



ISTITUTO G. CAPORALE
TERAMO

Regional information system for WND surveillance



Barcelona Process (BP)

- Following the indication of several meetings (Lisbon, 1992 – Corfu and Essen, 1994) the European Council held in Barcelona in 1995 decided to launch a new strategy in the cooperation between EU and Mediterranean Countries
- This Barcelona Process (BP) is based on the Declaration approved in 1995 by the Euro-Mediterranean Countries



Barcelona Declaration

- **The goals set out in the Barcelona Declaration are:**
 - create an area of peace and stability based on fundamental principles, including respect for human rights and democracy;
 - create an area of shared prosperity through sustainable and balanced socioeconomic development and the progressive establishment of free trade between the EU and its partners and among the partners;
 - **improve mutual understanding among the peoples of the region and the development of an active civil society.**

European Neighbourhood Policy (ENP)

- The new European Neighbourhood Policy (ENP) completes the existing cooperation policies towards
 - **Candidate Countries** (Croatia, FYROM, Turkey),
 - **Potential candidate countries** and territories (Albania, Bosnia and Herzegovina, Kosovo[UNSCR1244], Montenegro, Serbia),
 - **other neighbouring countries**: Armenia, Azerbaijan, Belarus, Egypt, Georgia, Israel, Jordan, Lebanon, Libya, Moldova, Morocco, Palestinian Authority, Syria, Tunisia, Ukraine.

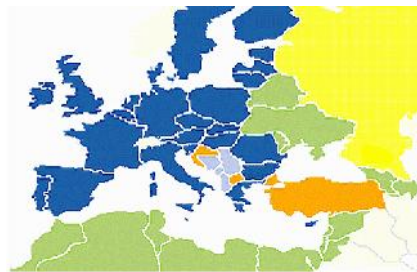
European Neighbourhood Policy

- **In Strategy Paper. COM(2004) 373 final:**
 - **Convergence with EU standards for sanitary and phyto-sanitary controls will greatly enhance trade between the partner countries and the EU.**
 - **Exchanging information and close co-operation in international organizations responsible for the control of animal and plant diseases and improved sanitary conditions to protect consumers are priorities.**
 - **Most countries also need to improve administrative capacity to ensure levels of food safety to enable them to access EU markets.**

Future challenges

- Globalization of products, ingredients and processes,
- The spread of emergent communicable and vector-borne diseases,

do not allow a single national approach in animal diseases and food safety control actions.





International approach

- Several global (e.g. SARS, avian flu) or regional (e.g. FMD and bluetongue in EU) **crises** have clearly indicated once more the necessity for a trans-boundaries and international approach to diseases surveillance and control

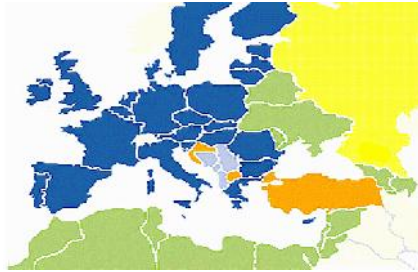




Surveillance networks

- Implementation of international surveillance networks is the necessary condition for making available relevant epidemiological information, indispensable for effective **risk assessment** studies on an appropriate scale and for taking **science-based decisions** in the evaluation of risk reduction options





Networks

- Networking has an added value *per se*, provided that all participants intend to transparently share information.
- Networks must be implemented to include and not to exclude
- The culture of inclusiveness must prevail against the culture of exclusion
- To support and encourage the enlargement to other countries





OIE 4th strategic plan 2006-2010

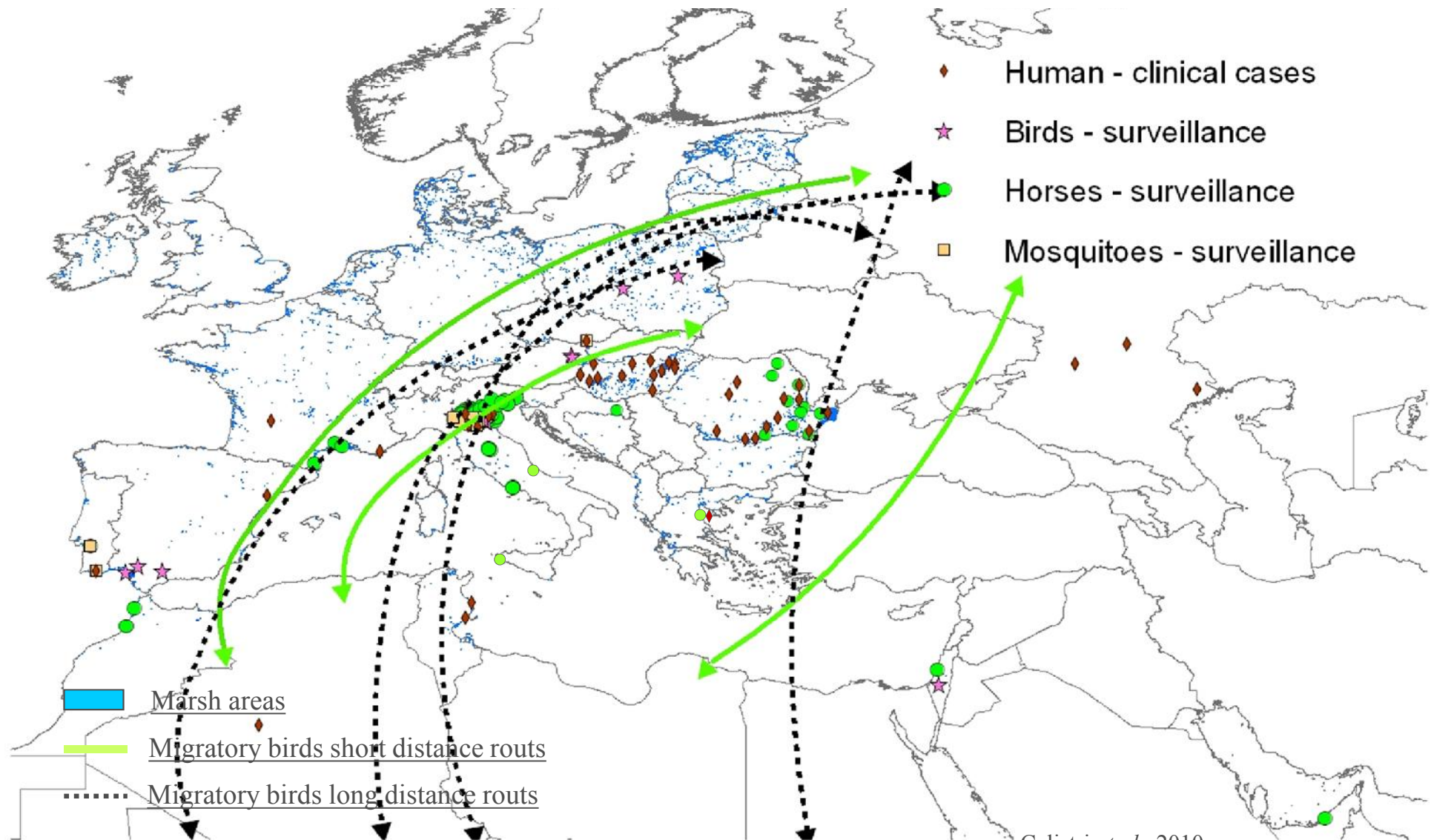
- improving animal health information, collection and dissemination for better control of diseases and safety of livestock products;
- strengthening animal disease surveillance systems, including those of aquatic animals and wildlife;
- improving the knowledge of epidemiological surveillance systems of animal diseases and harmonization of surveillance systems at the regional level.



WND in Europe and in the Mediterranean

Clinical cases and positivity detected (1979-2010)

Data updated to April 2010



Calistri et al., 2010

Web-GIS tools for data exchange

- In the framework of FP7 Arbozoonet* project, Istituto G. Caporale developed a web-GIS system for collecting and sharing data on worldwide WND, RVF and CCHF occurrence.



* International Network for Capacity Building for the Control of Emerging Viral Vector Borne Zoonotic Diseases





Country -	Infecting country	Region	Administrative unit	Disease	Start month	Start year	End month	End year	Specie	Subtype	Vector	Diagnosis	Cause	Source type	Source description	Case number	Zoom to
ALGERIA	null	ADRAR	null	WND	1	1994	12	1994	HUMANS	null	null	CLINICAL SIGNS & SEROLOGY	null	UNOFFICIAL	ARTICLE	17	
ARGENTINA	null	BUENOS AIRES	null	WND	2	2006	12	2006	HORSE AND OTHER EQUINES	null	null	CLINICAL SIGNS & SEROLOGY	null	OFFICIAL	OIE	3	
AUSTRIA	null	NIEDEROSTERREICH	NIEDEROSTERREICH-SUD	WND	9	2008	10	2008	BIRDS	null	null	VIRUS ISOLATION/PCR	null	OFFICIAL	OIE	2	
AUSTRIA	null	WIEN	WIEN	WND	9	2008	10	2008	BIRDS	null	null	VIRUS ISOLATION/PCR	null	OFFICIAL	OIE	1	
BELIZE	null	ORANGE WALK	null	WND	6	2010	null	2010	HORSE AND OTHER EQUINES	null	null	SEROLOGY	null	OFFICIAL	OIE	4	

