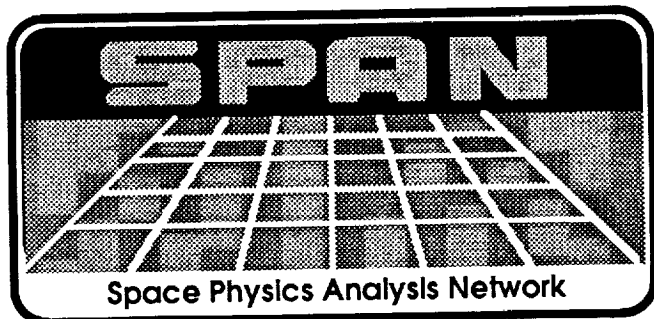


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NSSDC/WDC-A-R&S 89-14



# Space Physics Analysis Network Node Directory (The Yellow Pages)

## Fourth Edition

*David J. Peters*  
*Patricia L. Sisson*  
*James L. Green*  
*Valerie L. Thomas*

August 1989



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**SPACE PHYSICS ANALYSIS NETWORK NODE DIRECTORY  
(THE YELLOW PAGES)**

**Fourth Edition**

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**August 1989**

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## Table of Contents

<b>I. Introduction</b> .....	1
<b>II. Internetworking: The DECnet Internet</b> .....	3
<b>III. SPAN_NIC Online Data Base System</b> .....	9
A. SPAN_NIC Online Data Base System: Output by Node Name .....	9
B. SPAN_NIC Online Data Base System: Output by Country/Institution..	23
<b>IV. Remote Site Manager List</b> .....	37
A. Remote Site Manager Contact List.....	37
B. Goddard Space Flight Center SPAN Routing Center .....	40
C. Marshall Space Flight Center SPAN Routing Center .....	46
D. Jet Propulsion Laboratory SPAN Routing Center .....	51
E. Johnson Space Center SPAN Routing Center.....	56
F. European-SPAN (E-SPAN) Routing Center.....	58
<b>V. Technical References for the Space Physics Analysis Network</b> .....	73
<b>VI. Acknowledgments</b> .....	79
<b>Appendix. Accessing SPAN from Non-SPAN Nodes</b> (dated August 1989).....	81

### List of Figures

Figure 1. SPAN Backbone Configuration .....	4
Figure 2. NSI/SPAN North American Sites .....	5
Figure 3. European-SPAN (E-SPAN) Backbone Configuration.....	6

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

2. The second part of the document outlines the various methods and tools used to collect and analyze data. It highlights the need for a systematic approach to data collection and the importance of using reliable sources of information.

3. The third part of the document focuses on the analysis and interpretation of the collected data. It discusses the various statistical techniques and models used to identify trends and patterns in the data, and how these can be used to inform decision-making.

4. The fourth part of the document discusses the importance of communication and reporting in the data analysis process. It emphasizes that the results of the analysis must be clearly and effectively communicated to the relevant stakeholders, and that this is essential for ensuring that the organization can act on the findings.

5. The final part of the document provides a summary of the key findings and conclusions of the analysis. It reiterates the importance of maintaining accurate records and using a systematic approach to data collection and analysis, and emphasizes the need for clear communication and reporting of the results.

## I. Introduction

The Space Physics Analysis Network, or SPAN, has grown exponentially over the course of the last few years. In this time period, the number of tail circuits to SPAN remote facilities has grown considerably, and the number of registered SPAN host computers is now well over 2500. SPAN is a component of the global DECnet Internet, which currently counts somewhere over 17,000 host computers.

The growth of SPAN from its implementation in 1981 to the present has created a need for users to acquire timely information about the network. In the past, information about the network was spread by word of mouth or through relevant publications. Since that time, it has become clear that the need for information on SPAN could only be satisfied by developing a central source for dissemination of such knowledge. The SPAN Network Information Center (SPAN\_NIC), managed by the National Space Science Data Center (NSSDC), is an online facility which was developed to meet this need for SPAN-wide information. The remote node descriptive information in this document is not currently contained in the SPAN\_NIC data base but will be incorporated in the near future. Access is also available to non-DECnet users over a variety of networks such as Telenet, the NASA Packet Switched System (NPSS), and the TCP/IP Internet (see the Appendix, *Accessing SPAN from Non-SPAN Nodes*).

