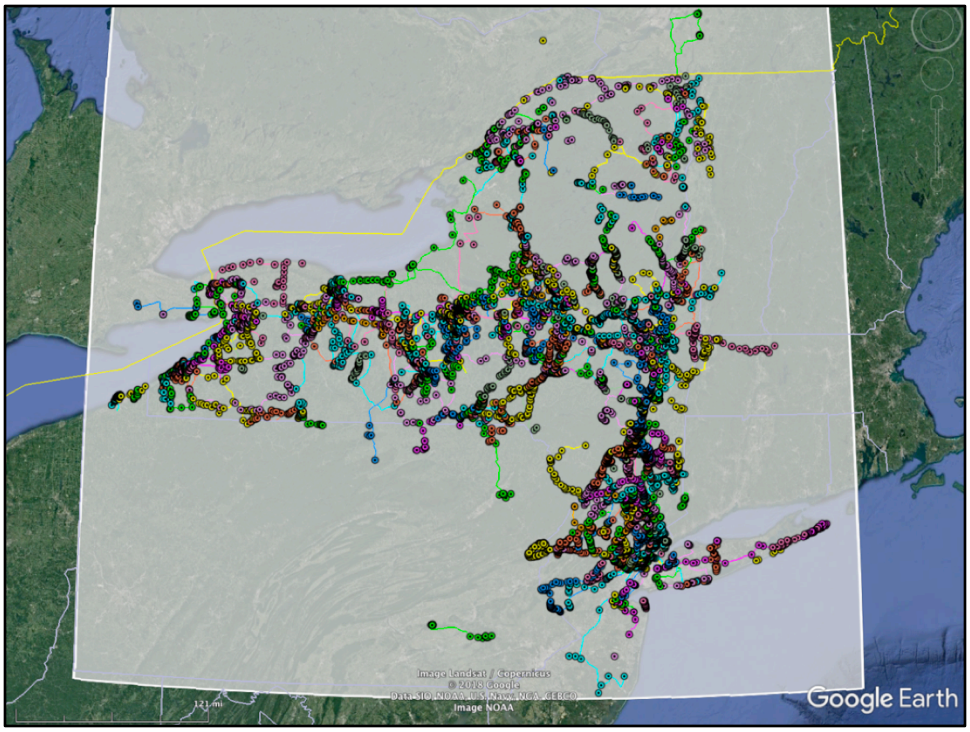
Instructions for Limiting the Geographical Extent of the Placemarks in the NYSGA Database

This pdf is from the Powerpoint Presentation given at the NEGSA conference in Burlington, VT, in March, 2018. It omits the background information on how the database was constructed, and just starts where we went over the procedures to use in extracting field trip stops based on their locations.

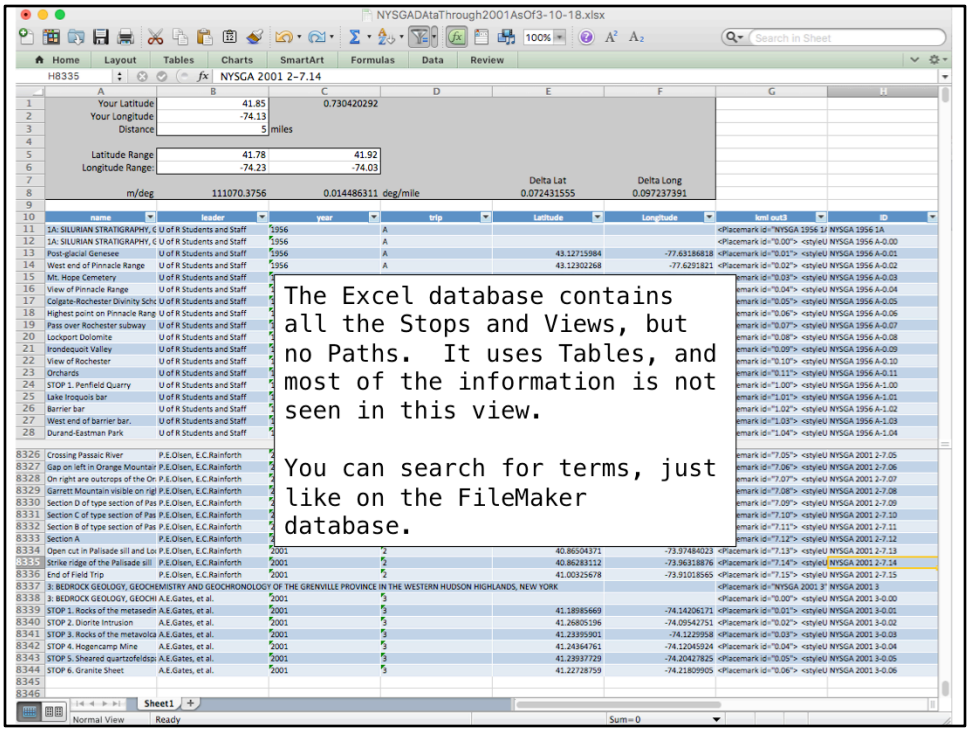


Here we are on Google Earth showing all the Placemarks made so far. 8,000 placemarks is too many to deal with, and Filemaker is not something everyone has lying around. So we put things into Microsoft Excel tables. To do this we extracted the Placemarks and their locations from Filemaker, and imported them into Excel. The file can be found here:

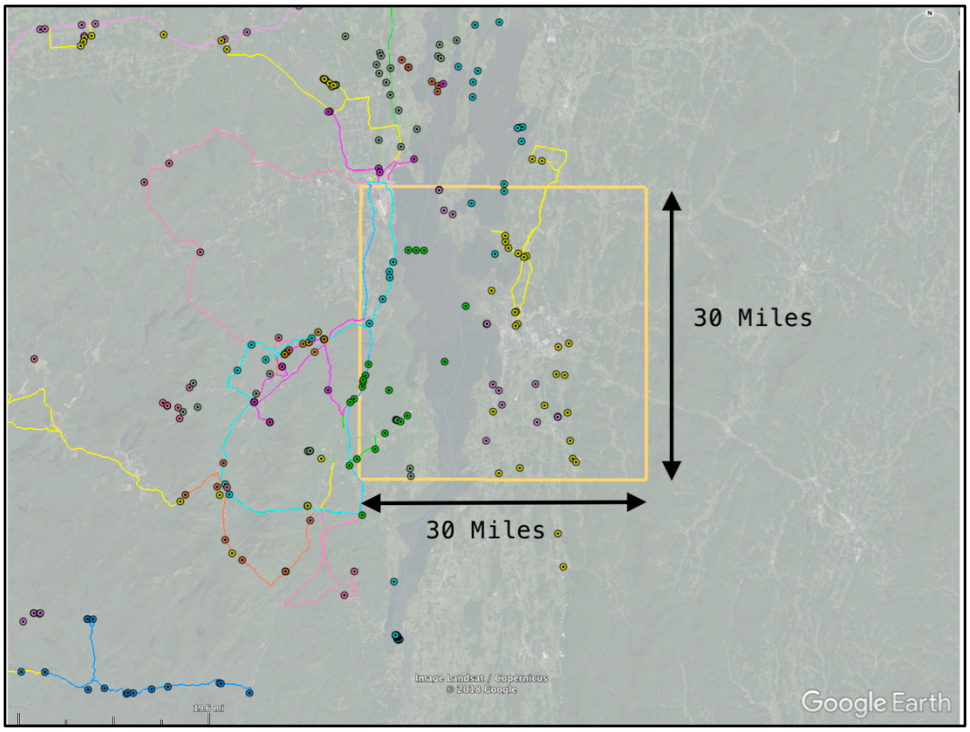
http://ottohmuller.com/nysga2ge/Files/NYSGADAtaThrough2001AsOf3-10-18.xlsx and additional instructions are here:

http://ottohmuller.com/nysga2ge/Instructions.docx

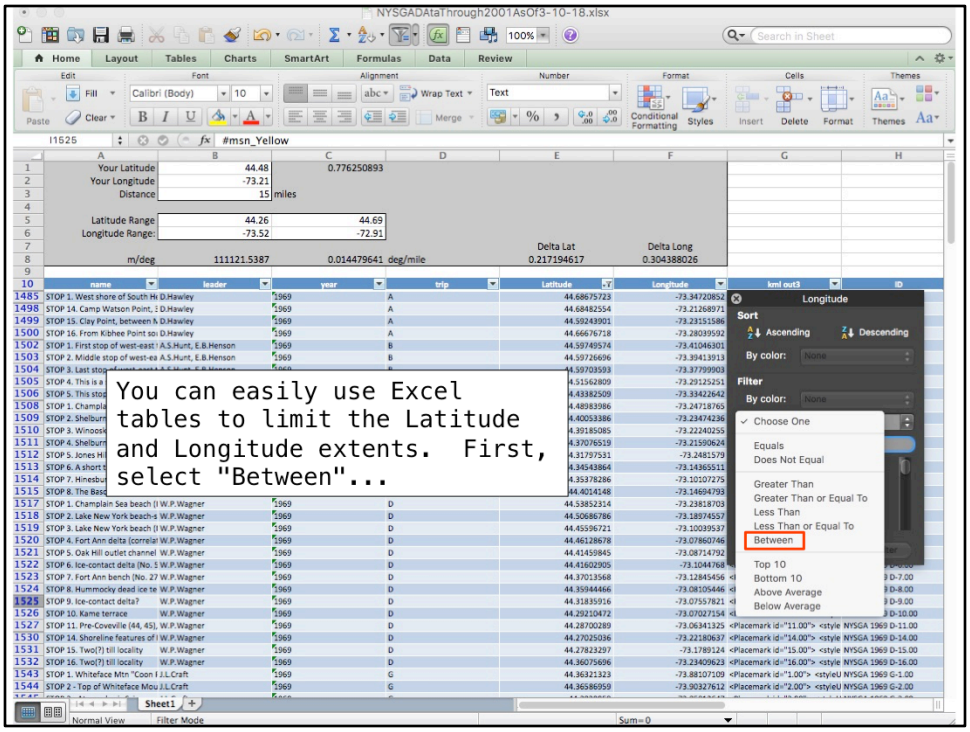
For Apple fans, this is also possible with Numbers. There may be a sequel to this pdf using Numbers and Pages, instead of Excel and Word.



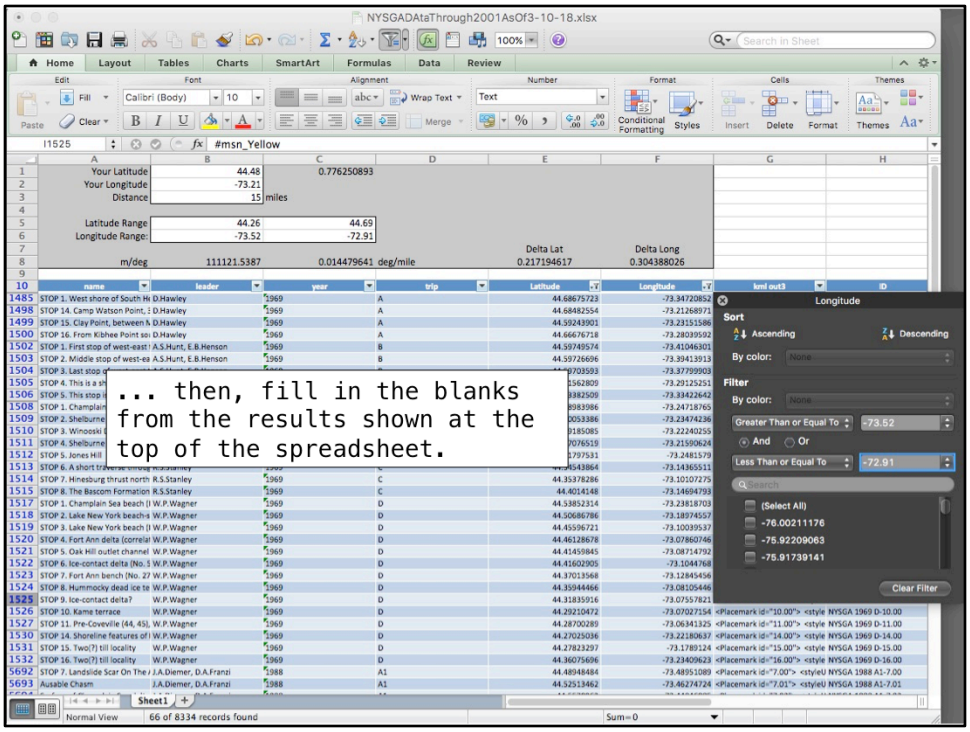
Many Excel users are not aware that it has impressive database handling capabilities. This table, with all the stops and views, but none of the paths, can be used to restrict things based on geography, search terms, dates, leaders, etc. We'll next walk through how this is done...