<http://arbozoonet.izs.it/arbozoonet/>

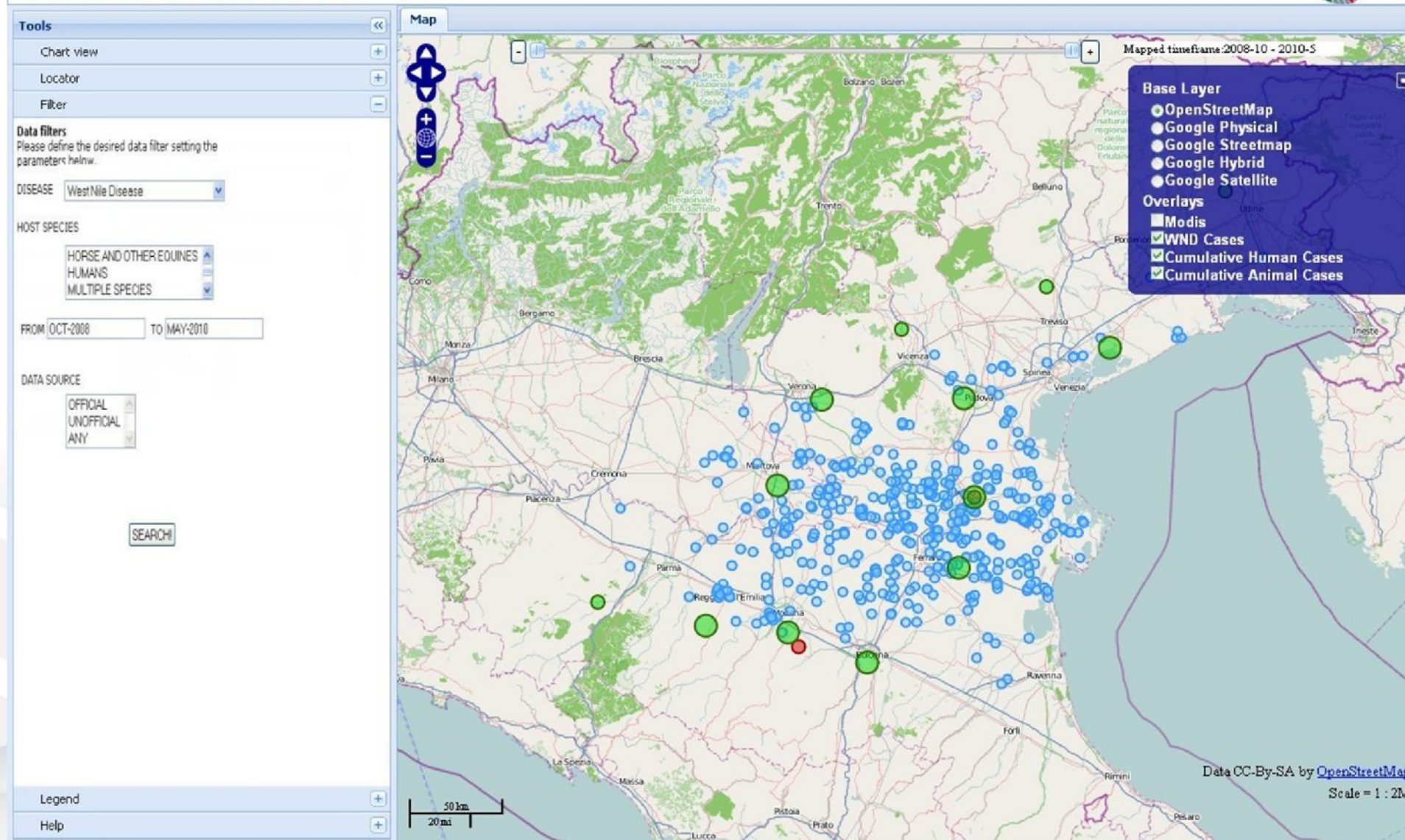
Further developments

- Following this experience a new GIS network system is under development, including spatial analysis tools



WND GeoExplorer

WND GeoExplorer



WND GeoExplorer

WND GeoExplorer

Tools

Chart view
Locator
Filter
Legend

Legend

Month Average Land
Surface Temperature
(MODIS)

T °C

< -20
-20 -18
-18 -16
-16 -14
-14 -12
-12 -10
-10 -8
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38 40
> 40

COLD

WARM

WND Cumulative
Human Cases

< 10
10-100
100-1000

WND Cumulative
Animal Cases

< 10
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WND Cases

Occurrence

Map



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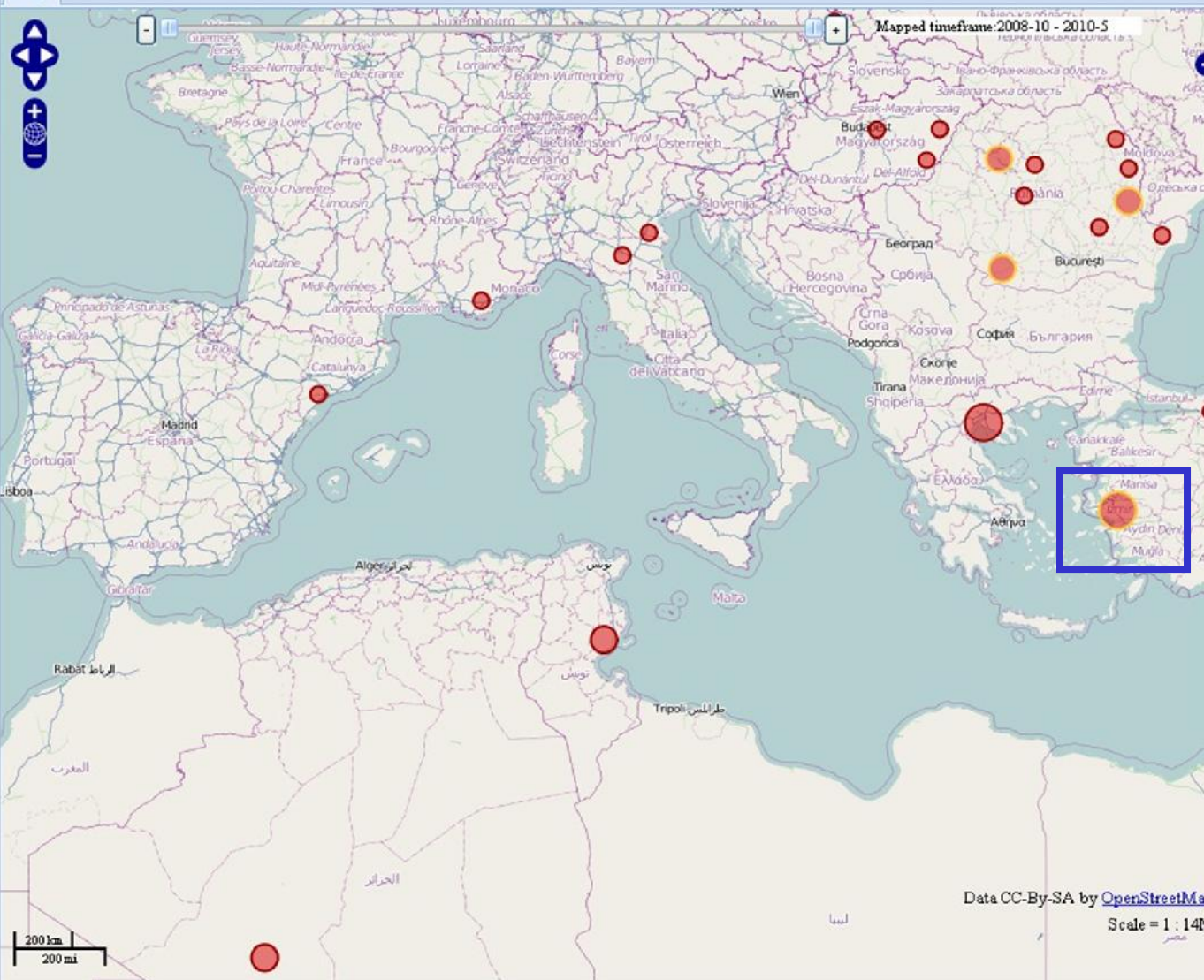
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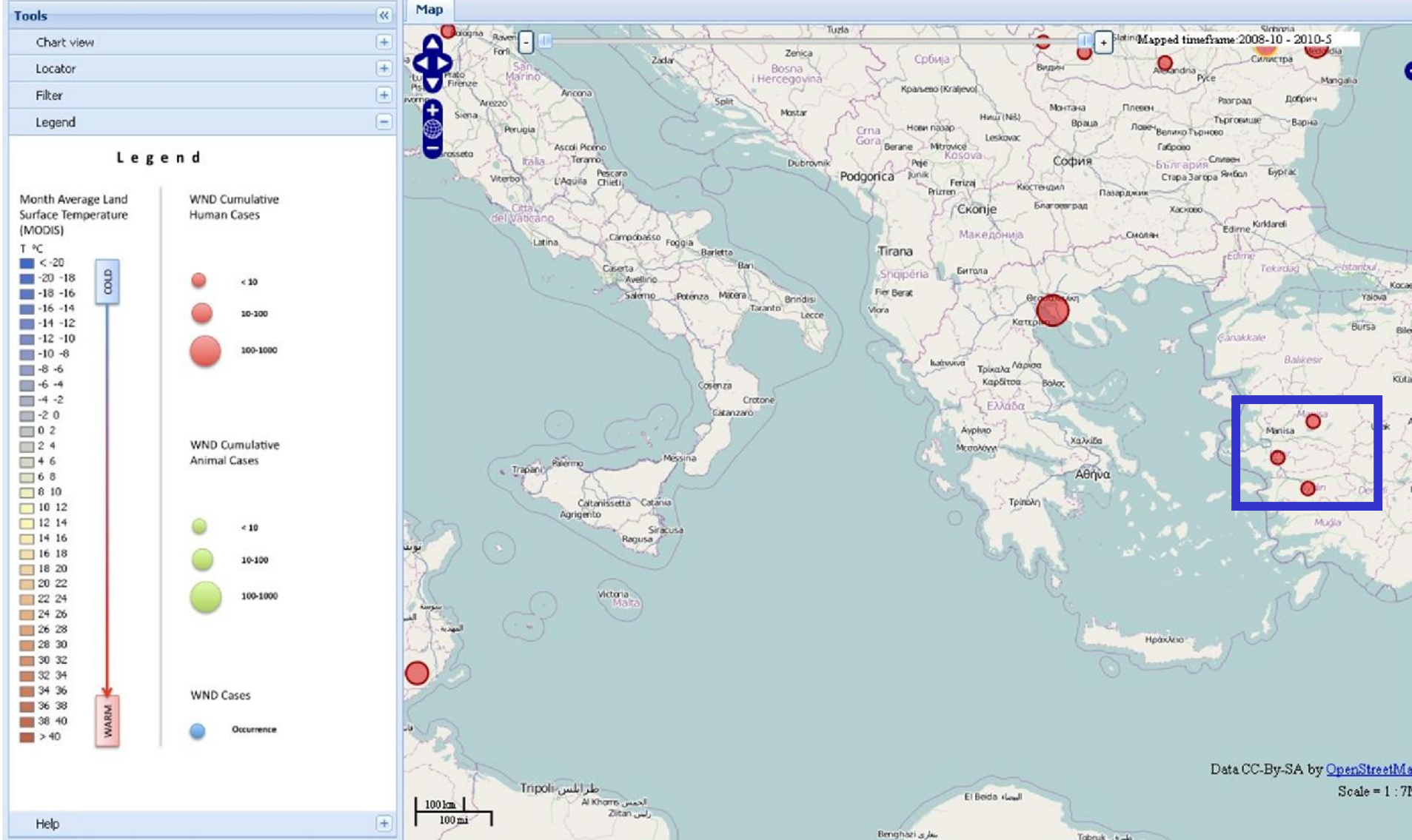
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Help

