



Resolver filter use with Dspace

14.05.2018 Status:

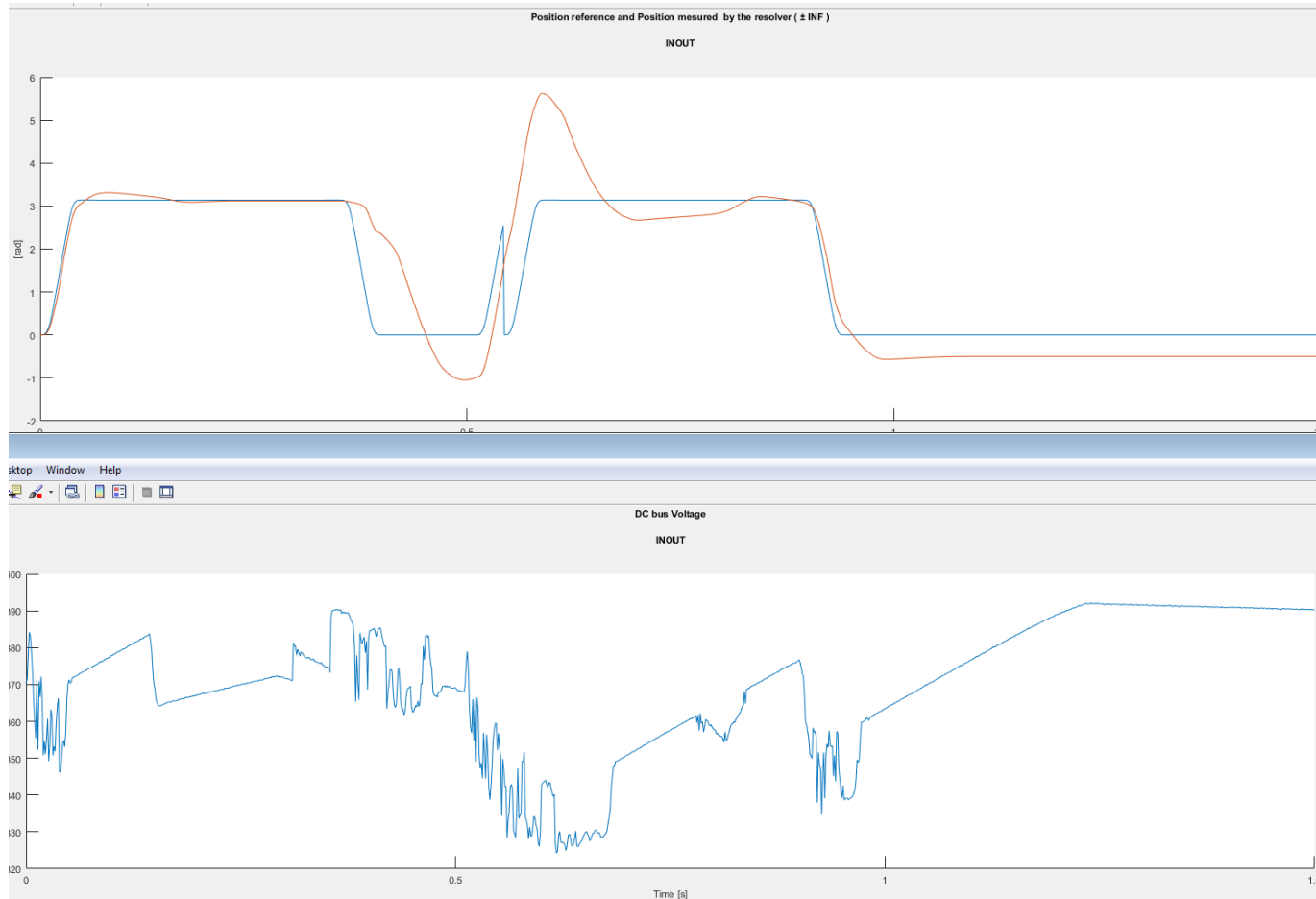
- Resolver analog signals filtering (Patrik)
- Provides stable position – tested in the PS
- Ready for motion with Dspace (during technical stop?)

22.05.2018 Short injector stop:

- Access to verify the true position of the scanner (verify the influence of the filter to the position) => OK
- Performed 2 scans movement without problem
1x 55 rad/s ok, 1x 110 rad/s ok
- Last scan presented a strange behavior



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- First motion went ok
- But a second one was following directly
- The scanner responded with a relative smooth motion (in Red)
- After analysis, it appear that it is resolver wrong readings which trigger new movement...



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- We went back with the motor bench (at the surface).
- The Simulink/Dspace program was deeply checked.
- New code was introduced:
 - improved reliability of the resolver readings
 - [Inhibit new scan if resolver issue](#)
 - Disabling functionality of the speed loop to use only current control
 - Improved reliability of the integrators resets position and speed
 - Improved GUI control desk for better readability
- Ready for test with a pulse from LTIM
- Should be setup this beginning of the week by Ana (on the new FEC dedicated to the LIU BWS)
- Then test with motor bench at the surface
- Then test with the PS prototype on zero cycle, then with beam!