Contract, Grant, and Procurement Records, 1987-1996

by Smithsonian Institution Archives
# Table of Contents

Collection Overview .................................................................................................. 1
Administrative Information ....................................................................................... 1
Descriptive Entry ....................................................................................................... 1
Names and Subject Terms ......................................................................................... 1
Container Listing ..................................................................................................... 3
Collection Overview

Repository: Smithsonian Institution Archives, Washington, D.C., osiaref@si.edu

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Administrative Information

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Restricted for 15 years, until Jan-01-2012; Transferring office; Contact reference staff for details.

Descriptive Entry

These records consist of proposals, grants, and contracts for scholarly studies conducted by the Smithsonian Astrophysical Observatory (SAO) for the National Aeronautics and Space Administration (NASA) and other Federal agencies. Included are correspondence, grant proposals and supplements, contracts and modifications, progress reports, and requests for foreign travel.

Names and Subject Terms

This collection is indexed in the online catalog of the Smithsonian Institution under the following terms:

Subjects:
Research grants

Types of Materials:
Manuscripts
Names:
United States. National Aeronautics and Space Administration
Container Listing

Box 1

NAG1-876 - Atmospheric Investigation Related to Aerothermodymic Research in the 90-BO KM Region

NASA/Langley - L29036C - Aluminize a 56 Inch Diameter Mirror

NAG2-374 - Observations of Young Low-Mass Stars in Dense Cores

NAG2-710 - A Team Member Investigation for the Targeted Search for Extraterrestrial Intelligence

NAG2-816 - 3-30 Micron Spectral Calibration Standards and Their Applications to Improved Stellar...

NAS2-12953 - U.S. Gateway to Simbad Astronomical Data Base

NAS2-12557 - Experiment Implementation of the Infrared Array Camera for Space Infrared Telescope Facility (SIRTF) (2 folders)

Box 2

NAS2-12557 - Experiment Implementation of the Infrared Array Camera for Space Infrared Telescope Facility (SIRTF)

NAG5-87 - Combined Ultraviolet Studies of Astronomical Sources (4 folders)

Box 3

NAG5-87 - Combined Ultraviolet Studies of Astronomical Sources (2 folders)

PO S-19750-E - Evaluation of the Submillimeter Wave Astronomy Satellite (SWAS) Acousto-Optical Spectrometer Flight Readiness

PO S-20120-E - Support the Lageos 2 Joint Working Group

PO S-60623-E - Eclipse Experiment on Mauna Kea Mountain

PO S-73878-E - Provide CO-I Support for the Waves in Space Plasmas/High Frequency

PO S92825-D - Ultraviolet Coronagraph Spectrometer for SOHO

PO S92826-D - Ultraviolet Coronagraph Spectrometer for SOHO

PO S92827-D - Ultraviolet Coronagraph Spectrometer for SOHO

PO S92828-D - Ultraviolet Coronagraph Spectrometer for SOHO

PO S92829-D - Ultraviolet Coronagraph Spectrometer for SOHO

PO S92830-D - Ultraviolet Coronagraph Spectrometer for SOHO
NAG5-605 - Development of High Resolution Imaging Detectors for X-Ray Astronomy

NAG5-824 - Analyzing Space Telescope High Resolution Spectrograph Observations

NAG5-1179 - Far-Infrared Emission from the Largest Molecular Complexes in Fourth Galacti

NAG5-1180 - Spatial Structure of Supernova Remnants

NAG5-1200 - Cluster Evolution

NAG5-1201 - The Einstein All-Sky Slew Survey

NAG5-1202 - The X-Ray Spectra of Normal Galaxies and their Emission Mechanisms

Box 4

NAG5-1203 - Star Formation in Nearby Molecular Clouds

NAG5-1204 - Mapping the Great Attractor Region in X-Rays and Diffuse X-Ray Emission a Possible Galactic

NAG5-1205 - The Onset of Galactic Winds in Early-Type Galaxies

NAG5-1270 - A Co-Survey of Selected Regions at High Galactic Latitudes

NAG5-1340 - Investigation of the Structure of the Electromagnetic Field and Related Phenomena of Satellites

NAG5-1364 - Interactive Deconvolution of X-Ray and Optical SNR Images

NAG5-1365 - Wind Interaction in Planetary Nebulae

NAG5-1381 - Very High Energy Gamma Ray Extension of GRO Observation

NAG5-1388 - UV Spectra of Magnetically Disturbed Accretion Discs

NAG5-1428 - ROSAT All-Sky Survey Data on the Einstein EMSS Sample

NAG5-1536 - Investigation Relative to Roentgen Satellite (ROSAT)