WND GeoExplorer

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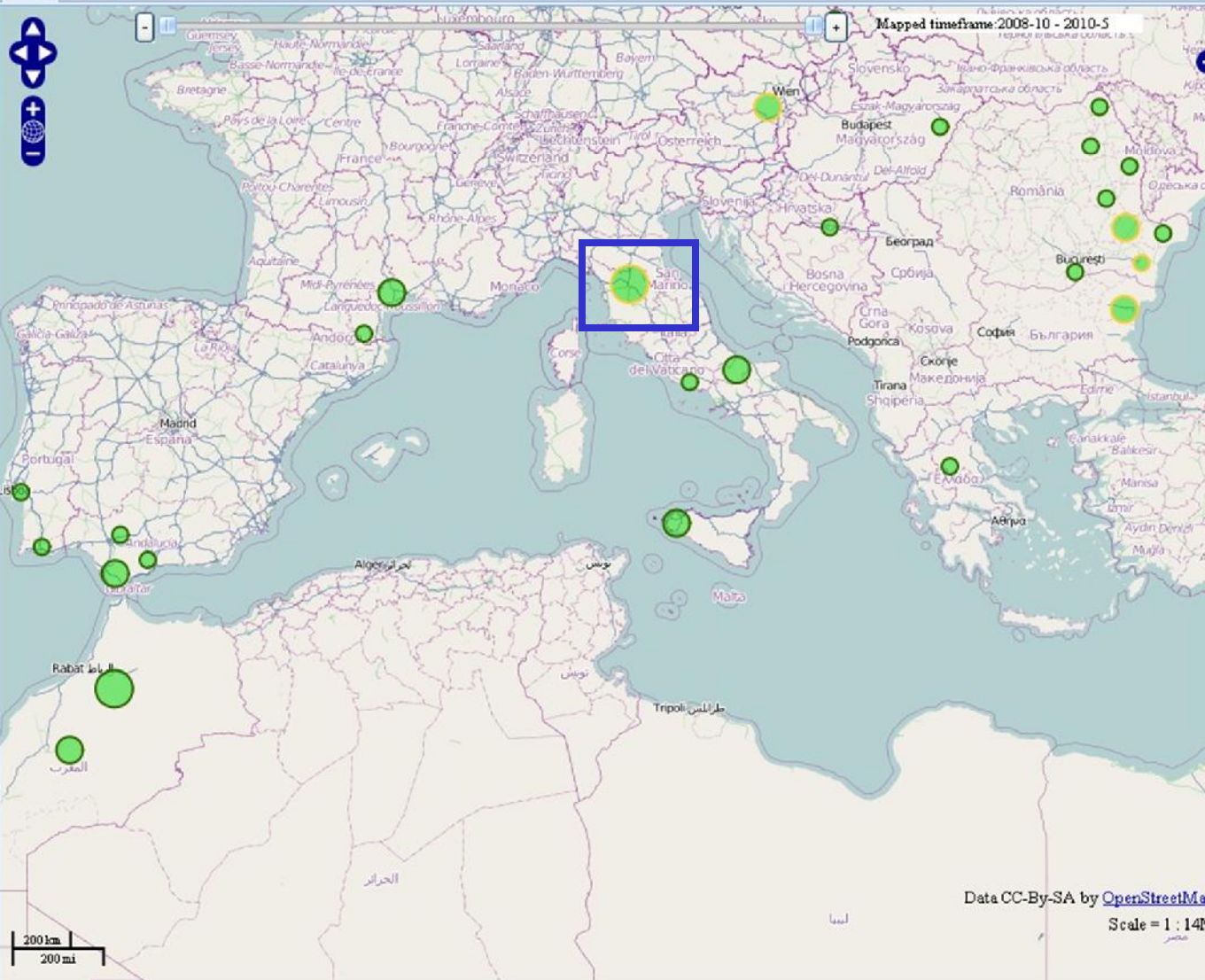
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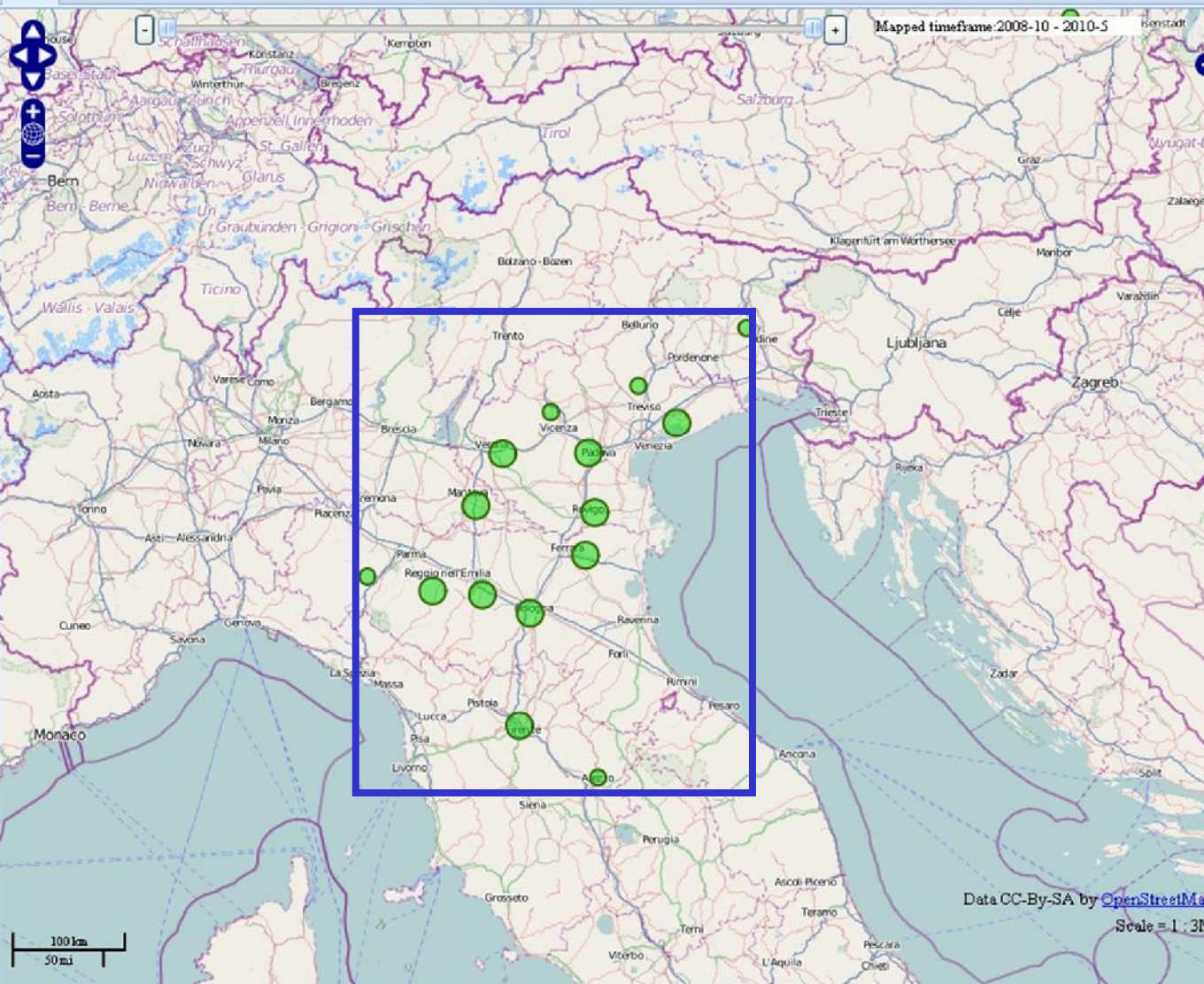
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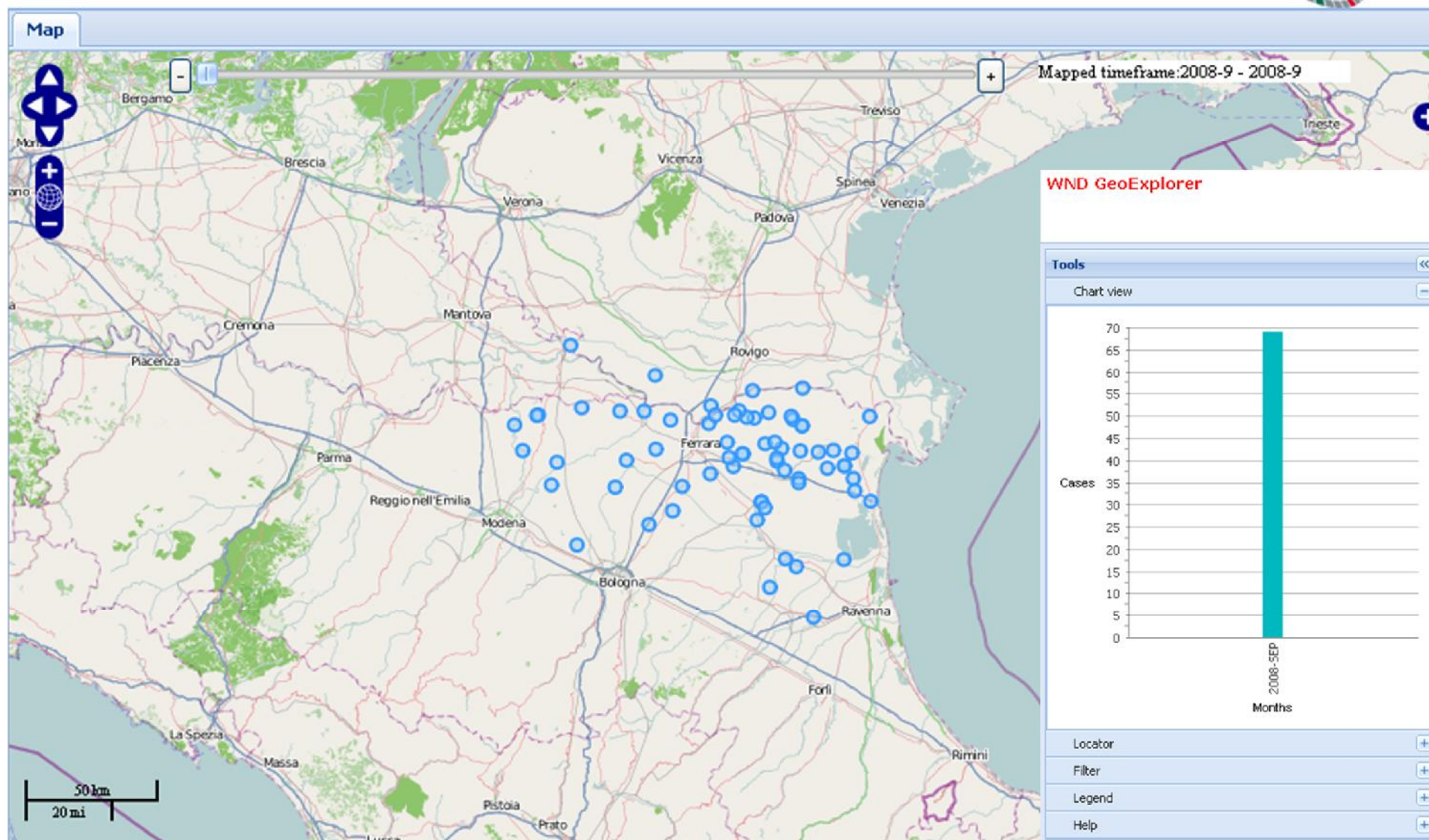
