

As of 6 PM on Oct. 31, 2019, the Pcal suspension filters that convert the forces to displacement have not been updated; they are still using O2 masses for the ETMs. To compensate for this at the start of the O3b run, we have generated compensating force coefficients as follows.

$$\chi_{Teff}(O3) \propto \frac{\Gamma_T(O3)}{M(O3)} \equiv \frac{\Gamma'_T}{M(O2)} \quad (1)$$

$$\chi_{Reff}(O3) \propto \frac{\Gamma_R(O3)}{M(O3)} \equiv \frac{\Gamma'_R}{M(O2)} \quad (2)$$

This gives us

$$\Gamma'_T = \frac{M(O2)}{M(O3)} \Gamma_T(O3) \quad (3)$$

$$\Gamma'_R = \frac{M(O2)}{M(O3)} \Gamma_R(O3) \quad (4)$$

	LHO X TxPD	LHO X RxPD	LHO Y TxPD	LHO Y RXPd
Γ (11/1/2019)	$7.9278e - 13$	$6.2344e - 13$	$9.2203e - 13$	$6.2702e - 13$
(O2 Mass/ O3 Mass)	0.99982	0.99982	1.0022	1.0022
Γ'	$7.9264e - 13$	$6.2333e - 13$	$9.2340e - 13$	$6.2795e - 13$

Table 8: Force coefficients corrected for the discrepancy between the O3 ETM masses and the O2 masses in the Pcal suspension filters.