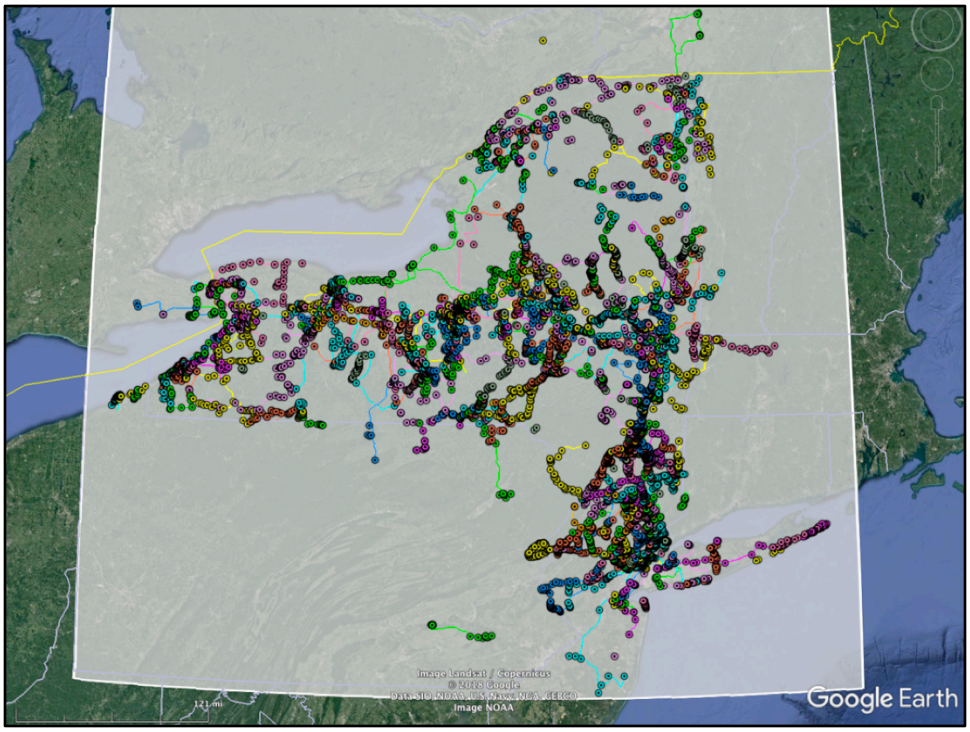
Instructions for Limiting the Geographical Extent of the Placemarks in the NYSGA Database (Mac Version)

This pdf is adapted 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. Also, this uses Numbers and Textedit rather than Excel and Word...

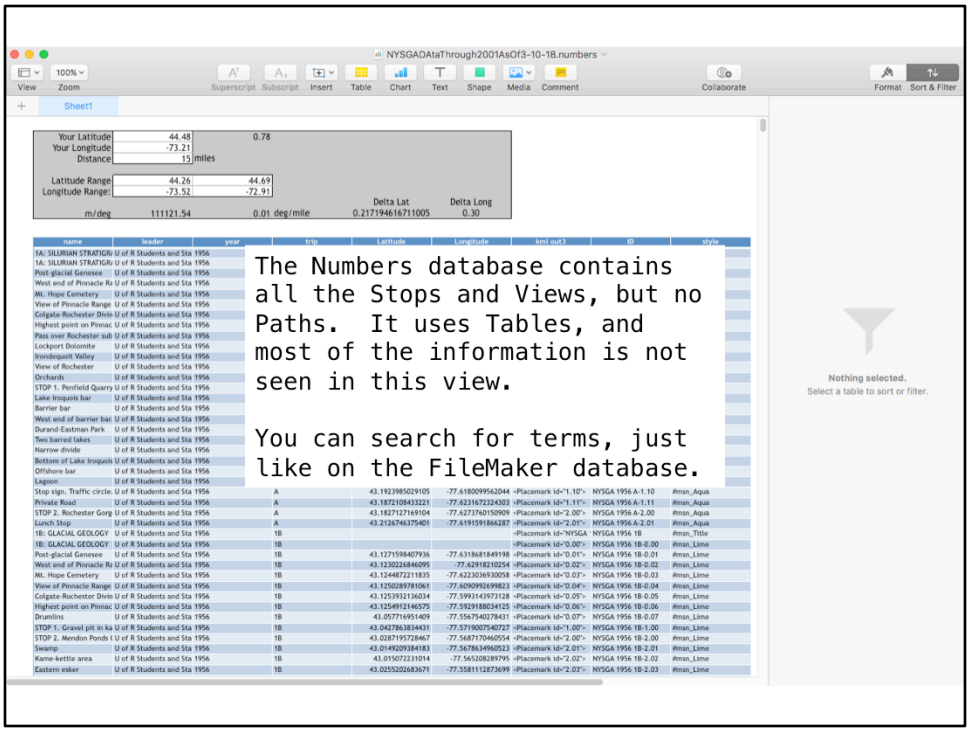


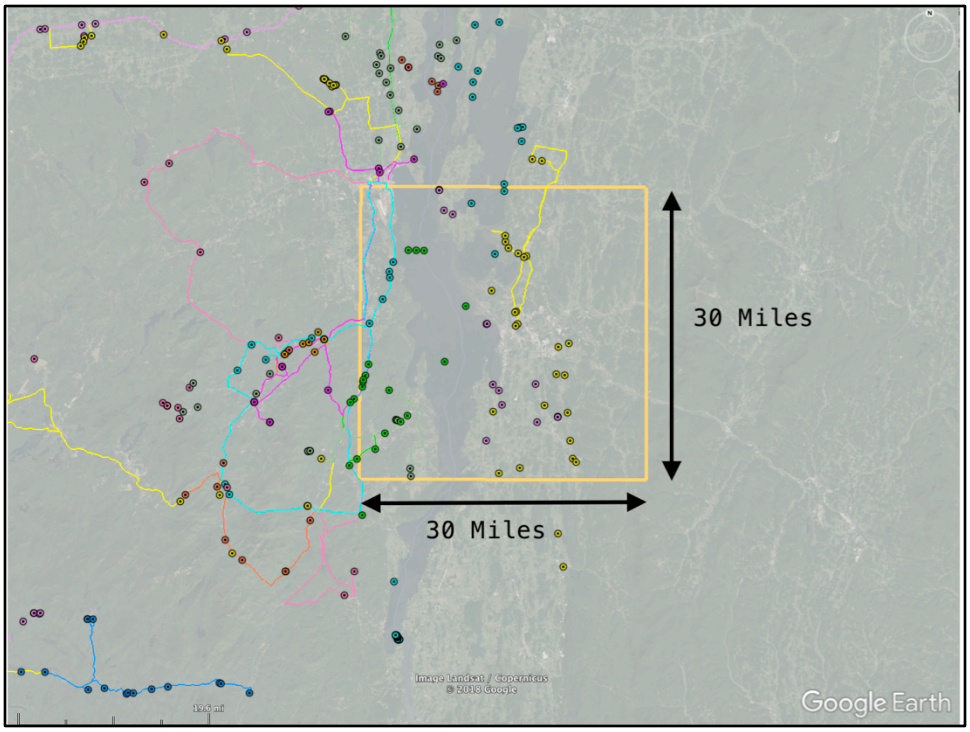
Here we are on Google Earth showing all the Placemarks made so far. 8,000 placemarks is too many to deal with, and Filemaker is not something everyone has lying around. So we put things into Microsoft Excel tables. To do this we extracted the Placemarks and their locations from Filemaker, and imported them into Excel. Then, for Mac fans, we converted the Excel file into a Numbers file.