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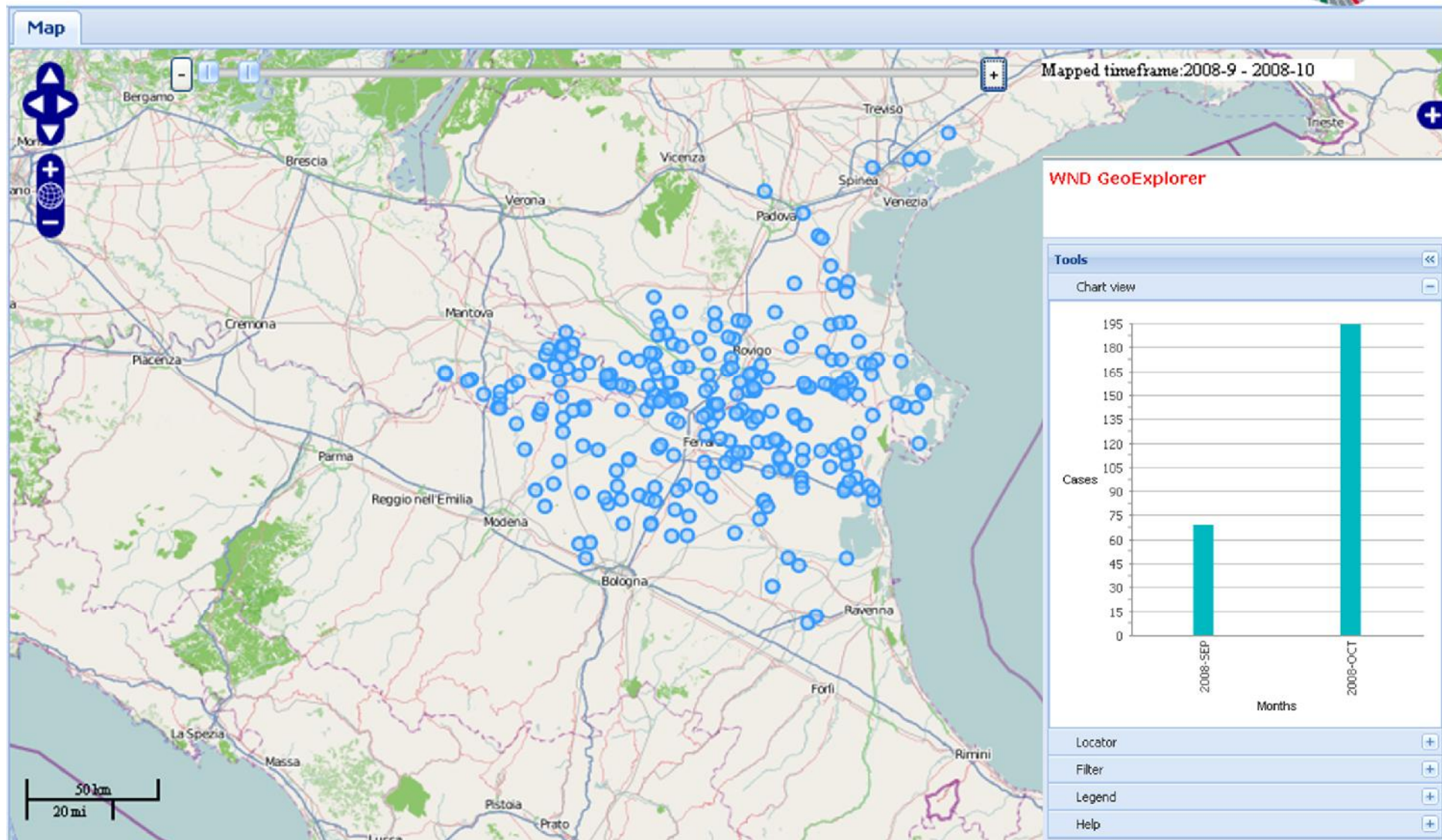
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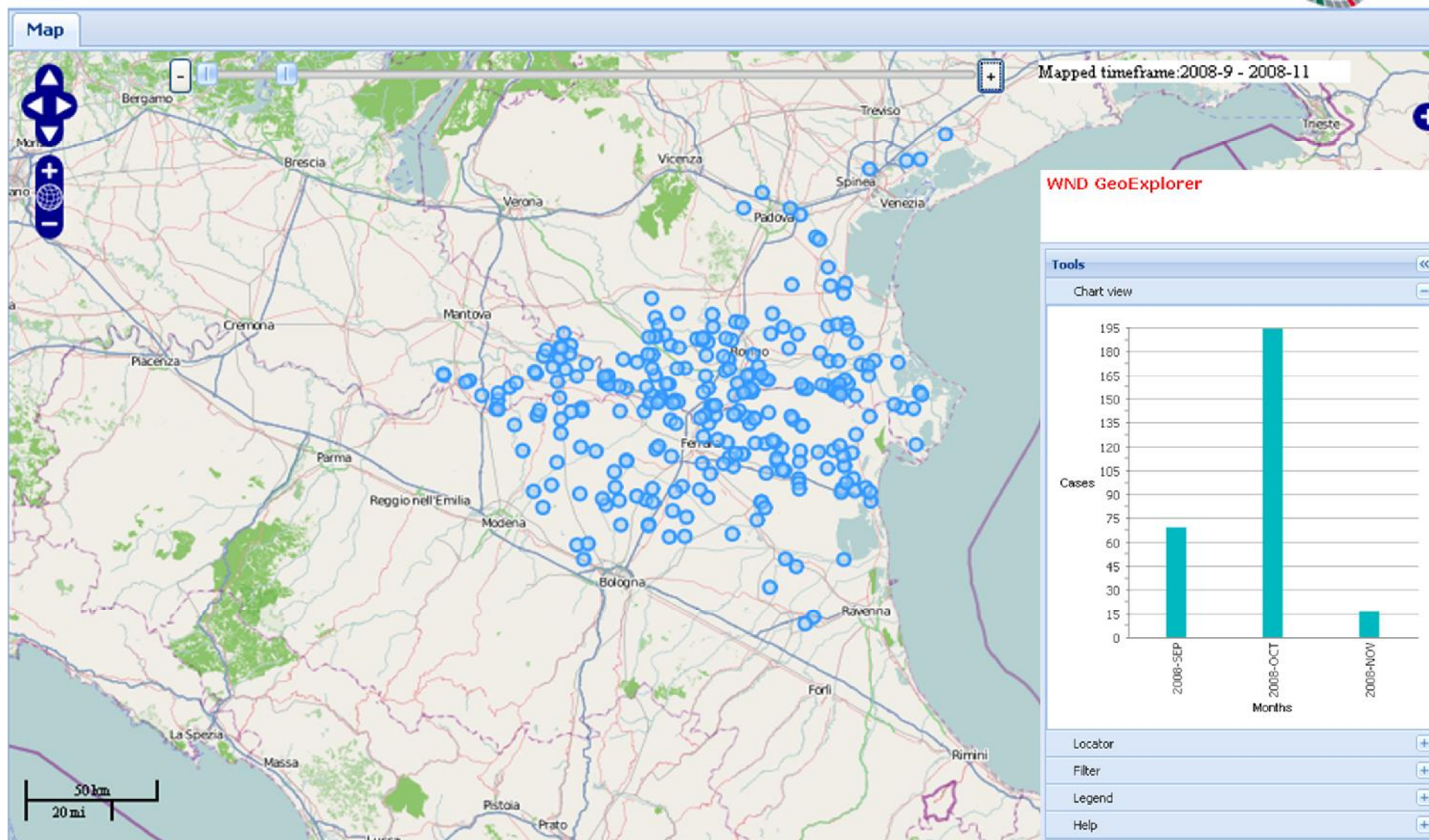
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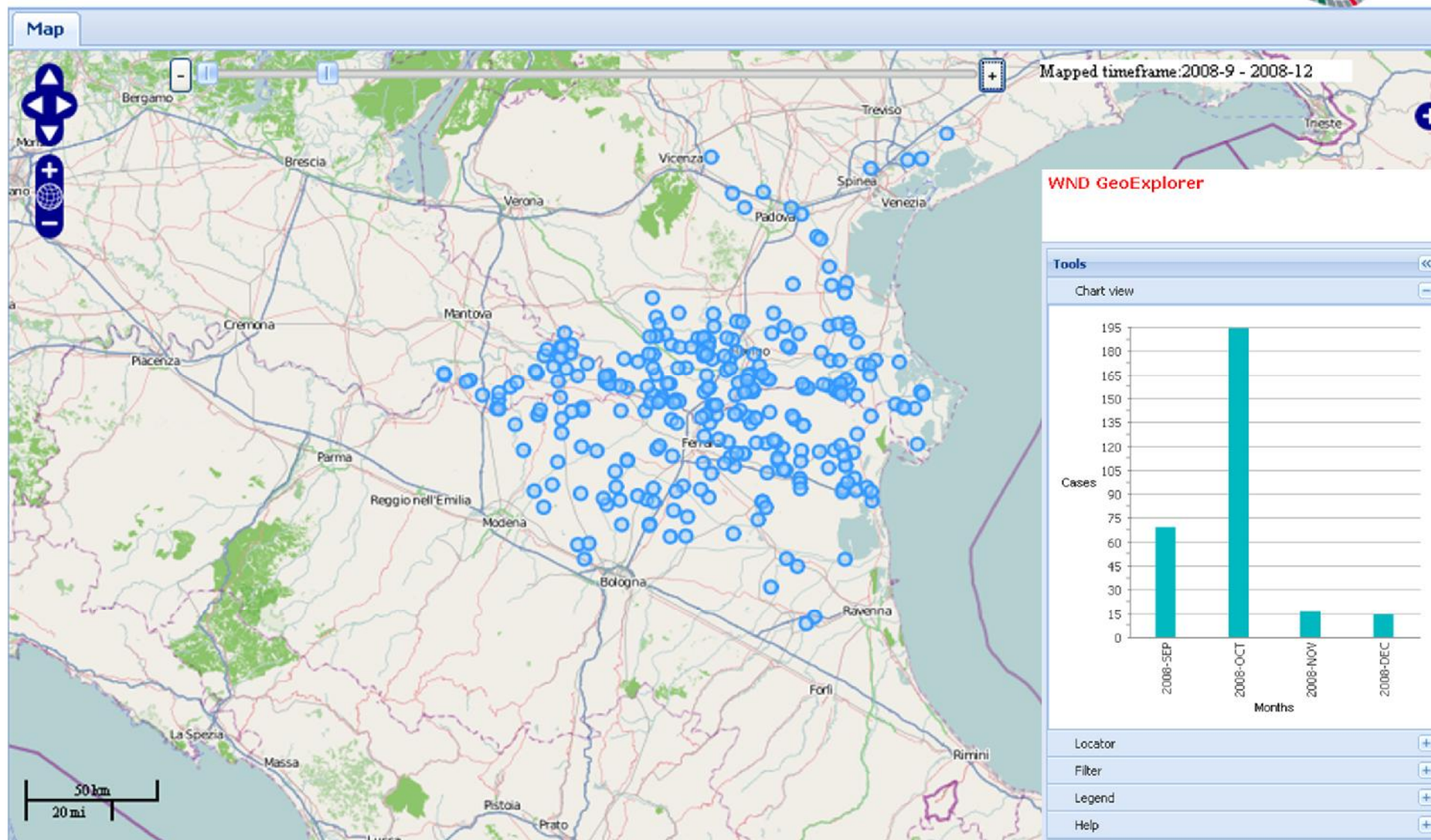
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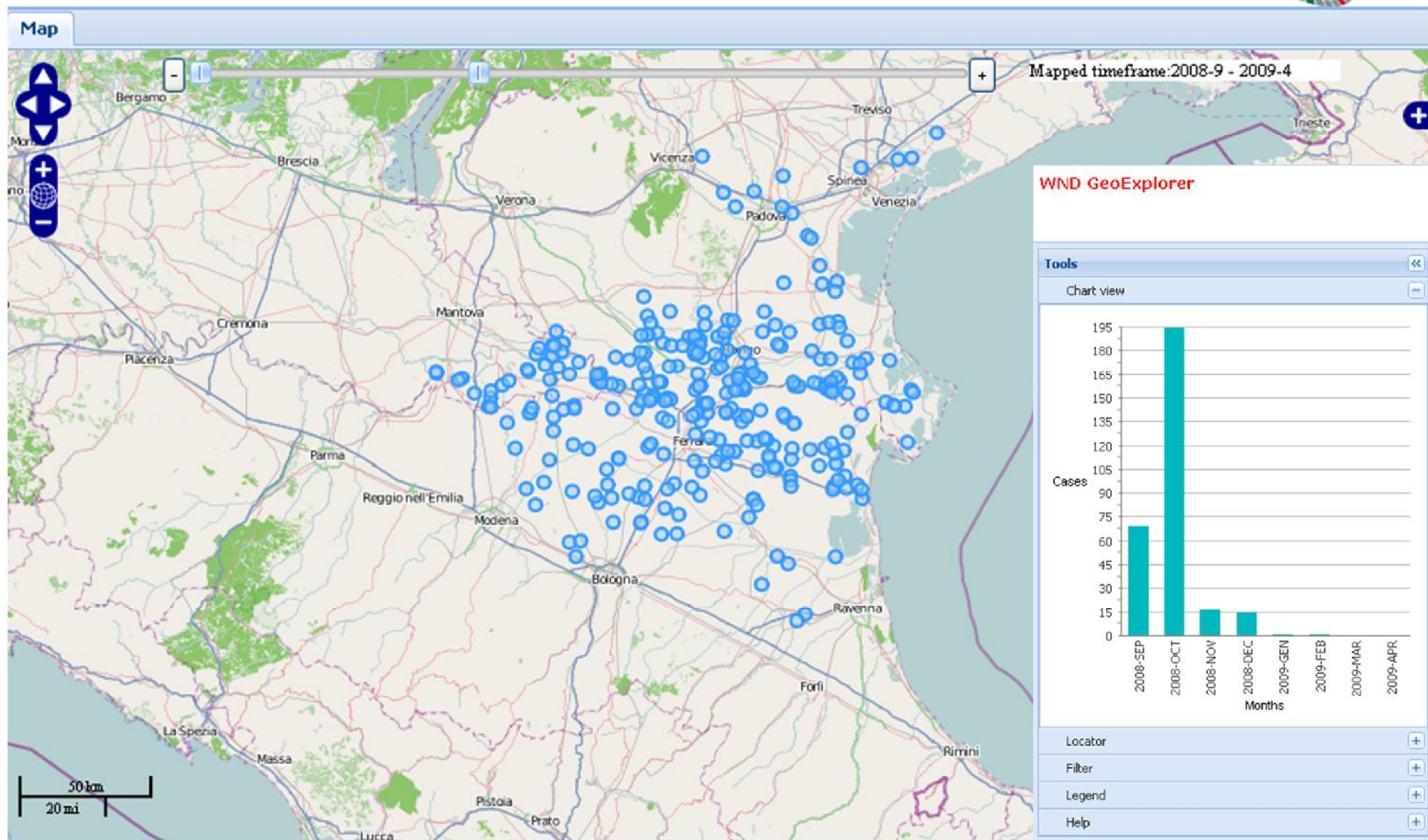


