

JIRA	Hutch	TILE	Condition	Approx. Date of Failure	Serial Number	Symptom	RCA
ECS-5728	TMO	HRM	Broken	7/4/2024	SLC1760ds-89	Unresponsive stage	Piezo damaged, root cause unknown, but it occurred at 4:30 am on July 4th and corresponded to a large spike in MCS2 module temperature (65°C!)
ECS-5468	TMO	EJX	Broken	5/26/2024	SLC1740ds-85	Unresponsive, hanging after sticky movements	Piezo damaged. Possible user error, stage could be run indefinitely into the EJX enclosure
ECS-5468	TMO	EJX	Limping	N/A	SLLV42lc-469	Does not home properly for half of the stage's travel. Indicative of sensor or encoder strip damage	Possibly: encoder strip, sensor
ECS-4242	TMO	HRM	Broken	11/27/2023	STT25.4v-21	Unresponsive tilt axis	Piezo damage, possibly from Nov. power outage
ECS-4242	TMO	HRM	Broken	2/5/2023	SLLV42sc-463	Unresponsive linear stage	Piezo damage, likely from Feb 5th power outage
ECS-4242	TMO	ATM	Broken	11/27/2023	STT25.4v-?	ATM_MR0_TIP1 unresponsive	Piezo damage, cause unknown
ECS-4242	TMO	ATM	Broken	11/27/2023	STT25.4v-?	ATM_MR1_TILT1 unresponsive	Piezo damage, cause unknown
ECS-4476	TMO	COM	Resolved	1/30/2024	SLC1780ds-?	Absolute positions changed unexpectedly	Calibration error caused by firmware update
ECS-4476	TMO	COM	Resolved	1/30/2024	CLL42lc-?	Absolute positions changed unexpectedly	Calibration error caused by firmware update
ECS-4077	cRIXS	ATM	Limping	2/27/2024	STT50.8iv-2?	Intermittent sensor failure on encoded tilt axis	Cause unclear, may be due to excessive weight of optic causing piezo slippage. Currently runs in open-loop mode
ECS-4496	cRIXS	EJX	Broken	2/5/2024	STT25.4v-?	Unresponsive axes	Piezo damage, likely from Feb 5th power outage

ECS-4576	cRIXS	COM	Resolved	2/5/2024	CLL42lc-47	Stage would sporadically fail in closed-loop movement	Thought to be due to Feb. 5th power outage, turns out it was sensor-type incompatibility with an L-type sensor on a sensor-module with I-type sensors on it. Causes a diff. voltage float to sensors which can cause this symptom. Replaced with SLLV42sc-655, which is an S type sensor, now placed on a different sensor module.
ECS-5213	cRIXS	EJX	Resolved	4/22/2024	SLC2445ds-?	Stage would sporadically fail in closed-loop movements including "homing"	Wrong positioner type assigned — also had a sensor type conflict with neighboring stages on the sensor module. Rearranged cabling & assignments to keep all L-type and S-type stages with compatible types
ECS-5564	cRIXS	EJX	Broken	6/12/2024	SLLV42lc-473	Unresponsive movement	Piezo damage. Very unexpected, as the stage was powered off for approximately 1 month before this failure occurred, as EJX controls were disabled during OPA install.