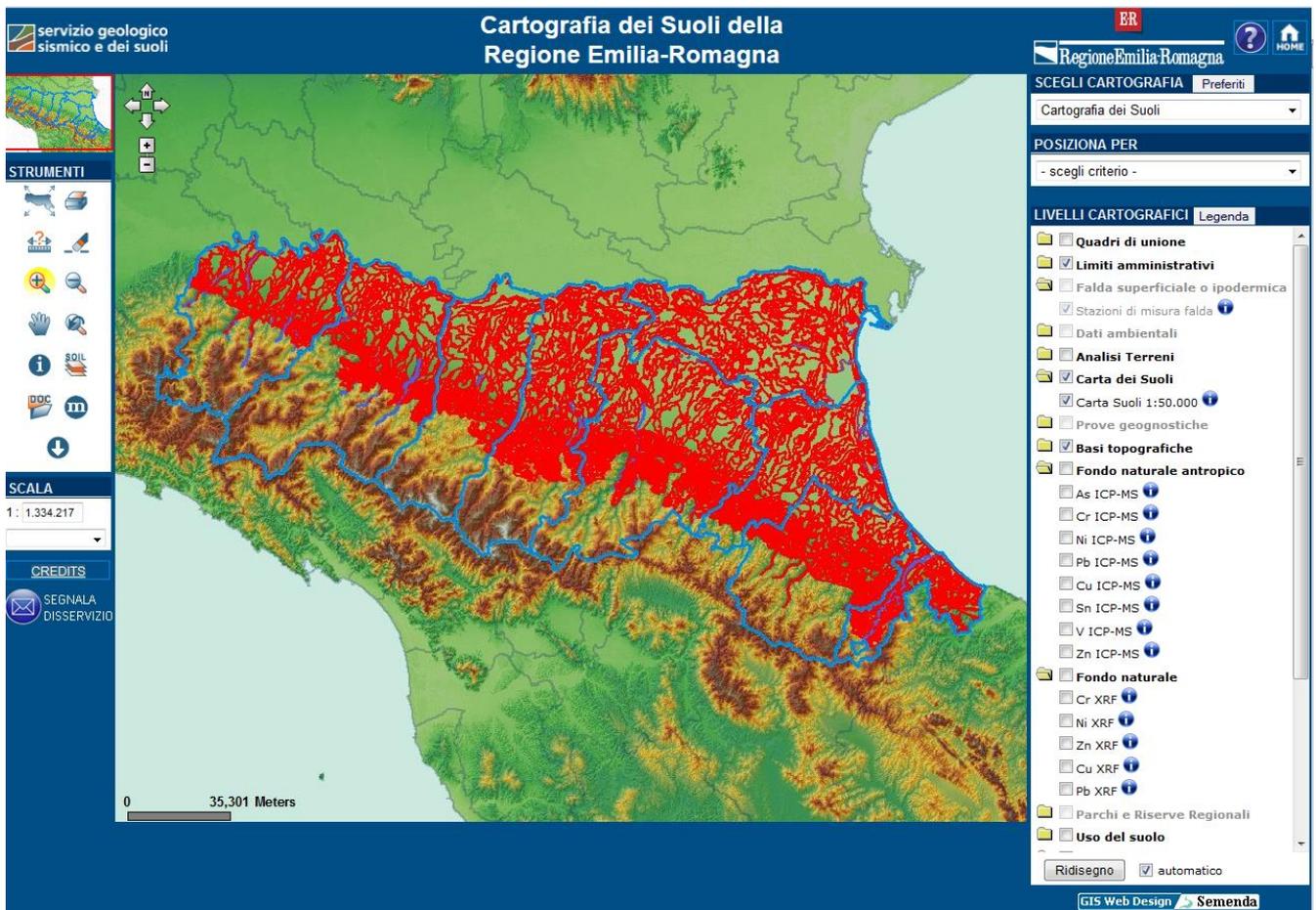


# GUIDEBOOK of SOIL MAPS OF EMILIA-ROMAGNA REGION WEBSITE



SOIL WEBGIS homepage

## STRUMENTI: TOOLS



**ZOOM TO MAXIMUM EXTENSION**



**PRINT:** print the current view



**MEASURE**



**DELETE MEASURE/SELECTION**



**ZOOM OUT**



**ZOOM IN**



**MOVE**



**BACK TO THE PREVIOUS VIEW**



**IDENTIFY:** query ALL the active layers



**QUERY** complete description of soil polygons, local benchmark sites, soil typological units and mapping units



LINK TO PDF DOCUMENTS



LINK TO METADATA



**DOWNLOAD:** select an area with a box and download soil polygon description and benchmark site analyses (shapefile and tables)