The purpose of the *Space Physics Analysis Network Node Directory* is to serve as the "Yellow Pages" for SPAN node information. This document also provides key information concerning other computer networks connected to SPAN, nodes associated with each SPAN routing center, science discipline nodes, contacts for primary SPAN nodes, and SPAN reference information.

Section II, which covers DECnet Internetworking, discusses SPAN connections with other wide-area DECnet networks (many with thousands of nodes each). As many researchers have already realized, there are many nodes which can be reached by SPAN users besides those listed in this document. This is due to the excellent cooperation between the DECnet wide-area networks that have subscribed to the same security rules and have adopted the policy of noninterference for the benefit of all the institutions, thereby making the DECnet Internet possible.

Section III provides information about the nodes currently listed in the SPAN Network Information Center Online Data Base System. This chapter has the information listed both by the node name (NODEname) in alphabetic order (with the discipline of each node listed for those users who want to find someone in the same discipline) and by country and institution. This will be especially useful to researchers who need to know the appropriate node names to reach their colleagues. Section III contains valuable resource information to aid those interested in deciding whether or not to become a SPAN node.

The first part of Section IV is an index of all remote sites connected to US-SPAN and European-SPAN (E-SPAN) in alphabetic order. The second part of Section IV provides information on the SPAN tail circuits, i.e., those remote nodes connected directly to a SPAN routing center, which is the local point of contact for resolving SPAN-related problems. Section V contains reference material for those who wish to know more about SPAN.

Because of the rapid growth of SPAN, it is very likely that not all SPAN nodes are listed in this document. The SPAN *Yellow Pages* is reissued periodically. Therefore, it is very important that the remote node managers send their node information to SPAN\_NIC. (See the *Introduction to SPAN*, Green *et al.*, 1987, for more specifics on the type of information that should be forwarded.)



## II. Internetworking: The DECnet Internet

SPAN's usefulness to the scientific community has been greatly enhanced by engineering interconnections between existing wide-area DECnet networks (WANs) and SPAN (e.g., HEPNET, THEnet [formerly TEXnet], GEONET). The interconnection of these WANs required careful coordination between SPAN and HEPNET management to ensure the technical viability of the resulting "Internetwork." This coordination requires mutual agreements between the various network managers on node and area number assignments, DECnet circuit costs, interconnection gateways, and other characteristics that affect the viability and performance of the DECnet Internet. The current internetwork topology of SPAN in relation to other DECnet-based networks and multiprotocol WANs will be described below.

The current structure of United States SPAN (US-SPAN), as shown in Figure 1, is composed of an interconnected mesh topology. (See Peters, 1986.) Each star has a SPAN routing center as its nucleus. These routing centers are located at Goddard Space Flight Center (GSFC), Marshall Space Flight Center (MSFC), the Jet Propulsion Laboratory (JPL), and Johnson Space Center (JSC). A fifth U.S. routing center has recently been established at Ames Research Center (ARC). The routing centers are linked together by a set of redundant 56-kbps backbone circuits. This mesh topology allows high bandwidth circuits as well as backup, should any single SPAN routing center or 56-kbps line fail. From each routing center extend tail circuits (9.6-kbps minimum line speed) linking the remote institutions into the SPAN backbone. Figure 2 shows, in map form, all sites currently connected to SPAN.

As shown in Figure 1, US-SPAN is connected to European-SPAN (E-SPAN) via a 19.2 kbps (upgraded from 9.6 kbps in early 1988) dedicated line between the GSFC Routing Center and the European Space Operations Center (ESOC) in Darmstadt, Federal Republic of Germany. ESOC acts as an E-SPAN routing center, along with the European Space Research Institute (ESRIN) located in Frascati, Italy. Prior to 1987, the connection between US-SPAN and E-SPAN was established on a scheduled basis using GTE/Telenet and PSI X.25 circuits. X.25 connections from ESOC to the MSFC Routing Center and from ESOC to the GSFC Routing Center are now maintained as backups to the dedicated line, thus ensuring reliable 24-hour service between US-SPAN and E-SPAN.