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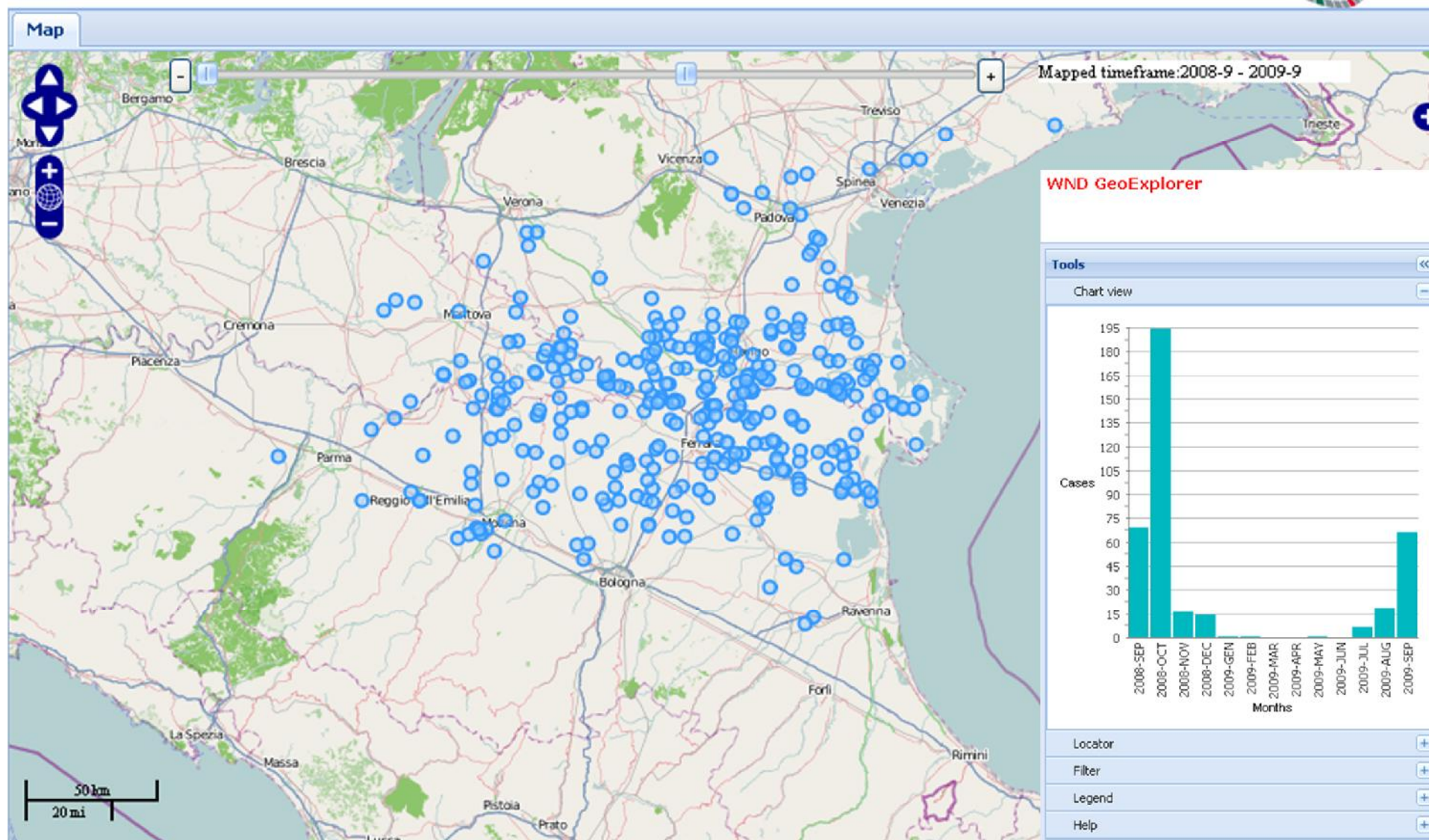


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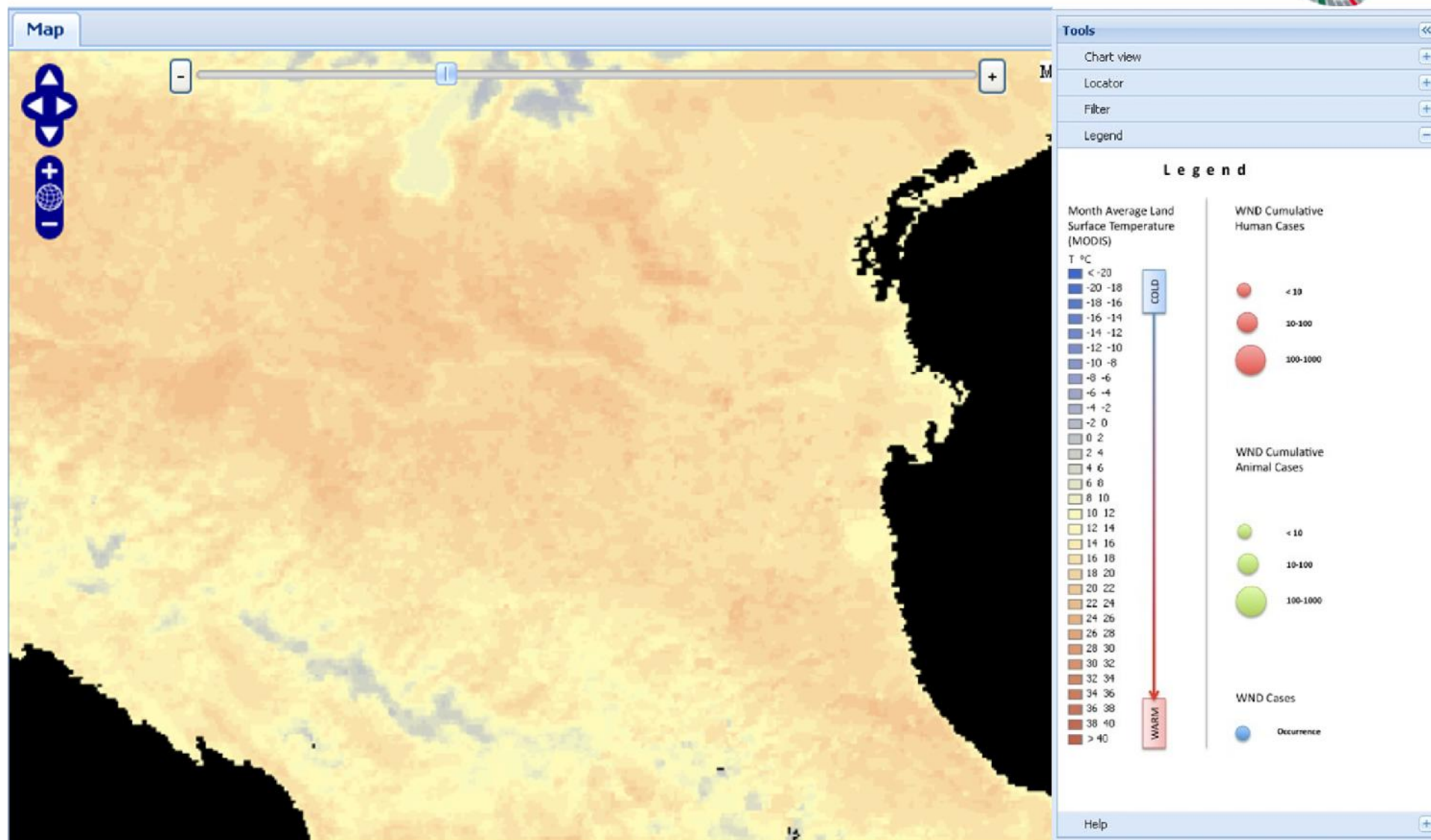