<p><b>SCEGLI CARTOGRAFIA</b> Preferiti</p> <p>Cartografia dei Suoli</p>	<p><b>CHOOSE THE PORTAL:</b> it's possible to switch to other cartographic portals: geology, coast, soil erosion etc.</p>
<p><b>POSIZIONA PER</b></p> <p>- scegli criterio -</p>	<p><b>LOCATE WITH:</b> here it's possible to choose different tools to locate your zone: use of topographic sheets, provinces or municipality names, toponyms or place names.</p>
<p><b>LIVELLI CARTOGRAFICI</b> Legenda</p>	<p><b>CARTOGRAPHIC LAYERS.</b> Click to "Legenda" to obtain the symbol legend of the active layers.</p>

## LIVELLI CARTOGRAFICI: CARTOGRAPHIC LAYERS

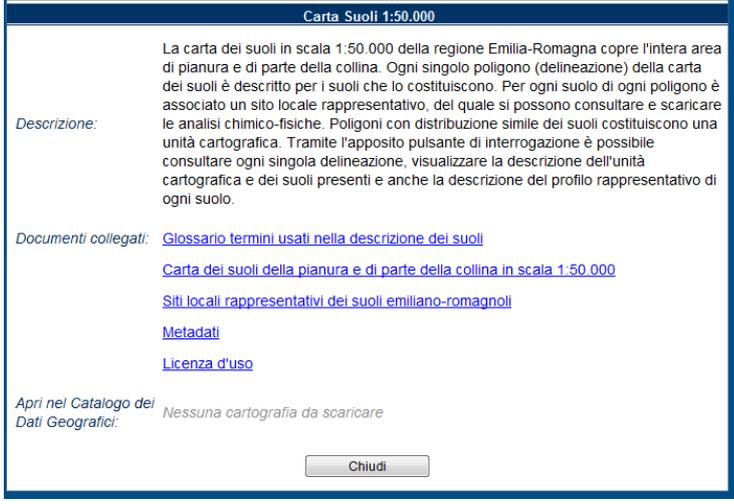
Click the button **IDENTIFY** on the left to query the layers. A layer is visible only if the folder and the sub-folder are checked.

<p><input checked="" type="checkbox"/> <b>Quadri di unione</b></p> <p><input checked="" type="checkbox"/> Griglia 10.000 </p> <p><input checked="" type="checkbox"/> Griglia 25.000 </p> <p><input type="checkbox"/> Griglia 50.000 </p>	<p><b>Topographic map quadrangles</b> at different scales.</p>
<p><input checked="" type="checkbox"/> <b>Limiti amministrativi</b></p> <p><input checked="" type="checkbox"/> Province </p> <p><input checked="" type="checkbox"/> Comuni </p>	<p><b>Administrative boundaries</b> of Provinces and Municipalities</p>
<p><input checked="" type="checkbox"/> <b>Falda superficiale o ipodermica</b></p> <p><input checked="" type="checkbox"/> Stazioni di misura falda </p>	<p><b>Shallow groundwater measurement sites.</b> This layer is symbolized by a green (active site) or red (non-active site) quadrangle. Click on "Ultime letture livellofalda" to obtain the latest measure of the groundwater level.</p>
<p><input checked="" type="checkbox"/> <b>Dati ambientali</b></p> <p><input checked="" type="checkbox"/> Inventario dati ambientali </p>	<p><b>Heavy metal point inventory.</b> This layer is symbolized by a green triangle. Metal content (mg/kg) is measured with ICP-MS method.</p>
<p><input checked="" type="checkbox"/> <b>Analisi Terreni</b></p> <p><input checked="" type="checkbox"/> Campioni Analisi Terreni </p>	<p><b>Extension Service soil analyses.</b> This layer is symbolized by boxes (about 1ha area) classified on clay value (click on <i>legenda</i>).</p>
<p><input checked="" type="checkbox"/> <b>Carta dei Suoli</b></p> <p><input checked="" type="checkbox"/> Carta Suoli 1:50.000 </p>	<p><b>1:50k Soil Map.</b> This layer is symbolized by transparent polygons with red boundaries and labeled by numerical ID. Clicking on <i>Descriz. completa</i> you'll obtain the same result by clicking the SOIL button.</p>
<p><input checked="" type="checkbox"/> <b>Prove geognostiche</b></p> <p><input checked="" type="checkbox"/> Ubicazioni prove </p>	<p><b>Geognostic tests:</b> cone penetration tests, wells, drills, soundings, seismic investigations and so on. Every type of test has its own symbol (click on <i>legenda</i>). This layer is visible at scale <math>\leq 1:20.000</math></p>

