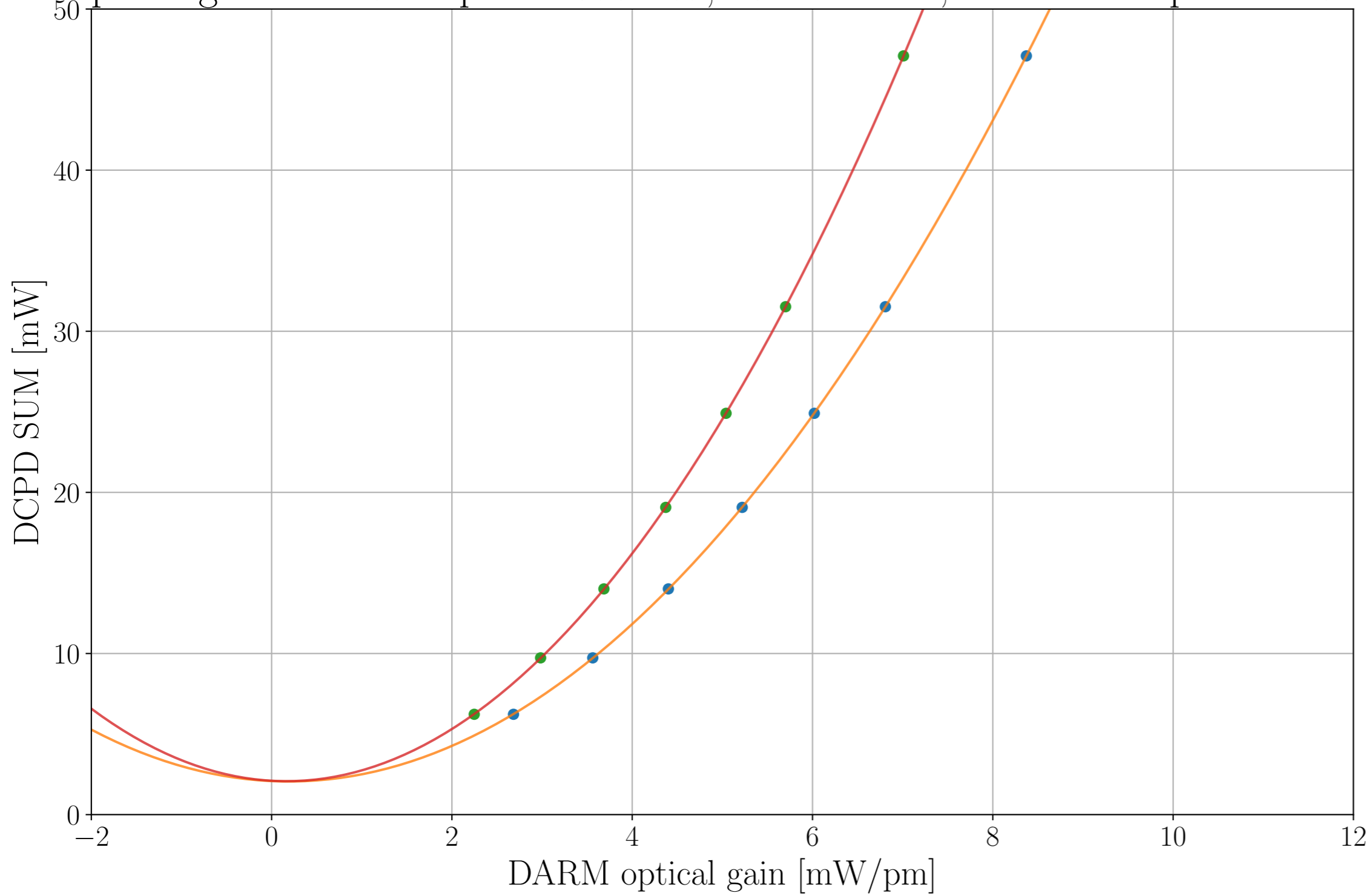


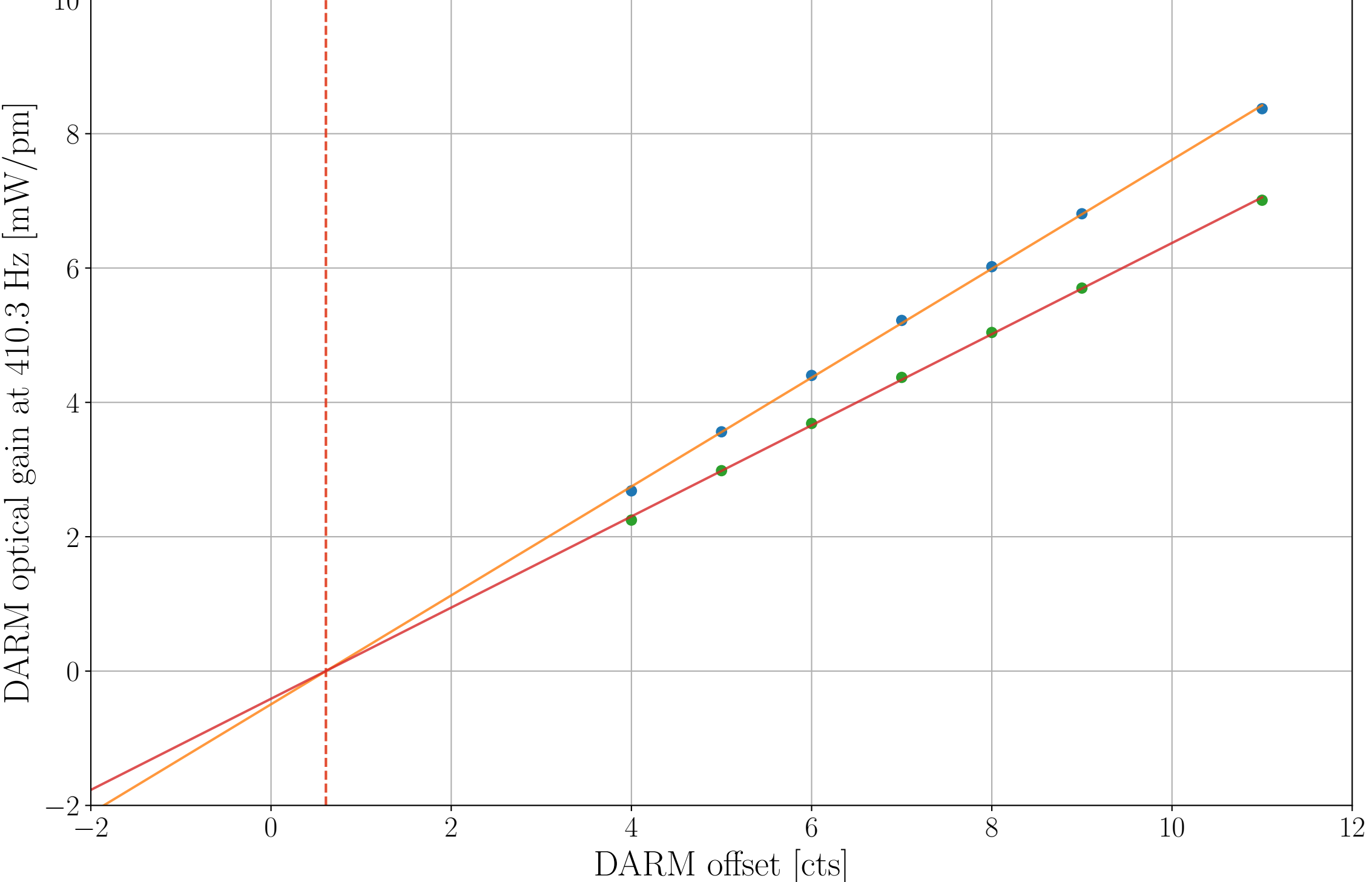
Optical gain vs DCPD power 370 kW, 20 hour lock, First relock prior to O4b



● Data at 255.0 Hz
General quadratic $b(x - x_0)^2 + c$
Scaler b [pm^2/mW] = 0.672 ± 0.002
Centroid x_0 [pm] = 0.188 ± 0.017
Contrast Defect c [mW] = 2.058 ± 0.058

● Data at 410.3 Hz
General quadratic $b(x - x_0)^2 + c$
Scaler b [pm^2/mW] = 0.961 ± 0.003
Centroid x_0 [pm] = 0.164 ± 0.015
Contrast Defect c [mW] = 2.075 ± 0.060

DARM offset vs optical gain 370 kW, 20 hour lock, First relock prior to O4b



- Data at 255.0 Hz
Linear fit $ax + b$
Slope a [(mW/pm)/cts] = 0.811 ± 0.008
Intercept b [mW/pm] = -0.495 ± 0.058
- Data at 410.3 Hz
Linear fit $ax + b$
Slope a [(mW/pm)/cts] = 0.678 ± 0.006
Intercept b [mW/pm] = -0.412 ± 0.049
- True DARM offset zero = 0.611 cts
- True DARM offset zero = 0.608 cts