

Brandenburg 3D Darstellung von geologischen Daten im Browser

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www.terrestris.de

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→ **Arbeitsgemeinschaft:**

→ **camp**to**camp**



→ terrestris: Eckdaten

- Inhalt: Geoinformatik/GIS
- Ausgründung aus der Universität Bonn 2002
- 13 Mitarbeiter, hauptsächlich Geographen und Informatiker
- Firmensitz in Bonn
- von der Beratung bis zum Projekt
- OpenSource-Software
- Basisentwicklung OpenLayers, GeoExt, u.v.m.



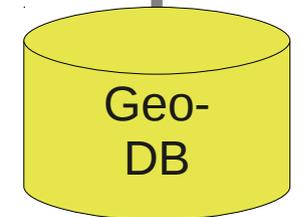
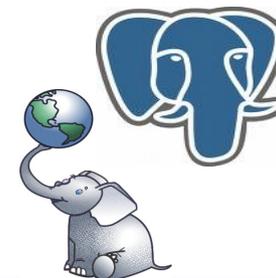
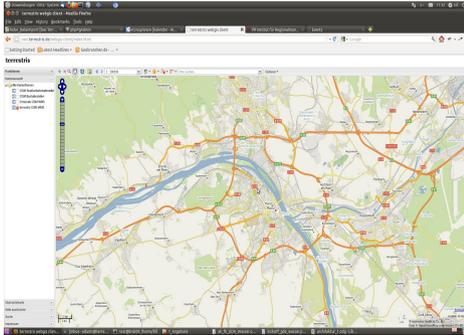
2D Mapviewer

Architektur:

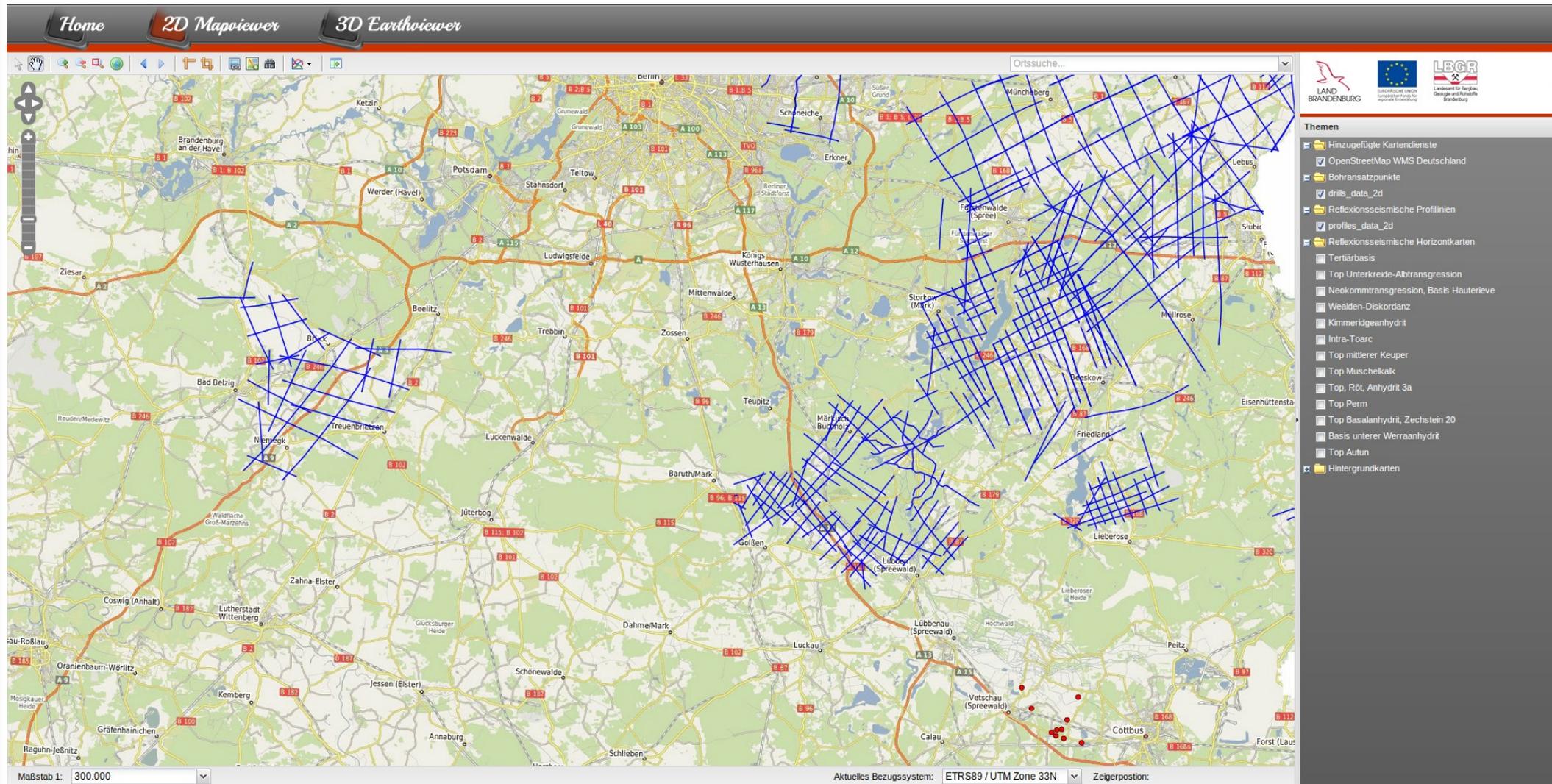
Ext JS 4

GeoExt 2

OpenLayers™



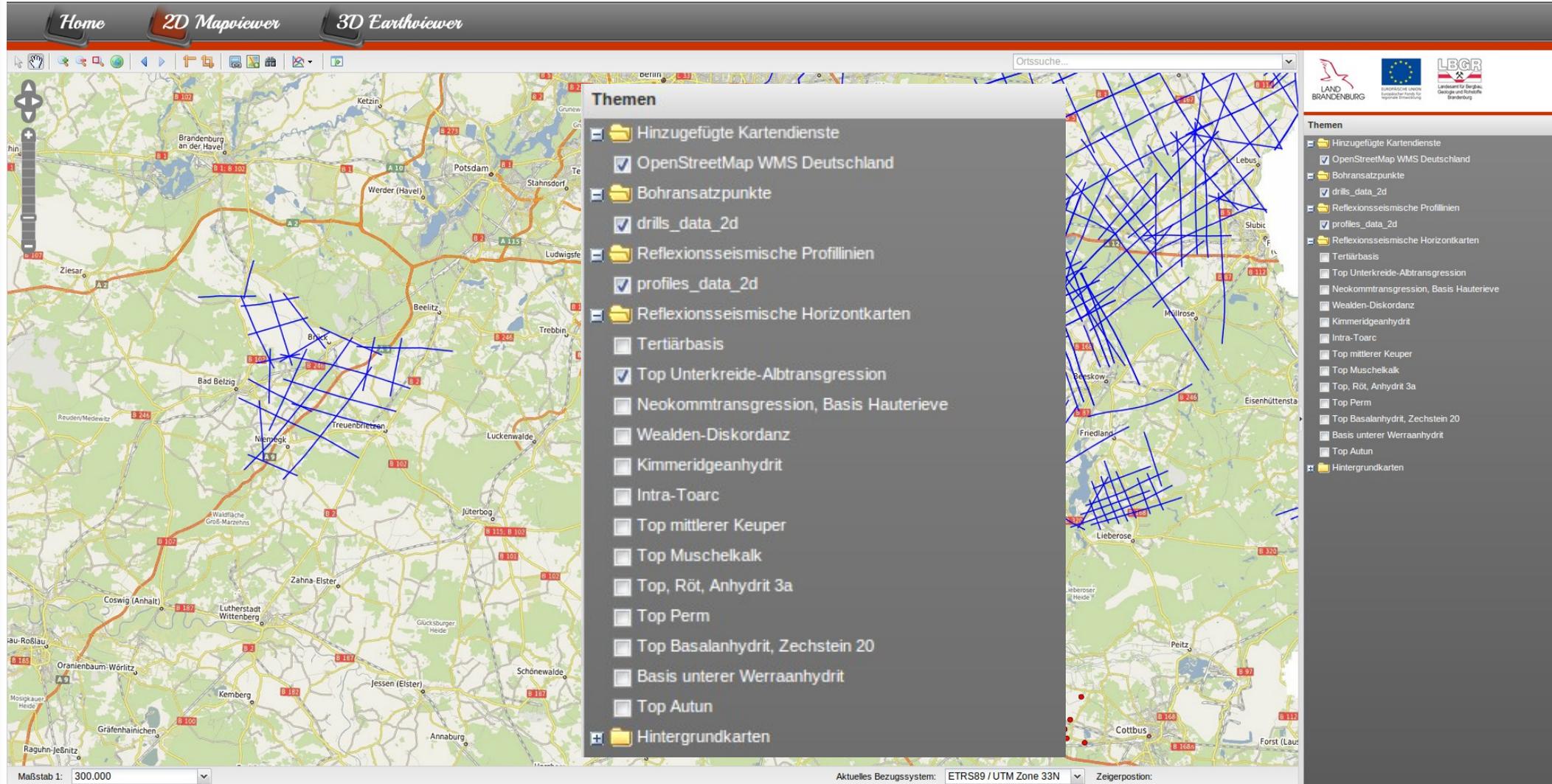
Hintergrunddaten OSM, Bohrersatzpunkte und Profillinien



The screenshot displays the 2D Mapviewer interface. At the top, there are navigation tabs for 'Home', '2D Mapviewer', and '3D Earthviewer'. Below the tabs is a search bar labeled 'Ortsuche...'. The main map area shows a geographical view of Brandenburg, Germany, with various towns and roads. Overlaid on the map are numerous blue lines representing profile lines and red dots representing borehole locations. The interface includes a scale bar at the bottom left (Maßstab 1: 300.000) and a coordinate system selector at the bottom right (Aktuelles Bezugssystem: ETRS89 / UTM Zone 33N, Zeigerposition: ...). On the right side, there is a 'Themen' (Layers) panel with a tree view of data layers:

- Hinzugefügte Kartendienste
 - OpenStreetMap WMS Deutschland
- Bohrersatzpunkte
 - drils_data_2d
- Reflexionsseismische Profillinien
 - profiles_data_2d
- Reflexionsseismische Horizontkarten
 - Tertiärbasis
 - Top Unterkreide-Albtransgression
 - Neokomtransgression, Basis Hauterive
 - Wealden-Diskordanz
 - Kimmeridgeanhydrit
 - Intra-Toarc
 - Top mittlerer Keuper
 - Top Muschelkalk
 - Top, Röt, Anhydrit 3a
 - Top Perm
 - Top Basalanhydrit, Zechstein 20
 - Basis unterer Werraanhydrit
 - Top Autun
- Hintergrundkarten

Hintergrunddaten OSM, Bohrersatzpunkte und Profillinien

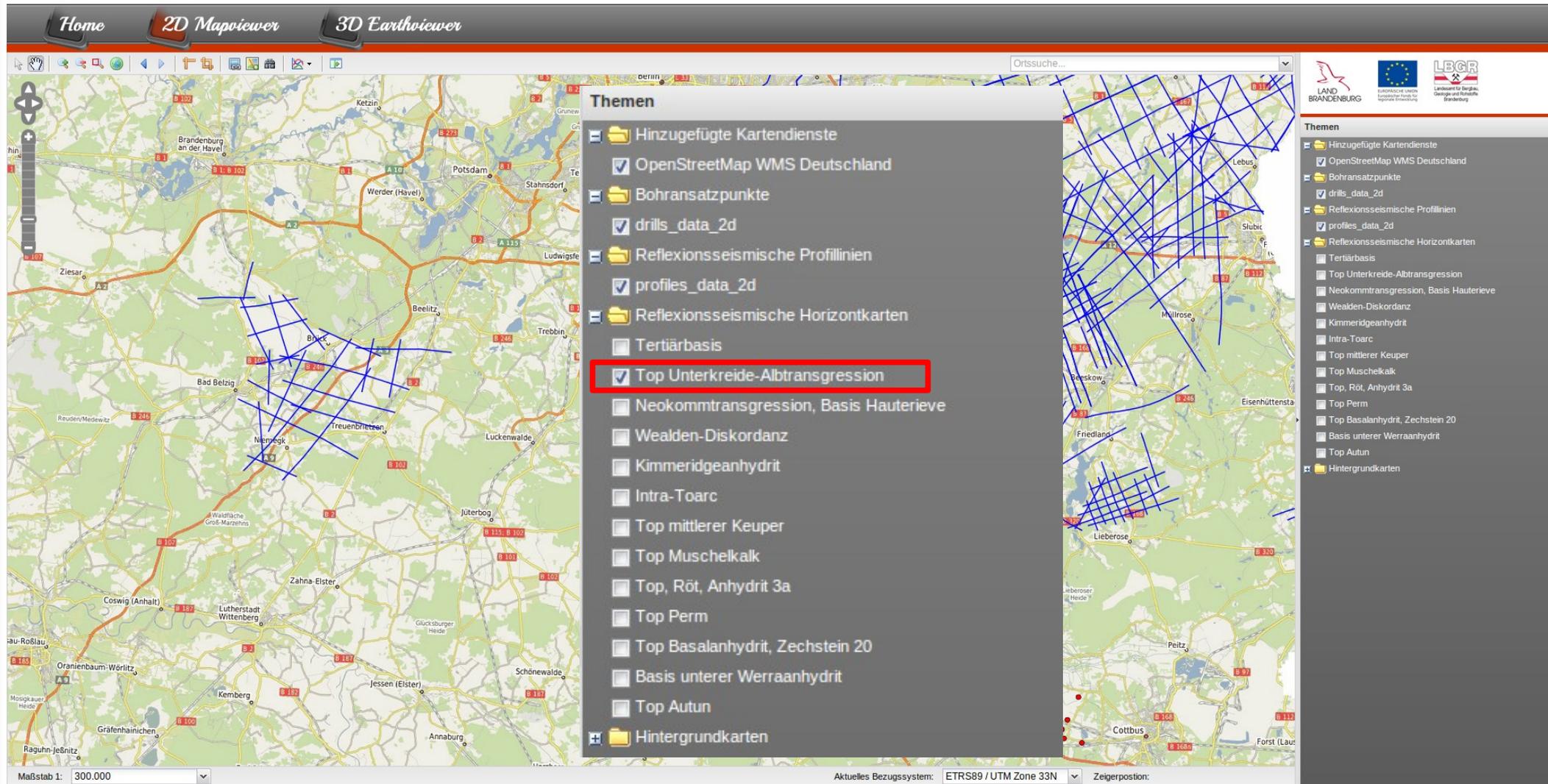


The screenshot displays the 2D Mapviewer interface. The top navigation bar includes 'Home', '2D Mapviewer', and '3D Earthviewer'. A search bar is located at the top right. The main map area shows a geographical view of Brandenburg, Germany, with various data layers overlaid. A central 'Themen' (Layers) panel lists the following layers:

- Hinzugefügte Kartendienste
 - OpenStreetMap WMS Deutschland
- Bohrersatzpunkte
 - drills_data_2d
- Reflexionsseismische Profillinien
 - profiles_data_2d
- Reflexionsseismische Horizontkarten
 - Tertiärbasis
 - Top Unterkreide-Albtransgression
 - Neokommtransgression, Basis Hauterieve
 - Wealden-Diskordanz
 - Kimmeridgeanhydrit
 - Intra-Toarc
 - Top mittlerer Keuper
 - Top Muschelkalk
 - Top, Röt, Anhydrit 3a
 - Top Perm
 - Top Basalanhydrit, Zechstein 20
 - Basis unterer Werraanhydrit
 - Top Autun
- Hintergrundkarten

The right side of the interface shows a secondary 'Themen' panel with the same layer list. The bottom status bar indicates the current reference system is ETRS89 / UTM Zone 33N and the pointer position is visible.

Hintergrunddaten OSM, Bohrersatzpunkte und Profillinien



The screenshot displays the 2D Mapviewer interface. The main map area shows a geographical region with various data layers overlaid, including a network of blue lines representing seismic profiles and drill points. The interface includes a navigation toolbar on the left, a search bar at the top right, and two panels for managing map themes.