NAG5-1724 - Various ROSAT-Related Studies

NAG5-1745 - Simultaneous X-Ray/UV Observations of Atoll Low-Mass X-Ray Binaries

NAG5-1746 - Generation of Complete Source Samples from the SLEW Survey

NAG5-1771 - Weak Bump Quasars

NAG5-1772 - UV Spectra of H2 Emitting Shocks
NAG5-1773 - The Maunder-Minimum Phase of Solar-Type Stars in the Ultraviolet

NAG5-1849 - ROSAT Guest Observer Program

NAG5-1870 - Shocked Clouds in the Cygnus Loop

NAG5-1872 - X-Ray Quiet (but detected) Quasars

NAG5-1873 - The Soft X-Ray Excess and the Big Blue Bump in Quasar

NAG5-1925 - Participation in the Scientific Activities of the Waves Injection in Space Plasma (WISP) Project

Box 5

NAG5-1974 - X-Ray Emission from Compact Steep-Spectrum Quasars

NAG5-1975 - Coronal Physics of the Lower Main Sequences: Relationships among X-Rays, Radio Emissions and ...

NAG5-1980 - ROSAT Observations of the X-Ray Binary HD 154791

NAG5-1982 - The Inner Accretion Disk of Black Hole AO620-00

NAG5-1987 - Measurement of Element Abundance Variations in the CAS A and Tycho SNRS

NAG5-2048 - A Search for Substructure in High X-Ray Luminosity Clusters of Galaxies

NAG5-2050 - Deep Imaging in Taurus: Dark Cloud Cores with and without T Tauri Stars

NAS5-26613 - Preliminary Design, Breadboard and Test of Selected Lamar Subsystems (3 folders)

Box 6

NAS5-27792 - Physics of Magnetic Field Plasma Interaction in the Solar Atmosphere - Definition Phase

NAS5-29341 - Development and Implementation Joint Program for Laser Measurements

NAS5-29350 - Participation in the ROSAT Science Center

Box 7

NAS5-30388 - Definition Phase Report for UVCS for the SOHO Mission (5 folders)

NAG8-181 - Analysis of LAC Observations of Clusters of Galaxies and Supernova Remnants

NAG8-290 - 1-10 KEV Spectral Variability and the Complete X-Ray Spectra of Active Galactic
Box 8

NAG8-496 - Scientific Investigations with the Data Base Head-1 Scanning Modulator Collimator

NAG8-528 - Telescope Scientist (TS) on the Advanced X-Ray Astrophysics Facility

NAG8-670 - An Analysis of Thermal X-Ray Emission from Supernova Remnants

NAG8-675 - A SADAP Investigation of HEAO/EXOSAT Locations and Identifications of Bright, Hard X-Ray Sources

NAG8-689 - A SADAP Investigation: A Synoptic Study of Quasar Continua

NAG8-699 - Observations of Clusters of Galaxies and Supernova Remnants with Astro-C (Ginga)

NAG8-800 - Investigation of the Iron Enrichment of the Intracluster Medium and Galaxy Formation Efficient

NAG8-801 - Hard X-Ray Spectra of Three Normal Galaxies

NAG8-1052 - Survey of Manufacturing Capabilities for Small-Pixel UV Imagers for the Lunar Ultraviolet Experiment

NAS8-36160 - Investigation of Tethered Satellite System Dynamics

Box 9

NAS8-36160 - Investigation of Tethered Satellite System Dynamics (3 folders)

NAS8-36606 - Analytical Investigation of the Dynamics of Tethered Constellation in Earth Orbit

Box 10

NAS8-36606 - Analytical Investigation of the Dynamics of Tethered Constellation in Earth Orbit (3 folders)

Box 11

NAS8-36750 - High Resolution Camera for Advanced X-Ray Astrophysics Facility (AXAF) (4 folders)

Box 12

NAG9-28 - Mineralogic and Petrologic Studies of Meteorites and Lunar Samples (2 folders)

NAG9-29 - Mineralogic Investigations of Lunar Samples and Meteorites

NAG9-643 - Plasma Motor Generator (PMG) Experiment

Box 13
NAS8-30751 - Continuation of HEAO Mission B Experiment (5 folders)

Box 14

NAS8-30751 - Continuation of HEAO Mission B Experiment (5 folders)

Box 15

NAS8-30751 - Continuation of HEAO Mission B Experiment (4 folders)

NAGW-17 - A Balloon-Borne 102-CM Telescope for Far-Infrared Astronomy

Box 16

NAGW-112 - Solar and Stellar Coronal Plasmas (2 folders)

NAGW-397 - A Normal Incidence X-Ray Telescope (NIXT)

NAGW-511 - Theoretical Studies of Chromospheres and Winds in Cool Stars

NAGW-528 - Theoretical Study of the X-Ray Emission from Astrophysical Shock Waves