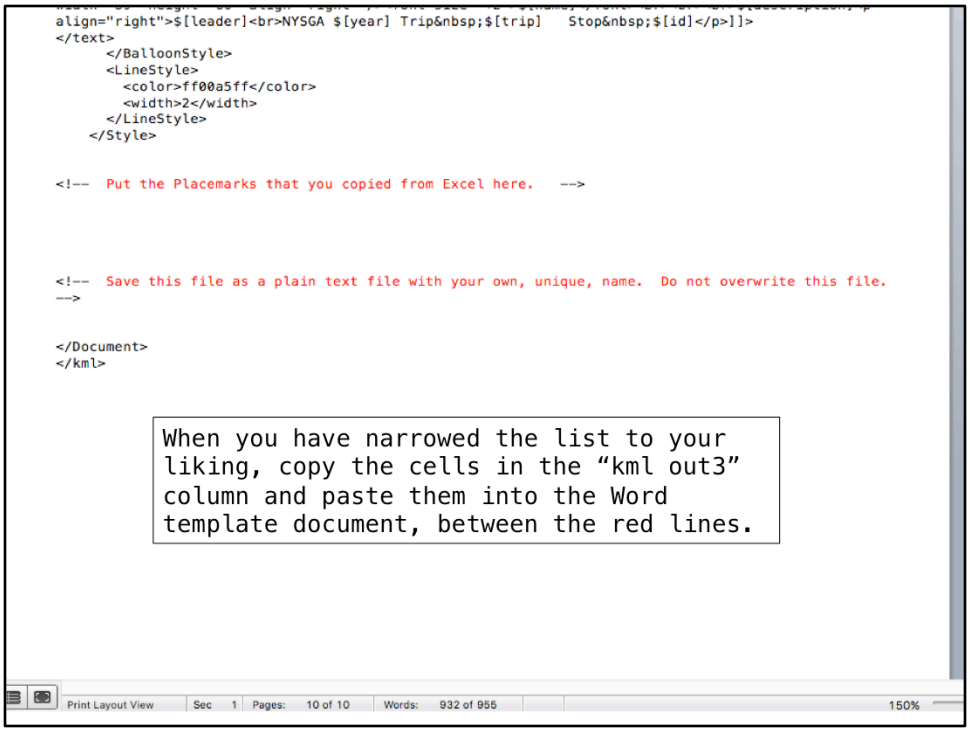
We can easily restrict the data to a box, bounded by N-S and E-W lines. As this meeting is in Burlington, I set up a box, 30 miles on a side, centered there. Those stops within this box might be visited on a field trip starting at UVM. Admittedly, Lake Champlain interferes with this, but the idea is applicable to most areas. The colors of the Placemarks within that box suggests that at least four field trips visited stops here.



To make it easy for the user, there is a section at the top of the spreadsheet which will determine the Lat/Long pairs for the corners of the square. Here the user enters the Lat/Long pair for the center, and half the length of a side. Then copy the results into the filter's dropdown box for the correct columns.

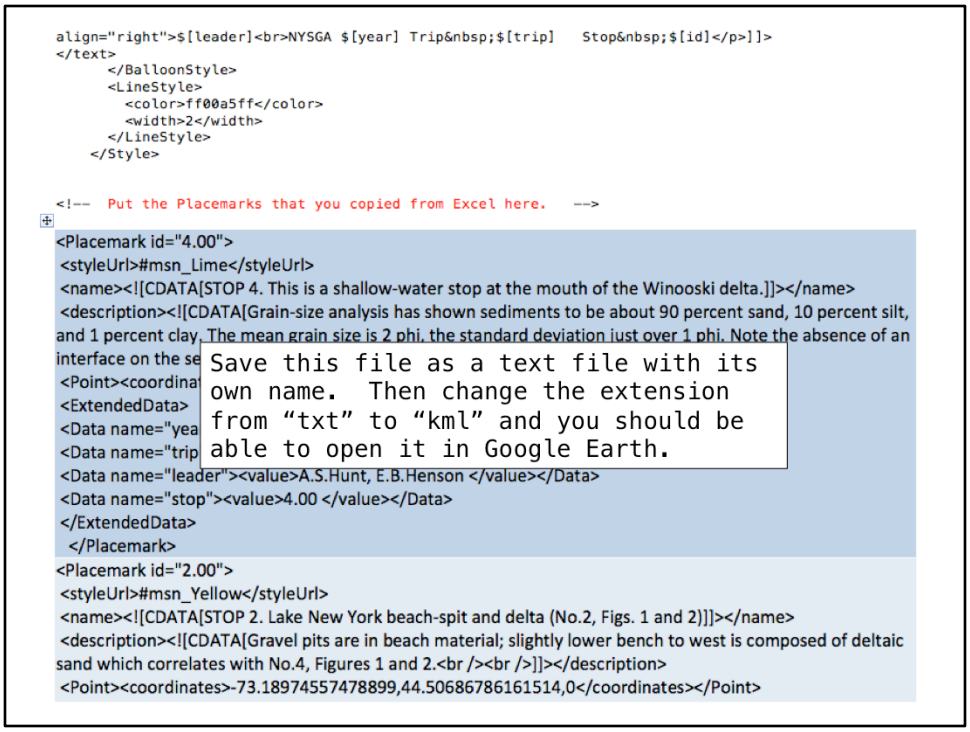


Those results within the box are then found.

