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# *Noise Model for Real-time Feedback System for Storage-ring*

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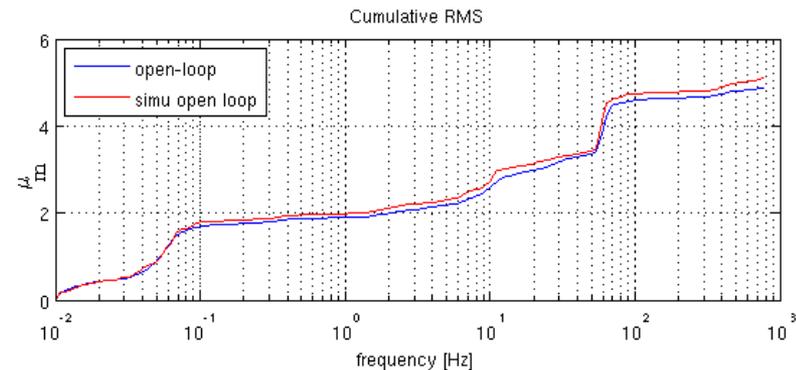
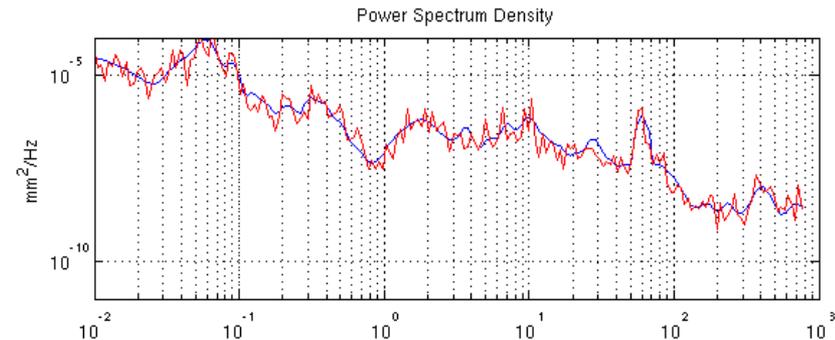
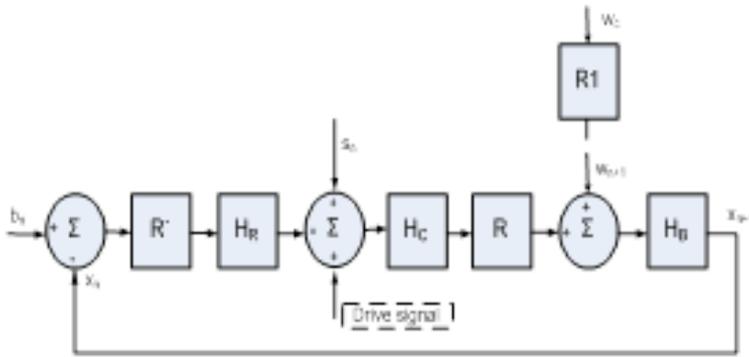
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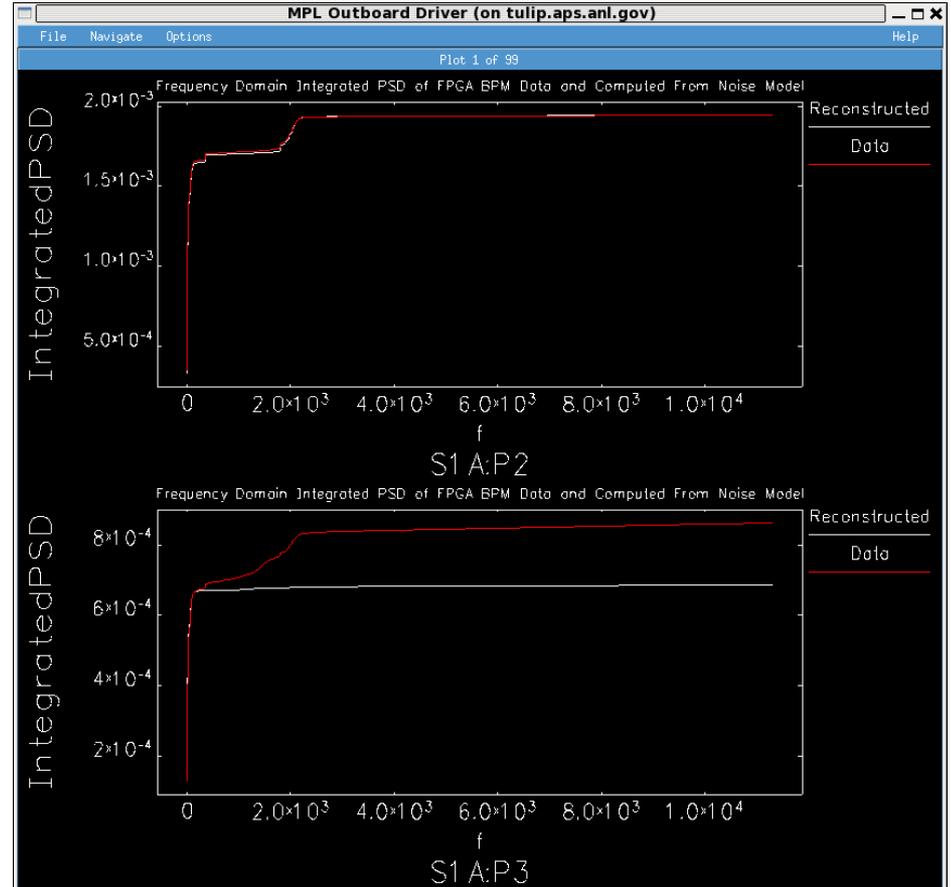
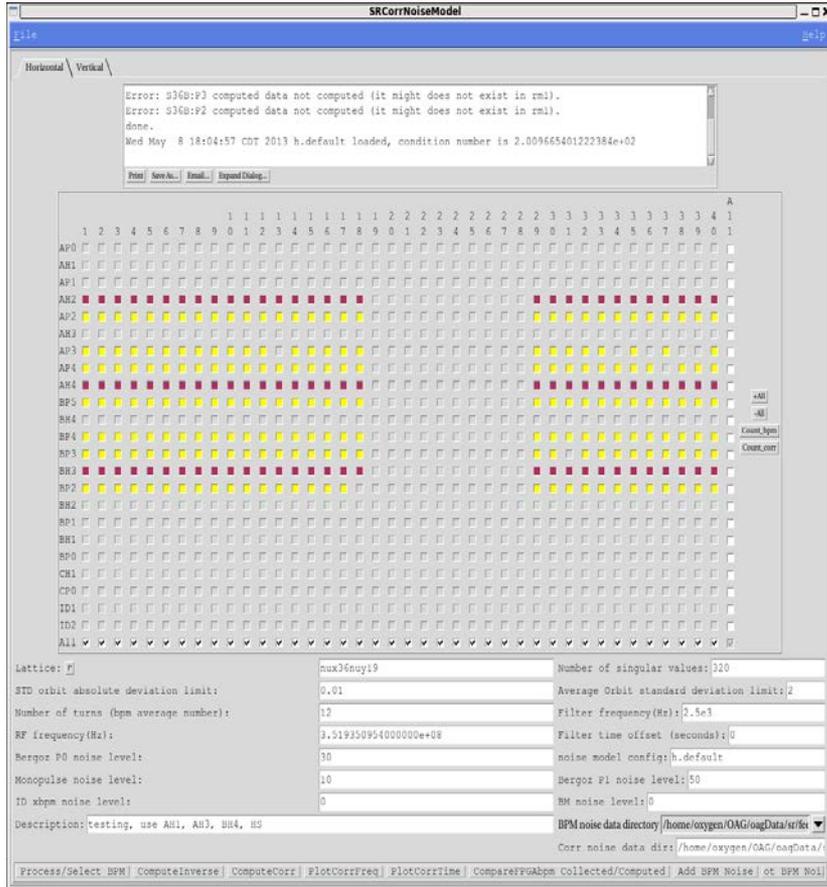
# Frequency Domain Implementation

- Implemented on IPAC12 paper “Simulation of the APS storage ring orbit real-time feedback system upgrade using MATLAB”
- System diagram, sampling rate 20k Hz.
- Response Matrix: R(317x78), R1(317x315)



# Time Domain Implementation

- Collected BSP100 BPM data at 22.6 kHz on the present RTFB system of APS
- Response Matrix: R(194x90), R1(485x90)



# Issues

- Is this a reasonable way?
- How to select bpms, correctors, numbers?
- Other noise sources.