Double Black: predicted phase noise from vibration spectra

Single Black: DARM no-injection reference

Red: Predicted DARM - from reference combined with the predicted phase noise

Blue: DARM - this is what red is attempting to predict from vibration spectra

Parameters that were adjusted for the model:

- light amplitude to match DARM

- baffle resonance structure: Qs and frequencies to match DARM temporal behavior during shaker sweep; needed because accelerometers are not on the baffle

Predicted phase noise for motion and A+ design; motion: combined channel

no SR tube injection – ambient vibration level

Predicted phase noise for motion and A+ design; motion: combined channel

shaker sweep starting to excite resonance

Predicted phase noise for motion and A+ design; motion: combined channel

shaker sweep closer to resonance

Predicted phase noise for motion and A+ design; motion: combined channel

shaker sweep at resonance