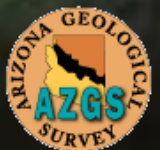


NATIONAL GEOTHERMAL DATA SYSTEM: STATE GEOLOGICAL SURVEY CONTRIBUTIONS TO DATE

Lee Allison, Stephen Richard, Ryan Clark, Diane Love,
Kim Patten, Celia Coleman, Christy Caudill, Jordan
Matti, Esty Pape, & Leah Musil

Arizona Geological Survey




[Use Data](#)
[Publish Data](#)
[Developers](#)
[About](#)

Welcome to NGDS, information for discovery, evaluation, and development of geothermal resources.

NGDS is your source for access to information resources on geothermal energy from a national network of data providers. Data are contributed by academic researchers, private sector participants, and state and federal agencies, primarily the Department of Energy. Access, view, and download data with this free and [easy online search tool](#).



Find Data

[Search Catalog](#)
[Types of Data](#)
[Data Contributors](#)


Tools & Apps

[Access Apps](#)
[For Developers](#)
[Register Apps](#)


New Data

New York submitted new Digital Well Log Data for the AASG State Geothermal Data Project.

HELP

- [Glossary](#)
- [USGIN Tutorials](#)
- [Using Apps](#)

FAQ

FIRST VISIT

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SHARE DATA

Becoming a data provider to the NGDS is simple. To learn more about getting data into the system, data interchange formats, and data services follow the links below:

- [Register Data](#)
- [Data Interchange Formats](#)

