Do you want to monitor live data from Arduino® in MATLAB® and Simulink®?

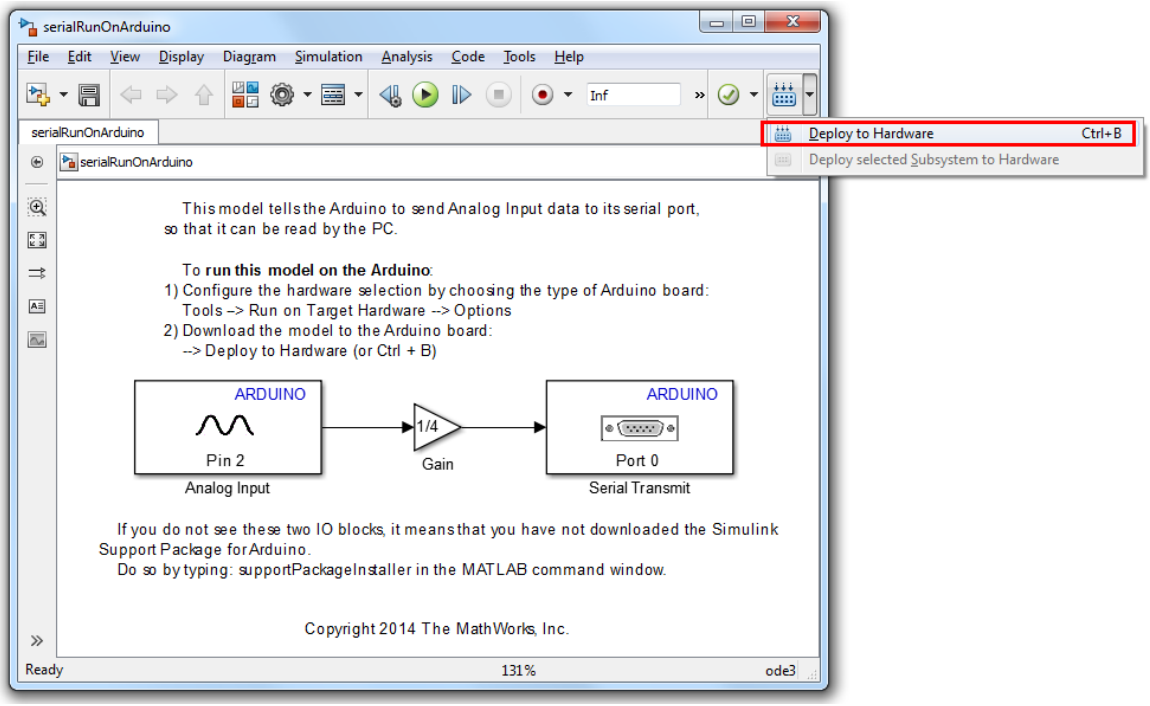
-You can do so easily with Simulink External Mode if you use Arduino Mega 2560 and Arduino Due.

What if you use Arduino Uno?

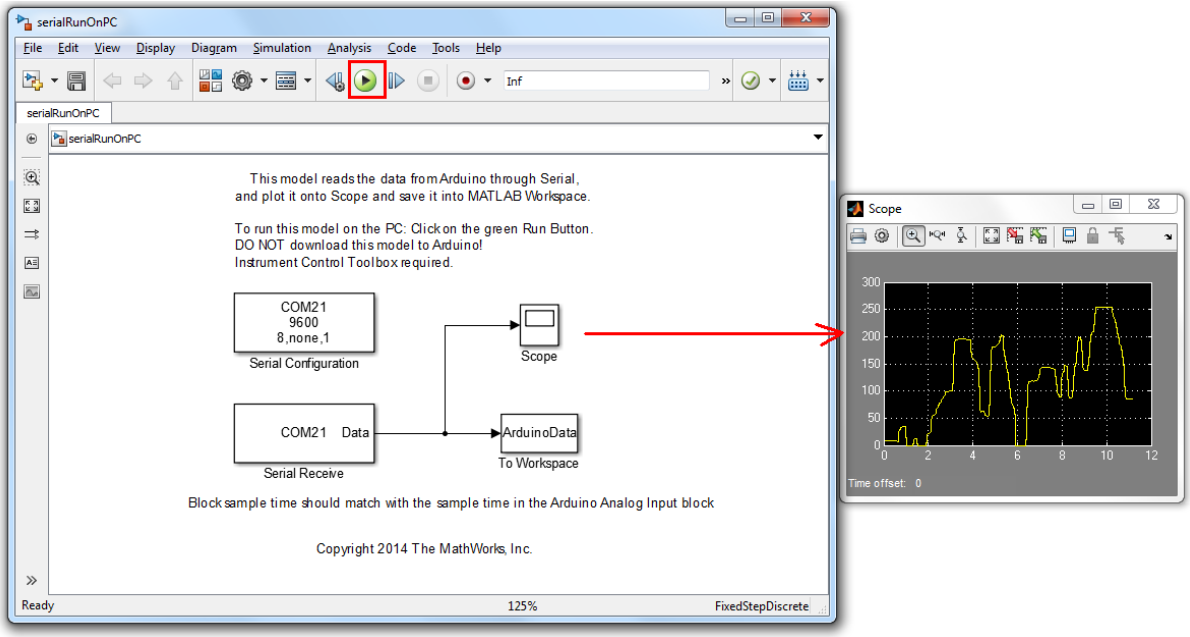
-This File Exchange download will help you do exactly that.

