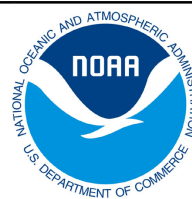


Clear

## GNSS OBSERVATION LOG SHEET

Save

PROJECT NAME: ODU Survey

Site Name: \_\_\_\_\_

Date: 02/10/2021 DOY: 041

Site Number: \_\_\_\_\_

Four Character ID: 863F

SSN: \_\_\_\_\_

## MONUMENT

Designation: 863-8610

Stamping - Station Description

PID: \_\_\_\_\_

8610 F 2006

VM #: \_\_\_\_\_

Condition: Good

## POSITION

Latitude: 36 56 33.74437 (Format: N DD° MM' SS.SS")Ellipsoid Height -34.638Longitude: 76 19 43.29966 (Format: W DDD° MM' SS.SS")Ortho Height 2.264Scheduled Start Time: 1200 UTCScheduled End Time: 1900 UTCActual Start Time: 1154 UTCActual End Time: 1906 UTC

Actual Start and End Times in UTC only

## TRIPOD

A = Datum point to Top of Tripod  
(Tripod Height)

Start HI

End HI

1.9991

1.9991

B = Any additional offset to ARP  
(Tribrach/Spacer)

0.0000

0.0000

H = Antenna Height A + B  
Datum Point to Antenna Reference Point (ARP)

1.9991

1.9991

Note and/or sketch **ANY** unusual conditions. Be very explicit and detailed as to where and how the ARP is measured. **ALWAYS** confirm HI at the end of an observation session

Tripod/Mast Type

☒ Fixed Height☐ Mast☐ Collapsible

Height Entered into Receiver \_\_\_\_\_

NOTE: ALL MEASUREMENTS ARE TO BE IN METERS

## EQUIPMENT

Receiver

Antenna

Power Supply

Type/Name: TrimbleType/Name: Trimble☐ InternalModel Number: Net R9Model Number: 115000-00☒ 12V ExternalSerial Number: 5832R50297Serial Number: 6122223928☐ Other (Specify) \_\_\_\_\_Firmware Version: 5.45

Firmware Version: \_\_\_\_\_

## CONDITIONS

Weather Condition Comments (If there could be an effect on observations)

Remember.....the observation sessions are long. Take the time to write down anything they may have an effect the quality of the collected data.

General Concerns or comments (obstructions, battery failures, level issues)

## OBSERVER

Contact Information

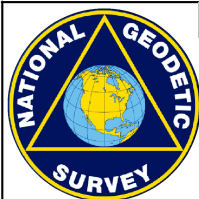
- ☒ Photographs  
☐ \*Visibility Sketch  
☐ \*Obstruction Sketch
- ☐ Updated Description  
☐ Sketch attached or on Back  
☐ Checked By \_\_\_\_\_

\* may be omitted with good quality color photographs

Organization: NGSName: Phil MarshallRINEX File Name: 863f0410.210

Telephone: \_\_\_\_\_

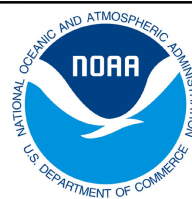
email address: phillip.marshall@noaa.gov



Clear

## GNSS OBSERVATION LOG SHEET

Save



PROJECT NAME: ODU Control 2021

Site Name: FOB

Date: 02/10/2021 DOY: 041

Site Number: \_\_\_\_\_

Four Character ID: BRMR

SSN: \_\_\_\_\_

## MONUMENT

Designation: Breadmaker

Stamping - Station Description

PID: DG9069

VM #: \_\_\_\_\_

Condition: Good

## POSITION

Latitude: 36 51 16.85018 (Format: N DD° MM' SS.SS")

Ellipsoid Height \_\_\_\_\_

Longitude: 076 18 00.44343 (Format: W DDD° MM' SS.SS")

Ortho Height \_\_\_\_\_

Scheduled Start Time: 1200 UTC

Scheduled End Time: 1900 UTC

Actual Start Time: 1152 UTC

Actual End Time: 1905 UTC

Actual Start and End Times in UTC only

## TRIPOD

A = Datum point to Top of Tripod  
(Tripod Height)

Start HI

End HI

1.9999

1.9999

B = Any additional offset to ARP  
(Tribrach/Spacer)

0.0000

0.0000

H = Antenna Height A + B  
Datum Point to Antenna Reference Point (ARP)

1.9999

1.9999

Note and/or sketch **ANY** unusual conditions. Be very explicit and detailed as to where and how the ARP is measured. **ALWAYS** confirm HI at the end of an observation session

Tripod/Mast Type

☒ Fixed Height☐ Mast☐ Collapsible

Height Entered into Receiver 1.9999

NOTE: ALL MEASUREMENTS ARE TO BE IN METERS

## EQUIPMENT

Receiver

Antenna

Power Supply

Type/Name: Trimble Net R9

Type/Name: Zephyr 3

☐ Internal

Model Number: 67668-30

Model Number: 115000-00

☒ 12V External

Serial Number: 5832R50274

Serial Number: 6122223766

☐ Other (Specify)

Firmware Version: 5.45

Firmware Version: \_\_\_\_\_

## CONDITIONS

Weather Condition Comments (If there could be an effect on observations)

Wind and Overcast

Remember.....the observation sessions are long. Take the time to write down anything they may have an effect the quality of the collected data.

General Concerns or comments (obstructions, battery failures, level issues)

Multipath from power cables to the north, from buildings to the south

## OBSERVER

Contact Information

☐ Photographs☐ Updated Description☐ \*Visibility Sketch☐ Sketch attached or on Back☐ \*Obstruction Sketch☐ Checked By \_\_\_\_\_

\* may be omitted with good quality color photographs

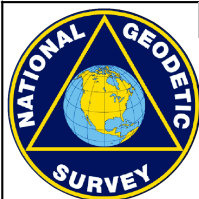
Organization: NGS

Name: Kyle Fernish

RINEX File Name: BRMR0410.21o

Telephone: 7602775434

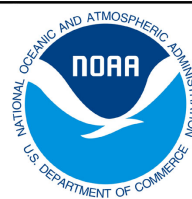
email address: kyle.fernish@noaa.gov



Clear

## GNSS OBSERVATION LOG SHEET

Save



PROJECT NAME: ODU Control 2021

Site Name: GPS099

Date: 02/10/2021 DOY: 041

Site Number: \_\_\_\_\_

Four Character ID: GP99

SSN: \_\_\_\_\_

## MONUMENT

Designation: GPS099

Stamping - Station Description

PID: \_\_\_\_\_

PA 42 RESET 1966

VM #: \_\_\_\_\_

Condition: GOOD

## POSITION

Latitude: N 36° 53' 11" (Format: N DD° MM' SS.SS")

Ellipsoid Height \_\_\_\_\_

Longitude: W 076° 17' 42" (Format: W DDD° MM' SS.SS")

Ortho Height \_\_\_\_\_

Scheduled Start Time: 1200 UTC

Scheduled End Time: 1900 UTC

Actual Start Time: 1145 UTC

Actual End Time: 2020 UTC

Actual Start and End Times in UTC only

## TRIPOD

A = Datum point to Top of Tripod  
(Tripod Height)