NAGW-553 - Study of the Application of Particle Theory to the Very Early Universe

Box 17

NAGW-722 - Viking Radio Science Data Analysis

NAGW-1055 - The Impact on VLBI on Astrophysics and Geophysics

NAGW-1155 - Investigation of Prairie Network Geminia Fireballs

NAGW-1268 - Theoretical Studies of Plasma and MHD Processes in the Solar Interior and Solar Outer Atmosphere

NAGW-1355 - Planetary System Detection by Precision Optical Interferometry in Space

NAGW-1391 - Phobos Lander Radio Science

NAGW-1438 - Venus Gravity Map Based on Pioneer Venus

NAGW-1439 - Support for the IAU Colloquium 115 on High Resolution X-Ray Spectroscopy Cosmic Plasmas

NAGW-1486 - Research on Spectroscopy, Opacity and Atmospheres


NAGW-1568 - Structure and Heating in Magnetic Flux Tubes

NAGW-1647 - Precision Optical Interferometry in Space
NAGW-1677 - Observational and Theoretical Investigations in Solar Seismology

NAGW-1714 - Astrophysics Master Directory System (AMDS)/Astrophysics Data System (ADS)

NAGW-1724 - Solar-System Tests of Gravitational Theories

NAGW-1788 - Absolute Absorption Cross Section of Ozone at 300K, 228K and 195K in the Wavelength Region

NAGW-2361 - Venus Gravity

NAGW-2365 - High Angular Observations of the RAQR Symbiotic System

NAGW-2528 - Research on Spectroscopy, Opacity and Atmospheres

Box 18

NAGW-2594 - Resonant Excitation of P- and G- Waves in Common Envelopes

NAGW-2613 - Integrated Investigations of Triton's Eruptive Plumes

NAGW-2814 - Resonance Lines of MgII as Diagnostics of the Upper Solar Chromosphere

NAGW-2869 - "Street Stars," A Planetarium Program for City Kids

NAGW-2919 - Envelopes of Pre-Main Sequence Stars

NAGW-3095 - Publication of Proceedings of the International Workshop on Luminous High-Latitude Stars

NAGW-3200 - Second Annual Conference on Astronomical Data Analysis Software and Systems

NAGR-09-015-212 - Astrometric Observations of Comets and Asteroids (2 folders)

NSG-7054 - Calculations of Theoretical Chromospheric Models and Predicted OSO-1 Spectra

Box 19

NSG-7054 - Calculations of Theoretical Chromospheric Models and Predicted OSO-1 Spectra

NSG-7082 - Study of Physics of Cometary Nuclei (2 folders)

Box 20

NSG-7421 - Molecular Processes in Comets (2 folders)

954938 (JPL) - Jet Propulsion Laboratory

Box 21
956024 (JPL) - Repairing Atomic Hydrogen Masers

957626 (JPL) - IRAS General Investigator Program: An Infrared Study of the Vela Supernova

957748 (JPL) - Neptune Operations and Uranus Data Analysis for Voyager 1 and 2

958019 (JPL) - A Study on the Feasibility of Development of a State-of-the-Art Hydrogen Maser

957754 (JPL) - Jet Propulsion Laboratory

957669 (JPL) - Jet Propulsion Laboratory

958021 (JPL) - A SADAP Investigation of IRAS Far-Infrared Maps and Spiral Galaxies Observed in X-Rays with the Einstein Satellite

958022 (JPL) - A SADAP Investigation of Star Formation in Nearby Molecular Clouds

958079 (JPL) - Jet Propulsion Laboratory

958255 (JPL) - Fabricate, Inspect and Test One VLG-11B Hydrogen Maser

958289 (JPL) - Infrared Astronomical Satellite General Investigator Program (IRAS)

Box 22

958593 (JPL) - Co-Investigation for the Magellan Mission Radar Investigation Group

958671 (JPL) - Development and Testing of a 3HE Refrigerator System

958765 (JPL) - Experiment Implementation of the Infrared Array Camera (IRAC) for the Space Infrared Telescope (2 folders)

Box 23

N00014-85-C-2158 - Research to Develop a Hydrogen Maser Cavity Frequency Stabilization System