The Numbers file can be found here:

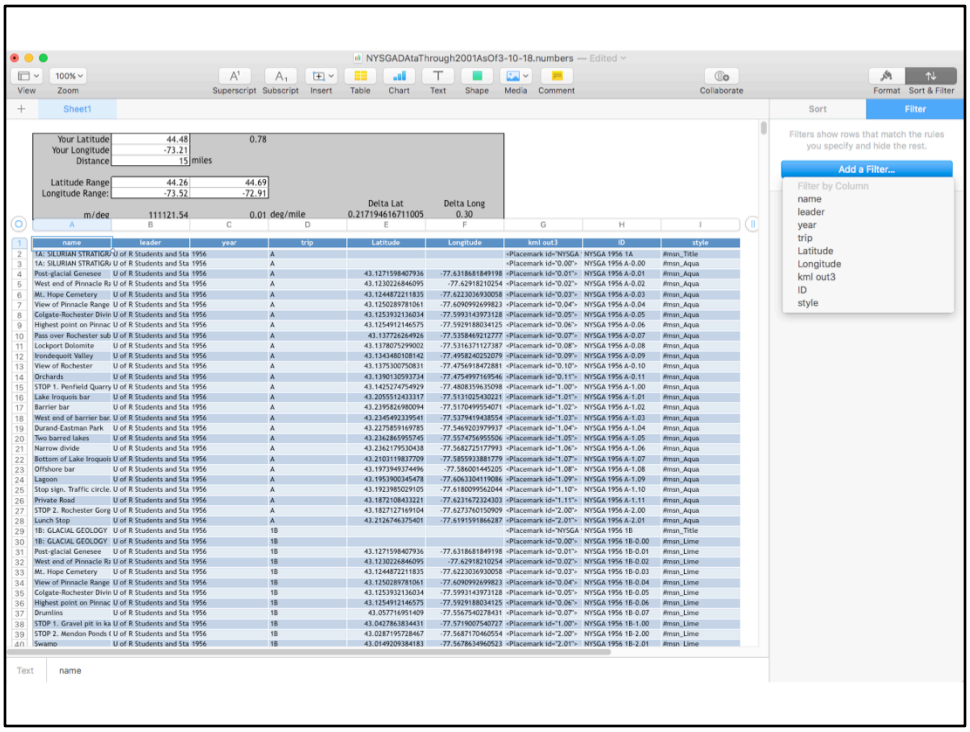
http://ottohmuller.com/nysga2ge/Files/NYSGADAtaThrough2001AsOf3-10-18.numbers and additional instructions are here:

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

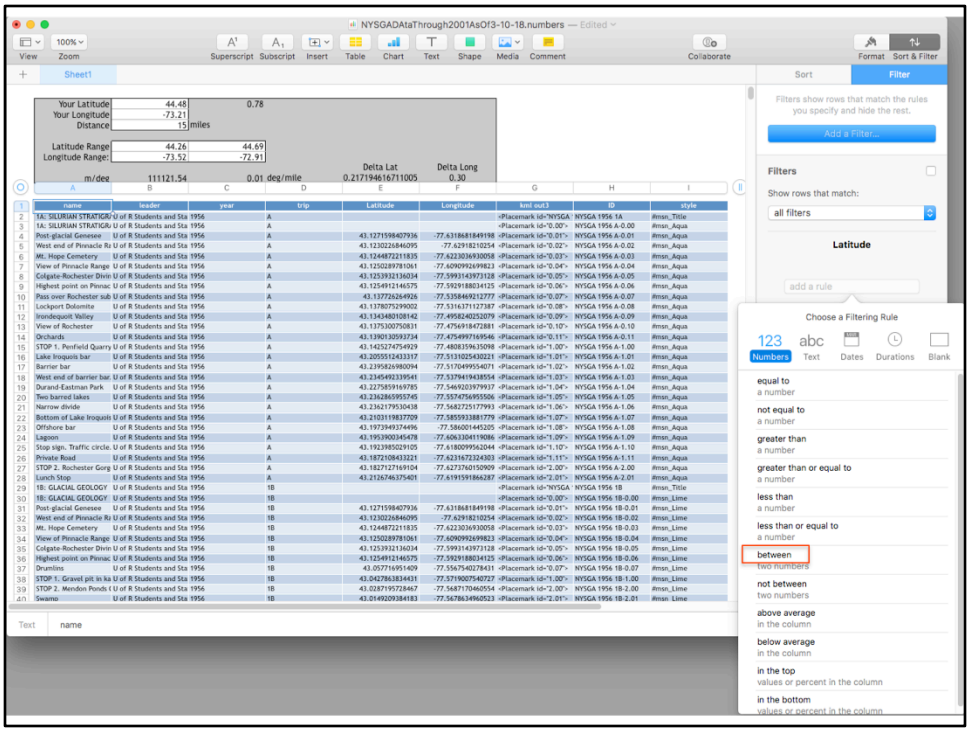

NYSGADAtaThrough2001AsOf3-10-18.numbers
View
Zoom
Superscript
Subscript
Insert
Table
Chart
Text
Shape
Media
Comment
Collaborate
Format
Sort & Filter
Sheet1
Your Latitude 44.48 0.78
Your Longitude -73.21
Distance 15 miles
Latitude Range 44.26 44.69
Longitude Range: -73.52 -72.91
m/deg 111121.54 0.01 deg/mile
Delta Lat 0.2171946167711005
Delta Long 0.30
name leader year trip Latitude Longitude kml out3 ID style
The Numbers database contains all the Stops and Views, but no Paths. It uses Tables, and most of the information is not seen in this view.
You can search for terms, just like on the FileMaker database.
Nothing selected.
Select a table to sort or filter.

