

Tools

(in preparation for your site visit and your sketch_walk photo assignment. .)

1. Geo-locating photos
2. Gathering GPX data from your GPS
(on your phone, and bringing it into GIS)
3. Importing kml data from google



NOTE:

ArcGIS default is for LANDSCAPE or horizontal photos. If you take a vertical photo you CAN work around by re-saving it, but its an extra couple of steps . .

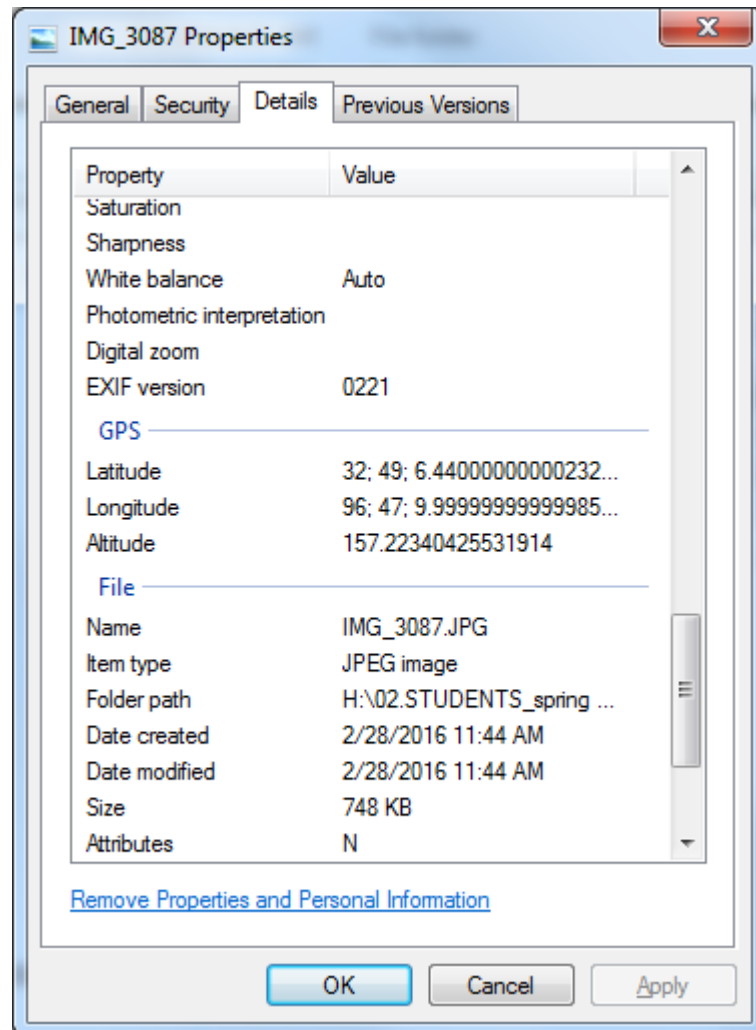
For now— Just take horizontal photos!

Take a series of Geotagged Photographs . . .

your smart-phone does this automatically!!

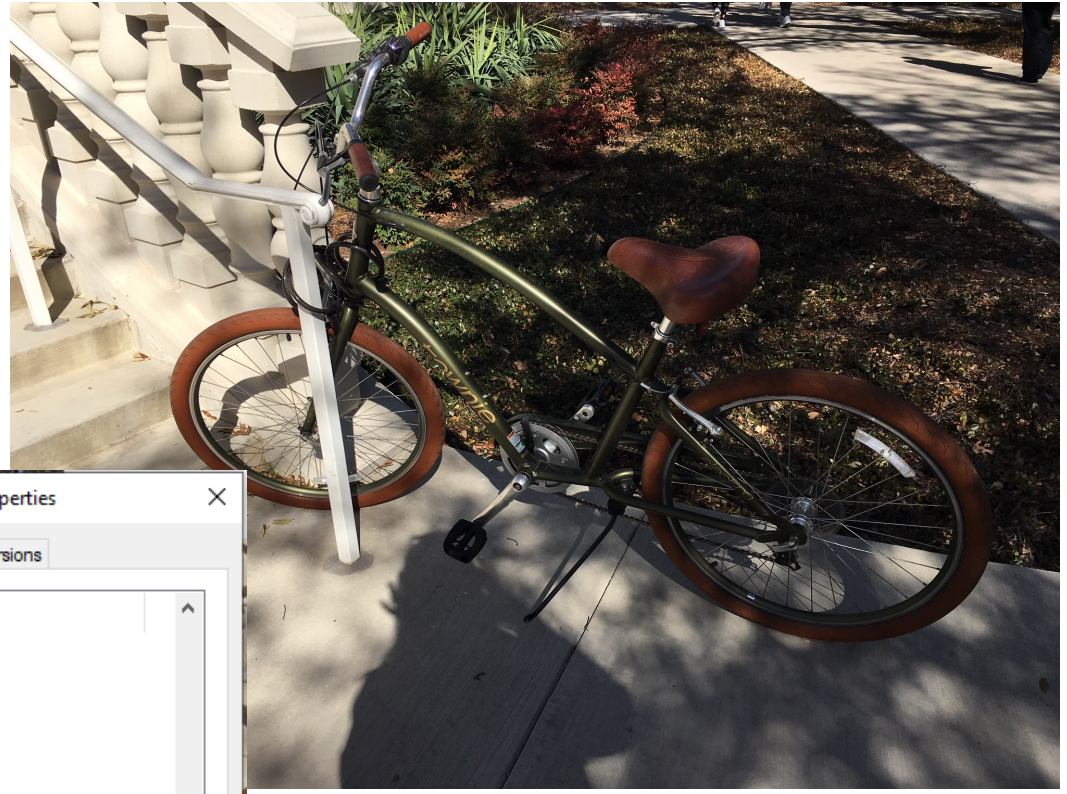
Just check by looking at 'properties' or 'info' on your photos

Most modern cameras have the option to geotag . .but not all have it as default. .



If your phone is not geotagging your photos- you will need to set your settings to allow it to do so.

(sometimes you lose the geographic data when you e-mail it through certain systems . .)