Start HI

End HI

2.0003

2.0003

B = Any additional offset to ARP  
(Tribrach/Spacer)

0.0000

0.0000

H = Antenna Height A + B  
Datum Point to Antenna Reference Point (ARP)

2.0003

2.0003

Note and/or sketch **ANY** unusual conditions. Be very explicit and detailed as to where and how the ARP is measured. **ALWAYS** confirm HI at the end of an observation session

Tripod/Mast Type

☒ Fixed Height☐ Mast☐ Collapsible

Height Entered into Receiver \_\_\_\_\_

NOTE: ALL MEASUREMENTS ARE TO BE IN METERS

## EQUIPMENT

Receiver

Antenna

Power Supply

Type/Name: TRIMBLE NETR9

Type/Name: TRIMBLE ZEPHYR3

☐ Internal

Model Number: 67668-30

Model Number: 115000-00

☒ 12V External

Serial Number: 5832R50338

Serial Number: 6122223882

☐ Other (Specify) \_\_\_\_\_

Firmware Version: 5.45

Firmware Version: NA

## CONDITIONS

Weather Condition Comments (If there could be an effect on observations)

MORNING - 45° OVERCAST - WIND - &lt;5 MPH

AFTERNOON - 45° OVERCAST - WIND - &lt;5 MPH

General Concerns or comments (obstructions, battery failures, level issues)

MARK IS HIGHLY OBSTRUCTED TO THE NORTHWEST

Remember.....the observation sessions are long. Take the time to write down anything they may have an effect the quality of the collected data.

## OBSERVER

Contact Information

Organization: NATIONAL GEODETIC SURVEY

Name: KEVIN JORDAN

Telephone: 757-441-5478

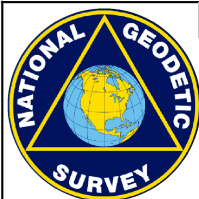
☒ Photographs☐ \*Visibility Sketch☐ \*Obstruction Sketch

\* may be omitted with good quality color photographs

☐ Updated Description☐ Sketch attached or on Back☐ Checked By \_\_\_\_\_

RINEX File Name: G0990410.21o

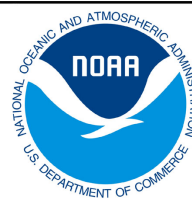
email address: KEVIN.JORDAN@NOAA.GOV



Clear

## GNSS OBSERVATION LOG SHEET

Save



PROJECT NAME: ODU Survey

Site Name: ODU 3

Date: 02/10/2021 DOY: 041

Site Number: \_\_\_\_\_

Four Character ID: OU03

SSN: \_\_\_\_\_

## MONUMENT

Designation: ODU 3

Stamping - Station Description

PID: AJ4598

ODU 3 2000

VM #: \_\_\_\_\_

Condition: Good

## POSITION

Latitude: N 36°53'11.86976" (Format: N DD° MM' SS.SS")

Ellipsoid Height -34.290(m)

Longitude: W 76°18'13.50364" (Format: W DDD° MM' SS.SS")

Ortho Height 2.746(m)

Scheduled Start Time: 12:00 UTC

Scheduled End Time: 19:00 UTC

Actual Start Time: 11:54 UTC

Actual End Time: 19:05 UTC

Actual Start and End Times in UTC only

## TRIPOD

A = Datum point to Top of Tripod  
(Tripod Height)

Start HI

End HI

1.9999

1.9999

B = Any additional offset to ARP  
(Tribrach/Spacer)

0.0000

0.0000

H = Antenna Height A + B  
Datum Point to Antenna Reference Point (ARP)

1.9999

1.9999

Note and/or sketch **ANY** unusual conditions. Be very explicit and detailed as to where and how the ARP is measured. **ALWAYS** confirm HI at the end of an observation session

Tripod/Mast Type

☒ Fixed Height☐ Mast☐ Collapsible

Height Entered into Receiver 2.0000

NOTE: ALL MEASUREMENTS ARE TO BE IN METERS

## EQUIPMENT

Receiver

Antenna

Power Supply

Type/Name: Net R9

Type/Name: Zephyr 3 Geodetic

☒ Internal

Model Number: 67668-30

Model Number: 115000.00

☒ 12V External

Serial Number: 5820R50154

Serial Number: 1441037967

☐ Other (Specify)

Firmware Version: 5.44

Firmware Version: \_\_\_\_\_

## CONDITIONS

Weather Condition Comments (If there could be an effect on observations)

Overcast, 10 mph wind out the N/NE

Remember.....the observation sessions are long. Take the time to write down anything they may have an effect the quality of the collected data.

General Concerns or comments (obstructions, battery failures, level issues)

Large trees at about a distance of 40m to the north, east, and south of location, 30-35° elevation angle above horizon.

Campus buildings 50m to the north and south of location, 10-15° elevation angle above horizon.

## OBSERVER

Contact Information

☒ Photographs☐ Updated Description☐ \*Visibility Sketch☐ Sketch attached or on Back☐ \*Obstruction Sketch☐ Checked By \_\_\_\_\_

\* may be omitted with good quality color photographs

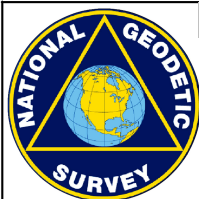
Organization: NGS

Name: Ben Gavin

RINEX File Name: OU030410.210

Telephone: \_\_\_\_\_

email address: benjamin.gavin@noaa.gov



Clear

## GNSS OBSERVATION LOG SHEET

Save



PROJECT NAME: ODU Control 2021

Site Name: ODU18

Date: 02/10/2021 DOY: 041

Site Number: \_\_\_\_\_

Four Character ID: OU18

SSN: \_\_\_\_\_

## MONUMENT

Designation: ODU18

Stamping - Station Description

PID: \_\_\_\_\_

ODU 18

VM #: \_\_\_\_\_

Condition: GOOD

## POSITION

Latitude: N 36 53 8.99419 (Format: N DD° MM' SS.SS")

Ellipsoid Height -35.272

Longitude: W 76 19 0.94238" (Format: W DDD° MM' SS.SS")

Ortho Height 1.743

Scheduled Start Time: 12:00:00 UTC

Scheduled End Time: 19:00:00 UTC

Actual Start Time: 11:44:00 UTC

Actual End Time: 19:05:30 UTC

Actual Start and End Times in UTC only

## TRIPOD

A = Datum point to Top of Tripod  
(Tripod Height)

Start HI

End HI

2.0000

2.0000

B = Any additional offset to ARP  
(Tribrach/Spacer)

0.0000

0.0000

H = Antenna Height A + B  
Datum Point to Antenna Reference Point (ARP)

2.0000

2.0000

Note and/or sketch **ANY** unusual conditions. Be very explicit and detailed as to where and how the ARP is measured. **ALWAYS** confirm HI at the end of an observation session

Tripod/Mast Type

☒ Fixed Height☐ Mast☐ Collapsible

Height Entered into Receiver \_\_\_\_\_

NOTE: ALL MEASUREMENTS ARE TO BE IN METERS

## EQUIPMENT

Receiver

Antenna

Power Supply

Type/Name: TRIMBLE NETR9

Type/Name: TRIMBLE ZEPHYR3

☒ Internal

Model Number: \_\_\_\_\_

Model Number: 115000-00

☒ 12V External

Serial Number: 5834R50371

Serial Number: 22223925

☐ Other (Specify) \_\_\_\_\_

Firmware Version: 5.45

Firmware Version: NA

## CONDITIONS

Weather Condition Comments (If there could be an effect on observations)

MORNING - 45° OVERCAST - WIND - &lt;5 MPH

AFTERNOON - 45° OVERCAST - WIND &lt;5 MPH

Remember.....the observation sessions are long. Take the time to write down anything they may have an effect the quality of the collected data.