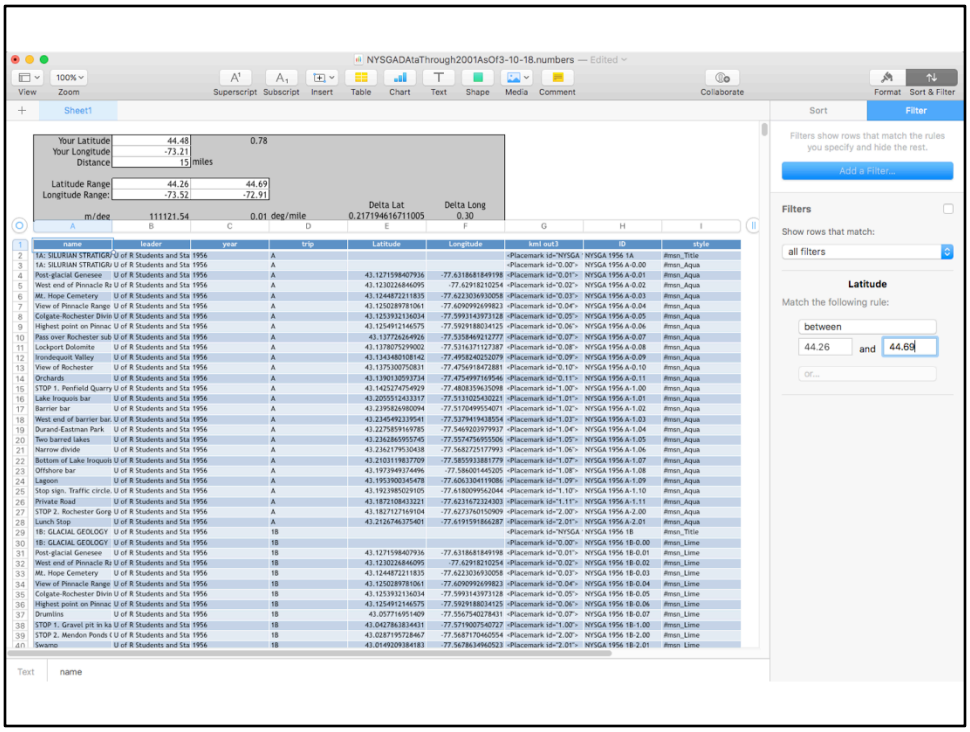


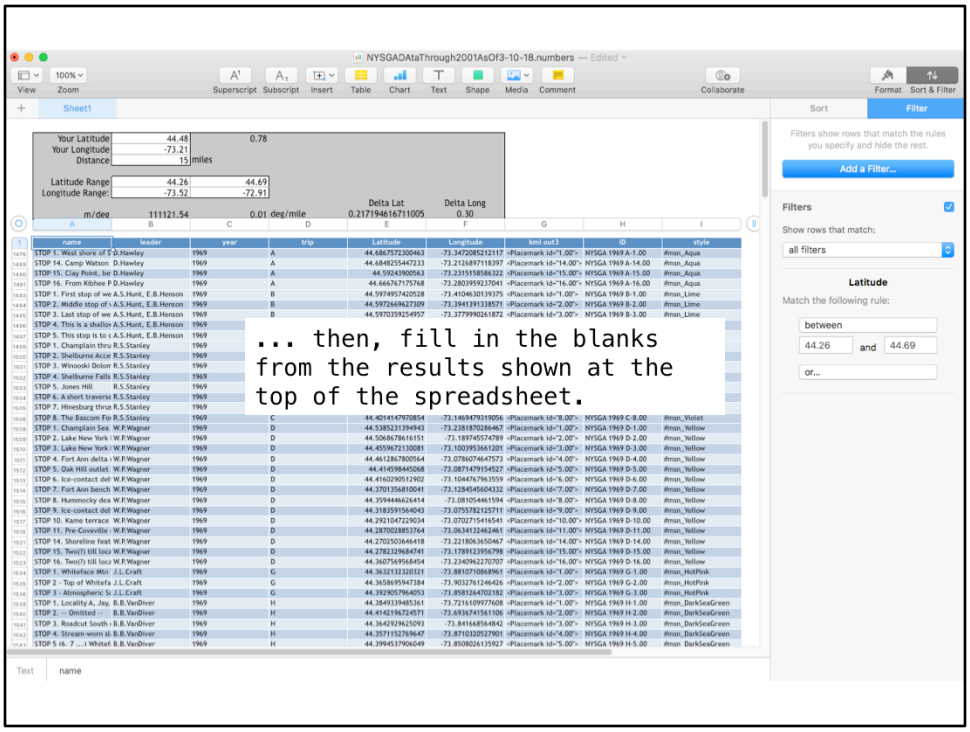
We can easily restrict the data to a box, bounded by N-S and E-W lines. As this meeting is in Burlington, I set up a box, 30 miles on a side, centered there. Those stops within this box might be visited on a field trip starting at UVM. Admittedly, Lake Champlain interferes with this, but the idea is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

