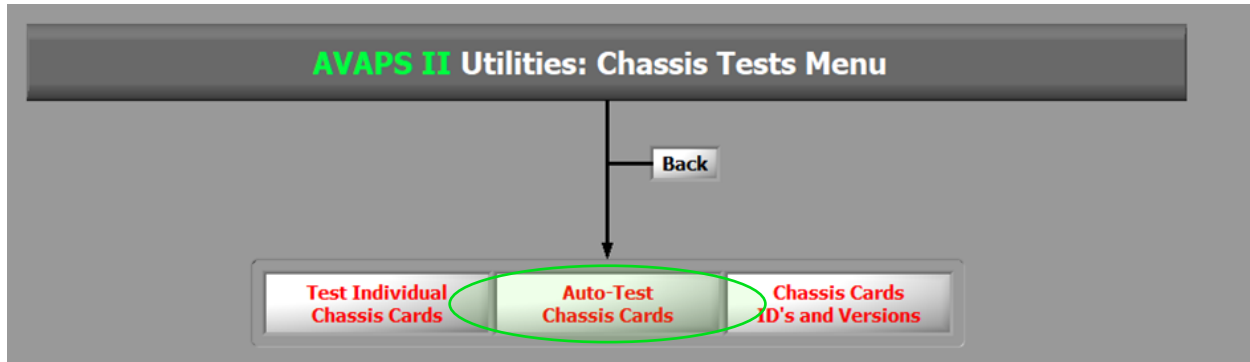


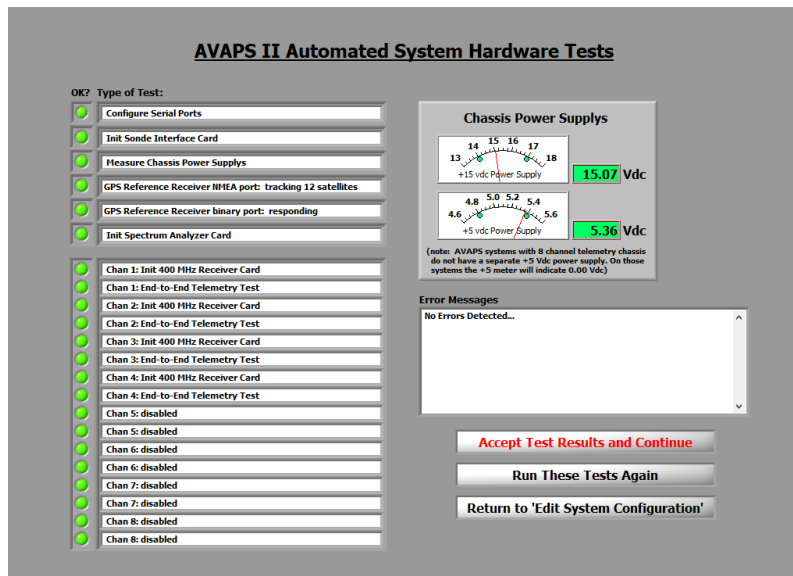
System Test

Repeat steps 1-4 in the GPS test section to arrive at the AVAPS utilities chassis test