Themen (Left Panel):

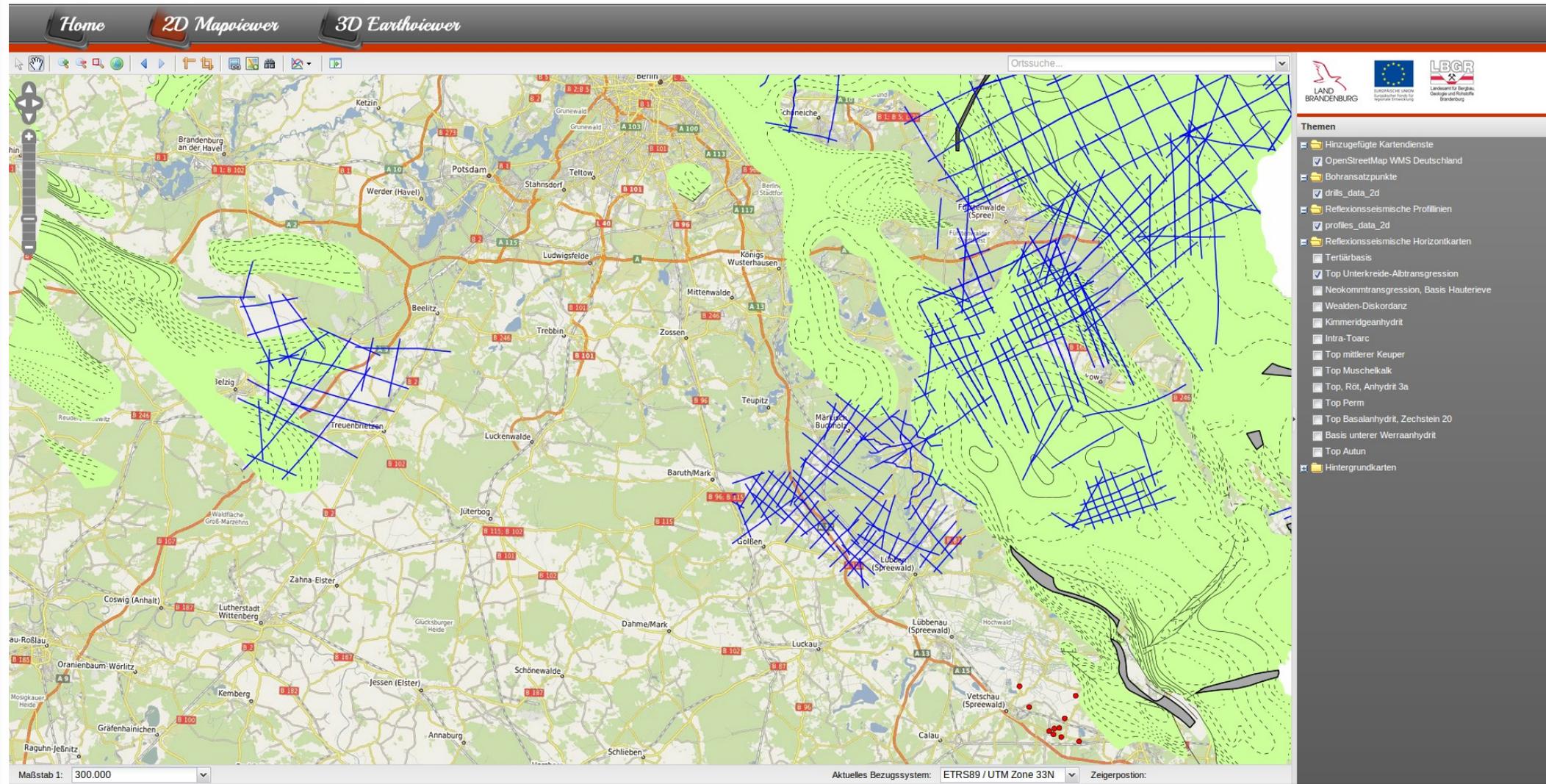
- Hinzugefügte Kartendienste
 - OpenStreetMap WMS Deutschland
- Bohrersatzpunkte
 - drills_data_2d
- Reflexionsseismische Profillinien
 - profiles_data_2d
- Reflexionsseismische Horizontkarten
 - Tertiärbasis
 - Top Unterkreide-Albtransgression
 - Neokommtransgression, Basis Hauterieve
 - Wealden-Diskordanz
 - Kimmeridgeanhydrit
 - Intra-Toarc
 - Top mittlerer Keuper
 - Top Muschelkalk
 - Top, Röt, Anhydrit 3a
 - Top Perm
 - Top Basalanhydrit, Zechstein 20
 - Basis unterer Werraanhydrit
 - Top Autun
- Hintergrundkarten

Themen (Right Panel):

- Hinzugefügte Kartendienste
 - OpenStreetMap WMS Deutschland
- Bohrersatzpunkte
 - drills_data_2d
- Reflexionsseismische Profillinien
 - profiles_data_2d
- Reflexionsseismische Horizontkarten
 - Tertiärbasis
 - Top Unterkreide-Albtransgression
 - Neokommtransgression, Basis Hauterieve
 - Wealden-Diskordanz
 - Kimmeridgeanhydrit
 - Intra-Toarc
 - Top mittlerer Keuper
 - Top Muschelkalk
 - Top, Röt, Anhydrit 3a
 - Top Perm
 - Top Basalanhydrit, Zechstein 20
 - Basis unterer Werraanhydrit
 - Top Autun
- Hintergrundkarten

At the bottom of the interface, the current reference system is set to ETRS89 / UTM Zone 33N and the pointer position is visible.

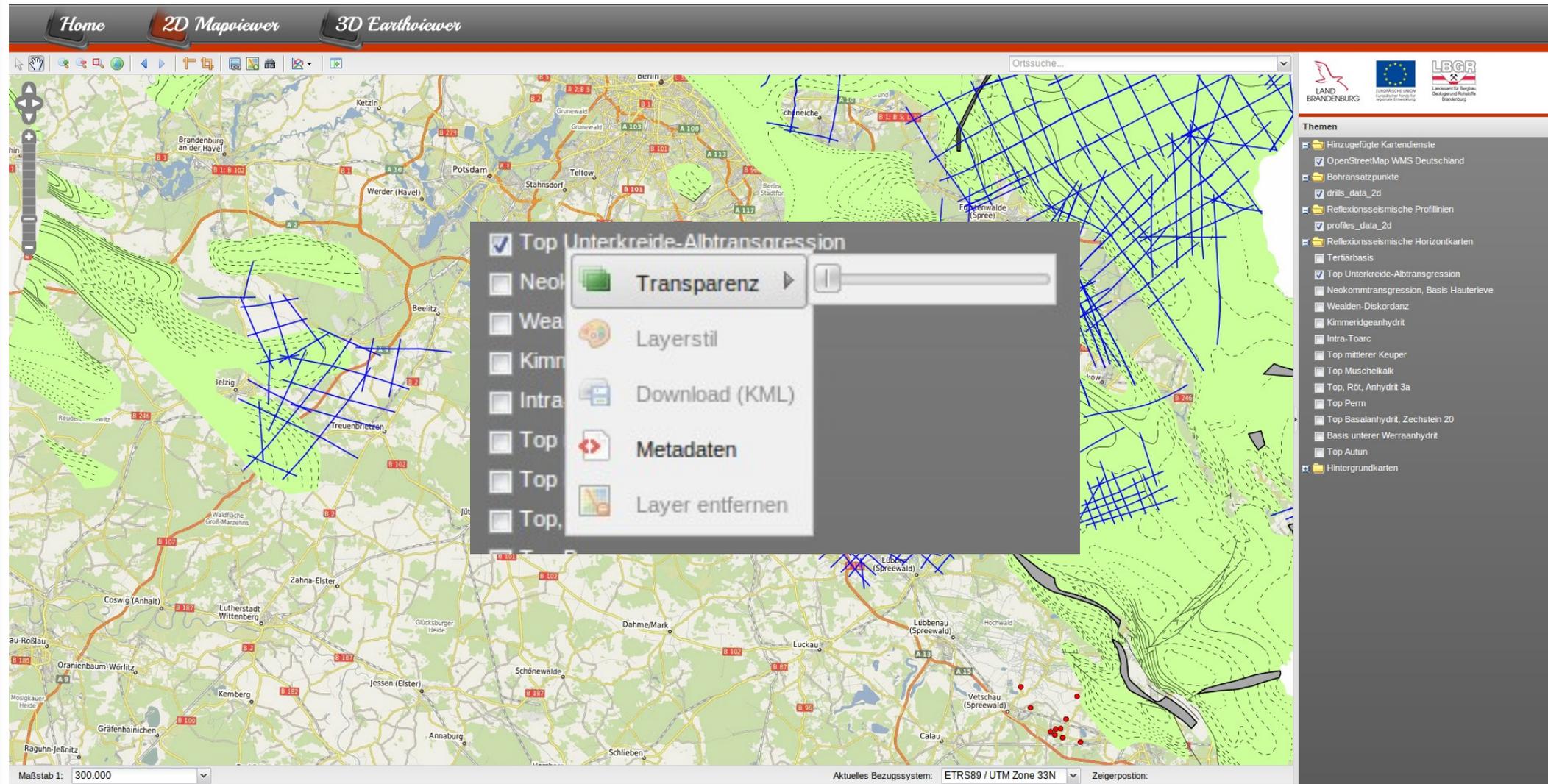
Hinzugeladene Informationsebene



The screenshot shows the 2D Mapviewer interface with the following elements:

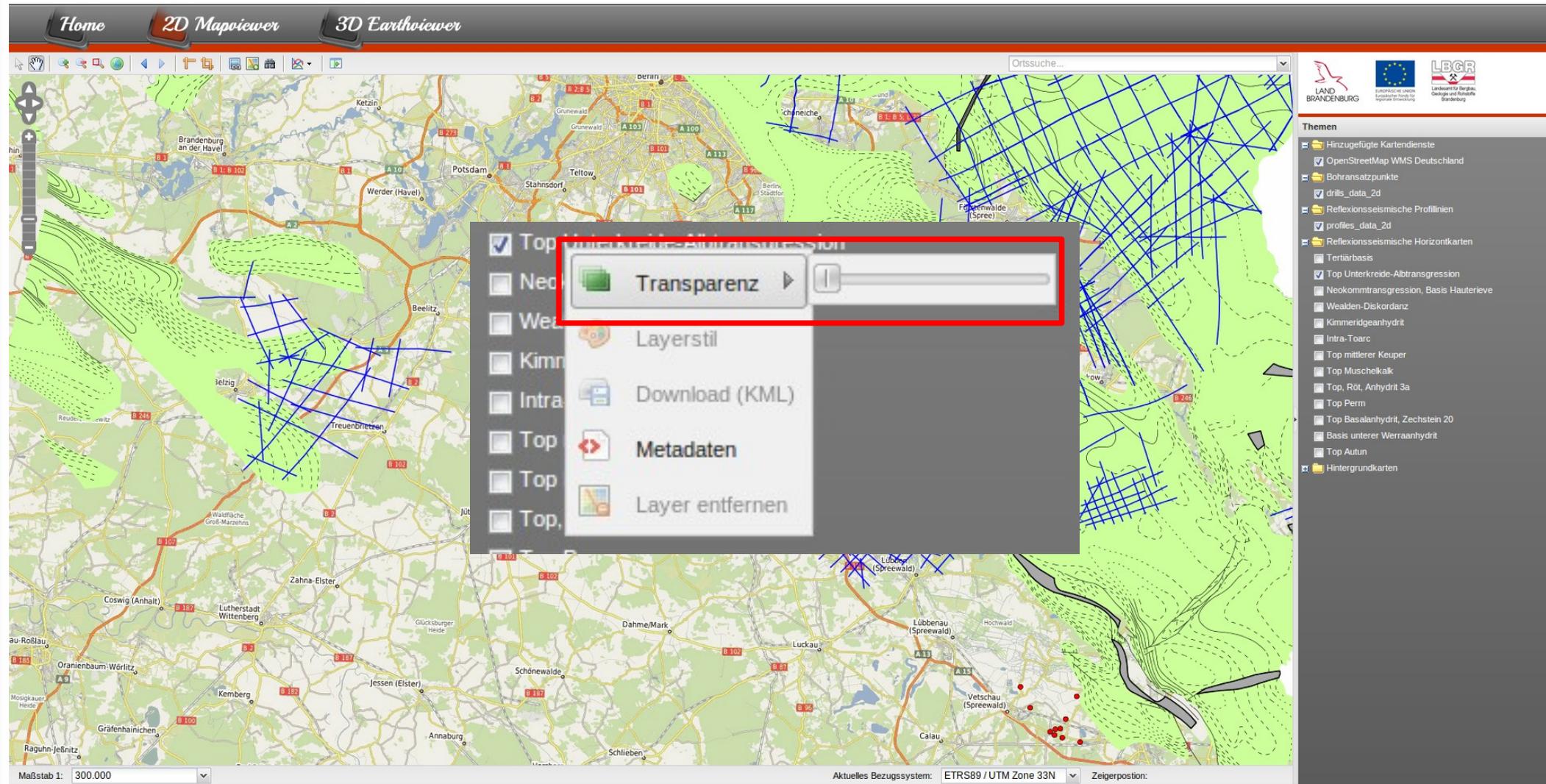
- Navigation:** Home, 2D Mapviewer, 3D Earthviewer tabs; a toolbar with navigation icons; a search bar labeled "Ortsuche..."; a scale bar at the bottom left showing "Maßstab 1: 300.000"; and a coordinate system dropdown at the bottom center showing "Aktuelles Bezugssystem: ETRS89 / UTM Zone 33N".
- Map Content:** A map of Brandenburg, Germany, with a network of blue lines representing geological profiles and green shaded areas representing geological horizons. Major cities like Potsdam, Teltow, Ludwigsfelde, and Mittenwalde are visible.
- Legend (Themen):**
 - Hinzugefügte Kartendienste
 - OpenStreetMap WMS Deutschland
 - Bohransatzpunkte
 - drills_data_2d
 - Reflexionsseismische Profillinien
 - profiles_data_2d
 - Reflexionsseismische Horizontkarten
 - Tertiärbasis
 - Top Unterkreide-Albtransgression
 - Neokomtransgression, Basis Hauterive
 - Wealden-Diskordanz
 - Kimmeridgeanhydrit
 - Intra-Toarc
 - Top mittlerer Keuper
 - Top Muschelkalk
 - Top, Rot, Anhydrit 3a
 - Top Perm
 - Top Basalanhydrit, Zechstein 20
 - Basis unterer Werraanhydrit
 - Top Autun
 - Hintergrundkarten

Transparenz der hinzugeladenen Informationsebene einstellbar



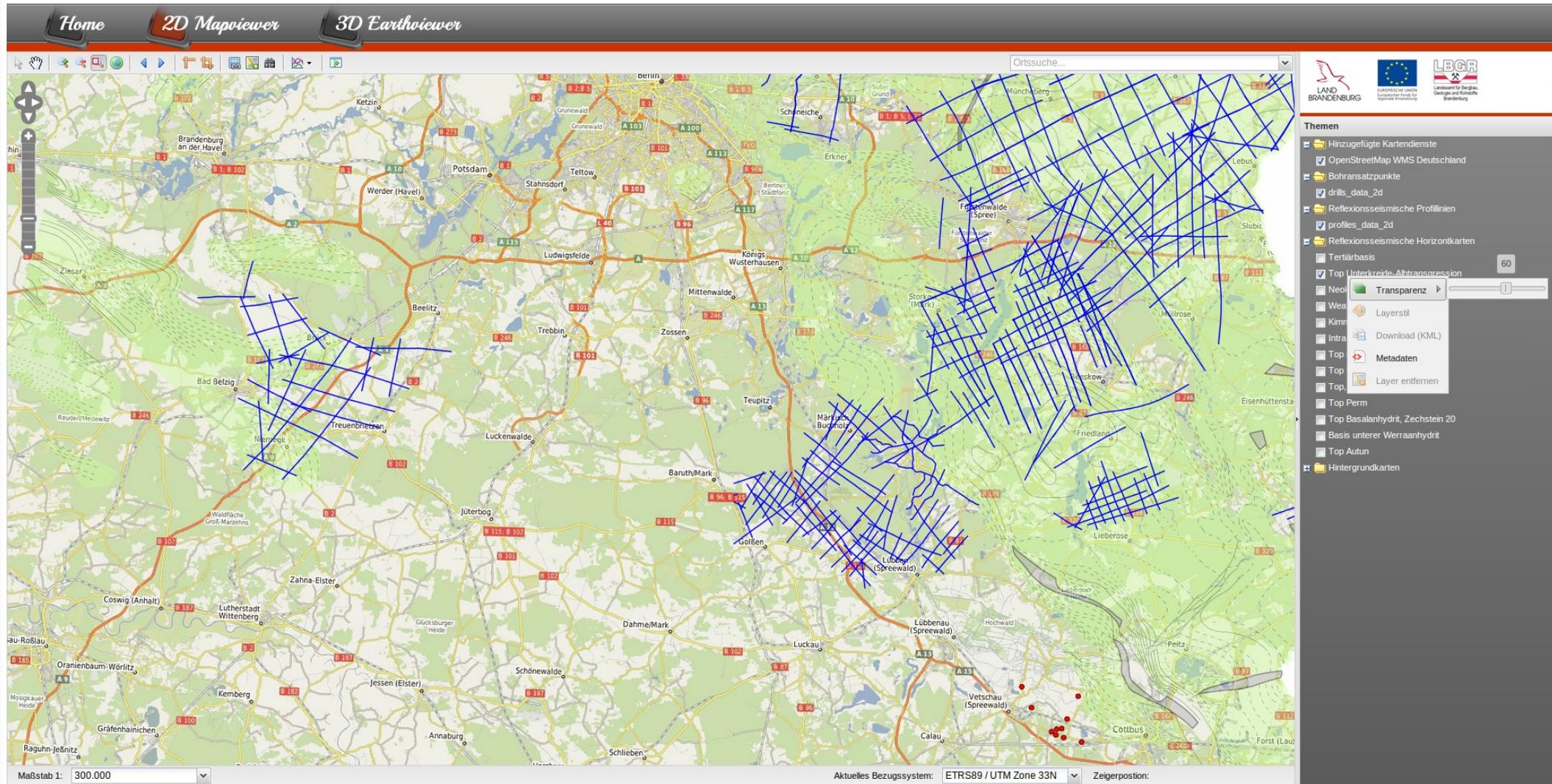
The screenshot displays the 2D Mapviewer interface. At the top, there are navigation tabs for 'Home', '2D Mapviewer', and '3D Earthviewer'. Below the tabs is a search bar labeled 'Ortsuche...'. The main map area shows a geological map of Brandenburg, Germany, with various colored layers and blue grid lines. A dialog box is open over the map, titled 'Top Unterkreide-Albtransgression'. The dialog has a 'Transparenz' (Transparency) slider set to approximately 50%. Other options in the dialog include 'Layerstil', 'Download (KML)', 'Metadaten', and 'Layer entfernen'. On the right side of the interface, there is a 'Themen' (Layers) panel with a list of layers, including 'OpenStreetMap WMS Deutschland', 'Bohransatzpunkte', 'drills_data_2d', 'Reflexionsseismische Profillinien', 'profiles_data_2d', 'Reflexionsseismische Horizontkarten', 'Tertiärbasis', 'Top Unterkreide-Albtransgression', 'Neokommitransgression, Basis Hauterieve', 'Wealden-Diskordanz', 'Kimmeridgeanhydrit', 'Intra-Toarc', 'Top mittlerer Keuper', 'Top Muschelkalk', 'Top, Rot, Anhydrit 3a', 'Top Perm', 'Top Basalanhydrit, Zechstein 20', 'Basis unterer Werraanhydrit', 'Top Autun', and 'Hintergrundkarten'. The bottom of the interface shows the scale 'Maßstab 1: 300.000', the current coordinate system 'Aktuelles Bezugssystem: ETRS89 / UTM Zone 33N', and the 'Zeigerposition' (Pointer position).

