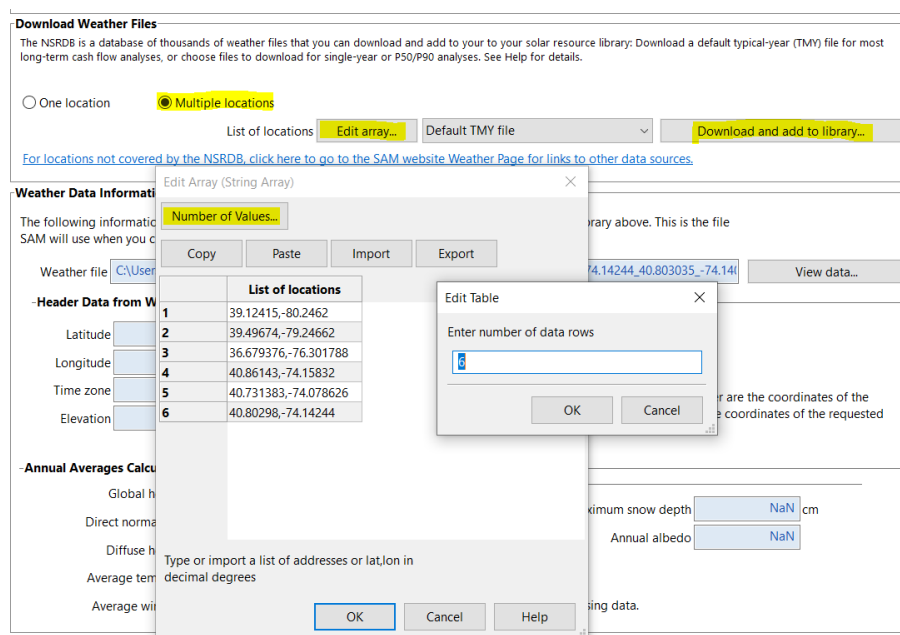


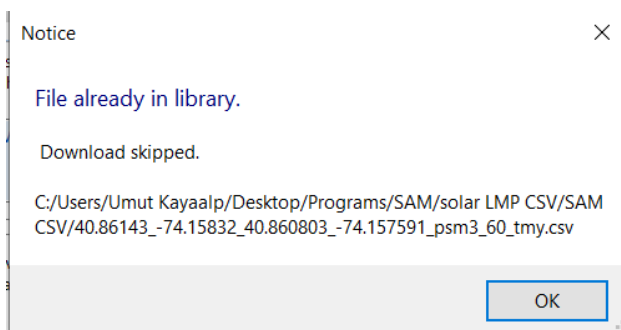
MULTIPLE LOCATION RUN WITH USING LK SCRIPT

To download files for more than one location:

1. Click Multiple locations.
2. Click Edit data.
3. In the Edit Data window, click Number of Values and type the number of locations to create a table with a row for each location.
4. Type a street address or latitude-longitude pair in the table for each location.
5. Click OK.
6. Choose TMY data.
7. Click Download and add to library.