 <input checked="" type="checkbox"/> <b>Basi topografiche</b> <input checked="" type="checkbox"/> CTR 250.000 <input checked="" type="checkbox"/> IGM 50.000 <input checked="" type="checkbox"/> CTR 25.000 <input checked="" type="checkbox"/> CTR 5.000 <input checked="" type="checkbox"/> DBTR2008 Ctr5 <input checked="" type="checkbox"/> Sfumo 3D (70m) <input checked="" type="checkbox"/> Sfumo 3D (40m) <input checked="" type="checkbox"/> Sfumo 3D (10m) <input checked="" type="checkbox"/> Sfumo 3D (5m)	<p><b>Topographic maps and DTM at different scales</b></p>
 <input type="checkbox"/> <b>Fondo naturale antropico</b> <input checked="" type="checkbox"/> Cr ICP-MS ⓘ <input checked="" type="checkbox"/> Ni ICP-MS ⓘ <input checked="" type="checkbox"/> Pb ICP-MS ⓘ <input checked="" type="checkbox"/> Cu ICP-MS ⓘ <input checked="" type="checkbox"/> Sn ICP-MS ⓘ <input checked="" type="checkbox"/> Zn ICP-MS ⓘ	<p><b>1:250k Heavy metal Background maps.</b>  Every polygon (tile 1km x 1Km) is derived by a kriging elaboration and every metal has its own legend (click to <i>legenda estesa</i> for more information). For each cell estimated values of 50°, 90° and 95° percentile in mg/kg (ICP-MS method) are available.</p>
 <input checked="" type="checkbox"/> <b>Fondo naturale</b> <input checked="" type="checkbox"/> Cr XRF ⓘ <input checked="" type="checkbox"/> Ni XRF ⓘ <input checked="" type="checkbox"/> Zn XRF ⓘ <input checked="" type="checkbox"/> Cu XRF ⓘ <input checked="" type="checkbox"/> Pb XRF ⓘ	<p><b>1:250k Pedo geochemical maps.</b>  Every polygon is classified on 95° percentile and every metal has its own legend (click to <i>legenda estesa</i> for more information). There are data about functional group, soil classification, provenance, depositional environment, 50°, 90° and 95° percentile values in mg/kg (XRF method).</p>
 <input checked="" type="checkbox"/> <b>Uso del suolo</b> <input checked="" type="checkbox"/> Uso suolo 2008 ⓘ <input type="checkbox"/> Uso suolo 1994 ⓘ <input type="checkbox"/> Uso suolo 2003 ⓘ <input type="checkbox"/> Uso suolo 1976 ⓘ <input type="checkbox"/> Uso suolo 1954 ⓘ <input type="checkbox"/> Uso suolo 2005 costa ⓘ <input type="checkbox"/> Uso suolo 2000 costa ⓘ <input type="checkbox"/> Uso suolo 1982 costa ⓘ	<p><b>1:25k Land cover maps.</b>  The first five maps concern the whole regional territory, the other three maps concern only the coastal area.</p>
 <input type="checkbox"/> <b>Carte tematiche</b> <input type="checkbox"/> Gruppi Idrologici ⓘ <input type="checkbox"/> Capacità uso suoli ⓘ <input type="checkbox"/> Salinità 0-50 cm ⓘ <input type="checkbox"/> Salinità 50-100 cm ⓘ <input type="checkbox"/> Dotazione in sostanza organica ⓘ	<p><b>Thematic Maps.</b></p> <ul style="list-style-type: none"> <li>• <b>1:50k Hydrologic Soil Group Map.</b> Every polygon of the 50k soil map (2014 edition) is classified by a Hydrologic Soil Group (USDA-NRCS methodology, 2009).</li> <li>• <b>1:50k Land Capability Map.</b> Every polygon of the 50k soil map (2005 edition) is classified by a land capability class (click to <i>legenda</i> for more information).</li> <li>• <b>1:250k Salinity Map.</b> Every polygon (tile 1km x 1Km) is derived by a kriging elaboration and is classified on the estimated electrical conductivity value (ECe, dSm-1). Click on <i>link legenda</i> for more information.</li> <li>• <b>1:50k Evaluation of Organic Matter content.</b> Every polygon (tile 1km x 1Km) is derived by a kriging elaboration and is</li> </ul>