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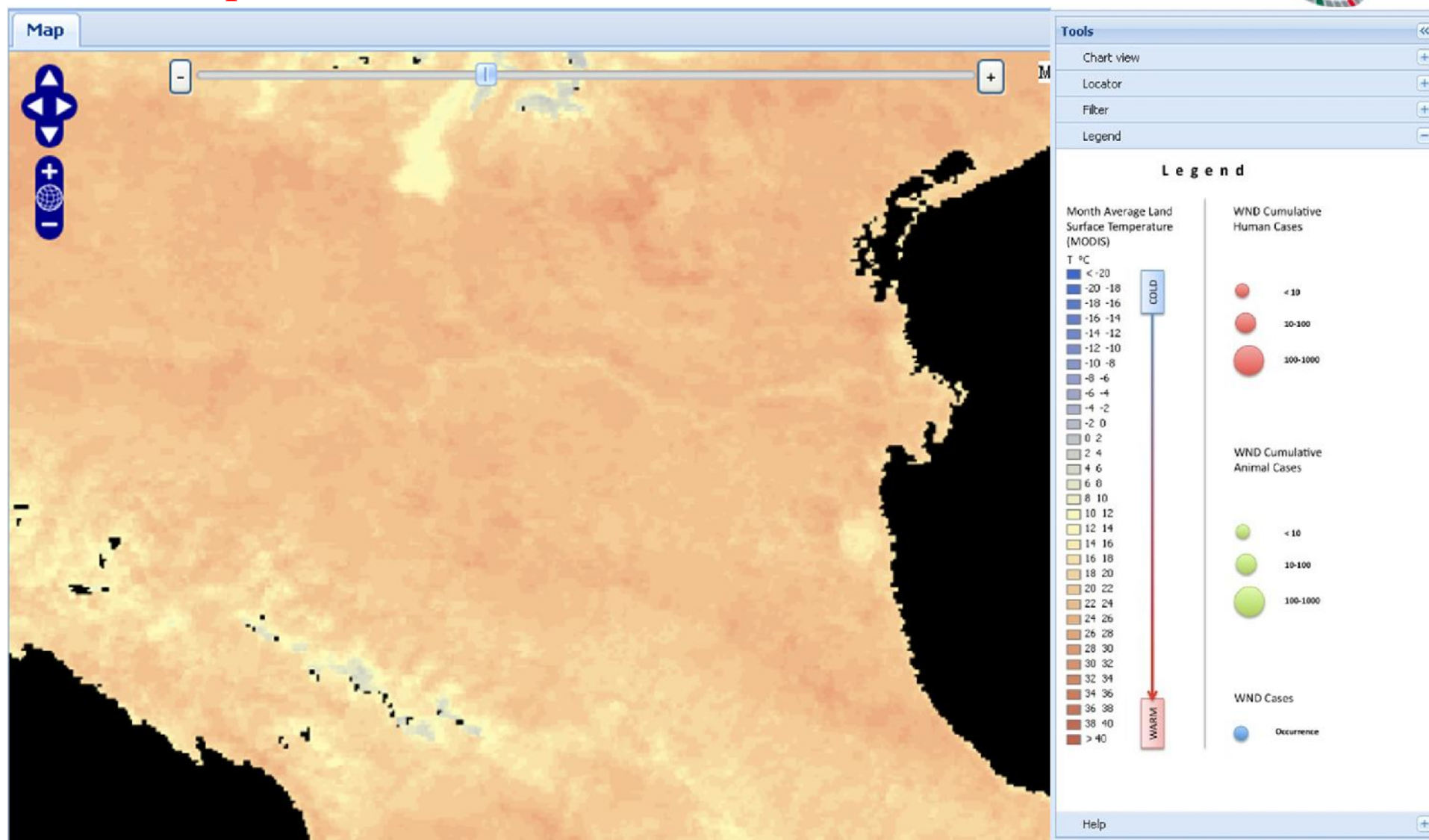


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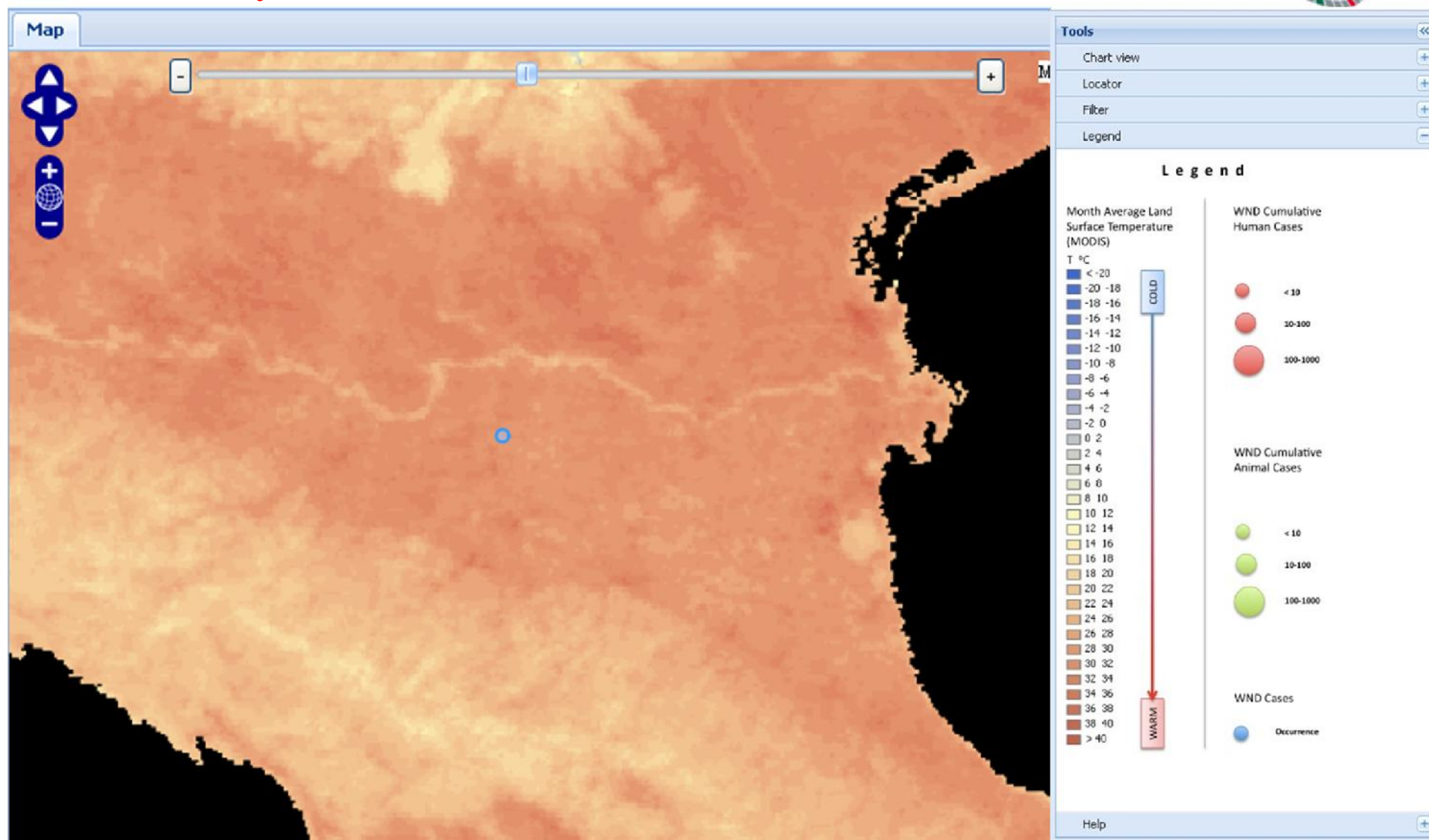


WND GeoExplorer

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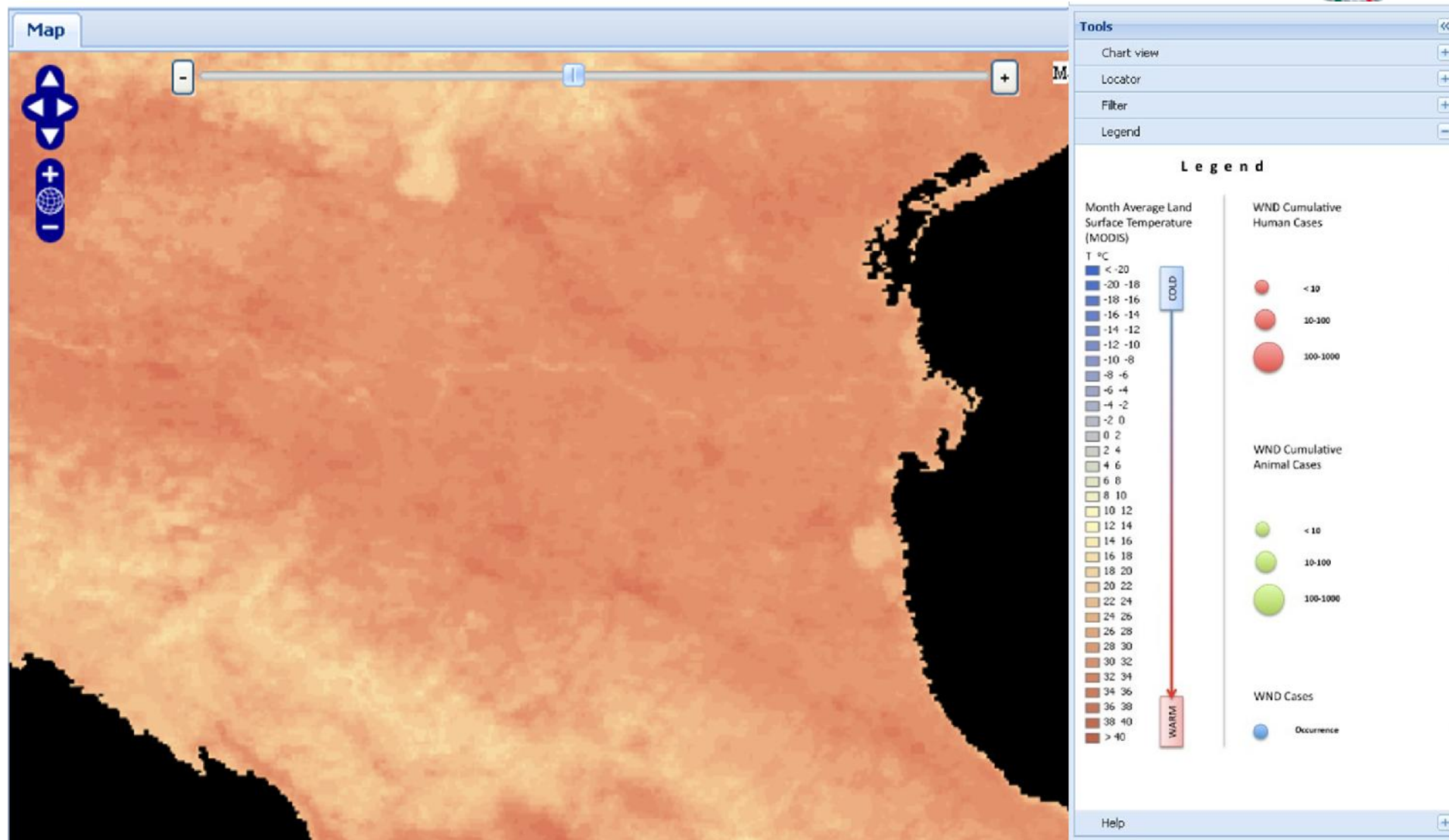


