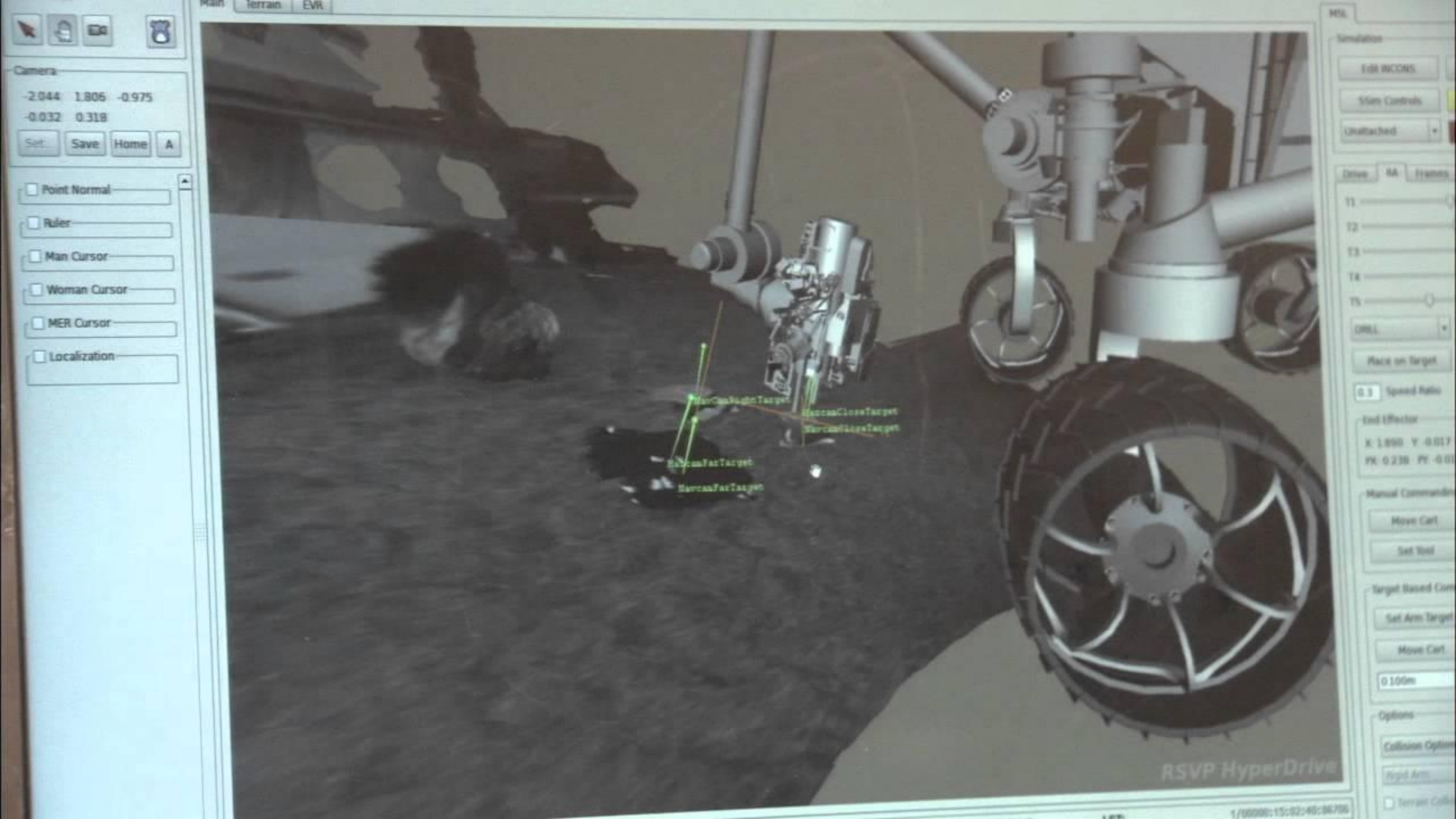
Main
Terrain
EVR
Camera
-2.044 1.806 -0.975
-0.032 0.318
Set
Save
Home
A
Point Normal
Ruler
Man Cursor
Woman Cursor
MER Cursor
Localization
MSL
Simulation
Drive
RA
Frames
DRILL
Place on Target
Speed Ratio
End Effector
Manual Commanding
Move Cart
Set Tool
Target Based Control
Set Arm Target
Move Cart
Options
Collision Options
Right Arm
Terrain Collision
RSVP HyperDrive

1
00:00:00,000 --> 00:00:04,000
(Sound effect)

2
00:00:04,000 --> 00:00:11,000
Hi I'm Matt Robinson, the MSL lead robotic arm systems engineer and this is your Curiosity Update.

3
00:00:11,000 --> 00:00:19,000
I'm standing here in the MSL test bed and behind me is the MSL test rover.

4
00:00:19,000 --> 00:00:23,000
This test rover is a near copy of Curiosity.

5
00:00:23,000 --> 00:00:29,000
End to end accuracy is how well we can, using our vision system, select a target

6
00:00:29,000 --> 00:00:33,000
and then position the arm at the target that we selected.

7
00:00:33,000 --> 00:00:38,000
We use our cameras mounted to the body of the vehicle and also

8
00:00:38,000 --> 00:00:43,000
cameras mounted to the mast to take pictures of our workspace.

9
00:00:43,000 --> 00:00:47,000
Our images come down and we process them.

10
00:00:47,000 --> 00:00:50,000
Using these pictures we can build a 3D terrain model of the surface.

11
00:00:50,000 --> 00:00:54,000
Once we have that 3D terrain model we can pick out a target.

12
00:00:54,000 --> 00:00:58,000
Today you notice we have a number of rocks here with little targets on.

13
00:00:58,000 --> 00:01:03,000

We'll select one of those targets and then we sequence the robotic arm

14
00:01:03,000 --> 00:01:06,000
commands to position the arm at the target.

15
00:01:06,000 --> 00:01:11,000
Once we're satisfied we send the sequence to Curiosity.

16
00:01:11,000 --> 00:01:15,000
During the months from launch to landing we can perform a number of tests,