Transparenz der hinzugeladenen Informationsebene einstellbar



The screenshot displays the 2D Mapviewer interface. The main map area shows a geological map with various layers, including a prominent blue grid pattern. A context menu is open over the map, with the 'Transparenz' (Transparency) option highlighted by a red rectangle. The 'Transparenz' option includes a slider control. Other options in the menu include 'Layerstil', 'Download (KML)', 'Metadaten', and 'Layer entfernen'. The interface also features a search bar at the top right, a navigation toolbar on the left, and a list of layers on the right side. The bottom of the interface shows the scale (Maßstab 1: 300.000) and the current coordinate system (Aktuelles Bezugssystem: ETRS89 / UTM Zone 33N).

Transparenz der hinzugeladenen Informationsebene einstellbar



The screenshot displays the 2D Mapviewer interface. At the top, there are navigation tabs for "Home", "2D Mapviewer", and "3D Earthviewer". Below the tabs is a search bar labeled "Orssuche...". The main map area shows a topographic map of Brandenburg, Germany, with various towns and roads. Overlaid on the map are several blue lines representing geological data layers. On the right side, there is a "Themen" (Layers) panel with a list of layers and their visibility status. The "Transparenz" (Transparency) slider is set to 60. Below the map, there is a scale bar showing "Maßstab 1: 300.000" and a coordinate system selector showing "Aktuelles Bezugssystem: ETRS89 / UTM Zone 33N".

Home 2D Mapviewer 3D Earthviewer

Orssuche...

Themen

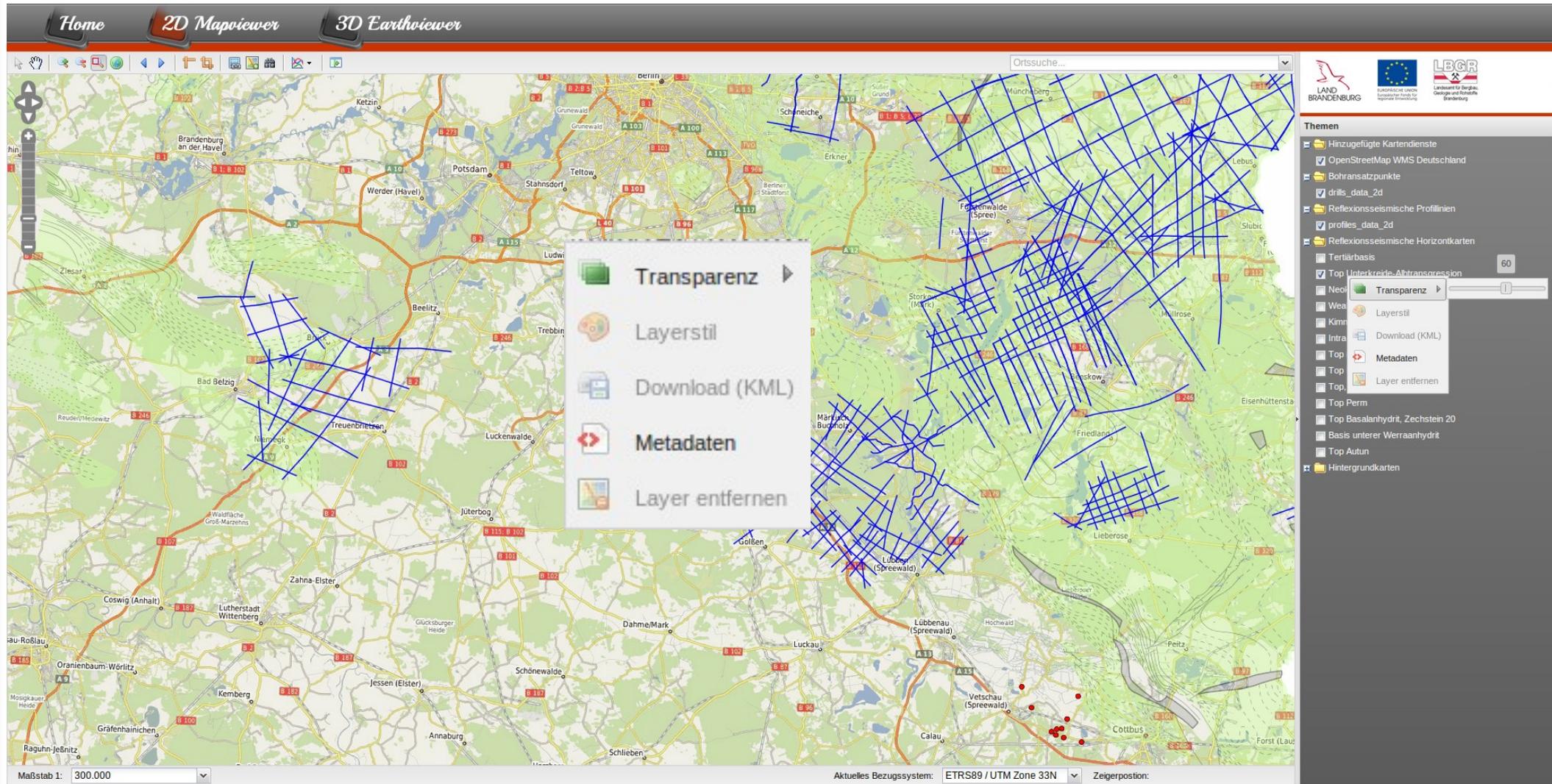
- Hinzugefügte Kartendienste
- OpenStreetMap WMS Deutschland
- Bohransatzpunkte
- drils_data_2d
- Reflexionsseismische Profilnlinien
- profiles_data_2d
- Reflexionsseismische Horizontkarten
- Tertiärbasis
- Top Unterkreide-Altranzpression 60
- Neol
- Wear
- Kmnr
- Intra
- Top
- Top
- Top
- Top Perm
- Top Basalanhydrit, Zechstein 20
- Basis unterer Werraanhydrit
- Top Autun
- Hintergrundkarten

Maßstab 1: 300.000

Aktuelles Bezugssystem: ETRS89 / UTM Zone 33N

Zeigerposition:

Metadaten der Informationsebene abrufen



Home 2D Mapviewer 3D Earthviewer

Orssuche

LAND BRANDENBURG Europäische Union Landesamt für Bergbau, Geologie und Rohstoffe Brandenburg

Themen

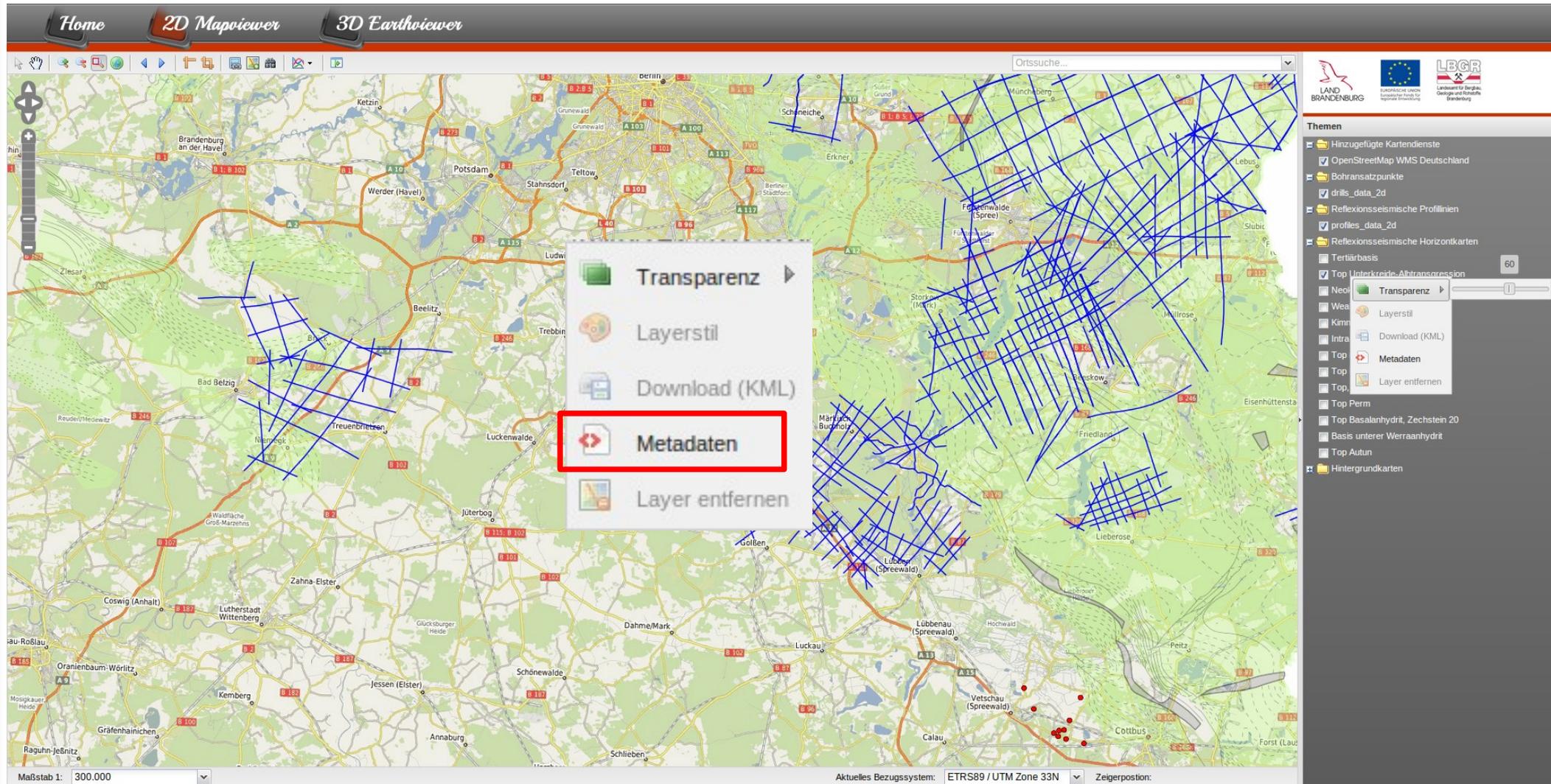
- Hinzugefügte Kartendienste
 - OpenStreetMap WMS Deutschland
 - Bohrersatzpunkte
 - drils_data_2d
- Reflexionsseismische Profilnenn
 - profiles_data_2d
- Reflexionsseismische Horizontkarten
 - Tertiärbasis
 - Top Unterkreide-Albtransgression 60
 - Neol
 - Wea
 - Kmr
 - Intra
 - Top
 - Top
 - Top
 - Top Perm
 - Top Basalanhidrit, Zechstein 20
 - Basis unterer Werraanhidrit
 - Top Autun
- Hintergrundkarten

Maßstab 1: 300.000

Aktuelles Bezugssystem: ETRS89 / UTM Zone 33N

Zeigerposition:

Metadaten der Informationsebene abrufen

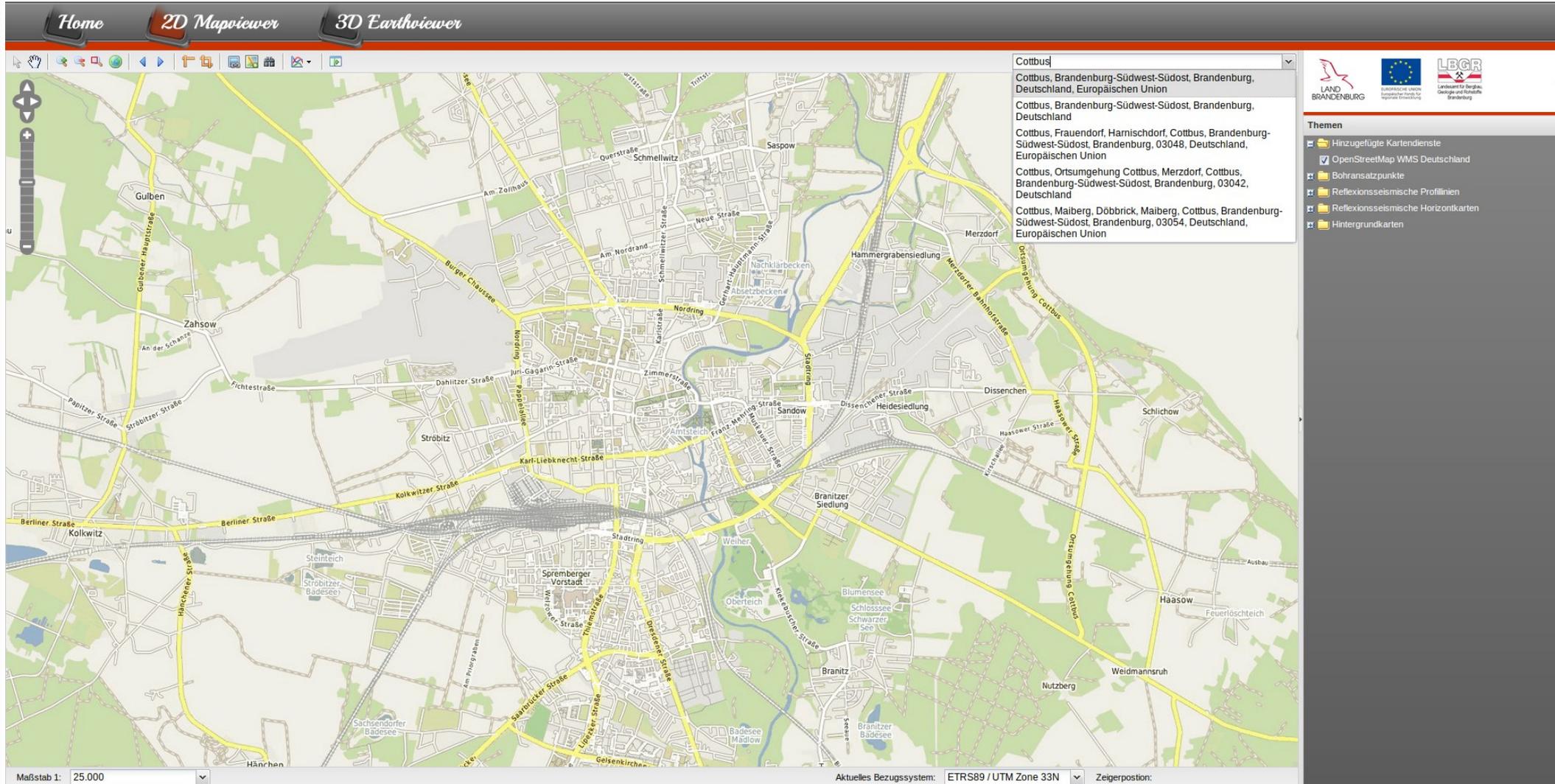


The screenshot displays the 2D Mapviewer interface. At the top, there are navigation tabs for 'Home', '2D Mapviewer', and '3D Earthviewer'. Below the tabs is a search bar labeled 'Ortsuche...'. The main map area shows a geographical view of Brandenburg, Germany, with a blue grid overlay representing seismic profiles. A context menu is open over the grid, listing options: 'Transparenz', 'Layerstil', 'Download (KML)', 'Metadaten' (highlighted with a red box), and 'Layer entfernen'. The right sidebar contains a 'Themen' panel with a list of layers. The 'Metadaten' layer is selected, and its properties are visible, including a 'Transparenz' slider set to 60. The bottom of the interface shows the scale (Maßstab 1: 300.000) and the current coordinate system (Aktuelles Bezugssystem: ETRS89 / UTM Zone 33N).

