Obtaining Data

1. Typically, users can get their data using FTP (from a Windows Folder by typing in: ftp://ncnr.nist.gov/pub/ncnrdata/vsans/ -> 202007/27633/data (files 64954 onward)

and

-> 201911/26903/data (files 51277 to 51351).

1. Alternatively, for summer school we have located your data at: //ncnr.nist.gov/summerschool/tutorials/VSANS\_2021/. This also includes the older data from NG7 SANS and Colab files.

Running VSANS [Python] Reduction from Colab

1. Get a Google account if you don’t already have one
2. Navigate to Google Drive (<https://drive.google.com>)
3. Click New to Upload Files / Folders:

e.g. VSANS27633\_CoFe2O4NP\_Data and CoFe2O4Config\_Colab.json (this file’s name and input parameters, like path, can be changed for different experiments)

1. Go to Colab by typing <https://colab.research.google.com/>
2. Upload the Colab notebook VSANSReductionSummerSchool.ipynb
3. Now run the first cell (shift + enter)
4. It will tell you to navigate to another link to authorize Colab to access your google drive - go to that page, click “Allow” (at bottom) and copy the code (right box), and then paste it back into the box in your Colab notebook
5. Now run the second cell (shift + enter)
6. You should find your reduced data in your Google Drive (CoFe2O4VSANS\_Results)
7. To process future experiments, upload new data, create and upload additional json input files to match with corresponding input and output paths, and then re-run second cell, calling the new json file in parenthesis (e.g. VSANS\_ReductionHighRes.main(json\_config='/content/drive/MyDrive/CoFe2O4Config\_Colab.json')).

Other Programs

1. SasView 5.0.4 (the latest) <https://github.com/SasView/sasview/releases>. The scroll down to the end of section 5.0.4 and click on Assets. Choose what installation matches your computer and install.
2. IGOR Pro with SANS modules: <https://www.nist.gov/ncnr/data-reduction-analysis/sans-software>.