N00014-87-C-2253 - Fabrication, Delivery and Installation of Two Hydrogen Masers

N00014-88-C-2129 - Next Generation Interferometer

N70092-89-M-0146 - Install Remote Monitor and Control in Maser P-19

N70092-89-M-0285 (NSS) - Provide One Test Set for VLG-11 Maser Frequency

N62285-89-M-0289 - Four Sets/Seven Bit Eproms for Maser

N62285-89-M-0390 - Repair Maser #19's Receiver at SAO and Modify
N62285-89-M-1125 - Repair Maser Receiver S/N 23
N62285-89-M-1198 - Repair Maser S/N P-19
N00014-89-C-2316 - Construction of Two Advanced Hydrogen Masers
N00014-89-C-2367 - Receiver for Smithsonian Astrophysical Observatory Hydrogen Masers
N00014-89-C-2432 - Planetary Ephemeris Program
N00014-89-J-3151 - Measurements with Torsion Balance Neutrino Detector
N00014-90-J-2028 - Planetary Ephemeris Program (PEP)
N00173-89-M-8517 (NRL) - Far Ultraviolet Imaging Spectrograph (FUVIS)
N70092-90-M-0156 - Repair P-19 Dissociator Oscillator
N00173-90-M-E195 - Ultraviolet Nebular Imaging Spectrograph
N62285-90-M-2821 - Refurbish One Set of VLG-11 Maser Pump Elements
N62285-90-M-2826 - Repair Maser #19 Receiver
N0600-91-C-1580 - Repair of Masers P22 and P23
N62285-91-M-2703 - Repair P-22 Maser at USNO and Refurbish One Set of Ion Pump Elements at SAO
N00014-91-P-2041 - Repair P-1 Maser
N62285-92-M-2173 - Repair P24 and P25 Maser Reactive SORBACS of UNSO
N62285-92-M-2275 - Spare Remote Monitoring and Control Board
N62285-92-M-2399 - Replace SORBAC Cartridges on S/N P-24 and P-25 Masers
N62285-92-M-2849 - Furnishing VLG Maser Spare Parts
N62285-93-X-0010 - Furnishing VLG-11 Maser Spare Parts
N62285-93-X-0044 - Repair S/N P-28 Maser
N00014-93-K-2036 - A Small Astrometric Interferometer in Space

Box 24

PO 10526 (STSI) - Search for Extraterrestrial Intelligence Microwave Observing Project
PO 11770 (STSI) - Second Annual Conference on Astronomical Data Analysis Software and Systems
PO 12912 (STSI) - Phase-Dependent Observations of Intermediate Polars
PO 15821 (STSI) - An Infrared for Super Planets as Comparisons to Nearby Young Stars

GO-2237.01-87A (STSI) - Observations of the Eclipsing Millisecond Pulsar

GO-2295.01-87A (STSI) - Black Holes in Elliptical Galaxies

GO2334.01-87A (STSI) - Ultraviolet Spectroscopy of the Black Hole A0620-00

GO-2350.02-87A (STSI) - WF/PC Imaging of Gravitational Lenses and Gravitational Lens Candidates

GO-2595.01-87A (STSI) - The Luminosity Function of the Trapezium Cluster - An Observational Test of Bi-Modal Star Form

GO-2693.01-87A (STSI) - A Search for Mass Loss from Red Giants in Globular Clusters

GO3240.01-91A (STSI) - Multi-wavelength Observations of Stellar Flares

GO3496.02-91A (STSI) - An Ultraviolet Atlas of Sirius: Constraining Model Stellar Atmospheres

AR-3503.01-91A (STSI) - Evolution of Galaxies in Intermediate Redshift Clusters: Imaging of CL0024+16

AR3686.01-91A (STSI) - Quasar Continuum Archival Studies

GO-3845.03-91A - Deciphering the UV Emission Lines in T Tauri Stars

GO-4271.02-92A - Testing the Star-Disk Connection: MGII and CIV Maps of Accretion Disks

GO-4674.01-92A - Molecular Emission in HH47

AR-5294.01-93A - Modeling of the Blue Bump Emission in High Redshift Quasars

8864153 (Aeritalia) - Analytical Investigation of Tethered Gravity Laboratory

AFOSR-88-0042 - Theoretical Investigations of Metastability and Energy Storage in Molecular Systems

AFOSR-91-0282 - Measurement of Atomic Interactions and Frequency Stability with a Cryogenic Hydrogen Maser

AFOSR-F49620-92-J-0311 - Implications of the Small Scale Structure in the Quiet Sun for the Solar Wind Flow

AT&T Letters 09 & 28 October 1991 - Antarctic Submillimeter Telescope and Remote Observatory (AST/RO) Project

Box 25
24398-UH (Bartol Research Institute) - Atmospheric Cherenkov Detectors at the South Pole

PC094339 (California Tech.) - Field Measurements of Contemporary Crustal Motions in the Death Valley Region Using GPS

P-0031-0265-S (CER Corp.) - Dynamic Noise Analysis of Gravity Gradiometer

P41618 (Dartmouth) - HK Measurements at the Mount Wilson Observatory

5-38761 (Dartmouth) - HK Measurements at the Mount Wilson Observatory of Solar Type Stars

930126F81 (EE & G) - Troubleshoot NRL Maser S/N P-12

Electric Power Research Institute (EPRI) - Global Warming: Ultra-High Precision Brightness Measurements and Observational Study