General Concerns or comments (obstructions, battery failures, level issues)

Receiver was powered by internal power supply for approximately first two hours, before switching to external 12V.

Single tree obstruction 20 feet to NE approximately 30 feet tall x 30 feet across.

## OBSERVER

Contact Information

Organization: National Geodetic Survey

Name: Luke Downey

Telephone: 757-441-5479

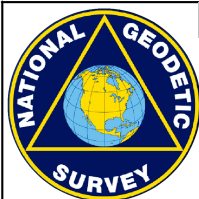
☒ Photographs☐ \*Visibility Sketch☐ \*Obstruction Sketch

\* may be omitted with good quality color photographs

☐ Updated Description☐ Sketch attached or on Back☐ Checked By \_\_\_\_\_

RINEX File Name: OU180410.210

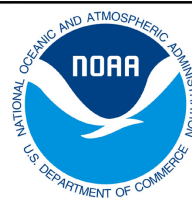
email address: luke..downey@noaa.gov



Clear

## GNSS OBSERVATION LOG SHEET

Save



PROJECT NAME: ODU Research Project

Site Name: \_\_\_\_\_

Date: 02/10/2021 DOY: 041

Site Number: \_\_\_\_\_

Four Character ID: W416

SSN: \_\_\_\_\_

## MONUMENT

Designation: W416

Stamping - Station Description

PID: FX0049

See Datasheet

VM #: \_\_\_\_\_

Condition: See Below

## POSITION

Latitude: 36 57 29.21 (Format: N DD° MM' SS.SS")

Ellipsoid Height \_\_\_\_\_

Longitude: 76 15 34.14 (Format: W DDD° MM' SS.SS")

Ortho Height \_\_\_\_\_

Scheduled Start Time: 12:00:00 UTC

Scheduled End Time: 19:00:00 UTC

Actual Start Time: 11:51:15 UTC

Actual End Time: 19:03:45 UTC

Actual Start and End Times in UTC only

## TRIPOD

A = Datum point to Top of Tripod  
(Tripod Height)

Start HI

End HI

2.0000

2.0000

B = Any additional offset to ARP  
(Tribrach/Spacer)

0.0000

0.0000

H = Antenna Height A + B  
Datum Point to Antenna Reference Point (ARP)

2.0000

2.0000

Note and/or sketch **ANY** unusual conditions. Be very explicit and detailed as to where and how the ARP is measured. **ALWAYS** confirm HI at the end of an observation session

Tripod/Mast Type

☒ Fixed Height☐ Mast☐ Collapsible

Height Entered into Receiver \_\_\_\_\_

NOTE: ALL MEASUREMENTS ARE TO BE IN METERS

## EQUIPMENT

Receiver

Antenna

Power Supply

Type/Name: TRM NetR9

Type/Name: Zephyr 3

☐ Internal

Model Number: 67668-30

Model Number: 115000-00

☒ 12V External

Serial Number: 5835R50374

Serial Number: 6122223769

☐ Other (Specify)

Firmware Version: 5.45

Firmware Version: \_\_\_\_\_

## CONDITIONS

Weather Condition Comments (If there could be an effect on observations)

Clear skies, 38-44 degrees, 8-10 mph winds from the NE.

Remember.....the observation sessions are long. Take the time to write down anything they may have an effect the quality of the collected data.

General Concerns or comments (obstructions, battery failures, level issues)

Cluster of trees to the NW that block the horizon for approx. 90 degrees. Large propeller from naval ship to the south not above 10 degrees. Horizontal instability detected in benchmark. Disk has approx 1/10 inch play.

## OBSERVER

Contact Information

☒ Photographs☐ Updated Description☐ \*Visibility Sketch☐ Sketch attached or on Back☐ \*Obstruction Sketch☐ Checked By \_\_\_\_\_

\* may be omitted with good quality color photographs

Organization: National Geodetic Survey

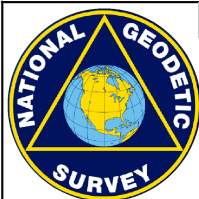
Name: Jack Larter

RINEX File Name: W4160410.210

Telephone: (304)312-6952

email address: jack.larter@noaa.gov

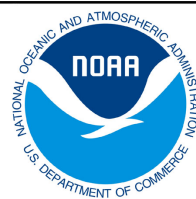




Clear

## GNSS OBSERVATION LOG SHEET

Save

PROJECT NAME: ODU Control 2021

Site Name: \_\_\_\_\_

Date: 02/17/2021 DOY: 048

Site Number: \_\_\_\_\_

Four Character ID: 863F

SSN: \_\_\_\_\_

## MONUMENT

Designation: 863-8610

Stamping - Station Description

PID: \_\_\_\_\_

8610 F 2008

VM #: \_\_\_\_\_

Condition: Good

## POSITION

Latitude: 36 56 33.74437 (Format: N DD° MM' SS.SS")Ellipsoid Height -34.638Longitude: 76 19 43.29966 (Format: W DDD° MM' SS.SS")Ortho Height 2.264Scheduled Start Time: 1400 UTCScheduled End Time: 1700 UTCActual Start Time: 1343 UTCActual End Time: 1706 UTC

Actual Start and End Times in UTC only

## TRIPOD

**A** = Datum point to Top of Tripod  
(Tripod Height)

Start HI

End HI

1.9991

1.9991

**B** = Any additional offset to ARP  
(Tribrach/Spacer)

0.0000

0.0000

**H** = Antenna Height **A + B**  
Datum Point to Antenna Reference Point (ARP)

1.9991

1.9991

Note and/or sketch **ANY** unusual conditions. Be very explicit and detailed as to where and how the ARP is measured. **ALWAYS** confirm HI at the end of an observation session

Tripod/Mast Type

☒ Fixed Height☐ Mast☐ Collapsible

Height Entered into Receiver \_\_\_\_\_

NOTE: ALL MEASUREMENTS ARE TO BE IN METERS

## EQUIPMENT

Receiver

Antenna

Power Supply

Type/Name: TrimbleType/Name: Trimble☐ InternalModel Number: Net R9Model Number: 115000-00☒ 12V ExternalSerial Number: 5832R50297Serial Number: 6122223928☐ Other (Specify) \_\_\_\_\_Firmware Version: 5.45

Firmware Version: \_\_\_\_\_

## CONDITIONS

Weather Condition Comments (If there could be an effect on observations)

Remember.....the observation sessions are long. Take the time to write down anything they may have an effect the quality of the collected data.

