

Advanced Structural Geology, Fall 2022

Field trips follow up and planning

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South Mountains

- StraboSpot upload and back up
- StraboSport download and plot

STRABOSPOT

LOGGED IN AS: JRARROWSMITH@HOTMAIL.COM (LOGOUT)

HOME

ABOUT

ACCOUNT

API

SOFTWARE

HARDWARE

SEARCH

HELP

TEACHING

StraboSpot2 Now Available at the App Store. [Click for more details](#)



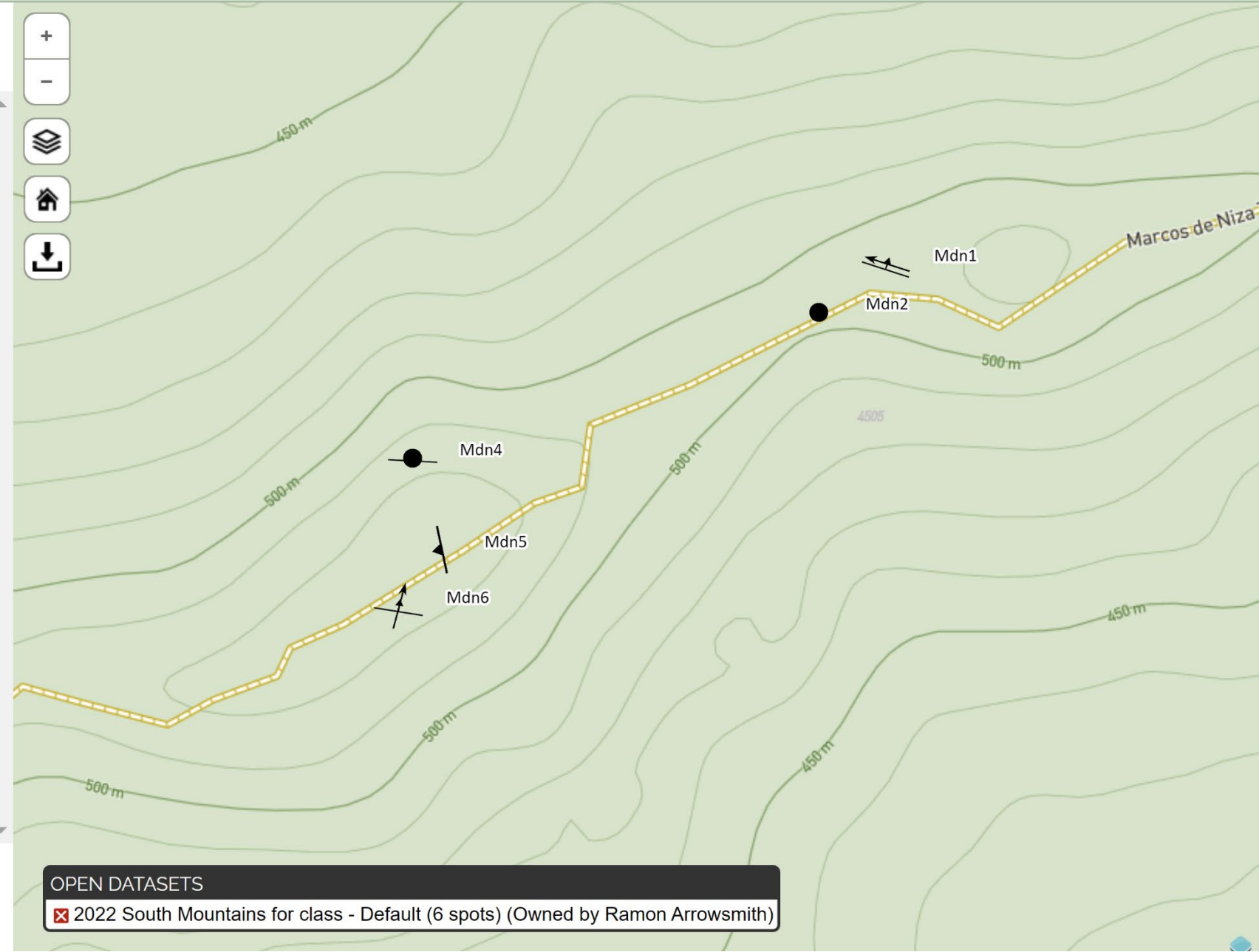
STRABO SEARCH

Set Search Criteria:

select...