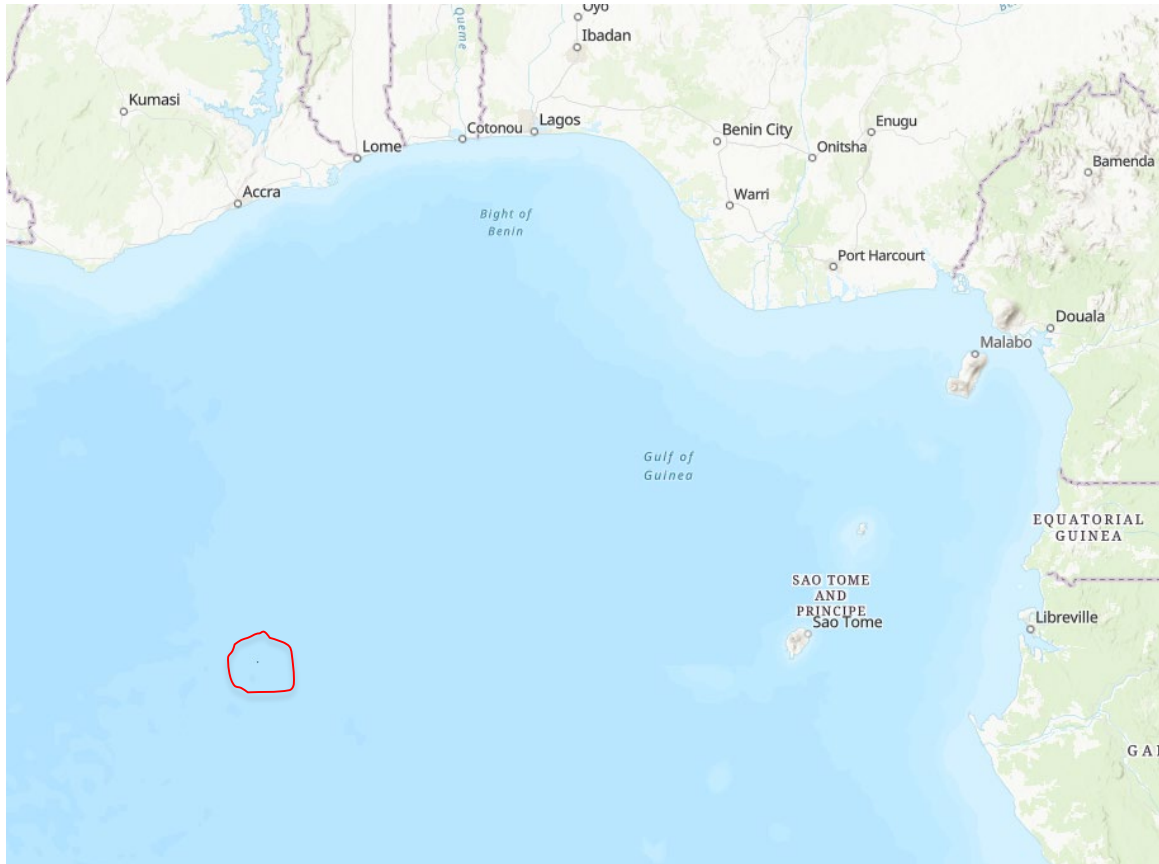
28246559649_662830d354_o.jpg Properties

General Security Details Previous Versions

Property	Value
Saturation	
Sharpness	
White balance	Auto
Photometric interpretation	
Digital zoom	
EXIF version	0221
GPS	
Latitude	32; 50; 21.88999999999993...
Longitude	96; 47; 5.159999999997433...
Altitude	169.875
File	
Name	28246559649_662830d35...
Item type	JPG File
Folder path	C:\Users\26661028\Box S...
Date created	9/13/2020 7:14 PM
Date modified	9/13/2020 7:14 PM
Size	1.90 MB

[Remove Properties and Personal Information](#)

OK Cancel Apply



Open a new Map in Pro
> Add a folder
> Navigate to your photos

First try dragging a photo onto the map.

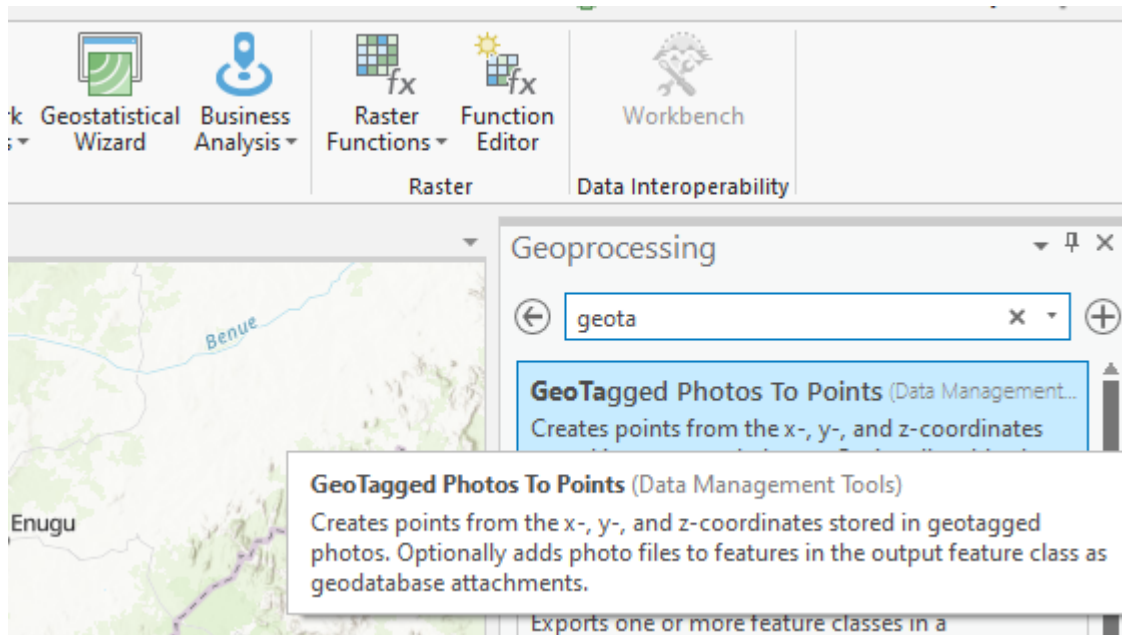
Right-click and 'zoom to layer'
Zoom out- it is probably in the ocean

Why?

"Null Island"

Analysis > tools > GeoTagged Photos to Points (Data Management)
import geotagged digital photographs into your map and integrate them directly into your existing geodatabase using the **GeoTagged Photos To Points tool**

The tool creates a point feature class in the geodatabase and, as an option, attaches the photos to the point feature class



Geoprocessing



GeoTagged Photos To Points



Parameters Environments



Input Folder

SMU_photos_JMZ



Output Feature Class

jects\MyProject4\MyProject4.gdb\SMU_photos



Invalid Photos Table



☒ Include Non-GeoTagged Photos

☒ Add Photos As Attachments

Pop-up

SMU_photos (1)

