

Using CHORDS/Granafa to Archive/Display Real-time MetTrailer Observations

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Website - Meteorological Observations Trailer (MetTrailer)

Edit with Sea-Monkey Composer (WYS/WYG HTML Editor)

MetTrailer Measurements - Google Chrome

MetTrailer Measur x +

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**METEOROLOGICAL
OBSERVATIONS
TRAILER**



Instrument Plots

[Campbell CS125 Present Weather Sensor Dashboard](#)
[Gill Windsonic Anemome Dashboard Web](#)
[IMet XQ2 Dashboard](#)
[Measurement Computing AD Board Dashboard](#)
[NCAR 3D-PAWS Dashboard](#)
[Trailer Inside Monitor Web](#)
[Sten Lofving Mini Dashboard](#)
[Vaisala Weather Transmitter Dashboard](#)
[Young 61202V Pressure Dashboard](#)

Comparison Plots

[Temperature / Relative Humidity Dashboard](#)
[Visibility Dashboard](#)
[Wind Dashboard](#)

[Camera Images](#)

Deeplens Camera 1

[Latest](#) [Last 6 Images](#) [Last 18 Images](#) [Last 36 Images](#)

Deeplens Camera 2

[Latest](#) [Last 6 Images](#) [Last 18 Images](#) [Last 36 Images](#)

All Sky Camera

[#1 - Latest](#) [Last 6 Images](#) [Last 18 Images](#) [Last 36 Images](#)
[#2 - Latest](#) [Last 6 Images](#) [Last 18 Images](#) [Last 36 Images](#)
[#3 - Latest](#) [Last 6 Images](#) [Last 18 Images](#) [Last 36 Images](#)
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4 ft Pole