Map navigation controls:

- Zoom in (+)
- Zoom out (-)
- Layers
- Home
- Full Screen



Download

OPEN DATASETS

- 2022 South Mountains for class - Default (6 spots) (Owned by Ramon Arrowsmith)

DOWNLOAD OPTIONS:



Download Datasets:

Default (6 spots)

Download Scope:

All Spots

Only spots in current window.

Shapefile

Download StraboSpot data in shapefile format.

KMZ

Download StraboSpot data in .kmz format suitable for Google Earth.

Excel

Download StraboSpot data in Microsoft Excel spreadsheet format.

Stereonet

Download StraboSpot data in format suitable for Rick Allmendinger's Stereonet software.

Field Book

Download StraboSpot data in PDF Field Book format.

Strat Section(s)

Download StraboSpot strat section SVG file(s).

Table Of Contents

Layers

- points
- PimaCanyon_1m_shd.tif
 - Value
 - High : 254
 - Low : 0

Symbol Selector

Geology

Search: All Styles Referenced Styles

geologic_rea...

Geology 24K

Minor Dome	Minor Basin	Horizontal bedding
Inclined bedding--Showing strike and direction of dip	Inclined bedding--Sh...	Inclined and crenulated o...
Inclined beds--Showi...	Overturned bedding--Sh...	Overturned bedding--Sh...
Bedding overturned ...	Vertical bedding--Sh...	Vertical bedding--Sh...

Current Symbol

Color:

Size: 18.00

Angle: 270.00

Edit Symbol...

Save As... Reset

Style References...

OK Cancel

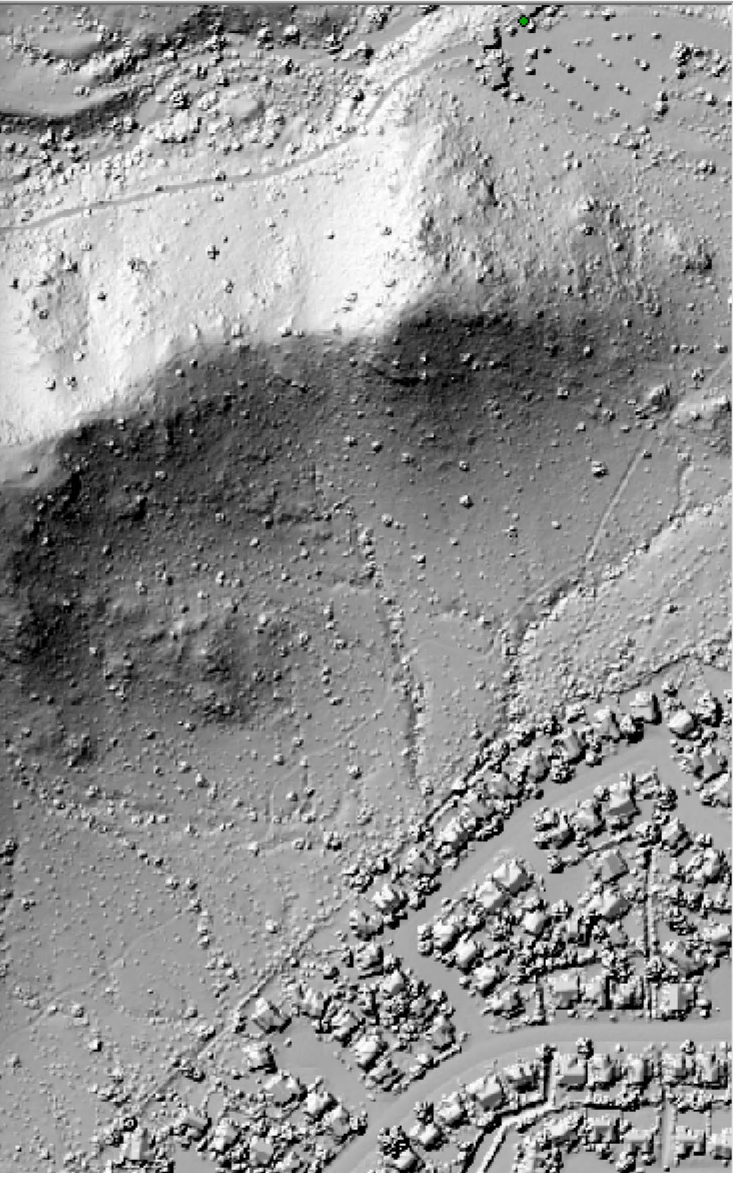




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Layers

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Layer Properties

General Source Selection Display Symbology Fields Definition Query Labels Joins & Relates Time HTML Popup

Label features in this layer

Method: Label all the features the same way

All features will be labeled using the options specified.