Within E-SPAN, the backbone and tail circuits are composed of DECnet over a number of different media. E-SPAN consists of DECnet links over dedicated lines, as well as DECnet over both private and public X.25 packet switch networks. ESOC and ESRIN both support tail circuits to cooperating institutions within Europe, primarily over public packet switch networks (see Figure 3).

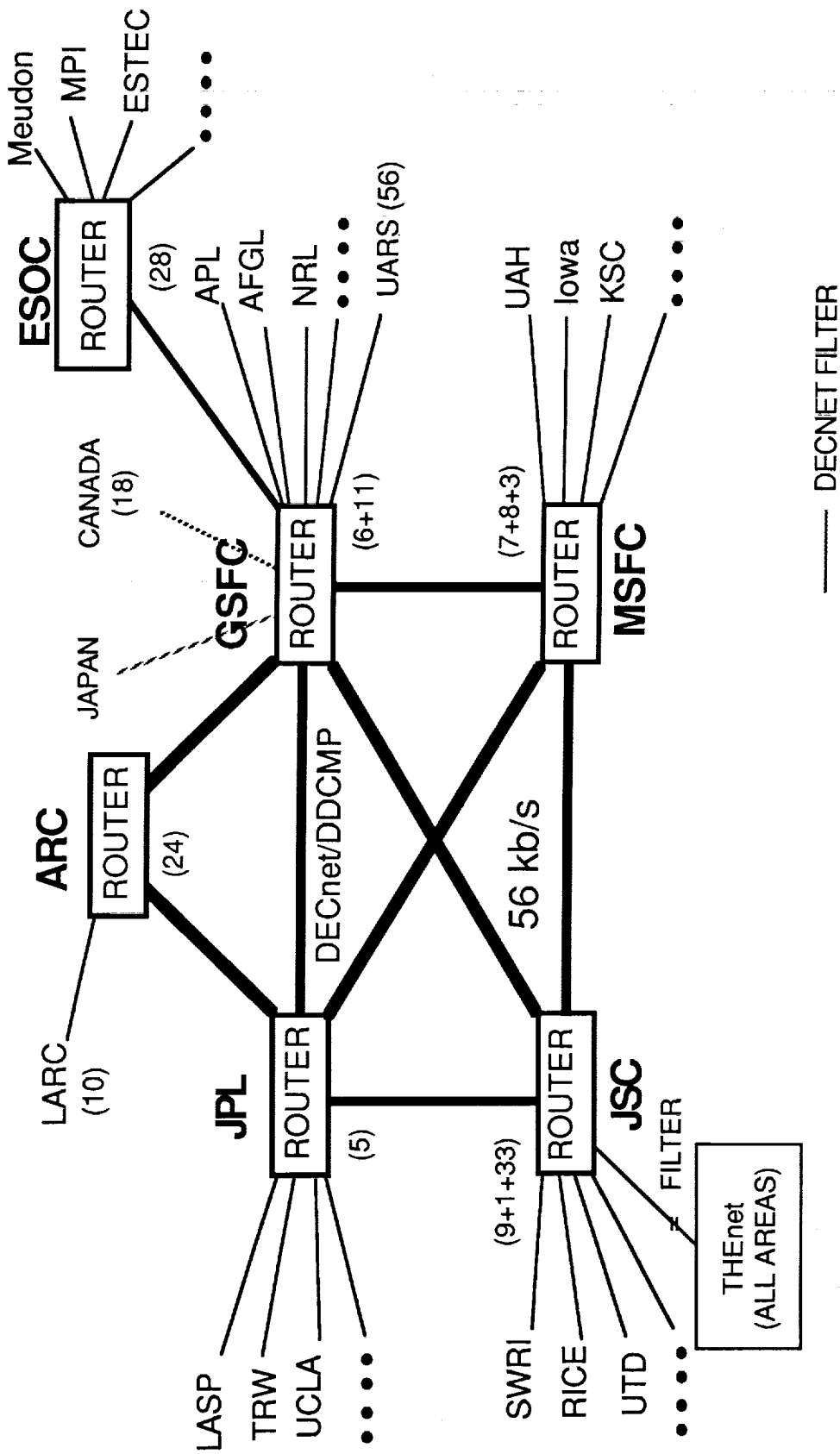


Figure 1. SPAN Backbone Configuration

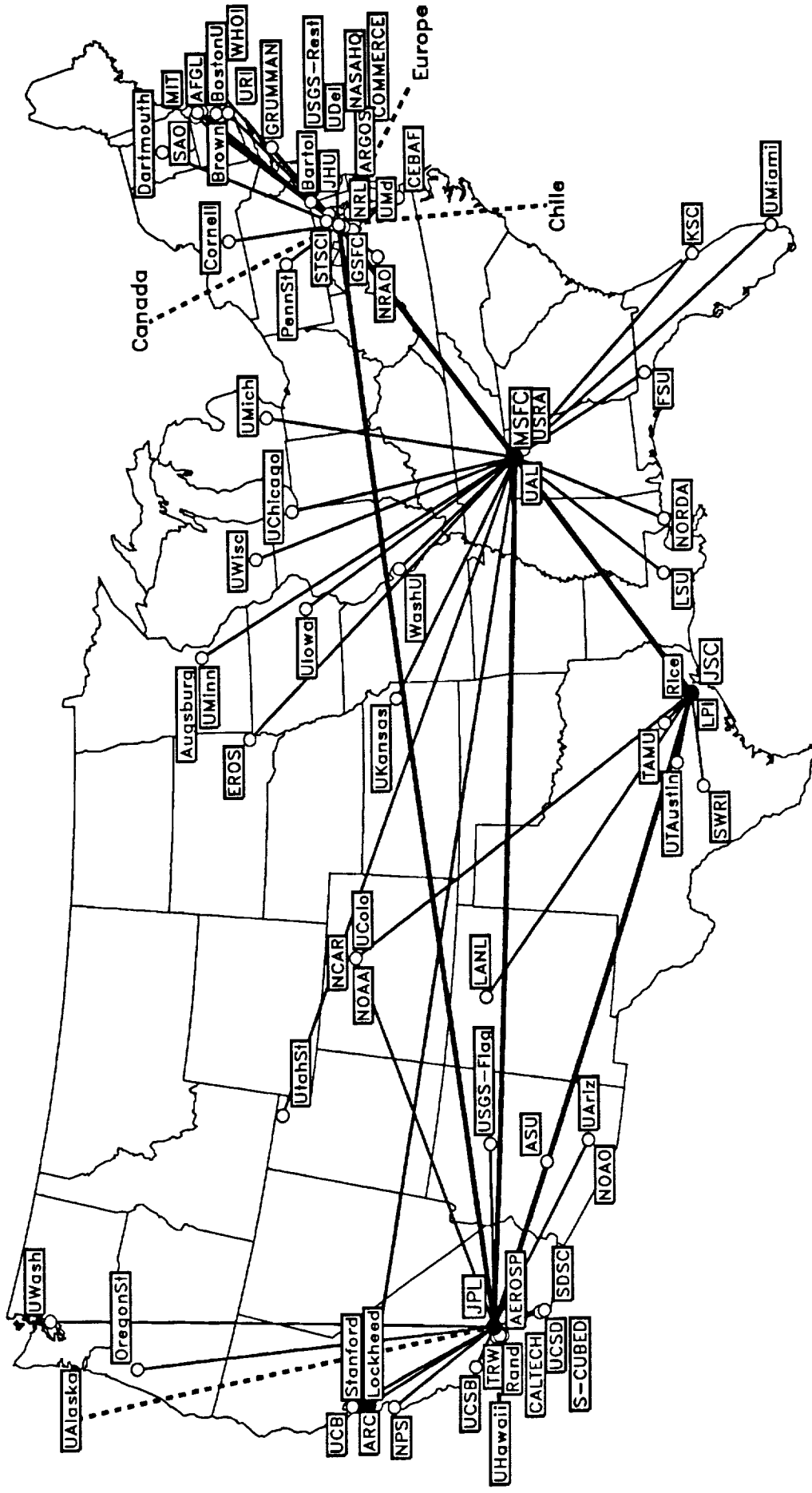
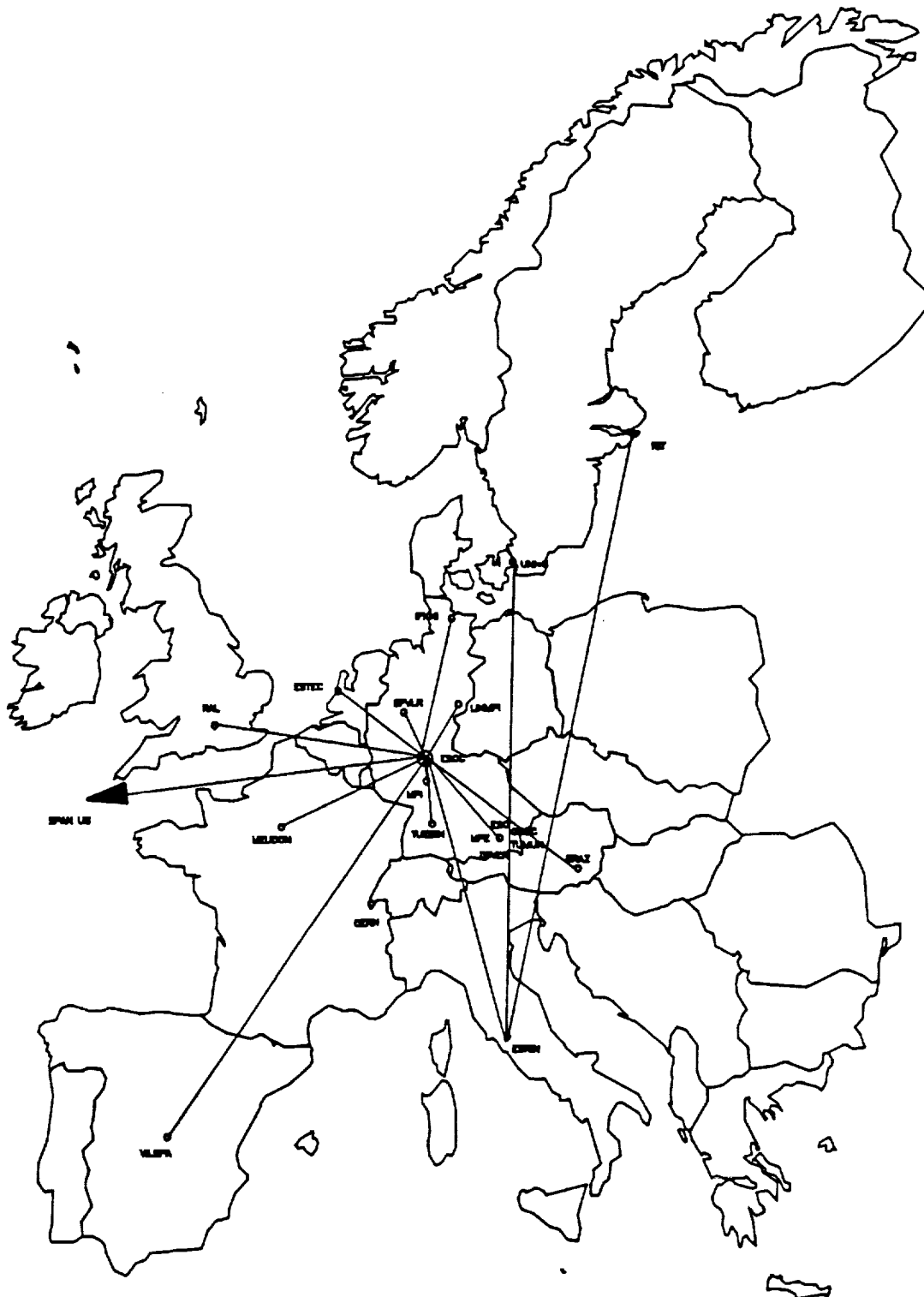


