



**EXPERIENCED  
ENVIRONMENTALISTS**



***GE Astro Space***



# EXPERIENCED ENVIRONMENTALISTS

79  
SATELLITES  
LAUNCHED

1985 - 91

9

1980 - 84

8

1975 - 79

15

1970 - 74

18

1965 - 69

20

1960 - 64

9



GE Astro Space is the definitive leader in the design and production of environmental satellites. Since 1960, 79 of our satellites have been launched to monitor and investigate weather patterns, earth resources, or atmospheric properties. The demonstrated ability of these satellites to meet or exceed their performance designs has enabled scientists from diverse disciplines to come to understand the Earth from a new perspective: as a system of interrelated natural and man-made forces.

Our strength in this most vital space research area is founded on an instrument-accommodative satellite design philosophy and an in-depth understanding of the involved science. We work in partnership with our customers, instrument contractors, and instrument researchers to develop an integrated environmental satellite system that does not compromise performance due to hardware, software, or in-production platform limitations.

Whether spin or three-axis stabilization; single or multi-instrument suite, GE Astro Space has the satellite design heritage, the instrument integration experience, and the on-orbit experience to meet your total mission requirements with the highest degree of reliability.

*Since 1960, not a year has passed without the launch of a GE Astro Space environmental satellite.*

For over 30 years, environmental satellites built by GE Astro Space have flown on a continuous investigation of p



## Atmosphere Explorer

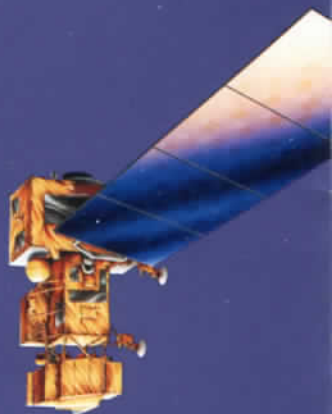
This 3-satellite NASA program carried 42 instruments for investigation of the processes in the lower atmosphere and ionosphere.

## Nimbus

The vintage NASA environmental satellite series served as a test-bed for new and remote sensing instruments. The 7 GE-built satellites have carried out 48 experiments.

## Landsat

The Landsat series of satellites initiated the observation of Earth's resources from space in 1972. Of the 5 GE-built satellites launched, 2 continue to operate well beyond their design life.



## DMSP

A U.S. Air Force program designed to meet unique military requirements for worldwide weather information. GE has delivered 29 DMSP satellites for launch since 1966.



## TIROS

A NASA/NOAA program to provide daily global observations of weather patterns and environmental conditions for numerical weather analysis and prediction. GE has built 33 TIROS satellites since 1960.



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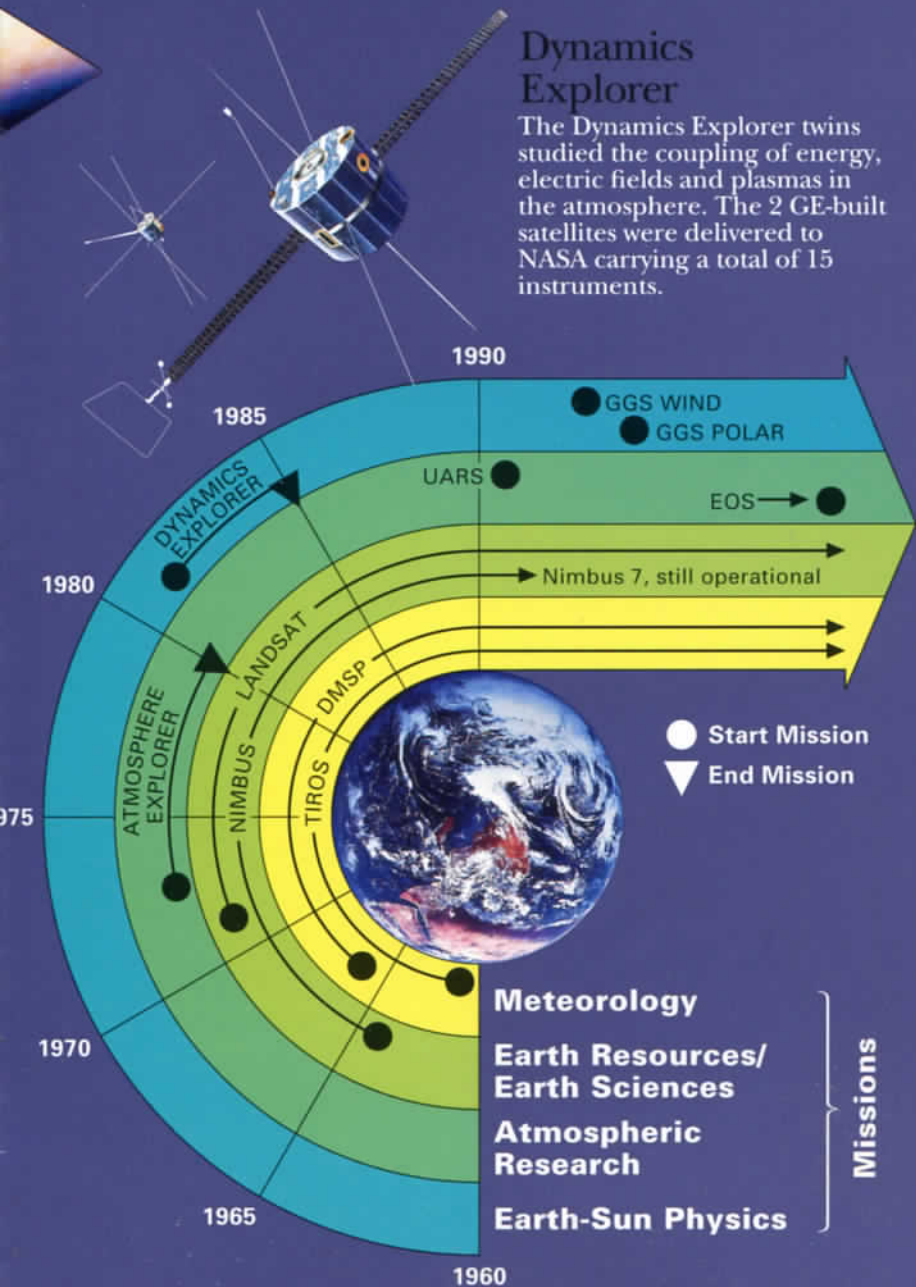