8206-33257-X (Johns Hopkins) - Phase B Definition Study for Lyman: The Far Ultraviolet Spectroscopic Explorer

PO 950321-2 (Lexitek) - UV Through X-Ray Sensitive Detector

SN70A3750R (Lockheed) - Transition Region and Coronal Explorer (TRACE)

PO 39315396/E (Max-Planck) - Provide and Install Dissociator Glassware

GH-R-204260 (MIT) - Repair Maser for Haystack Observatory

A71298 (MMC) - External Tank Gamma Ray Imaging Telescope Study

Grant Letter 05-04-1992 (Mt. Wilson) - Bright Star Research with the Atmospheric Compensation Experiment (ACE)

COBASE (NRC) - COBASE Program: Short Term Development Grant


40RANB1B135 (NIST) - Redesign and Construct Belleville Spring Set

43NANB417505 (NIST) - Development of a Service to Access Atomic and Molecular Data

AUI-236 (NRAO) - An IRAS of Nearby Molecular Clouds

G16249 (NRAO) - Repair of PC Maser

PO 2045 (Onsala Space Observatory) - Repair the P-4 Maser

45-0009-6247 (Raytheon) - Preliminary Stability Analysis of Large Tethered Antennas

MM-9-592 (SOGO Electronics) - Repair Maser S/N P-17 (Japan)
DE-FG02-86ER13634 (DOE) - Measurements of Ionization Balance Parameters in Atomic Ions

DE-AC02-82ER40063 - Research on the Fundamental Properties of Very High Energy Gamma Rays

Box 26

DE-AC02-82ER40063 - Research on the Fundamental Properties of Very High Energy Gamma Rays (2 folders)

INT-8314132 (NSF) - Submillimeter Astronomy with a Balloon-Borne Telescope

DMR-8700452 (NSF) - Development of Multilayer Coatings in the Ultraviolet and X-Ray Region

DPP-8716835 (NSF) - Uranium Series Dating and Other Studies on Antarctic Ice

INT-8802188 (NSF) - U.S. Brazil Cooperative Research: Red Shift Survey of the Southern Skies

PHY-8812592 (NSF) - Visitor Program for Institute for Theoretical Atomic and Molecular Physics

INT-8815947 (NSF) - Japanese Language Fellowship Study

INT-9008558 (NSF) - Japanese Language Award

EAR-9105502 (NSF) - High Accuracy Determination of the Vertical from GPS

ATM-9119514 (NSF) - Analysis and Interpretation of Coordinated Solar Eclipse Observations

INT-9203015 (NSF) - U.S.-Venezuela Cooperative Program: Mass Loss from Proto Stellar Accretion Disks

INT-9204415 (NSF) - Intense Flux Tubes on the Sun, U.S.-India Cooperative Research

INT-921409 (NSF) - Measurement and Interpretation of Post Glacial Rebound-Induced Crustal Deformation Rates

INT-9308299 (NSF) - Studies of the X-Ray Emission from Supernova Remnants and Clusters of Galaxies

SC-9296-2302 (Physical Sciences, Inc.) - Development of a Cell-Filling-Station and Prototype Cells for a Laser-Powered Rubidium Masers

SM-3-001 (SOGO) - Repair S/N P-17 Maser

SM-3-002 (SOGO) - Degauss S/N P-17 Maser at Nobeyama Radio Observatory, Japan

SM-3-003 (SOGO) - To Build One Hydrogen Maser Degausser
SM-3-004 (SOGO) - To Repair P-17 Maser at SAO

SM-3-EX-395 (SOGO) - Repair P-17 Receiver and P-17 Maser: Delivery to SAO from Logan Airport

MOA 11/03/1993 (Tufts) - Participation in Tufts University Image Restoration and Fundamental Limitation of HST WF/PC Image

Box 27

106449 (University of Arizona) - Definition Study of Optics for a Near-Infrared Camera and Multi-Object Spectrometer for the Hubble Space Telescope

120295 (University of Arizona) - Definition Study of Optics for a Near-Infrared Camera and Multi-Object Spectrometer for the Hubble Space Telescope

147168 (University of Arizona) - NICMOS

2C93RH00356 (UNLV) - Construction of a Spin Polarized Atomic Hydrogen Source

5-36827 (University of North Carolina) - Evolution of Substructure in Nearby Clusters of Galaxies

391Q681 (University of Wisconsin) - Observation of Very High Energy Gamma Ray Sources from the South Pole

809M233 (University of Wisconsin) - Wisconsin's Ultraviolet Photo Polarimeter Experiment (WUPPE)

1434-92-G-2170 (USGS) - Using High-Accuracy VLBI to Improve Estimates of the Vertical from GPS