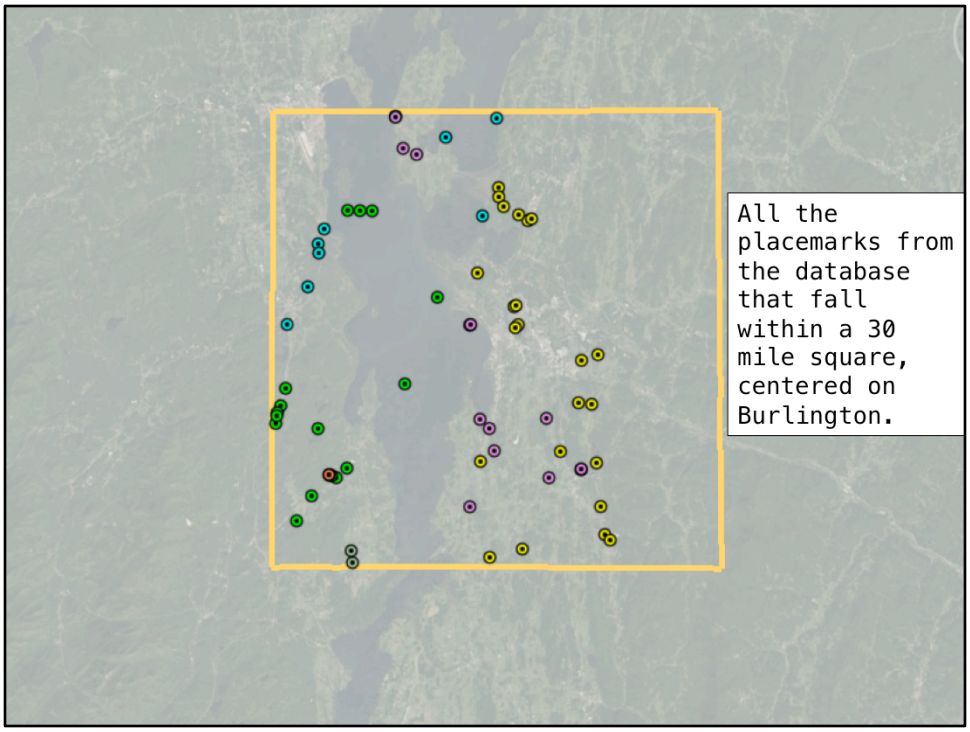


Rather than coming up with a macro to output the results as a formatted kml file, we chose to provide a Word document with the formatting, and let the user paste in the results of the search. (Many users avoid macros because of security concerns, and this way a user knows exactly what is happening.) The Word document GETemplate.docx contains the HTML code which formats the found list of stops into a Google Earth readable document. It is available here:

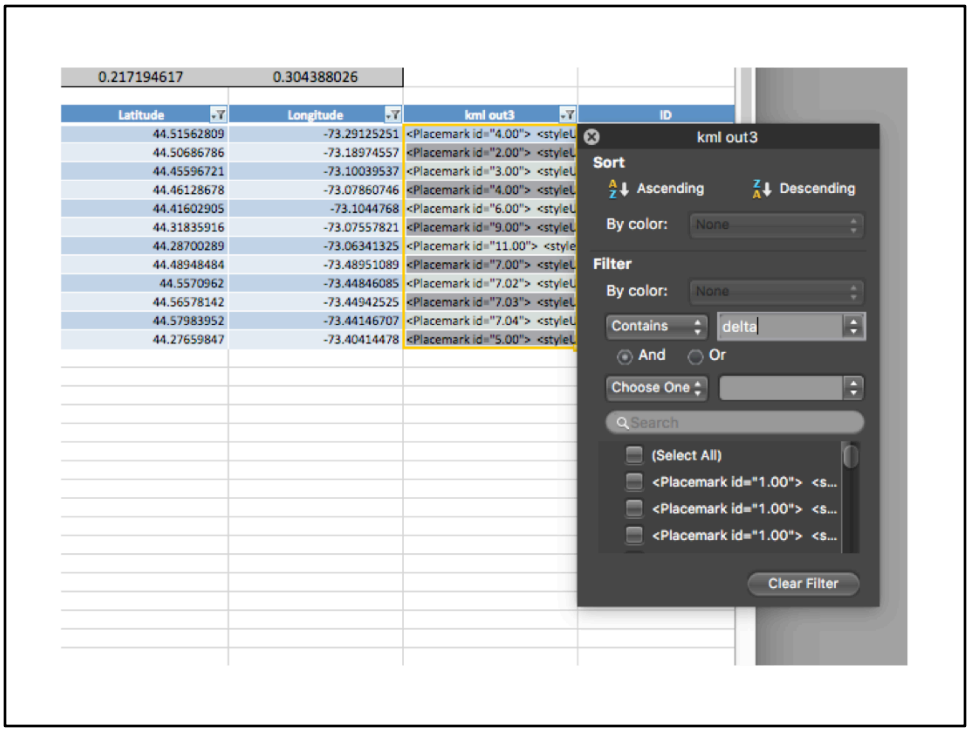
http://ottohmuller.com/nysga2ge/GETemplate.docx