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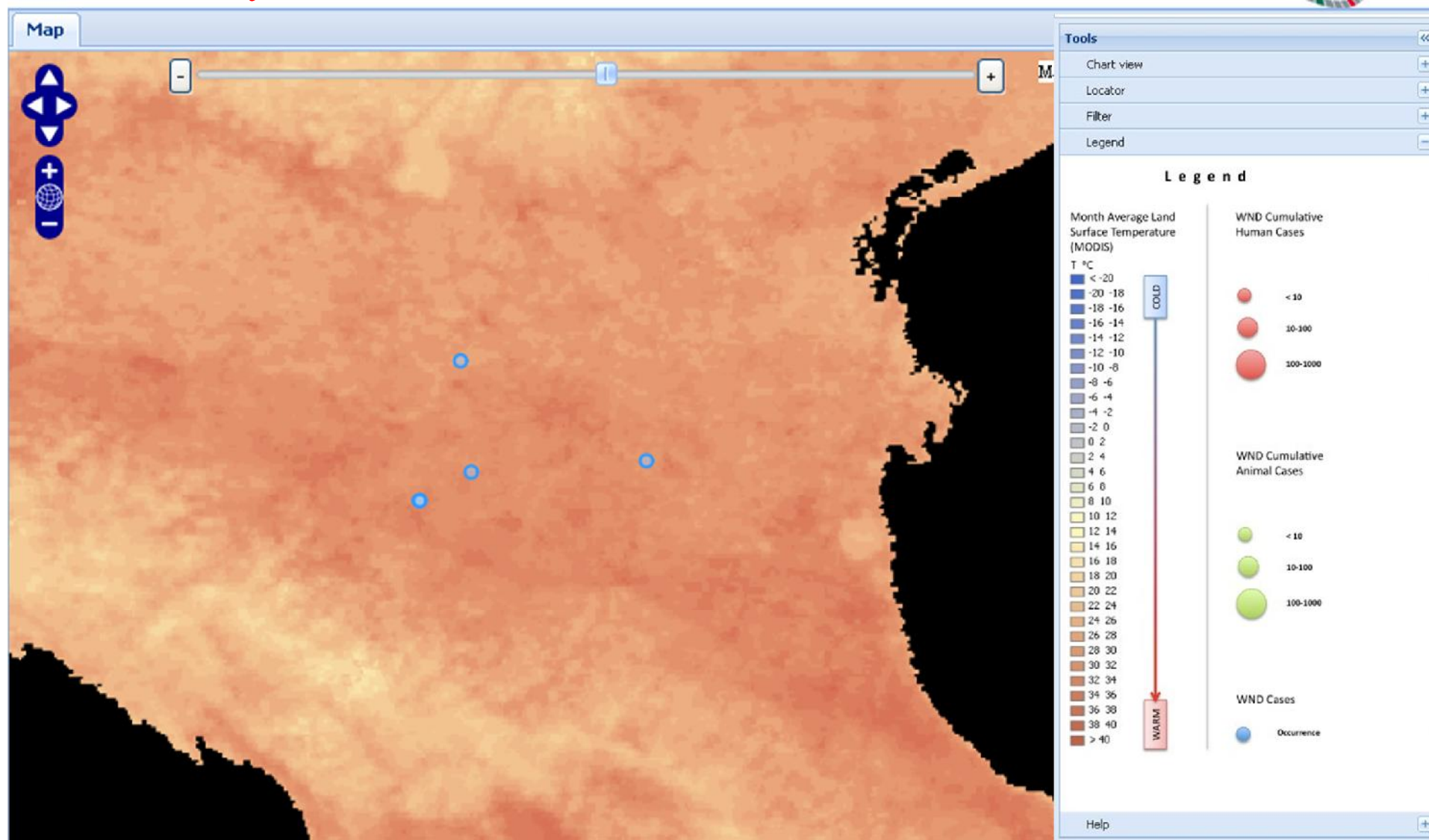