P2261-6-90 - Program of Very High Energy Gamma Ray Astronomy at the South Pole

P2262-6-90 - Study of Astrophysical Magnetic Fields and Topics in Galaxy Formation

P2263-6-90 - Program to Complete a CCD Camera for the Southern Redshift Survey and Construct an Echelle Spectrograph

P2264-6-90 - Administration, Operation and Maintenance of the U.S. Gateway to SIMBAD Astronomical Data Base

P2265-6-90 - JPL

P2266-6-90 - Computing Atomic Data and Theoretical Spectra for Analyzing Space Telescope High Resolution Spectrograph Observations

P2267-7-90 - Definition Phase Extension of the Submillimeter Wave Astronomy Satellite (SWAS) Project

P2268-7-90 - Investigation of Space-Borne Electromagnetic Tethers as Practically-Usable Generators and Radiators of E.M. Waves at ULF and ELF Frequencies
P2269-7-90 - Continuation of Einstein (HEAO-2) Data Center Activities

P2270-7-90 - Wide Field Infrared Camera

P2271-7-90 - Development, Mission Operations and Data Analysis for SWAS (3 folders)

P2273-7-90 - Observational Study of Magnetohydrodynamic Heating of the Solar Atmosphere

P2274-7-90 - Observational Characteristics of the Small Scale Structure of the Quiet Sun and Their Implications for Coronal Heating Processes

P2275-7-90 - Continuation of Physics of Inner Heliosphere Mechanisms, Models and Observational Signatures

P2276-7-90 - Development of POINTS as a Planetary Instrument

Box 28

P2277-7-90 - Targeted Selection and Characterization: A Team Member Investigation Proposal for the Targeted Search Project of the Search for Extraterrestrial Intelligence Microwave Observing Project

P2278-7-90 - Participation in the Astrophysics Theory Program, Theoretical Models of Spiral and Starburst Galaxies

P2279-7-90 - Receiver/Digital Synthesizer Systems for SAO Masers

P2280-7-90 - Theoretical Investigation of Interstellar ad Extragalactic Chemistries

P2281-8-90 - Smithsonian's Support of the Space Telescope Science Institute's Proposal to NASA for the Search for Extraterrestrial Intelligence Microwave Observing Project

P2282-8-90 - Continuation of Research on Spectroscopy, Opacity, and Atmospheres

P2283-8-90 - Study of the Dynamics of Star Formation

P2284-8-90 - Structure and Heating in Magnetic Flux Tubes

P2285-8-90 - Smithsonian's Support of an Observational Program for Ultra-High Precision Brightness Measurements

P2286-8-90 - Long-Term Research on Spectroscopy, Opacity and Atmospheres

P2287-8-90 - Continuation of Astrophysics Master Directory System (AMDS)/Astrophysics Data System (ADS)

P2288-8-90 - Planetary Ephemeris Program (PEP)

P2289-8-90 - Continuation of Astrophysics Software and Research Aids
P2290-8-90 - Continuation of Fabricate, Inspect and Test One VLG-11B Hydrogen Maser

P2291-8-90 - Continuation of Advanced X-Ray Astrophysics Facility

P2292-8-90 - Supplement to Research Grant NSG-5175

P2293-9-90 - Advanced X-Ray Astrophysics Facility (AXAF)

P2294-9-90 - A Normal Incidence X-Ray Telescope Sounding Rocket Payload

P2295-9-90 - Dynamic Noise Analysis of Gravity Gradiometer

P2296-9-90 - Theoretical Studies of the Outer Envelopes of Young Stellar Objects

P2297-9-90 - Coronagraphic Observations and Analyses of the Ultraviolet Solar Corona

P2298-9-90 - HK Measurements of Solar Type Stars

P2299-9-90 - Development of High Throughput X-Ray Telescopes for X-Ray Imaging and Dispersive Spectroscopy with Applications to Rockets and the LAMAR/High Throughput Facility

P2300-9-90 - Continuation of Investigation of Tethered Satellite System Dynamics

P2301-9-90 - Radar Studies in the Solar System

P2302-10-90 - Study of Astrophysical Magnetic Fields and Topics in Galaxy Formation

P2303-10-90 - Molecular Processes in Comets

P2304-10-90 - Continuing Engineering Support to the NICMOS Project

P2305-10-90 - SAO Support to Jet Propulsion Laboratory (JPL) for Gravity Physics in the Solar Probe Mission

P2306-10-90 - Determination of Spectroscopic Properties of Atmospheric Molecules from High Resolution Vacuum Ultraviolet Cross Section and Wavelength Measurements