Metadaten im GetCapabilities Dokument

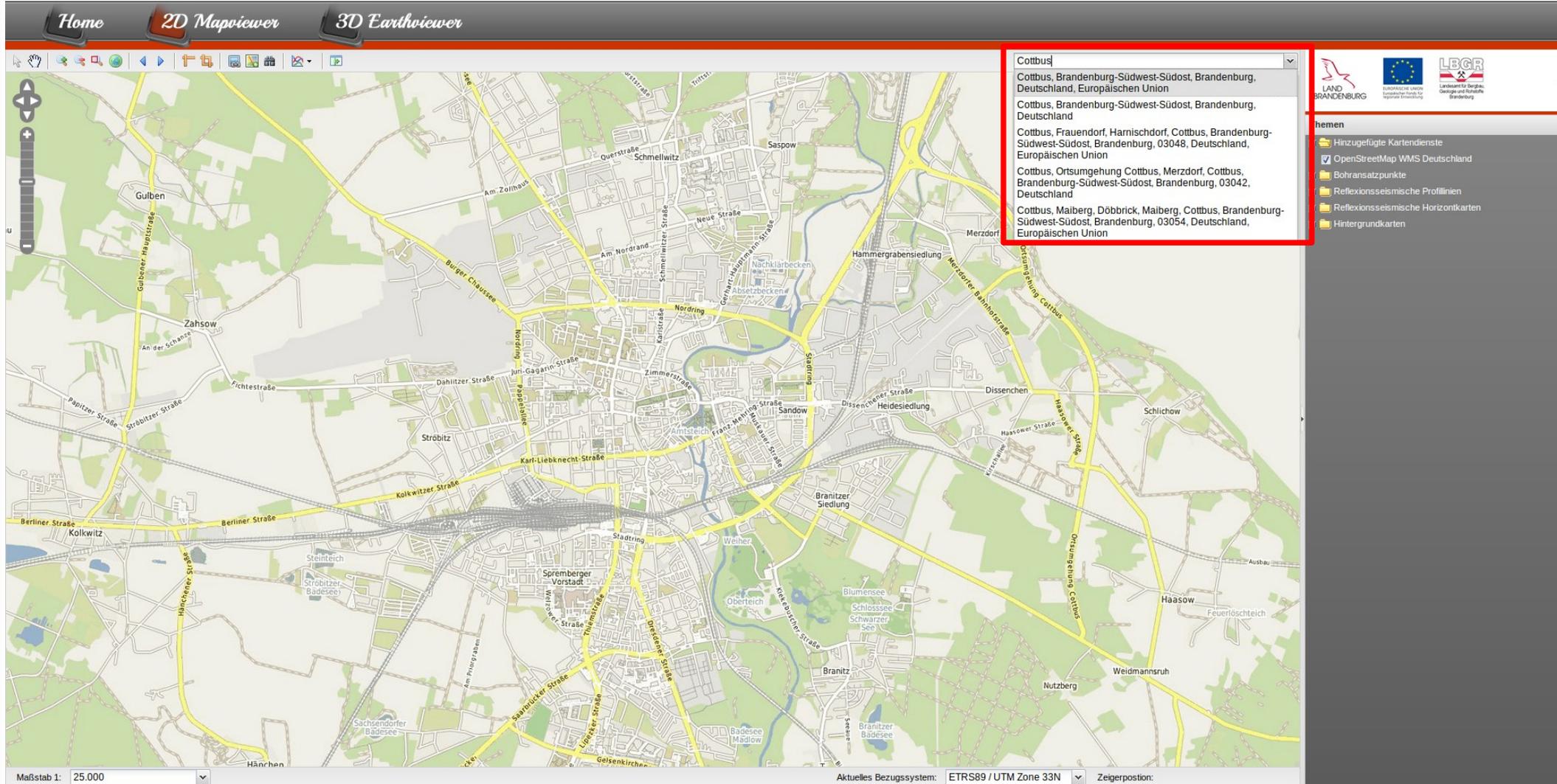
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<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE WMT_MS_Capabilities SYSTEM "http://b3d.intranet.terrestris.de/geoserver/schemas/wms/1.1.1/WMT_MS_Capabilities.dtd">
<WMT_MS_Capabilities version="1.1.1" updateSequence="861">
  <Service>
    <Name>OGC:WMS</Name>
    <Title>GeoServer Web Map Service</Title>
    <Abstract>A compliant implementation of WMS plus most of the SLD extension (dynamic styling). Can also generate PDF, SVG, KML, GeoRSS</Abstract>
    <KeywordList>
      <Keyword>WFS</Keyword>
      <Keyword>WMS</Keyword>
      <Keyword>GEOSERVER</Keyword>
    </KeywordList>
    <OnlineResource xmlns:xlink="http://www.w3.org/1999/xlink" xlink:type="simple" xlink:href="http://geoserver.sourceforge.net/html/index.php"/>
    <ContactInformation>
      <ContactPersonPrimary>
        <ContactPerson>Dipl.-Geol. Andreas Simon</ContactPerson>
        <ContactOrganization>Landesamt für Bergbau, Geologie und Rohstoffe Brandenburg</ContactOrganization>
      </ContactPersonPrimary>
      <ContactPosition>Dezernat Tiefengeologie und Bohrkernlager</ContactPosition>
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        <PostCode/>
        <Country>Deutschland</Country>
      </ContactAddress>
      <ContactVoiceTelephone/>
      <ContactFacsimileTelephone/>
      <ContactElectronicMailAddress>Andreas.Simon@lbgr.brandenburg.de</ContactElectronicMailAddress>
    </ContactInformation>
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    <AccessConstraints>NONE</AccessConstraints>
  </Service>
  <Capability>
    <Request>
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            </Get>
            <Post>
              <OnlineResource xmlns:xlink="http://www.w3.org/1999/xlink" xlink:type="simple" xlink:href="http://b3d.intranet.terrestris.de/geoserver/brandenburg3d/wms?SERVICE=WMS&"/>
            </Post>
          </HTTP>
        </DCPType>
      </GetCapabilities>
    </Request>
  </Capability>
  <GetMap>|
```

Ortssuche



The screenshot displays the 2D Mapviewer interface. At the top, there are navigation tabs for 'Home', '2D Mapviewer', and '3D Earthviewer'. The main map area shows a detailed street map of Cottbus, Germany, with various districts and landmarks labeled. A search bar at the top right contains the text 'Cottbus'. Below the search bar, a list of search results is displayed, including 'Cottbus, Brandenburg-Südwest-Südost, Brandenburg, Deutschland, Europäischen Union' and 'Cottbus, Ortsumgehung Cottbus, Merzdorf, Cottbus, Brandenburg-Südwest-Südost, Brandenburg, 03042, Deutschland'. The interface also features a sidebar on the right with a 'Themen' section containing a list of map layers such as 'Hinzugefügte Kartendienste', 'OpenStreetMap WMS Deutschland', and 'Bohransatzpunkte'. At the bottom, there are controls for the map scale (Maßstab 1: 25.000), the current coordinate system (Aktuelles Bezugssystem: ETRS89 / UTM Zone 33N), and the current location (Zeigerposition).

Ortssuche



The screenshot displays the 2D Mapviewer interface. At the top, there are navigation tabs for 'Home', '2D Mapviewer', and '3D Earthviewer'. The main map area shows a detailed street map of Cottbus, Germany, with various districts and landmarks labeled. A search results popup is visible in the upper right corner, listing search results for 'Cottbus'. The popup contains the following text:

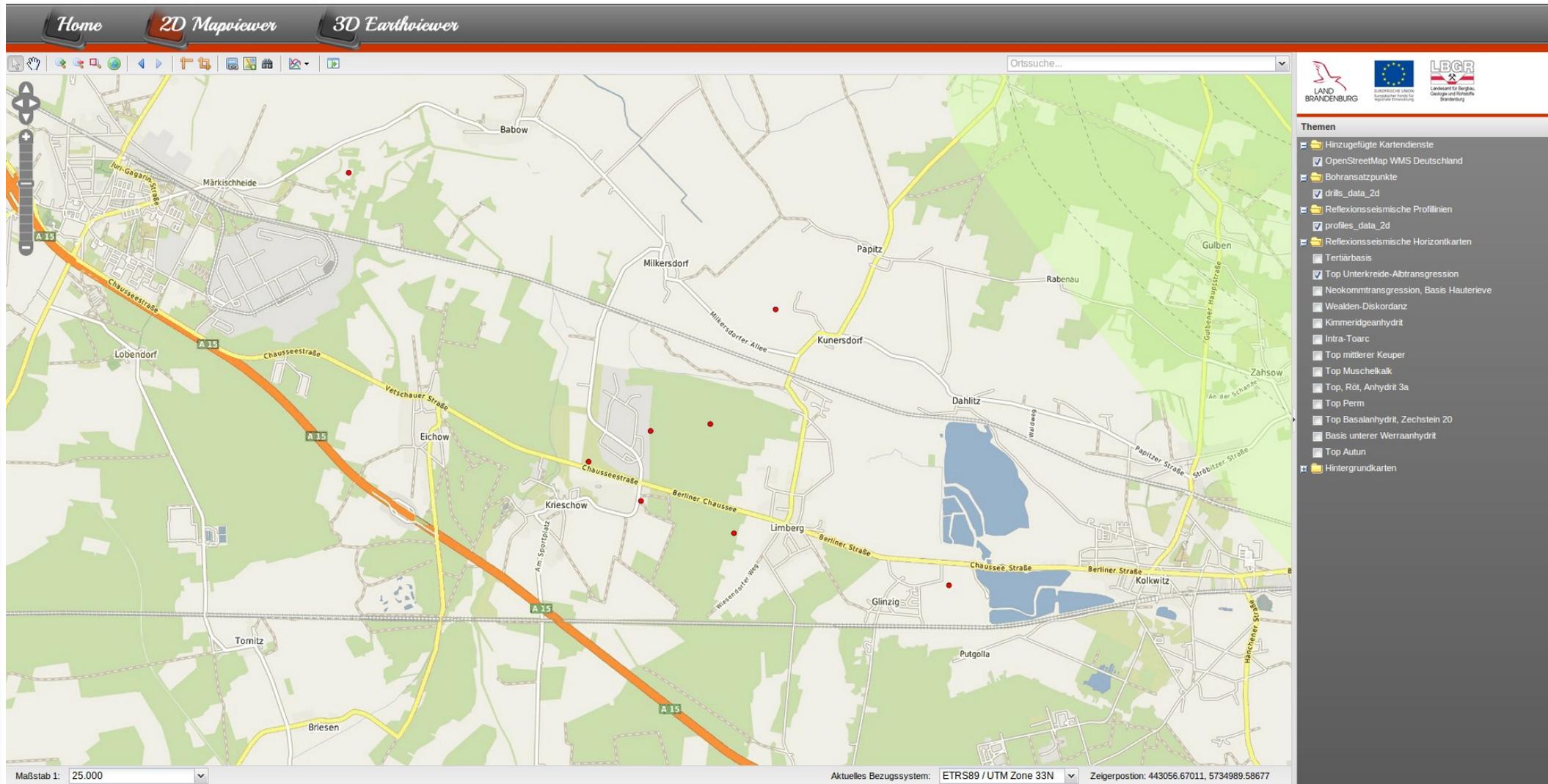
- Cottbus|
- Cottbus, Brandenburg-Südwest-Südost, Brandenburg, Deutschland, Europäischen Union
- Cottbus, Brandenburg-Südwest-Südost, Brandenburg, Deutschland
- Cottbus, Frauendorf, Harnischdorf, Cottbus, Brandenburg-Südwest-Südost, Brandenburg, 03048, Deutschland, Europäischen Union
- Cottbus, Ortsumgehung Cottbus, Merzdorf, Cottbus, Brandenburg-Südwest-Südost, Brandenburg, 03042, Deutschland
- Cottbus, Maiberg, Döbbrick, Maiberg, Cottbus, Brandenburg-Südwest-Südost, Brandenburg, 03054, Deutschland, Europäischen Union

Below the map, there is a scale bar (Maßstab 1: 25.000) and a coordinate system selector (Aktuelles Bezugssystem: ETRS89 / UTM Zone 33N). The bottom right corner shows the 'Zeigerposition' (pointer position).

