

WWWGridDemo2Mission Report

[Mission Metadata](#) | [AVCL Header](#) | [Mission Details](#) | [Mission Commands](#) | [Screen Snapshots](#) | [Telemetry Plots](#) | [Credits](#)

Mission Metadata	
AVCL Mission File	WWWGridDemo2.xml
Mission Statement	Test mission for UUV waypoint commands
Identity information	
Location	Monterey Bay California USA
Personnel	Actual underwater UUV operations are allowed in U.S. and are performed regularly by NPS.
Live/virtual	Virtual demonstration test
Environment	
Estimated sea state	0
Estimated current set, drift	0, 0
Test objectives	
Mission	Demonstrate various AVCL commands for UUV missions
Conclusions and recommendations	
Conclusions	This is a good test example.
Recommendations for future work	Continue building interesting tests.

[Back to top](#)

AVCL Mission Header	
description	Unmanned underwater vehicle (UUV) AVCL mission generated by the AUV Workbench
title	WWWGridDemo2.xml
mission	WWWGridDemo2.xml
creator	Duane Davis, Don Brutzman
created	30 October 2008
modified	28 August 2010
MissionMetadata	WWWGridDemo2.MissionMetadata.xml
generator	AUV Workbench https://savage.nps.edu/AuvWorkbench
identifier	http://xmsf.svn.sourceforge.net/viewvc/xmsf/trunk/AuvWorkbench/MyAuvwProjects/DefaultProject/missions/WWWGridDemo2.xml
missionOriginDeltaNorth	0
missionOriginDeltaEast	0

[Back to top](#)

AVCL Mission Details	
Vehicle Type	UUV
Vehicle ID	4
Units of Measure	
Angle	degrees
Distance	meters
Mass	kilograms
Time	seconds
Geographic Origin	
Latitude	36.606998443603516
Longitude	-121.88500213623047
Time Units	
Start Time	29 August 2010 2:45:56
Time Zone	7
Sample Time	27
Interval	Seconds

[Back to top](#)

AVCL Mission Command Table: WWWGridDemo2.xml					
#	Command	X Position	Y Position	Speed	Description
1	SetPositionUUV	250.0	0.0		Start point
2	Thrusters	value="false"			Disable thrusters
3	WaypointUUV	175.0	-25.0		Dive to first waypoint
4	SendMessage	Sender=1	Recipient=0	InformationRequest	test message 1
5	WaypointUUV	100.0	-25.0		Start small box search
6	SendMessage	Sender=1	Recipient=0	InformationRequest	test message 2
7	WaypointUUV	100.0	50.0		
8	WaypointUUV	200.0	50.0		
9	WaypointUUV	200.0	-25.0		
10	WaypointUUV	75.0	-25.0		Small box search complete
11	WaypointUUV	-50.0	75.0		
12	WaypointUUV	-50.0	100.0		Begin lawnmower search
13	WaypointUUV	500.0	100.0		
14	WaypointUUV	500.0	175.0		
15	WaypointUUV	-50.0	175.0		
16	WaypointUUV	-50.0	250.0		
17	WaypointUUV	500.0	250.0		
18	WaypointUUV	500.0	325.0		
19	WaypointUUV	-50.0	325.0		
20	WaypointUUV	-50.0	400.0		
21	WaypointUUV	500.0	400.0		
22	WaypointUUV	500.0	475.0		
23	WaypointUUV	-50.0	475.0		Lawnmower search complete, return
24	WaypointUUV	150.0	150.0		
25	WaypointUUV	250.0	150.0		
26	WaypointUUV	250.0	0.0		Surface at start point
27	SetPower				Shut down
28	Quit				

Reference: [Autonomous Vehicle Control Language \(AVCL\)](#)

[Back to top](#)

Screen Snapshots

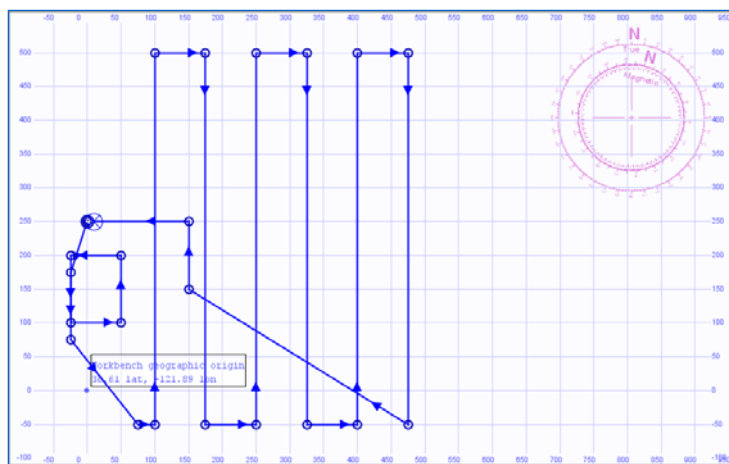


Figure 1: Resulting mission image from 2DMissionView

[Back to top](#)

