

Joint Satellite Conference 2019
Air Quality Training Courses
Instructions - How to Get Started with the Python Tools Activity Code

1. Access to the JetBrains Datalore web application

- Open the email from the Datalore Team entitled "Datalore Invitation."
- Click on the purple button that says, "Sign up and join the workbook."
- A window will open asking you to "Sign up and try JetBrains Datalore" - enter your name, email, and a password.
- Datalore will send you another email, asking you to verify your email address - open it and click on the purple button that says, "Verify your email."
- Note: You are signing up for the Community Subscription Plan. The subscription is for one month at a time, and it's free. You'll have to agree to the terms in the User Agreement, but there is no commitment or fee.

2. Open the activity code workbook in Datalore

- Open Datalore in a web browser.
- Click on the "Shared" menu on the left side of the page.
- Right-click the file named "JSC Python Activity - Sunday Short Course" or "JSC Python Activity - Tuesday Advanced Training" (whichever is appropriate) and a menu will open - left-click on "Clone."
- A new file called "Copy of JSC Python Activity - Sunday Short Course" (or "Copy of JSC Python Activity - Tuesday Advanced Training") will appear - double click on it to open.
- **You will need to wait ~3-5 minutes for the "Conda environment" to set up.** Look for a small box in the lower right side of the browser. **Once the box is gone, you can start the activity.**
- **Before you begin:**
 - Click on the "Run" pull down menu at the top and make sure "Live Computation" IS NOT checked!
 - Click on the "Kernel" pull down menu at the top and make sure the "IPython kernel" IS checked!
- Follow the directions at the top of each code block and work through the blocks in order. To run the code, click anywhere in a given code block and then click on the small arrow symbol in the menu at the top right of the block.

3. Tips for running the activity code on your own (after the training session)

- If you change the range of the lat/lon coordinates or the figure size of the plot, then the resulting figure may be partially cut off (e.g., missing parts of the latitude axis values or the title). This is an artifact of the Datalore web application - it's NOT a problem with the figure itself. Your saved plot will display correctly.
- To save the activity code as a python file for use offline, go back to the Home page. Right-click on the file that you want to save and a menu will open - left-click the "Export .ipynb" option and then navigate to where you want to save the file.
- To download the NetCDF data files used in this activity, go back to the Home page. Right-click on the file that has the data you want to save, and a menu will open - left-click the "Download" option and navigate to where you want to save the data files.
- If you run the program offline (not using Datalore), you will need to change the file paths in the code to match where you are storing the data.