Dear Administrator Nelson,

Since its launch aboard the Space Shuttle Columbia in 1999, the Chandra X-ray telescope — the most powerful ever built — has epitomized decades of U.S. leadership and dominance in high energy astrophysics, a Nobel-prize winning discipline. Chandra has transformed our understanding of the universe, delivering groundbreaking discoveries and complementing the capabilities of the James Webb Space Telescope (JWST). We are therefore concerned about, and opposed to, NASA’s proposed budget cuts to the Chandra X-ray Observatory mission.

The President’s Budget Request for Fiscal Year 2025 proposes severe reductions to Chandra’s operating budget. If implemented, these cuts would result in a significantly reduced FY25 science mission and initiate a closeout process in FY26. The justification for these cuts cites rising mission costs and inefficiencies. But Chandra’s operational efficiency remains near optimal, its costs stable, and its scientific returns per taxpayer dollar exceptionally high. The mission is well-positioned to continue yielding significant discoveries well beyond 2030.

In NASA’s 2022 Senior Review, Chandra was ranked “Tier 1,” the agency’s highest peer review rating. This assessment highlighted Chandra’s and the Hubble Space Telescope’s profound impact on astronomy, their prolific generation of frequently cited publications, and their role in inspiring future generations of astronomers. In the two years since this top ranking, Chandra has enabled scientists to observe a black hole consuming a star; map one of the largest explosions in the universe; and enhance the JWST’s capacity to identify the most distant supermassive black hole—a breakthrough that Bloomberg recognized as one of 2023’s top scientific achievements.¹

As the last remaining flagships of NASA’s original fleet of “Great Observatories” satellites, Chandra and Hubble have safeguarded U.S. leadership in cosmic exploration for decades. Chandra’s enduring functionality after 25 years in space, without the need for servicing, and its unparalleled ability to synergize with other telescopes, underscore American ingenuity and a capability we must not prematurely relinquish.

The Chandra Operations Control Center in Burlington, Massachusetts, which employs many U.S. military veterans, works alongside the Smithsonian Astrophysical Observatory, MIT, and the Marshall Space Flight Center, fostering a core national expertise in X-ray astrophysics. Premature termination of the Chandra mission would jeopardize this critical workforce, potentially driving talent to other countries. Chandra should serve as a bridge to a promising future in high energy astrophysics at NASA, including the development of its eventual flagship-scale successor, as recommended by the 2020 Decadal Survey in Astronomy and Astrophysics.

We strongly urge NASA to maintain full FY25 funding for the Chandra mission at the $68.7 million level, as outlined in NASA’s FY24 budget request, and to halt plans for significant reductions in FY25 until Congress determines Chandra’s appropriations. The proposed budget cuts would cause damage to U.S. leadership in high energy astrophysics and prematurely end the mission of a national treasure whose most significant discoveries may still be ahead.

Thank you for your continued leadership of NASA. We look forward to continuing to work with you on this issue.

Sincerely,

\[Signature\]
Seth Moulton
Member of Congress

\[Signature\]
Elizabeth Warren
United States Senator

\[Signature\]
Edward J. Markey
United States Senator
Sheldon Whitehouse
United States Senator

James P. McGovern
Member of Congress

Lori Trahan
Member of Congress

Jake Auchincloss
Member of Congress

Stephen F. Lynch
Member of Congress

Suzan K. DelBene
Member of Congress