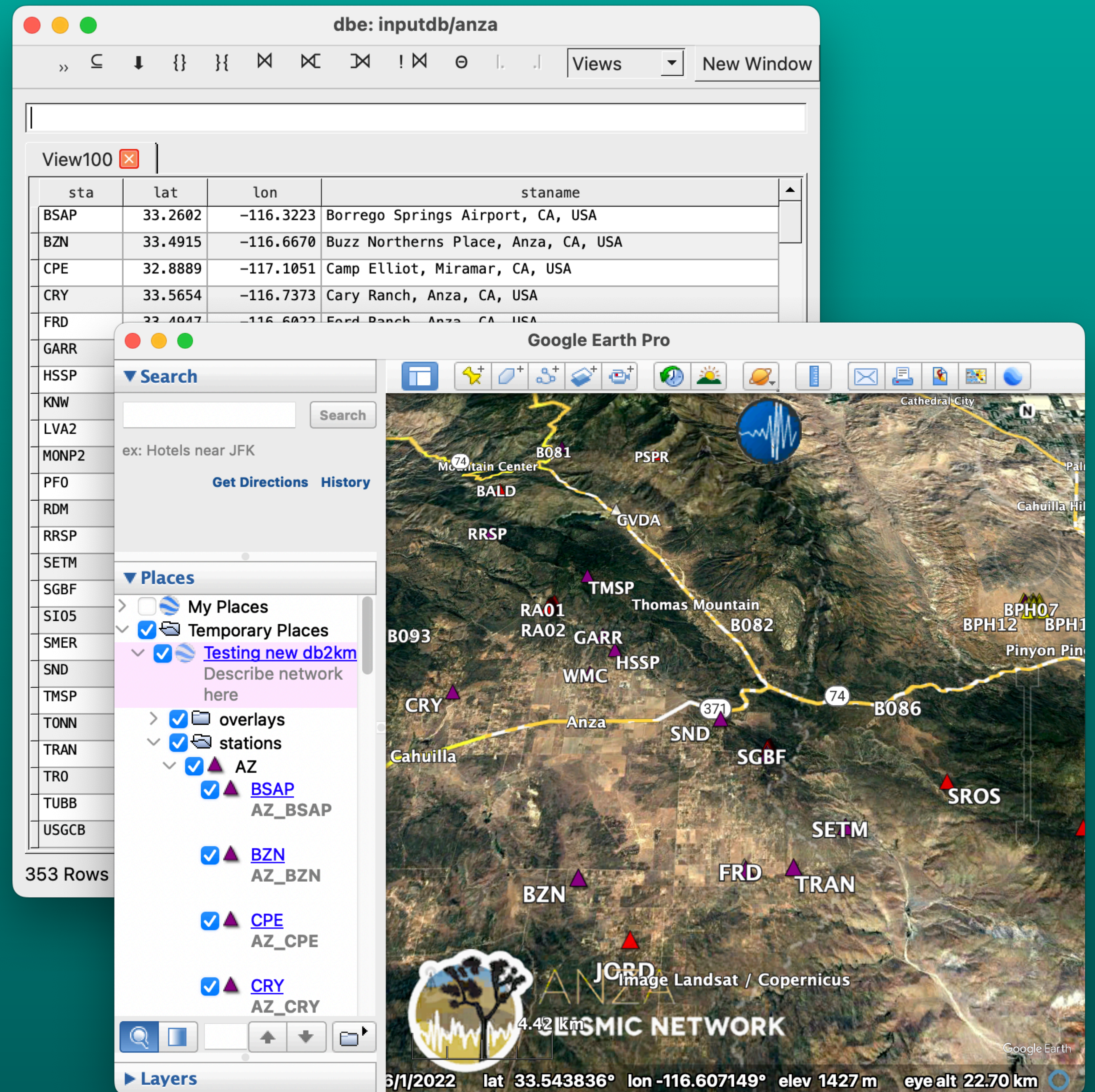


Updated db2kml_py

contrib code to produce kml/kmz for sites/origins

What is KML?