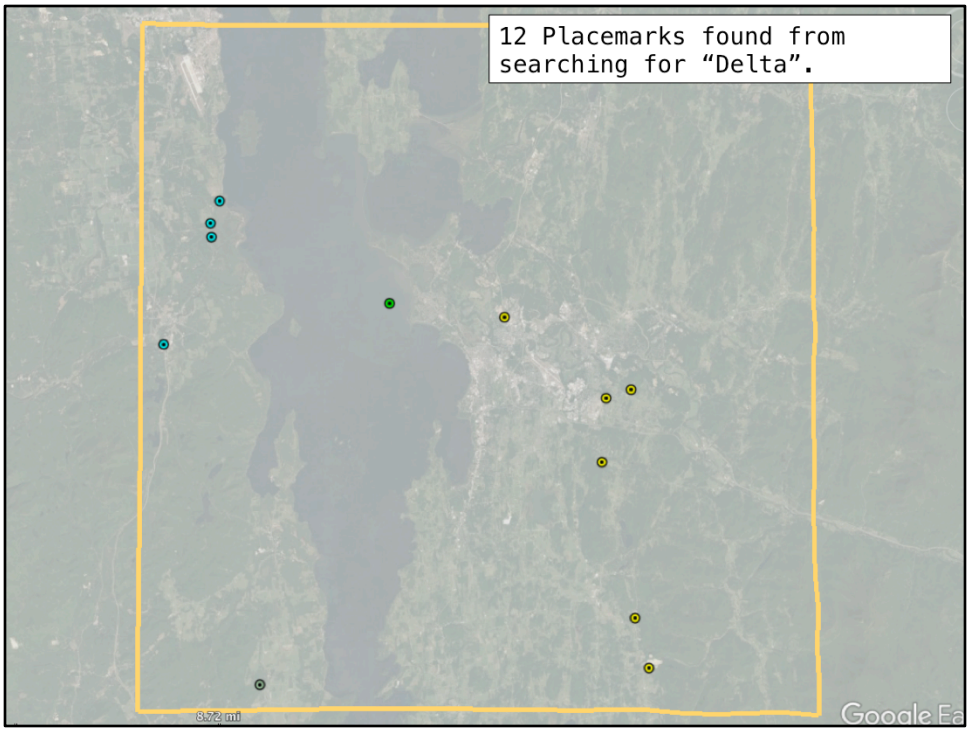
Paste between the lines in red text, save the file as a txt file, and then change the suffix from .txt to .kml and open in Google Earth. (If the paste doesn't look like this, try the copy and paste from Excel again.)



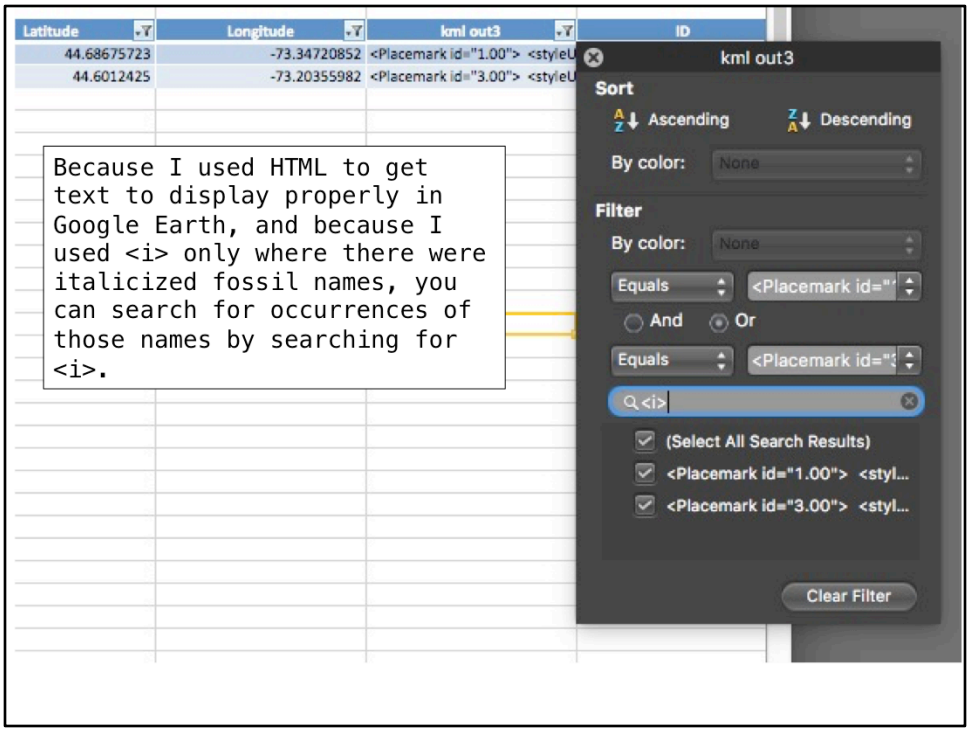
Here are the results for that 30 mile square.