On the right side of the interface, there are logos for 'LAND BRANDENBURG', the 'Europäische Union' (European Union), and 'LBGR' (Landamt für Bergbau, Geologie und Rohstoffe Brandenburg). Below these logos is a section titled 'themen' (themes) with a list of map layers:

- Hinzugefügte Kartendienste
- OpenStreetMap WMS Deutschland
- Bohransatzpunkte
- Reflexionsseismische Profilinien
- Reflexionsseismische Horizontkarten
- Hintergrundkarten

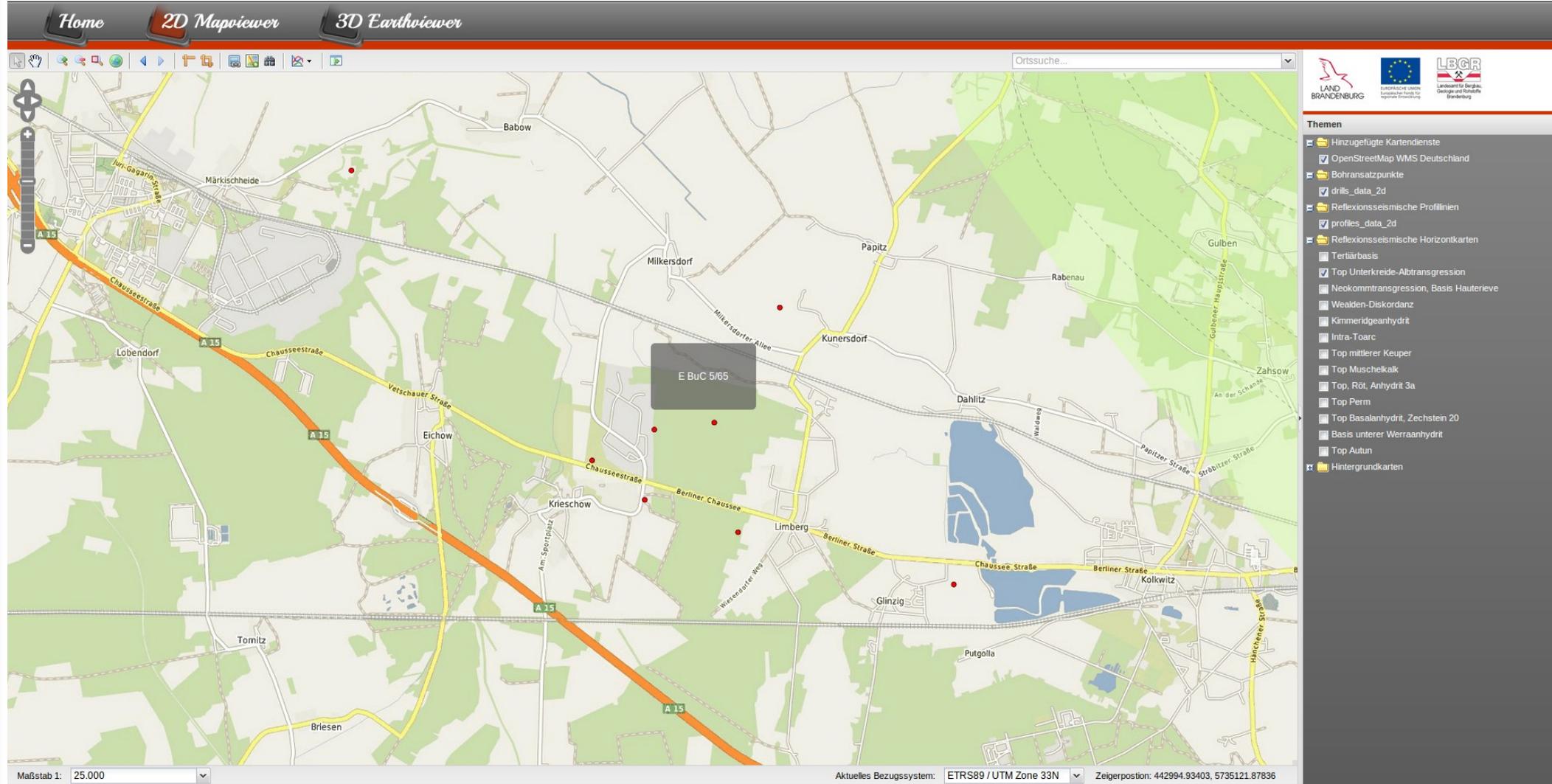
Bohransatzpunkte anzeigen



The screenshot displays the 2D Mapviewer interface. At the top, there are navigation tabs for 'Home', '2D Mapviewer', and '3D Earthviewer'. Below the tabs is a search bar labeled 'Ortssuche...'. The main map area shows a geographical view of the Krieschow region, with several red dots indicating borehole locations. The map includes labels for various locations such as Babow, Märkischeide, Lobendorf, Eichow, Krieschow, Limberg, Glinzig, Putgolla, Kolkwitz, Papitz, Milkersdorf, and Dahlitz. A scale bar at the bottom left indicates a scale of 1:25,000. The bottom right corner shows the current coordinate system as ETRS89 / UTM Zone 33N and the coordinates 443056.67011, 5734989.58677. On the right side, there is a legend titled 'Themen' with a list of layers and their visibility status.

- Hinzugefügte Kartendienste
 - OpenStreetMap WMS Deutschland
- Bohransatzpunkte
 - drills_data_2d
- Reflexionsseismische Profillinien
 - profiles_data_2d
- Reflexionsseismische Horizontkarten
 - Tertiärbasis
 - Top Unterkreide-Albtransgression
 - Neokommtansgression, Basis Hauterive
 - Wealden-Diskordanz
 - Kimmeridgeanhydrit
 - Intra-Toarc
 - Top mittlerer Keuper
 - Top Muschelkalk
 - Top, Rot, Anhydrit 3a
 - Top Perm
 - Top Basalanhydrit, Zechstein 20
 - Basis unterer Werraanhydrit
 - Top Autun
- Hintergrundkarten

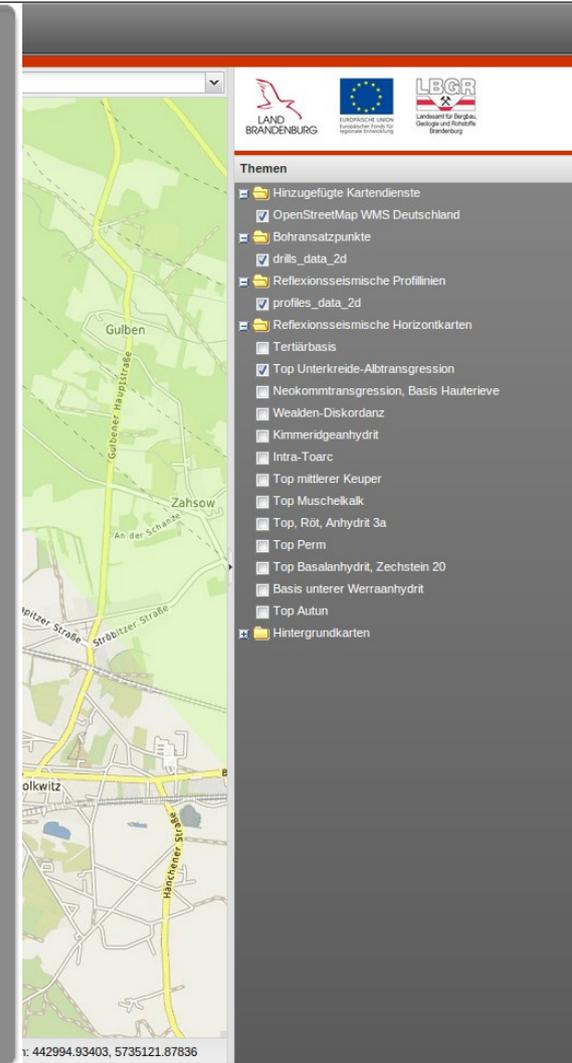
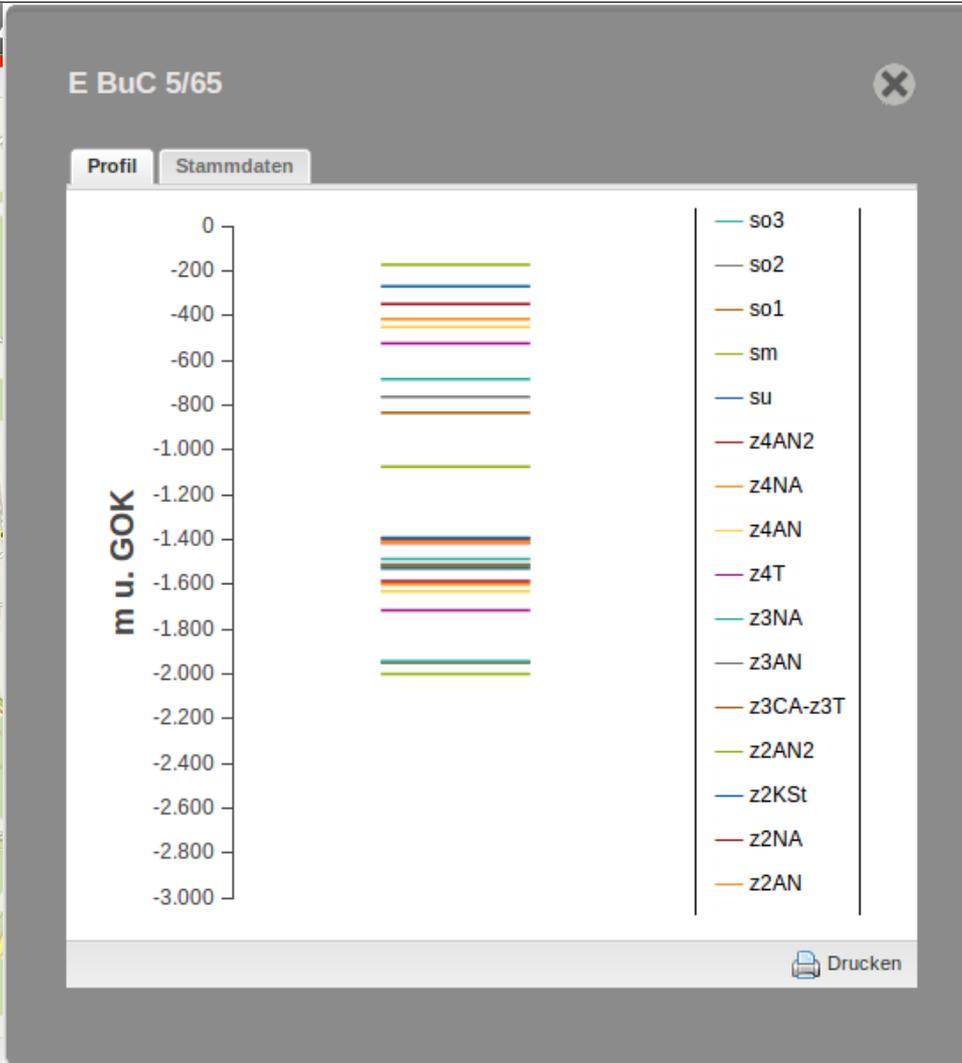
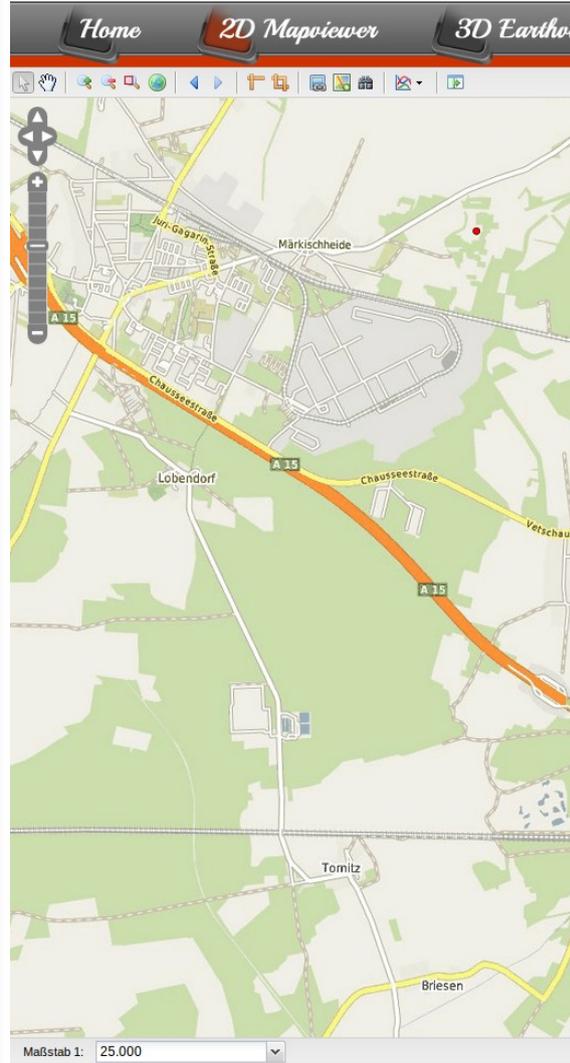
Kurzinfo zu Bohrersatzpunkten anzeigen



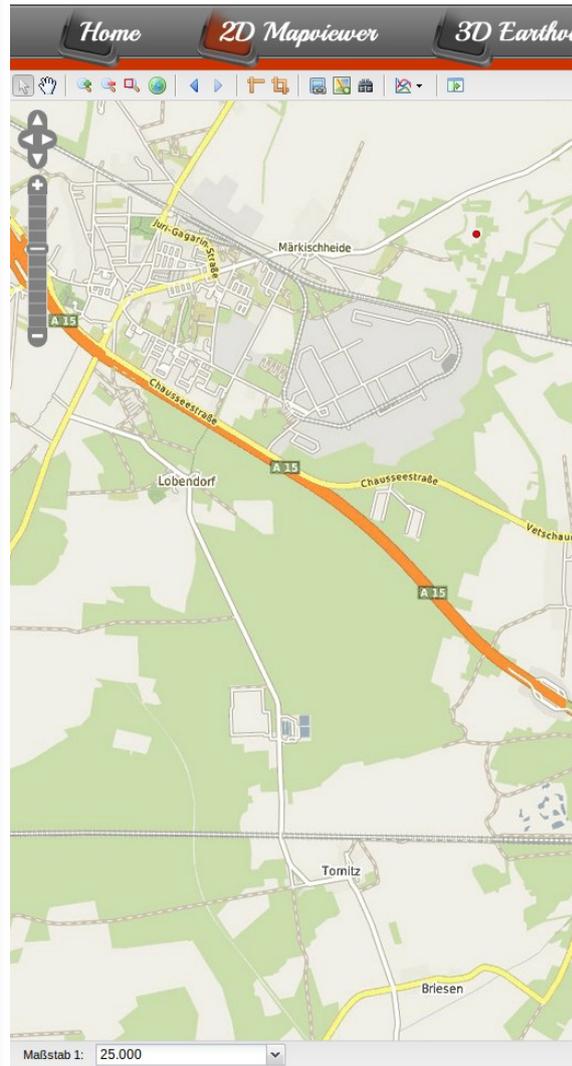
The screenshot displays the 2D Mapviewer interface. At the top, there are navigation tabs for 'Home', '2D Mapviewer', and '3D Earthviewer'. Below the tabs is a search bar labeled 'Ortsuche...'. The main map area shows a geographical region with various towns and roads. A specific location is highlighted with a grey box labeled 'E BuC 5/65'. The map includes a scale bar at the bottom left (Maßstab 1: 25.000) and a coordinate system indicator at the bottom right (Aktuelles Bezugssystem: ETRS89 / UTM Zone 33N, Zeigerpostion: 442994.93403, 5735121.87836). On the right side, there is a 'Themen' (Layers) panel with a list of data layers and their visibility status:

- Hinzugefügte Kartendienste
 - OpenStreetMap WMS Deutschland
- Bohrersatzpunkte
 - drills_data_2d
- Reflexionsseismische Profilnien
 - profiles_data_2d
- Reflexionsseismische Horizontkarten
 - Tertiärbasis
 - Top Unterkreide-Albransgression
 - Neokommtansgression, Basis Hauterieve
 - Wealden-Diskordanz
 - Kimmeridgeanhydrit
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 - Top mittlerer Keuper
 - Top Muschelkalk
 - Top, Röt, Anhydrit 3a
 - Top Perm
 - Top Basalanhydrit, Zechstein 20
 - Basis unterer Werraanhydrit
 - Top Autun
- Hintergrundkarten

Darstellung der Bohrprofile



Darstellung der Stammdaten der Bohrprofile



E BuC 5/65

Profil | **Stammdaten**

Name	Wert
Longname	E BuC 5/65
Shortname	E BuC 5/65
Schichtdaten	ja
X-Koordinate	443037.7262
Y-Koordinate	5735104.8465
Koordinatenreferenzsystem	EPSG:25833
Geländeoberkante (m ü. NN)	66.8
Höhensystem	NN
Endteufe	2000.7
Kodierungsschlüssel	SEP3
Kontaktdaten des Ansprechpartners	LBGR Brandenburg Inselstraße 26 03046 Cottbus Dezernat 14 Andreas Simon Andreas.Simon@lbgrr.brandenburg.de

Drucken

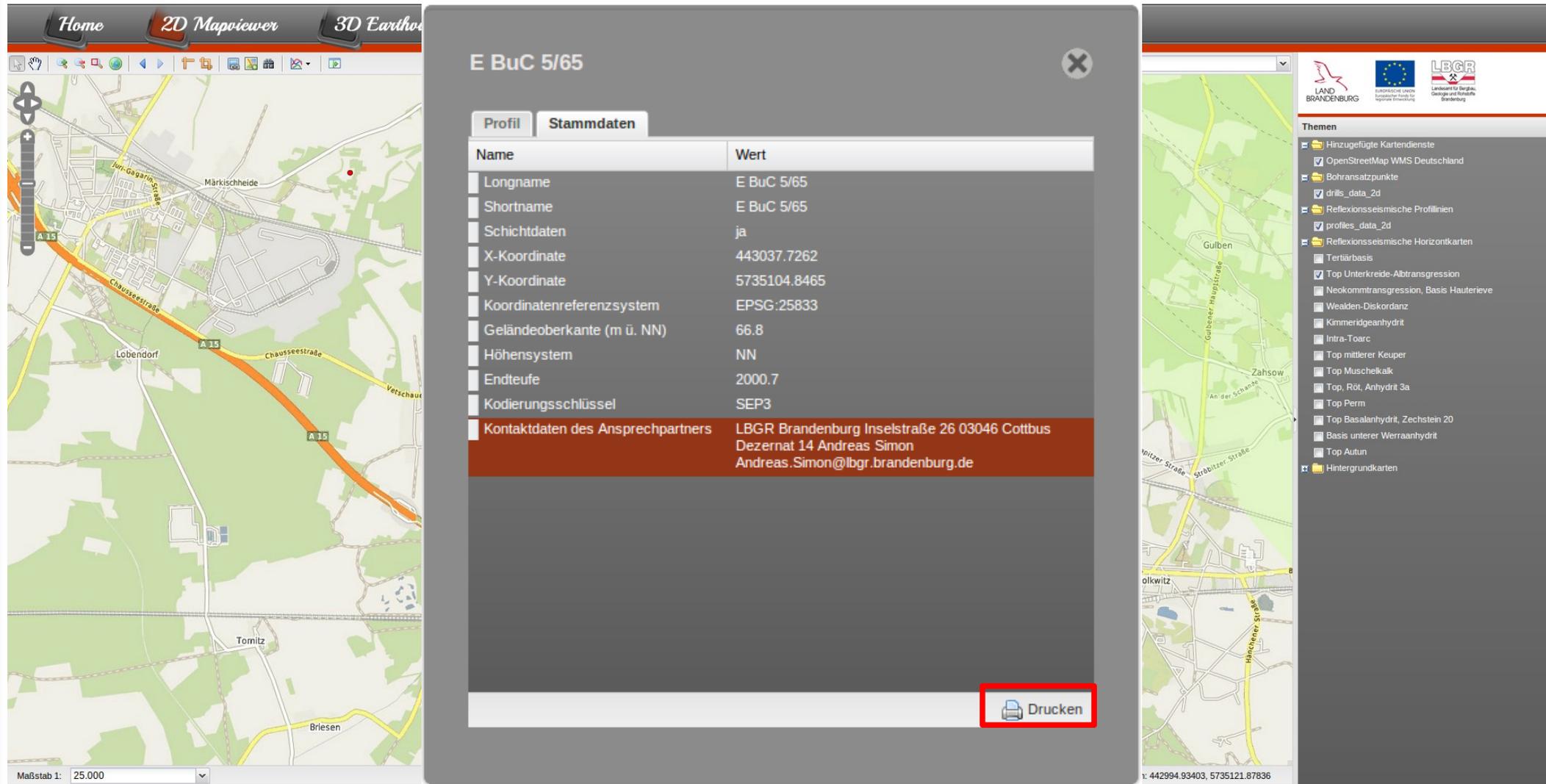
LAND BRANDENBURG | EUROPÄISCHE UNION | LBGR

Themen

- Hinzugefügte Kartendienste
 - OpenStreetMap WMS Deutschland
- Bohransatzpunkte
 - drills_data_2d
- Reflexionsseismische Profillinien
 - profiles_data_2d
- Reflexionsseismische Horizontkarten
 - Tertiärbasis
 - Top Unterkreide-Albransgression
 - Neokommtansgression, Basis Hauterieve
 - Wealden-Diskordanz
 - Kimmeridgeanhydrit
 - Intra-Toarc
 - Top mittlerer Keuper
 - Top Muschelkalk
 - Top, Rot, Anhydrit 3a
 - Top Perm
 - Top Basalanhydrit, Zechstein 20
 - Basis unterer Werraanhydrit
 - Top Autun
- Hintergrundkarten

Maßstab: 1:442994.93403, 5735121.87836