Figure 2. NSI/SPAN North American Sites

Prepared for: NASA Science Internet Project Office  
 by: Sterling Software, NAS2-11555  
 4/26/89



EUROPEAN SPACE OPERATIONS CENTRE

Figure 3. European-SPAN (E-SPAN) Backbone Configuration

The internetwork topology is also shown in Figure 1. SPAN is shown schematically with squares representing the four major routing centers, along with the European-SPAN (E-SPAN) routing center and the Ames Sub-routing Center. In general, there are more interconnections between the various WANs than are shown. The interconnections that are shown are those that have been sanctioned as gateways for the general purpose user. For networks that use DECnet, the gateways are transparent, enabling a user to access a computer on the associated network as easily as any other computer on SPAN.

In September 1986, SPAN made its first connection with the High Energy Physics Network (HEPNET) by virtue of having circuits to the same remote institutions. US-HEPNET is a data communications network supporting high energy physics research in the United States. US-HEPNET is the largest component of the more encompassing Energy Sciences Network/DECnet, a DECnet network run for the benefit of the Office of Energy Research of the U.S. Department of Energy. The topology of US-HEPNET utilizes a routing center approach with U.S. Government laboratories acting as the hubs. Currently, SPAN and HEPNET interconnect at many sites. A new US-SPAN to US-HEPNET backbone-to-backbone link is scheduled to begin service in June 1989. There is also a European component to HEPNET, named European-HEPNET (E-HEPNET). E-HEPNET is managed by the European Organization for Nuclear Research (CERN) in Geneva, Switzerland.

Consisting of over 400 DECnet nodes as of January 1987, THENet is another DECnet-based WAN to be internetworked with SPAN. THENet links the three major state universities (Texas A & M, the University of Texas System, and the University of Houston) into a single WAN. As shown in Figure 2, THENet is interconnected to SPAN via the JSC Routing Center. When THENet was first encountered, three points of interconnection were planned. A mutual agreement between SPAN and THENet management limited this to a single gateway between the University of Texas at Austin and the SPAN JSC Routing Center to enhance management of the SPAN to THENet connection.

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III. SPAN\_NIC Online Data Base System

A. SPAN\_NIC Online Data Base System: Output by Node Name

The following is a listing of SPAN registered nodes currently in the SPAN Network Information Center Online Data Base System (SPAN\_NIC). These nodes are listed in alphabetical order by node name (NODEname).