PARTICIPANTS



Association of American
State Geologists



Boise State University



National Renewable
Energy Laboratory



Southern Methodist
University

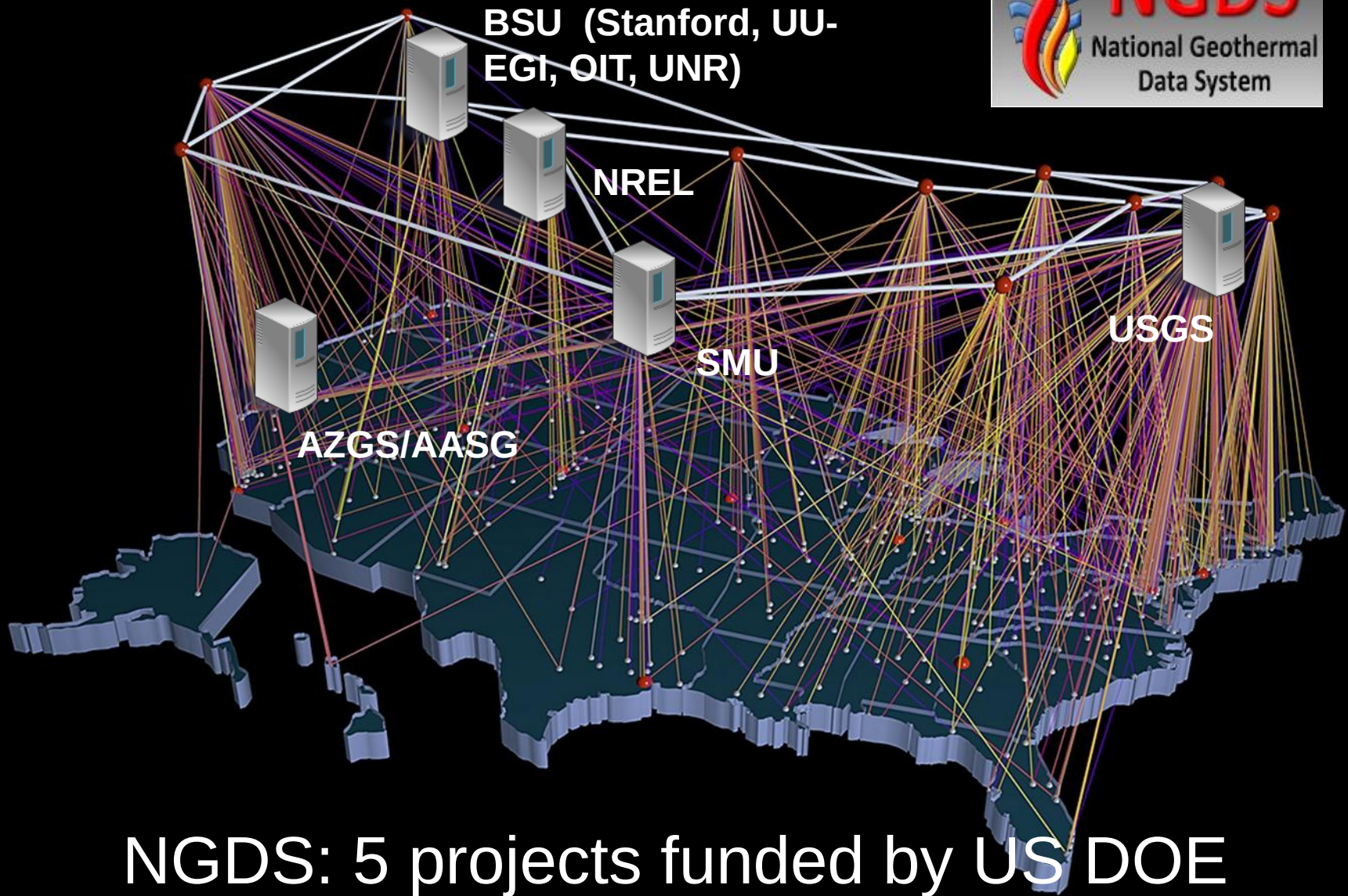


U. S. Geological Survey

[Full list of contributors](#)



- [Active Fault/Quaternary Fault](#)
- [Aqueous Chemistry](#)
- [Borehole Temperature Observation Feature](#)
- [Data Interchange Content Models](#)
- [Direct Use Feature](#)
- [Drill Stem Test Observations](#)
- [Fault Feature](#)
- [Fluid Flux Injection and Disposal](#)
- [Geologic Contact Feature](#)
- [Geologic Unit Feature](#)
- [Geothermal Area](#)
- [Geothermal Fluid Production](#)
- [Geothermal Power Plant](#)
- [Heat Flow](#)
- [Heat Pump Facility](#)
- [Lithology Interval Log Feature](#)
- [Metadata](#)
- [Physical Sample](#)
- [Powell Cummings Geothermometry](#)
- [Power Plant Production](#)
- [Radiogenic Heat Production](#)
- [Seismic Event Hypocenter](#)
- [Thermal Conductivity](#)
- [Thermal/Hot Spring Feature](#)
- [Volcanic Vents](#)
- [Well Fluid Production](#)
- [Well Header](#)
- [Well Log Data Compilation Workbook](#)
- [Well Log Observation](#)



NGDS: 5 projects funded by US DOE



For geothermal exploration and development



StateGeothermalData.org

Discover.
Access.
Explore.

supported by:



Users can:

- **Discover Resources** – search the NGDS federated catalogs to find data relevant to needs
- **Access Resources** – view and download useful data resources in a variety of consumable formats (WMS, WFS, .xls, CSV, XML, and more)
- **Explore Resources** – use the data for calculations or simulations on your desktop, or with third-party web-based software or “apps”
 - Provide feedback on datasets
 - Request additional data content

Data Providers can:

- **Share Resources** – register new resources in the federated catalogs

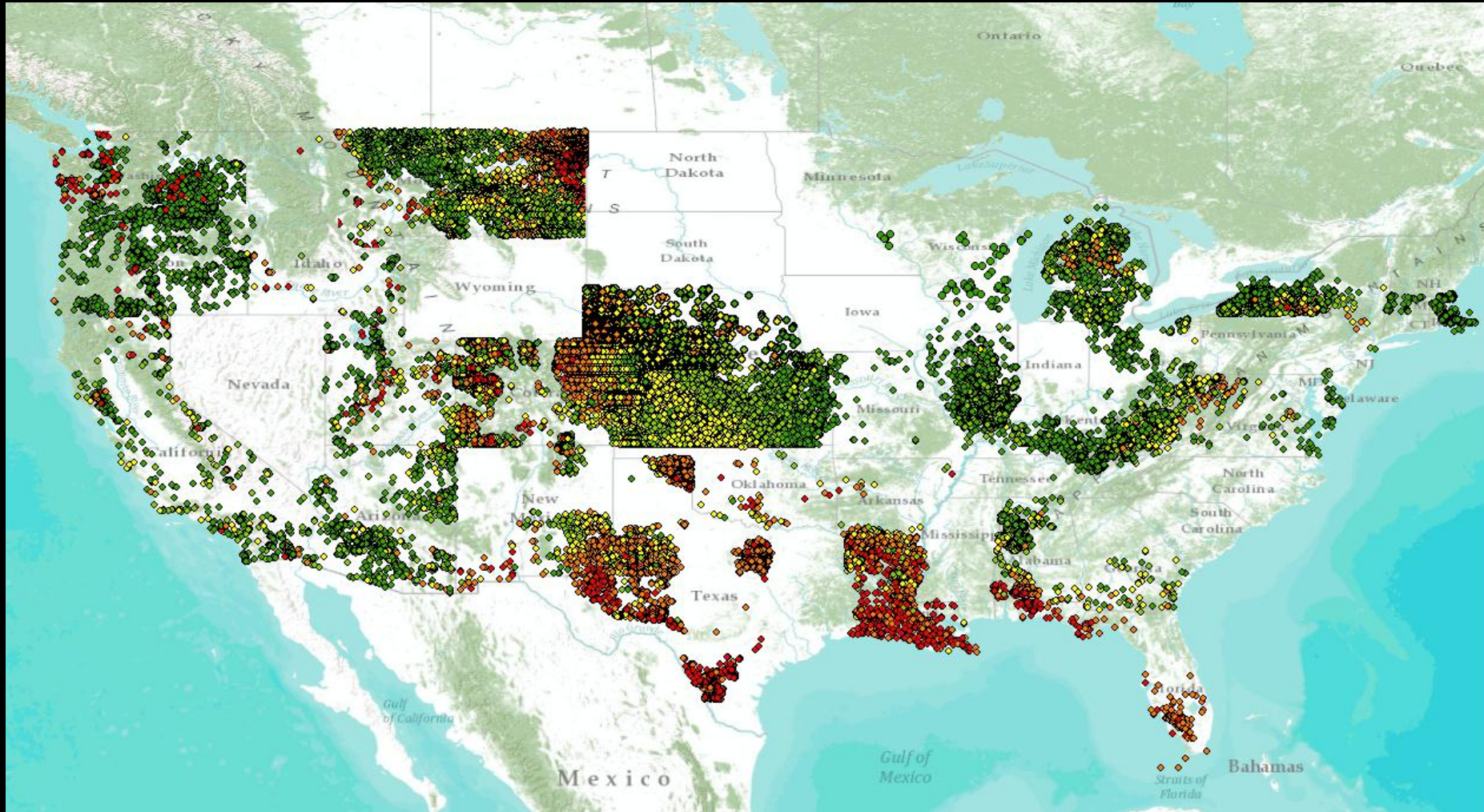
Data resources online from State Geological Surveys

- > 1,000 data sets
- > 2 million records

digital, online, and
growing fast!