- **KML = Keyhole Markup Language**
- **KMZ** - a kml file with all images/ icons included
 - Good for off-line usage
 - Reducing server load



History of db2kml and db2kml_py

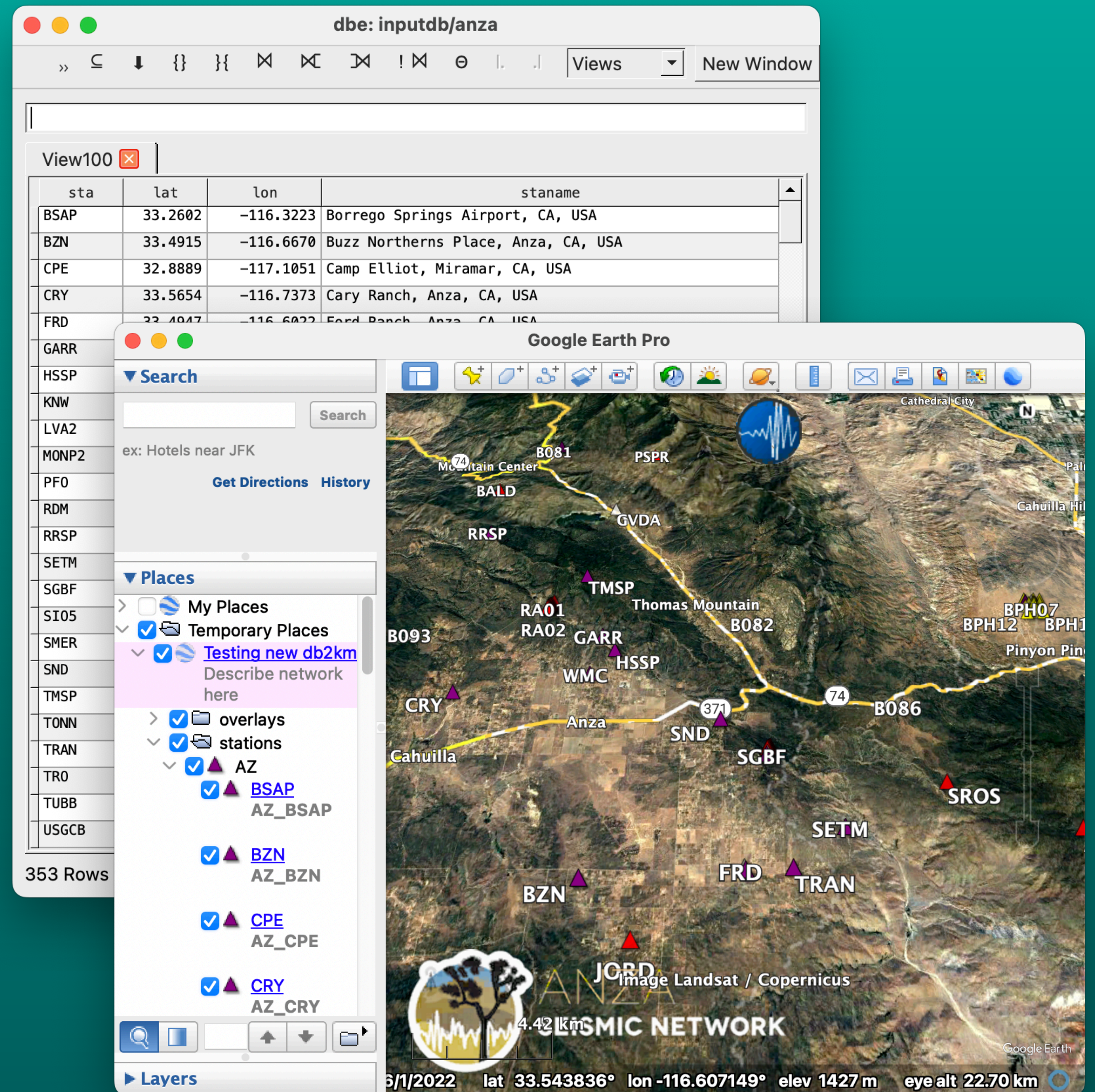
Many versions of this code

- Original perl script by Mike West ~10/2006
 - Scaling and colorization hard-coded internally
- 1st Python version called db2kml_py
 - Rewrite and further updates by Rob Newman and Juan Reyes
 - Customization of icons for station and origin place marks
 - Output of kmz allowed

Why update?

Good “teach myself Python” project

- Broken
- No python 2 since ~Antelope 5.8
- Styling options were limited
- Code hard to maintain
 - Relied on hand-rolled kml tagging
- Single source for placemark images



What changed?

