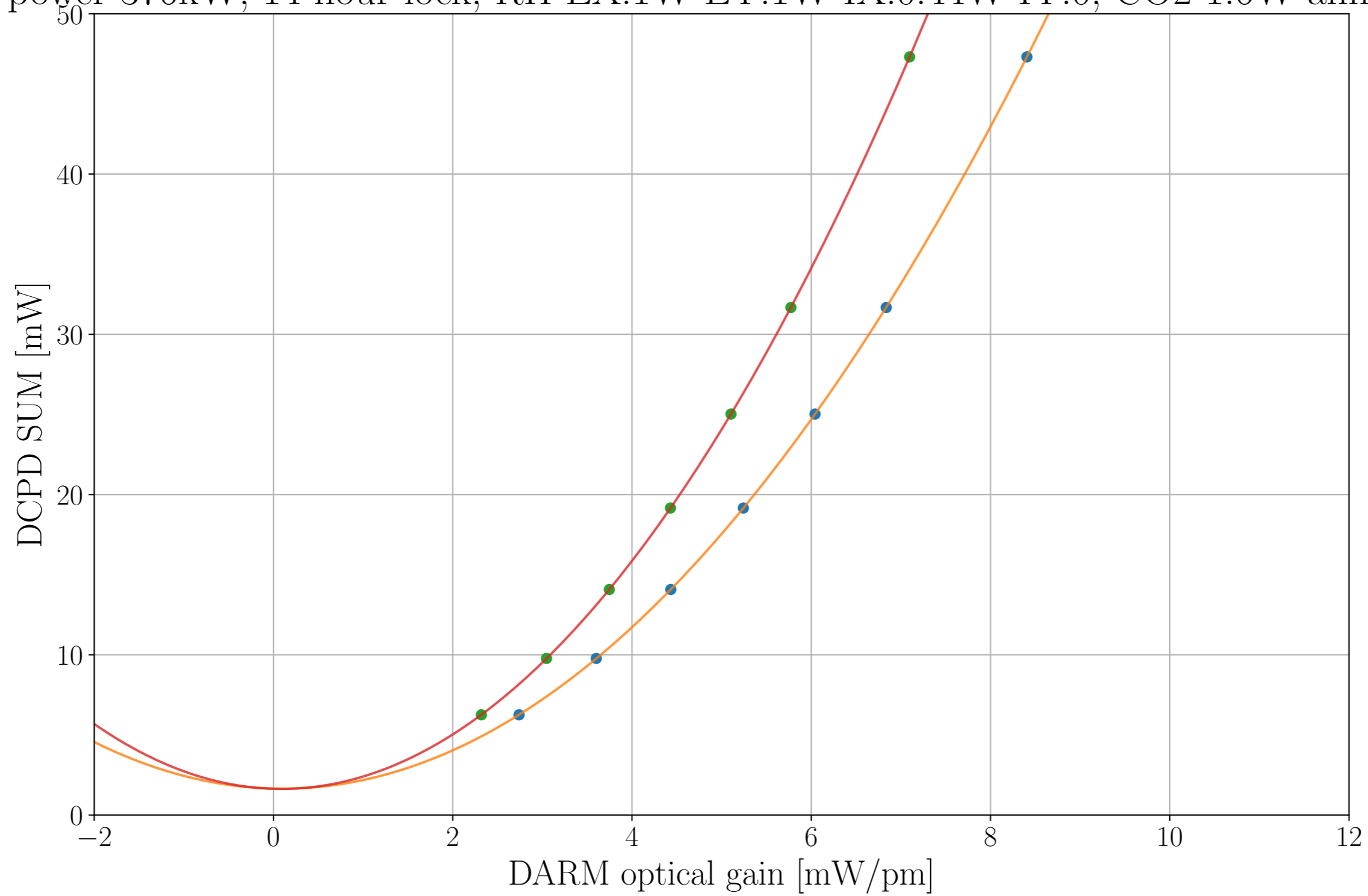


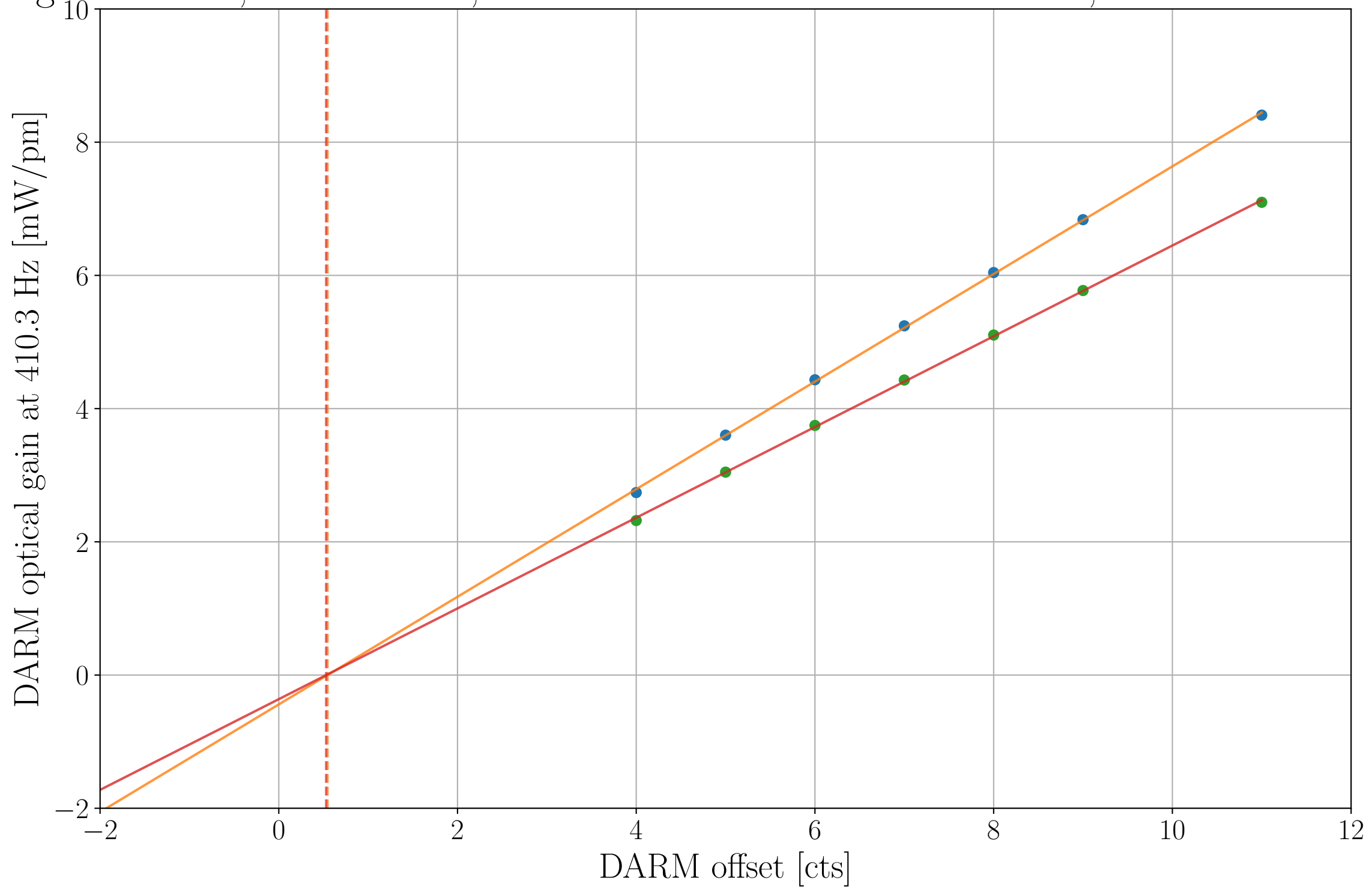
Optical gain vs DCPD power 376kW, 14 hour lock, RH EX:1W EY:1W IX:0.44W IY:0, CO2 1.6W annular both ITMs, OM2:4.6V



● Data at 255.0 Hz  
General quadratic  $b(x - x_0)^2 + c$   
Scaler  $b$  [ $\text{pm}^2/\text{mW}$ ] =  $0.661 \pm 0.001$   
Centroid  $x_0$  [pm] =  $0.098 \pm 0.010$   
Contrast Defect  $c$  [mW] =  $1.647 \pm 0.034$

● Data at 410.3 Hz  
General quadratic  $b(x - x_0)^2 + c$   
Scaler  $b$  [ $\text{pm}^2/\text{mW}$ ] =  $0.930 \pm 0.001$   
Centroid  $x_0$  [pm] =  $0.088 \pm 0.006$   
Contrast Defect  $c$  [mW] =  $1.631 \pm 0.022$

DARM offset vs optical gain 376kW, 14 hour lock, RH EX:1W EY:1W IX:0.44W IY:0, CO2 1.6W annular both ITMs, OM2:4.6V



● Data at 255.0 Hz  
Linear fit  $ax + b$   
Slope  $a$  [(mW/pm)/cts] =  $0.808 \pm 0.006$   
Intercept  $b$  [mW/pm] =  $-0.441 \pm 0.044$   
- - - True DARM offset zero = 0.546 cts  
● Data at 410.3 Hz  
Linear fit  $ax + b$   
Slope  $a$  [(mW/pm)/cts] =  $0.681 \pm 0.005$   
Intercept  $b$  [mW/pm] =  $-0.362 \pm 0.037$   
- - - True DARM offset zero = 0.530 cts