40025478591_586482b744_o.jpg

SMU_photos - 40025478591_586482b744_o.jpg

OBJECTID 8

Path G:\2020 GIS
CLASS\SMU_photos_JMZ\40025478

Name 40025478591_586482b744_o.jpg

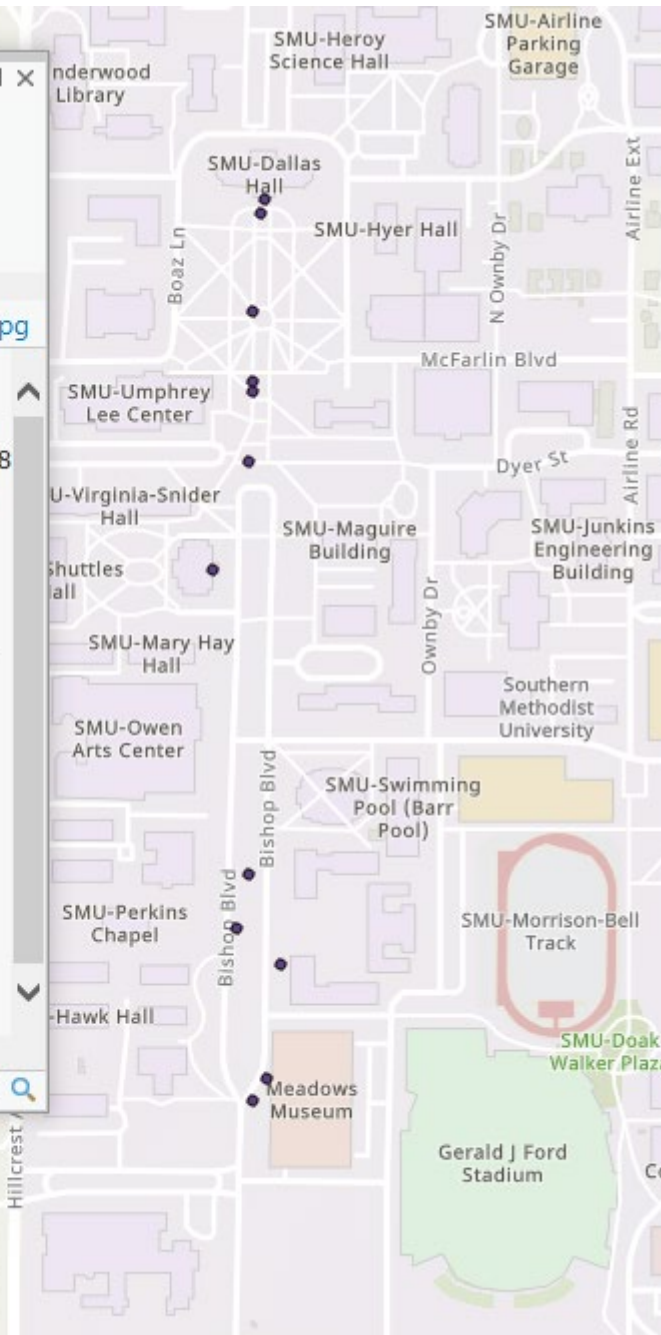
DateTime 2018:01:24 12:04:31

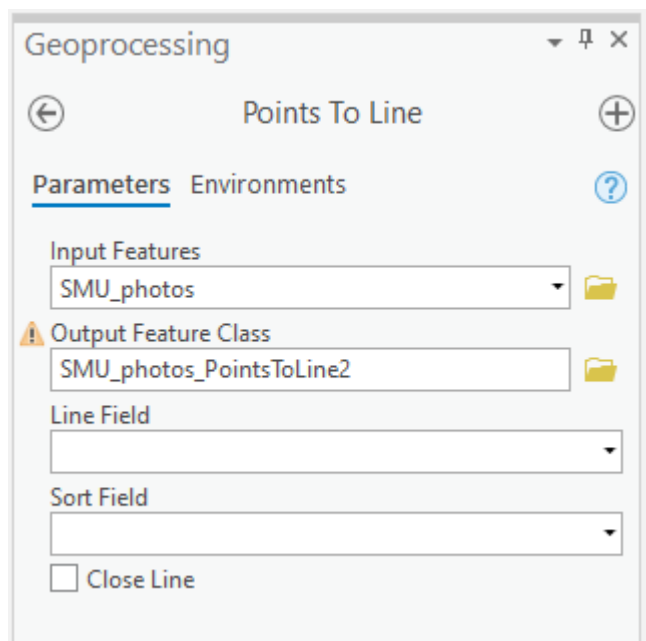
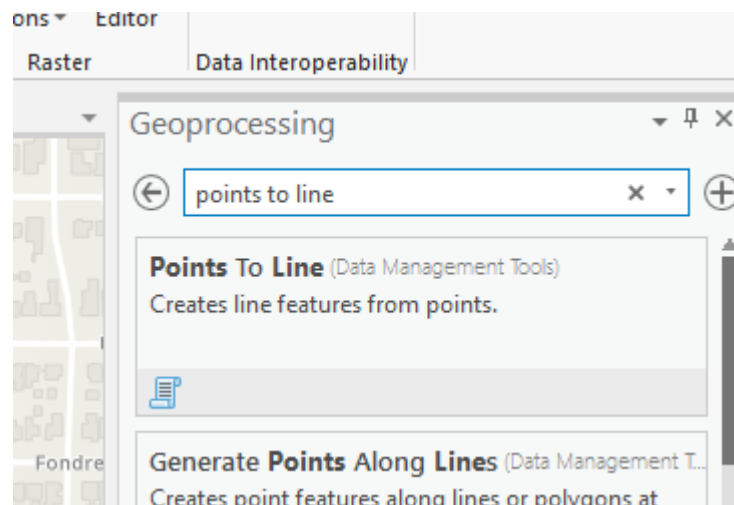
Direction 69.409669

40025478591_586482b744_o.jpg



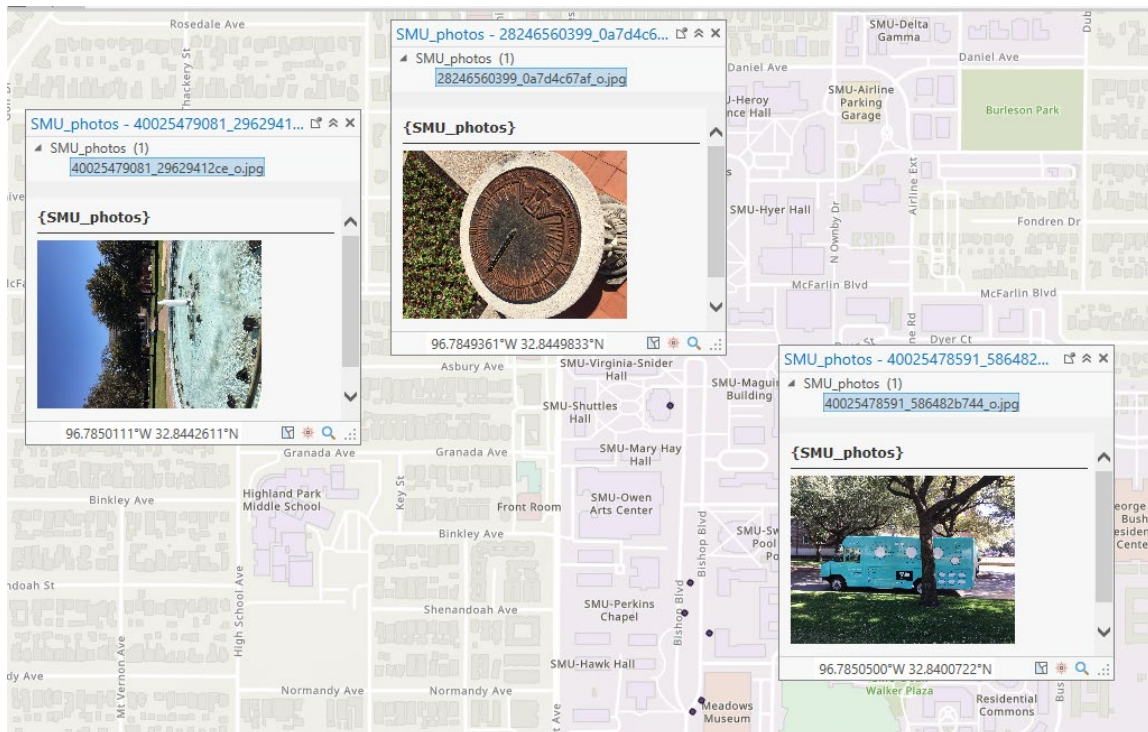
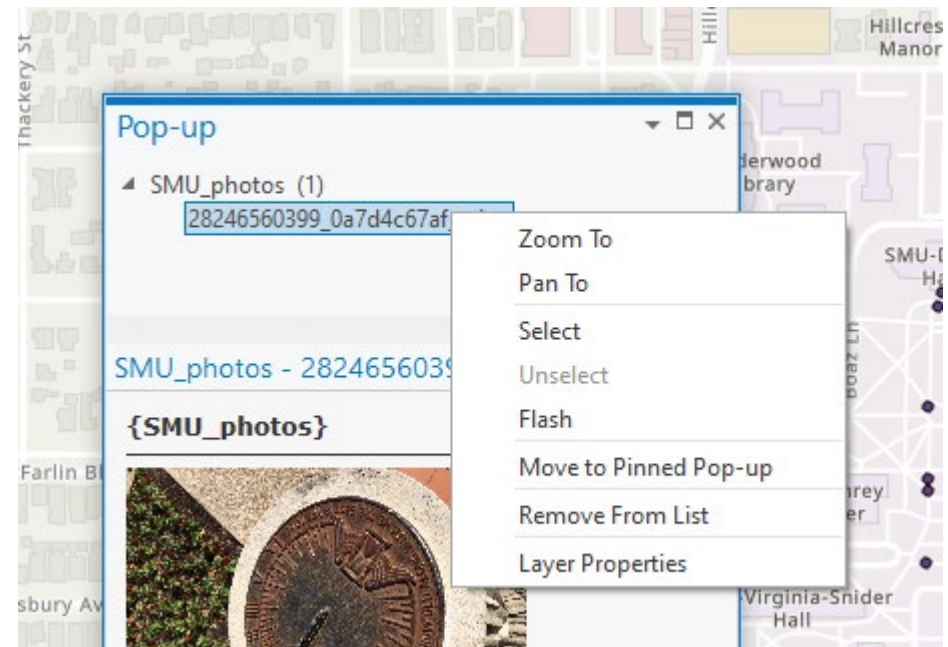
96.7850500°W 32.8400722°N