General Concerns or comments (obstructions, battery failures, level issues)

## OBSERVER

Contact Information

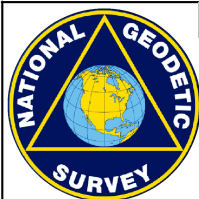
- ☐ Photographs  
☐ \*Visibility Sketch  
☐ \*Obstruction Sketch
- ☐ Updated Description  
☐ Sketch attached or on Back  
☐ Checked By \_\_\_\_\_

\* may be omitted with good quality color photographs

Organization: NATIONAL GEODETIC SURVEYName: PHILLIP MARSHALLRINEX File Name: 863F0410.21o

Telephone: \_\_\_\_\_

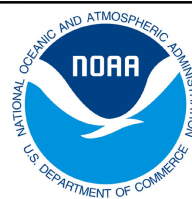
email address: PHILLIP.MARSHALL@NOAA.GOV



Clear

## GNSS OBSERVATION LOG SHEET

Save



PROJECT NAME: ODU CONTROL 2021

Site Name: FOB

Date: 02/17/2021 DOY: 048

Site Number: \_\_\_\_\_

Four Character ID: BRMR

SSN: 000

## MONUMENT

Designation: BREADMAKER

Stamping - Station Description

PID: DG9069

BREADMAKER 2004

VM #: NA

SS ROD IN NGS LOGO CAP

Condition: GOOD

## POSITION

Latitude: N 36 51 16.85018 (Format: N DD° MM' SS.SS")

Ellipsoid Height \_\_\_\_\_

Longitude: W076 18 00.44343 (Format: W DDD° MM' SS.SS")

Ortho Height \_\_\_\_\_

Scheduled Start Time: 1400 UTC

Scheduled End Time: 2100 UTC

Actual Start Time: 1255 UTC

Actual End Time: 2105 UTC

Actual Start and End Times in UTC only

## TRIPOD

A = Datum point to Top of Tripod  
(Tripod Height)

Start HI

End HI

1.9999

1.9999

B = Any additional offset to ARP  
(Tribrach/Spacer)

0.0000

0.0000

H = Antenna Height A + B  
Datum Point to Antenna Reference Point (ARP)

1.9999

1.9999

Note and/or sketch **ANY** unusual conditions. Be very explicit and detailed as to where and how the ARP is measured. **ALWAYS** confirm HI at the end of an observation session

Tripod/Mast Type

☒ Fixed Height☐ Mast☐ Collapsible

Height Entered into Receiver \_\_\_\_\_

NOTE: ALL MEASUREMENTS ARE TO BE IN METERS

## EQUIPMENT

Receiver

Antenna

Power Supply

Type/Name: TRM NETR9

Type/Name: TRM ZEPHYR 3 GEODETI

☐ Internal

Model Number: 67668-30

Model Number: 115000-00

☒ 12V External

Serial Number: 5832R50274

Serial Number: 6122223766

☐ Other (Specify)

Firmware Version: 5.45

Firmware Version: \_\_\_\_\_

## CONDITIONS

Weather Condition Comments (If there could be an effect on observations)

COOL(35) , WIND 10-15, SUNNY

Remember.....the observation sessions are long. Take the time to write down anything they may have an effect the quality of the collected data.

General Concerns or comments (obstructions, battery failures, level issues)

## OBSERVER

Contact Information

Organization: NGS

Name: JIM HARRINGTON

Telephone: 757-303-7455

☐ Photographs☐ \*Visibility Sketch☐ \*Obstruction Sketch

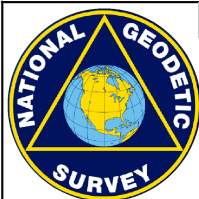
\* may be omitted with good quality color photographs

☐ Updated Description☐ Sketch attached or on Back☐ Checked By \_\_\_\_\_

RINEX File Name: BRMR048.210

email address: JIM.HARRINGTON@NOAA.GOV

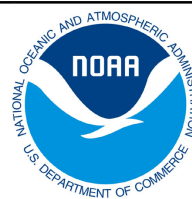




Clear

## GNSS OBSERVATION LOG SHEET

Save



PROJECT NAME: ODU Control 2021

Site Name: GPS099

Date: 02/17/2021 DOY: 048

Site Number: \_\_\_\_\_

Four Character ID: GP99

SSN: \_\_\_\_\_

## MONUMENT

Designation: GPS099

Stamping - Station Description

PID: \_\_\_\_\_

PA 42 RESET 1966

VM #: \_\_\_\_\_

Condition: GOOD

## POSITION

Latitude: N 36° 53' 11" (Format: N DD° MM' SS.SS")

Ellipsoid Height \_\_\_\_\_

Longitude: W 076° 17' 42" (Format: W DDD° MM' SS.SS")

Ortho Height \_\_\_\_\_

Scheduled Start Time: 1400 UTC

Scheduled End Time: 2100 UTC

Actual Start Time: 1354 UTC

Actual End Time: 2107 UTC

Actual Start and End Times in UTC only

## TRIPOD

A = Datum point to Top of Tripod  
(Tripod Height)

Start HI

End HI

2.0003

2.0003

B = Any additional offset to ARP  
(Tribrach/Spacer)

0.0000

0.0000

H = Antenna Height A + B

Datum Point to Antenna Reference Point (ARP)

2.0003

2.0003

Note and/or sketch **ANY** unusual conditions. Be very explicit and detailed as to where and how the ARP is measured. **ALWAYS** confirm HI at the end of an observation session

Tripod/Mast Type

☒ Fixed Height☐ Mast☐ Collapsible

Height Entered into Receiver \_\_\_\_\_

NOTE: ALL MEASUREMENTS ARE TO BE IN METERS

## EQUIPMENT

Receiver

Antenna

Power Supply

Type/Name: TRIMBLE NETR9

Type/Name: TRIMBLE ZEPHYR3

☐ Internal

Model Number: 67668-30

Model Number: 115000-00

☒ 12V External

Serial Number: 5832R50338

Serial Number: 6122223882

☐ Other (Specify) \_\_\_\_\_

Firmware Version: 5.45

Firmware Version: NA

## CONDITIONS

Weather Condition Comments (If there could be an effect on observations)

MORNING - 45° OVERCAST - WIND - &lt;5 MPH

AFTERNOON - 45° OVERCAST - WIND - &lt;5 MPH

General Concerns or comments (obstructions, battery failures, level issues)

MARK IS HIGHLY OBSTRUCTED TO THE NORTHWEST

## OBSERVER

Contact Information

☒ Photographs☐ Updated Description☐ \*Visibility Sketch☐ Sketch attached or on Back☐ \*Obstruction Sketch☐ Checked By \_\_\_\_\_

