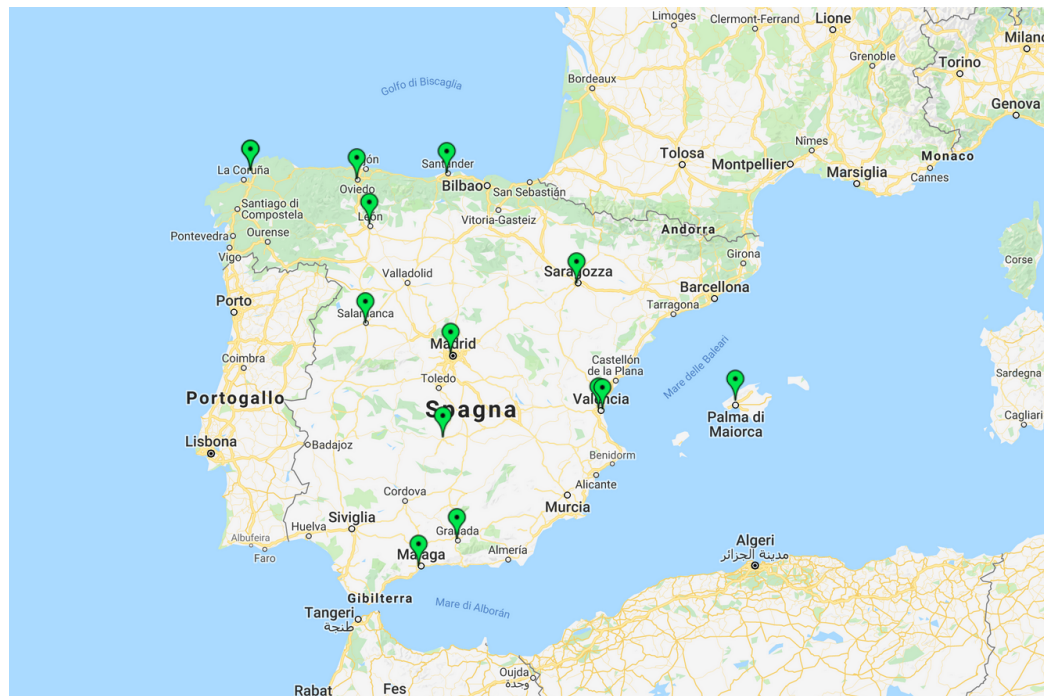
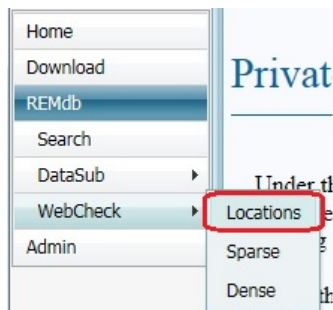
DST ID	Institution	Title	Ref. Number	Receipt Date	Status	View Maps
5287	IPH	Ohrid Lake, Lepenec, Vardar T-BETA 2012	MACED16 26	11/9/2016 1:18:49 PM	2	<a href="#">View Maps</a>
5327	DEFRA	EW Surface Water Data	JRC SU16 10	12/15/2016 5:35:17 PM	2	<a href="#">View Maps</a>
5334	DSDRP	drinking water 2016	LUXEM17 2	2/7/2017 3:09:43 PM	2	<a href="#">View Maps</a>
5363	NRDIEP	Romania 2015, tritium (H3) drinking water	ROMAN17 1	2/22/2017 9:44:40 AM	2	<a href="#">View Maps</a>
5364	EEAMEW	MH 2015	BULGA17 1	2/27/2017 12:53:24 PM	2	<a href="#">View Maps</a>
5387	DPRSN	Portugal 2015	PORTU17 21	4/7/2017 12:05:37 PM	2	<a href="#">View Maps</a>
5222	CSN	Spain 2015 Mixed Diet	SPAIN16 6	7/11/2016 12:35:24 PM	2	<a href="#">View Maps</a>
5278	IPH	Milk CS-137, K-40	MACED16 17	11/9/2016 9:03:44 AM	2	<a href="#">View Maps</a>
5283	IPH	Ohrid Lake, Lepenec, Vardar T-BETA 2013	MACED16 22	11/9/2016 10:17:37 AM	2	<a href="#">View Maps</a>
5281	IPH	Air SK,BT,GEV, T-BETA, CS-137	MACED16 20	11/9/2016 9:40:49 AM	2	<a href="#">View Maps</a>

Page 215 of 216 (2158 items) [1](#) [2](#) [3](#) ... [210](#) [211](#) [212](#) [213](#) [214](#) [215](#) [216](#)