Right-click on the photo and
'move to Pinned pop-up to
display more than one.

Right-click in Contents and
'configure pop-up to remove all
the extra text.



Upload a
screenshot of a
series of images in
a test-run photo
walk.
And a screenshot
of your path.

STEP 2

Bring your photos into a storymap

Title your st

Start with a short introductio

+ New story ▾

rch

1. New story
2. Add a title and a first line of text
3. Add. . . .Guided tour
4. Map focused

Text

Button

Separator

Image

Video

Audio

Map

Embed

Slideshow Beta

Swipe Beta

Sidcar

Guided tour

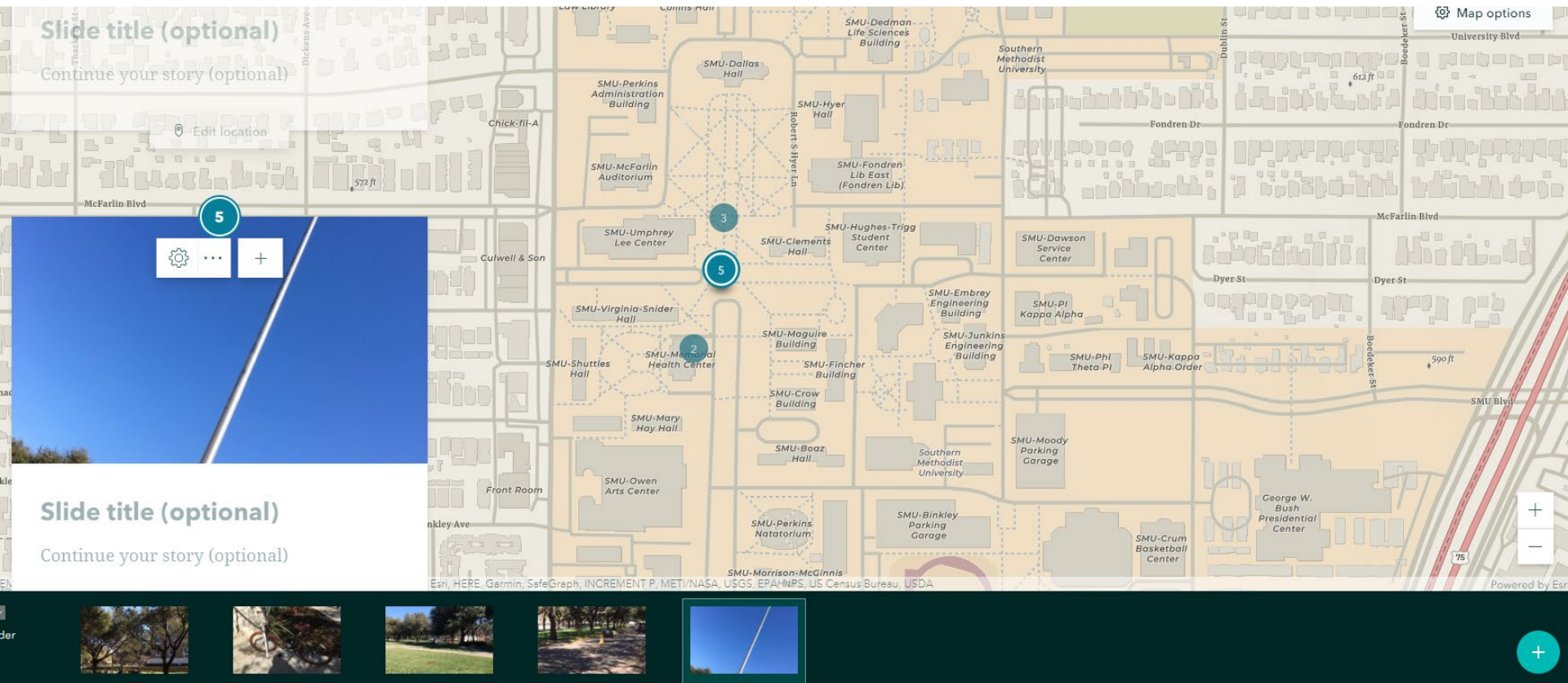
Location added

The image you added has location information which has been used to locate this point in your tour

NORWAY

Moscow

Map options to
change the zoom level
and background



Plus to add the images

Play with the format And upload the link (make it public when you publish it).

STEP 3

Gathering GPX data, showing the journey collected from a GPS
(on your phone, and then bringing it into GIS)

(this is an actual path, rather than just a connecting of
photographs taken with your phone)

See if you can do this as a separate step-

WITHOUT doing a collection photos on the same app.

(you can combine the two, but every app has a different set of
settings for this)

In this exercise – see if you can collect ONLY the path.



[View in iTunes](#)

Free

Category: [Navigation](#)

Updated: Feb 24, 2016

Version: 3.5.2

Size: 7.5 MB

Languages: English, Simplified

Chinese, Traditional Chinese

Seller: Jason Chiu

© 2012-16 GPS Hiker from

Jason Chiu

Rated 4+

Compatibility: Requires iOS 7.0 or later. Compatible with iPhone, iPad, and iPod touch.

Customer Ratings

We have not received enough ratings to display an average for the current version of this application.

All Versions:

★★★★ 37 Ratings

Description

GPS Hiker is a great and free application for outdoor activities. It supports GPS track logging, GPX file import/export and offline maps (Open Street Map, Open Cycle Map, Hike Bike and Custom Map Image) download and viewing. Camera, twitter and email features are integrated as well.