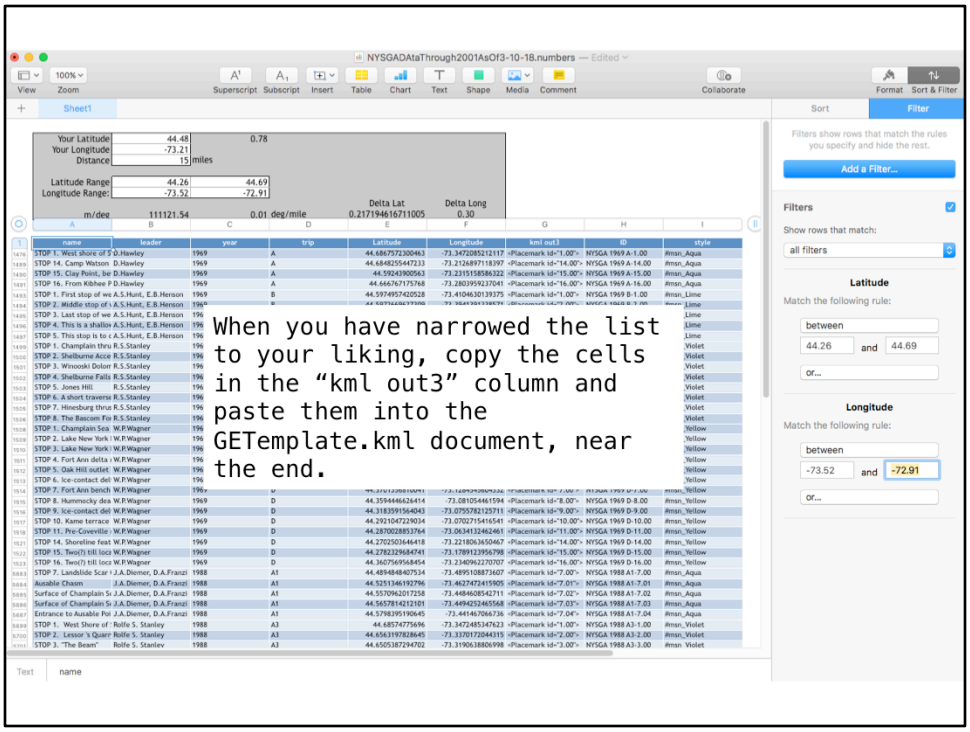


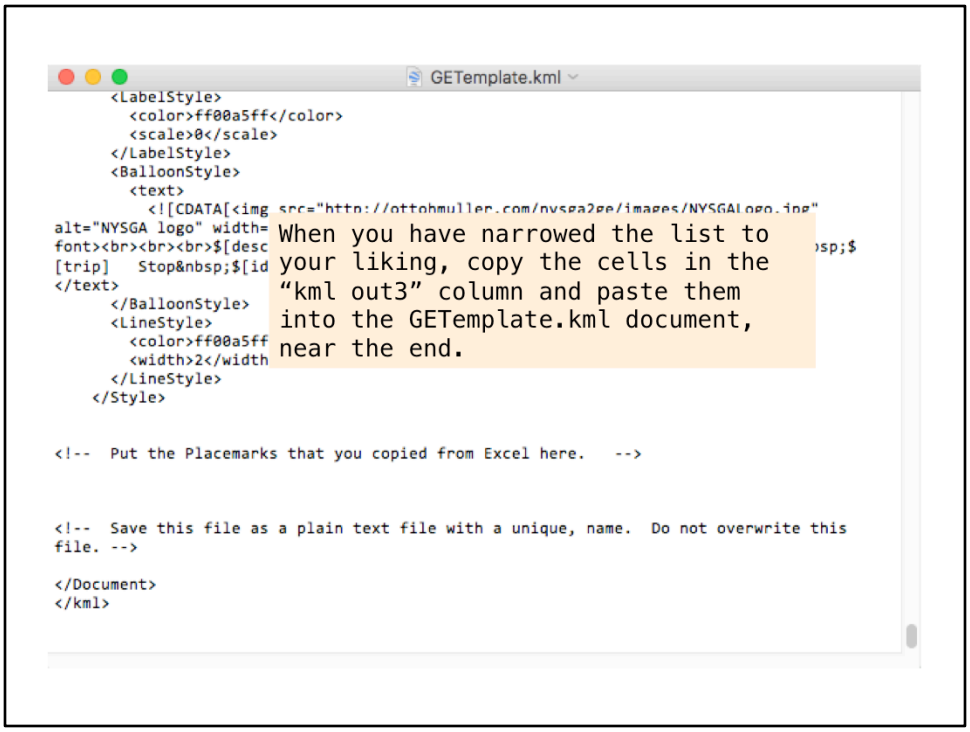
To make it easy for the user, there is a section at the top of the spreadsheet which will determine the Lat/Long pairs for the corners of the square. Here the user enters the Lat/Long pair for the center, and half the length of a side. Then copy the results into the filter's dropdown box for the correct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


NYSGADAtaThrough2001AsOf3-10-18.numbers — Edited
Sheet1
Your Latitude 44.48
Your Longitude -73.21
Distance 15 miles
0.78
Latitude Range 44.26 44.69
Longitude Range: -73.52 -72.91
m/deg 111121.54 0.01 deg/mile
Delta Lat 0.217194616711005
Delta Long 0.30
Sort
Filter
Filters show rows that match the rules you specify and hide the rest.
Add a Filter...
Filters
Show rows that match:
all filters
Latitude
add a rule
Choose a Filtering Rule
Numbers
Text
Dates
Durations
Blank
equal to
a number
not equal to
a number
greater than
a number
greater than or equal to
a number
less than
a number
less than or equal to
a number
between
two numbers
not between
two numbers
above average
in the column
below average
in the column
in the top
values or percent in the column
in the bottom
values or percent in the column

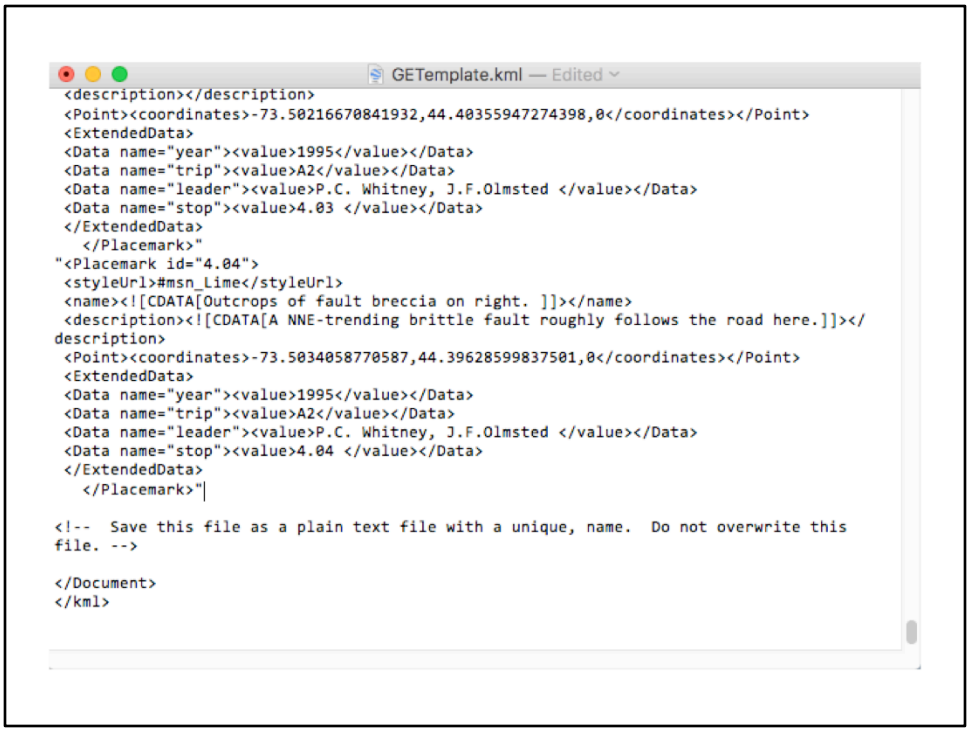

NYSGADAtaThrough2001AsOf3-10-18.numbers — Edited
Sheet1
Your Latitude 44.48
Your Longitude -73.21
Distance 15 miles
0.78
Latitude Range 44.26 44.69
Longitude Range: -73.52 -72.91
m/deg 111121.54 0.01 deg/mile
Delta Lat 0.217194616711005
Delta Long 0.30
Sort
Filter
Filters show rows that match the rules you specify and hide the rest.
Add a Filter...
Filters
Show rows that match:
all filters
Latitude
Match the following rule:
between
44.26 and 44.69
or...
Text
name


... then, fill in the blanks from the results shown at the top of the spreadsheet.