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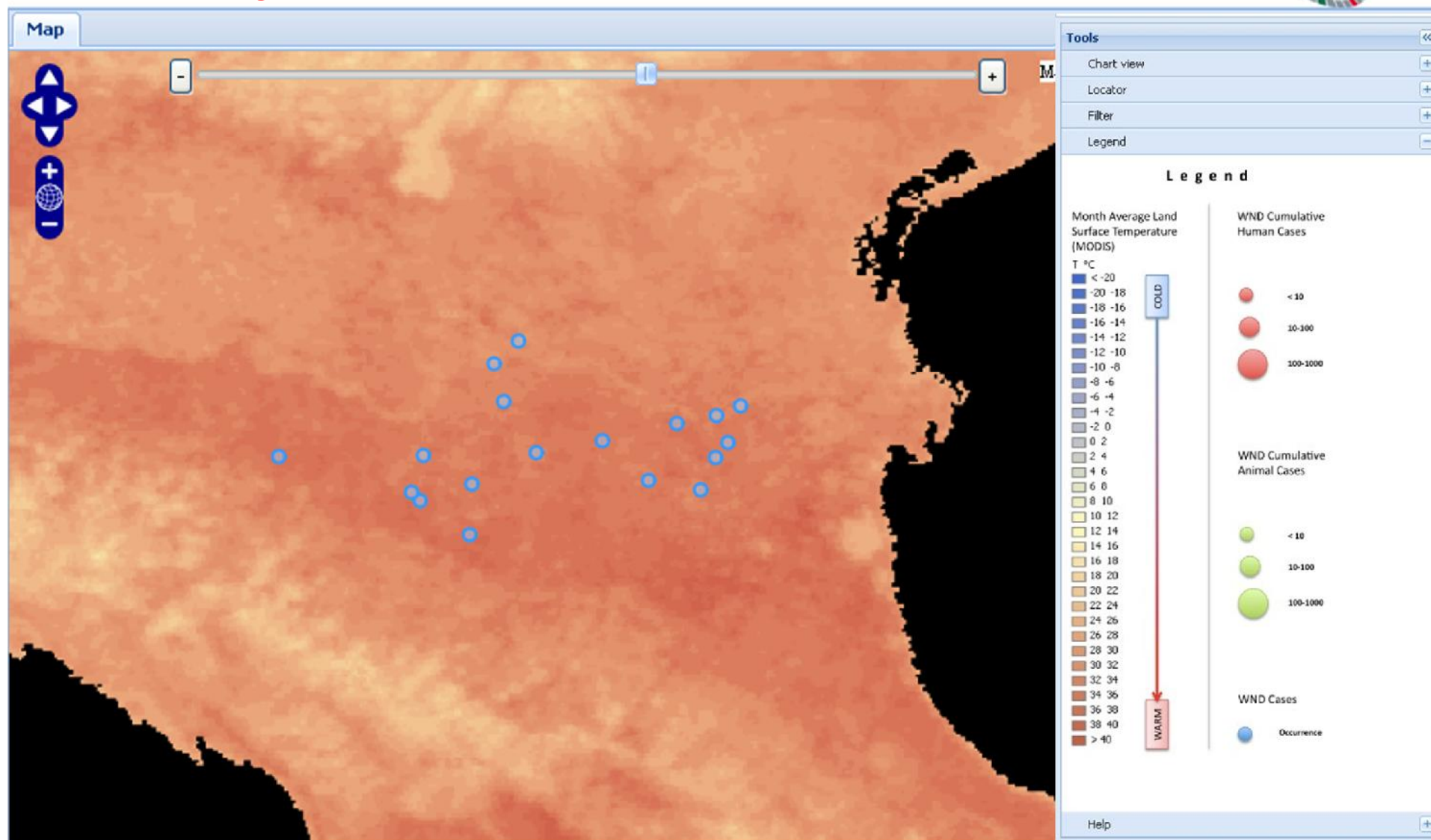
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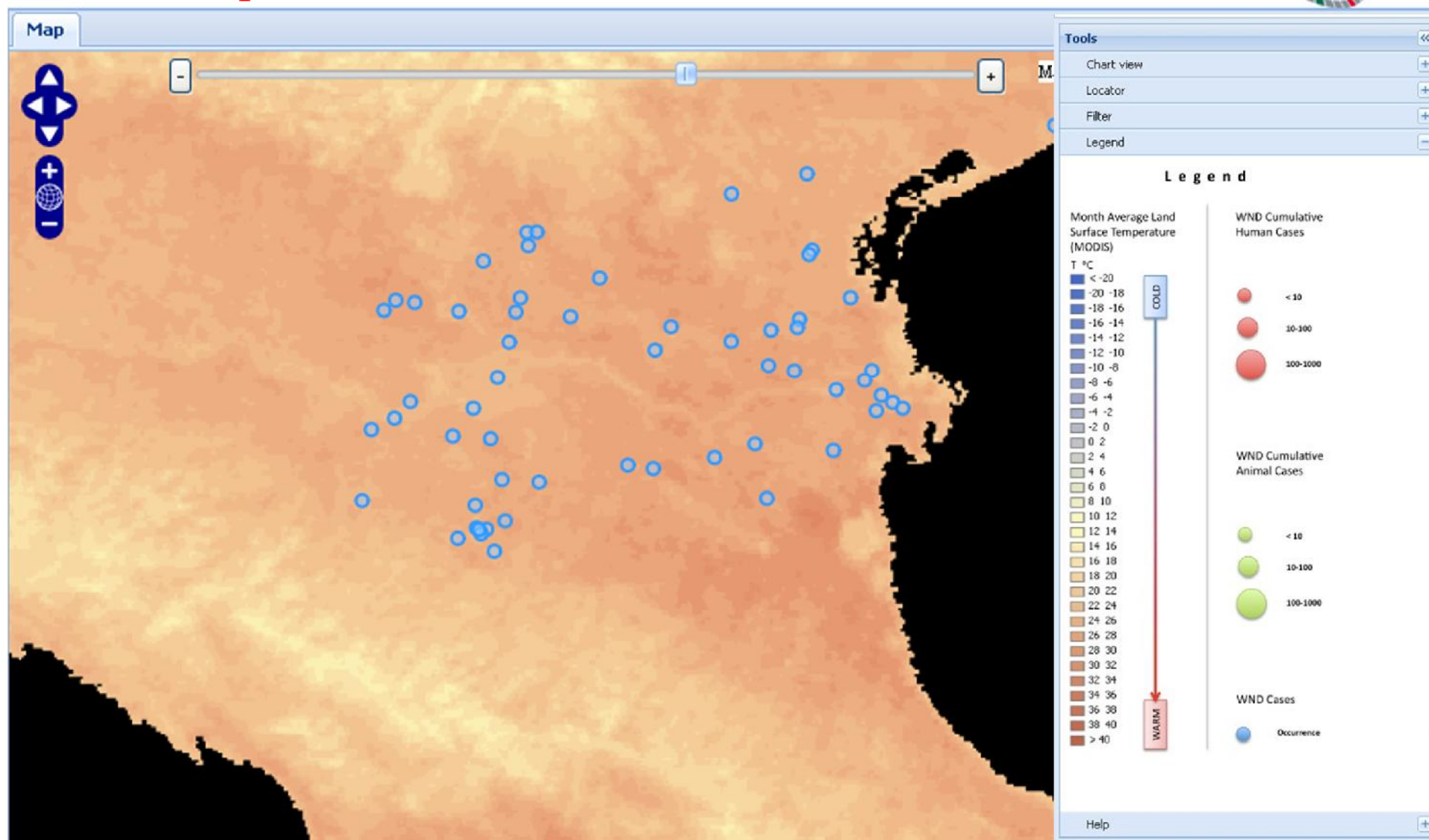
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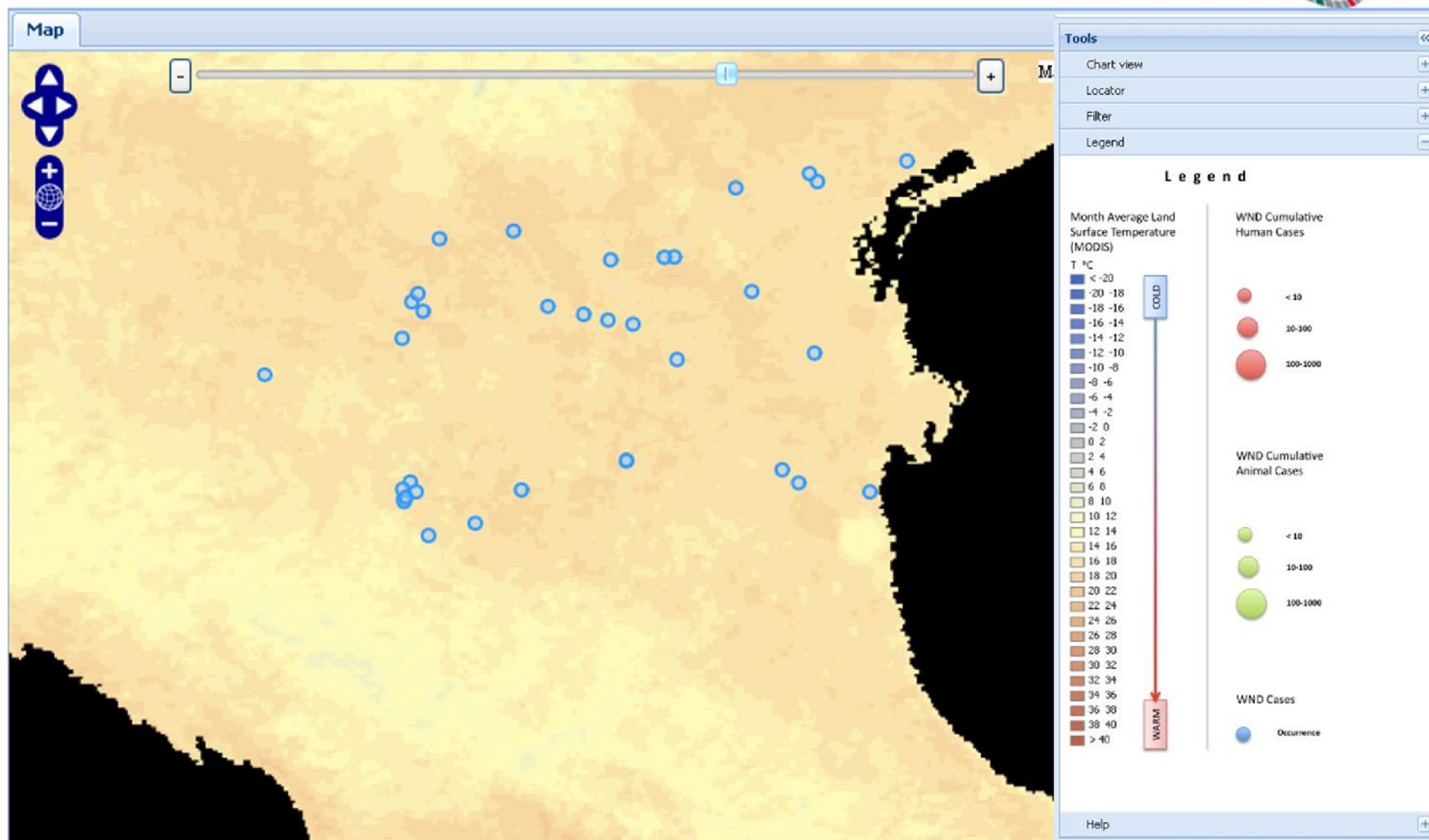
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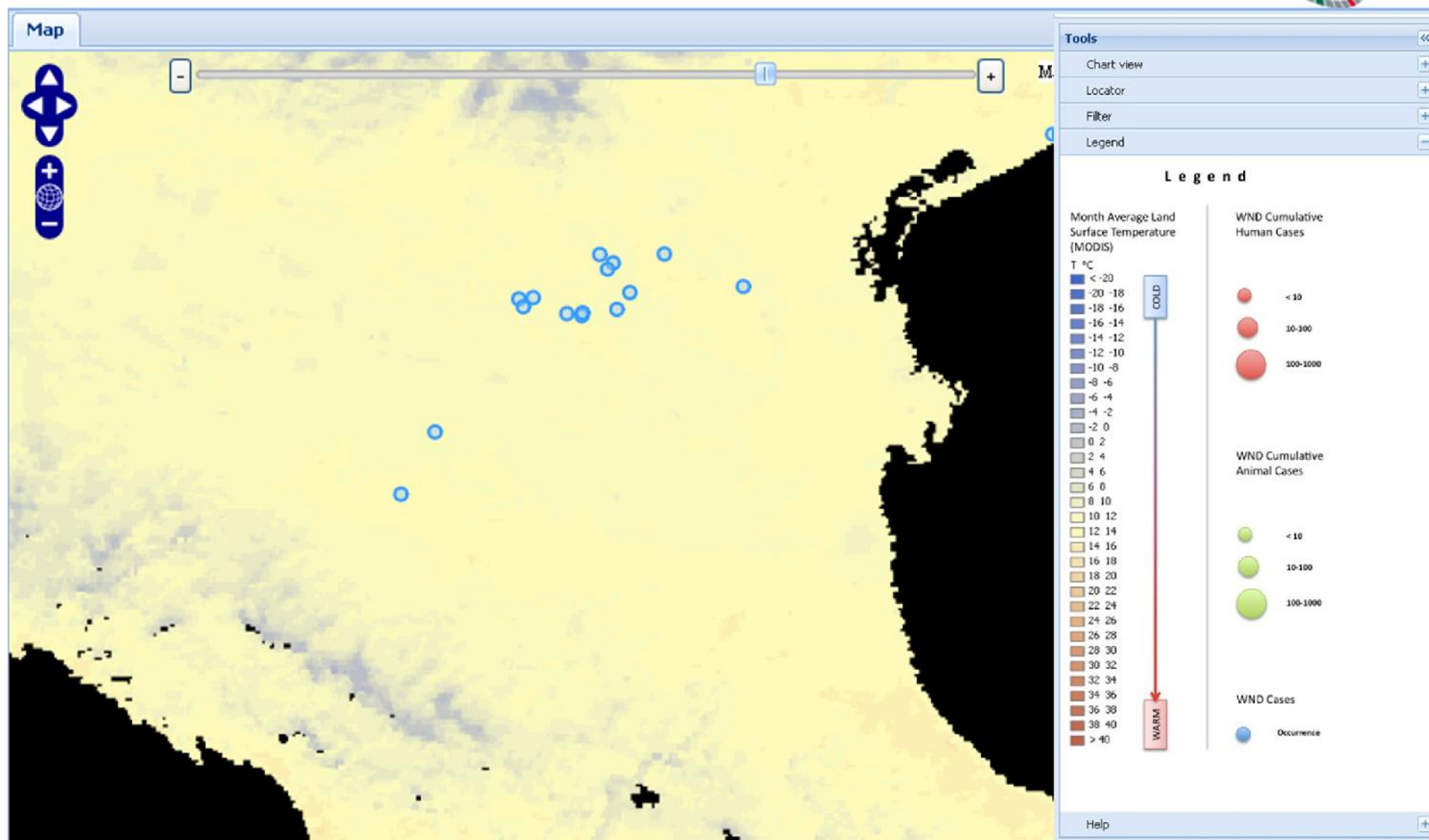
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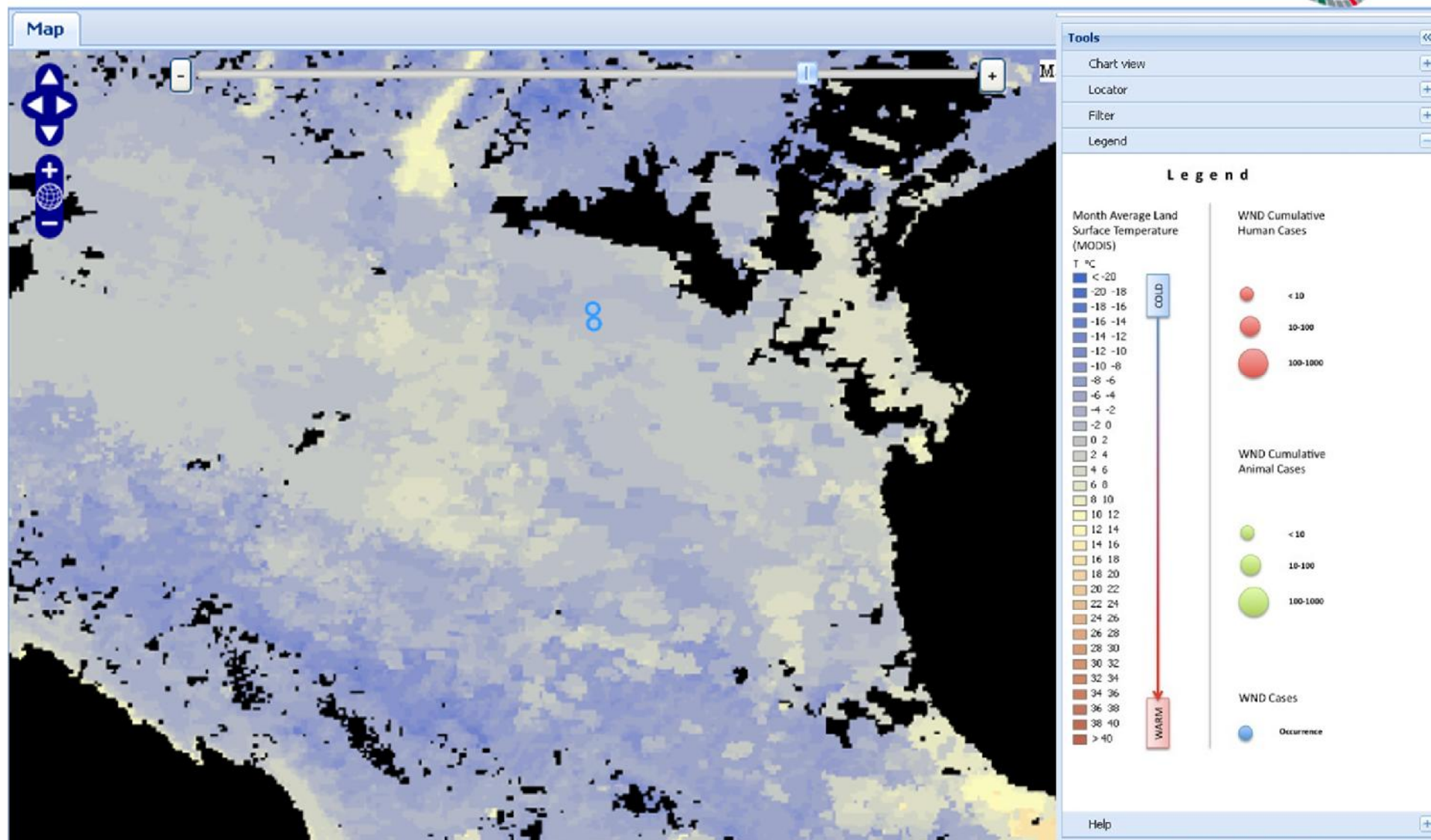
October 2009



November 2009



December 2009





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