### Upper Atmosphere Research Satellite (UARS)

The GE-built UARS is on a pioneering mission to investigate the Earth's stratosphere. The NASA observatory is laying the foundation for the future Earth Observing System in its development of integrated observational, theoretical, and data management techniques.

### Dynamics Explorer

The Dynamics Explorer twins studied the coupling of energy, electric fields and plasmas in the atmosphere. The 2 GE-built satellites were delivered to NASA carrying a total of 15 instruments.



## A string of environmental satellite firsts.

### TIROS 1

□ First meteorological satellite

### TIROS 9

□ First complete view of global cloud cover

### NOAA 8

□ First space-based search and rescue system

### Nimbus 3

□ First global vertical temperature profile of the atmosphere

### Nimbus 4

□ First global ozone profiles

### Nimbus 6

□ First atmospheric limb-scanning instrument

□ First global Earth radiation budget measurement

### Nimbus 7

□ First global ocean color measurement

□ First daily mapping of ozone concentration

### Landsat 4

□ First high-resolution multiwavelength image of the Earth

### Dynamics Explorer

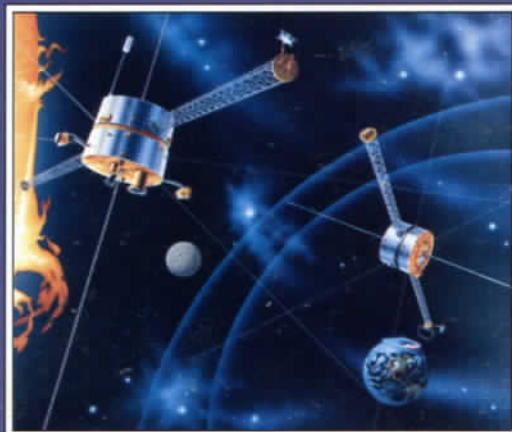
□ First image of complete auroral oval

### UARS

□ First global change observatory

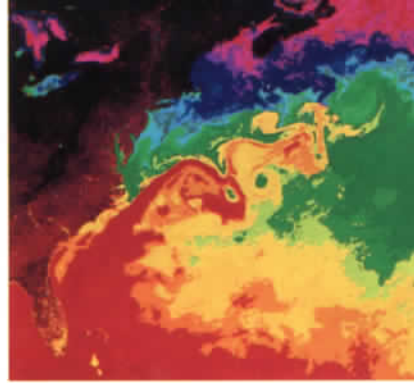
## The Earth mission continues.

Concurrent with the construction of the next-generation Landsat, TIROS and DMSP is GE's development of advanced environmental systems, such as the Global Geospace Science (GGS) WIND and POLAR observatories and the first Earth Observing System (EOS) platform. GE satellites will ensure observation continuity throughout the 1990s and will lead the world into the next century of Earth system study from space.

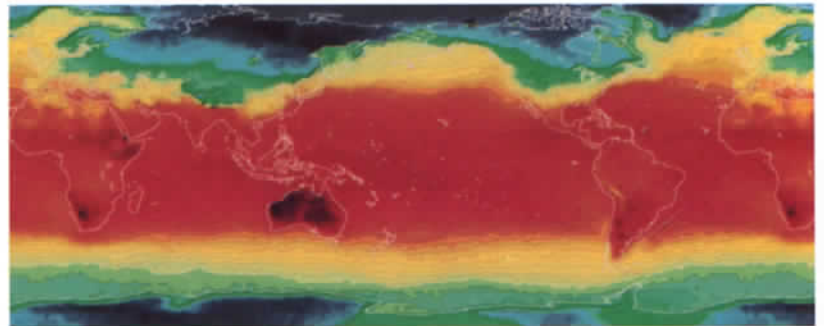


WIND (left) and POLAR are part of the International Solar-Terrestrial Physics program.