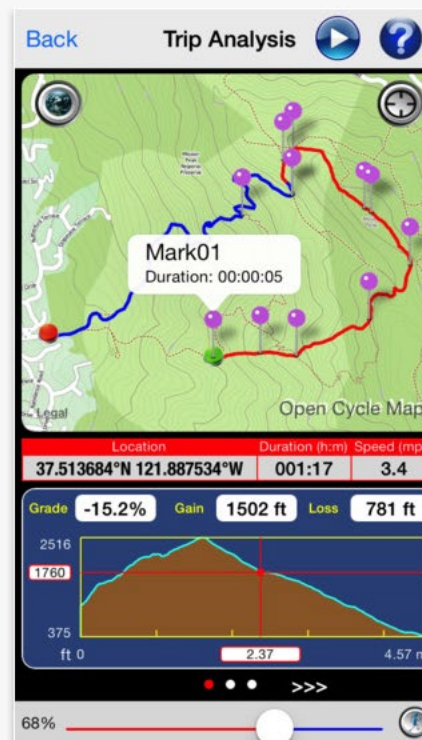
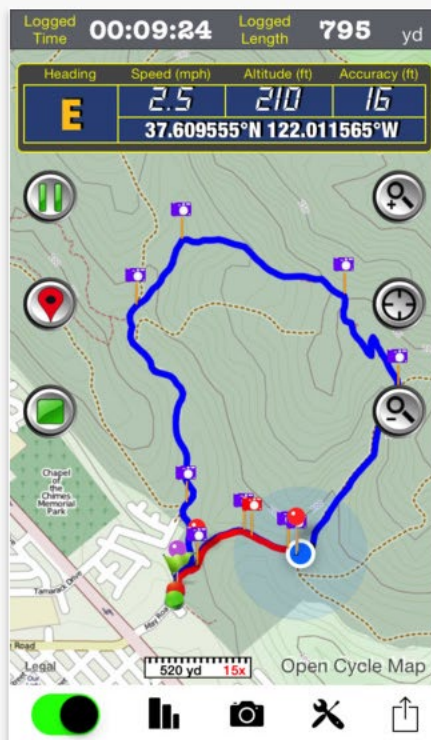
[GPS Hiker Support](#)

[...More](#)

What's New in Version 3.5.2

1. Support routes in the GPX file.
2. Fix the camera privilege issue.

iPhone Screenshots



FIND AN APP

Something like this-
there are
HUNDREDS
It needs to be able
to

export GPX or KML

Minimalist GPS Tracker

By Alexey Kuznetsov

Open iTunes to buy and download apps.



[View in iTunes](#)

+ This app is designed for both iPhone and iPad

Free

Category: [Navigation](#)

Updated: Sep 17, 2015

Version: 1.7

Size: 5.2 MB

Languages: English, Russian

Seller: Alexey Kuznetsov

© 2013-2015 Alexey

Kuznetsov

[Rated 4+](#)

Compatibility: Requires iOS 8.2 or later. Compatible with iPhone, iPad, and iPod touch.

Customer Ratings

We have not received enough ratings to display an average for the current version of this application.

All Versions:

★★★★ 18 Ratings

Description

Tracker records, keeps the history of, and exports GPS tracks in GPX format. It cares about the data privacy and about the battery life.

[Minimalist GPS Tracker Support](#)

[...More](#)

What's New in Version 1.7

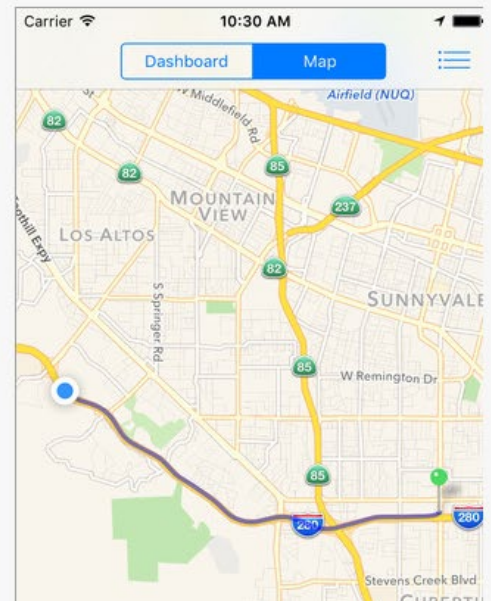
iOS 9 and iPad multitasking support.

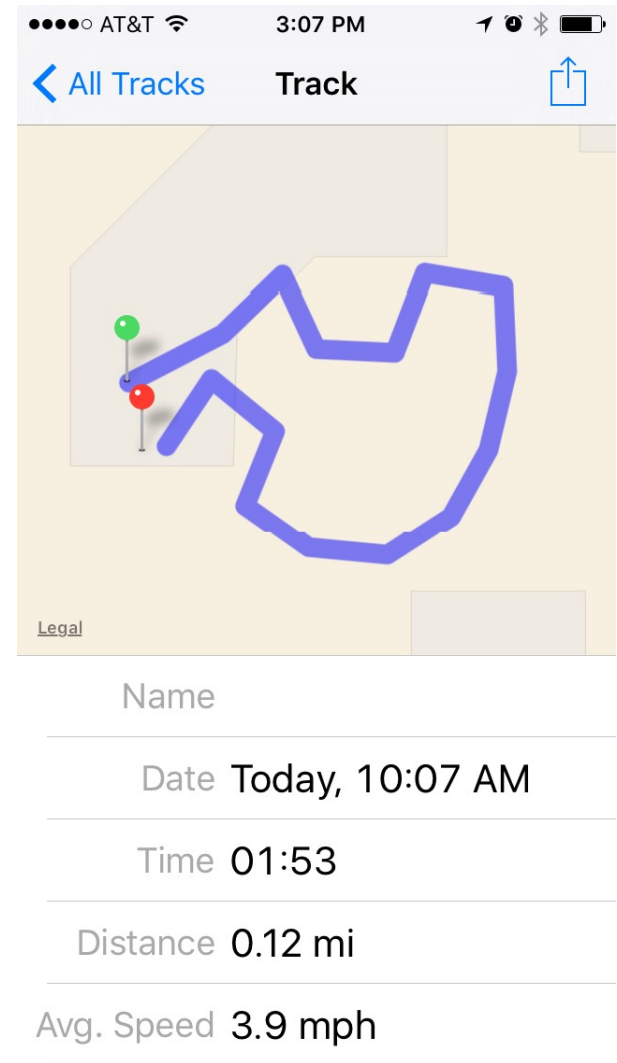
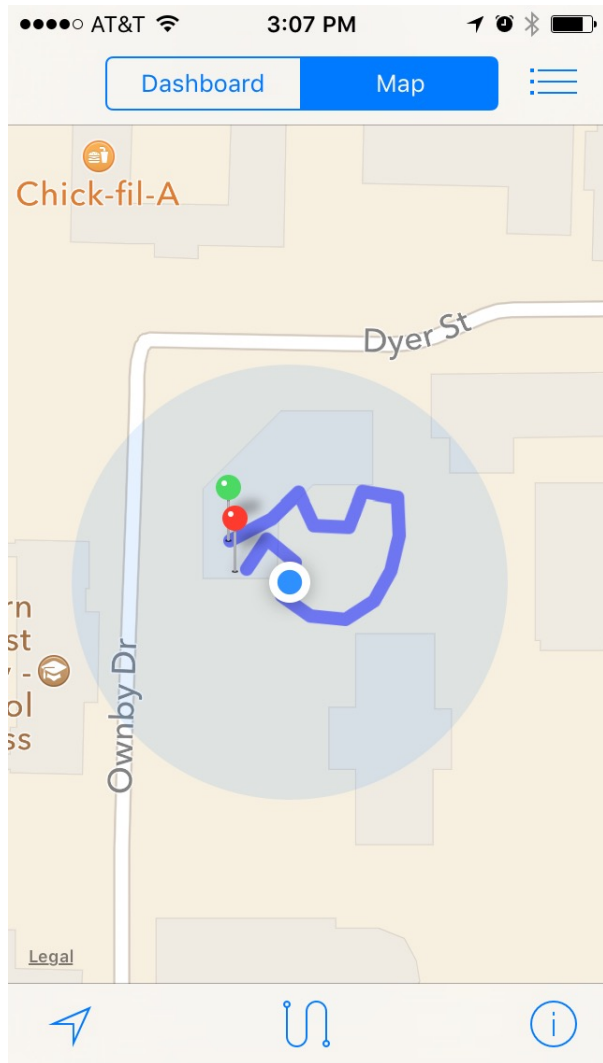
export GPX or KML