# REMdb webcheck

## What to check?

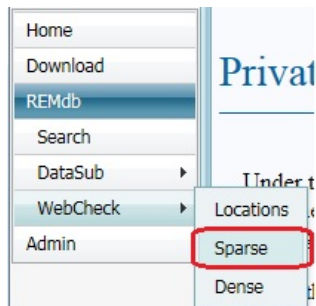
### Example: Locations



# REMdb webcheck

## What to check?

Example: Sparse



### Sparse Network Check

Key Code	Graph Title	Nuclide	Description	View Graph
S-A-CS-BRINDISI	Air CS-137 BRINDISI	CS-137	Air	<a href="#">View Graph</a>
S-A-BE-HELS_NUR	Air BE-7 HELSINKI-NURMIJAERVI	BE-7	Air	<a href="#">View Graph</a>
S-A-CS-BRUSSELS	Air CS-137 BRUSSELS	CS-137	Air	<a href="#">View Graph</a>
S-A-CS-TOUL-SSM	Air CS-137 TOULON/SEYNE-SUR-MER	CS-137	Air	<a href="#">View Graph</a>
S-MK-CS-VESINET	Milk CS-137 LE VESINET	CS-137	Milk	<a href="#">View Graph</a>
S-MK-SR-MEAUDRE	Milk SR-90 MEAUDRE	SR-90	Milk	<a href="#">View Graph</a>
S-DW-CS-CASBODE	Drinking Water CS-137 CASTELO DE BODE	CS-137	Drinking Water	<a href="#">View Graph</a>
S-MK-CS-BERLIN	Milk CS-137 BERLIN	CS-137	Milk	<a href="#">View Graph</a>
S-MK-SR-LYCKS	Milk SR-90 LYCKSELE	SR-90	Milk	<a href="#">View Graph</a>
S-MK-CS-LYCKS	Milk CS-137 LYCKSELE	CS-137	Milk	<a href="#">View Graph</a>

Page 1 of 35 (347 items) < [1] 2 3 4 5 6 7 ... 33 34 35 >

# REMdb webcheck

## What to check?

Example: Sparse



# REMdb webcheck

## What to check?

Example: Dense

### Dense Network Check

Datasets submitted: Please Select some items

Drag a column header here to group by that column

#	DST ID	Institution	Title	Ref. Number	Receipt Date	Status
<input type="checkbox"/>	1391	AGES	Austria 2006	AUSTR07 1	04/10/2007 00:00:00	1
<input type="checkbox"/>	1417	AGES	AUSTRIA 2004	GREGO07 1	20/11/2007 00:00:00	1
<input type="checkbox"/>	1544	AGES	AUSTRIA 2005	AUSTR07 7	28/11/2007 00:00:00	1
<input type="checkbox"/>	326	AGES	AUSTRIAN SUPPLEMENTARY DATA 1996	BMGK--99E1		1
<input type="checkbox"/>	401	AGES	AUSTRIAN 2001 MILK DATA	BMGK--02E5		1
<input type="checkbox"/>	407	AGES	AUSTRIAN DATA 2002	BMGK--03E1		1
<input type="checkbox"/>	3408	AGES	AUSTRIA 2011-2012	AUSTR13 1	19/06/2013 00:00:00	1
<input type="checkbox"/>	3006	AGES	AUSTRIA 2009-2010	AUSTR12 1	22/02/2012 00:00:00	1
<input checked="" type="checkbox"/>	4140	AGES	AUSTRIA 2013	AUSTR14 1	13/10/2014 00:00:00	2
<input checked="" type="checkbox"/>	4631	AGES	AUSTRIA 2014	AUSTR15 1	08/04/2015 15:46:54	2

Page 12 of 198 (1972 items) < 1 2 3 ... 11 [12] 13 14 ... 196 197 198 >

IDs selected: 4140, 4631

Surface Water Check for selected items

Export to XLS   Export to PDF   Export to XLSX   Export to RTF   Export to CSV

Drag a column header here to group by that column

#	Nuclide	Year	Catchment	Location	Num. Measurements	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual Average	Monthly MAX	Month
	R-BETA	2014	DANUBE	JOCHENSTEIN	16	<RL	<RL	<RL	<RL	<RL	<RL	
	R-BETA	2013	DANUBE	JOCHENSTEIN	16	<RL	<RL	<RL	<RL	<RL	<RL	
	CS-137	2014	DANUBE	JOCHENSTEIN	16	<RL	<RL	<RL	<RL	<RL	<RL	
	CS-137	2013	DANUBE	JOCHENSTEIN	16	<RL	<RL	<RL	<RL	<RL	2.4E+00	08

Selected Items

- AUSTRIA 2013
- AUSTRIA 2014

Clear selection

Action for selected items:

- Submission summary
- Dense Report
- Surface Water

# REMdb webcheck

## What to check?

The WebCheck Service



Not yet available (all functionalities)