Darstellung der Stammdaten der Bohrprofile



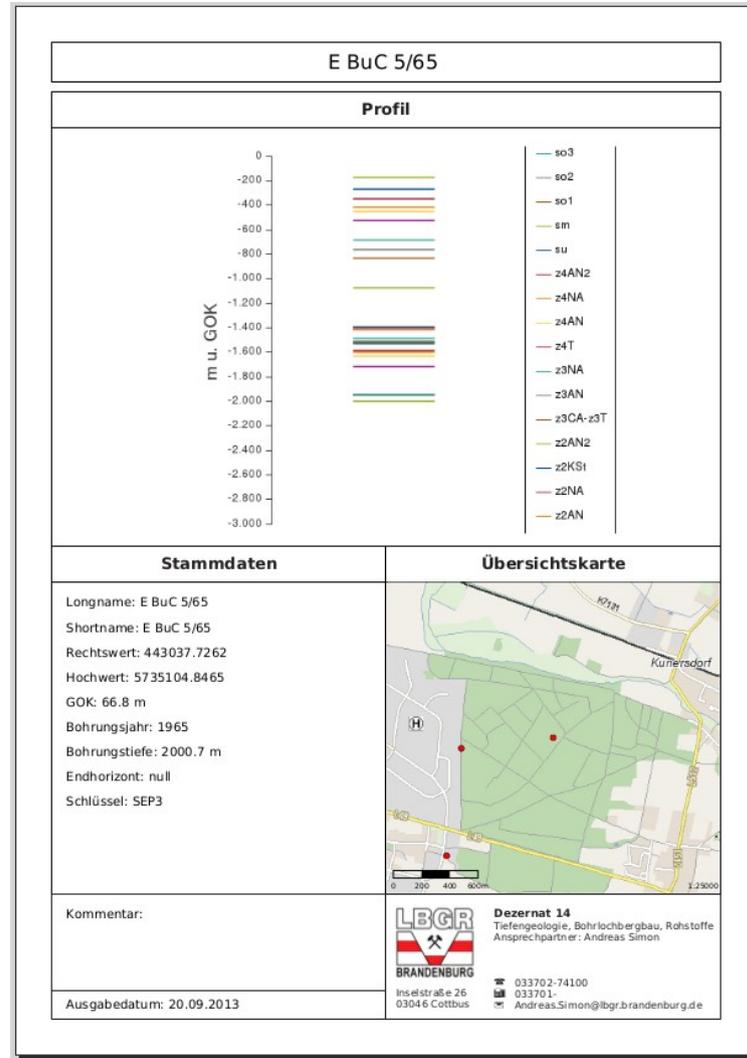
The screenshot displays the 2D Mapviewer interface. On the left, a map shows the location of the borehole profile 'E BuC 5/65' near Märkischeheide. The central popup window displays the following data:

Name	Wert
Longname	E BuC 5/65
Shortname	E BuC 5/65
Schichtdaten	ja
X-Koordinate	443037.7262
Y-Koordinate	5735104.8465
Koordinatenreferenzsystem	EPSG:25833
Geländeoberkante (m ü. NN)	66.8
Höhensystem	NN
Endteufe	2000.7
Kodierungsschlüssel	SEP3
Kontaktdaten des Ansprechpartners	LBGR Brandenburg Inselstraße 26 03046 Cottbus Dezernat 14 Andreas Simon Andreas.Simon@lbgrr.brandenburg.de

At the bottom right of the popup, there is a red-bordered button labeled 'Drucken' (Print).

On the right side of the interface, a legend titled 'Themen' lists various data layers, including 'OpenStreetMap WMS Deutschland', 'Bohransatzpunkte', 'drills_data_2d', 'Reflexionsseismische Profillinien', 'profiles_data_2d', 'Reflexionsseismische Horizontkarten', 'Tertiärbasis', 'Top Unterkreide-Albransgression', 'Neokommtansgression, Basis Hauterieve', 'Wealden-Diskordanz', 'Kimmeridgeanhydrit', 'Intra-Toarc', 'Top mittlerer Keuper', 'Top Muschelkalk', 'Top, Rot, Anhydrit 3a', 'Top Perm', 'Top Basalanhydrit, Zechstein 20', 'Basis unterer Werraanhydrit', 'Top Autun', and 'Hintergrundkarten'. The map scale is 1:25,000.

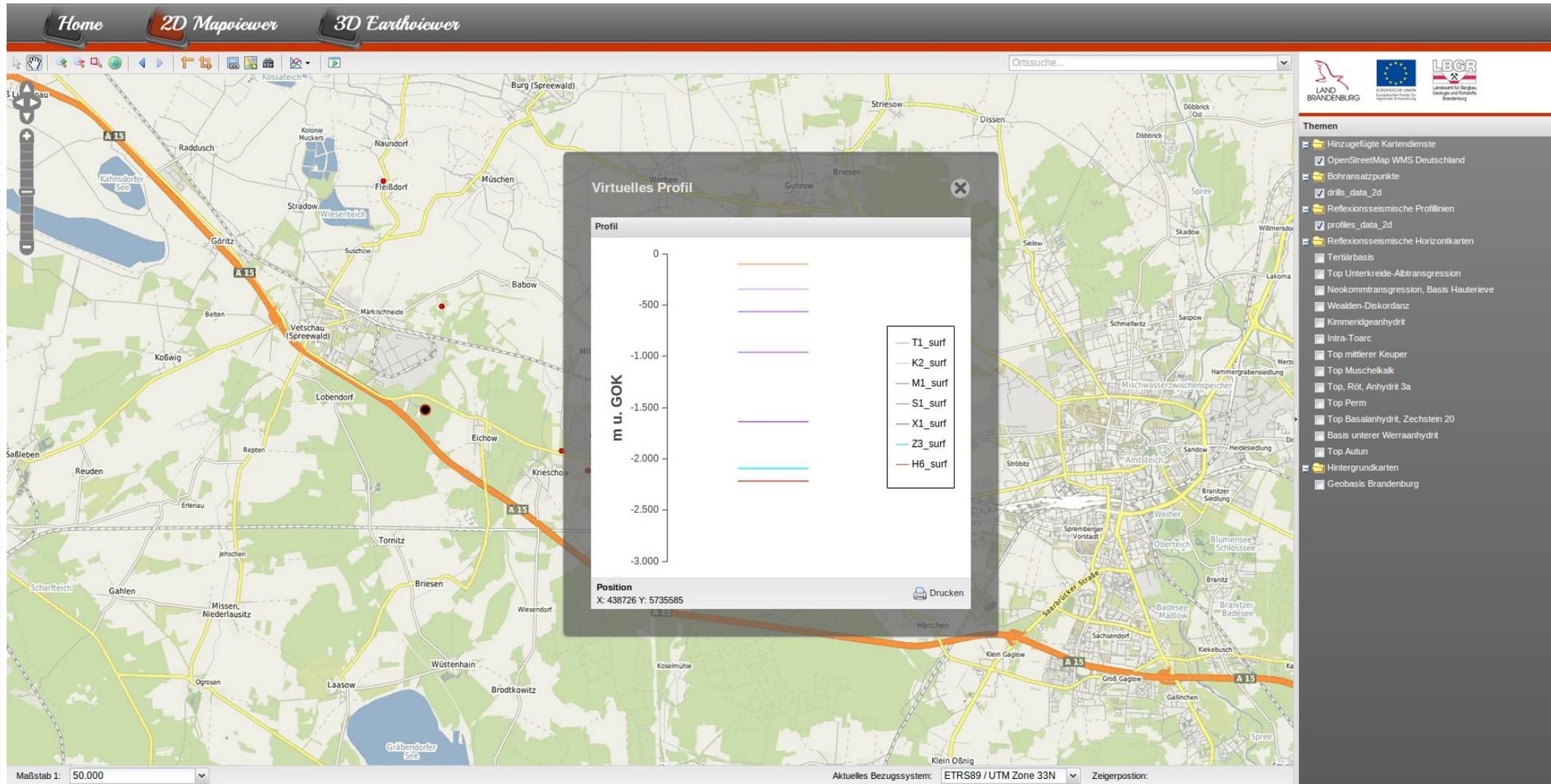
Bohrprofil drucken



Soweit, so langweilig

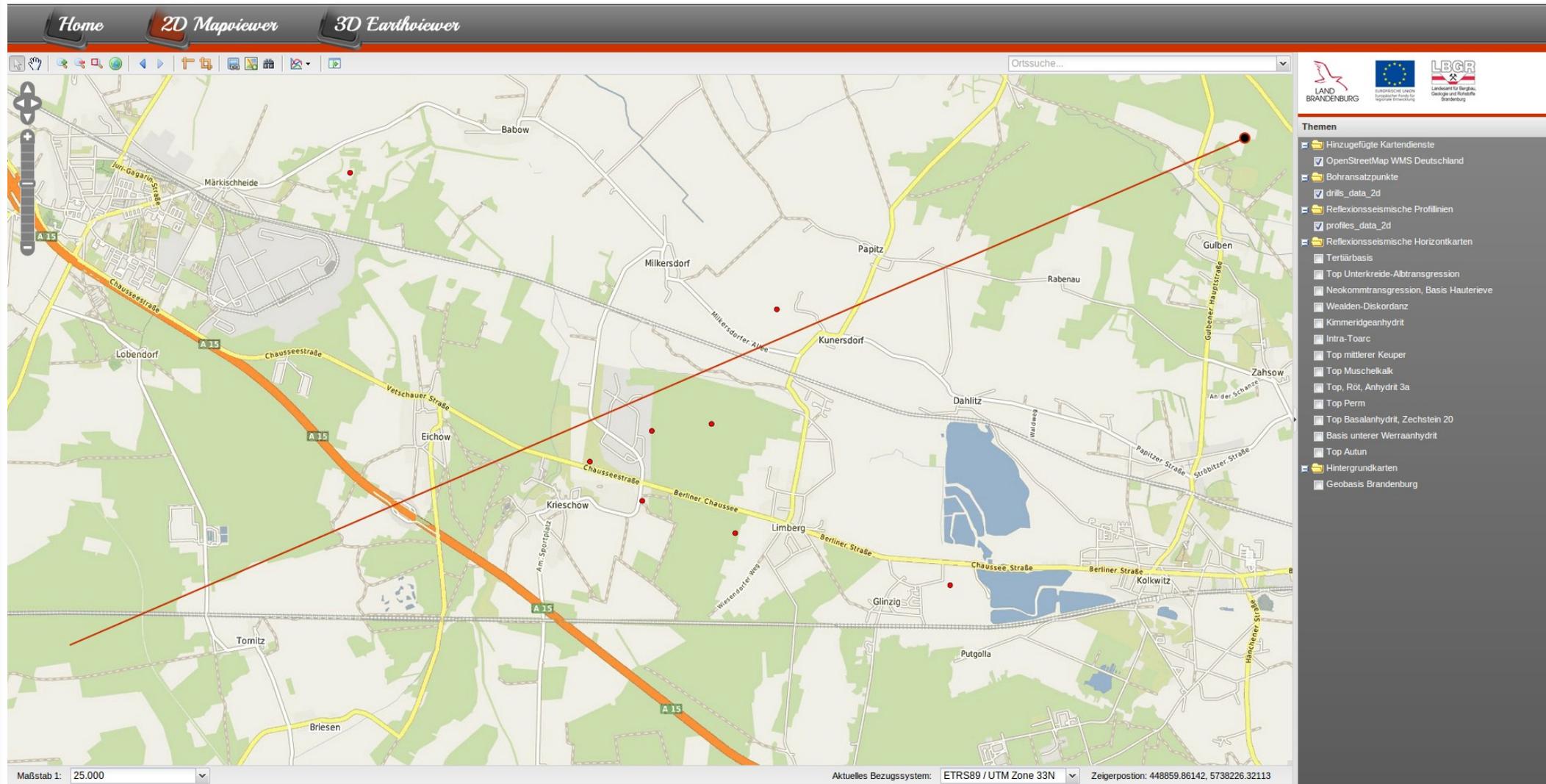


Virtuelles Bohrprofil erzeugen



The screenshot displays the 2D Mapviewer interface. At the top, there are navigation tabs for 'Home', '2D Mapviewer', and '3D Earthviewer'. Below the tabs is a search bar labeled 'Ortsuche...'. The main map area shows a geographical region with various towns and roads. A red line indicates the path of a virtual borehole profile. A central window titled 'Virtuelles Profil' is open, showing a graph of the profile. The y-axis is labeled 'm u. GOK' and ranges from 0 to -3.000. The x-axis represents the profile path. The graph shows several horizontal lines representing different geological layers, color-coded according to the legend: T1_surf (orange), K2_surf (purple), M1_surf (blue), S1_surf (green), X1_surf (red), Z3_surf (cyan), and H6_surf (brown). The legend is located to the right of the graph. Below the graph, the current position is given as 'Position X: 438726 Y: 5735585'. A 'Drucken' button is also visible. On the right side of the interface, there is a 'Themen' panel with various layers and themes, including 'Hinzugefügte Kartendienste', 'Bohransatzpunkte', 'Reflexionsseismische Profillinien', 'Reflexionsseismische Horizontkarten', and 'Hintergrundkarten'. The bottom of the interface shows the scale 'Maßstab 1: 50.000', the current coordinate system 'Aktuelles Bezugssystem: ETRS89 / UTM Zone 33N', and the 'Zeigerposition'.

Virtuelles Profil erzeugen



The screenshot displays the 2D Mapviewer interface. At the top, there are navigation tabs for 'Home', '2D Mapviewer', and '3D Earthviewer'. Below the tabs is a search bar labeled 'Ortsuche...'. The main area shows a map of a region in Brandenburg, Germany, with a red line representing a virtual profile drawn across it. The map includes labels for various locations such as Babow, Märkischeide, Lobendorf, Eichow, Krieschow, Limberg, Glinzig, Putgolla, Kolkwitz, and Zehsow. A scale bar at the bottom left indicates a scale of 1:25,000. The bottom right corner shows the current coordinate system as ETRS89 / UTM Zone 33N and the cursor position as 448859.86142, 5738226.32113.

Themen

- Hinzugefügte Kartendienste
 - OpenStreetMap WMS Deutschland
- Bohransatzpunkte
 - drills_data_2d
- Reflexionsseismische Profilnlinien
 - profiles_data_2d
- Reflexionsseismische Horizontkarten
 - Tertiärbasis
 - Top Unterkreide-Albransgression
 - Neokomtransgression, Basis Hauterieve
 - Wealden-Diskordanz
 - Kimmeridgeanhydrit
 - Intra-Toarc
 - Top mittlerer Keuper
 - Top Muschelkalk
 - Top, Rot, Anhydrit 3a
 - Top Perm
 - Top Basalanhydrit, Zechstein 20
 - Basis unterer Werraanhydrit
 - Top Autun
- Hintergrundkarten
 - Geobasis Brandenburg

Virtuelle Bohrungen und Profile erzeugen

3D Modelldaten in GST
(proprietär) exportiert
als WKT

WKT importiert in
PostGIS

Data1:
ST_GeomFromEWKT()