Extendable to 12 M

6 M Height

Tiltable Tower

Tower Wire Guides

4 M Height

Cell Data Antenna

2 Port Side Access

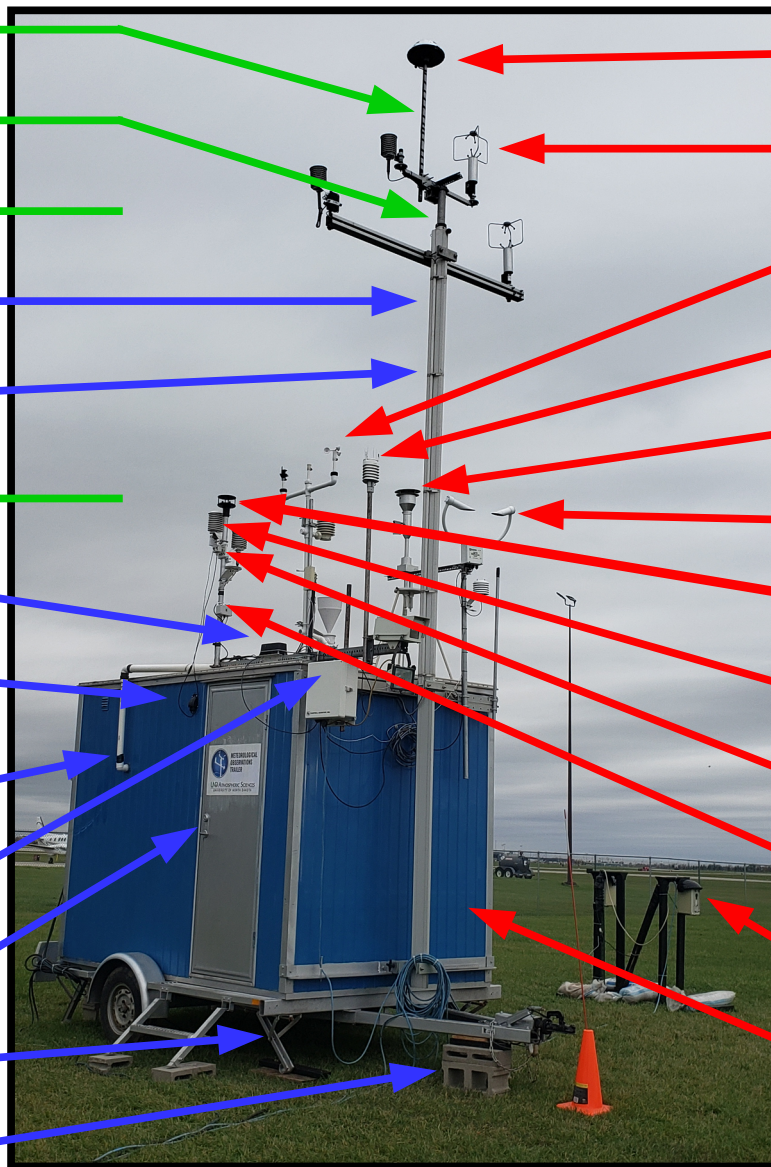
Wire Access Tube

Power Distribution

Lockable Door

Lifting Jack

Support Blocks



All Sky Camera

3 Axis Sonic Anemometer

3D-PAWS

Weather Transmitter

Aerosol Inlet

Present Weather Sensor

2 Axis Sonic Anemometer

iMet-XQ2 UAV Sensor

MiniOFS Visibility Sensor

Pressure Transducer

Deeplens Camera

MetTrailer

Wiki Page - Meteorological Observations Trailer

Online Editable Web Pages

Useful for Quick Documentation by Many People

atmos:meteorological_observations_trailer:home [Atmoswiki] - Google Chrome

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**METEOROLOGICAL
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- Overview
- Lab Book
- Table of Spring 2021 Fog Observations
- Data Workflow
- Instrumentation
- Wiring Diagram
- Programming

atmos:meteorological_observations_trailer:instrumentation [Atmoswiki] - Google Chrome

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Atmoswiki

Trace: home instrumentation

atmos:meteorological_observations_trailer:instrumentation

Meteorological Observations Trailer Instruments

Currently Operating / Deployed

- Visibility
 - MiniOFS - Sten Lofying
 - Present Weather Sensor - Campbell Scientific Model CS125
- Cameras
 - All Sky Camera - Mike Hankey LLC
 - Deeplens - Amazon Web Services
- Meteorological
 - 3D-Printable Atmospheric Weather Sensor (3D-PAWS) - NCAR
 - 3 Axis Sonic Anemometer - R.M Young 81000
 - 2 Axis Sonic Anemometer - Gill
 - IMet-XQ2 UAV Sensor - International Met Systems
 - Pressure Probe - R.M. Young Barometric Pressure Transducer
 - Temperature/Humidity Probe - Vaisala Model HMP45AC
 - Weather Transmitter - Vaisala Model WXT536
- Data Loggers
 - Data Logger - Campbell Scientific Model CR23X Micrologger
 - Data Logger - Campbell Scientific Model CR3000 Micrologger

