Acconeer Radar for Ardupilot Proximity Sensor

Setup

Components:
    Flight Controller
    GPS Board
    UxV Breakout Board
    STM Nucleo
    Acconeer XE121
    2x USB to USB Mini Cables
    2x Female to Female Jumpers

Code:
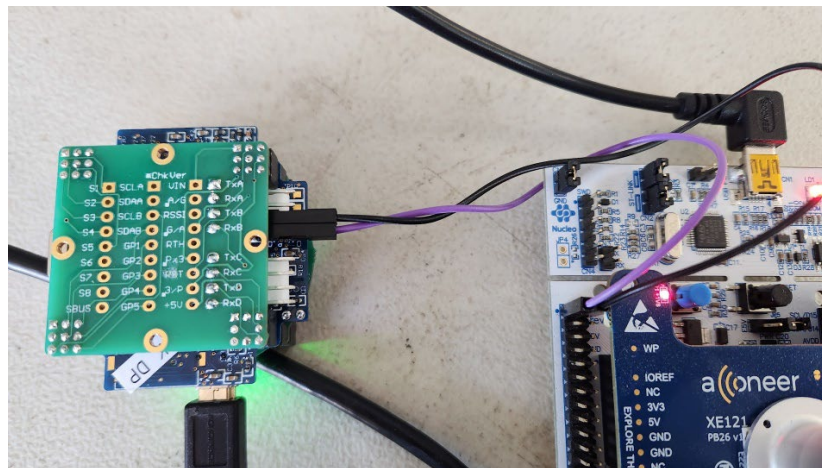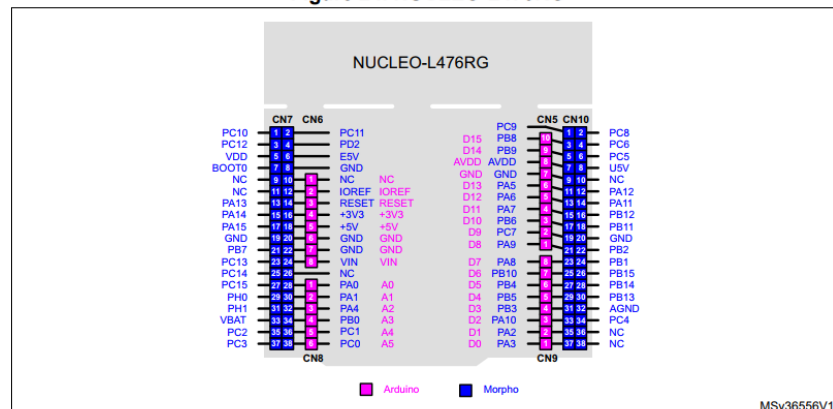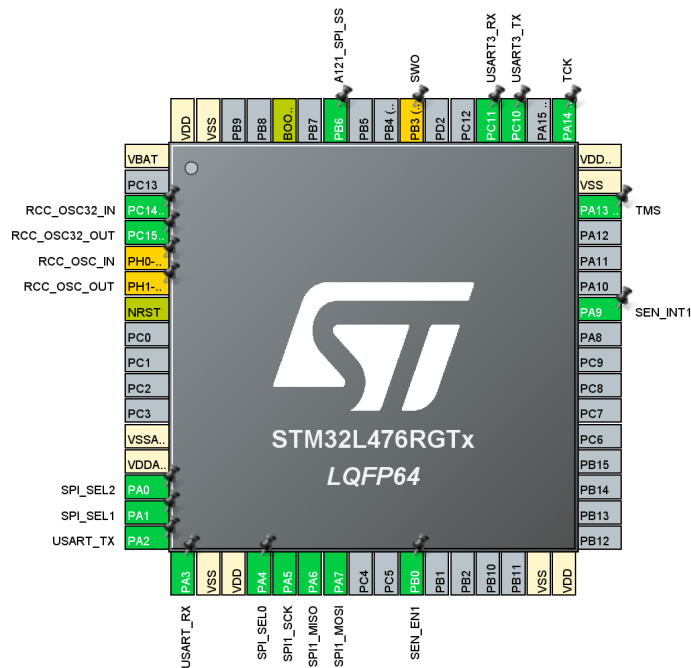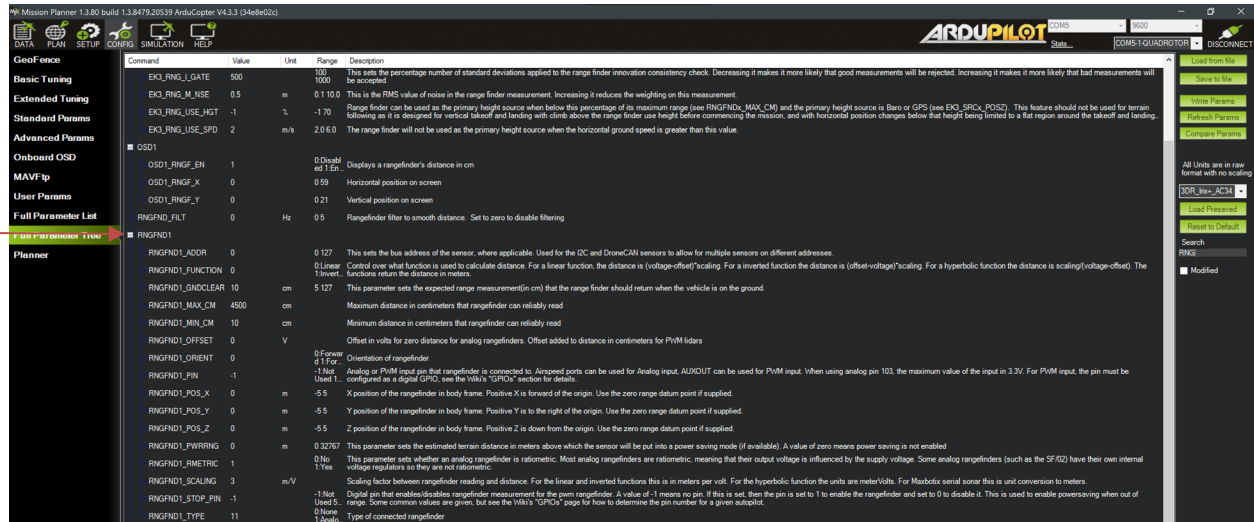   https://github.com/JIRonnie/AcconeerRadar-for-Ardupilot.git

