GPSD Reader

Assignment 3

Test Documentation

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Test #	Description	Test	Expected Results	Pass/Fail	Supporting Details
1	Curses GUI display	Program startup	Expect all the required parameters for the curses GUI are displayed. (Time stamp (UTC), Latitude/Longitude, PRN , Elevation o Azimuth, SNR, Used flag (Y or N))	Pass	See Figure.1
2	opening the device	Ensure that the GPS device is properly opened	If it failed, prompt for error message and terminate the program	Pass	See Figure.2
3	Reading from GPS	Ensure that the program is running in an outside environment where there is nothing blocking the sky.	Corresponding values for the GUI parameters will be updated on the program.	Pass	See Figure.3
4	Disconnecting from the device	Enter Ctrl^C	Display message and terminate the program	Pass	See Figure.4
5	Displaying longitude and latitude	Ensure there are more than 2 satellites detected	Corresponding values are displayed properly. If there are no fixes, display “n\a”	Pass	See Figure.5 for lack of satellites, See figure. 3 for sufficient satellites.
6	Unplugging the satellite dongle	Unplug the dongle while reading satellites.	The error window will display a problem reading satellites.	Pass	See Figure 6.

Figure 1:

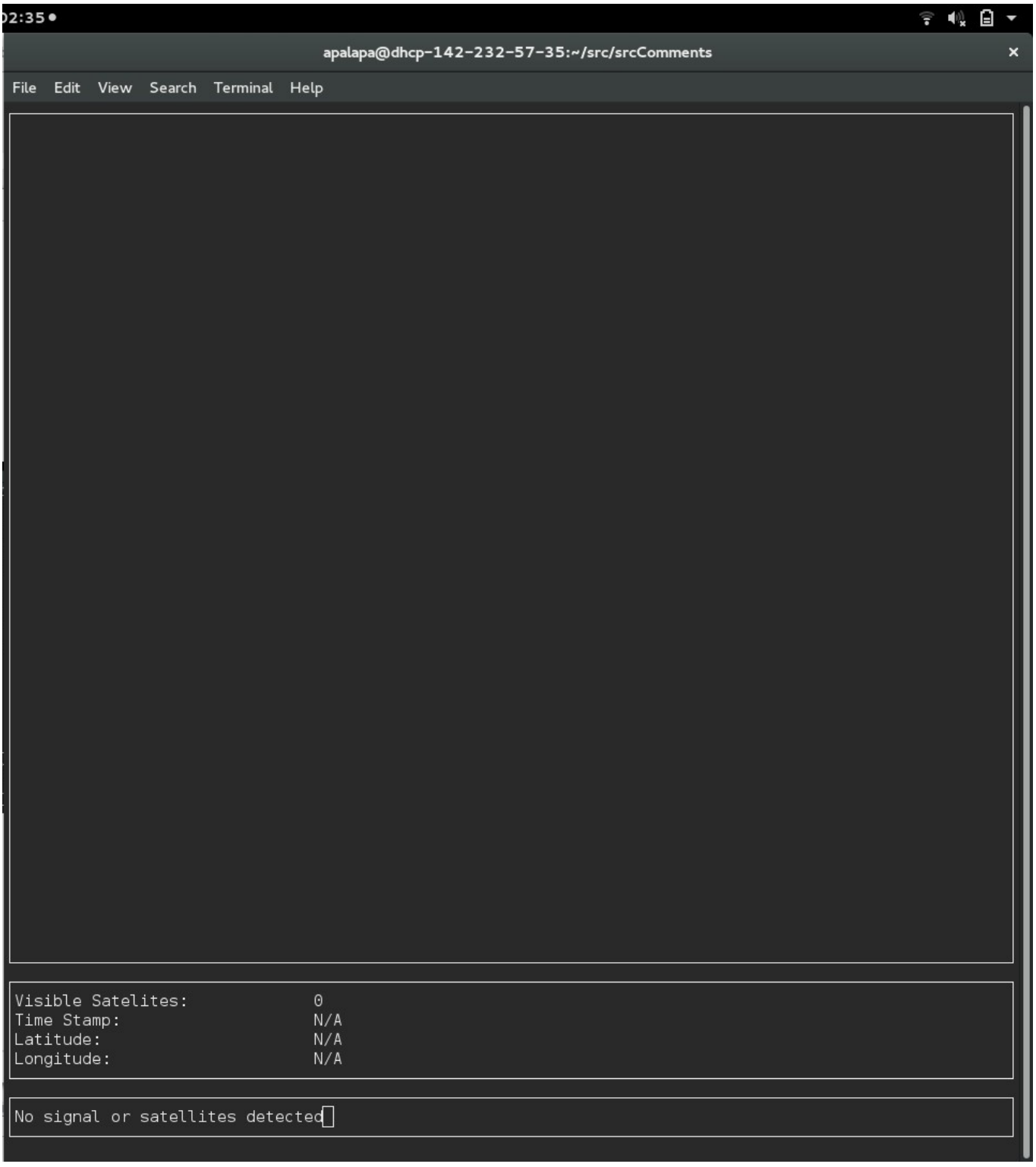

02:35
apalapa@dhcp-142-232-57-35:~/src/srcComments
File Edit View Search Terminal Help
Visible Satelites: 0
Time Stamp: N/A
Latitude: N/A
Longitude: N/A
No signal or satellites detected

Figure 2:

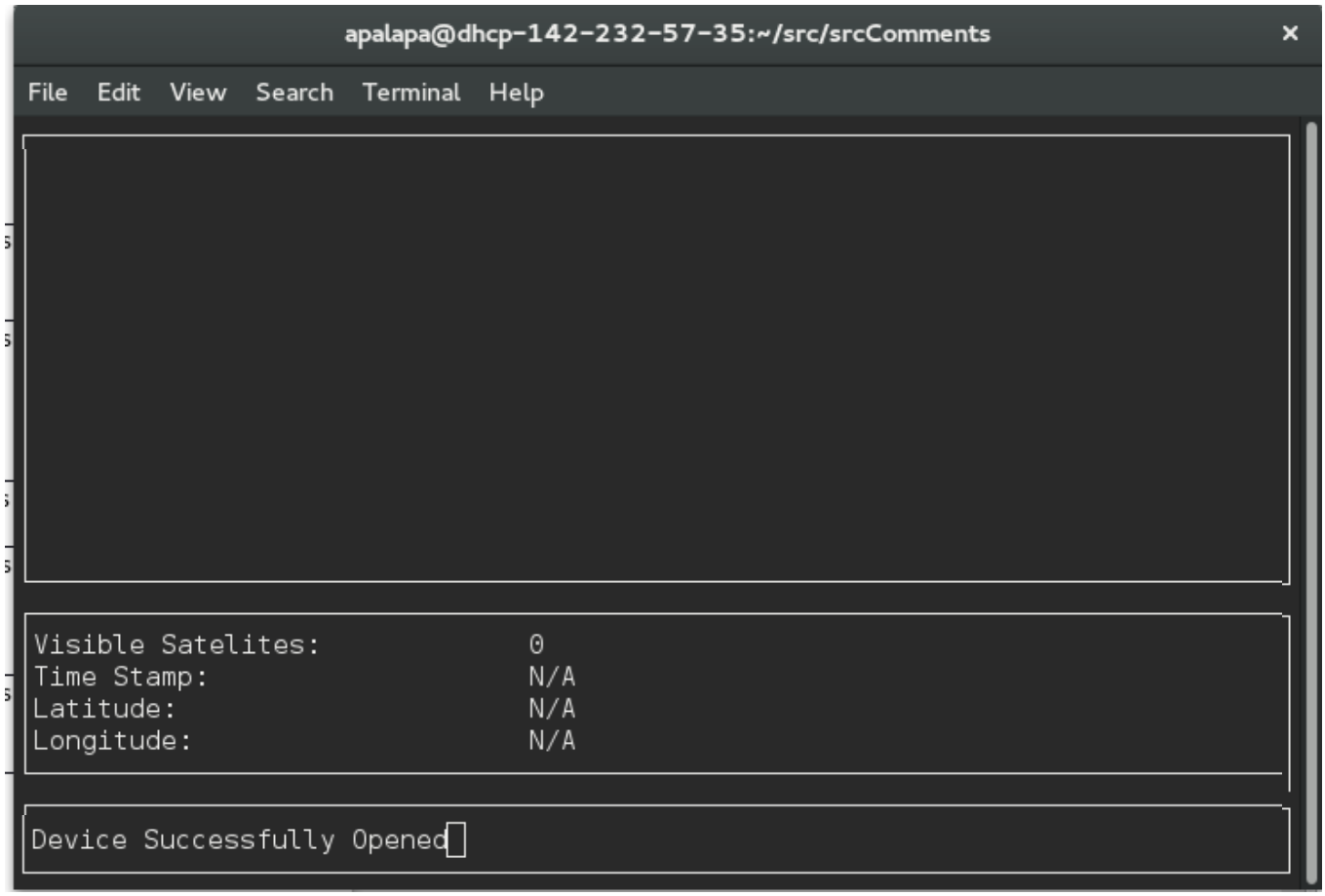

apalapa@dhcp-142-232-57-35:~/src/srcComments
File Edit View Search Terminal Help
Visible Satelites: 0
Time Stamp: N/A
Latitude: N/A
Longitude: N/A
Device Successfully Opened

Figure 3:

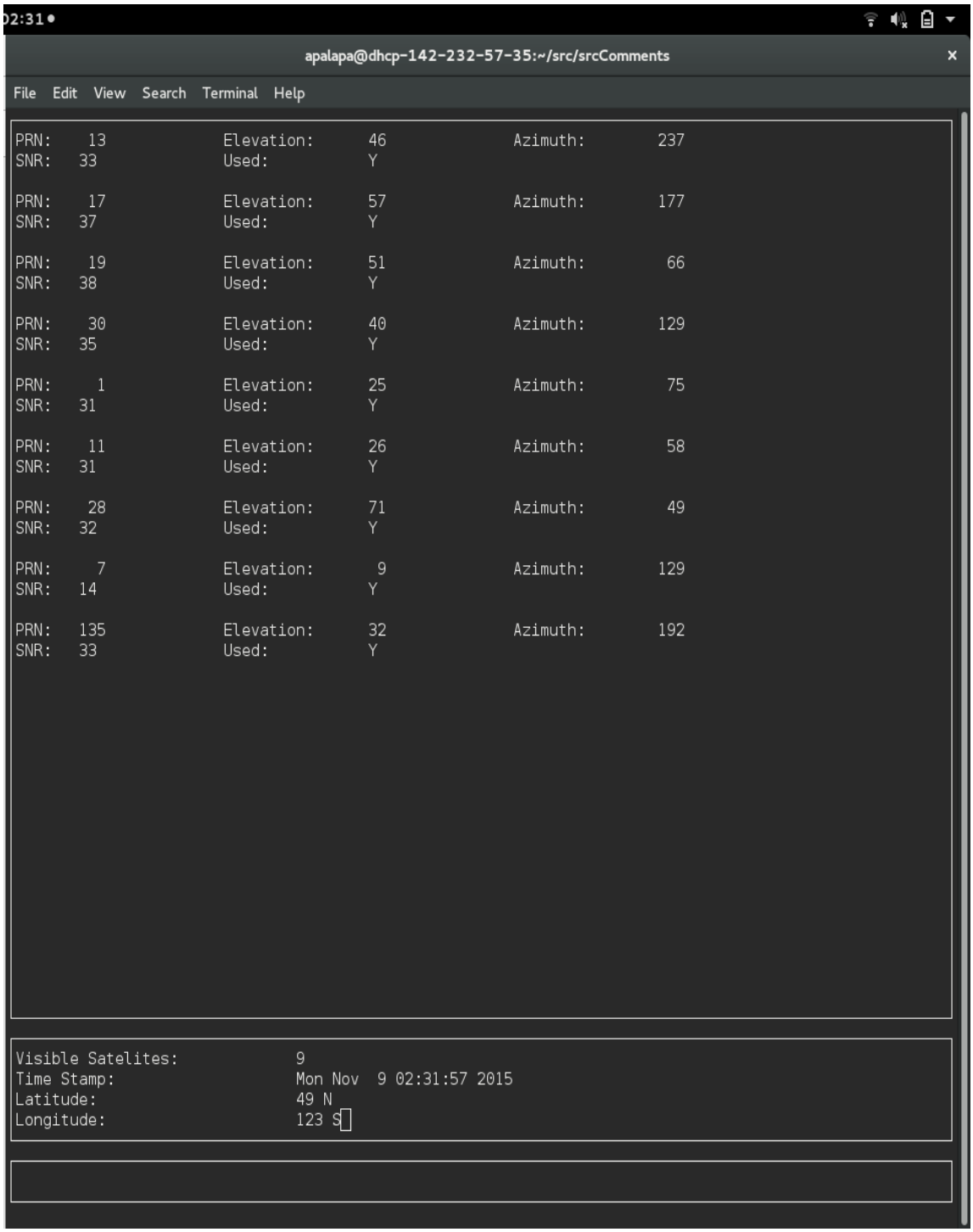

02:31
apalapa@dhcp-142-232-57-35:~/src/srcComments
File Edit View Search Terminal Help
PRN: 13 Elevation: 46 Azimuth: 237
SNR: 33 Used: Y
PRN: 17 Elevation: 57 Azimuth: 177
SNR: 37 Used: Y
PRN: 19 Elevation: 51 Azimuth: 66
SNR: 38 Used: Y
PRN: 30 Elevation: 40 Azimuth: 129
SNR: 35 Used: Y
PRN: 1 Elevation: 25 Azimuth: 75
SNR: 31 Used: Y
PRN: 11 Elevation: 26 Azimuth: 58
SNR: 31 Used: Y
PRN: 28 Elevation: 71 Azimuth: 49
