Data-acquisition with MDSplus and custom devices

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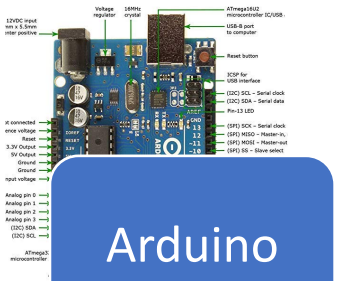
- Hardware (the experiment)
- Software (MDSplus Device class for data acquisition)
- Real-time visualization
- Data analysis
- Jupyter Lab

Jupyter Lab

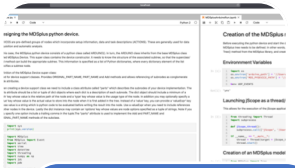
(as the development environment)



Arduino

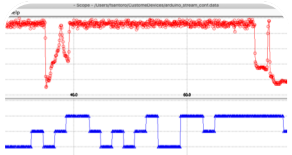
Lidar, T/H sensors

Custom Device
(as the experiment)



MDSplus

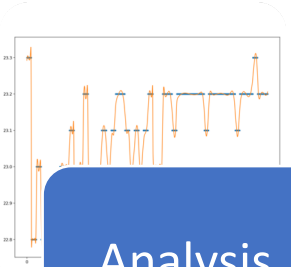
device class



jScope

Real-time data visualization