\* may be omitted with good quality color photographs

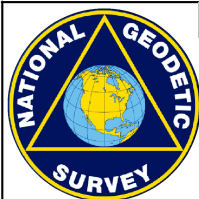
Organization: NATIONAL GEODETIC SURVEY

Name: KEVIN JORDAN

RINEX File Name: G0990410.21o

Telephone: 757-441-5478

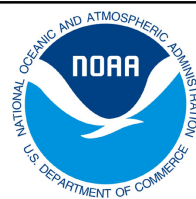
email address: KEVIN.JORDAN@NOAA.GOV



Clear

## GNSS OBSERVATION LOG SHEET

Save



PROJECT NAME: ODU Control 2021

Site Name: ODU 3

Date: 02/17/2021 DOY: 048

Site Number: \_\_\_\_\_

Four Character ID: OU03

SSN: \_\_\_\_\_

## MONUMENT

Designation: ODU 3

Stamping - Station Description

PID: AJ4598

ODU 3 2000

VM #: \_\_\_\_\_

Condition: Good

## POSITION

Latitude: N 36°53'11.86976" (Format: N DD° MM' SS.SS")

Ellipsoid Height -34.320(m)

Longitude: W 76°18'13.50356" (Format: W DDD° MM' SS.SS")

Ortho Height 2.716(m)

Scheduled Start Time: 14:00 UTC

Scheduled End Time: 21:00 UTC

Actual Start Time: 13:56 UTC

Actual End Time: 21:05 UTC

Actual Start and End Times in UTC only

## TRIPOD

A = Datum point to Top of Tripod  
(Tripod Height)

Start HI

End HI

1.9990

1.9990

B = Any additional offset to ARP  
(Tribrach/Spacer)

0.0000

0.0000

H = Antenna Height A + B  
Datum Point to Antenna Reference Point (ARP)

1.9990

1.9990

Note and/or sketch **ANY** unusual conditions. Be very explicit and detailed as to where and how the ARP is measured. **ALWAYS** confirm HI at the end of an observation session

Tripod/Mast Type

☒ Fixed Height☐ Mast☐ Collapsible

Height Entered into Receiver 2.0000

NOTE: ALL MEASUREMENTS ARE TO BE IN METERS

## EQUIPMENT

Receiver

Antenna

Power Supply

Type/Name: Net R9

Type/Name: Zephyr 3 Geodetic

☒ Internal

Model Number: 67668-30

Model Number: 115000.00

☒ 12V External

Serial Number: 5820R50154

Serial Number: 1441037967

☐ Other (Specify)

Firmware Version: 5.44

Firmware Version: \_\_\_\_\_

## CONDITIONS

Weather Condition Comments (If there could be an effect on observations)

Clear conditions, 9-15 mph wind out the N/NE

Remember.....the observation sessions are long. Take the time to write down anything they may have an effect the quality of the collected data.

General Concerns or comments (obstructions, battery failures, level issues)

Large trees at about a distance of 40m to the north, east, and south of location, 30-35° elevation angle above horizon.

Campus buildings 50m to the north and south of location, 10-15° elevation angle above horizon.

## OBSERVER

Contact Information

Organization: NGS

Name: Ben Gavin

Telephone: \_\_\_\_\_

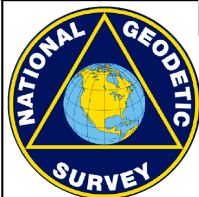
☒ Photographs☐ \*Visibility Sketch☐ \*Obstruction Sketch

\* may be omitted with good quality color photographs

☐ Updated Description☐ Sketch attached or on Back☐ Checked By \_\_\_\_\_

RINEX File Name: OU030480.210

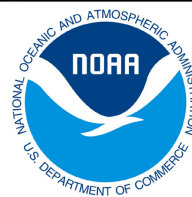
email address: benjamin.gavin@noaa.gov



Clear

## GNSS OBSERVATION LOG SHEET

Save



PROJECT NAME: ODU Control 2021

Site Name: ODU18

Date: 02/17/2021 DOY: 048

Site Number: \_\_\_\_\_

Four Character ID: OU18

SSN: \_\_\_\_\_

## MONUMENT

Designation: ODU18

Stamping - Station Description

PID: \_\_\_\_\_

ODU 18

VM #: \_\_\_\_\_

Condition: GOOD

## POSITION

Latitude: N 36° 53' 08.99" (Format: N DD° MM' SS.SS")

Ellipsoid Height -35.264

Longitude: W 076° 19' 0.94" (Format: W DDD° MM' SS.SS")

Ortho Height 1.751

Scheduled Start Time: 14:00:00 UTC

Scheduled End Time: 21:00:00 UTC

Actual Start Time: 13:48:00 UTC

Actual End Time: 21:07:00 UTC

Actual Start and End Times in UTC only

## TRIPOD

A = Datum point to Top of Tripod  
(Tripod Height)

Start HI

End HI

2.0004

2.0004

B = Any additional offset to ARP  
(Tribrach/Spacer)

0.0000

0.0000

H = Antenna Height A + B  
Datum Point to Antenna Reference Point (ARP)

2.0004

2.0004

Note and/or sketch **ANY** unusual conditions. Be very explicit and detailed as to where and how the ARP is measured. **ALWAYS** confirm HI at the end of an observation session

Tripod/Mast Type

☒ Fixed Height☐ Mast☐ Collapsible

Height Entered into Receiver \_\_\_\_\_

NOTE: ALL MEASUREMENTS ARE TO BE IN METERS

## EQUIPMENT

Receiver

Antenna

Power Supply

Type/Name: TRIMBLE NETR9

Type/Name: TRIMBLE ZEPHYR3

Model Number: \_\_\_\_\_

Model Number: 115000-00

Serial Number: 5834R50371

Serial Number: 22223925

Firmware Version: 5.45

Firmware Version: NA

☒ Internal☒ 12V External☐ Other (Specify) \_\_\_\_\_

## CONDITIONS

Weather Condition Comments (If there could be an effect on observations)

MORNING - 35 OVERCAST - WIND - &lt;5 MPH

AFTERNOON - 35 OVERCAST - WIND &lt;5 MPH

General Concerns or comments (obstructions, battery failures, level issues)

Single tree obstruction 20 feet to NE approximately 30 feet tall x 30 feet across.

On display the battery switched from internal to external approximately 1 hour into the observation.

Remember.....the observation sessions are long. Take the time to write down anything they may have an effect the quality of the collected data.

## OBSERVER

Contact Information

☒ Photographs☐ Updated Description☐ \*Visibility Sketch☐ Sketch attached or on Back☐ \*Obstruction Sketch☐ Checked By \_\_\_\_\_

\* may be omitted with good quality color photographs

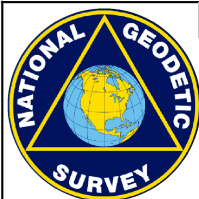
Organization: National Geodetic Survey

Name: Luke Downey

RINEX File Name: OU180480.210

Telephone: 757-441-5479

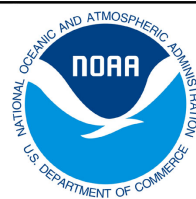
email address: luke..downey@noaa.gov



Clear

## GNSS OBSERVATION LOG SHEET

Save



PROJECT NAME: ODU Control 2021

Site Name: \_\_\_\_\_

Date: 02/17/2021 DOY: 048

Site Number: \_\_\_\_\_

Four Character ID: W416

SSN: \_\_\_\_\_

## MONUMENT

Designation: W416

Stamping - Station Description

PID: FX0049

See Datasheet

VM #: \_\_\_\_\_

Condition: See Below

## POSITION

Latitude: 36 57 29.21 (Format: N DD° MM' SS.SS")

