

June 18, 2020



## Viewing KML files of ATON data using Google Earth

The following instructions assume a Windows 10 computer and a Chrome browser. Other computers or devices and/or browsers will require similar actions, but there may be differences. Note: a KMZ file is a compressed KML file; in these instructions, they are interchangeable.

If you do not already have Google Earth or Google Earth Pro installed on your computer, go to the [Google Earth Pro download page](#) (it's free). On that page, click "Agree and Download" to download an installation file. A link to it appears at the bottom of your browser window. Click on this link to begin the installation. Follow the prompts to install Google Earth Pro. Note: Google Earth Pro is the same as Google Earth but has a few additional features. For an Apple or Android tablet or phone, download and install Google Earth from the Apple App Store or Google Play. Google Earth for the Web is not suitable for viewing this data.

With Google Earth installed, click the button "ATON Data KML File" on the [Aids to Navigation](#) page. The KML file downloads and a link to it appears at the bottom of your browser window. Click the link. Google Earth should open on your computer. If Google Earth does not automatically fly you to the Marco area, you can navigate there manually or double click a folder in Places to fly there. If clicking the downloaded file does not open Google Earth on your computer, you can open Google Earth and then click "File" (at top of the Google Earth window), then "Open", then navigate to the downloaded KML file and open it in Google Earth.

(Note: If you have another application on your computer that can open KML files, the file may open automatically in that application. To open it in Google Earth, do one of the following: a) Uninstall the other program and try again, or b) Change the default application for KML files to Google Earth and try again, or c) Find the downloaded file on your computer, right click and open with Google Earth.)

Some Google Earth features useful for viewing ATON information:

- Zoom and pan using scroll wheel and mouse (left-click to pan, ctrl+left-click to pivot and tilt, center-click to tilt and pivot about a point, right-click to zoom and pivot). Or use the controls at upper right.
- Zoom to the white square just west of Marco Island for a key to the icons, or click the blue text "Icon Key" in the Places panel.
- Expand or compress folders and subfolders in the Places list to see available categories of icons. Check or uncheck folders to view or not view the icons. There are several folders that are not checked in the default view of the KML file:
  - "Light List" displays ATONs as listed in the USCG Light List
  - "Channels" displays paths representing marked channels
  - "ATON Owners" displays all ATONs color coded by owner.
  - "Zones" shows outlines around ATON groupings by zone
  - "RCN/NOAA\_RNC" overlays NOAA chart 11430. If RCN/NOAA\_RCN is checked, a slider appears at the bottom of the Places panel that allows adjustment of the transparency of the overlay. Google Earth plots the overlay at sea level so there may be gaps in the overlay. Un-checking "Terrain" or "Buildings" in the Layers panel to eliminate the gaps.
- Drag the folder "MISPS ATONs" from Temporary Places to My Places to save it in Google Earth. It will then be available whenever you open Google Earth and will automatically update to the most recent data. To delete an old kml or kmz file from My Places, select it and hit "Delete" key.
- Click on an icon to bring up a balloon with information about the ATON.
- On the Tools menu, select Ruler (or click the ruler icon at the top of the window) to measure distances and headings.
- On the Tools menu, select Options to change lat/lon units and other settings.
- On the View menu, check "Scale Legend" to display a distance scale.