When you have narrowed the list to your liking, copy the cells in the “kml out3” column and paste them into the GETemplate.kml document, near the end.

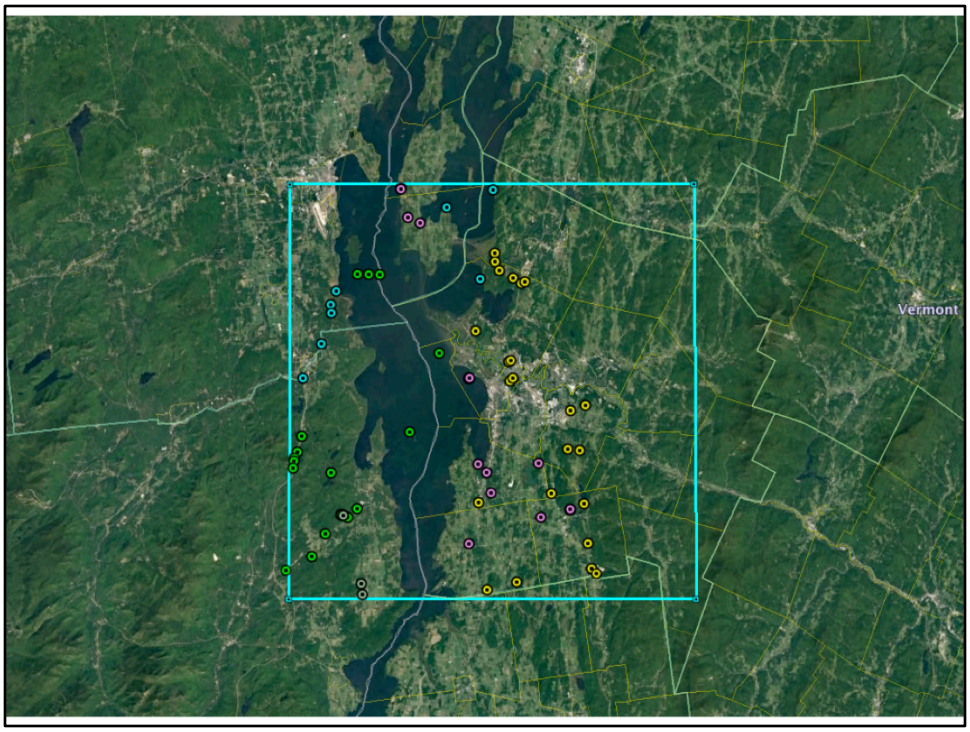

GETemplate.kml
<LabelStyle>
<color>ff00a5ff</color>
<scale>0</scale>
</LabelStyle>
<BalloonStyle>
<text>
<![CDATA[<img src="http://ottohmuller.com/nysga2ge/images/NYSGALogo.jpg"
alt="NYSGA logo" width=
font>

$[desc
[trip] Stop $[id
</text>
</BalloonStyle>
<LineStyle>
<color>ff00a5ff
<width>2</width
</LineStyle>
</Style>
When you have narrowed the list to your liking, copy the cells in the "kml out3" column and paste them into the GETemplate.kml document, near the end.
<!-- Put the Placemarks that you copied from Excel here. -->
<!-- Save this file as a plain text file with a unique, name. Do not overwrite this file. -->
</Document>
</kml>

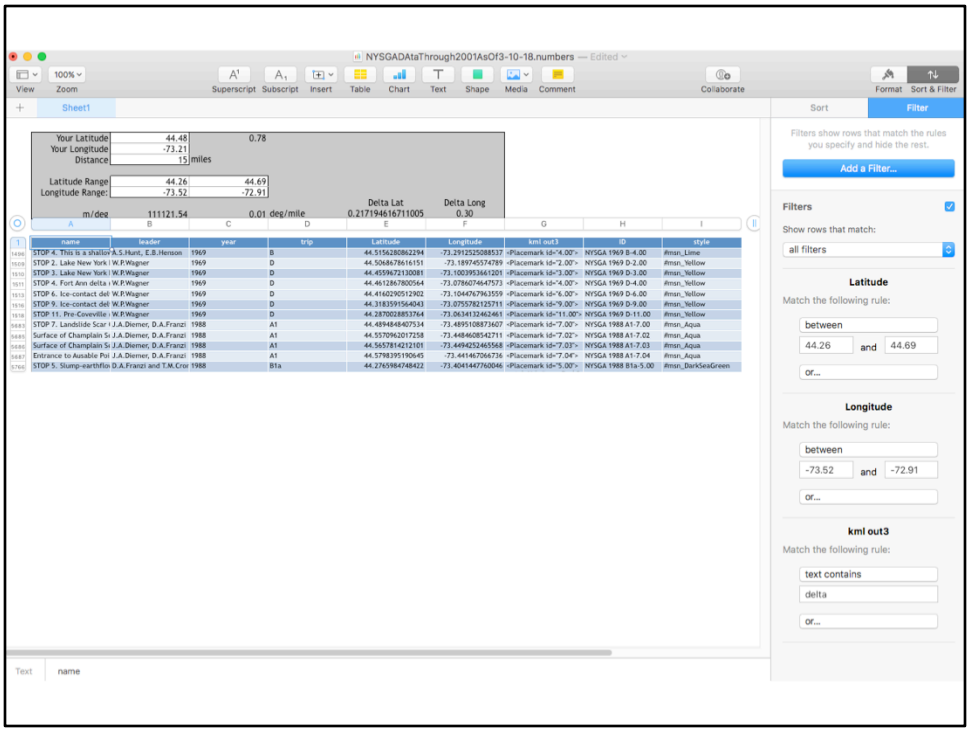


Rather than coming up with a macro to output the results as a formatted kml file, we chose to provide a Textedit document with the formatting, and let the user paste in the results of the search. (Many users avoid macros because of security concerns, and this way a user knows exactly what is happening.)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