Ellipsoid Height \_\_\_\_\_

Longitude: 76 15 34.14 (Format: W DDD° MM' SS.SS")

Ortho Height \_\_\_\_\_

Scheduled Start Time: 14:00:00 UTC

Scheduled End Time: 21:00:00 UTC

Actual Start Time: 13:50:00 UTC

Actual End Time: 21:09:30 UTC

Actual Start and End Times in UTC only

## TRIPOD

A = Datum point to Top of Tripod  
(Tripod Height)

Start HI

End HI

2.0000

2.0000

B = Any additional offset to ARP  
(Tribrach/Spacer)

0.0000

0.0000

H = Antenna Height A + B  
Datum Point to Antenna Reference Point (ARP)

2.0000

2.0000

Note and/or sketch **ANY** unusual conditions. Be very explicit and detailed as to where and how the ARP is measured. **ALWAYS** confirm HI at the end of an observation session

Tripod/Mast Type

☒ Fixed Height☐ Mast☐ Collapsible

Height Entered into Receiver \_\_\_\_\_

NOTE: ALL MEASUREMENTS ARE TO BE IN METERS

## EQUIPMENT

Receiver

Antenna

Power Supply

Type/Name: TRM NetR9

Type/Name: Zephyr 3

☐ Internal

Model Number: 67668-30

Model Number: 115000-00

☒ 12V External

Serial Number: 5835R50374

Serial Number: 6122223769

☐ Other (Specify)

Firmware Version: 5.45

Firmware Version: \_\_\_\_\_

## CONDITIONS

Weather Condition Comments (If there could be an effect on observations)

Clear skies, 32-36 degrees, 16-26 mph winds from the NE.

Remember.....the observation sessions are long. Take the time to write down anything they may have an effect the quality of the collected data.

General Concerns or comments (obstructions, battery failures, level issues)

Cluster of trees to the NW that block the horizon for approx. 90 degrees. Large propeller from naval ship to the south not above 10 degrees. Horizontal instability detected in benchmark. Disk has approx 1/10 inch play.

## OBSERVER

Contact Information

☐ Photographs☐ Updated Description☐ \*Visibility Sketch☐ Sketch attached or on Back☐ \*Obstruction Sketch☐ Checked By \_\_\_\_\_

\* may be omitted with good quality color photographs

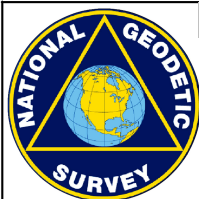
Organization: National Geodetic Survey

Name: Jack Larter

RINEX File Name: W4160480.210

Telephone: (304)312-6952

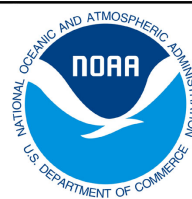
email address: jack.larter@noaa.gov



Clear

## GNSS OBSERVATION LOG SHEET

Save

PROJECT NAME: ODU Control 2021

Site Name: \_\_\_\_\_

Date: 02/23/2021 DOY: 054

Site Number: \_\_\_\_\_

Four Character ID: 863F

SSN: \_\_\_\_\_

## MONUMENT

Designation: 863-8610

Stamping - Station Description

PID: BBBX818610 F 2008

VM #: \_\_\_\_\_

Condition: Good

## POSITION

Latitude: 36 56 33.74437 (Format: N DD° MM' SS.SS")Ellipsoid Height -34.638Longitude: 76 19 43.29966 (Format: W DDD° MM' SS.SS")Ortho Height 2.264Scheduled Start Time: 1200 UTCScheduled End Time: 1700 UTCActual Start Time: 1149 UTCActual End Time: 1915 UTC

Actual Start and End Times in UTC only

## TRIPOD

**A** = Datum point to Top of Tripod  
(Tripod Height)

Start HI

End HI

1.9991

1.9991

**B** = Any additional offset to ARP  
(Tribrach/Spacer)

0.0000

0.0000

**H** = Antenna Height **A + B**  
Datum Point to Antenna Reference Point (ARP)

1.9991

1.9991

Note and/or sketch **ANY** unusual conditions. Be very explicit and detailed as to where and how the ARP is measured. **ALWAYS** confirm HI at the end of an observation session

Tripod/Mast Type

☒ Fixed Height☐ Mast☐ Collapsible

Height Entered into Receiver \_\_\_\_\_

NOTE: ALL MEASUREMENTS ARE TO BE IN METERS

## EQUIPMENT

Receiver

Antenna

Power Supply

Type/Name: Trimble NETR9Type/Name: Trimble☐ InternalModel Number: 67668.30Model Number: 115000-00☒ 12V ExternalSerial Number: 5832R50297Serial Number: 6122223928☐ Other (Specify)Firmware Version: 5.45

Firmware Version: \_\_\_\_\_

## CONDITIONS

Weather Condition Comments (If there could be an effect on observations)

Remember.....the observation sessions are long. Take the time to write down anything they may have an effect the quality of the collected data.

General Concerns or comments (obstructions, battery failures, level issues)

## OBSERVER

Contact Information

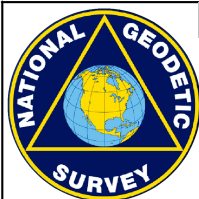
- ☐ Photographs  
☐ \*Visibility Sketch  
☐ \*Obstruction Sketch
- ☐ Updated Description  
☐ Sketch attached or on Back  
☐ Checked By \_\_\_\_\_

\* may be omitted with good quality color photographs

Organization: NATIONAL GEODETIC SURVEYName: PHILLIP MARSHALLRINEX File Name: 863F0540.21o

Telephone: \_\_\_\_\_

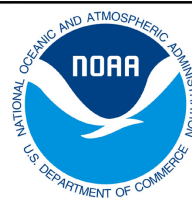
email address: PHILLIP.MARSHALL@NOAA.GOV



Clear

## GNSS OBSERVATION LOG SHEET

Save

PROJECT NAME: ODU SURVEYSite Name: FOBDate: 02/23/2021 DOY: 054

Site Number: \_\_\_\_\_

Four Character ID: BRMRSSN: 000

## MONUMENT

Designation: BREADMAKER

Stamping - Station Description

PID: DG9069BREADMAKER 2004VM #: NASS ROD IN NGS LOGO CAPCondition: GOOD

## POSITION

Latitude: N 36 51 16.85018 (Format: N DD° MM' SS.SS")

Ellipsoid Height \_\_\_\_\_

Longitude: W076 18 00.44343 (Format: W DDD° MM' SS.SS")

Ortho Height \_\_\_\_\_

Scheduled Start Time: 1200 UTCScheduled End Time: 1900 UTCActual Start Time: 1130 UTCActual End Time: 1950 UTC

Actual Start and End Times in UTC only

## TRIPOD

**A** = Datum point to Top of Tripod  
(Tripod Height)

Start HI

End HI

1.9999

1.9999

**B** = Any additional offset to ARP  
(Tribach/Spacer)

0.0000

0.0000

**H** = Antenna Height **A + B**  
Datum Point to Antenna Reference Point (ARP)

1.9999

1.9999

Note and/or sketch **ANY** unusual conditions. Be very explicit and detailed as to where and how the ARP is measured. **ALWAYS** confirm HI at the end of an observation session

Tripod/Mast Type

☒ Fixed Height☐ Mast☐ Collapsible

Height Entered into Receiver \_\_\_\_\_

NOTE: ALL MEASUREMENTS ARE TO BE IN METERS

## EQUIPMENT

Receiver

Antenna

Power Supply

Type/Name: TRM NETR9Type/Name: TRM ZEPHYR 3 GEODETI☐ InternalModel Number: 67668-30Model Number: 115000-00☒ 12V ExternalSerial Number: 5832R50274Serial Number: 6122223766☐ Other (Specify)Firmware Version: 5.45

Firmware Version: \_\_\_\_\_

## CONDITIONS

Weather Condition Comments (If there could be an effect on observations)

COOL(35) , WIND 0-5, SUNNY

Remember.....the observation sessions are long. Take the time to write down anything they may have an effect the quality of the collected data.