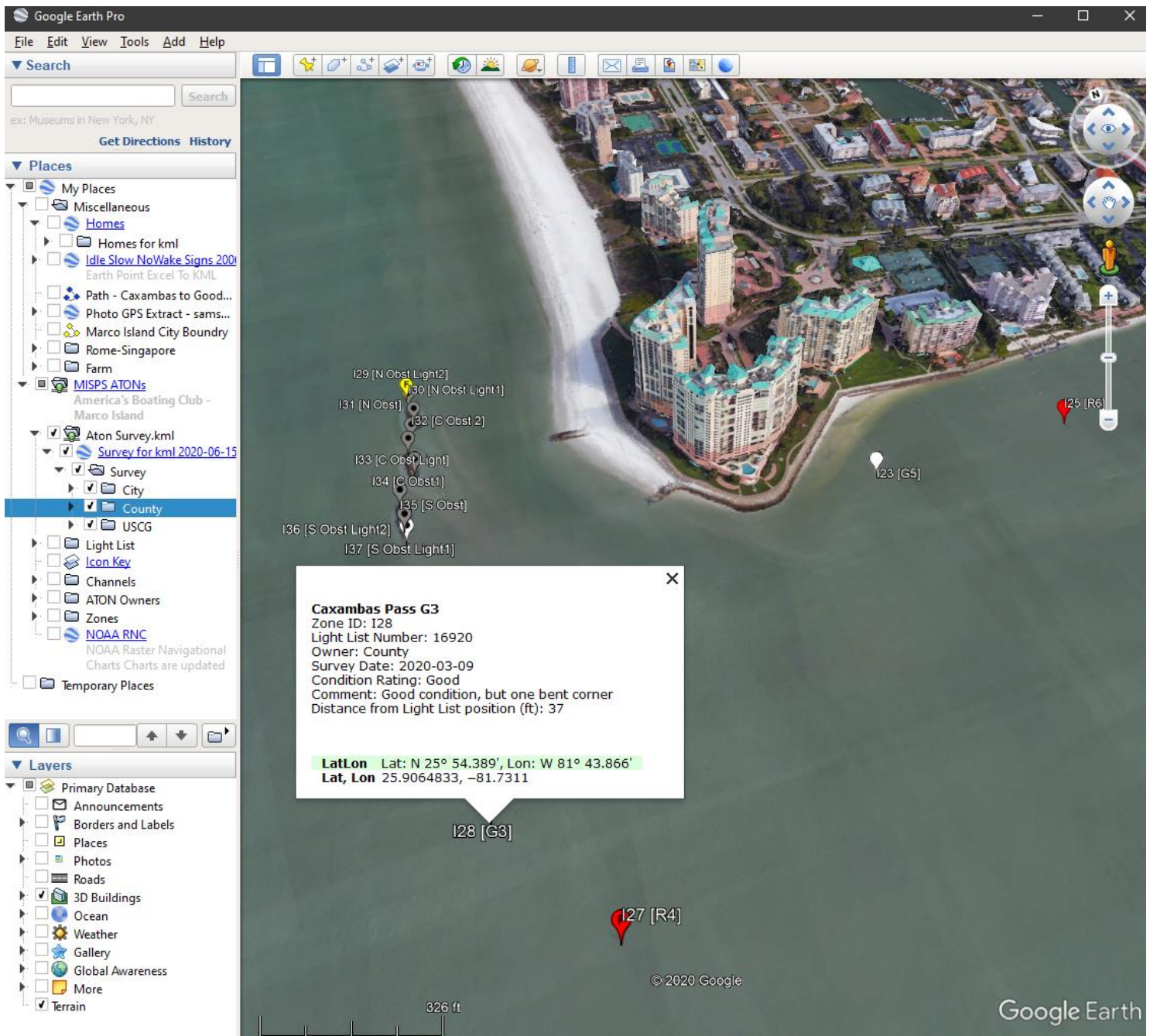
- On the View menu, check “Historical Imagery” (or click the clock icon at the top of the window) to open a time slider that allows viewing earlier imagery. Earlier imagery may be better than the default for viewing certain details (calmer water, lower tide, no clouds).

## Screen Shot of Google Earth Window zoomed to show Entrance to Caxambas Pass

Aton I28 [G3] has been clicked to show additional information.




In the Places Panel on the left, the folder “MISPS ATONS” has been moved from “Temporary Places” to “My Places”. Only the subfolder ATON Survey.kml has been checked, so the other subfolders (Light List, Icon Key, Channels, ATON Owners, Zones and NOAA RNC) are not overlayed on the satellite image.

In the Layers panel, Buildings and Terrain have been checked and the view tilted for a 3D perspective.












## Key to Icons used in KML file for ATONs

### Light List Icons

-  Odd numbered daybeacon or light
-  Even numbered daybeacon or light
-  Not numbered obstruction marker or light

(Click on Icon for Zone ID, Full light list name, Lat/Lon)

### Survey Results Icons

-  Odd numbered daybeacon or light (F = Fair, P = Poor, S = Special)
-  Even numbered daybeacon or light
-  Not numbered obstruction Marker or light
-  Piling only
-  Missing sign on one side
-  Missing completely
-  Missing but not needed
-  On Light list, but in area not surveyed  
(shown at Light list position)
-  Proposed New daybeacon (even, odd or obstruction)

(Click on Icon for Zone ID and other information)