REQUEST FOR AUTHORITY TO DISPOSE OF RECORDS

(See Instructions on Reverse)

TO: **GENERAL SERVICES ADMINISTRATION**
NATIONAL ARCHIVES AND RECORDS SERVICE, WASHINGTON, DC 20408

LEAVE BLANK	
DATE RECEIVED	JOB NO.
OCT 29 1976	NC 1-370-77-2

NOTIFICATION TO AGENCY

In accordance with the provisions of 44 U.S.C. 3303a the disposal request, including amendments, is approved except for items that may be stamped "disposal not approved" or "withdrawn" in column 10.

WITHDRAWN

(Date) — *Archivist of the United States*

1. FROM (AGENCY OR ESTABLISHMENT)
Department of Commerce

2. MAJOR SUBDIVISION
National Oceanic and Atmospheric Administration

3. MINOR SUBDIVISION
EDS: NCC: Satellite Data Services Branch

4. NAME OF PERSON WITH WHOM TO CONFER
Peter Donald Jiron, Mgt. Analyst

5. TEL. EXT.
443-8595

6. CERTIFICATE OF AGENCY REPRESENTATIVE:

I hereby certify that I am authorized to act for this agency in matters pertaining to the disposal of the agency's records; that the records proposed for disposal in this Request of 1 page(s) are not now needed for the business of this agency or will not be needed after the retention periods specified.

☐ A Request for immediate disposal

☑ B Request for disposal after a specified period of time or request for permanent retention

October 27, 1976 — Ivy V. Parr — Departmental Records Mgt. Officer
Date — (Signature of Agency Representative) — (Title)

7. ITEM NO.	8. DESCRIPTION OF ITEM (With Inclusive Dates or Retention Periods)	9. SAMPLE OR JOB NO.	10. ACTION TAKEN
	The attached schedule describes records received and maintained by the Satellite Data Services Branch, NCC. While this Branch is part of NCC, Asheville, NC, it is physically located in the Suitland, Md. area. The records eligible for retirement will be sent to the Washington National Records Center. Items 1,D. and 3B., are records received by the Nat. Geophysical and Solar-Terrestrial Data Center, Boulder, CO. They are described in item 44 of NGSDC's proposed schedule. Canceled 10-17-77		WITHDRAWN

115-106

STANDARD FORM 115
Revised January 1973
Prescribed by General Services Administration
FPMR (41 CFR) 101-11.4

The operational environmental satellite observation system utilizes two types of spacecraft, polar-orbiting and geostationary.

The current polar-orbiting spacecraft are of the ITOS (Improved TIROS Operational Satellite) design, and when successfully launched are individually named NOAA-2, NOAA-3, etc. They fly at relatively low altitudes, about 1,500 kilometers above the earth, in near-polar sun-synchronous orbits. The earth's rotation brings every point on the globe within view of the satellite at least once during daytime and at least once during the night. The polar-orbiters thus provide the global observations needed for large-scale weather prediction and for worldwide monitoring of the ocean surface and other environmental phenomena.

The polar orbiting satellites are also well-positioned for providing data on environmental conditions in space, and provide valuable coverage of the high-latitude ionosphere and magnetosphere. Energetic charged particles from the solar wind have direct access to the magnetosphere along magnetic field lines connected to the polar caps. During magnetic activity, large amounts of energy, both in the form of energetic particles and electromagnetic radiation, are injected into the auroral zone. A typical polar orbiter passes over one of the polar caps and the adjacent auroral zone at least once every hour. The observations obtained from these satellites are needed for understanding of the mechanisms for introduction of solar energy into the geoenvironment and the concomitant effects upon man's activities.

Geostationary satellites fly at the geosynchronous altitude (about 36,000 kilometers) in orbits directly above the earth's equator. At this altitude, the orbital speed is synchronous with the rotation of the earth, hence a geostationary spacecraft appears to be fixed above a point on the equator. Geostationary satellites can provide nearly continuous observation of the portion of the globe within their view. They view a circular area on the earth, centered at the subpoint directly below the spacecraft, with the horizon at a radial distance of 81 degrees of latitude (approximately 9,000 km). Useful information about cloud patterns and the ocean surface can be obtained out to about 7,500 km from subpoint. In addition, geostationary satellites provide excellent platforms for observing environmental conditions in near-earth space. Since the geostationary orbit lies within the region dominated by the outer radiation belts, such satellites are ideal for monitoring space environmental factors which are dependent on solar activity and associated radiation belt variations.

