

GLOBE Best Practices

Jeffrey R. Bouwman
GLOBE El Nino Field Campaign
Wednesday, September 21, 2016
8:00 p.m. (EST)



#GettingScienceDone



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Status



Photo / Video



Write something...

What's New at SMS?

- **WeatherSTEM**
- **Google Chromebooks**
- **More Rain Gauges**
- **Naturebytes (Nature Cameras)**



This year we are going to measure soil moisture, soil and surface temperature, precipitation, clouds, and current temperature.

Gibraltar School District WeatherSTEM

- Check out our WeatherSTEM! *Thank you Dr. Butler & YLACES!*

Website - wayne.weatherstem.com/gibraltar

Facebook – Gibraltar School District Weatherstem

Twitter - @GibraltarWX

- We are going to use our WeatherSTEM station (Davis Instruments) to push atmosphere data to GLOBE.
- Monitor and discuss real world data collected by our weather station. The Gibraltar community can use WeatherSTEM too!
- Compare WeatherSTEM measurements with our student collected GLOBE measurements.
- Get a time lapse view of the sky from the day before.




Gibraltar School District: conditions at 10:28 PM


[Handout](#)
[Portrait](#)
[Radar & Satellite](#)
[Radar \(legacy\)](#)
[Sky Video](#)
[Station Map](#)
[Tides](#)
[Tropical \(2\)](#)
[Upper Air](#)

65 °F

Clear (1% cloud cover)

Visibility 9.62 miles

62°F Low @ 2:51 AM

82°F High @ 2:51 PM



Key Details (updated 78 seconds ago)

[Tweet](#)

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Wind Calm with gusts to 1

mph

Humidity 92%

Ozone 273.52 DU

Rainfall (last 24 hour) 0.00 in

Last rain Sep 17 2:12 PM

Elevation 584 feet

[All Sensors](#)
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[2016 College Football Schedule](#)
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Sensor	Reading
10 Minute Wind Gust	1 mph
Anemometer	0 mph
Barometer	30.137 in. Hg
Barometer Tendency	Steady
Condensation / Dew	4 mi
Dewpoint	63.0 °F
Heat Index	67.0 °F
Hygrometer	92 %
Rain Gauge	0.00 in.
Rain Rate	0.00 in/hr
Soil Moisture (10 in.)	0 cb (Saturated Soil)
Soil Moisture (5 in.)	1 cb (Saturated Soil)
Soil Temperature (10 in.)	74.0 °F

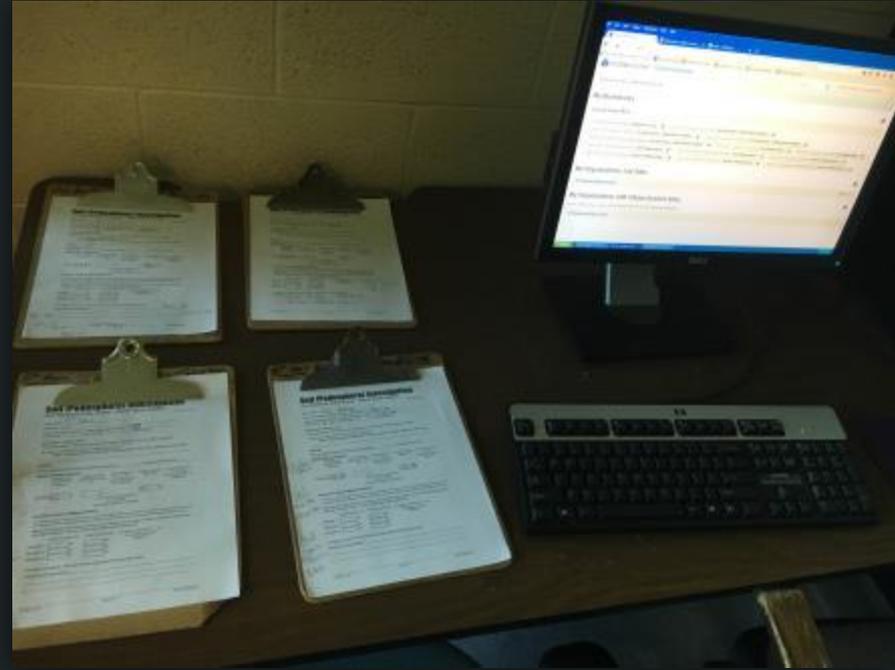


Gibraltar School District – Cloud Camera



Our GLOBE Sites

- This year we are going to start off with four GLOBE data sites. All of our sites are located on the north side of SMS.
- We are currently training the student trainers. Great approach!
- Each hour has their own clipboard to organize the data sheets.
- All of our sites are Bookmarks on the data entry page for easy access.



RECENT MEASUREMENTS



Shumate Middle School, United States, Surface Temperature, Measured on: 2015-09-21



Enter Data

Visualize Data



Mr. Kay



Mr. Bouwman



GLOBE Site Launch – 2016 - 2017

GLOBE Goals

Graph Data from the Data Board

Students have Chromebooks...
Use Google Spreadsheet! Discuss!

#DataSMASH

Combine GLOBE, CoCoRaHS,
WeatherSTEM & Naturebytes

Teach El Nino and La Nina

Discuss more during weather unit.

Most Important

Create GLOBE Projects
with our students!





Any Questions?

Verizon 3G 9:21 AM

330 300 240 210 180 150

N W E S

357° N Gibraltar MI

42°5'10" N 83°12'36" W

293.2