Step 8: Select *Auto-Test Chassis Cards*

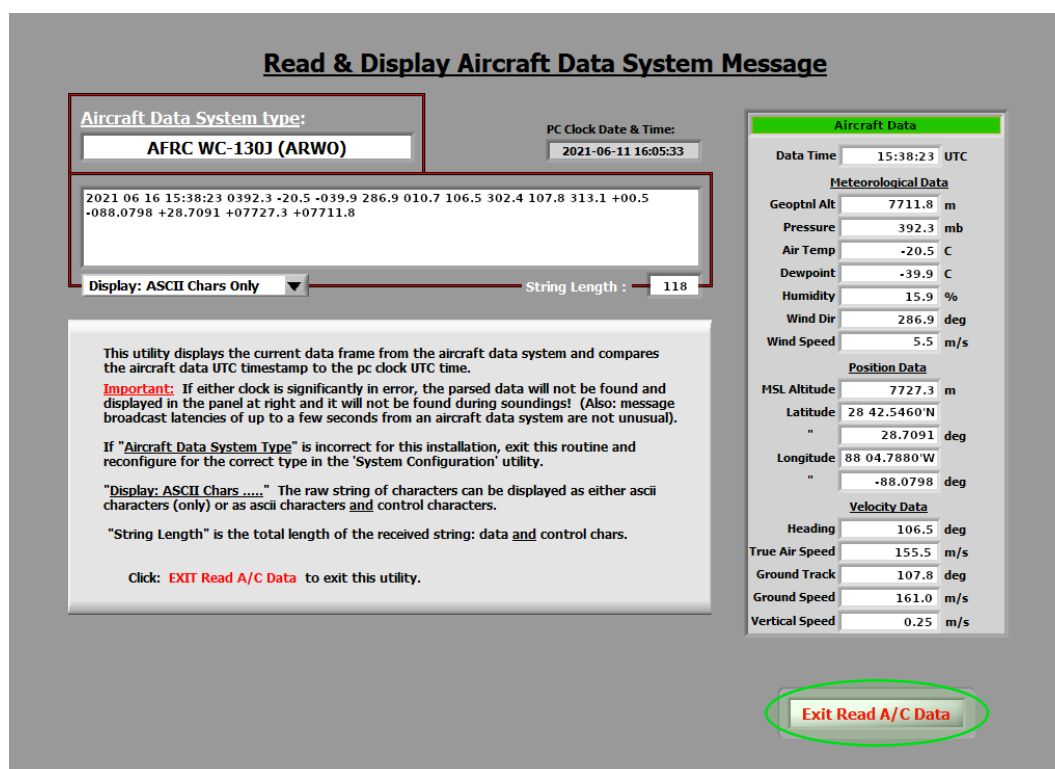
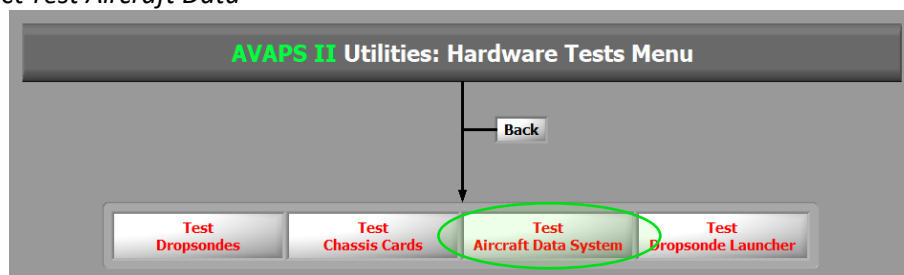


AVAPS will run automated tests on all electronics boards.



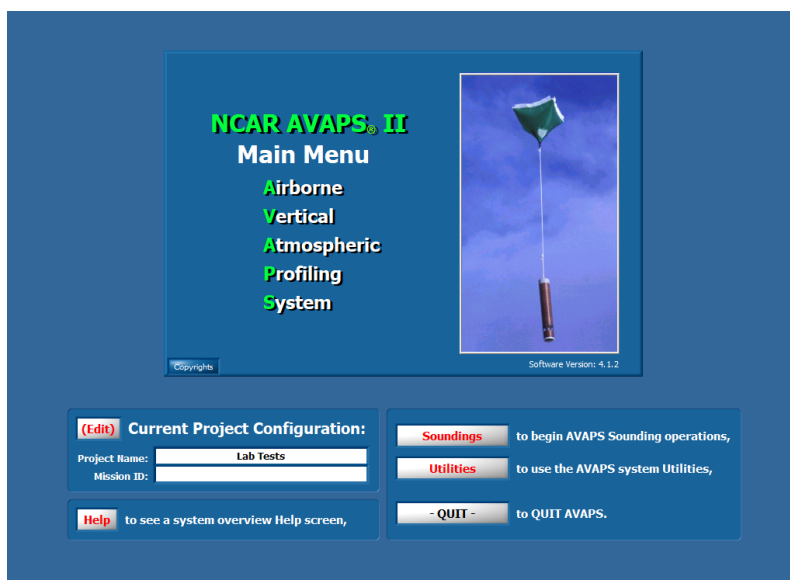
If any issues are found, select *Run These Tests Again* before trying to troubleshoot as the system may not have completely warmed up. If issues persist, see Section *Troubleshooting* at the end of this document.