The Geostationary Operational Environmental Satellite (GOES) system was inaugurated with the launch of NASA's prototype spacecraft SMS-1 (Synchronous Meteorological Satellite) in May 1974. Launch of SMS-B, November 1975, established the two-GOES observing system. Geostationary spacecraft in NASA's ATS (Applications Technology Satellite) system were used by NOAA in an operational test from 1969 to 1974.

ITEM NUMBER	DESCRIPTION OF RECORDS	DISPOSITION AUTHORITY	DISPOSITION INSTRUCTIONS
1.	ITOS Products. ITOS/NOAA satellites fly in a near polar orbit, with orbital period of 115 minutes, making 12 $\frac{1}{2}$ orbital passes each 24 hours. NOAA-2, NOAA-3 and subsequent spacecraft carry four sensors, Scanning Radiometer, Very High Resolution Radiometer, Vertical Temperature Profile Radiometer, and Solar Proton Monitor. A. Scanning Radiometer (SR). Two channel scanner which is the primary operational imager. The visible channel (SR-VIS) operates only on the daylight half of each orbit; the infrared channel (SR-IR) operates on both the day and the night halves. 1. Orbital swaths: a. 25x25 cm. negatives	Cancelled 10-17-74	Destroy when 6 years old. Cut-off at end of calendar year, hold until inactive, then transfer to the appropriate Federal Record Center.
	b. Above reduced to 35 mm. microfilm; one security positive and one working negative.		Permanent. Offer to the National Archives when inactive.
	2. Mapped Mosaics: Includes SR-VIS, SR-IR day, SR-IR night. a. Each mosaic is a 25x25 cm. negative.		Destroy records when 10 years old. Cut-off at end of calendar year, hold until inactive, then transfer to the appropriate Federal Rec Center.
	b. Above reduced to 35 mm. microfilm; one security positive and one working negative.		Permanent. Offer to the National Archives when inactive.

RECORDS DISPOSITION SCHEDULE

ITEM NUMBER	DESCRIPTION OF RECORDS	DISPOSITION AUTHORITY	DISPOSITION INSTRUCTIONS
1.cont.	3. Scientific Master Tapes Consisting of:	NRDS 20 item 32a	Permanent. Offer to the National Archives when inactive.
	a. Mapped Mosaics: Magnetic Tape consisting of one tape per day, 365 tapes per year.		
	b. Digitized radiance data on a 125 mesh-per-hemisphere containing mean IR temperature values converted by linear regression to estimates of total outgoing energy flex, twice daily. Also includes visible channel measurements converted to percent reflectance. Est. Quantity: 12 tapes per year.		
	c. Sea-Surface Temperatures on Magnetic Tape containing global sea-surface temperature observations for each day, and summary of orbital passes processed. Est. Quantity: 12 tapes per year.		
	4. Sea-Surface Temperatures: 25x25 cm. negatives displaying the latest available sea-surface temperature observation, and the age of the observation at each data point, for both Northern and Southern Hemisphere. Primary use of this product is internal to NESS for daily monitoring of sea-surface temperature processing. 365 negatives per year.		Destroy records when 6 years old. Cut-off at end of calendar year, hold until inactive, then transfer to the appropriate Federal Record Center.

ITEM NUMBER	DESCRIPTION OF RECORDS	DISPOSITION AUTHORITY	DISPOSITION INSTRUCTIONS
1. cont.	B. Very High Resolution Radiometer (VHRR). This scanner operates like the Scanning Radiometer, including visible and infrared channels, but with 1 km resolution in both channels compared to the Scanning Radiometer resolution of 4 km in the visible and 8 km in the infrared channel. Data are acquired through direct readout by three NOAA stations at Gilmore Creek, Alaska, at San Francisco, California, and at Wallops Station, Virginia. These data (V-DIR) are limited to the acquisition range of the station, and thus the image swaths cover only about 50 to 60 degrees along the orbital track. In addition, about 8 minutes (1/15th of a complete orbital track) of coverage in other parts of the world may be programmed for storage aboard the satellite on some but not all orbital passes each day. These data are designated VREC swaths.		
	1. V-DIR and VREC Swaths: 25x25 cm. negatives.		Destroy records when 6 years old. Cut-off at end of calendar year, hold until inactive, then transfer to the appropriate Federal Record Center.
	2. V-DIR and VREC Swaths on Magnetic tape. 12 tapes/day from each of 3 readout stations.		Erase after 90 days.
	C. Vertical Temperature Profile Radiometer (VTPR) measures radiation from the earth and its atmosphere in eight spectral regions corresponding to various layers of the atmosphere.		
	VTPR Soundings on Magnetic Tape containing three files: raw radiance, clear column radiances, and temperature soundings. 183 tapes per year.	NRDS 20 item 32a	Permanent. Offer to the National Archives when inactive.