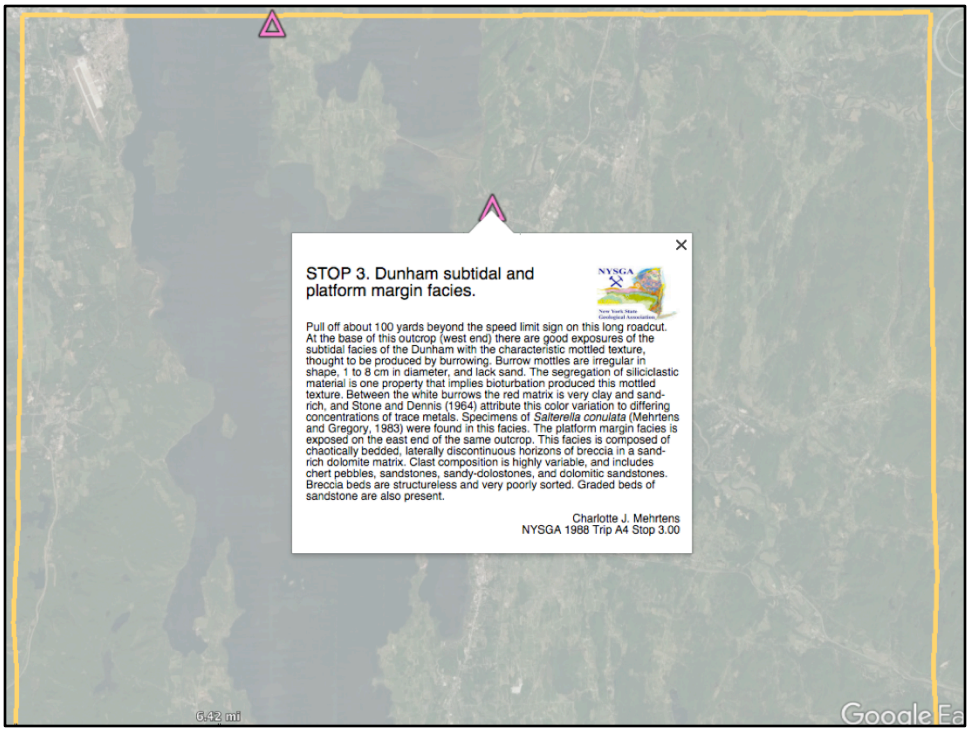
These results can be filtered further, of course. Here we find only those stops withing the square that contain the word “delta” in their description.



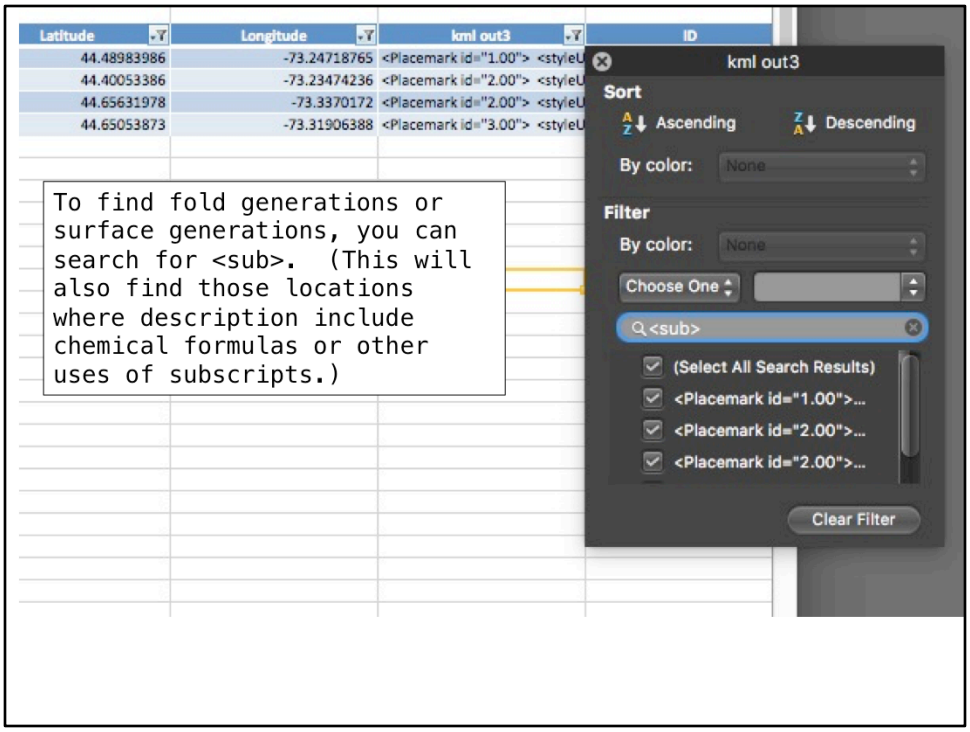
And it kicks out the kml for the 12 Placemarks containing “delta”.



We used the HTML tag <i> to format the names of fossils which were italicized in the Guidebooks. Other uses of italics were formatted using the tag. This permits users to easily find locations where fossils were identified on the genus or species level.



Within our 30 mile square, there were only two stops where fossils were identified with italics.

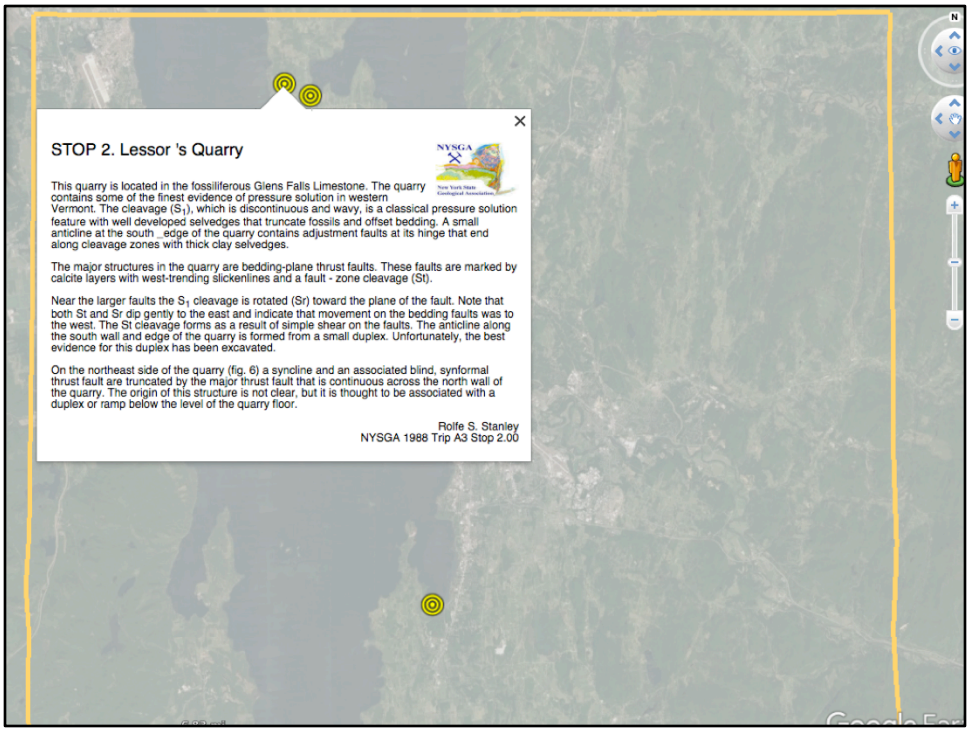


Other HTML tags for subscripts, superscripts, etc. can be searched for. Folds would be F<sub> and surfaces would be S<sub>. Chemical formulae and stable isotope values are other examples, so some care is needed.

