

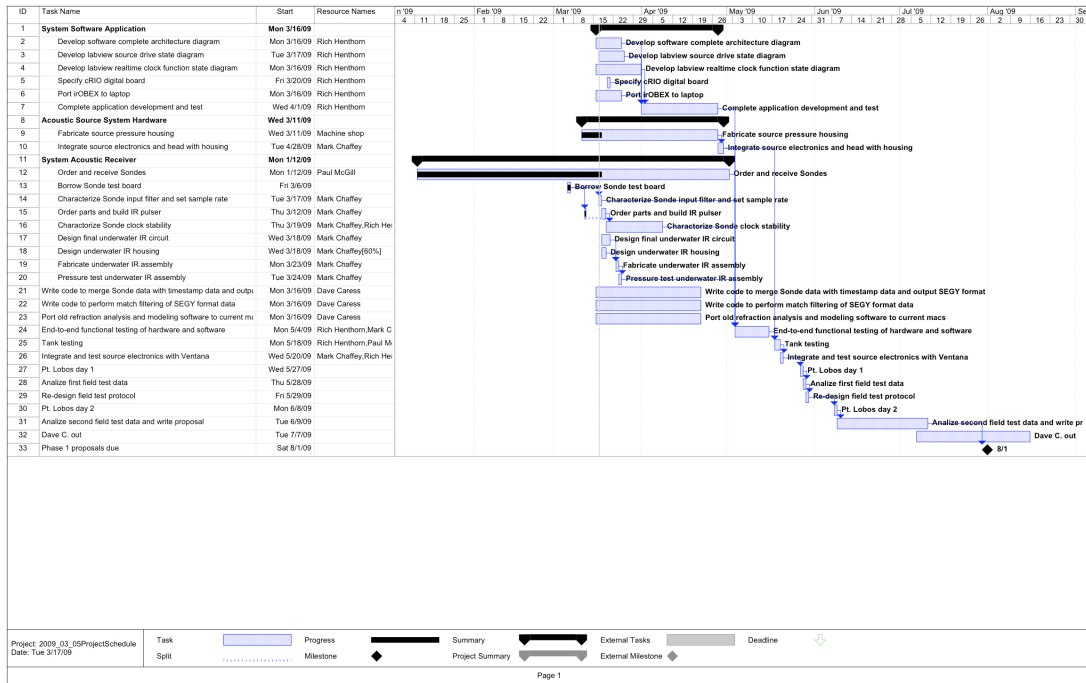
30 April 2009
10:30 am Surface Commons

MBARI Project 900907 Meeting High Resolution Near-Surface Seismic Refraction Tomography