Points (x,y,z)

Data2:
ST_AsX3d()
Polyhedralsurface



3D Earthviewer

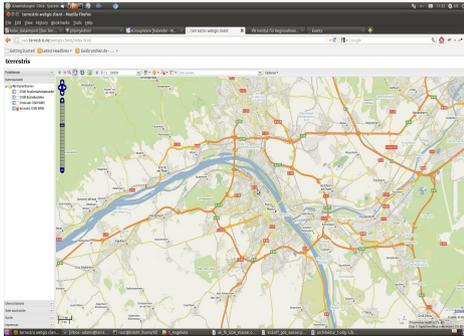
Architektur:

Ext JS 4

GeoExt 2

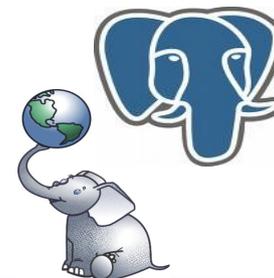
OpenLayers™

experimental 3D Document Object Model
X3DOM



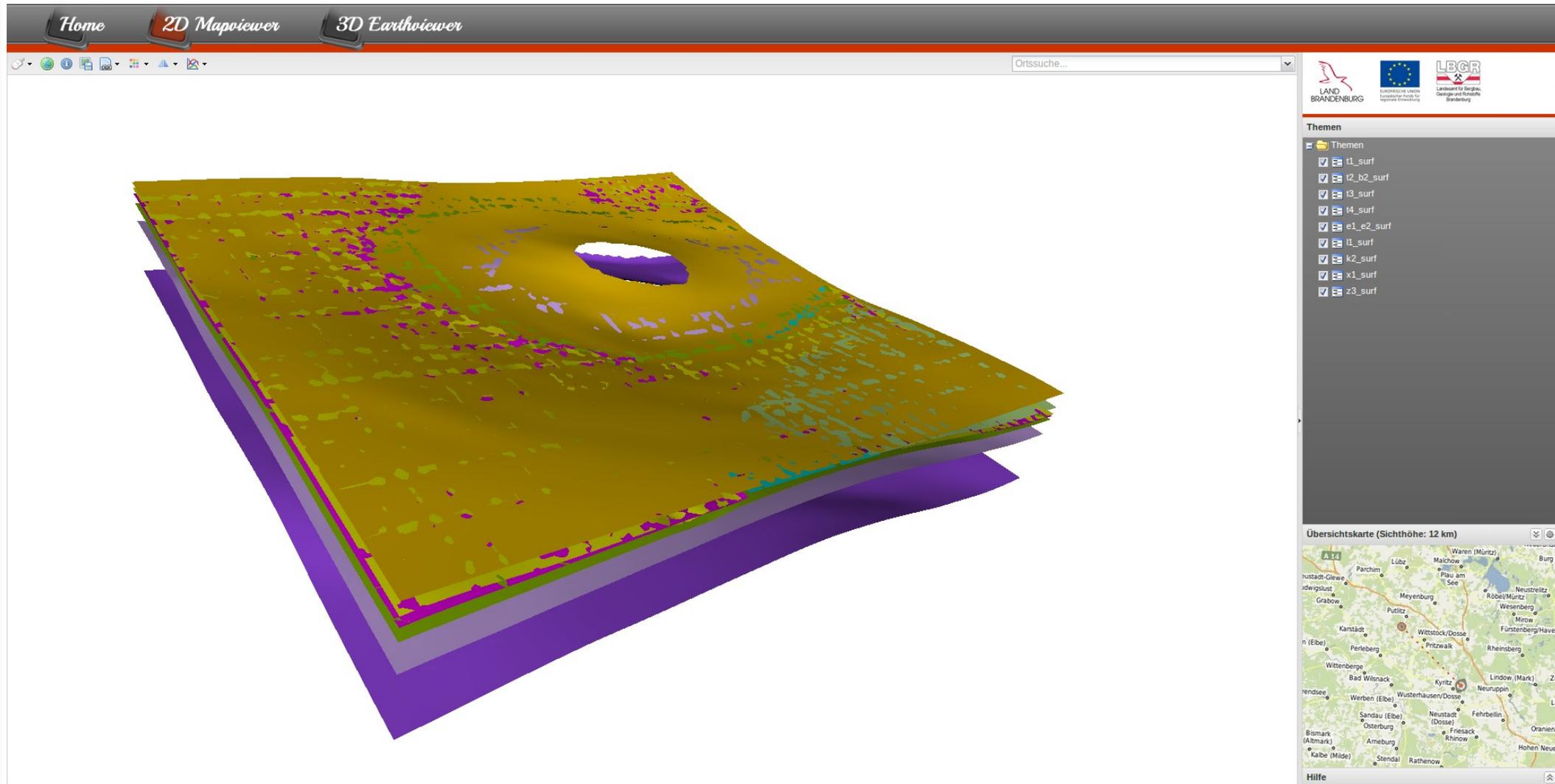
GeoServer
Tomcat

W3DS



Geo-DB

3D-Daten ansehen



Home 2D Mapviewer 3D Earthviewer

Ortssuche...

LAND BRANDENBURG Europäische Union Landesamt für Bergbau, Geologie und Rohstoffe Brandenburg LBGR

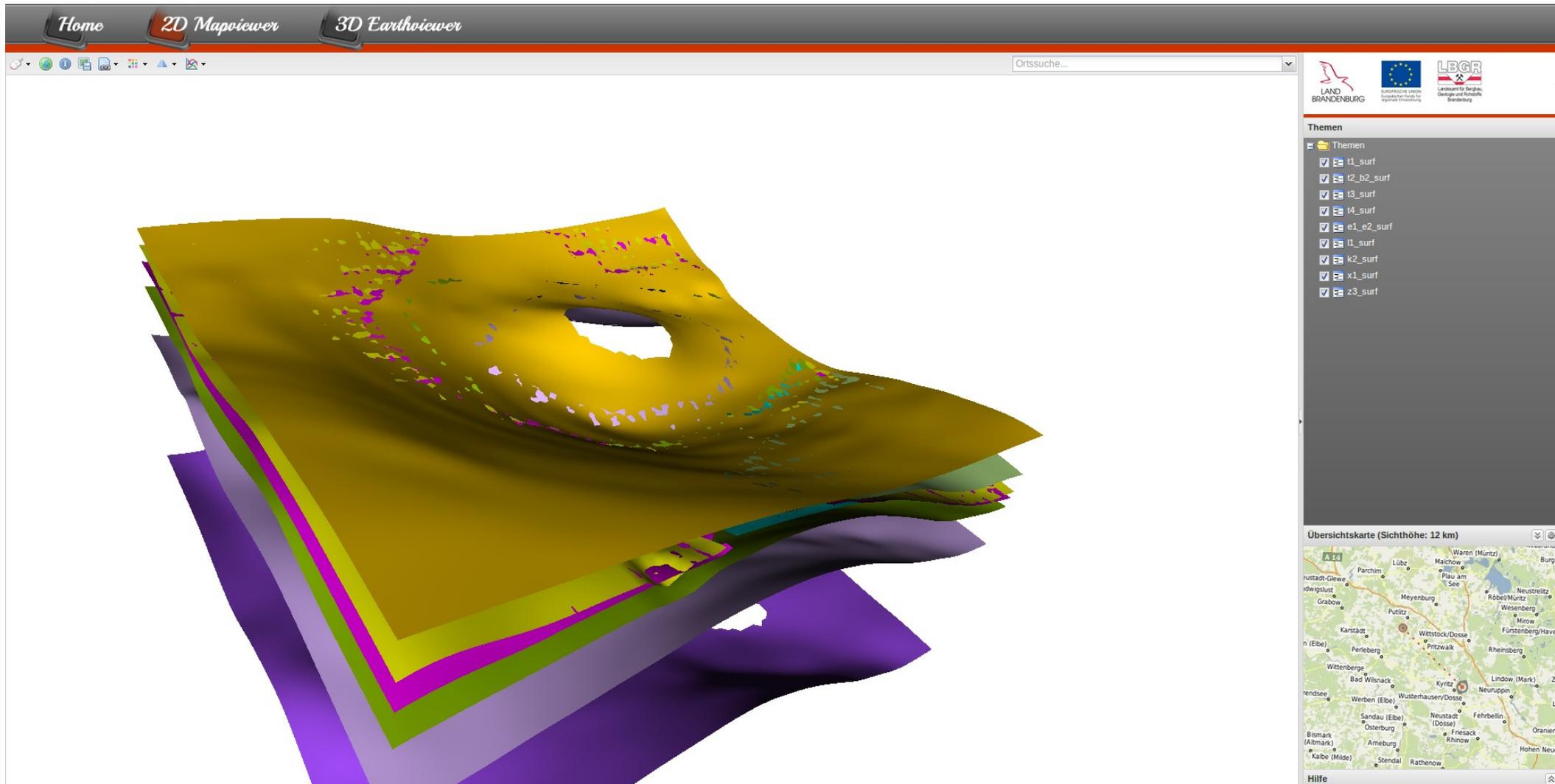
Themen

- t1_surf
- t2_b2_surf
- t3_surf
- t4_surf
- e1_e2_surf
- l1_surf
- k2_surf
- x1_surf
- z3_surf

Übersichtskarte (Sichthöhe: 12 km)

Hilfe

Überhöhung einstellbar



Home 2D Mapviewer 3D Earthviewer

Ortsuche...

LAND BRANDENBURG Europäische Union Landamt für Regionalentwicklung, Geologie und Rohstoffe Brandenburg LBGR

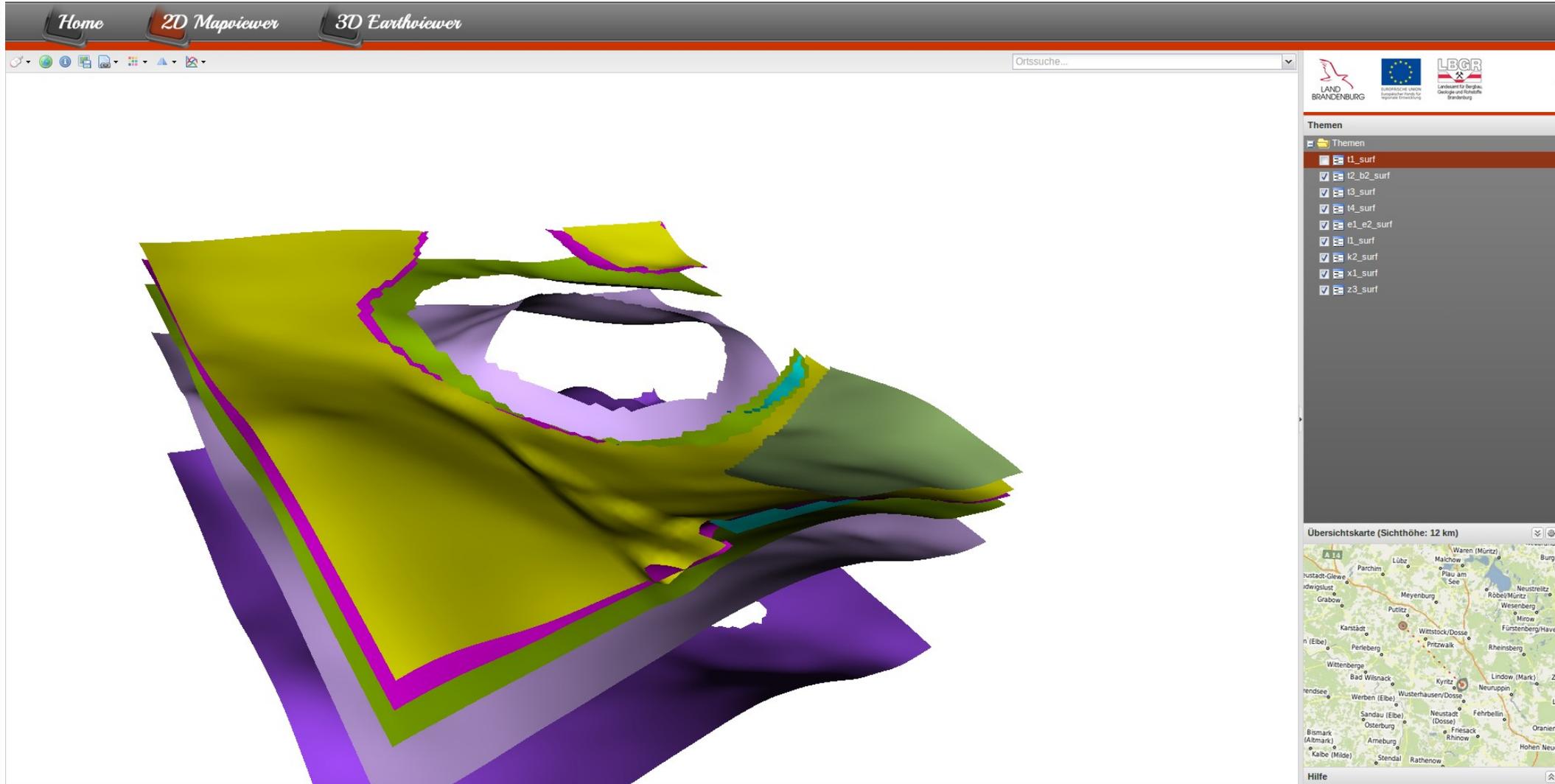
Themen

- t1_surf
- t2_b2_surf
- t3_surf
- t4_surf
- e1_e2_surf
- l1_surf
- k2_surf
- x1_surf
- z3_surf

Übersichtskarte (Sichthöhe: 12 km)

Hilfe

Horizonte einzeln schaltbar



Home 2D Mapviewer 3D Earthviewer

Ortssuche...

LAND BRANDENBURG

Europäische Union

LBGR

Landesamt für Bergbau, Geologie und Rohstoffe Brandenburg

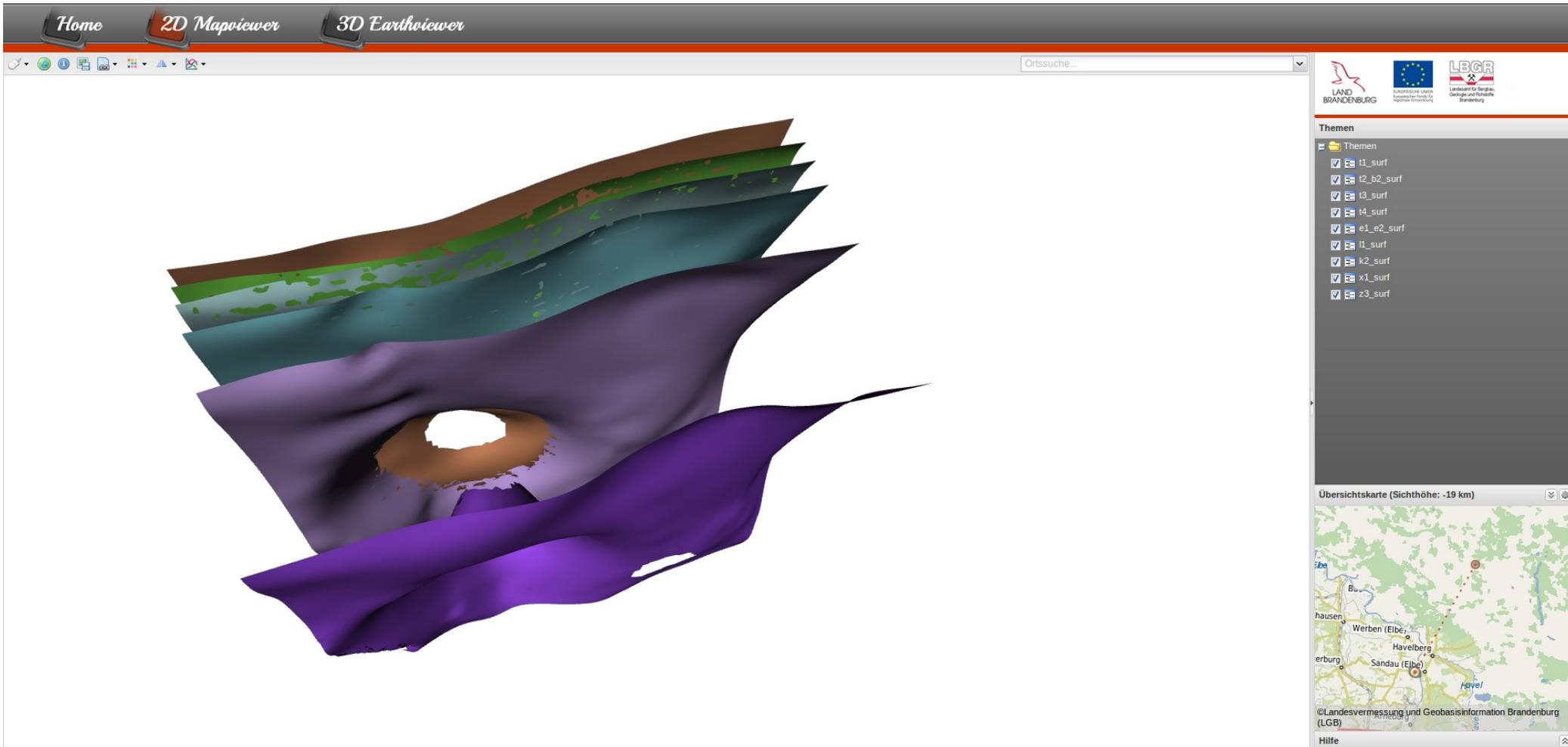
Themen

- Themen
- t1_surf
- t2_b2_surf
- t3_surf
- t4_surf
- e1_e2_surf
- l1_surf
- k2_surf
- x1_surf
- z3_surf

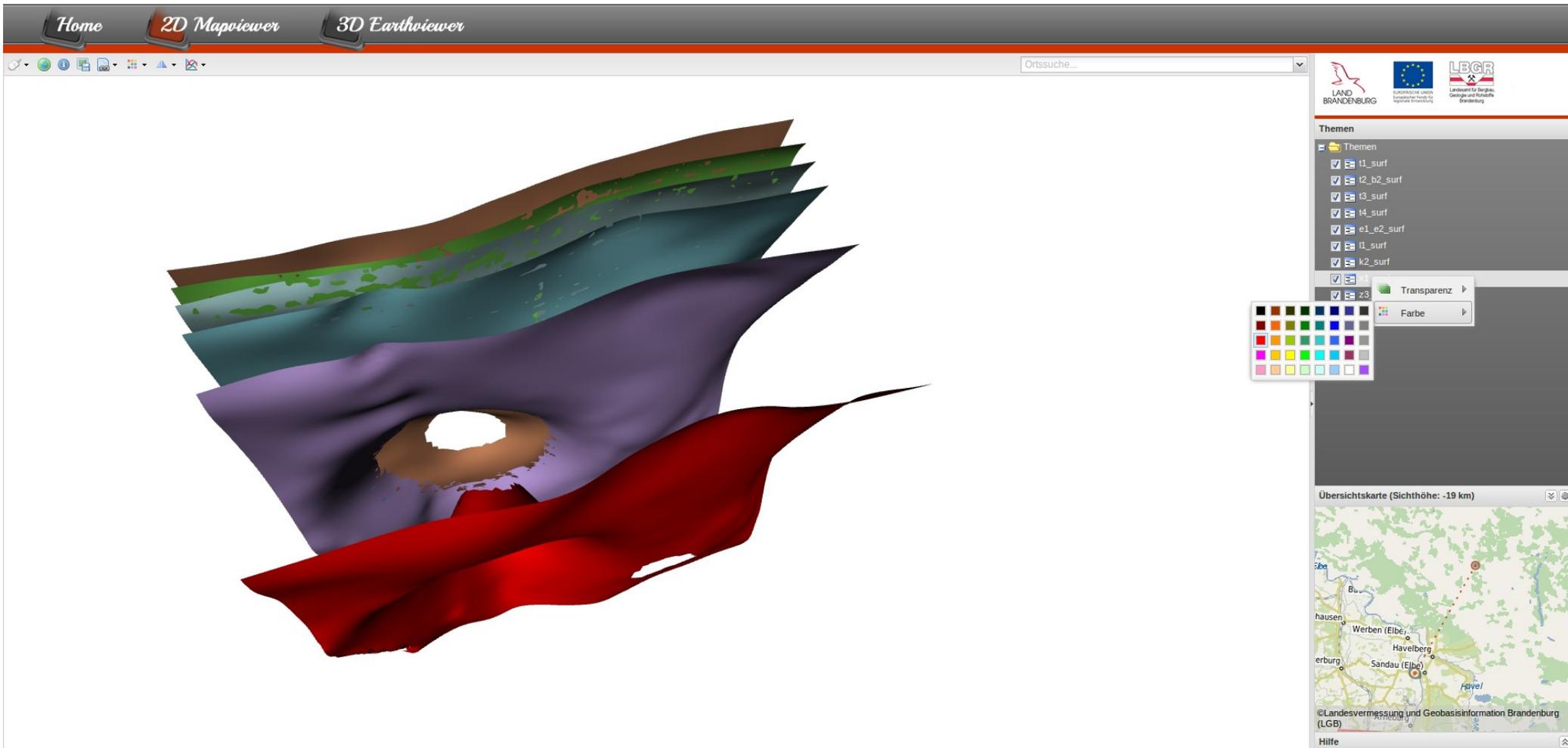
Übersichtskarte (Sichthöhe: 12 km)

Hilfe

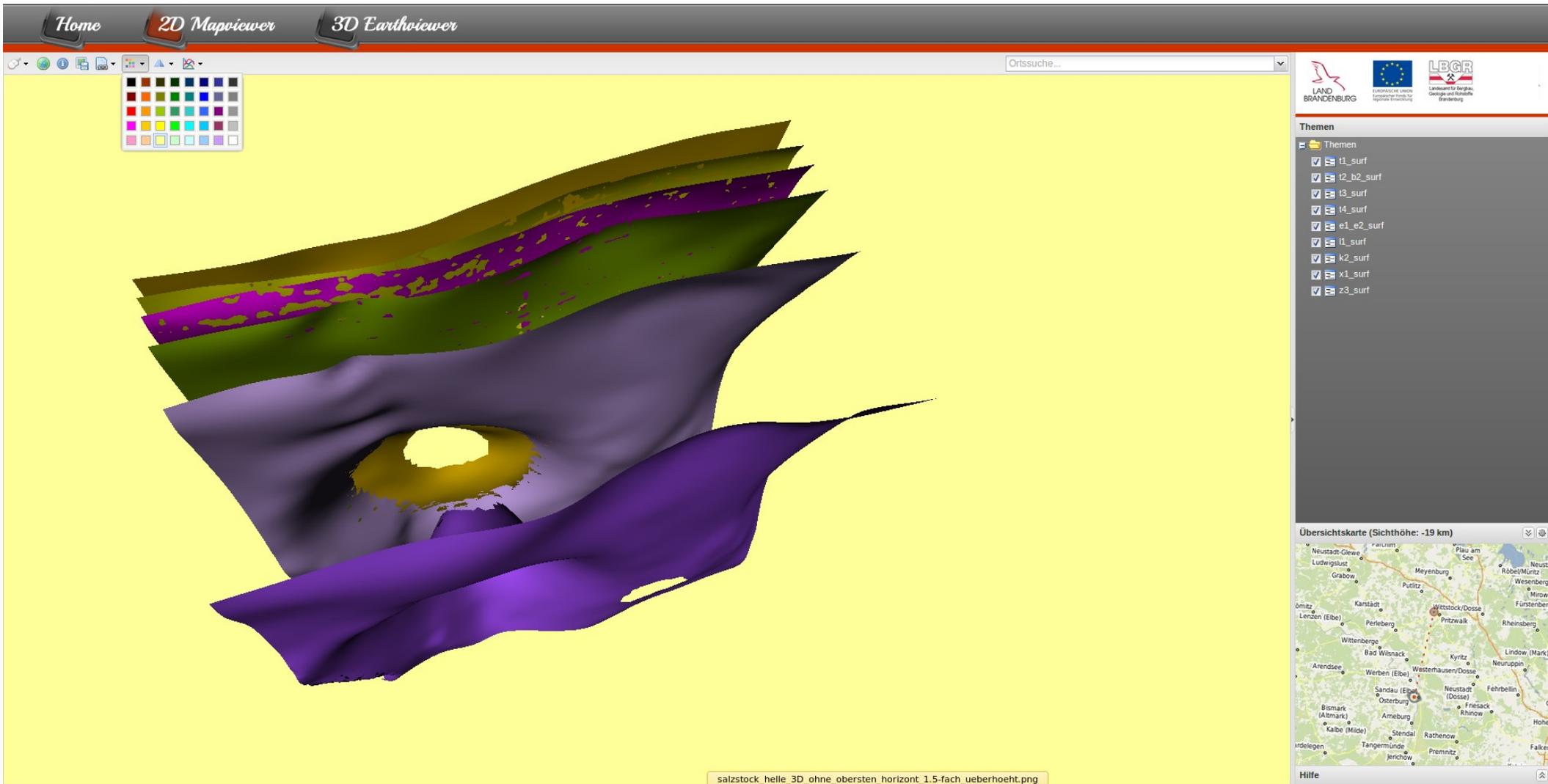
Modell drehbar



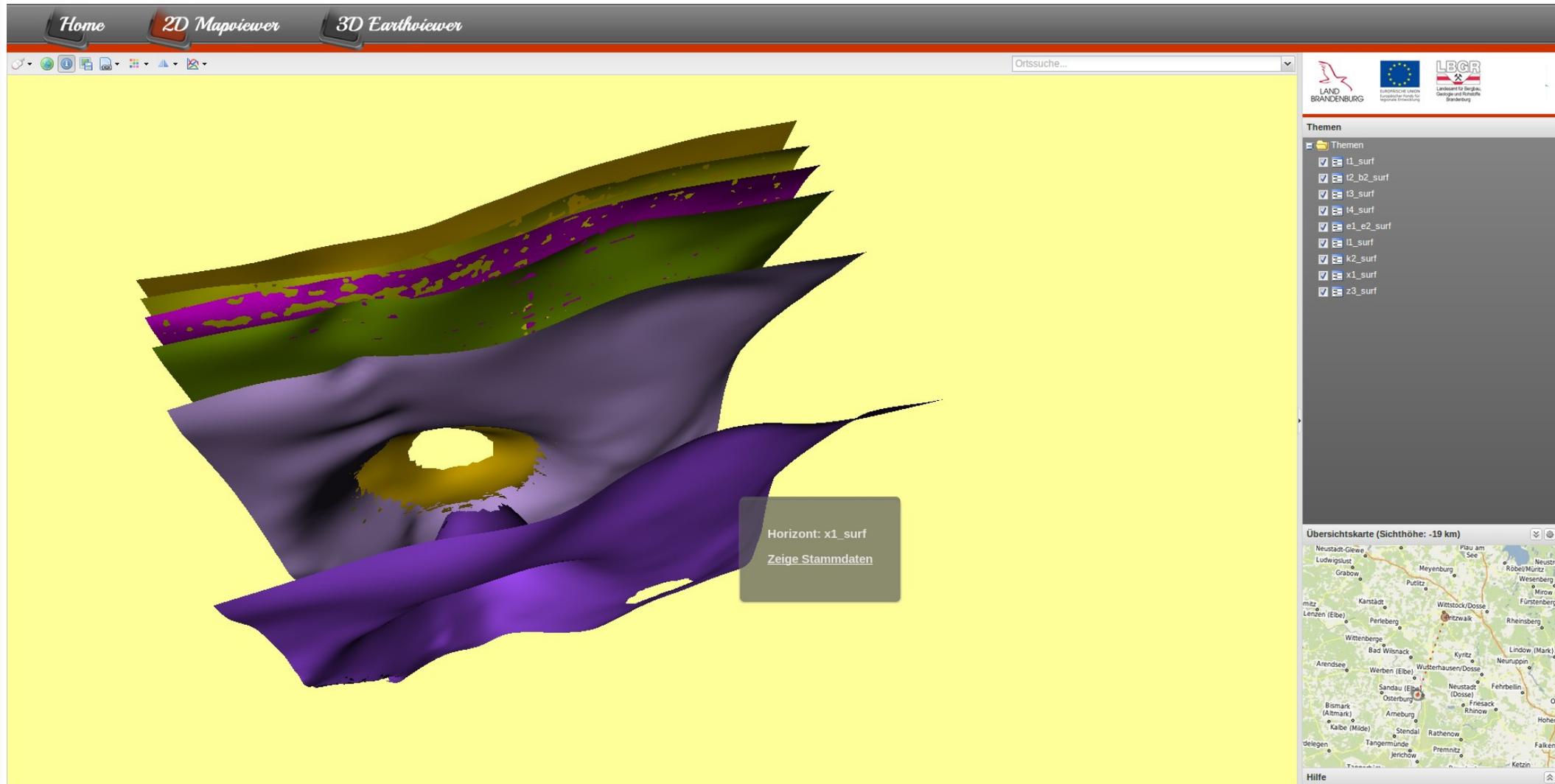
Farbe der Horizonte individuell einstellbar



Hintergrundfarbe wählbar

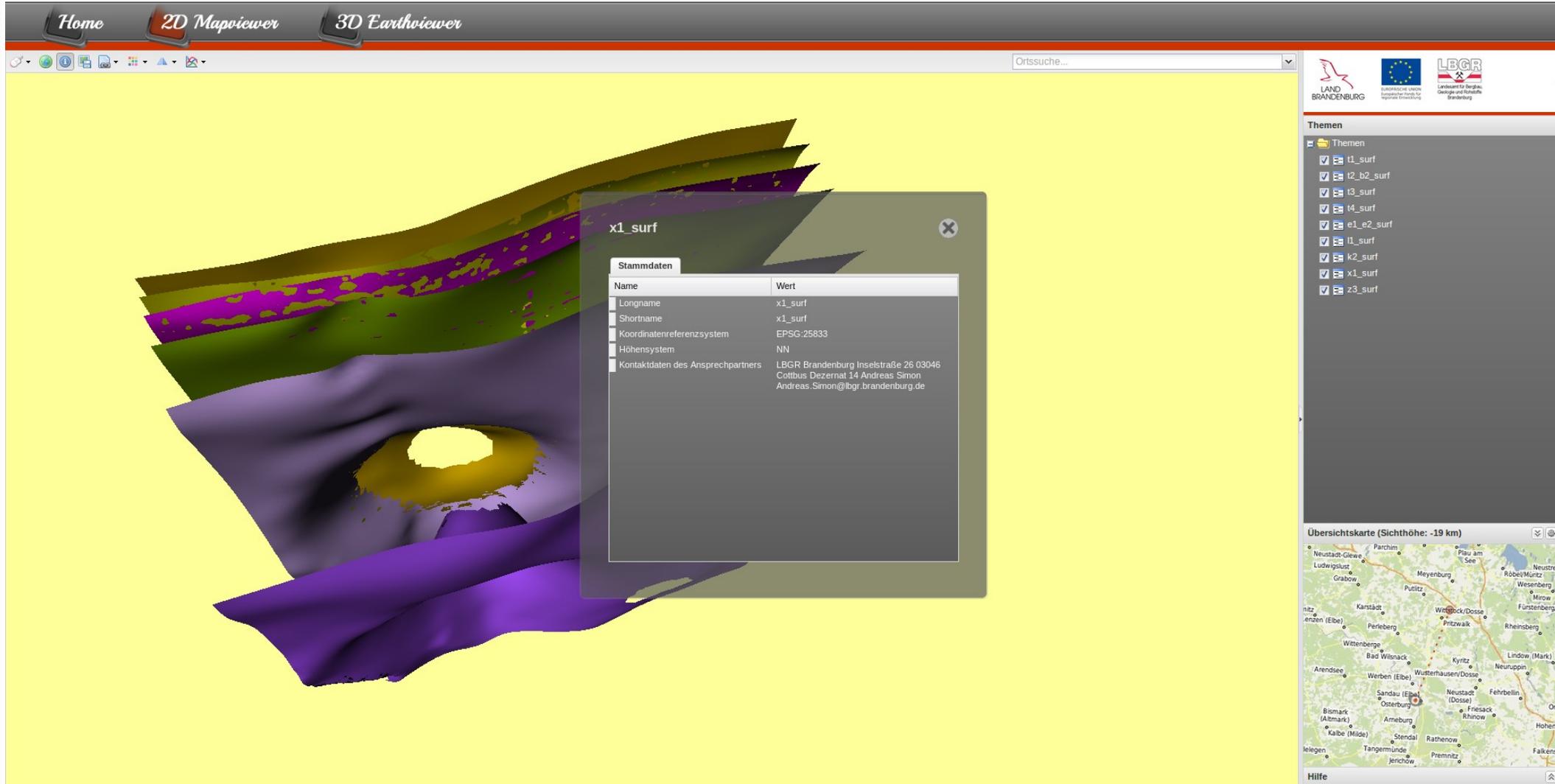


Horizonte abfragbar



The screenshot displays the 3D Earthviewer interface. At the top, there are navigation tabs for 'Home', '2D Mapviewer', and '3D Earthviewer'. Below the tabs is a search bar labeled 'Ortssuche...'. The main content area shows a 3D geological model with several layers. A tooltip is visible over one of the layers, displaying the text 'Horizont: x1_surf' and a link 'Zeige Stammdaten'. On the right side, there is a sidebar with logos for 'LAND BRANDENBURG', the European Union, and 'LBGR'. Below the logos is a 'Themen' section with a list of layers, each with a checked checkbox: 't1_surf', 't2_b2_surf', 't3_surf', 't4_surf', 'e1_e2_surf', 'l1_surf', 'k2_surf', 'x1_surf', and 'z3_surf'. At the bottom right, there is an 'Übersichtskarte (Sichthöhe: -19 km)' showing a map of the region with various locations marked. A 'Hilfe' button is located at the bottom right corner of the interface.

Horizonte abfragbar

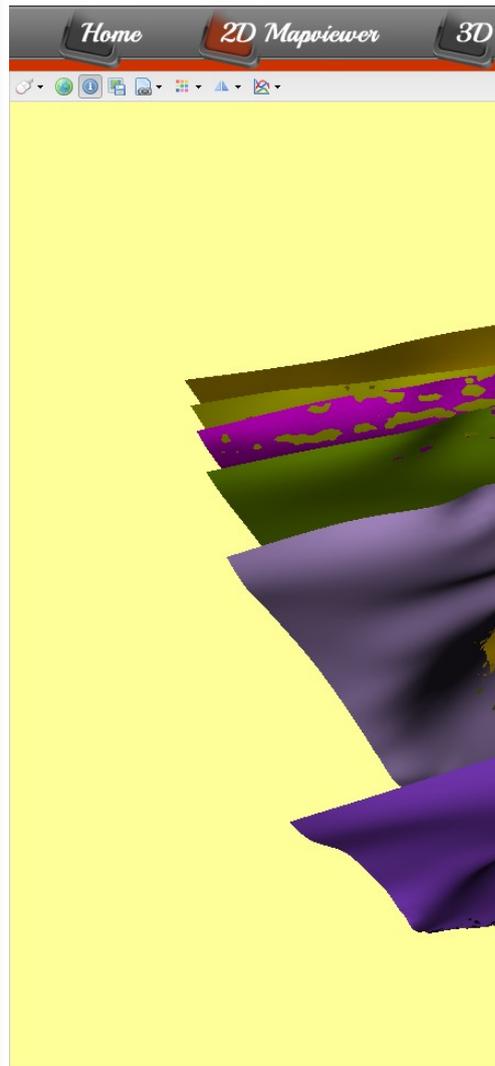


The screenshot displays the 3D Earthviewer application interface. At the top, there are navigation tabs for 'Home', '2D Mapviewer', and '3D Earthviewer'. Below the tabs is a search bar labeled 'Ortssuche...'. The main area shows a 3D visualization of geological data layers in various colors (green, purple, yellow). A popup window titled 'x1_surf' is open, displaying metadata for the selected layer. The metadata is organized into a table with two columns: 'Name' and 'Wert'. The data includes the layer name, short name, coordinate system (EPSG:25833), elevation system (NN), and contact information for LBGR Brandenburg.

Name	Wert
Longname	x1_surf
Shortname	x1_surf
Koordinatenreferenzsystem	EPSG:25833
Höhensystem	NN
Kontaktinformationen des Ansprechpartners	LBGR Brandenburg Inselstraße 26 03046 Cottbus Dezernat 14 Andreas Simon Andreas.Simon@lbgrr.brandenburg.de

On the right side of the interface, there is a 'Themen' panel with a list of layers: t1_surf, t2_b2_surf, t3_surf, t4_surf, e1_e2_surf, l1_surf, k2_surf, x1_surf, and z3_surf. All layers are checked. Below the themes panel is an 'Übersichtskarte (Sichthöhe: -19 km)' showing a 2D map of the region with various locations marked.

Ansicht speicherbar

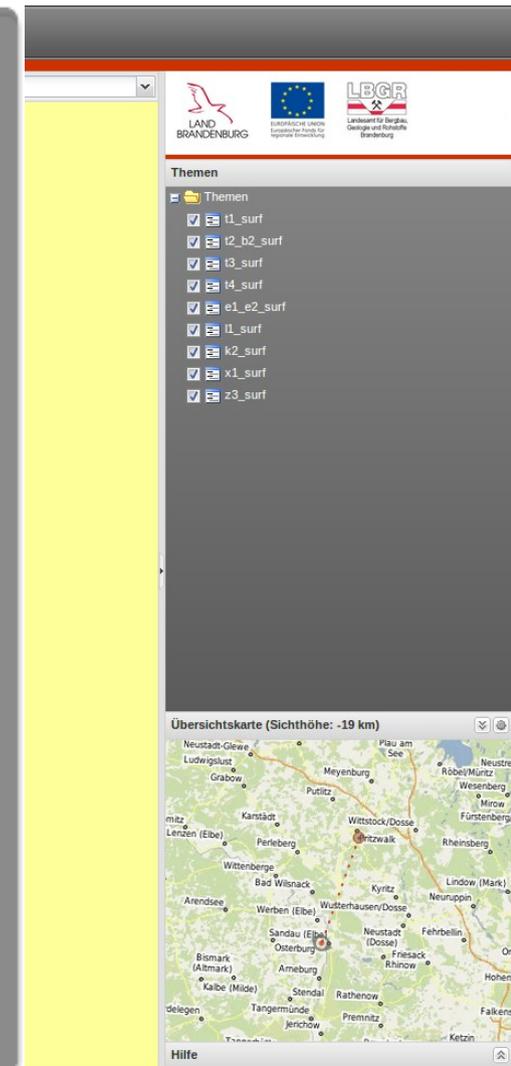


Ansicht speichern

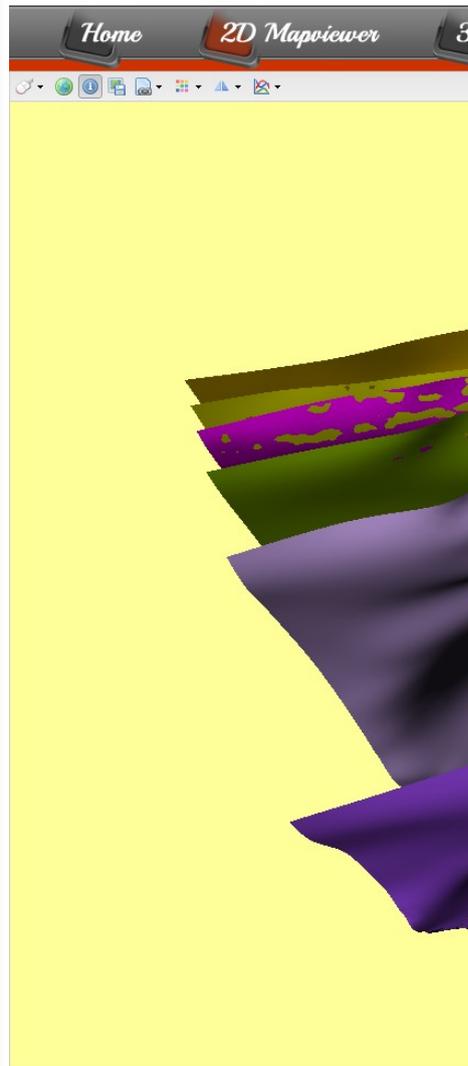
Die aktuelle Ansicht des Viewers wird durch das folgende Dokument angegeben. Möchten Sie die Ansicht speichern oder weitergeben, klicken Sie in das Textfeld und kopieren Sie das Dokument in die Zwischenablage (Tastenkombination **Strg + C** oder **Rechtsklick - Kopieren**). Vorhandene Ansichten können im Anschluss über **Ansicht laden** übernommen werden.

