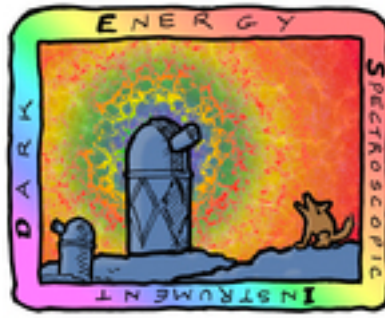




Analysis of BIAS, CTE, DARK and PTC

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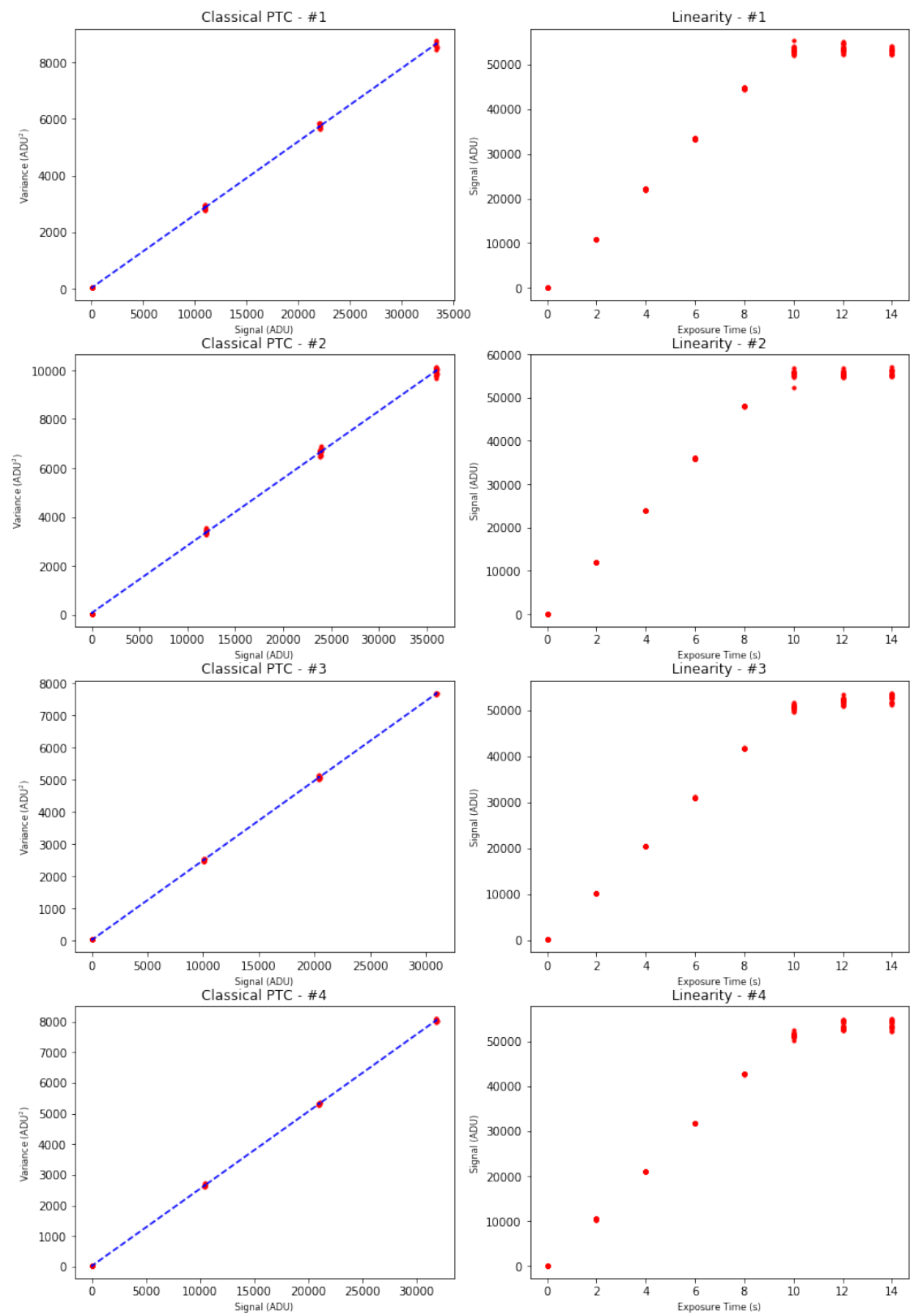
June 29th, 2018
Version 1.1