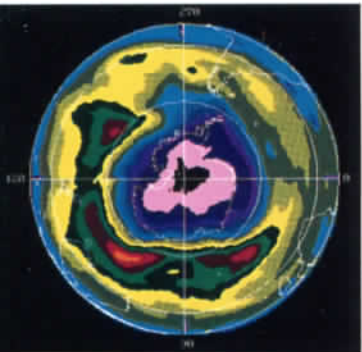
# EXPERIENCED ENVIRONMENTALISTS



From TIROS... Sea surface temperature

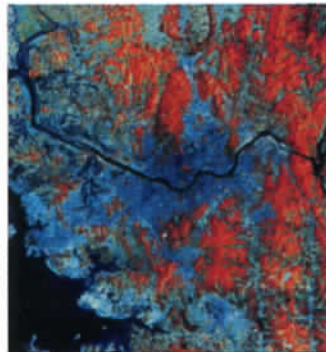


From TIROS... Global surface temperature

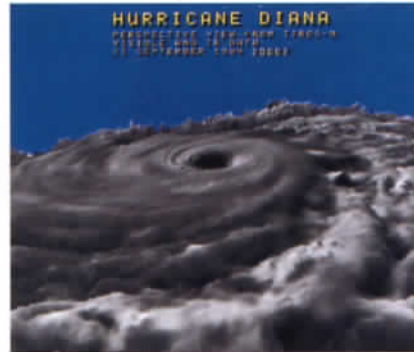


From Nimbus... Daily ozone map

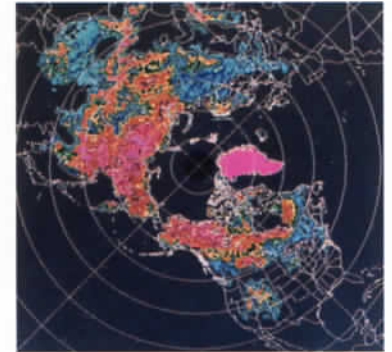
Photo: EOSAT



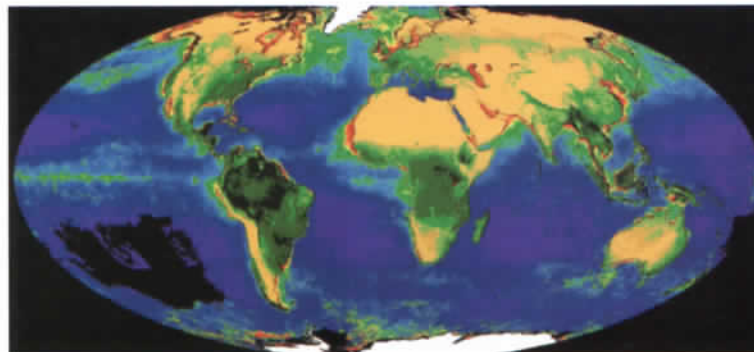
From Landsat... Land use



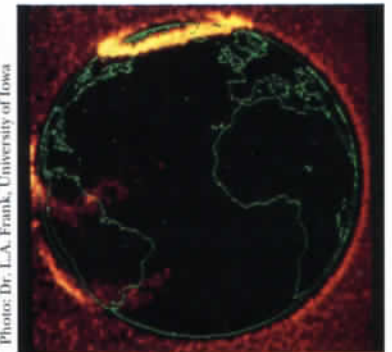
From TIROS... Weather monitoring



From Nimbus... Snow depth

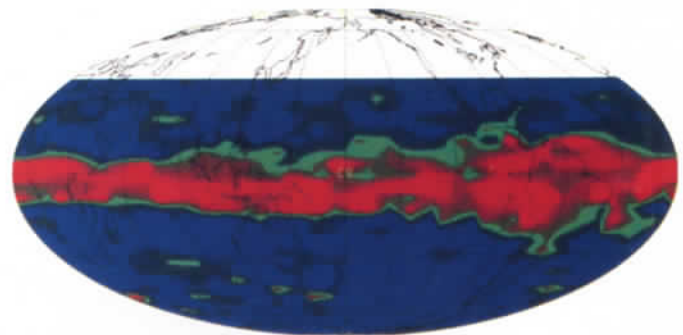


From TIROS and Nimbus... Ocean productivity and land vegetation



From Dynamics Explorer... Aurora borealis

Photo: Dr. L.A. Frank, University of Iowa



From UARS... Sulfur dioxide concentration from Mt. Pinatubo eruption



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