Step 9: If no issues were found select *Accept Test Results and Continue*, this returns the operator to the Chassis Test Menu. Select *Back* again to return to the *Hardware Tests Menu*

Step 10: Select *Test Aircraft Data*

Verify the aircraft data transmission. If any errors exist, review the aircraft data system and the connection to the AVAPS chassis.

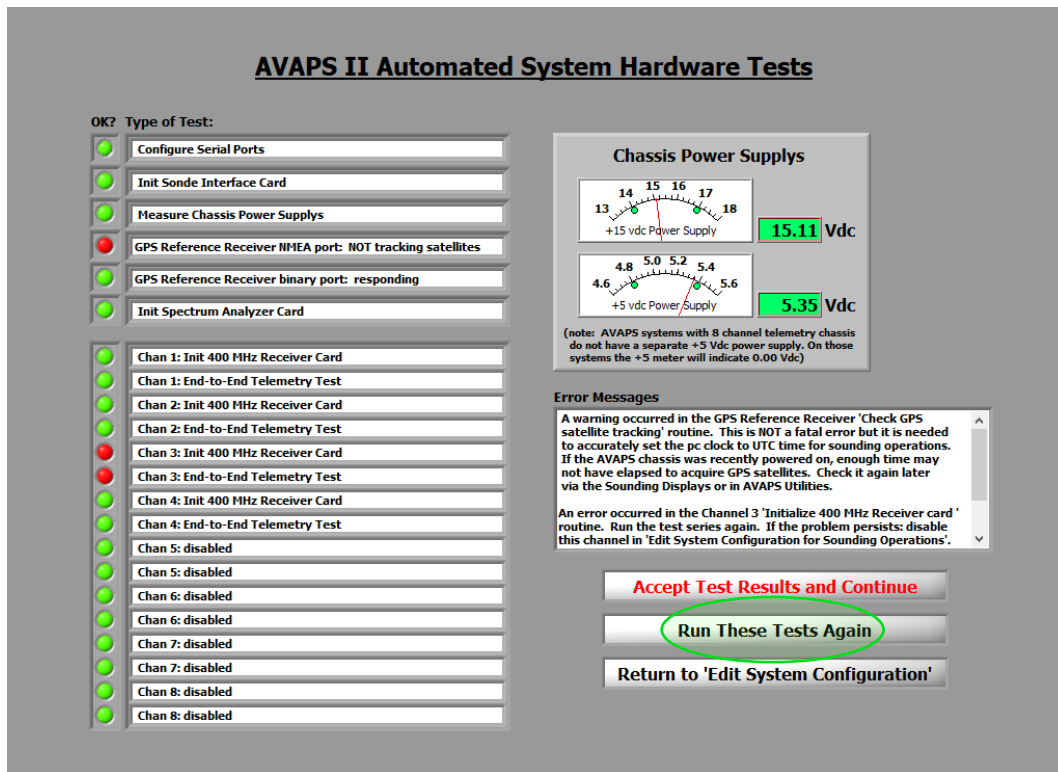
Step 11: Select *Exit Read A/C Data* and select *Back* until the AVAPS Main Menu screen is reached.



This completes the pre-flight System Test. Select *Soundings* to begin dropsonde operations.

Troubleshooting

Auto-Test Issues:



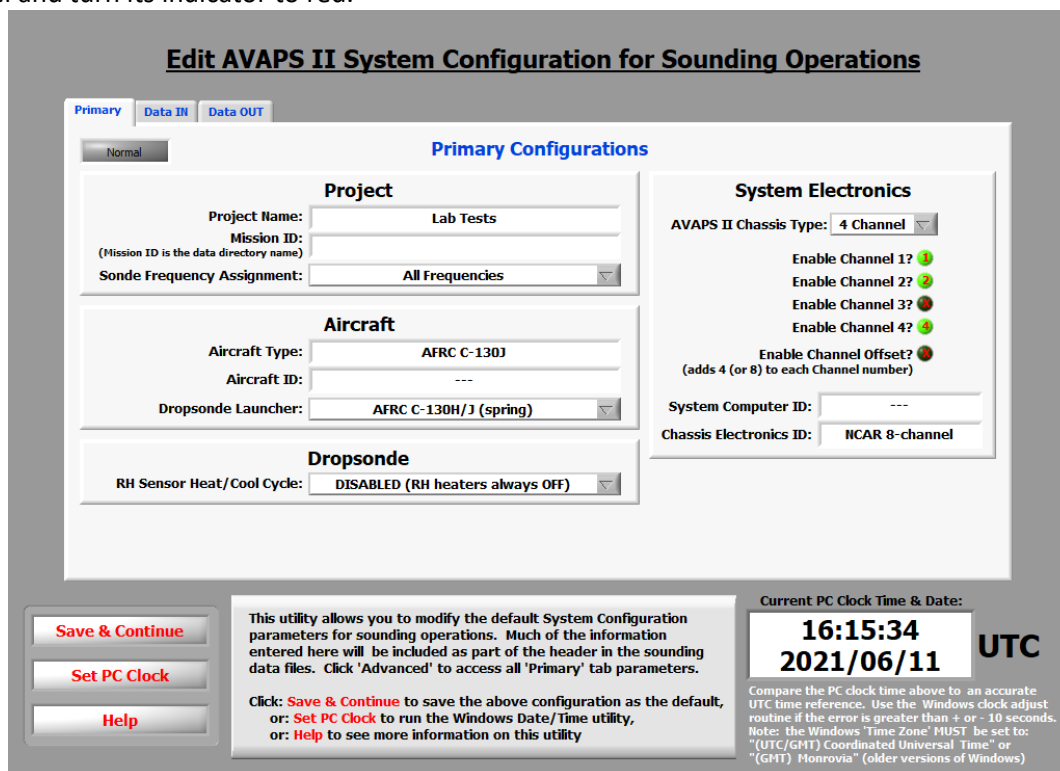
The two issues shown here are no GPS lock and a bad Channel 3 Rx card. The GPS issue is most likely due to the time it takes for the GPS to lock. Wait 15 minutes and *Run These Tests Again*

Note that channels 5 through 8 are disabled in this system, since this is a four-channel system. If the channel 3 receiver card is not working properly but the mission must continue, simply disable this channel.

Select *Edit* to disable a receiver



Select the red *Advanced* tab and click the green dot next to *Enable Channel 3*. This will disable that channel and turn its indicator to red.



Click *Save & Continue*

Run Auto-Test Chassis Cards Again

AVAPS II Automated System Hardware Tests

OK? Type of Test:

- ☐ Configure Serial Ports
- ☐ Init Sonde Interface Card
- ☐ Measure Chassis Power Supplys
- ☐ GPS Reference Receiver NMEA port: tracking 12 satellites
- ☐ GPS Reference Receiver binary port: responding
- ☐ Init Spectrum Analyzer Card

Chan 1: Init 400 MHz Receiver Card

Chan 1: End-to-End Telemetry Test

Chan 2: Init 400 MHz Receiver Card

Chan 2: End-to-End Telemetry Test

Chan 3: disabled

Chan 3: disabled

Chan 4: Init 400 MHz Receiver Card

Chan 4: End-to-End Telemetry Test

Chan 5: disabled

Chan 5: disabled

Chan 6: disabled

Chan 6: disabled

Chan 7: disabled

Chan 7: disabled

Chan 8: disabled

Chan 8: disabled

Chassis Power Supplys

13 14 15 16 17 18
+15 vdc Power Supply **15.21 Vdc**

4.6 4.8 5.0 5.2 5.4 5.6
+5 vdc Power Supply **5.38 Vdc**

(note: AVAPS systems with 8 channel telemetry chassis do not have a separate +5 Vdc power supply. On those systems the +5 meter will indicate 0.00 Vdc)

Error Messages

No Errors Detected...

Accept Test Results and Continue

Run These Tests Again

Return to 'Edit System Configuration'

Disabling a channel due to a bad Rx card is only a temporary solution to save a mission. The chassis card in question should be replaced or repaired at the next available opportunity. A bad GPS receiver or a bad Sonde Interface Card will prevent any dropsonde operation until a new card can be installed. Although this rarely happens, it is good practice to have spares on board the aircraft.