- Python3
- Requires new modules
 - Simplekml (user must pip install)
 - Argparse
 - PIL
- Revamped db2kml_py.py (not backwards compatible!)
- Included default icons

New features:

- User chosen depth colorization**
- Customizable magnitude scaling
- Multiple overlays (i.e. logos)
- Templates for origin plotting
- Placemark icon variety:
 - hosted (web accessible or local)
 - api generated**

** requires api access

```
# dynamic depth colorization requires api, mag sizing does not
depthcolor &Arr{
  # depth    fillcolor
  -5         3F3F3F  # grey, very negative depth
  0          BFFFFF
  6          00DFFF
  10         000080  # greyblue
  20         03ff03
  30         FFE800  # yellow-organge
  40         FE9400
  60         FF0000  # red
  100        FF00B2
  200        FF00F7  # fuchsia
  300        B000B3
  400        8E00FE  # purple
  600        4C0066  # dk. purple
  800        000000  # black
}
```

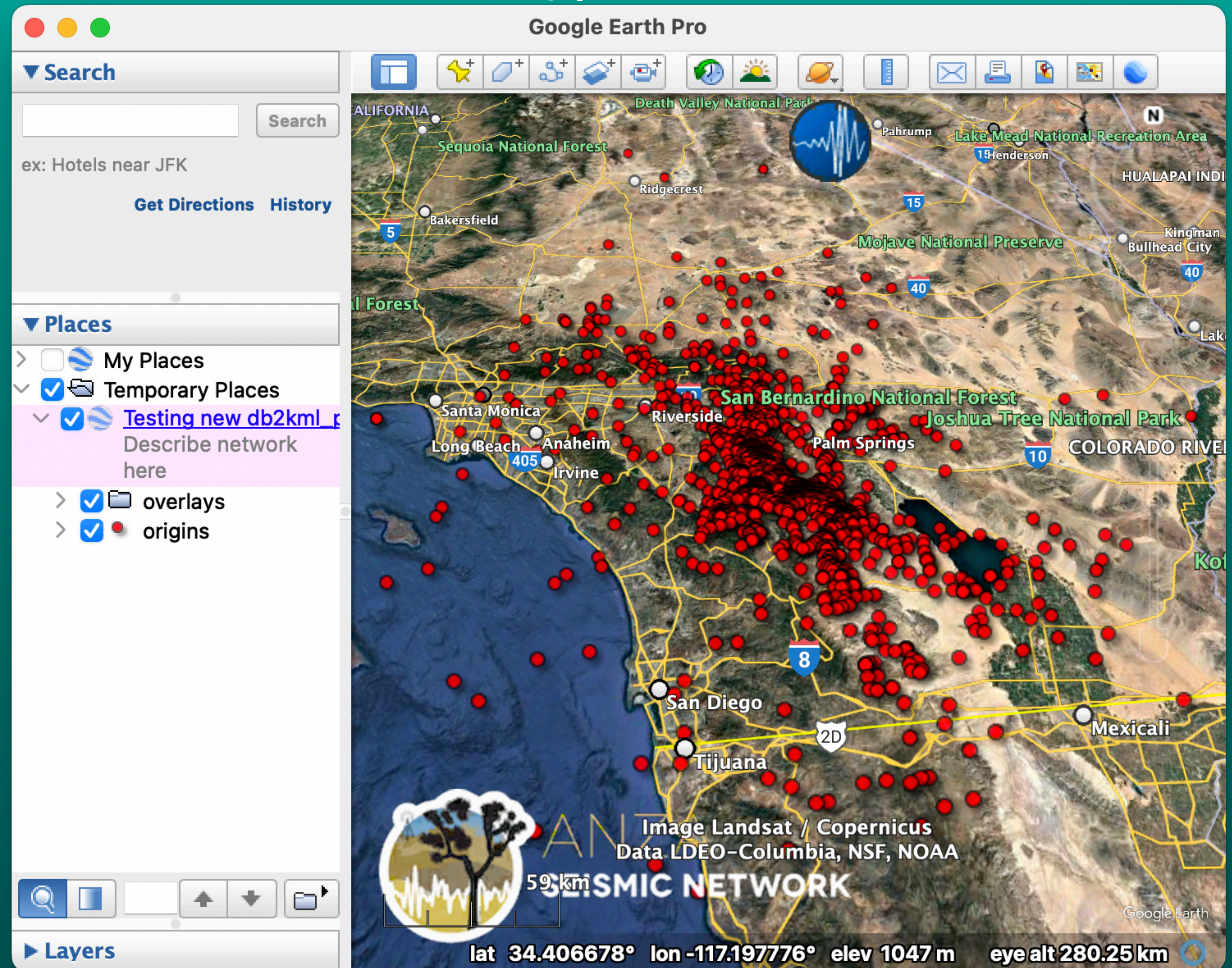
Customizable depth colorization

```
% db2kml_py -z dbin kmlout
```