Available

- Propeller Anemometer - R.M. Young Model 05103
- Net Radiometer - Kipp & Zonen

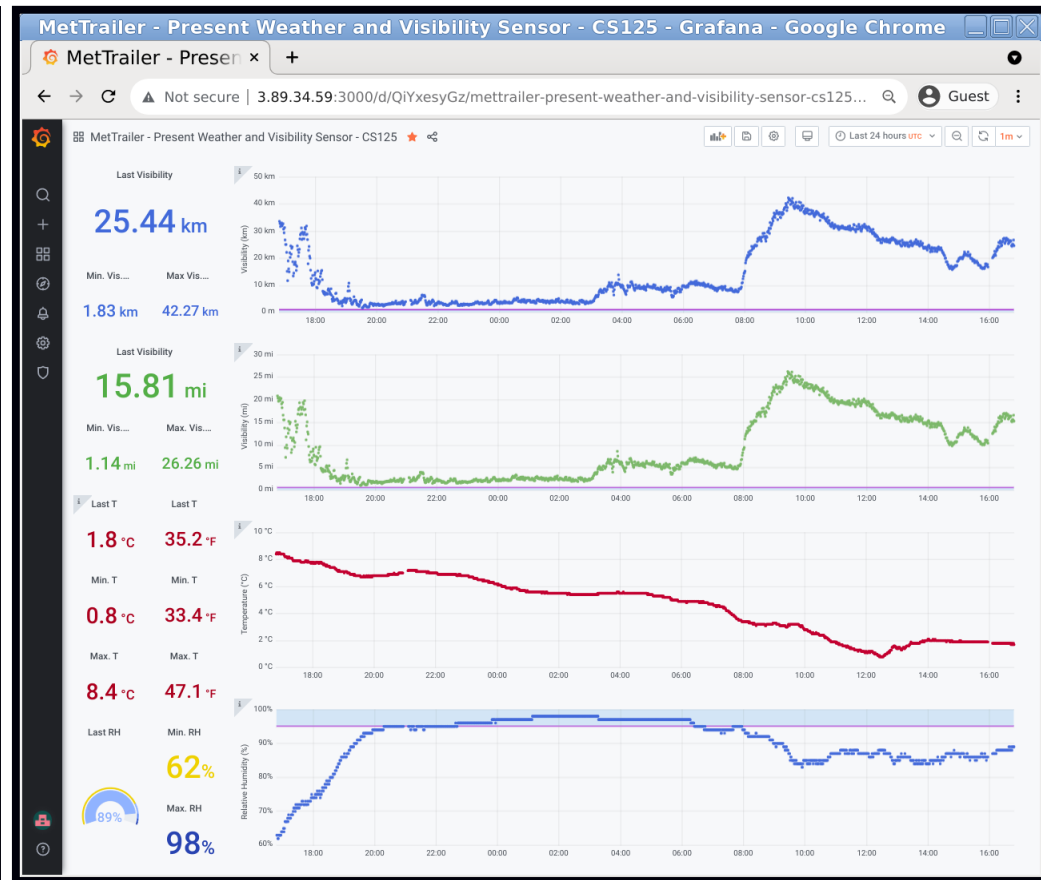
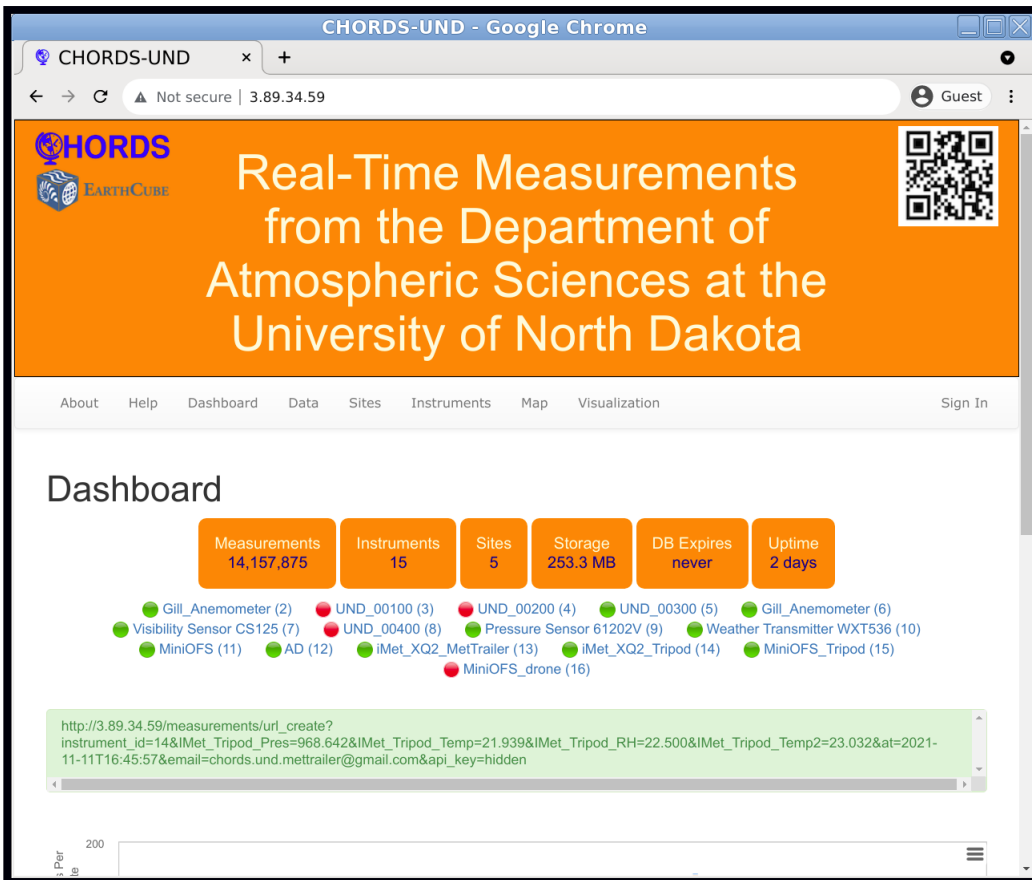
Table of Contents