Wiring:

Figure 24. NUCLEO-L476RG

UART3 on the STM Nucleo is wired to Serial Port B on the Flight Stack
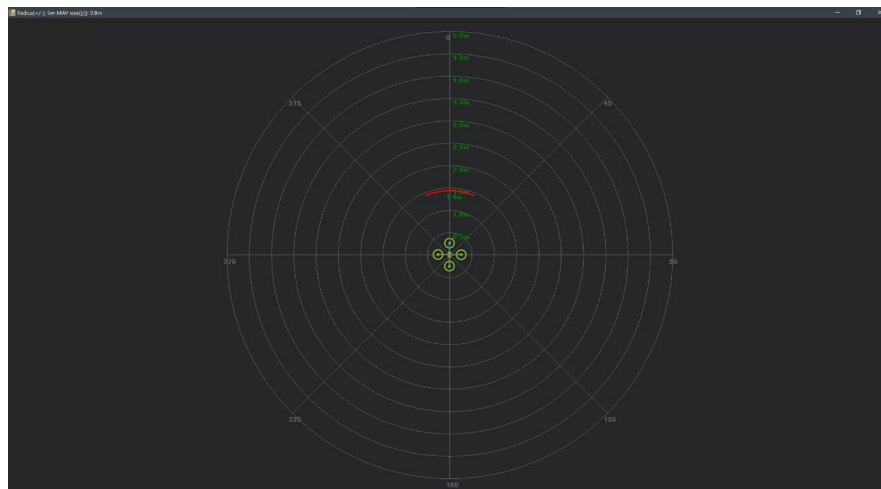
Mission Planner Parameters

Viewing Data

Ctrl+F opens the temp window in mission planner.

Selecting Proximity brings up the following:

The Red line indicates the value the rangefinder is sending. The example above has RNGFND1_ORIENT set to 0 which is the forward direction. If it was set to backwards facing, the red line would be drawn on the bottom of the drone representation. From what I can tell, Downward facing is not represented in this screen and can only be visualized in the following screen:
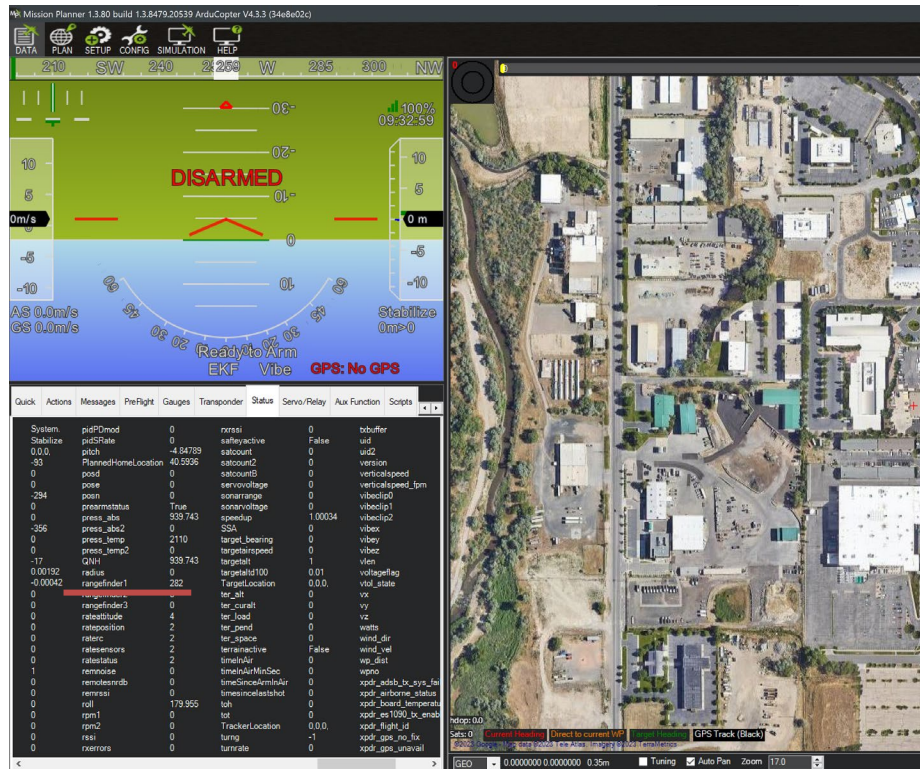
Rangefinder1 is represented in cm here

Version History

Date and Signature	Revisions	Reasons for Revision
12/03/2023 Jack R.	Document was written. (v01.00.00)	

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