- *API? No*
- *Mag? No*
- *Depth? No*

+ *used default
available icon*

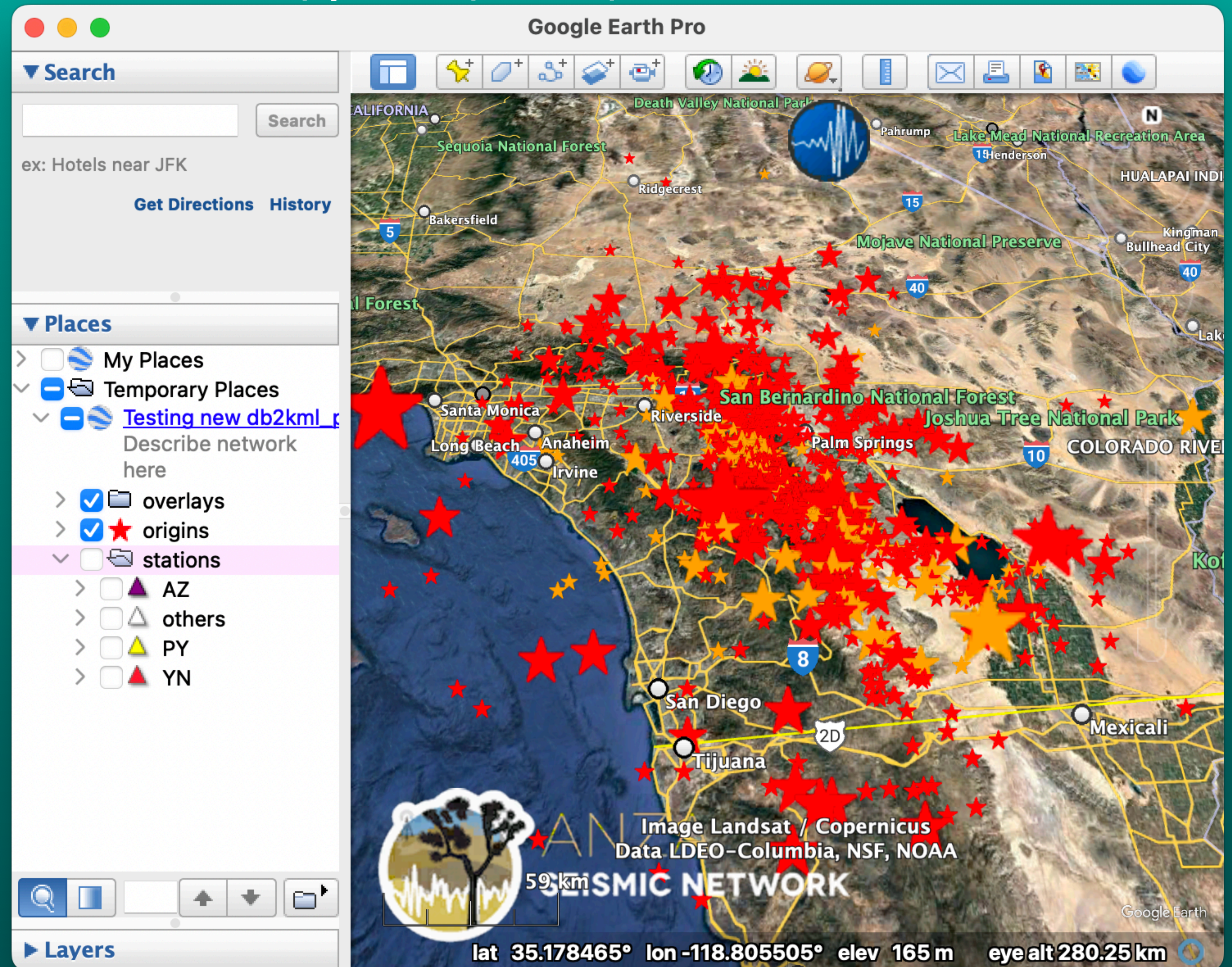
```
[zester{eakins}1334% ls -l $ANTELOPE/contrib/data/icons/  
ANZA-logo-small.png  
google_map_anza_icon.png  
green_star_nooutline.png  
orange_star_nooutline.png  
purple_star_nooutline.png  
red_star_nooutline.png  
red_triangle.png  
vsm_red_circle.png  
wht_triangle.png  
yel_triangle.png  
yellow_star_nooutline.png
```



```
% db2kml_py -z -opm depth:static_ms dbin kmlout
```