Nationwide Borehole Temperature Data

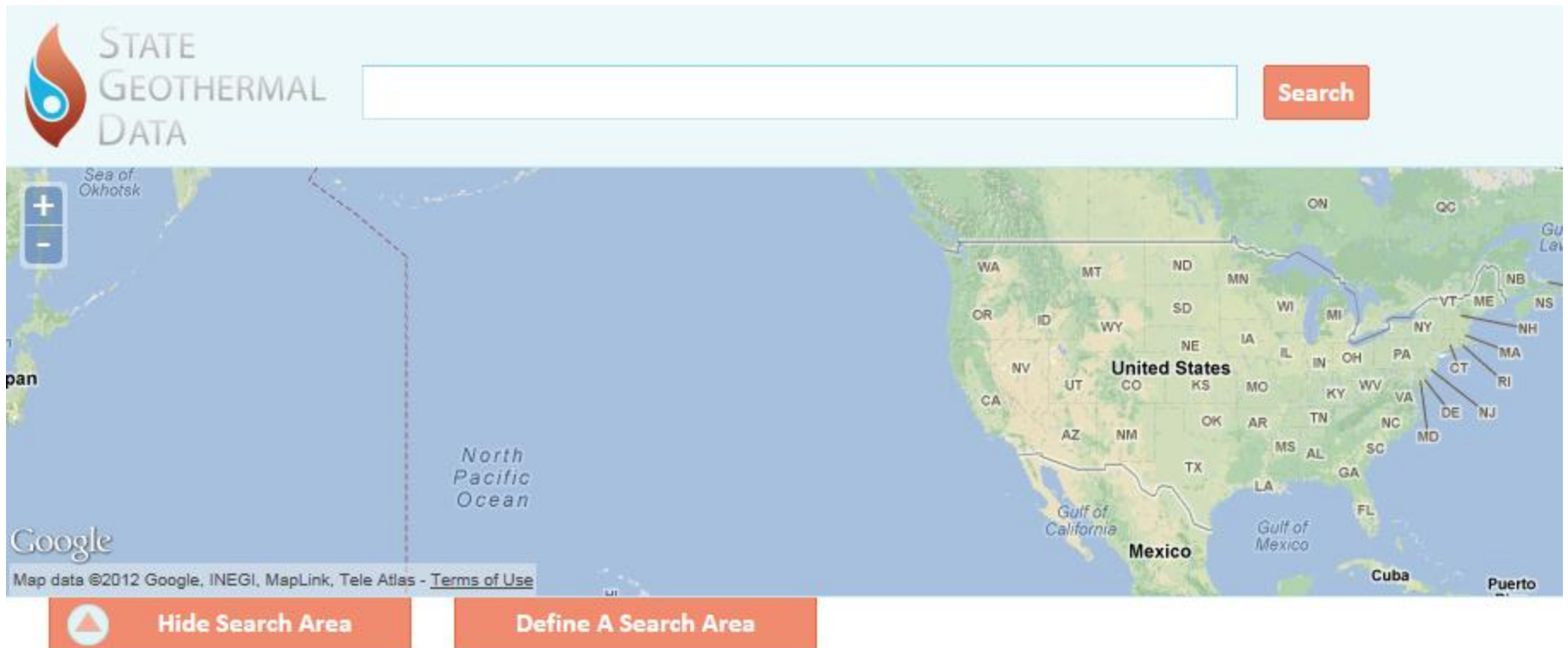


>800,000 well records online or in review

Catalog Search



- www.search.stategeothermaldata.org or www.search.geothermaldata.org

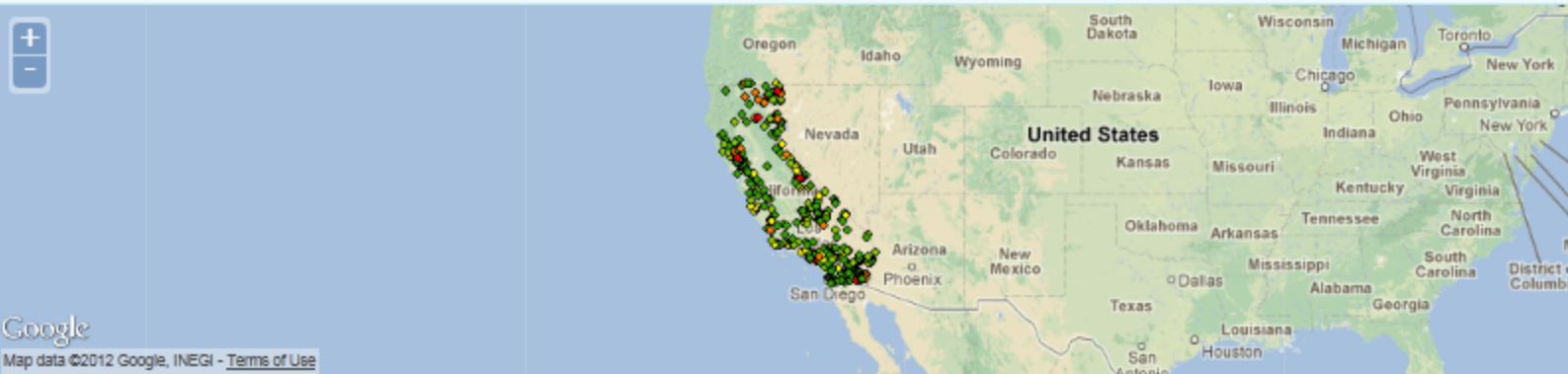


Catalog Search –

Term: California Borehole Temperature



**STATE
GEOTHERMAL
DATA**



Map data ©2012 Google, INEGI - Terms of Use

Results 1 total results

More Details
[Show Area on Map](#)
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Access Options
[Add WMS to Map](#)
[Add ESRI Service to Map](#)
[Add to ArcMap](#)
[Preview Data Table](#)
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[WMS Capabilities](#)
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California Borehole Temperatures

This dataset is a compilation of borehole temperature observations compiled by the California Division of Oil, Gas and Geothermal Resources, published as a Web feature service, a web map service, an ESRI service, and as a set of Excel spreadsheets for the...

By California Division of Oil, Gas and Geothermal - Published on Tue Feb 1 2011 - Modified on Sun Nov 4 2012

Keywords: Borehole Temperatures Geothermal Wells California Oil and gas WFS Services ESRI Services WMS Services Downloadable Files Borehole Temperature Observations California Division of Oil Gas and Geothermal Resources



- Full Metadata Details
- Geospatial Visualization
- Machine Ingested Metadata (XML)
- Preview the Dataset (WMS, ESRI Service)
- Download directly to ArcMap
- Preview the Data
- Get Capabilities
- ESRI Service Endpoint
- Contact Distributor