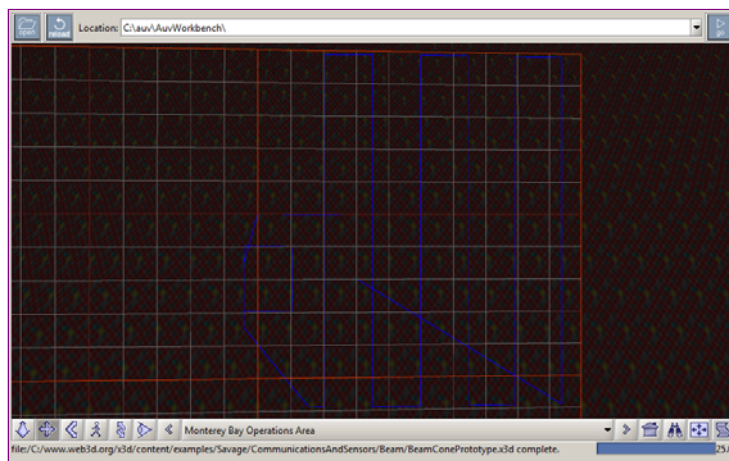


Figure 2: Resulting mission image from 3DSceneView

[Back to top](#)

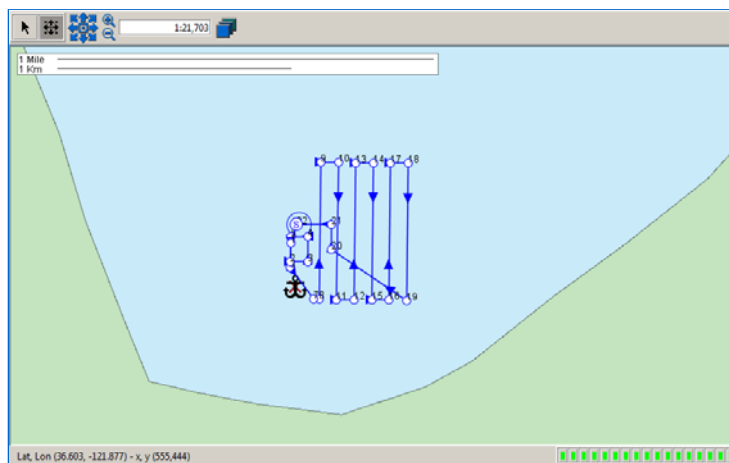


Figure 3: Resulting mission image from OpenMapView

[Back to top](#)

Mission Telemetry Plot Charts

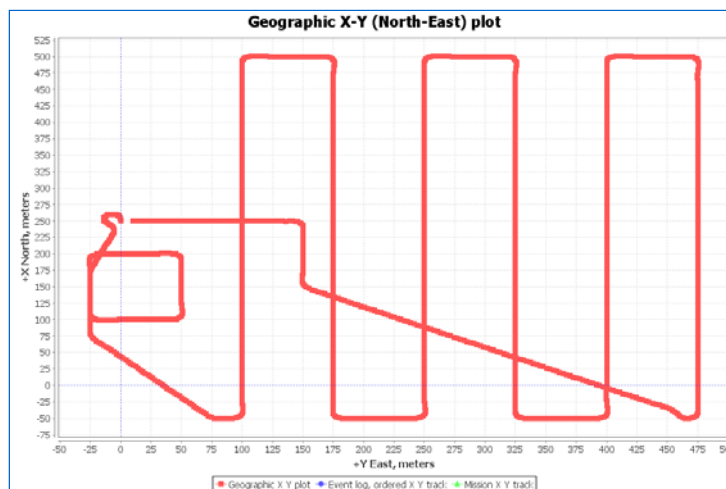


Figure 4: Resulting telemetry plot from chartXy

[Back to top](#)

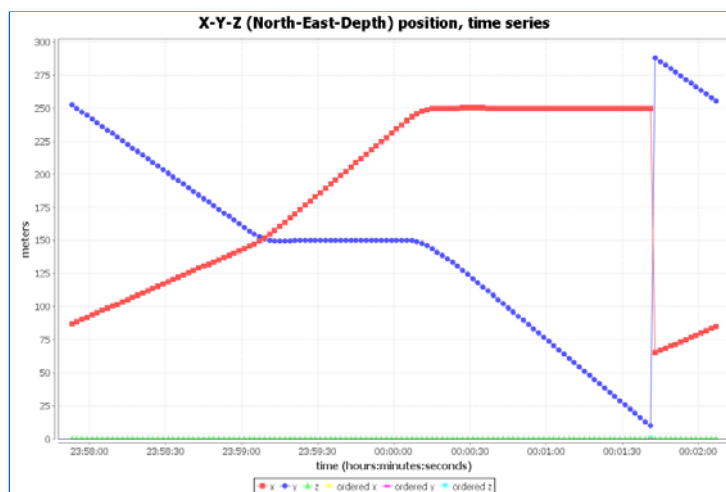


Figure 5: Resulting telemetry plot from chartXyz

[Back to top](#)