Note- this one only gives a 5 min path for the free version. Stop and start!

Screenshots

iPhone | iPad





●●●●○ AT&T 3:10 PM 1 0 *

[Cancel](#) Track on 2016-02-2... [Send](#)

To:

Cc/Bcc, From: zarazaga@icloud.com

Subject: Track on 2016-02-29
at 10-07 CST.gpx



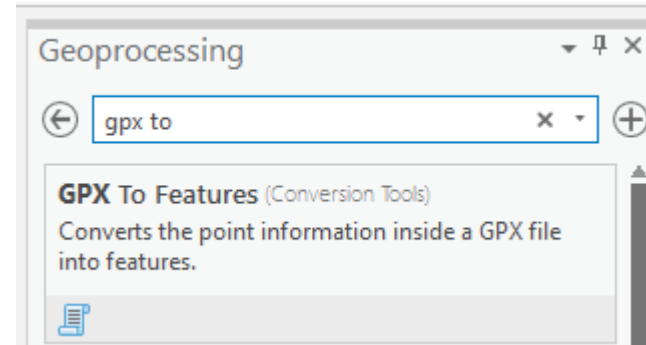
Track on 2...-07 CST.gpx

Sent from my iPhone

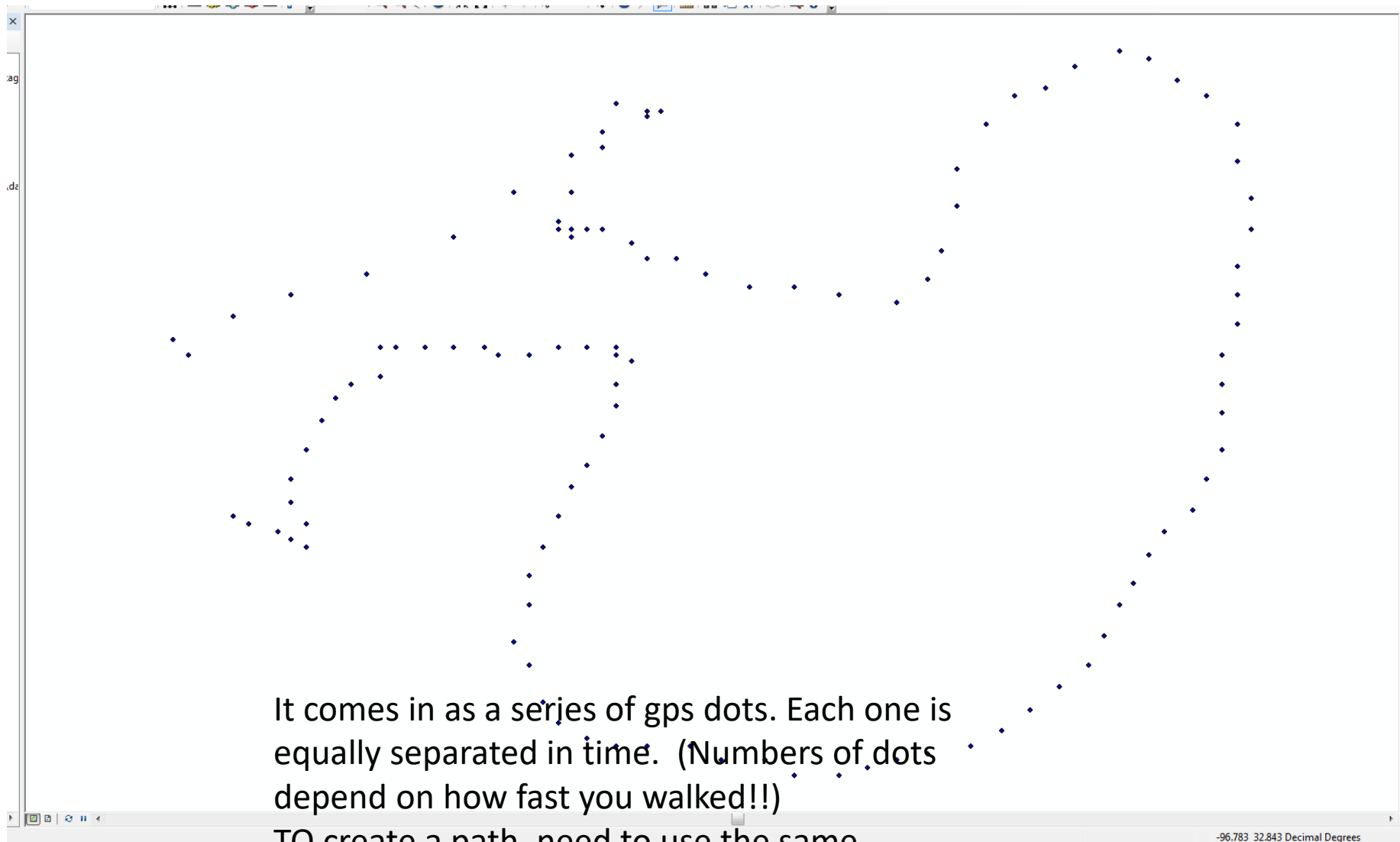
usually, if it has an export option, the app offers you the option to e-mail yourself the file or track