Foreseen launch in the next REMdb training submission tool  
(13-14 November 2018)





# Thanks

## Questions?

You can find us at

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# REMdb web check

## Data cleaning strategy

Repeated names: There are more than 8000 cases in which a single locality name occurred more than once in the database. This means that all attributes (name, latitude, longitude, height, etc.) are identical

Locality ID	Locality Name	NUTS Code	Latitude	Longitude	Height
151733	CHESHIRE	781	53.116667	-2.883333	-1
1625	CHESHIRE	781	53.116667	-2.883333	-1
1656	CHESHIRE	781	53.116667	-2.883333	-1
5062	CHESHIRE	781	53.116667	-2.883333	-1
16226	CHESHIRE	781	53.116667	-2.883333	-1
289822	CHESHIRE	781	53.116667	-2.883333	-1
193	HANNOVER	13B	52.383333	9.733333	-1
462	HANNOVER	18B	52.383333	9.733333	-1
463	HANNOVER	13B	52.383333	9.733333	-1
288607	HANNOVER	13B	52.383333	9.733333	-1
538603	LATERINA	3517	43.500833	11.715833	0
542531	LATERINA	3517	43.500833	11.715833	0
539928	LATERINA	3517	43.500833	11.715833	0
553977	LATERINA	3517	43.500833	11.715833	0
555284	LATERINA	3517	43.500833	11.715833	0
541230	LATERINA	3517	43.500833	11.715833	0
532153	BIBIANA	3111	44.7975	7.288889	0
527536	BIBIANA	3111	44.7975	7.288889	0
523640	BIBIANA	3111	44.7975	7.288889	0
525649	BIBIANA	3111	44.7975	7.288889	0

# REMdb web check

## Data cleaning strategy

Undefined localities: Locality name is empty (blank) and the coordinates (latitude and longitude) are both set to a presumably default value of -1

Locality ID	Locality Name	NUTS Code	Latitude	Longitude	Height	Coordinate Accuracy	Catchment ID	Institution ID
1174		3201	-1	-1	-1	A	1	4
3776		A	-1	-1	-1	A	1	44
3798		P	-1	-1	-1	A	1	90
6136		E6	-1	-1	-1	A	1	2
8635		712	-1	-1	-1	A	485	1
8638		712	-1	-1	-1	A	627	1
8639		712	-1	-1	-1	A	632	1
8640		712	-1	-1	-1	A	591	1
8641		712	-1	-1	-1	A	77	1
8644		712	-1	-1	-1	A	614	1
8645		712	-1	-1	-1	A	144	1
8648		712	-1	-1	-1	A	104	1
8652		712	-1	-1	-1	A	524	1
8653		712	-1	-1	-1	A	12	1
8654		712	-1	-1	-1	A	33	1
8680		712	-1	-1	-1	A	603	1
8683		712	-1	-1	-1	A	416	1
8739		7	-1	-1	-1	A	379	1
8741		7	-1	-1	-1	A	550	1
8742		7	-1	-1	-1	A	344	1

# REMdb web check

## Data cleaning strategy

Invalid coordinates: Valid locality names are supplied but both coordinates (latitude and longitude) are set to -1

Locality ID	Locality Name	NUTS Code	Latitude	Longitude	Height	Accuracy	Catchment ID	Institution ID
1302	VEDRIN	5	-1	-1	-1	A	1	39
1160	CERTOSA DI PAVIA	3207	-1	-1	-1	A	1	4
1148	GARBSEN(HAN.)	13B	-1	-1	-1	A	1	7
1650	HEYSHAM	783	-1	-1	-1	A	1	1
1652	WEST YORKSHIRE	724	-1	-1	-1	A	1	1
1653	BORDERS	7A11	-1	-1	-1	A	1	88
1655	CAMBRIDGESHIRE	7401	-1	-1	-1	A	1	1
1657	CUMBRIA	712	-1	-1	-1	A	1	1
1636	DUNGENESS	757	-1	-1	-1	A	1	1
1536	ESCH-SUR-ALZETTE	600023	-1	-1	-1	A	1	33
1507	BERGEM	600023	-1	-1	-1	A	1	33
1484	BECH-KLEINMACHER	600022	-1	-1	-1	A	1	33
1485	ERPELDANGE	600014	-1	-1	-1	A	1	33
700	KARANCSKESZI	R	-1	-1	-1	A	1	69
701	KESZEG	R	-1	-1	-1	A	1	69
658	SEGOVIA	B416	-1	-1	-1	A	1	25
661	ZAMORA	B419	-1	-1	-1	A	1	25
6549	GUSSENDORF	E6	-1	-1	-1	A	1	2
6552	REICHENDORF	E6	-1	-1	-1	A	1	2