More Details
Show Area on Map
Full XML Metadata

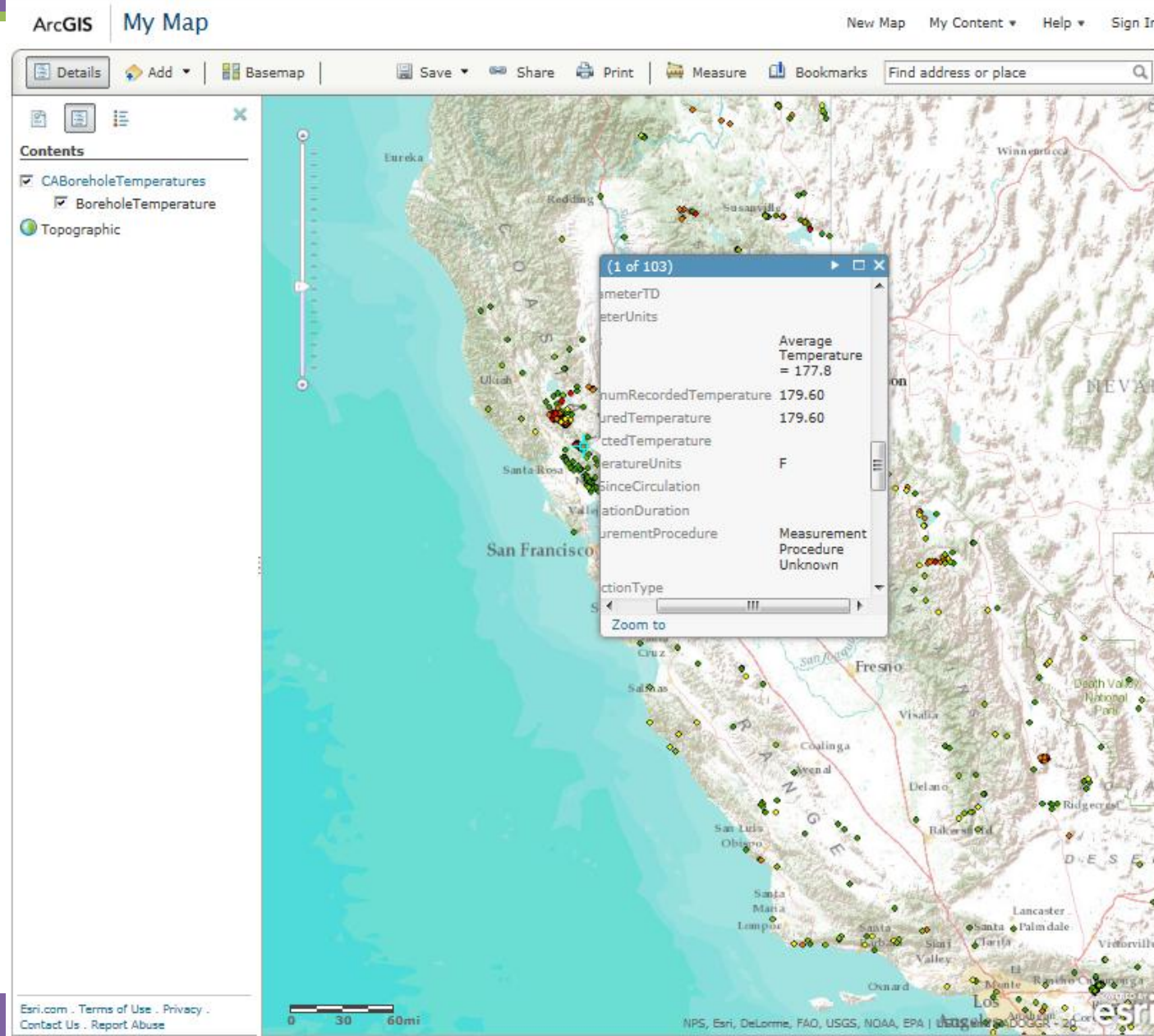
Access Options

Add WMS to Map
Add ESRI Service to Map
Add to ArcMap
Preview Data Table
downloadableFile
WMS Capabilities
WFS Capabilities
ESRI Service Endpoint
Contact Distributor

View in Free & Open Source Software



- Access data directly from the web map application
- OR download into the software of your choice