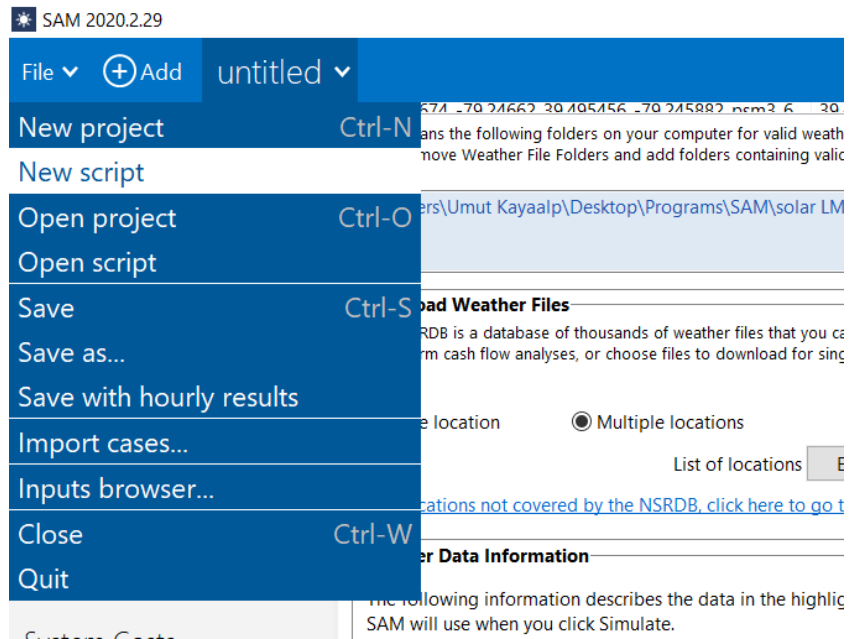
If coordinates are the same, SAM does not allow download again. Between two location is very close each other, for example, distance is only 1 meter, although weather file has Same GHI and DNI values, SAM is downloaded the data. We checked the coordinates in Excel using the remove duplicate tool.



| Name | Date modified | Type | Size |
|--|------------------|-----------------------|--------|
| 36.679376_-76.301788_36.681646_-76.29... | 3/8/2021 6:00 PM | Microsoft Excel Co... | 408 KB |
| 39.12415_-80.2462_39.125088_-80.24559... | 3/8/2021 5:59 PM | Microsoft Excel Co... | 374 KB |
| 39.49674_-79.24662_39.495456_-79.2458... | 3/8/2021 5:59 PM | Microsoft Excel Co... | 384 KB |
| 40.80298_-74.14244_40.803035_-74.1406... | 3/8/2021 6:00 PM | Microsoft Excel Co... | 406 KB |
| 40.86143_-74.15832_40.860803_-74.1575... | 3/8/2021 6:00 PM | Microsoft Excel Co... | 405 KB |
| 40.731383_-74.078626_40.730980_-74.07... | 3/8/2021 6:00 PM | Microsoft Excel Co... | 407 KB |

To run multiple weather file:

1. Before all below processes, project detail must be entered such as system design, losses etc. <https://github.com/NREL/SAM/blob/develop/samples/LK%20Scripts%20for%20SAM/hourly-data-from-multiple-weather-files.lk>
2. This link includes lk script to run multiple weather files getting hourly output data.
3. Click link, copy the script. After selecting the new script, save the script.



4. Lk script is adjusted as shown below figure.

```

26 function get_year_from_filename( fname )
27 {
28     if ( !file_exists( fname ) )
29     {
30         outln( fname + ' does not exist.' );
31         return null;
32     }
33     str = file_only( fname );
34     arr = split( str, '.' );
35     date_ext = arr[#arr-1];
36     arr = split( date_ext, '-' );
37     return arr[0];
38 }
39

```

5. Array DC power can be calculated if lk script changes as below figure.

```

54 // Run a simulation for each weather file and get annual output result
55 outln('Running simulations. ');
56 errors='';
57 for (i=0;i<#files;i++)
58 {
59     set('user_specified_weather_file',files[i]);
60     ok=simulate(errors,0);
61     arr=split(errors,'\n'); //only show first error for legibility
62
63     yr = get_year_from_filename( files[i] );
64     if ( yr == null ) { yr = 'run_' + i; }
65     T{yr} = null;
66     if (!ok)
67     {
68         outln('Run ' + i + ': ' + file_only(files[i]) + ': ' + arr[0]);
69     }
70     else
71     {
72         outln('Run ' + i + ': ' + file_only(files[i]) + ' Array DC Power (kwh) = ' + get('annual_dc_gross')); }
73         T{yr} = get('dc_net');
74     }
75
76 outln('Done with simulations. ');
77 outln('Writing to results file. ');
78

```

6. Results.csv is shown below.