ITEM NUMBER	DESCRIPTION OF RECORDS	DISPOSITION AUTHORITY	DISPOSITION INSTRUCTIONS
1. cont.	D. Solar Proton Monitor (SPM) consisting of two detector assemblies. An omnidirectional detector assembly measuring integral proton fluxes greater than 10,30, and 60 Mev. A solid-state detector telescope measures directional proton fluxes both in the zenith direction and perpendicular to the orbit. Record copy held at NGSDC, Boulder, Co.	NRDS 20 item 32a	Permanent. Offer to the National Archives when inactive.
	1. SPM data on Magnetic tape. 12 tapes per year.		
	2. SPM data on 35 mm. microfilm. 48 100' reels per year.		Permanent. Offer to the National Archives when inactive.
2.	ATS Products. The Applications Technology Satellites, ATS-1 and ATS-3 were the first geostationery satellites to carry cloud cameras. They are NASA Experimental satellites and were launched in December 1966 and November 1967. In 1969, NOAA assumed responsibility for the cloud cameras for use in a test operation. The camera on ATS-1 failed October 1972. The camera on ATS-3 was deactivated in 1974 after SMS-1 satellite reached ~~to~~ its nominal position but is available for reactivation in case of SMS-1 malfunction. Visible Pictures: 25x25 cm. negatives from May 1969 to December 1974 Total of 66,000. Pictures prior to those periods have been provided to NOAA by NASA on 33 m. (100 ft) reels of 12 1/2 cm. (5 in.) film		Destroy records when 10 years old. Cut-off at end of calendar year, hold until inactiae, then transfer to the appropriate Federal Record Center.
3.	GOES Products. The GOES operational system, consists of two spacecraft in equatorial, geosynchronous orbit. Each carries one imager, the Visible/Infared Spin Scan Radiometer (VISSR), and a Space Environmental		

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3. cont.	Monitor (SEM) system to provide data on environmental conditions in space. A. VISSR is basically a telescope with a precision latitude stepping mechanism. It scans on each spin of the spacecraft, and the latitude step motion between each spin permits scanning of the earth disc within view. It operates in two channels, one in the visible and one in the infared. 1. Infared pictures, 8km. resolution, full disc 25x25 cm. negatives. Quantity: 45 negatives per day per satellite, 32,850 negatives per year. 2. Visible pictures, full disc, 4 km. resolution 25x25 cm. negatives. Quantity: 32 negatives per day; 11,680 per year. 3. Visible pictures, 2 km. resolution (Winds Section) 25x25 cm. negatives in a quarter disc, variable location. Quantity: Up to 32 negatives per day; 11,700 per year. 4. Visible pictures, 1 km. and 2 km. resolution from Satellite Field Services Stations Sectors, 25x25 cm. negatives in a format of sectors of variable size, resolution and location. Quantity: Potential for 280 negatives per day; 102,200 negatives per year.		Destroy records when 6 years old. Cut-off at end of calendar year, hold until inactive, then transfer to the appropriate Federal Record Center. Destroy records when 6 years old. Cut-off at end of calendar year, hold until inactive, then transfer to the appropriate Federal Record Center. Destroy records when 5 years old. Cut-off at end of calendar year, hold 1 year inactive, then transfer to the appropriate Federal Record Center. Destroy records when 5 years old. Cut-off at end of calendar year, hold 1 year inactive, then transfer to the appropriate Federal Record Center.