P2307-10-90 - High Angular Observation of the R aqr Symbiotic System

P2308-10-90 - Continuation of Multiwavelength Spectroscopy of X-Ray Binaries

P2309-10-90 - X-Ray Perspective on the Components and Structure of Galaxies

P2310-10-90 - Studies of the Evolutionary Luminosity Function of Active Galactic Nuclei as the Origin of the Diffuse X-Ray Background
P2311-10-90 - Cosmological Implications of Clusters of Galaxies

P2312-10-90 - Continuation of the Experiment Implementation of the Infrared Array Camera (IRAC) for the Space Infrared Telescope Facility (SIRTF)

P2313-10-90 - Continuation of Development of High Resolution Imaging Detectors and Optics for X-Ray Astronomy

P2314-10-90 - Accreting Stellar Systems

P2315-10-90 - Atmospheres of Cool Stars and Stellar Systems

P2316-10-90 - Continuation of the Study of Dynamics of Solar and Stellar Coronal Plasmas

Box 29

P2317-10-90 - SAO's Participation in a Project Entitled "Open Clusters as Laboratories: Angular Momentum Evolution of Young Stars"

P2318-10-90 - Global Studies of Molecular Clouds in the Galaxy, the Magellanic Clouds and M31

P2319-10-90 - Space Station Freedom: Large Area Modular Array of Reflectors (LAMAR)

P2320-10-90 - A Normal Incidence X-Ray Telescope Sounding Rocket Payload

P2321-10-90 - ROSAT Post-Launch Verification and Calibration

P2322-10-90 - VHE Gamma Ray Observations of the Galactic Plane

P2323-10-90 - Simultaneous X-Ray/UV Observations of Atoll Low-Mass X-Ray Binaries

P2324-10-90 - Analytical Investigation of Tethered Constellations in Earth Orbit (Phase II)

P2325-10-90 - Continuation of the Experiment Implementation of Infrared Array Camera (IRAC) for the Space Infrared Telescope Facility (SIRTF)

P2326-10-90 - An X-Ray Study of the Hot Phase of the Interstellar Medium of M31

P2327-10-90 - Dielectronic Recombination: A Unique Probe of Magnetic Fields in Stellar Transition Regions

P2328-10-90 - Relationships between Magnetic Flux and Atmospheric Heating in Cool Stars

P2329-10-90 - Development of a PAPA Detector for Ultraviolet Space Astronomy

P2330-10-90 - Generation of Complete Source Samples from the Slew Survey
P2331-10-90 - Measurement of Element Abundance Variations in the Cas A and Tycho SNRs
P2332-10-90 - Distant Cluster Evolution
P2333-10-90 - Physical Structure of Three Symbiotic Binaries
P2334-10-90 - Repair P-22 Maser at USNO and Refurbish One Set of Pump Elements at SAO
P2335-11-90 - Protostars and Disks
P2336-11-90 - Participation in the University of Colorado's Proposal to NASA ADP Program Entitled "Toward Understanding R Coronae Borealis Stars"
P2337-11-90 - Observations of the Rotational Transitions of OH from the Orion Molecular Cloud
P2338-11-90 - Participation in the University of Wisconsin's Ultraviolet Photo Polarimeter Experiment (WUPPE) the Spacelab Payload Scheduled to Fly on ASTRO
P2339-11-90 - Space Station Freedom: Large Area Modular Array of Reflectors (LAMAR)
P2340-11-90 - Venus Gravity
P2341-12-90 - UV Spectra of Nearly Synchronous Magnetic Cataclysmic Variables
P2342-12-90 - Calibration Stars for the Ultraviolet Coronograph Spectrometer
P2343-12-90 - Chromospheric Determinants in Red Giants
P2344-12-90 - International Ultraviolet Explorer Observing Program IUE Observations of the X-Ray Binary HD 154791
P2345-12-90 - Maunder-Minimum Phase of Solar-Type Stars in the Ultraviolet
P2346-12-90 - Coordinated IUE and Speckle Observations of R Aqr Central Region
P2347-12-90 - Role Pulsational Shock Waves in the R CrB Behavior of RY Sgr
P2348-12-90 - Contemporaneous Infrared to X-Ray Observations of ROSAT Quasars: Ultra-Violet
P2349-12-90 - Dielectronic Recombination: A Unique Probe of Stellar Magnetic Fields
P2350-12-90 - Long-Term Variability of Magnetic Structures on BD + 26 degree 730
P2351-12-90 - Multiband Observations of the Flares on AE Aquarii

P2352-12-90 - Periodic Variability in the Hybrid Supergiant: Alpha Aquarii

P2353-12-90 - UV Spectra of H2 Emitting Shocks

P2354-12-90 - Coordinated Study of Mira AB: Short-Term Variability and Outbursts

Box 30

P2355-12-90 - Continue Preliminary Design Definition of a Submillimeter Wave Astronomy Satellite (SWAS)