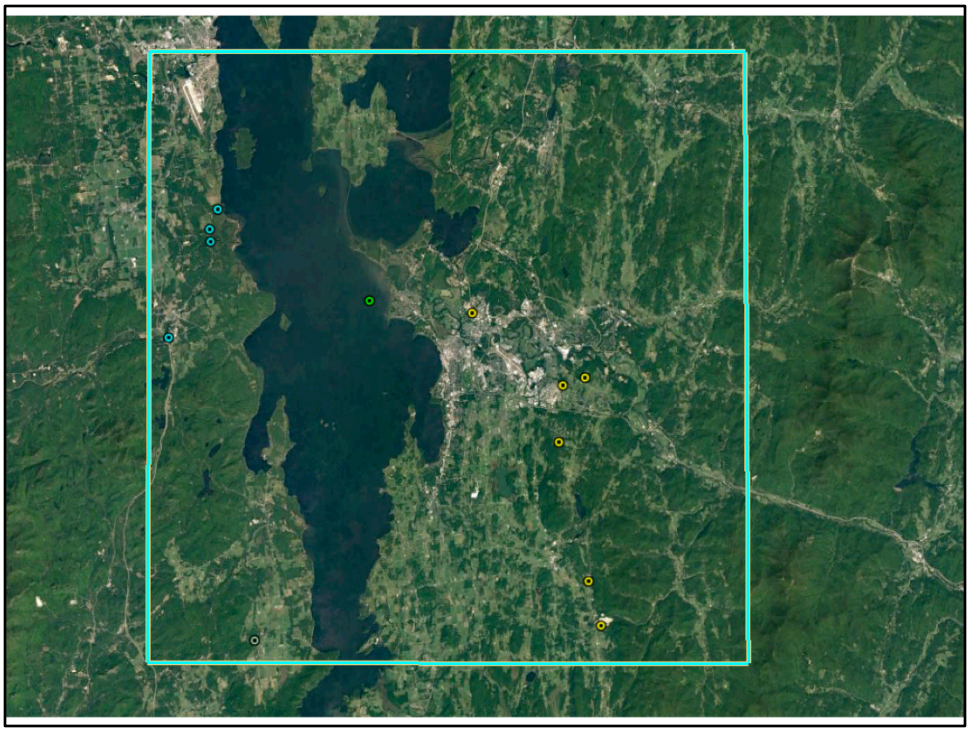
http://ottohmuller.com/nysga2ge/GETemplate.kml



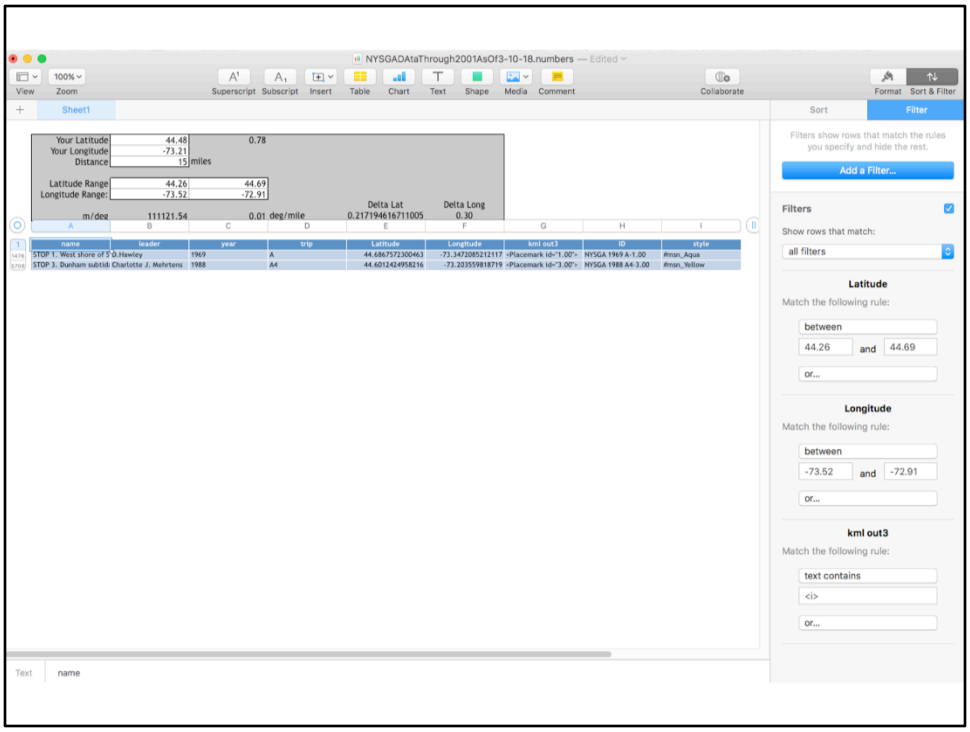
Here are the results for that 30 mile square.



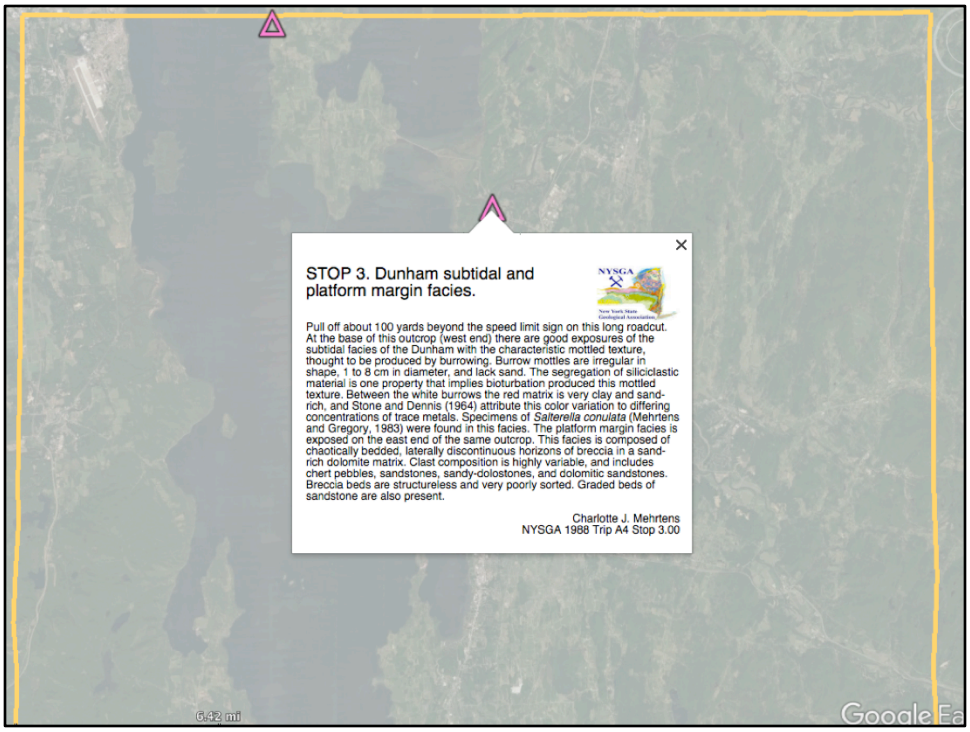
These results can be filtered further, of course. Here we find only those stops within the square that contain the word “delta” in their description.