This submission contains **three** files:

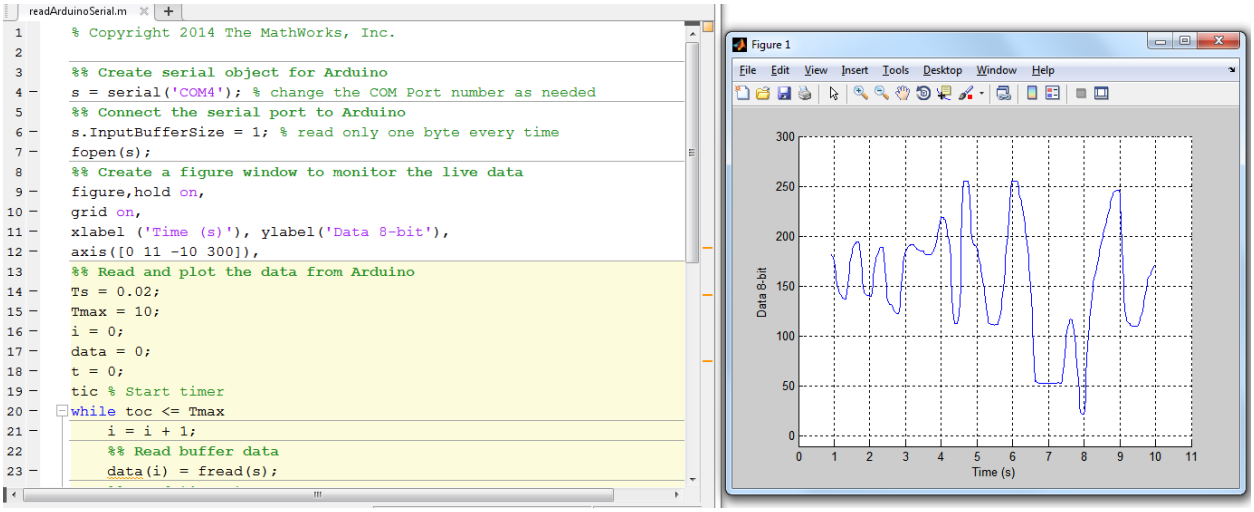
-serialRunOnArduino.slx: Download this model onto your Arduino board so that it sends data to serial port



-**serialRunOnPC.slx**: Run this model locally on your PC to collect and plot serial data **in Simulink**



-**readArduinoSerial.m**: Run this script to read and plot serial data **in MATLAB**

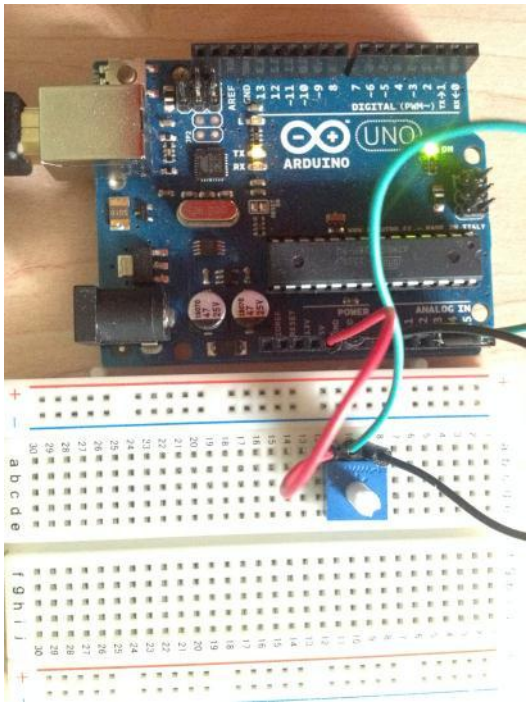


What you should do:

1. Download the **serialRunOnArduino.slx** model onto the Arduino board.

2. Note which COM Port the Arduino board is connected to (eg. COM21).

3. Use either the Simulink model **serialRunOnPC.slx** or the MATLAB script **readArduinoSerial.m** to collect the serial data, plot them live, and store to workspace for future analysis (Make sure to select the correct COM port first).



This example collects Analog Input from a potentiometer. You can use the same principle to collect data from other sensors like thermocouple, strain gage, accelerometer, etc.

More Information:

Arduino Simulink Support: http://www.mathworks.com/hardware-support/arduino-simulink.html

Documentation on Arduino Simulink Support: http://www.mathworks.com/help/simulink/arduino.html

Documentation on MATLAB to Serial Port Devices: http://www.mathworks.com/help/matlab/serial-port-devices.html