Figure 6: Resulting telemetry plot from chartOrientations

[Back to top](#)

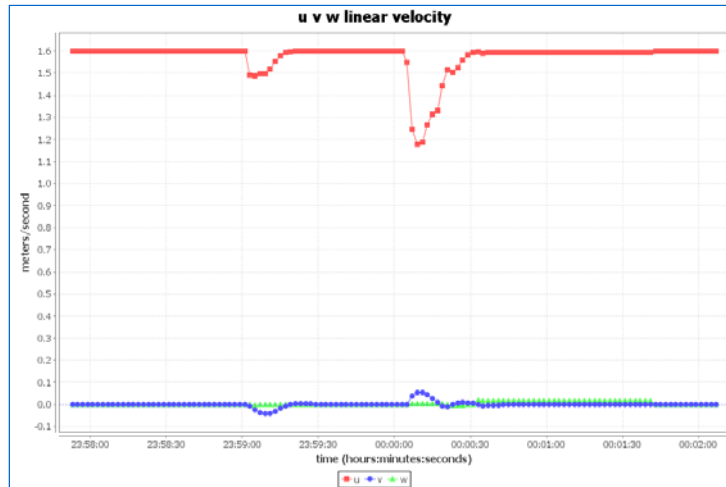


Figure 7: Resulting telemetry plot from chartLinearVelocities

[Back to top](#)

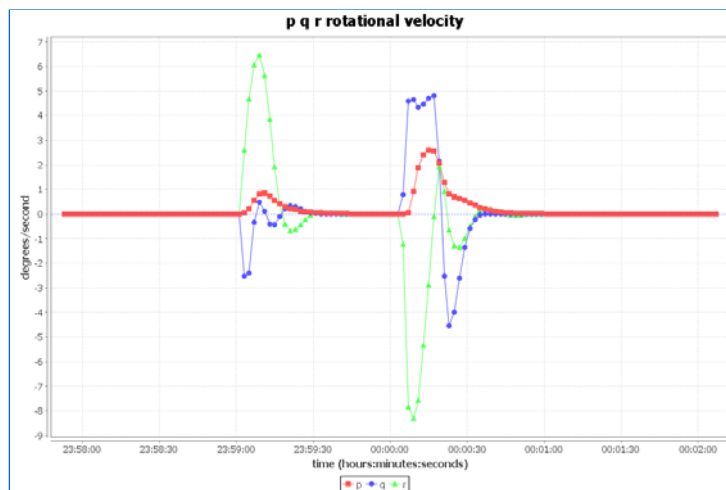


Figure 8: Resulting telemetry plot from chartRotationalVelocities

[Back to top](#)



Figure 9: Resulting telemetry plot from chartRudder

[Back to top](#)

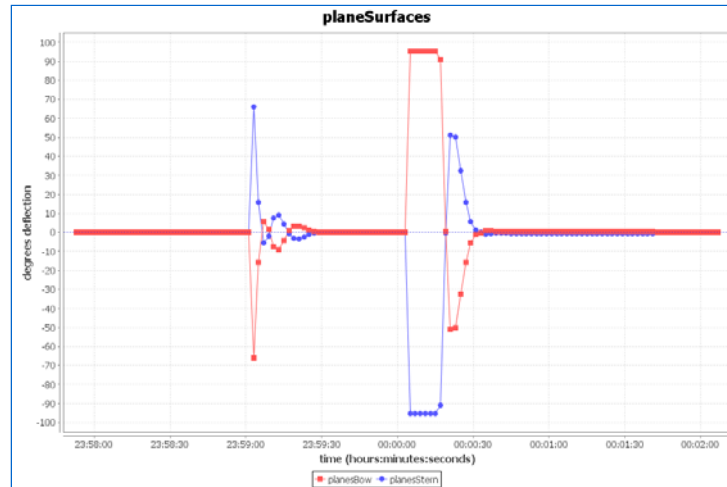


Figure 10: Resulting telemetry plot from chartPlaneSurfaces

[Back to top](#)

This report was generated by the [Autonomous Unmanned Vehicle \(AUV\) Workbench](#), an open-source tool for robot-mission planning, rehearsal, execution, and playback visualization.
Available online at <https://savage.nps.edu/AuvWorkbench>.

This report was generated on 290251ZAUG2010.