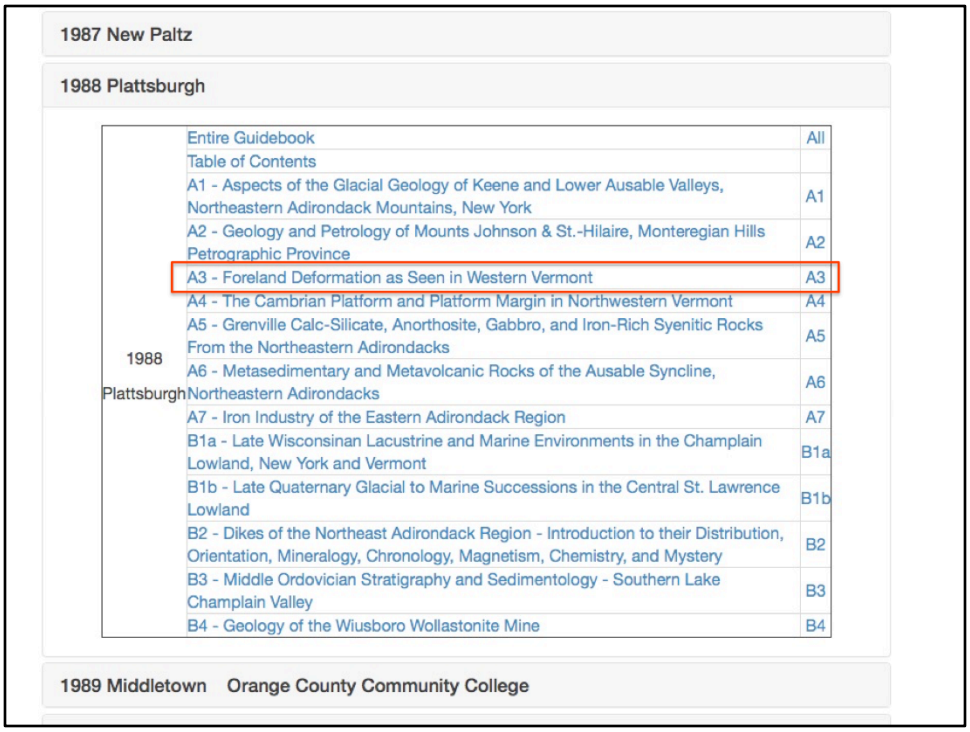
Latitude	Longitude	kml out3	
44.48983986	-73.24718765	<Placemark id="1.00"> <styleU	NYS
44.40053386	-73.23474236	<Placemark id="2.00"> <styleU	NYS
44.65631978	-73.3370172	<Placemark id="2.00"> <styleUrl>#msn_Violet</styleUrl> <name><![CDATA[STOP 2. Lessor 's Quarry]]></name> <description><![CDATA[This quarry is located in the fossiliferous Glens Falls Limestone. The quarry contains some of the finest evidence of pressure solution in western Vermont. The cleavage (S₁), which is discontinuous and wavy, is a classical pressure solution feature with well developed selvedges that truncate fossils and offset bedding. A small anticline at	NYS

You can read the stop descriptions within Excel, but need to ignore the HTML tags.

The stop descriptions are not rendered in Excel, but it isn't difficult to read them, ignoring all the HTML entities.



Once the template is filled with the selected data, and output as a kml file, the balloons show up in Google Earth, with all the HTML formatting applied.