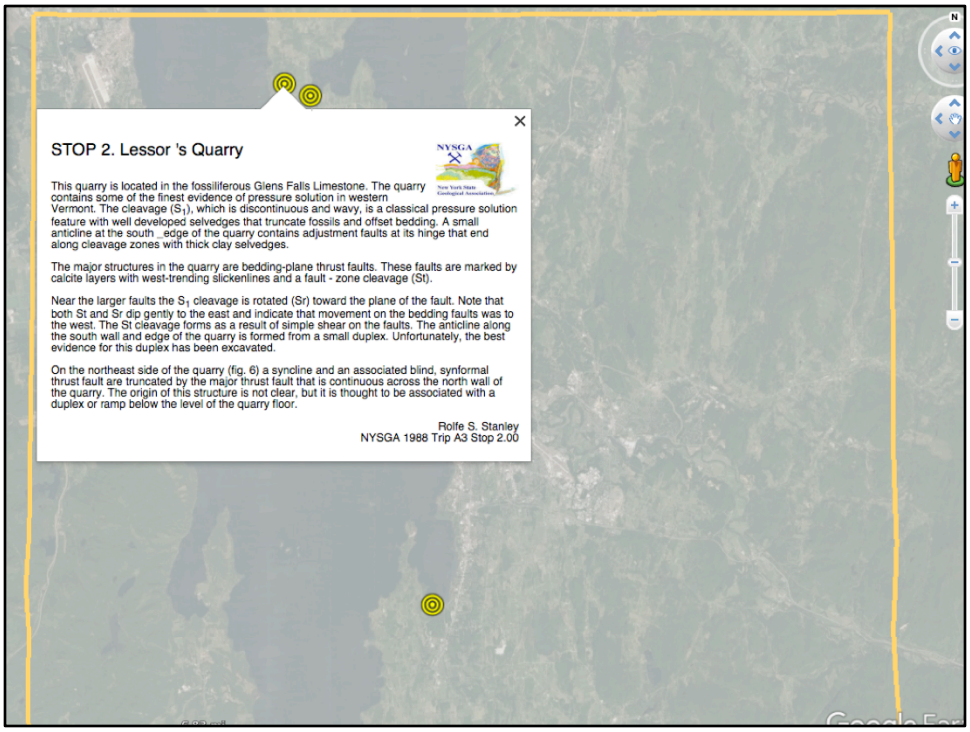
And it kicks out the kml for the 12 Placemarks containing “delta”.



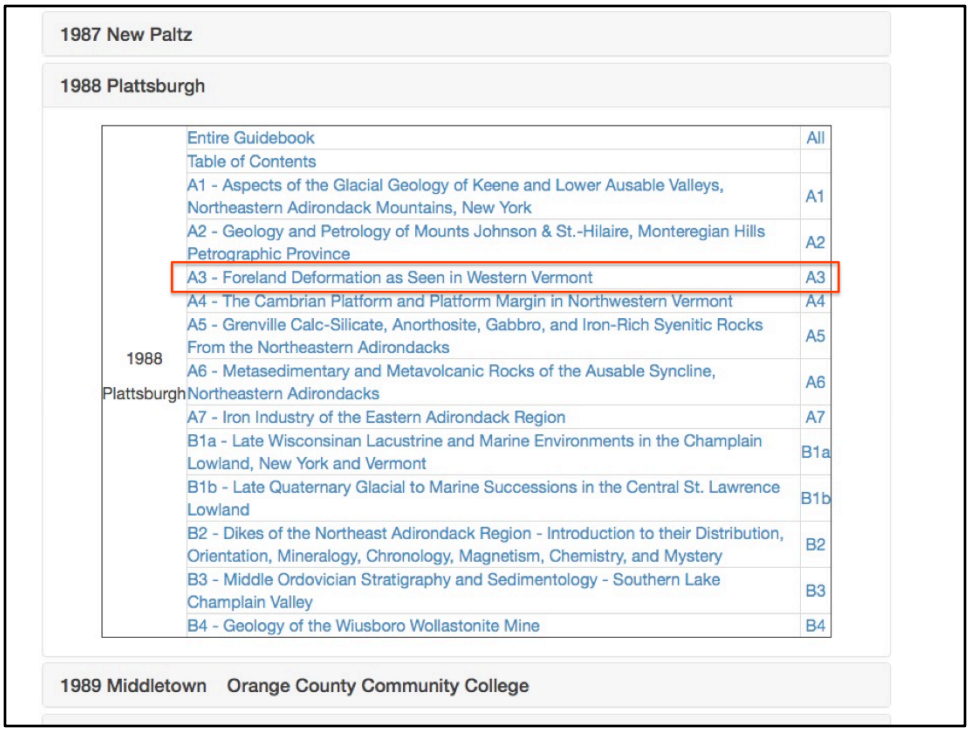
We used the HTML tag <i> to format the names of fossils which were italicized in the Guidebooks. Other uses of italics were formatted using the tag. This permits users to easily find locations where fossils were identified on the genus or species level.



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



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.



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.

