

TGA Actuator Control System Startup and Shutdown S-AB-P-095 Rev A

Intent: This procedure shall be followed to power ON/OFF the TGA tiling actuator control system under normal operating conditions. The TGA Control Rack and computer are normally left running 24/7. The control rack and computer (*iocaste*) are located in Diagnostic Bay 1.

Startup Procedure:

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| 1 | On the front panel of the rack, ensure the 150V power supply switch is OFF. | <input type="checkbox"/> |
| 2 | On the rear of the rack, ensure the control racks two power supplies are ON. | <input type="checkbox"/> |
| 3 | On the rear of the rack, ensure the VME power supply is ON. | <input type="checkbox"/> |
| 4 | At the TGA workstation terminal in DB1, log into the computer (<i>iocaste</i>) as epbl. | <input type="checkbox"/> |
| 5 | Start the GTRS service by typing: startGTRSService. | <input type="checkbox"/> |
| 6 | Put the actuators of all 8 TGA's into open loop drive at -8.77v D/A output. | <input type="checkbox"/> |
| 7 | Verify the actuators of all 8 TGA's are at -8.77v. | <input type="checkbox"/> |
| 8 | Verify on the HV Controller the "Control Power Indicator" and "HV Power Supply Enabled" lights are ON. <ul style="list-style-type: none">If necessary use the toggle to latch the 'AC available' and 'vacuum ok' relays. | <input type="checkbox"/> |
| 9 | Turn ON 150v power supply and verify 150v power supply light comes ON. | <input type="checkbox"/> |
| 10 | Close the control loops for all required actuators. | <input type="checkbox"/> |
| 11 | Verify all actuators are in 'closed loop mode' and converge to their setpoints. | <input type="checkbox"/> |

(End of Procedure)

Vol. IX System Startup and Shut Down
Chapter 4 Beamlines



Shutdown Procedure:

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| 1 | Ensure the actuators of all 8 TGA's are in the 'open loop' control mode and set the 'open loop' drive to -8.77v. | <input type="checkbox"/> |
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| 2 | Verify the actuators of all 8 TGA's are at -8.77v | <input type="checkbox"/> |
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| 3 | Turn OFF the 150v power supply and verify 150v light is OFF.
• Under these conditions it is safe to vent or pump down the GCC | <input type="checkbox"/> |
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| 4 | If desired shutdown the GTRS service; leave the computer running and the rack power supplies ON. | <input type="checkbox"/> |
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(End of Procedure)