- Meteorological Observations Trailer Instruments
 - Currently Operating / Deployed
 - Available

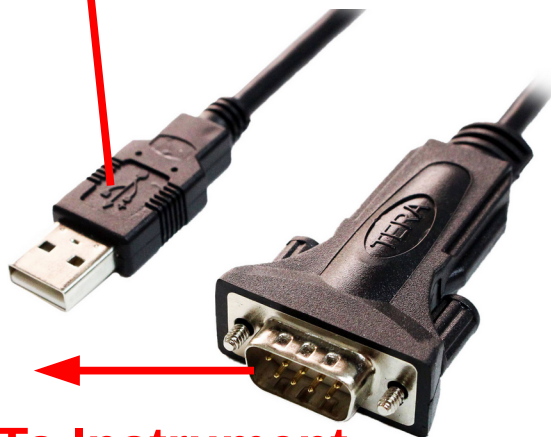
CHORDS / Grafana - Meteorological Observations Trailer

CHORDS – Online Data Base

Grafana – Display Time Series Data Online

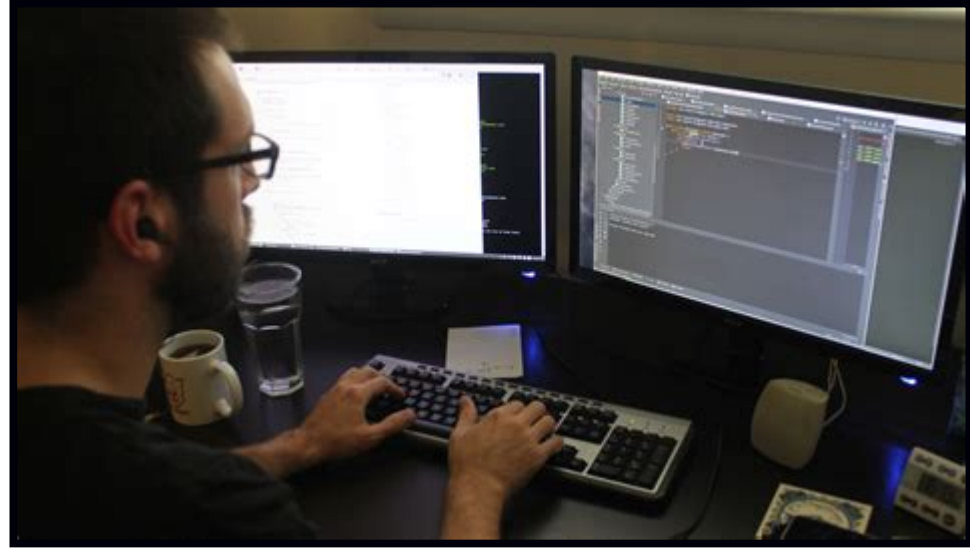


Raspberry Pi 4 – Data Acquisition System (Digital Data via UBS)
Python – Software Program to Acquire Data from Each Instrument

[illegible]

Discussion: What is so Hard?

- **CORDS/Grafana Server Setup**
 - Use an Existing Server
 - System Admin Setup
- **Develop Python Code**
 - 100 lines of code per instrument.
 - Examples Available (`${ADPAA_DIR}/src/acquire_python`)
- **Configuration CORDS and Grafana**
 - Setup Parameters for New Instrument
 - Create New Dashboard



JUST DO IT