Text String

Label Field: dip Expression...

Text Symbol

Arial 8

Symbol... B I U

Other Options

Placement Properties... Scale Range...

Pre-defined Label Style

Label Styles...

OK Cancel Apply

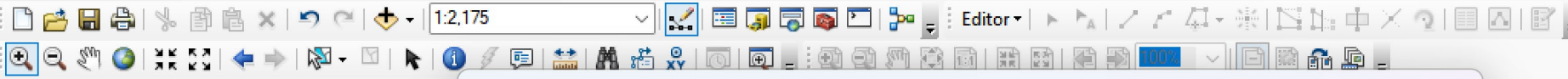


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Layer Properties

General Source Selection Display Symbology Fields Definition Query Labels Joins & Relates Time HTML Popup

Show:

- Features
- Single symbol
- Categories
- Quantities
- Charts
- Multiple Attributes

Draw all features using the same symbol. Import...

Symbol:  Advanced

- Rotation...
- Size...
- Symbol Levels...

Legend

Label appearing next to the symbol in table of contents:

Description... Additional description appearing next to the symbol in your map's legend

OK Cancel Apply





Table Of Contents

- Layers
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Layer Properties

General Source Selection Display Symbology Fields Definition Query Labels Joins & Relates Time HTML Popup

Show: Features Categories Quantities Charts Multiple Attributes

Draw all features using the same symbol. Import...

Symbol

Legend

Label

Additional

OK Cancel Apply

Rotate

Rotate Points by Angle in this field:

strike

Rotation Style:

0	90
270	180

90	0
180	270

Geographic Arithmetic

Random

Minimum: 0.00 Maximum: 360.00

OK Cancel



Untitled - ArcMap

File Edit View Bookmarks Insert Selection Geoprocessing Customize Windows Help

1:2,175

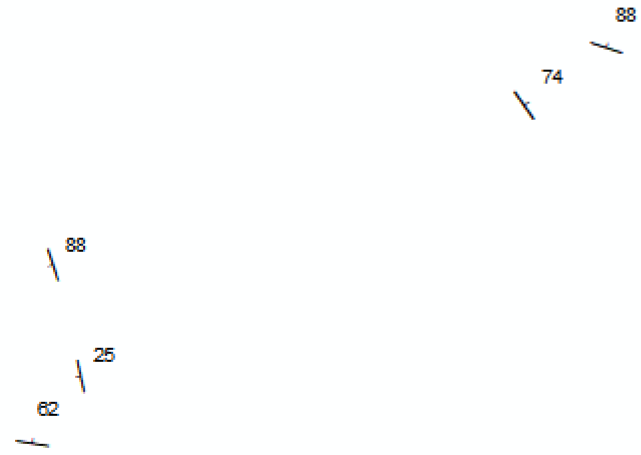
Editor

3D Analyst PimaCanyon_1m_shd.tif

Table Of Contents

Layers

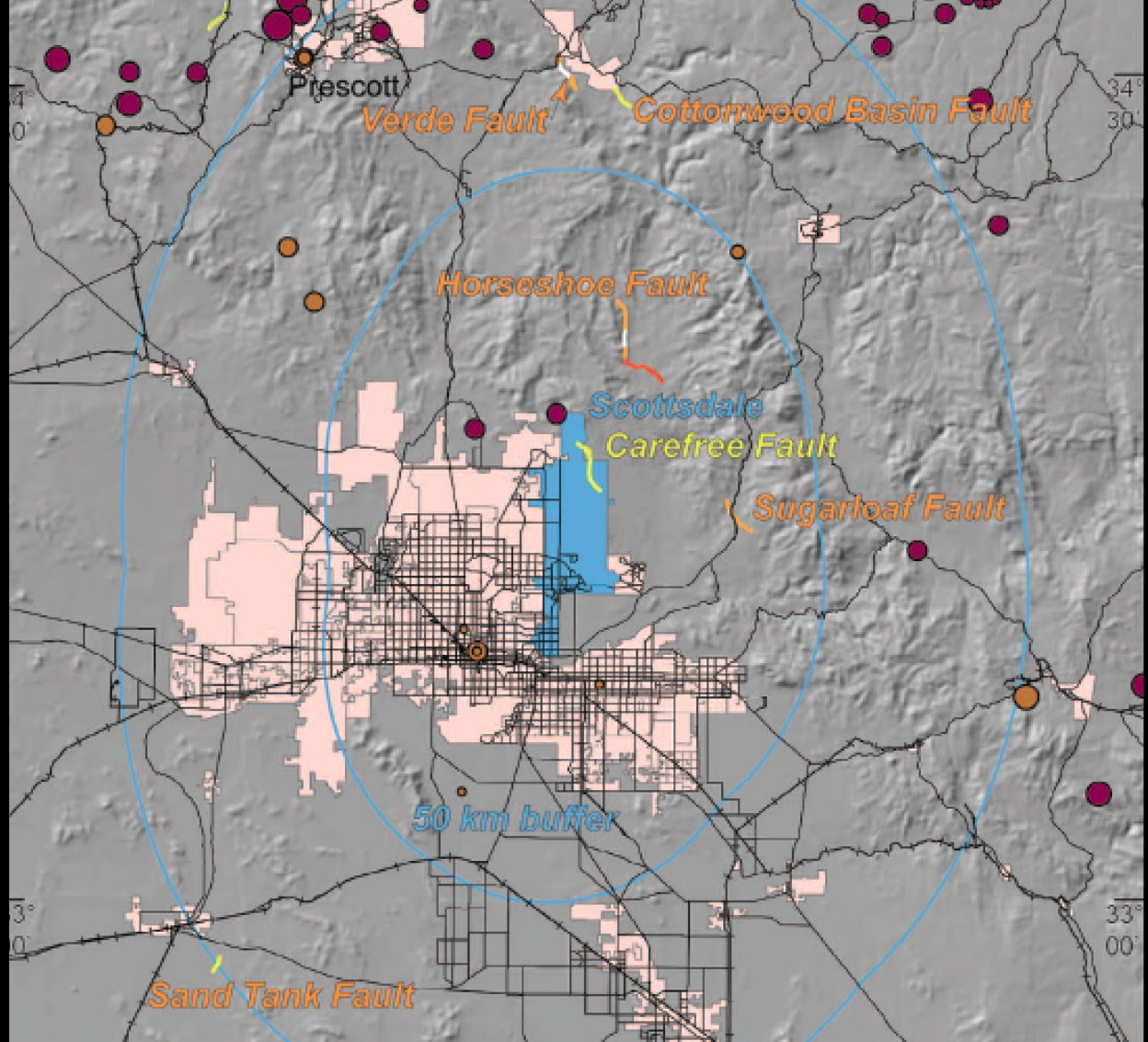
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Carefree fault

- Sunday October 30 all day
- Catch a ride with me or meet there

Ghanat, S. T., Kavazanjian, E., Arrowsmith, J R., Seismic Source Characterization for Greater Phoenix Area Earthquake Hazard, Environmental and Engineering Geoscience, Vol. XXI, No. 3, pp. 211–222, August 2015.



Detailed source characterization for Phoenix

Fault Sources	Length (km)	Age of Latest Movement	Slip Rate (mm/yr)	M_{max}
Horseshoe	20	Late Quaternary (<130 ka)	0.01–0.03	6.6
Carefree	11	Middle & Late Quaternary	0.01	6.3
Verde	10	Late Quaternary	0.01–0.02	6.2
Sugarloaf	9	Late Quaternary	0.01–0.02	6.1
Cottonwood	5	Middle & Late Quaternary	0.002–0.003	5.9
Sand Tank	5	Late Quaternary	0.01–0.03	5.9

Navigation icons: Home, Layers, Cloud, Add, Search

Legend

Qfaults

National Database

- Historic (< 150 years), well constrained location —
- Historic (< 150 years), moderately constrained location - -
- Historic (< 150 years), inferred location ••
- Latest Quaternary (<15,000 years), well constrained location —
- Latest Quaternary (<15,000 years), moderately constrained location - -
- Latest Quaternary (<15,000 years), inferred location ••
- Late Quaternary (< 130,000 years), well constrained location —
- Late Quaternary (< 130,000 years), moderately constrained location - -
- Late Quaternary (< 130,000 years), inferred location ••
- Middle and late Quaternary (< 750,000 years), well constrained location —
- Middle and late Quaternary (< 750,000 years), moderately constrained location - -
- Middle and late Quaternary (< 750,000 years), inferred location ••
- Undifferentiated Quaternary (< 1.6 million years), well constrained location —