Kettenhofen 1 Well

ObservationURI

<http://resources.usgcn.org/uri-qin/cadoqqr/bhtemp/Kettenhofen-Well-2454/>

WellName

Kettenhofen 1 Well

APINo

HeaderURI

<http://resources.usgcn.org/uri-qin/cadoqqr/well/ID:38.9492.122.7517/>

OtherID

OtherName

BoreholeName

Operator

LeaseOwner

LeaseNo

SpudDate

EndedDrillingDate

WellType

Production

Status

StatusDate

Function

Field

Clear Lake

County

LAK

State

CA

PLSS_Meridians

TWP

RGE

Section_

SectionPart

Parcel

UTM_E

UTM_N

UTMDatumZone

LatDegree

38.9492

LongDegree

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SRS

NAD 1983

LocationUncertaintyStatement

DrillerTotalDepth

2385

WellboreShape

TrueVerticalDepth

LengthUnits

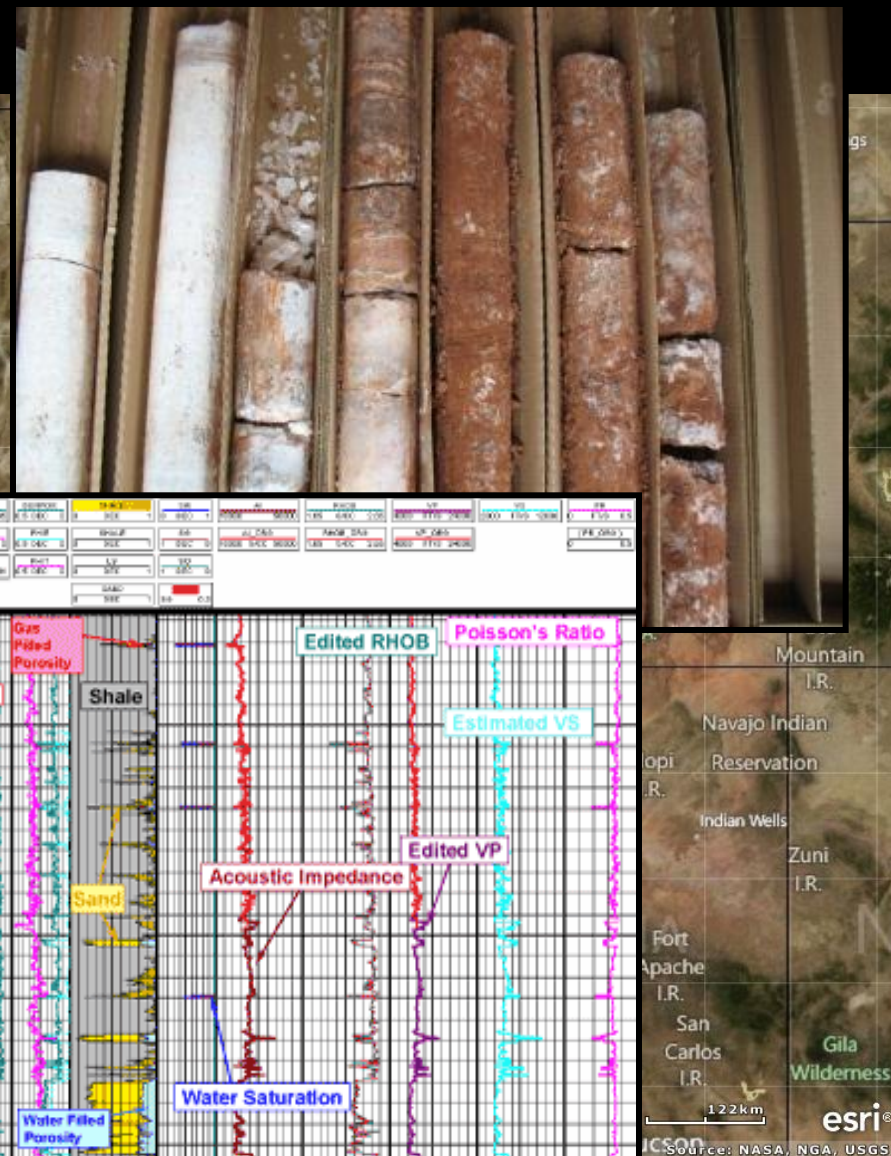
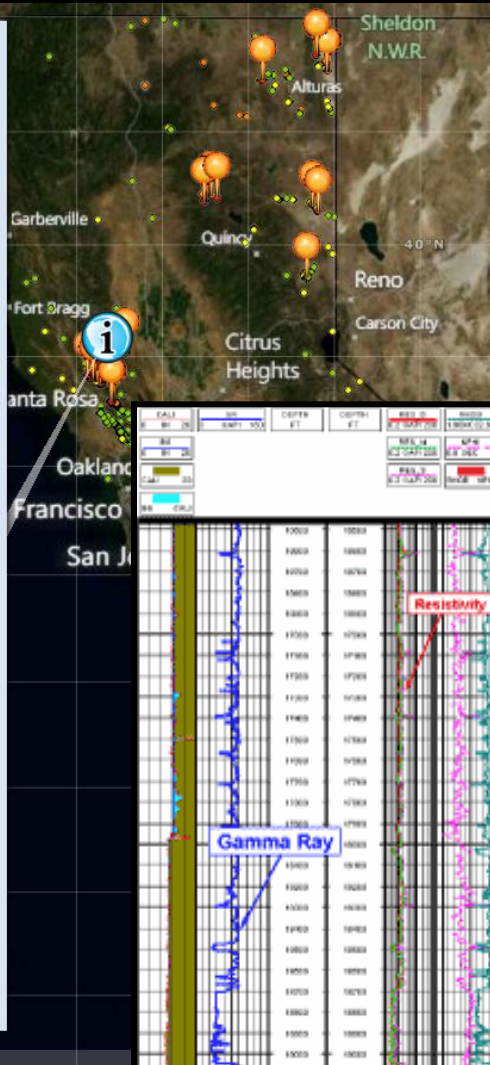
ft