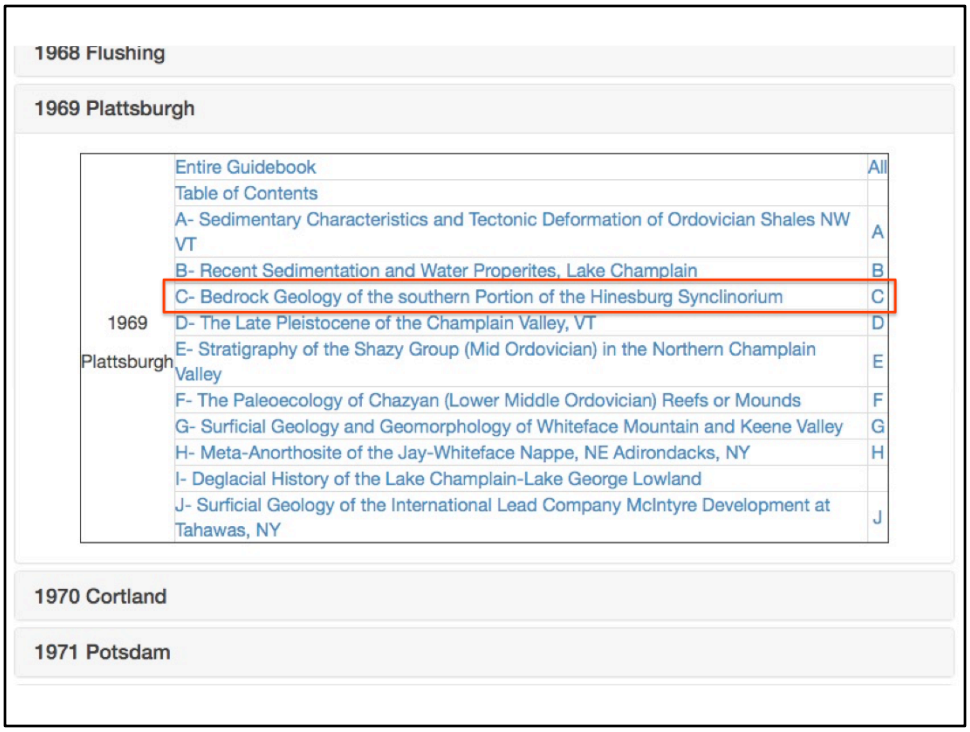
1987 New Paltz

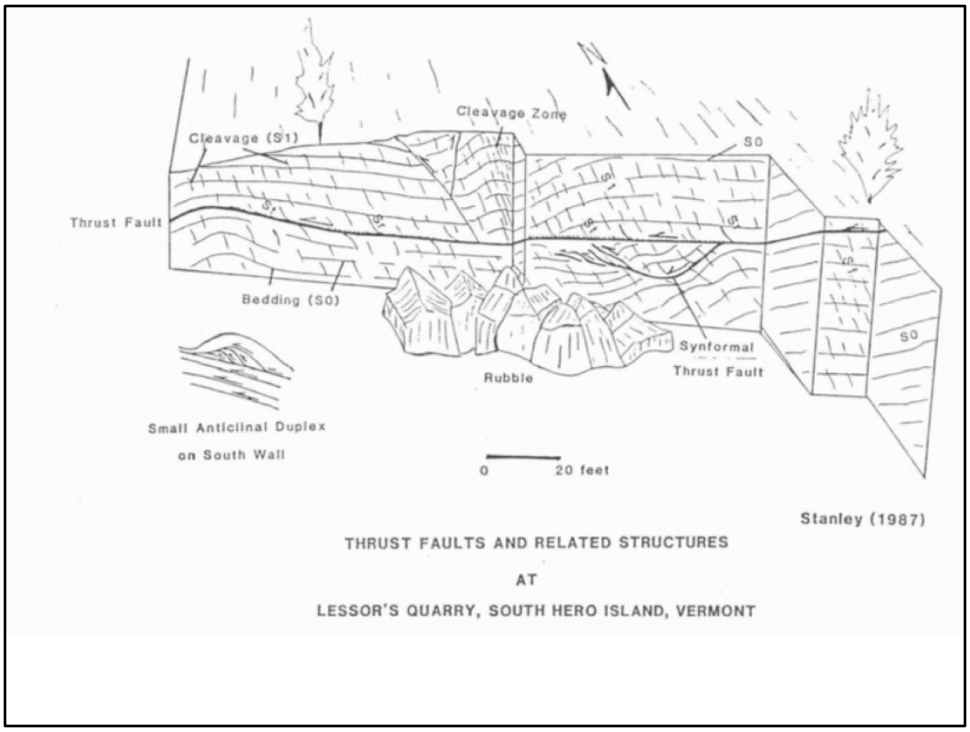
1988 Plattsburgh

1988 Plattsburgh	Entire Guidebook	All
	Table of Contents	
	A1 - Aspects of the Glacial Geology of Keene and Lower Ausable Valleys, Northeastern Adirondack Mountains, New York	A1
	A2 - Geology and Petrology of Mounts Johnson & St.-Hilaire, Monteregian Hills Petrographic Province	A2
	A3 - Foreland Deformation as Seen in Western Vermont	A3
	A4 - The Cambrian Platform and Platform Margin in Northwestern Vermont	A4
	A5 - Grenville Calc-Silicate, Anorthosite, Gabbro, and Iron-Rich Syenitic Rocks From the Northeastern Adirondacks	A5
	A6 - Metasedimentary and Metavolcanic Rocks of the Ausable Syncline, Northeastern Adirondacks	A6
	A7 - Iron Industry of the Eastern Adirondack Region	A7
	B1a - Late Wisconsinan Lacustrine and Marine Environments in the Champlain Lowland, New York and Vermont	B1a
	B1b - Late Quaternary Glacial to Marine Successions in the Central St. Lawrence Lowland	B1b
	B2 - Dikes of the Northeast Adirondack Region - Introduction to their Distribution, Orientation, Mineralogy, Chronology, Magnetism, Chemistry, and Mystery	B2
	B3 - Middle Ordovician Stratigraphy and Sedimentology - Southern Lake Champlain Valley	B3
	B4 - Geology of the Wiusboro Wollastonite Mine	B4

1989 Middletown Orange County Community College

From the found set of placemarks, users can identify the trips of interest. Rather than downloading the entire Guidebook, just the trips of interest can be downloaded. This may be useful if putting the pdf files on a mobile device to refer to in the field. The kml file for the trip is a link in the right hand column.


1968 Flushing
1969 Plattsburgh
1969 Plattsburgh
Entire Guidebook All
Table of Contents
A- Sedimentary Characteristics and Tectonic Deformation of Ordovician Shales NW VT A
B- Recent Sedimentation and Water Properites, Lake Champlain B
C- Bedrock Geology of the southern Portion of the Hinesburg Synclinorium C
D- The Late Pleistocene of the Champlain Valley, VT D
E- Stratigraphy of the Shazy Group (Mid Ordovician) in the Northern Champlain Valley E
F- The Paleoecology of Chazyan (Lower Middle Ordovician) Reefs or Mounds F
G- Surficial Geology and Geomorphology of Whiteface Mountain and Keene Valley G
H- Meta-Anorthosite of the Jay-Whiteface Nappe, NE Adirondacks, NY H
I- Deglacial History of the Lake Champlain-Lake George Lowland
J- Surficial Geology of the International Lead Company McIntyre Development at Tahawas, NY J
1970 Cortland
1971 Potsdam



The actual texts from the field trips contain a great deal of information beyond what is shown in the description of the stops. (Those descriptions come from the Road Logs of the field trips, and are often very abbreviated.) Her is a sketch of the quarry as it appeared in 1987.