	classified by a qualitative evaluation of organic matter content. Click on <i>link classi SO</i> for more information.
 <input type="checkbox"/> <b>Carte Storiche</b> <input type="checkbox"/> Stato Pontificio (1762) <input type="checkbox"/> Ducato di Modena (1821) <input type="checkbox"/> Ducato di Parma (1828) <input type="checkbox"/> Territorio ferrarese (1814) <input checked="" type="checkbox"/> Carta storica (1850)	<p><b>Historical Maps</b> Only the 1850 map concerns the whole regional territory</p>
 <input checked="" type="checkbox"/> <b>Foto aeree-satellite</b>  <input checked="" type="checkbox"/> <b>ORTOAGEA 2011</b>  <input type="checkbox"/> <b>ORTOAGEA 2008</b>  <input type="checkbox"/> <b>ORTOAGEA 2006</b>  <input type="checkbox"/> <b>ORTOAGEA 2005</b>  <input type="checkbox"/> <b>ORTOSAT 2003</b>  <input type="checkbox"/> <b>ORTOAGEA 2002</b>  <input type="checkbox"/> <b>ORTOAGEA 2001</b>  <input type="checkbox"/> <b>ORTOAGEA 2000</b>  <input type="checkbox"/> <b>IT 2000</b>  <input type="checkbox"/> <b>ORTOAIMA 1996</b> <input type="checkbox"/> VOLO RER 1976-1978 costa  <input type="checkbox"/> <b>VOLO GAI 1954</b> <input type="checkbox"/> VOLO RAF 1943-1944 costa	<p><b>Aerial/satellite Images</b></p>
 <input checked="" type="checkbox"/> <b>Geologia 1:10.000</b> <input checked="" type="checkbox"/> Risorse e prospezioni (10K) ⓘ <input checked="" type="checkbox"/> Punti geomorf./antrop. (10K) ⓘ <input checked="" type="checkbox"/> Linee geomorf./antrop. (10K) ⓘ <input checked="" type="checkbox"/> Punti di osservaz. e misura (10K) ⓘ <input checked="" type="checkbox"/> Ambienti deposiz. e litologie (10K) ⓘ <input checked="" type="checkbox"/> Coperture quaternarie (10K) ⓘ <input checked="" type="checkbox"/> Affioramenti (punti) (10K) ⓘ <input checked="" type="checkbox"/> Elementi strutturali (10K) ⓘ <input checked="" type="checkbox"/> Limiti di unità geologiche (10K) ⓘ <input checked="" type="checkbox"/> Processi geologici particolari (10K) ⓘ <input checked="" type="checkbox"/> Affioramenti (aree) (10K) ⓘ <input checked="" type="checkbox"/> Unità geologiche (10K) ⓘ	<p><b>1:10k Geological Map.</b></p> <ul style="list-style-type: none"> <li>• Risorse e prospezioni: resources and prospecting</li> <li>• Punti geomorf./antrop: various geomorphological and anthropic elements and lines</li> <li>• Punti di osservaz. e misura: geological and geophysical measures</li> <li>• Ambienti deposiz. e litologie: depositional areas and lithologies</li> <li>• Coperture quaternarie: quaternary cover boundaries</li> <li>• Affioramenti (punti): outcrops (points)</li> <li>• Elementi strutturali: structural elements</li> <li>• Processi geologici particolari: significant geological processes</li> <li>• Affioramenti (aree): significant outcrops</li> <li>• Unità geologiche: geological units</li> </ul>