- *API? No*
- *Mag? Yes*
- *Depth? Cutoff*

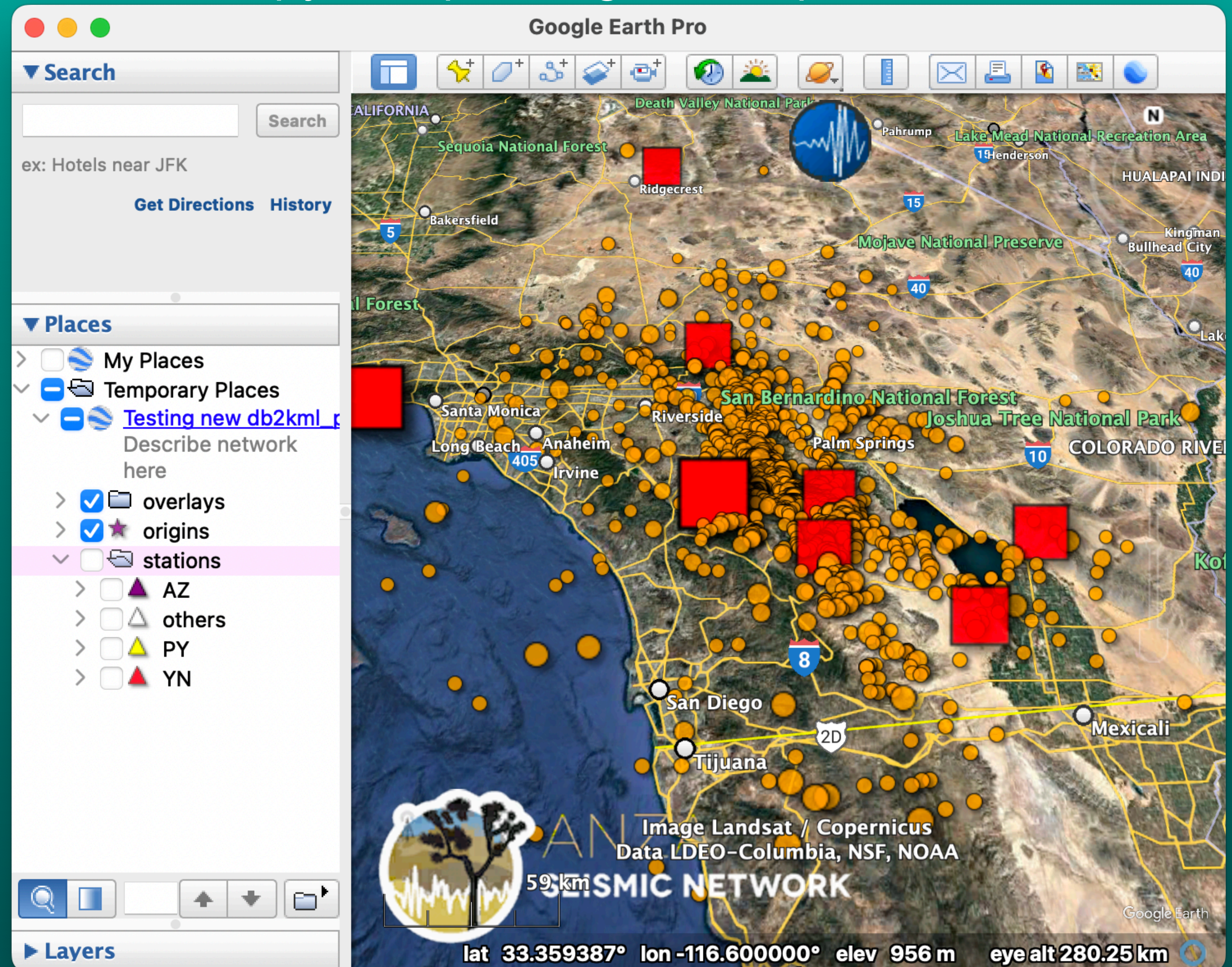
+ *color based on
cutoff depth*
+ *scale by
magnitude*



```
% db2kml_py -z -opm magnitude:api_ms dbin kmlout
```

- *API? Yes*
- *Mag? Yes*
- *Depth? No*

*+ color/shape
based on
magnitude
+ scale by
magnitude*



```
% db2kml_py -z -opm depth:api_ms_dd dbin kmlout
```

- *API? Yes*
- *Mag? Yes*
- *Depth? Yes*

+ *color by depth*
+ *scaled by magnitude*