ITEM NUMBER	DESCRIPTION OF RECORDS	DISPOSITION AUTHORITY	DISPOSITION INSTRUCTIONS
3. cont.	5. Visible pictures, 1 km. and 2 km. resolution for SFSS's designated sectors, 25x25 cm. paper prints. Includes operational movie strips produced for SFSS's.	370-75-2	Transfer to University Regional Depositories after termination of purpose or project at SFSS.
	6. Operational movie strips (Winds Section) on 16mm. film positives in 60 cm. strips. Quantity: Potential for 4 per day, 1450 per year.		Destroy records when 5 years old. Cut-off at end of calendar year, hold 1 year inactive, then transfer to the appropriate Federal Record Center.
	7. Wind Vectors on Magnetic Tape derived by computer over ocean areas at 2 1/2 degrees latitude- longitude intervals, using low-level cloud tracers in two pictures one to two hours apart. Collection begins with the vectors for July 29, 1974. Contains earth located wind vectors over ocean areas with estimated temperature and pressure level of cloud tracers. Quantity: about 570 vectors daily, per satellite; one tape per month.	NRDS 20 item 32a	Permanent. Offer to the National Archives when inactive.
	B. Space Environment Monitor (SEM) provides data on environmental conditions in space with special emphasis on environmental factors dependent on solar activity. The sensor package contains three monitors to measure energetic particles, magnetic fields, and solar X-rays. Record copies held by NGSDC, Boulder, Co.	NRDS 20 item 32a	Permanent. Offer to the National Archives when inactive.
	1. Energetic Particle Sensor (EPS) data recorded on magnetic tape, and microfilm.		
	2. Magnetometer data utilizing the satellite spin to measure the magnitude and direction of the ambient magnetic field recorded on magnetic tape and microfilmed.		

ITEM NUMBER	DESCRIPTION OF RECORDS	DISPOSITION AUTHORITY	DISPOSITION INSTRUCTIONS
3. cont.	a. Magnetic Tapes b. Microfilm 3. Solar X-Ray Sensor data recorded on magnetic tape and microfilmed obtained by pointing the sensor directly at the sun once during every spin of the satellite thus allowing continual monitoring of solar X-Ray output. a. Magnetic Tape b. Microfilm		
4.	LANDSAT Program Products, from the NASA earth resources satellites, LANDSAT 1,2. Data are archived for the DOC by EDS. The satellites carry two sensor systems: a four channel Multi-Spectral Scanner (MSS) and a Return Beam Vidicon (RBV) system incorporating three cameras. Both sensors view the earth in swaths only 200 km. wide so that a particular locality on earth may be viewed only at intervals of 18 days. A. Multi-Spectral Scanner (MSS). The MSS is a line scanning device which uses an oscillating mirror to continuously scan perpendicular to the spacecraft velocity. At each mirror sweep, six adjacent lines are scanned simultaneously in each of four spectral bands; two in the visible green (0.5 to 0.6 and 0.6 to 0.7 micrometers) and two in the near infrared (0.7 to 0.8 and 0.8 to 1.1 micrometers). Resolution of 100 meters is obtained in the four channels. Image swaths are obtained routinely		

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4.cont.	on all passes over North America and adjacent coastal waters. Coverage of selected areas elsewhere is obtained as required for research studies and other projects.		
	Image frames: 70 mm. negative film covering 200x200 km. on the earth are constructed from the continuous strip. Quantity varies from 10 to 50 image frames per orbit from each channel.		Destroy records when 6 years old. Cut-off at end of calendar year, hold until inactive, then transfer to the appropriate Federal Record Center.
	B. Return Beam Vidicon (RBV) Camera System. This system comprises thru independent cameras sensing in the spectral bands: green, red, and near infrared with resolution of 100 m. Images from the three cameras are coincident.		
	Image frames: 70mm. negative film covering 200x200 km. on the earth. Quantity: Approximately 1500 images for 13 days of available data. Photographic images from MSS and RBV are provided by NASA to NOAA on 70mm film. Browse files containing available imagery from one MSS channel and one RBV camera are available, on 16 mm microfilm, for study at numerous locations in the United States. The same imagery in digitized form is archived by NASA on standard half inch magnetic tape in 7 track format.		Permanent. Offer to National Archives when inactive.
5.	SKYLAB Program Products. The SKYLAB program established and maintained an orbiting manned workshop in a near earth orbit at an altitude of approximately 433 km from May 1973 to January 1974. It consisted of four seperate missions: SKYLAB I - intital launch and orbiting of the laboratory; SKYLAB II - May thru June 1973; SKYLAB III - July through September 1973,		