P2356-12-90 - Continuation of the Design and Analysis Effort on the Large Area Modular Array of Reflector (LAMAR) Selected as an Attached Payload Flight Aboard Space Station

P2357-1-91 - Continuation of Observational and Theoretical Studies of Low-Mass Star Formation

P2358-1-91 - Participation in Kuiper Airborne Observatory (KAO) Users' Subgroup Meetings

P2359-1-91 - Science Intuition Microworld Interactive Learning Environment (SIMILE)

P2360-1-91 - Redesign and Construct Belleville Spring Set for Hydrogen Maser

P2361-1-91 - Basic Remote Monitoring and Control System for S/N P-17 Maser

P2362-1-91 - Integrated Investigations of Triton's Eruptive Plumes

P2364-1-91 - Repair of S/N P-22 and P-23 Masers at SAO

P2365-1-91 - Polar Stratospheric Measurements with the FIRS-2 Spectrometer and the NASA DC-8 Platform

P2366-2-91 - Advanced X-Ray Astrophysics Facility (AXAF)

P2367-2-91 - Continuation for the Application of Two-Dimensional Imaging to Very High Energy Gamma Ray Astronomy

P2368-2-91 - Supplement to Research Grant NAGW-201

P2369-2-91 - Analysis and Management Support for the Laser Ranging Measurements in Europe and North America

P2370-2-91 - Continuation for the Application of Two-Dimensional Imaging to Very High Energy Gamma Ray Astronomy
P2371-2-91 - Dr. Kelly Chance's Participation in the European Space Agency's Global Ozone Monitoring Experiment (GOME) and the Scanning Imaging Absorption Spectrometer for Atmospheric Chartography (SCIAMACHY)

P2372-2-91 - Aluminize a 56 Inch Diameter Mirror

P2373-2-91 - Mass Reduction and Use of Gate Arrays in UVCS

P2374-3-91 - Study Storage Volume Coatings for Atomic Hydrogen Masers

P2375-3-91 - Continuation of Mineralogical Investigation of Lunar Samples and Meteorites

P2376-3-91 - Mineralogic and Petrologic Studies of Meteorites and Lunar Samples

P2377-3-91 - Spectrum of a New X-Ray-Detected Z = 2.2 QSO

P2378-3-91 - PSPC Observations of Eight New X-Ray-Detected Abell Clusters

P2379-3-91 - The BL Lac Phenomenon: X-Ray Observations of Transition Objects

P2380-3-91 - A Search for X-Ray Emission from Selected Radio Pulsars

P2381-3-91 - The Supernova Remnant CTA 1 and the Supernova Remnant KES 79

P2382-3-91 - High Resolution X-Ray Observations of the Central Region of M31

P2383-3-91 - The Supernova Remnant CTA 1 and the Supernova Remnant KES 79

P2384-3-91 - Determination of the X-Ray Spectrum of a Complete Sample of Flat-Spectrum Radio Sources

P2385-3-91 - A Study of the X-Ray Emission from Three Radio Pulsars

P2386-3-91 - Soft X-Ray Submission from Boundary Layers in Cataclysmic Variables

P2387-3-91 - The Onset of Winds in Early-Type Galaxies

P2388-3-91 - X-Ray Observations of a Complete Sample of Low Flux Radio AGNs

P2389-3-91 - X-Ray Images of Wide Separation Lensed Quasars

P2390-3-91 - Gravitating Masses of Poor Clusters of Galaxies

P2391-3-91 - Slew Survey Sources in the ROSAT Survey
P2392-3-91 - Continuation of Investigations of Dynamics of the Solid Earth (DOSE)

Box 31

P2393-3-91 - Study of the Physics of Cometary Nuclei

P2394-3-91 - Airborne Astronomy Program for Observations of Young Stars and Dense Cores

P2395-3-91 - Dust Polarization at Far-Infrared Wavelengths Galactic Center Clouds and Orion Gas Streamers

P2396-3-91 - A Normal Incidence X-Ray Telescope Sounding Rocket Payload

P2397-4-91 - Coronal Physics of the Lower Main Sequences: Relationships among X-Rays, Radio Emission and Magnetic Fields

P2398-4-91 - X-Ray Emission of the Sombrero Galaxy and its Binding Mass

P2399-4-91 - Two New Components of the X-Ray Emission of E and SO Galaxies

P2400-4-91 - The Environmental Impact of Intra-Cluster Medium on the Interstellar Medium in Early Type Galaxies

P2401-4-91 - Shocked Clouds in the Cygnus Loop

P402-4-91 - Variability in the Pleiades

P2403-4-91 - Mass Measurements in Early Type Galaxies: NGC 5044

P2404-4-91 - Hot Gas and Dark Halos in Isolated Early Type Galaxies