```
{  
  "layers": [  
    {  
      "id": "z3_surf",  
      "transparency": 0,  
      "color": 0  
    },  
    {  
      "id": "x1_surf",  
      "transparency": "0",  
      "color": "#A64DFF"  
    },  
    {  
      "id": "k2_surf",  

```



Laden einer gespeicherten Ansicht

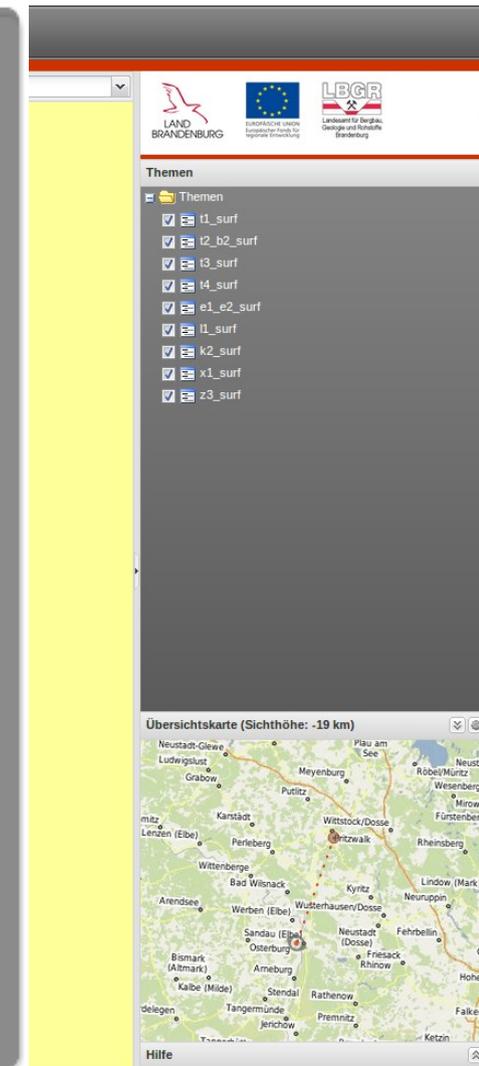


Ansicht laden

Um eine vorherige Ansicht des Viewers zu laden, können Sie ein Konfigurationsdokument (erstellt über **Ansicht speichern**) in das untere Textfeld einfügen und über den Button **Ansicht laden** übernehmen.

```
{  
  "layers": [  
    {  
      "id": "z3_surf",  
      "transparency": 0,  
      "color": 0  
    },  
    {  
      "id": "x1_surf",  
      "transparency": "0",  
      "color": "#A64DFF"  
    },  
    {  
      "id": "k2_surf",  
      "transparency": 0,  
      "color": 0  
    }  
  ]  
}
```

Ansicht laden



Vielen Dank für Ihre Aufmerksamkeit!

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Tel. 0228 - 962 899 51

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Besuchen Sie mich am Stand H1.033