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5 cont.	and SKYLAB IV - November 1973 through January 1974. SKYLAB carried six remote sensing systems: Multi-spectral Photographic Camera (S190A); Earth Terrain Camera (S190B); Infrared Spectrometer (S191); Multi-Spectral Scanner (S192); Microwave Radiometer/ Scatterometer and Altimeter (S193) and an L-Band Radiometer (S194). Data from only the S190A, S190B, and S192 are archived by NOAA. A. The MPC is composed of 6 high-precision lenses, sensing in spectral bands ranging from 0.5 to to 0.9 micrometers, with matched distortion and focal length. Four of the channels recorded in black and white and two recorded in color. The spectral regions were selected to separate the visible and photographic infrared spectrum into bands most useful for multispectral analysis. Coverage was obtained of selected areas, as determined to be of particular interest to earth resources investigations, with resolution on the order of 50 meters. Image Frames: 70mm positive film covering approximately 165 x 165 km on the earth. Quantity: 70 mm film reels holding 400 frames each, approximately 110 reels. B. Earth Terrain Camera (ETC) - S190B. The object of the ETC was to obtain selective coverage of high-resolution imagery in support of other sensors and user-oriented studies. Resolution of ETC imagery is on the order of 25 meters, sensing in spectral bands ranging from 0.4 to 8.8 micrometers.		Permanent. Offer to the National Archives when inactive.

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5. cont.	Image frames: 127 mm positive film covering approximately 110 x 110 km on the earth. Quantity: 127 mm film reels holding 450 frames each; approximately 15 reels.		Permanent. Offer to the National Archives when inactive.
	C. Multispectral Scanner (MSS) S192. The MSS was designed to gather quantitative imagery data with high spatial resolution from radiation reflected and emitted over selected ground sites in the continental United States. The instrument optically scanned successive contiguous lines across its flight path recording in 13 discrete spectral bands ranging approximately from 0.4 to 12.5 micrometers.		
	Image swaths: 70 mm negative film of continuous image swaths 68 km in width. Quantity: 70 mm film reels each holding a variable number of swaths depending on the number and size of ground sites available during each orbital pass; approximatly 100 reels.		Permanent. Offer to the National Archives when inactive.
6.	GARP Atlantic Tropical Experiment (GATE) data. Unique data sets from ATS-3, ITOS, and SMS-1 in support of the international project. Includes all GOES products from May 1974 to September 1974. These data sets contain 25x25 cm. imagery, 35mm. microfilm and 8000 magnetic tapes.	NRDS 19, item 12a and item 12b	Permanent. Offer to the National Archives when inactive.
7.	Assorted Russian Spacecraft Products. Nephanalyzes and satellite acquired photographs on 35mm. microfilm. Limited collection with reception discontinued in March 1975.		Permanent. Offer to the National Archives when inactive.

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8.	Original TIROS (Television and Infared Observation Satellite) series of imagery. As the first meteorological satellites to provide photographs of the Earth and clouds these images are historically and experimentally valuable. TIROS 1 was launched April 1960 and the program discontinued with TIROS 10 April 1966. Collection consists of 7,000,000 images of 35mm. microfilm.		Permanent. Offer to the National Archives when inactive.
9.	ESSA Satellites, 1-9 (also known as TOS, or TIROS Operational Satellites) lauched between February 1966 and February 1969. They ended operations in November 1973. Collection contains limited amount of digital and Vidicon data.		Permanent. Offer to the National Archives when inactive.
10.	NASA Experimental Research Satellites (NIMBUS 1-5). The five NIMBUS research spacecraft orbited to date have been used for development, test and application of a variety of new and advanced meteorological and geophysical remote-sensing instruments and associated data-transmission and processing techniques. A wealth of new data applicable to meteorology, oceanography, geology and hydrology have been transmitted to Earth from the NIMBUS spacecraft. On 70 mm negatives.		
	a. Records that possess historical political or technological significance.		Permanent. Offer to the National Archives when inactive.
	b. Other records.		Destroy records when 6 years old. Cut-off at end of calendar year, hold until inactive, then transfer to the appropriate Federal Record Center.