in a subprocess

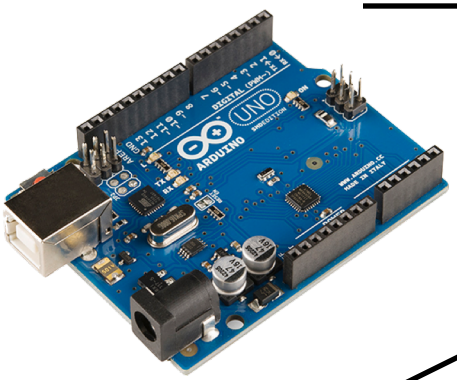


Analysis

Scipy, Matplotlib, etc

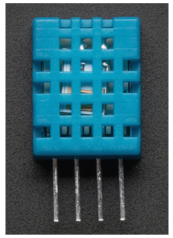
Arduino device and sensors

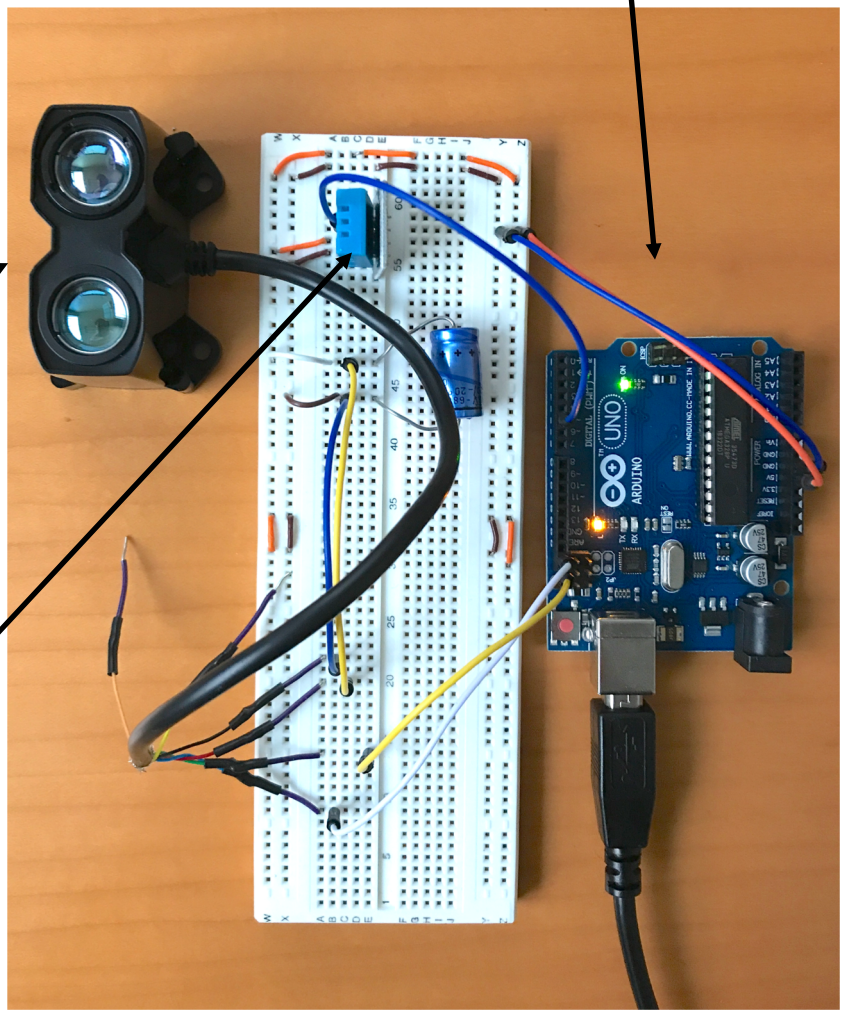
Arduino UNO microcontroller



Garmin Lidar v3HP

Adafruit Temperature Humidity sensor





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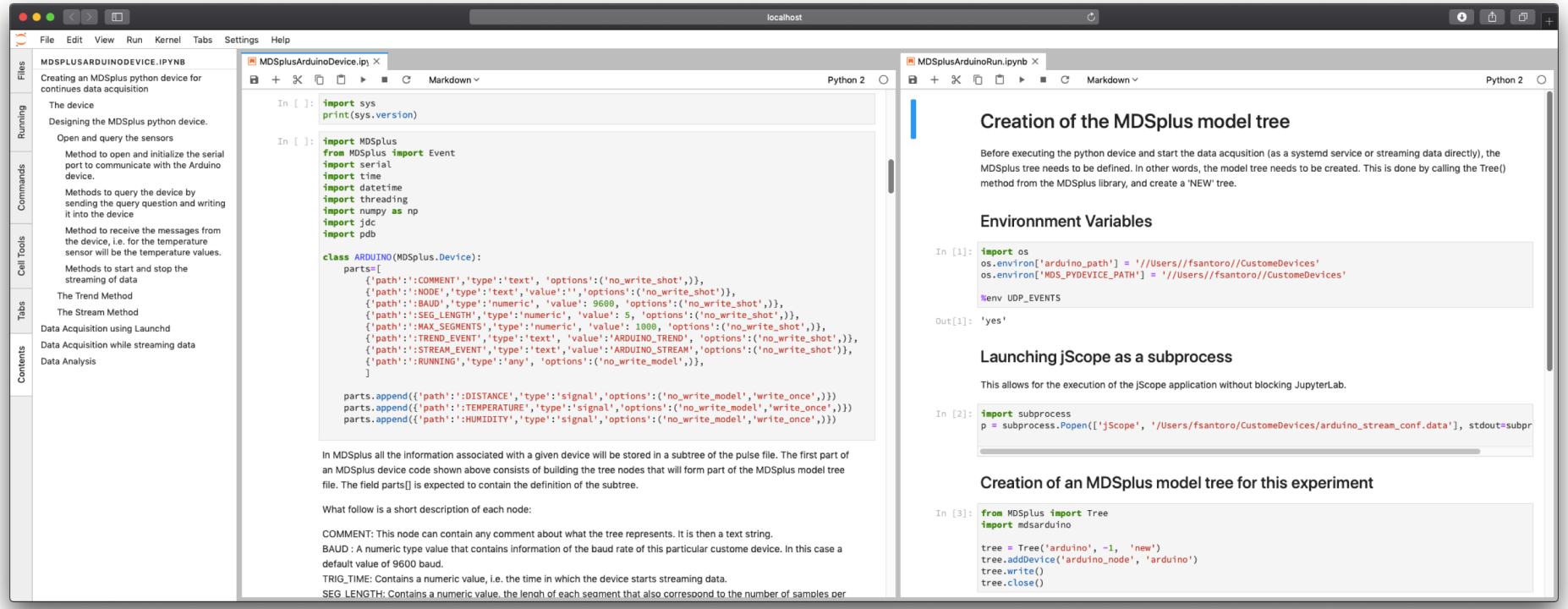
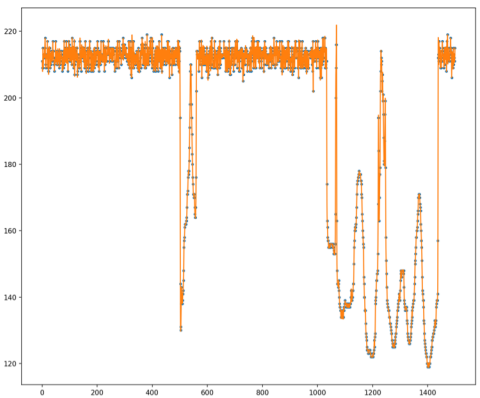
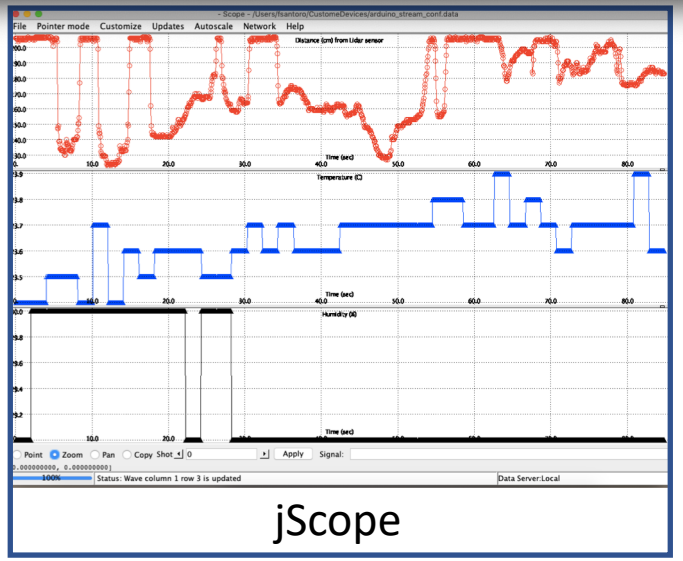
MDSplus and Jupyter Lab



Data Analysis



matplotlib and scipy



jScope

Real-time visualization