Every layer has an own button **INFO** on the right where it's possible to find:

	DESCRIZIONE	Brief description of the layer (only in Italian language).
	DOCUMENTI COLLEGATI	Link to PDF documents (only in Italian language). Link to METADATA (only in Italian language). Link to USE LICENCE.
	APRI NEL CATALOGO DEI DATI GEOGRAFICI	Link to GEO-CATALOG WEBSITE where it's possible to download shapefile and WMS of the layer.

Example of a INFO form

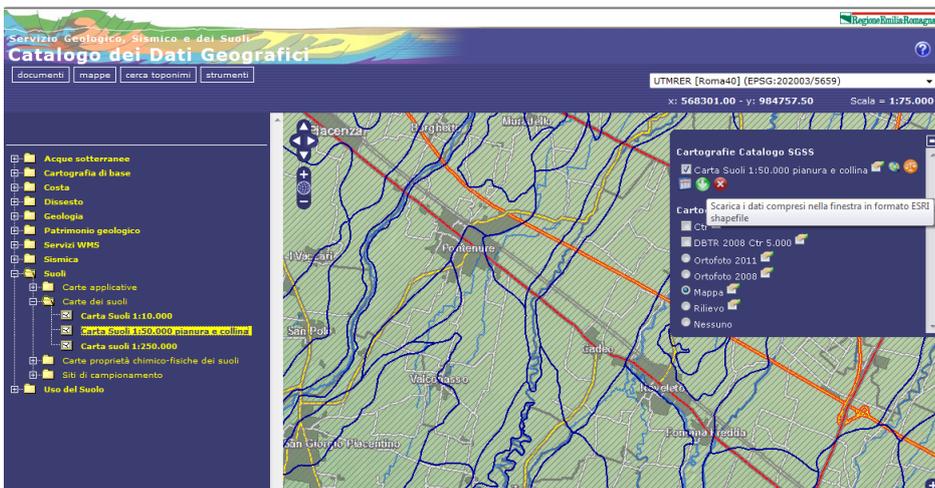
## DOWNLOAD

There are two options for downloading.

To download a layer as a shapefile click the box **INFO**, on the sentence *APRI NEL CATALOGO DEI DATI GEOGRAFICI*.

If the sentence is “*Nessuna cartografia da scaricare*” download is not possible.

If the sentence is “*Apri*” download is possible and the link opens [GEO-CATALOG website](#).



Geo-Catalog Website

To download the shapefile click on the button .

To download shapefile of the 1:50k soil map and correlated tables click the button  in the TOOL BAR. Select an area with a box and this form comes into view. Click on [Scarica cartografia](#) to download shapefile. Click the button [Download](#) to obtain table data (Excel or CSV format), a PDF map of the selected area (optional) and PDF documents (optional).

### DOWNLOAD DATI

Elementi da scaricare:

- Carta Suoli 1:50.000 - [Scarica cartografia](#)

Opzioni per il download dei dati:

- Formato Excel (file .xlsx)
- Formato CSV (Comma-Separated Value)
- Mappa degli elementi selezionati (.pdf)
- Documenti (.pdf)
  - Carta dei suoli della pianura e di parte della collina in scala 1:50.000*
  - Siti locali rappresentativi dei suoli emiliano-romagnoli*
  - metodi analitici e di stima di alcuni parametri dei suoli*

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