General Concerns or comments (obstructions, battery failures, level issues)

## OBSERVER

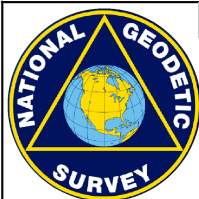
Contact Information

Organization: NGSName: KEVIN JORDANTelephone: 757-41-5467☐ Photographs☐ \*Visibility Sketch☐ \*Obstruction Sketch

\* may be omitted with good quality color photographs

☐ Updated Description☐ Sketch attached or on Back☐ Checked By \_\_\_\_\_RINEX File Name: BRMR0550.210email address: KEVIN.JORDAN@NOAA.GOV

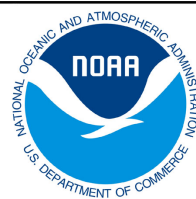




Clear

## GNSS OBSERVATION LOG SHEET

Save



PROJECT NAME: ODU Control 2021

Site Name: GPS099

Date: 2/23/2021 DOY: 054

Site Number: \_\_\_\_\_

Four Character ID: GP99

SSN: \_\_\_\_\_

## MONUMENT

Designation: GPS099

Stamping - Station Description

PID: \_\_\_\_\_

PA 42 RESET 1966

VM #: \_\_\_\_\_

Condition: GOOD

## POSITION

Latitude: N 36° 53' 11" (Format: N DD° MM' SS.SS")

Ellipsoid Height \_\_\_\_\_

Longitude: W 076° 17' 42" (Format: W DDD° MM' SS.SS")

Ortho Height \_\_\_\_\_

Scheduled Start Time: 1200 UTC

Scheduled End Time: 1900 UTC

Actual Start Time: 1136 UTC

Actual End Time: 1916 UTC

Actual Start and End Times in UTC only

## TRIPOD

A = Datum point to Top of Tripod  
(Tripod Height)

Start HI

End HI

2.0003

2.0003

B = Any additional offset to ARP  
(Tribrach/Spacer)

0.0000

0.0000

H = Antenna Height A + B  
Datum Point to Antenna Reference Point (ARP)

2.0003

2.0003

Note and/or sketch **ANY** unusual conditions. Be very explicit and detailed as to where and how the ARP is measured. **ALWAYS** confirm HI at the end of an observation session

Tripod/Mast Type

☒ Fixed Height☐ Mast☐ Collapsible

Height Entered into Receiver \_\_\_\_\_

NOTE: ALL MEASUREMENTS ARE TO BE IN METERS

## EQUIPMENT

Receiver

Antenna

Power Supply

Type/Name: TRIMBLE NETR9

Type/Name: TRIMBLE ZEPHYR3

☐ Internal

Model Number: 67668-30

Model Number: 115000-00

☒ 12V External

Serial Number: 5832R50338

Serial Number: 6122223882

☐ Other (Specify) \_\_\_\_\_

Firmware Version: 5.45

Firmware Version: NA

## CONDITIONS

Weather Condition Comments (If there could be an effect on observations)

MORNING - 38° SUNNY - WIND - &lt;5 MPH. A

AFTERNOON - 55° SUNNY - WIND - &lt;5 MPH

General Concerns or comments (obstructions, battery failures, level issues)

MARK IS HIGHLY OBSTRUCTED TO THE NORTHWEST

## OBSERVER

Contact Information

Organization: NATIONAL GEODETIC SURVEY

Name: JIM HARRINGTON

Telephone: 757-303-7455

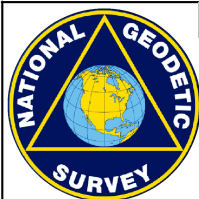
☒ Photographs☐ \*Visibility Sketch☐ \*Obstruction Sketch

\* may be omitted with good quality color photographs

☐ Updated Description☐ Sketch attached or on Back☐ Checked By \_\_\_\_\_

RINEX File Name: G0990540.21o

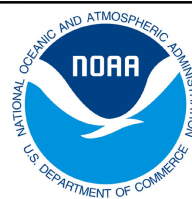
email address: JIM.HARRINGTON@NOAA.GOV



Clear

## GNSS OBSERVATION LOG SHEET

Save



PROJECT NAME: ODU Control 2021

Site Name: ODU 3

Date: 02/23/2021 DOY: 054

Site Number: \_\_\_\_\_

Four Character ID: OU03

SSN: \_\_\_\_\_

## MONUMENT

Designation: ODU 3

PID: AJ4598

VM #: \_\_\_\_\_

Condition: Good

ODU 3 2000

Stamping - Station Description

## POSITION

Latitude: N 36°53'11.86980" (Format: N DD° MM' SS.SS")

Ellipsoid Height -34.321(m)

Longitude: W 76°18'13.50349" (Format: W DDD° MM' SS.SS")

Ortho Height 2.715(m)

Scheduled Start Time: 12:00 UTC

Scheduled End Time: 19:00 UTC

Actual Start Time: 11:49 UTC

Actual End Time: 19:10 UTC

Actual Start and End Times in UTC only

## TRIPOD

A = Datum point to Top of Tripod  
(Tripod Height)

Start HI

End HI

1.9990

1.9990

B = Any additional offset to ARP  
(Tribrach/Spacer)

0.0000

0.0000

H = Antenna Height A + B  
Datum Point to Antenna Reference Point (ARP)

1.9990

1.9990

Note and/or sketch **ANY** unusual conditions. Be very explicit and detailed as to where and how the ARP is measured. **ALWAYS** confirm HI at the end of an observation session

Tripod/Mast Type

☒ Fixed Height☐ Mast☐ Collapsible

Height Entered into Receiver 2.0000

NOTE: ALL MEASUREMENTS ARE TO BE IN METERS

## EQUIPMENT

Receiver

Antenna

Power Supply

Type/Name: Net R9

Type/Name: Zephyr 3 Geodetic

☒ Internal

Model Number: 67668-30

Model Number: 115000.00

☒ 12V External

Serial Number: 5820R50154

Serial Number: 1441037967

☐ Other (Specify)

Firmware Version: 5.45

Firmware Version: \_\_\_\_\_

## CONDITIONS

Weather Condition Comments (If there could be an effect on observations)

Clear conditions, 10 mph wind out the E/NE

Remember.....the observation sessions are long. Take the time to write down anything they may have an effect the quality of the collected data.

