## V&V Summary Report L2 ASCDS Version: 10.7.1

Observation 22139 - L2 Version 2 Chandra X-Ray Center

L2 Processing Date: Mar 5 2019

See axaff22139N002\_VV001\_vvref2.pdf for the full report

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2019.03.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	21.326253099442

## Comments

Note: zeroth order intentionally off the array. projection of celestial source position was used for grating coordinates. Only MEG positive and HEG negative orders are present. Extraction of higher order spectra will require careful review of PHA extraction regions.

## Comments for Obi O

The ACIS focal plane temperature is warmer than -114.0 C degrees during the interval 667276626.14 - 667286563.39 (MET s) of this observation. This temperature is the upper limit of the verified ACIS calibration for the front-illuminated chips. The focal plane temperature is warmer than -112.0 C during the interval 667276626.14 - 667279373.64 (MET s) of this observation. This temperature is the upper limit of the verified ACIS calibration for the back-illuminated chips. The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -115.0 C. Users whose science objectives depend on the most accurate spectral response (e.g., fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect. Star in slot 5 has an RMS deviation > 0.200000 arcsec

Charge time: time per chip varies due to saturation; duration of observation was as planned.

Variation in Chips > 15% threshold.

Low Chip 6, ONTIME=8938.456075 seconds

High Chip 7, ONTIME=21326.253099 seconds

Chip 9, ONTIME=14449.130503 seconds is less than 80% of scheduled time=25500.000000 seconds

Chip 8, ONTIME=12150.119876 seconds is less than 80% of scheduled time=25500.000000 seconds

Chip 6, ONTIME=8938.456075 seconds is less than 80% of scheduled time=25500.000000 seconds

Chip 5, ONTIME=12574.755585 seconds is less than 80% of scheduled time=25500.000000 seconds

Chip 4, ONTIME=15776.188952 seconds is less than 80% of scheduled time=25500.000000 seconds

<code>ONTIME</code> of 21326.253099442 seconds is less than 85% of expected scheduled time of 25500 seconds

seq_num	402095	Sequence number
obs_id	22139	Observation id
title	Probing the disc-jet coupling in the neutron star binary Sco X-1	P
observer	Sara Motta	Principal investigator
object	Sco X-1	Source name
ra_targ	244.979583	Observer's specified target RA [deg]
dec_targ	-15.640278	Observer's specified target Dec [deg]
ra_nom	244.97637137531	Nominal RA [deg]
dec_nom	-15.638059119131	Nominal Dec [deg]
roll_nom	80.055754993152	Nominal Roll [deg]
revision	2	Processing version of data
ontime	21326.253099442	Sum of GTIs [s]
livetime	21242.947423272	Livetime [s]
ontime4	15776.188952208	Sum of GTIs [s]
ontime5	12574.755585313	Sum of GTIs [s]
ontime6	8938.4560751915	Sum of GTIs [s]
ontime7	21326.253099442	Sum of GTIs [s]
ontime8	12150.119876146	Sum of GTIs [s]
ontime9	14449.130502582	Sum of GTIs [s]
12events	4326613	Number of level 2 events