Scope

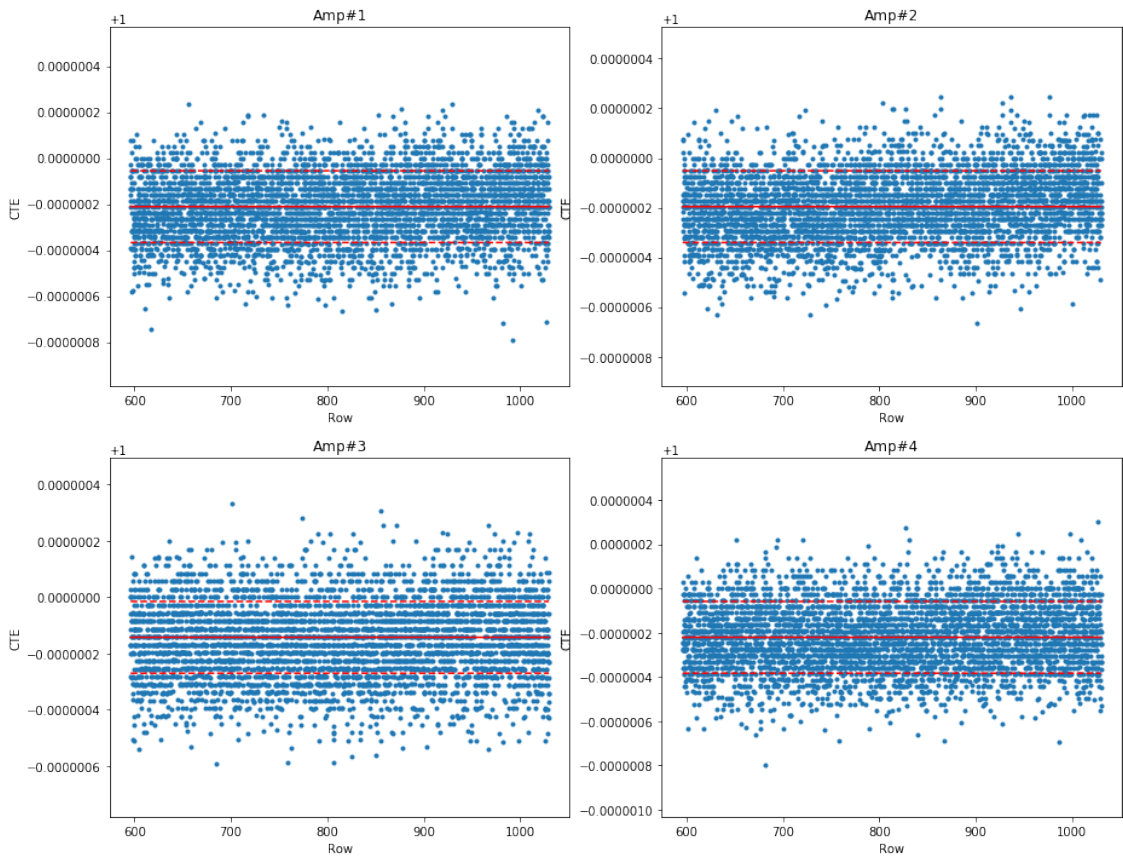
This document is a summary of the analysis of the BIAS, DARK, PTC and CTE images obtained in June 29th, 2018 of the GFA#01 unit equipped with the CCD **e2v 13072-18-04** and flat filter id#2.

The images used to do these test can be found in the NERSC directory:
**/global/projecta/projectdirs/desi/engineering/gfa/PreProductionCamera/
Data/99999999_GFA_FINAL/GFA01**

PTC



Horizontal CTE



Parameters obtained in the fits

Gain evaluated with the PTC

Amp#1: 3.863 +- 0.004 e-/ADU
Amp#2: 3.629 +- 0.004 e-/ADU
Amp#3: 4.043 +- 0.003 e-/ADU
Amp#4: 3.967 +- 0.002 e-/ADU

Dark current based in dark images of 60 seconds of exposure

Amp#1: 46.7 e-/pix/s
Amp#2: 43.7 e-/pix/s
Amp#3: 40.8 e-/pix/s
Amp#4: 45.3 e-/pix/s

Readout Noise (BIAS images)

Amp#1: 17.5 e-
Amp#2: 16.5 e-
Amp#3: 17.7 e-
Amp#4: 17.9 e-

Full Well Capacity

Amp#1: 207000 (FWC limited by the CCD)
Amp#2: 202000 (FWC limited by the CCD)
Amp#3: 213000 (FWC limited by the CCD)
Amp#4: 213000 (FWC limited by the CCD)

Vertical Charge Transfer Efficiency determined by EPER method

Amp#1: Vertical CTE = 0.999995 +- 0.000002
Amp#2: Vertical CTE = 0.999995 +- 0.000003
Amp#3: Vertical CTE = 0.999997 +- 0.000001
Amp#4: Vertical CTE = 0.999997 +- 0.000001

Horizontal Charge Transfer Efficiency determined by EPER method

Amp#1: Horizontal CTE = 1.000000 +- 0.000000
Amp#2: Horizontal CTE = 1.000000 +- 0.000000
Amp#3: Horizontal CTE = 1.000000 +- 0.000000
Amp#4: Horizontal CTE = 1.000000 +- 0.000000