SNR: 32 Used: Y
PRN: 7 Elevation: 9 Azimuth: 129
SNR: 14 Used: Y
PRN: 135 Elevation: 32 Azimuth: 192
SNR: 33 Used: Y
Visible Satelites: 9
Time Stamp: Mon Nov 9 02:31:57 2015
Latitude: 49 N
Longitude: 123 S

Figure 4:

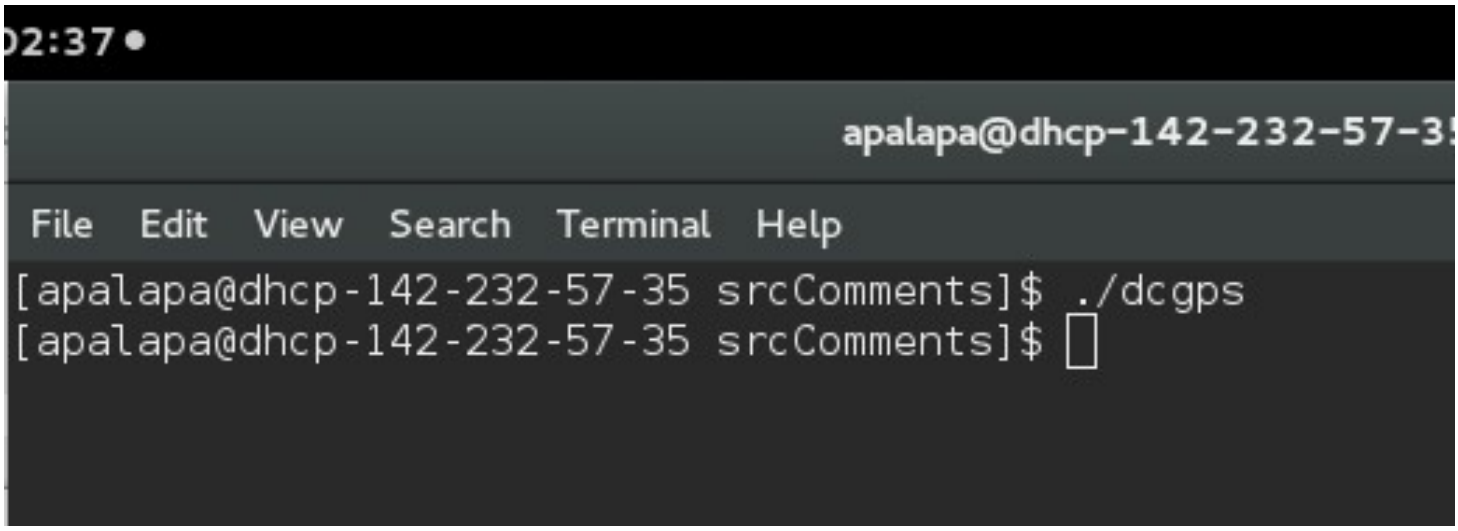

02:37
apalapa@dhcp-142-232-57-3
File Edit View Search Terminal Help
[apalapa@dhcp-142-232-57-35 srcComments]$ ./dcgps
[apalapa@dhcp-142-232-57-35 srcComments]$

Figure 5:

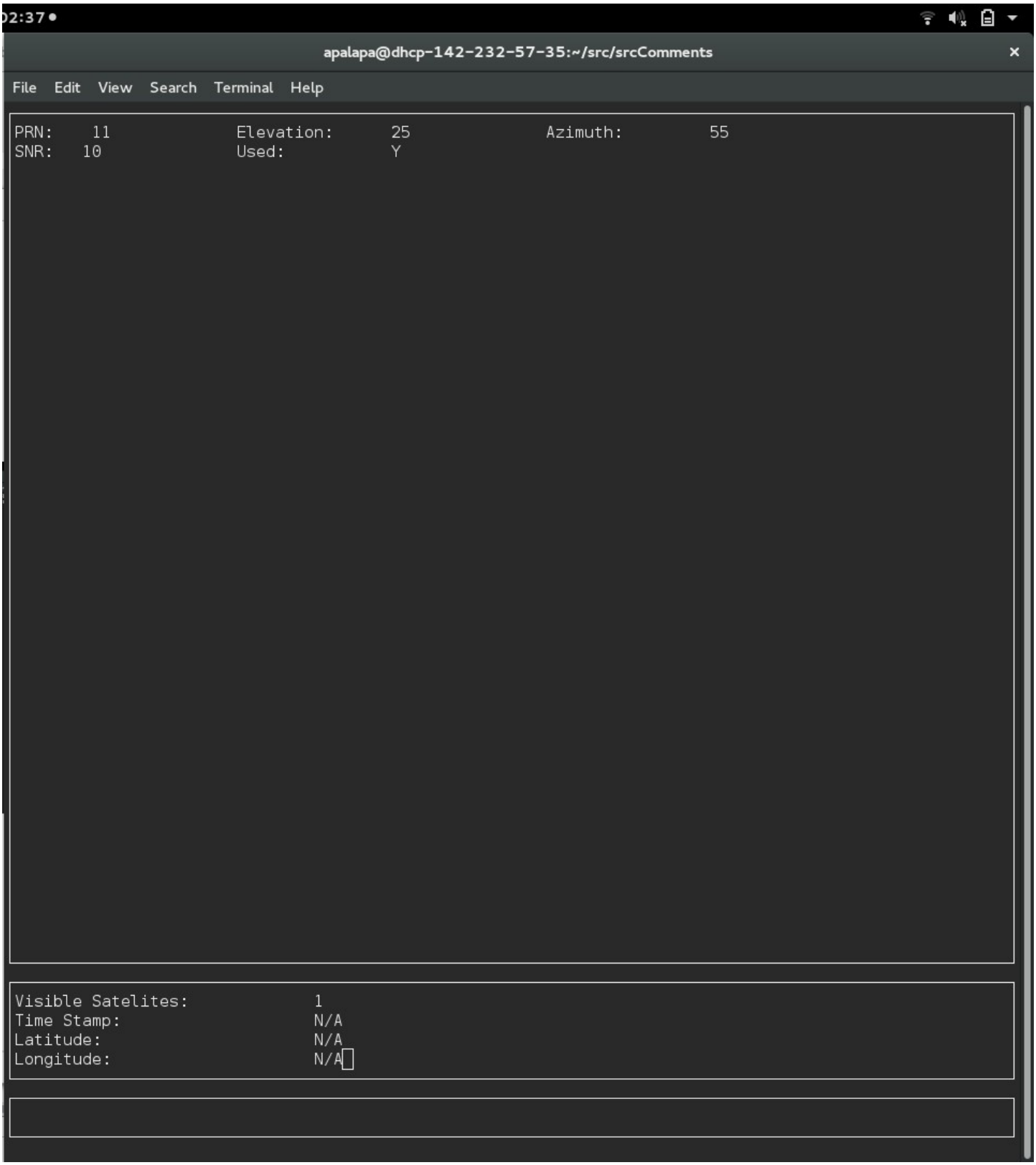
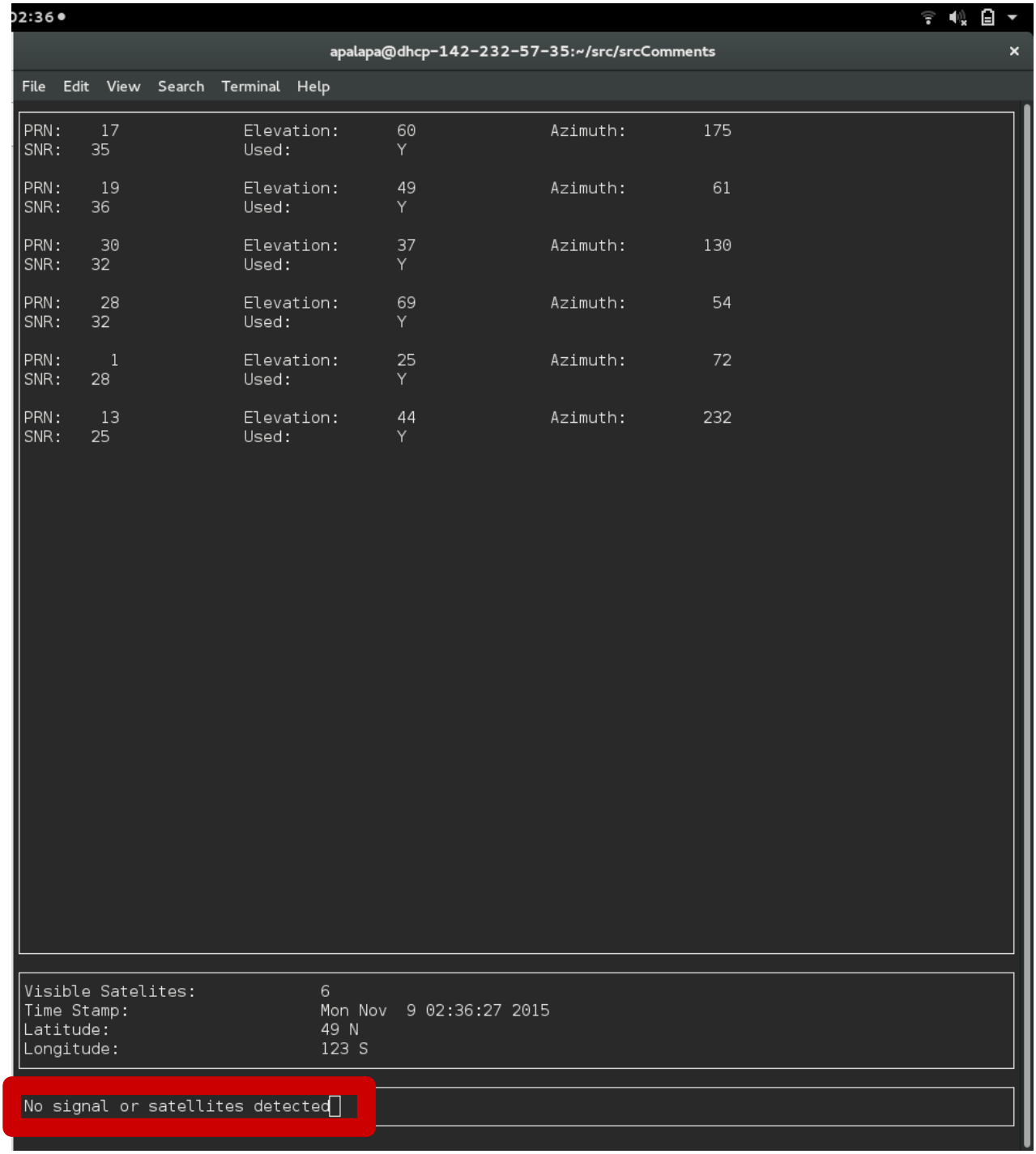

02:37
apalapa@dhcp-142-232-57-35:~/src/srcComments
File Edit View Search Terminal Help
PRN: 11 Elevation: 25 Azimuth: 55
SNR: 10 Used: Y
Visible Satelites: 1
Time Stamp: N/A
Latitude: N/A
Longitude: N/A

Figure 6:


02:36
apalapa@dhcp-142-232-57-35:~/src/srcComments
File Edit View Search Terminal Help
PRN: 17 Elevation: 60 Azimuth: 175
SNR: 35 Used: Y
PRN: 19 Elevation: 49 Azimuth: 61
SNR: 36 Used: Y
PRN: 30 Elevation: 37 Azimuth: 130
SNR: 32 Used: Y
PRN: 28 Elevation: 69 Azimuth: 54
SNR: 32 Used: Y
PRN: 1 Elevation: 25 Azimuth: 72
SNR: 28 Used: Y
PRN: 13 Elevation: 44 Azimuth: 232
SNR: 25 Used: Y
Visible Satelites: 6
Time Stamp: Mon Nov 9 02:36:27 2015
Latitude: 49 N
Longitude: 123 S
No signal or satellites detected