A .gpx file or a .kml file can both be imported into ArcGIS / ArcGIS Pro easily

you want the tool: from GPX or GPX to Feature
or
from KML to Layer

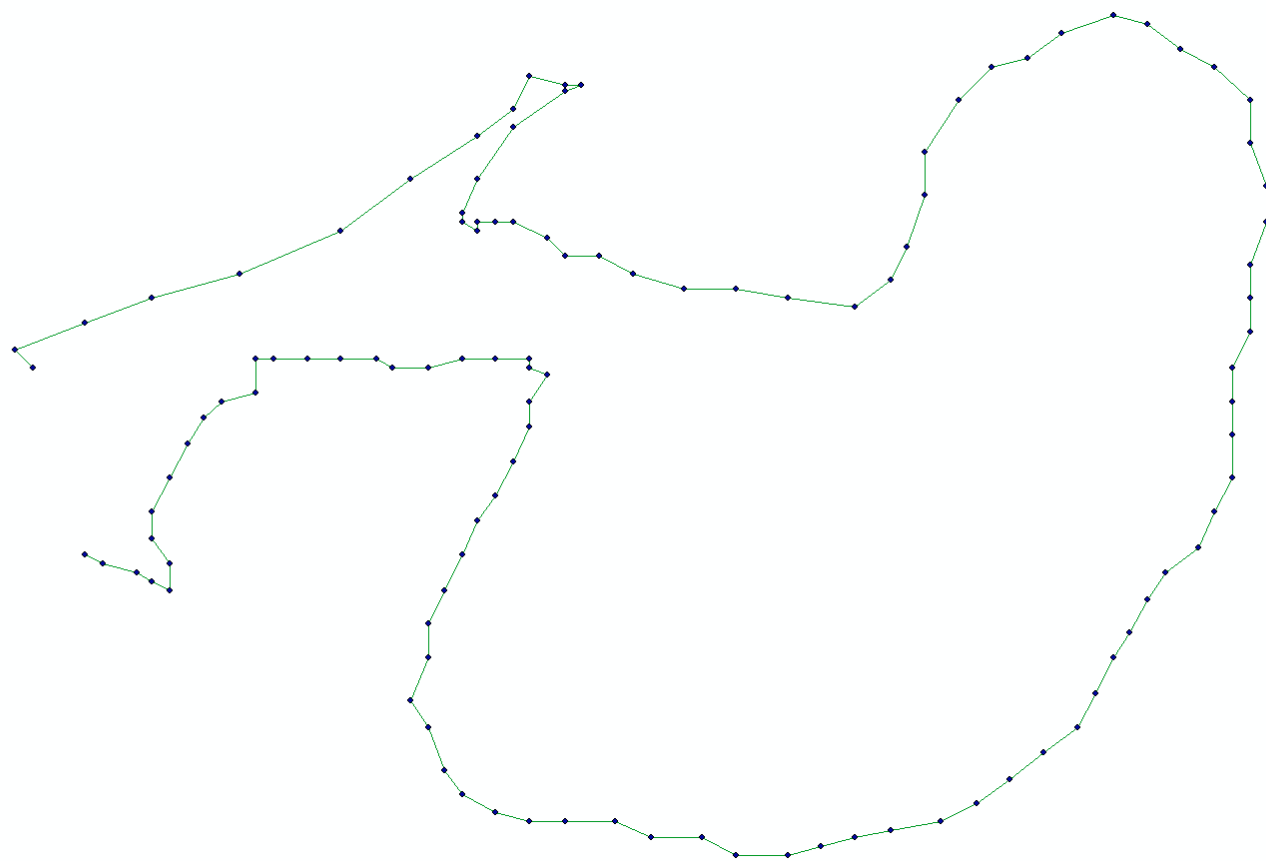


you will have to navigate to where you saved the file



It comes in as a series of gps dots. Each one is equally separated in time. (Numbers of dots depend on how fast you walked!!)

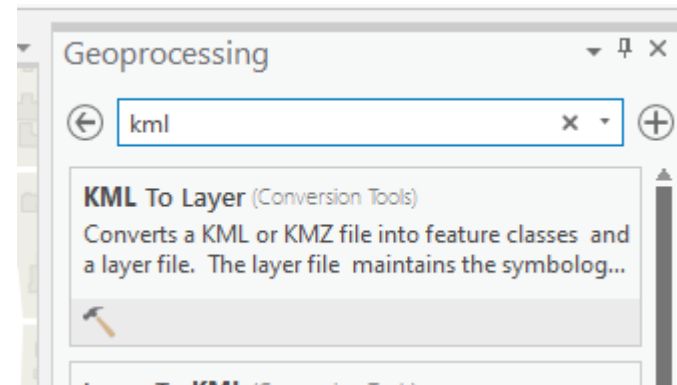
TO create a path, need to use the same 'POINTS to LINE' tool again.



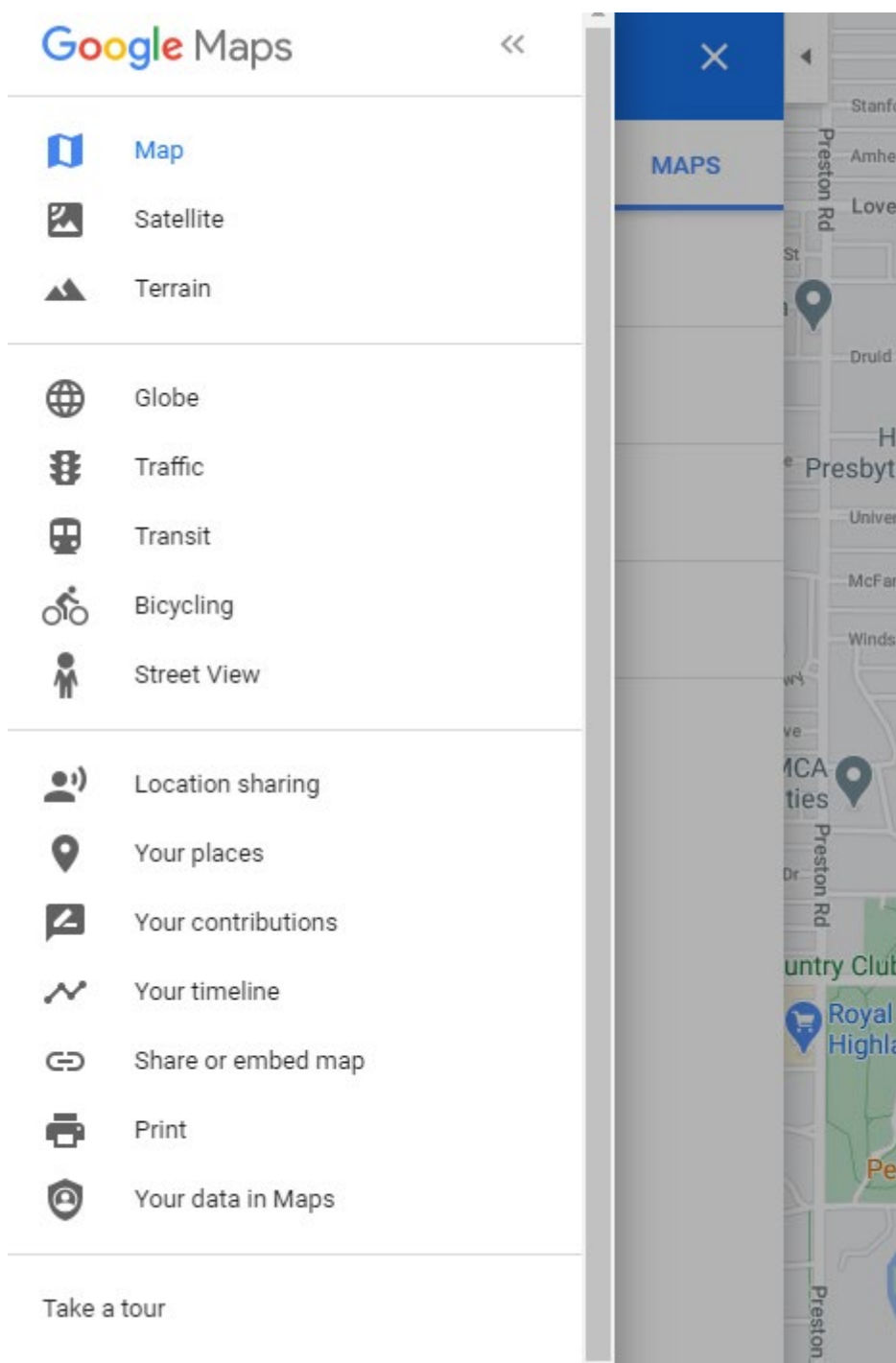
If your data exported from your phone is a KML file- you can import it using that tool .
(this is less common, since its not a native GPS system)

KML is the language that google maps uses to store geo data!