ElevationGL

BitDiameterCollar

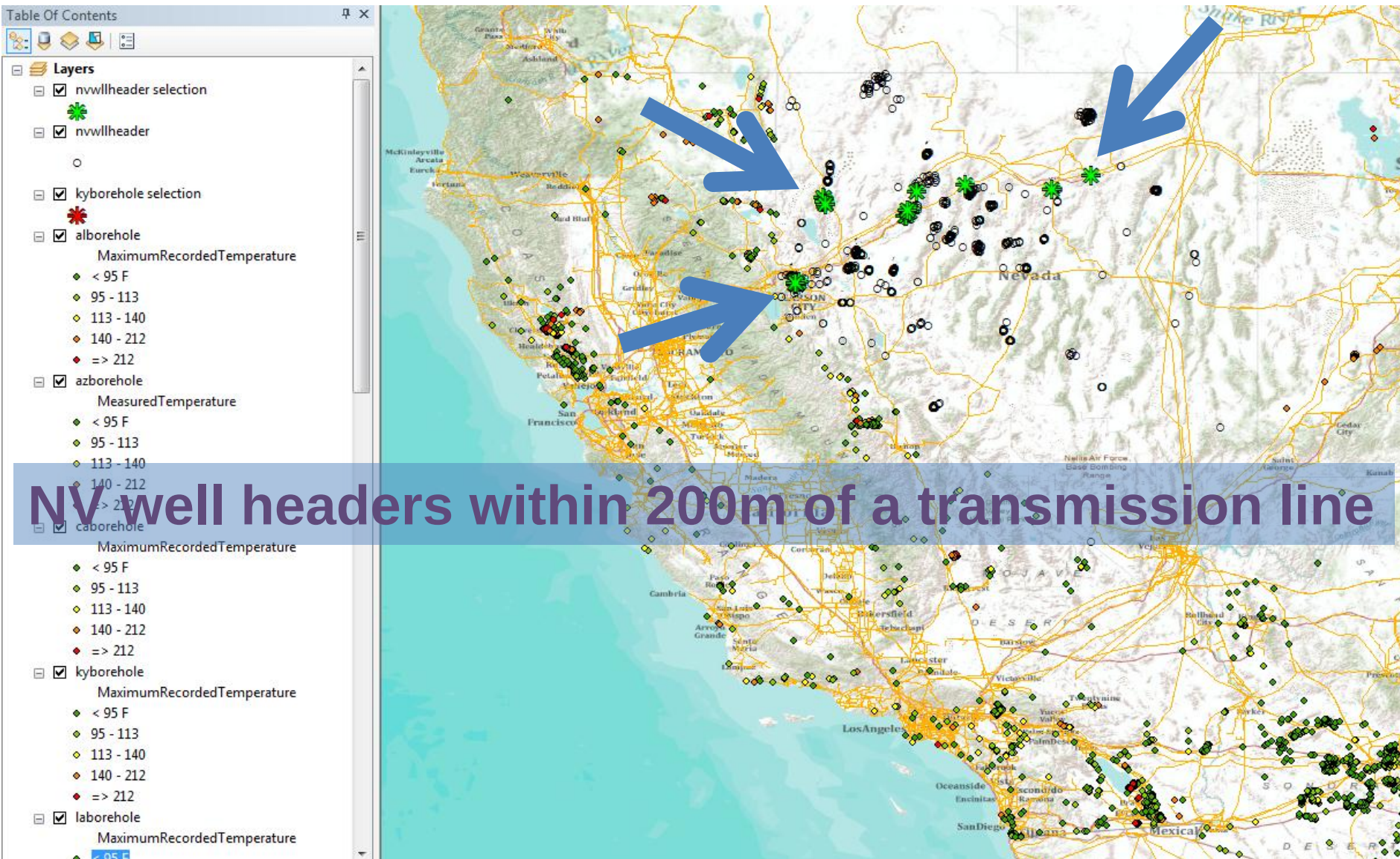
BitDiameterTD

Position 37°21'18"N 118°56'44"W



Individual features in live datasets may be queried for attributes

Exploring the Data in our Application – Well Headers in Nevada using ArcGIS



Geoscience foundation for geothermal energy exploration & utilization in the US

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This project is supported by the U.S. Department of Energy,
Geothermal Technologies Program



Photo credit, CalPine Geysers

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