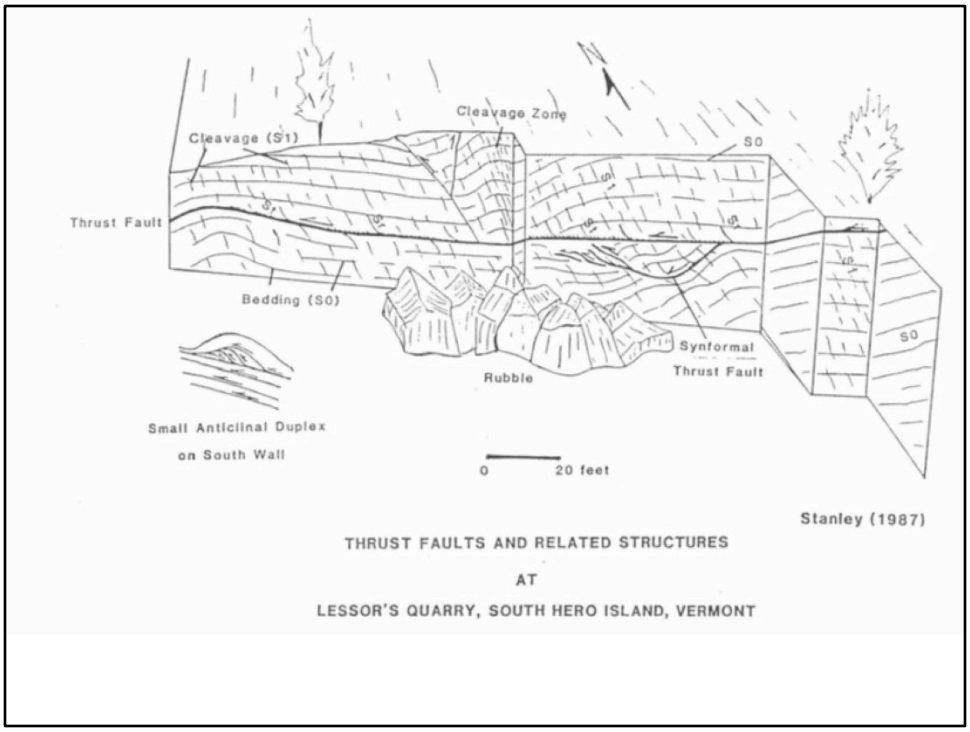
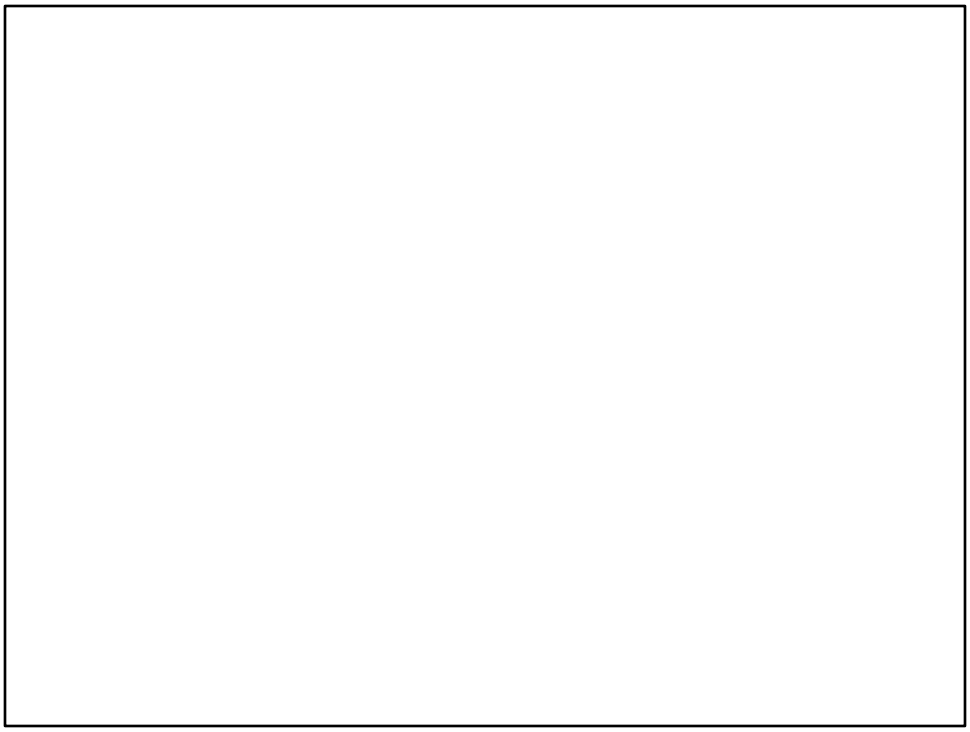
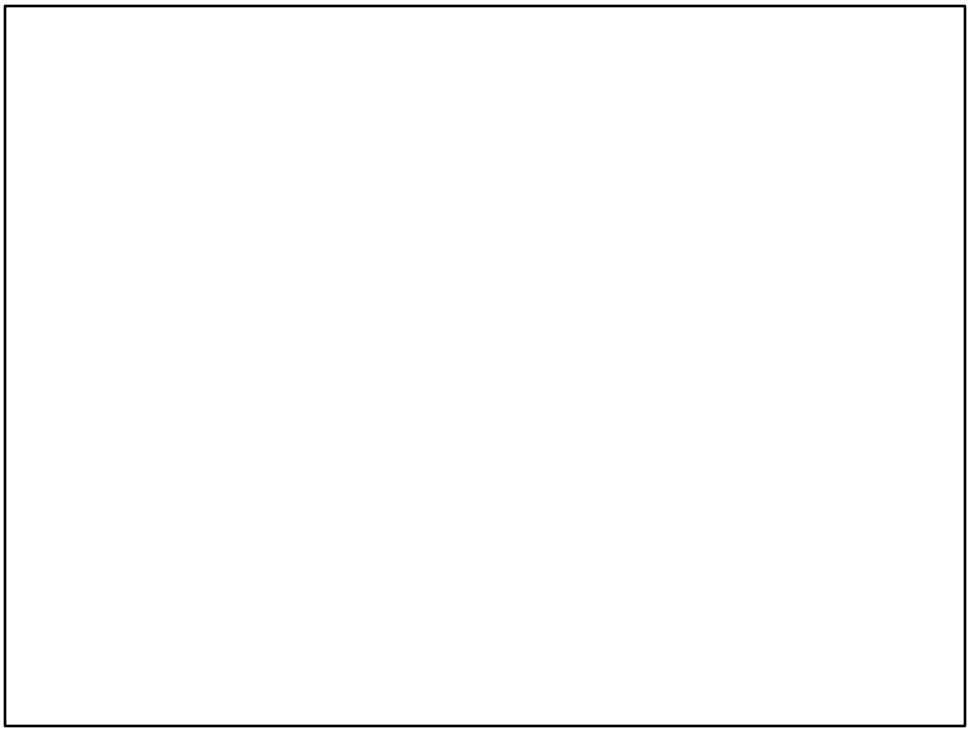
1968 Flushing

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.