Attending: David Caress, Rich Henthorn, Mark Chaffey

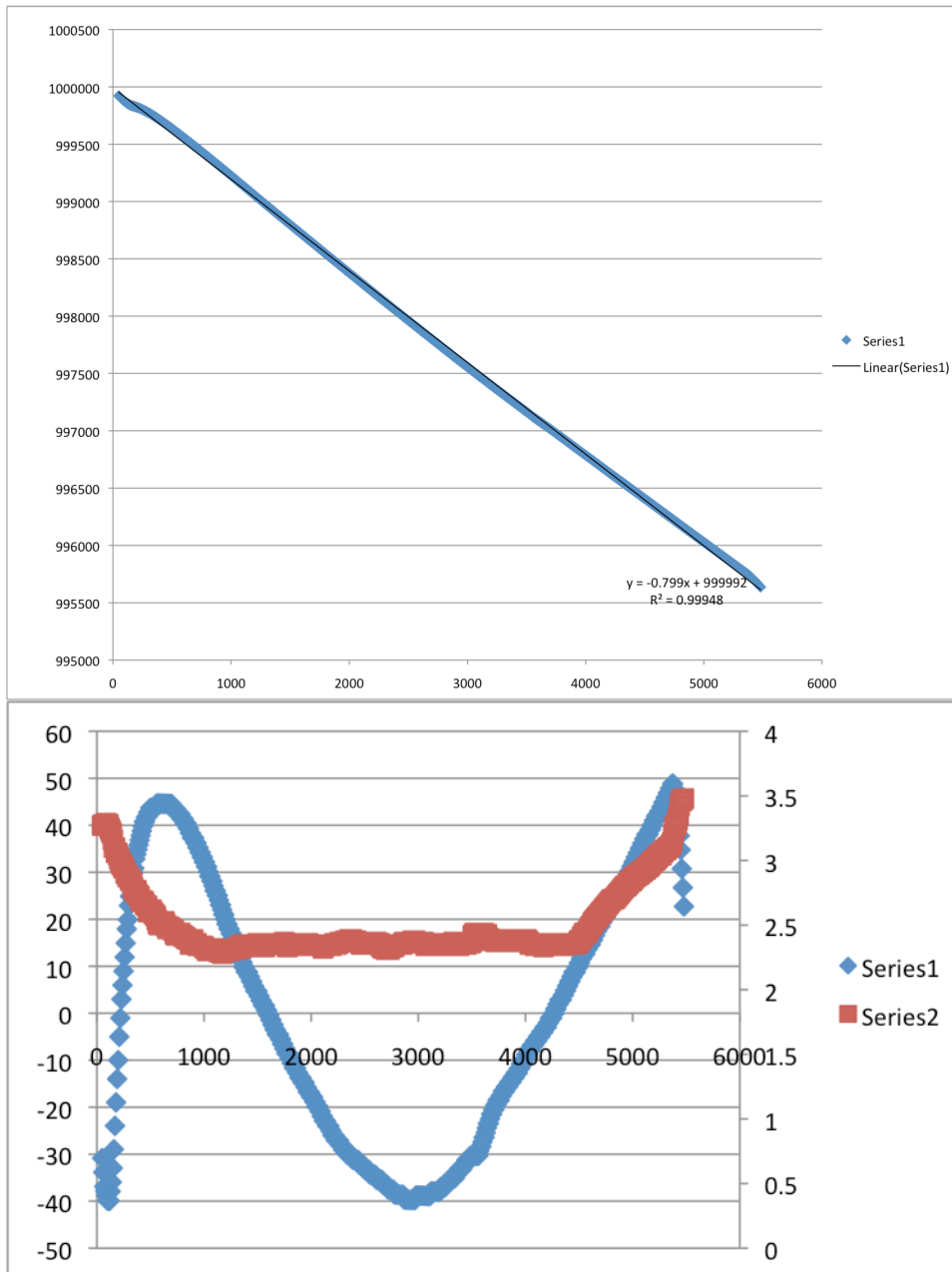
Schedule

Initial schedule put out on March 16:



Status:

- First at sea day May 27 on Point Lobos
- Sonde delivery May 15
- Sonde timing
 - Paul McGill is back and will be helping with the sonde timing issues
 - Tests so far
 - Drift is large but consistent. We should be able to compensate.
 - The top plot below shows raw time drift over a 10 hour test. The lower plot shows the time drift residual after removing a linear fit in blue, and the Sonde temperature in red. The corrected time drift is well within the 250 millisecond requirement.



- Underwater time marks on Sondes
 - IR pulser working on bench. However, if we pulse every second then the unit stops logging after another 60-90 seconds. Will use 10 second pulse mode.
 - Mark working on electronic design for paddle to be potted and on ROV
 - Cables ordered, in in three weeks
- Time source
 - Need to get time source with SMTP/NTP and 1 PPS
 - Still have to resolve this
 - May have to buy one – the AUV one is out with the Mapping AUV - \$1500 to \$5000

- Caress may hand carry AUV box back from Lau Basin cruise
- Labview source driver
 - Caress has produced chirp pulse functions
 - Rich has the code and a GUI working that push the pulse function down to the CRIO – doesn't run right now but Rich is debugging.
 - Need to get more help from Gene – Rich will talk with Jim Birch about getting official time for Gene on this project.
- Electronics
 - Need digital input board to provide time trigger for CRIO
 - Chaffey almost done with detailed schematic of electronics in the housing
 - Need two circuits to translate time signal to and from the tether multiplexer still need designing.
- Pressure housing
 - Done except for finding rear bulkhead from Gene.
- Ventana techs building mounts for housing and transducer – the transducer will be mounted on the swing arm. The IR housing will be mounted on a T-handle so that the manipulator when desired can pick it up.
- Test jitter in ROV telemetry link on Ventana
 - To be done

Major Issues and Worries:

- Schedules:
 - Caress at sea in Lau Basin May 2-15
 - Henthorn gone May 11-15
 - Chaffey gone for first week in April
 - McGill gone until April 20

Get Gene Massion's time

Choose time server to buy