General Concerns or comments (obstructions, battery failures, level issues)

Large trees at about a distance of 40m to the north, east, and south of location, 30-35° elevation angle above horizon.

Campus buildings 50m to the north and south of location, 10-15° elevation angle above horizon.

## OBSERVER

Contact Information

☒ Photographs☐ Updated Description☐ \*Visibility Sketch☐ Sketch attached or on Back☐ \*Obstruction Sketch☐ Checked By \_\_\_\_\_

\* may be omitted with good quality color photographs

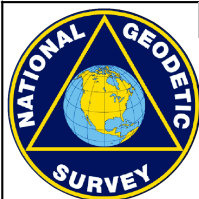
Organization: NGS

Name: Ben Gavin

RINEX File Name: OU030540.210

Telephone: \_\_\_\_\_

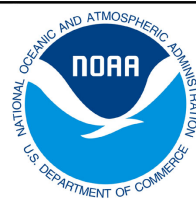
email address: benjamin.gavin@noaa.gov



Clear

## GNSS OBSERVATION LOG SHEET

Save



PROJECT NAME: ODU Control 2021

Site Name: ODU18

Date: 02/23/2021 DOY: 054

Site Number: \_\_\_\_\_

Four Character ID: OU18

SSN: \_\_\_\_\_

## MONUMENT

Designation: ODU18

Stamping - Station Description

PID: \_\_\_\_\_

ODU 18

VM #: \_\_\_\_\_

Condition: GOOD

## POSITION

Latitude: N 36° 53' 08.99" (Format: N DD° MM' SS.SS")

Ellipsoid Height -35.284

Longitude: W 076° 19' 0.94" (Format: W DDD° MM' SS.SS")

Ortho Height 1.731

Scheduled Start Time: 12:00:00 UTC

Scheduled End Time: 19:00:00 UTC

Actual Start Time: 11:52:00 UTC

Actual End Time: 19:11:00 UTC

Actual Start and End Times in UTC only

## TRIPOD

A = Datum point to Top of Tripod  
(Tripod Height)

Start HI

End HI

2.0004

2.0004

B = Any additional offset to ARP  
(Tribrach/Spacer)

0.0000

0.0000

H = Antenna Height A + B  
Datum Point to Antenna Reference Point (ARP)

2.0004

2.0004

Note and/or sketch **ANY** unusual conditions. Be very explicit and detailed as to where and how the ARP is measured. **ALWAYS** confirm HI at the end of an observation session

Tripod/Mast Type

☒ Fixed Height☐ Mast☐ Collapsible

Height Entered into Receiver \_\_\_\_\_

NOTE: ALL MEASUREMENTS ARE TO BE IN METERS

## EQUIPMENT

Receiver

Antenna

Power Supply

Type/Name: TRIMBLE NETR9

Type/Name: TRIMBLE ZEPHYR3

Model Number: \_\_\_\_\_

Model Number: 115000-00

Serial Number: 5834R50371

Serial Number: 22223925

Firmware Version: 5.45

Firmware Version: NA

☒ Internal☒ 12V External☐ Other (Specify) \_\_\_\_\_

## CONDITIONS

Weather Condition Comments (If there could be an effect on observations)

MORNING - 35 Clear Sky- WIND - &lt;5 MPH

AFTERNOON - 45 Clear Sky- WIND &lt;5 MPH

General Concerns or comments (obstructions, battery failures, level issues)

Single tree obstruction 20 feet to NE approximately 30 feet tall x 30 feet across.

On display the battery switched from internal to external approximately 1 hour into the observation.

Remember.....the observation sessions are long. Take the time to write down anything they may have an effect the quality of the collected data.

## OBSERVER

Contact Information

Organization: National Geodetic Survey

Name: Luke Downey

Telephone: 757-441-5479

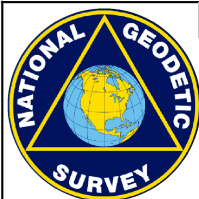
☒ Photographs☐ \*Visibility Sketch☐ \*Obstruction Sketch

\* may be omitted with good quality color photographs

☐ Updated Description☐ Sketch attached or on Back☐ Checked By \_\_\_\_\_

RINEX File Name: OU180540.210

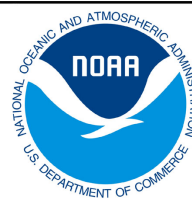
email address: luke.downey@noaa.gov



Clear

## GNSS OBSERVATION LOG SHEET

Save



PROJECT NAME: ODU Control 2021

Site Name: W 416 1963

Date: 02/23/2021 DOY: 054

Site Number: \_\_\_\_\_

Four Character ID: W416

SSN: \_\_\_\_\_

## MONUMENT

Designation: W 416 1963

Stamping - Station Description

PID: FX0049

VM #: \_\_\_\_\_

Condition: \_\_\_\_\_

## POSITION

Latitude: 365729.3 (Format: N DD° MM' SS.SS")

Ellipsoid Height \_\_\_\_\_

Longitude: 0761534.0 (Format: W DDD° MM' SS.SS")

Ortho Height 3.273

Scheduled Start Time: 1200 UTC

Scheduled End Time: 1915 UTC

Actual Start Time: 1214 UTC

Actual End Time: 1915 UTC

Actual Start and End Times in UTC only

## TRIPOD

A = Datum point to Top of Tripod  
(Tripod Height)

Start HI

End HI

2.0000

2.0000

B = Any additional offset to ARP  
(Tribrach/Spacer)

0.0000

0.0000

H = Antenna Height A + B  
Datum Point to Antenna Reference Point (ARP)

2.0000

2.0000

Note and/or sketch **ANY** unusual conditions. Be very explicit and detailed as to where and how the ARP is measured. **ALWAYS** confirm HI at the end of an observation session

Tripod/Mast Type

☒ Fixed Height☐ Mast☐ Collapsible

Height Entered into Receiver 2.0000

NOTE: ALL MEASUREMENTS ARE TO BE IN METERS

## EQUIPMENT

Receiver

Antenna

Power Supply

Type/Name: TRIMBLE NETR9

Type/Name: Zephyr 3

☐ Internal

Model Number: 67668-30

Model Number: 115000-00

☒ 12V External

Serial Number: 5835R50374

Serial Number: 6122223769

☐ Other (Specify)

Firmware Version: 5.45

Firmware Version: \_\_\_\_\_

## CONDITIONS

Weather Condition Comments (If there could be an effect on observations)

Sunny light breeze

Remember.....the observation sessions are long. Take the time to write down anything they may have an effect the quality of the collected data.

General Concerns or comments (obstructions, battery failures, level issues)

Multipath from tree to the north Multipath from anchor to the south

## OBSERVER

Contact Information

Organization: NGS

Name: Kyle Fernish

Telephone: 7602775434

☐ Photographs☐ \*Visibility Sketch☐ \*Obstruction Sketch

\* may be omitted with good quality color photographs

☐ Updated Description☐ Sketch attached or on Back☐ Checked By \_\_\_\_\_

RINEX File Name: W4160540.210

email address: kyle.fernish@noaa.gov