SO, while we are learning this, we also will learn another useful tip



-- if you want to get some info from google maps- and you want to bring that route data directly into ArcGIS, you can import it as KML!



4. How to import a file from google maps. KML to layer (and eventually to .shp)

Sign in (you need a google account)

note- google changes fast – this may be out of date- but it will be similar.

..

click on search box (to reveal the list of searches below) select: ' My maps'

(note, Google maps changes very frequently, so these instructions are out of date every time I re-do them. But it should be similar)



Your places



LABELLED

SAVED

VISITED

MAPS



The Bike-sharing World Map

February 25, 2020



DIS

March 14, 2018



services near fair park

October 17, 2017



Untitled map

October 17, 2017

SEE ALL YOUR MAPS

CREATE MAP

Untitled map

All changes saved in Drive



Add layer



Share



Preview



cafes



Cafe Brazil



Cafe Izmir



Zaguan



la Madeleine French Bakery ...



Cool River Cafe



Company Cafe & Bar



Cafe Brazil



la Madeleine French Bakery ...



Cafe Brazil



la Madeleine French Bakery ...



Untitled layer



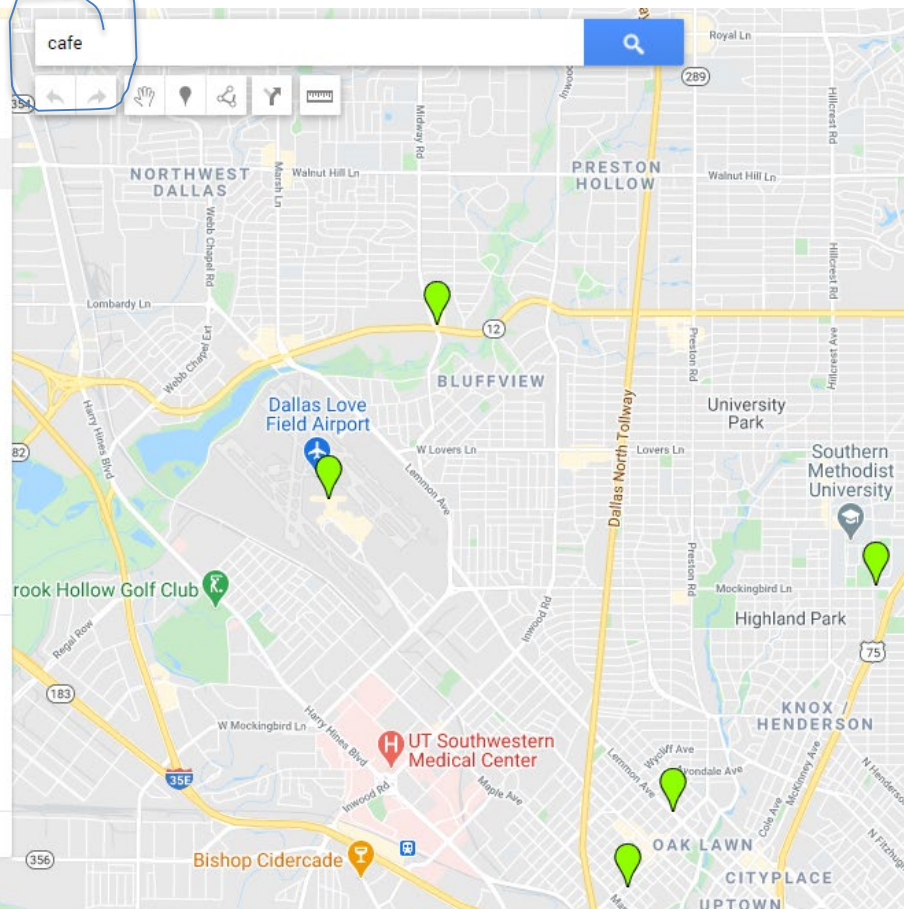
Import

Add places to this layer by drawing or importing data. [Learn more](#)



Base map

cafe



✕

Edit map title and description

Map title

cafe map

Description

Add a description to help people understand your map

Save

Cancel

Add them to your layer

✕

📍 Cafe Brazil

+

☒ Untitled layer

Individual styles

📍 la Madeleine French Bakery ...

📍 Cafe Brazil

📍 la Madeleine French Bakery ...

📍 Cafe Brazil

📍 Company Cafe & Bar

📍 Cool River Cafe

📍 la Madeleine French Bakery ...

📍 Zaguan

📍 Cafe Izmir

Lombardy Ln

Webb Ct

Hunt Jones Blvd

Brook Hollow Golf Club

Regal Row

82

183

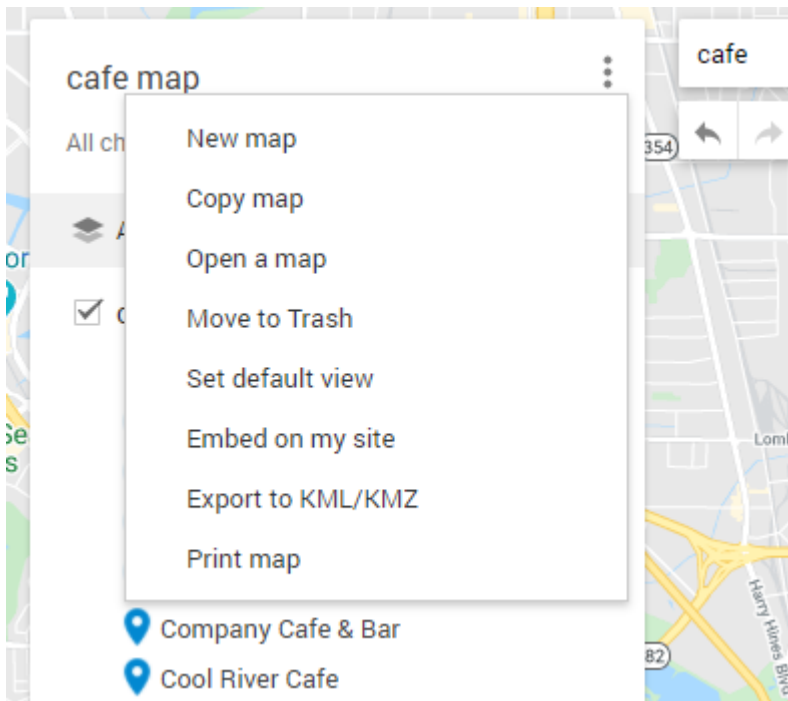
☒ Untitled layer

Rename this layer

Delete this layer

Open data table

📍 Cafe Brazil



Three dots: export to KML

Then import to KML