NODE NAME	NODE NUMBER	INSTITUTION	CONTACT POINT	CONTACT E-MAIL	DISCIPLINE
AAP1	9.358	NCAR	LIZ COOLBAUGH	AAP1::LIZ	
AAP2	9.359	NCAR	LIZ COOLBAUGH	AAP1::LIZ	
ACDURS	9.367	NCAR	DANIEL PACKMAN	ACDURS::SYSTEM	ATMOSPHERIC
AFGLSC	6.364	AFGL	LEN D'ALBERTI	AFGLSC::DALBERTI	SOLAR-TERRS
AIBDNN	28.800	UNIV OF BONN	PETER KALBERLA	AIBDNN::SYSTEM	ASTRONOMY
AIMS	6.361	AFGL	KEITH ROBERTS	AFGL::ROBERTS	SOLAR-TERRS
AIO	9.39	NASA/JSC	MIKE HEIDT	AIO::HEIDT	PLANETARY
ALBEDD	33.47	UNIV OF COLORADO-BOULDER	LARRY BOLEF	RASTER::BOLEF	EARTH SCIENCE
ALCHMY	6.922	CALTECH	DAVE MALERBA	XHMEIA::DEM	CHEMISTRY
ALF	6.70	NASA/GSFC	GARY DORMAN	DSTL86::DORMAN	ALL
ALGOL	33.75	UNIV OF COLORADO-BOULDER	PHIL EVANS	AQUILA::EVANS	ATMOSPHERIC/OCE
ALKOR	26.306	EUROPEAN MOLECULAR BIOLG	ROY OMOND	EMBL::OMOND	SPACE SCIENCES
AMBER	6.476	SPACE TELESCOPE INSTITUTE	TOM COMEAU	SCIVAX::TCOMEAU	
AMELIA	24.104	MASSACHUSETTS INST. OF TE	ROBERT BRUEN	KARMAN::BRUEN	AERONAUTICAL EN
AML	9.60	NASA/JSC	BOB JONES	AML::JONES	PLANETARY
AMPTE	6.361	APPLIED PHYSICS LABORATOR	STUART NYLUND	AMPTE::NYLUND	SOLAR-TERRS
APLSP	6.360	APPLIED PHYSICS LABORATOR	OLIVER LAMM	APLSP::SYSTEM	SOLAR-TERRS
APOLLO	7.54	STANFORD UNIV	FAISAL KHAN	MCCOY::KHAN	SOLAR-TERRS/ATM
AQUA	6.164	WOODS HOLE OCEANOGRAPHIC	WARREN SASS	RED::SPAN MANAGER	OCEANS
AQUILA	33.25	UNIV OF COLORADO-BOULDER	PHIL EVANS	AQUILA::EVANS	ATMOSPHERIC/OCE
ARCDEV	6.365	AFGL	KEITH ROBERTS	AFGL::DAPOLITO	SOLAR-TERRS
ARCIP	6.363	AFGL	KEITH ROBERTS	AFGL::ROBERTS	SOLAR-TERRS
ARCNR	17.50	CONSIGLIO NAZIONALE DELLE	REMO BIANCHI	ARCNR::RBIANCHI	SPACE SCIENCE /
ARCNR1	17.51	CONSIGLIO NAZIONALE DELLE	REMO BIANCHI	ARCNR1::RBIANCHI	SPACE SCIENCE/R
ARGOS6	6.631	SERVICE ARGOS INC	DAN MITCHUM	ARGOS6::MITCHUM	
ARIES	33.21	UNIV OF COLORADO-BOULDER	PHIL EVANS	AQUILA::EVANS	PLANETARY/ATMOS
ARLAC	33.83	UNIV OF COLORADO-BOULDER	PHIL EVANS	AQUILA::EVANS	ASTROPHYSICS/AS
ASD	9.5	NASA/JSC	PETE POULOS	ASD::POULOS	ASTRONOMY
ASTB01	37.169	C.N.R.	MAURO NANNI	ASTB01::NANNI	RADIO ASTRONOMY
ASTB03	38.191	UNIV OF BOLOGNA	ILEANO BONFA	ASTB02::BONFA	ASTRONOMY
ASTMI1	39.188	UNIV OF MILANO	ANNA LUISA CIAPI	ASTMI1::SYSTEM	ASTRONOMY
ASTMIB	29.186	OBSERV. ASTR. BRERA (MILA	GIUSEPPE MALASPIN	ASTMIB::SYSTEM	ASTRONOMY
ASTMIM	39.187	OBSERV. ASTR. BRERA (MERA	GIUSEPPE MALASPIN	ASTMIB::SYSTEM	ASTRONOMY
ASTMP1	17.61	OBSERV. ASTRON. DI ROMA	DOMENICO NANNI	ASTRMP::NANNI	ASTRONOMY
ASTRBA	29.123	IESI/CNR	ARCANGELO DISTANT	ASTRBA::SYSTEM	COMPUTER SCIENC
ASTRCT	38.70	OBSERV. ASTROFISICO CATAN	P. MASSIMINO & C.	ASTRCT::SYSTEM	ASTRONOMY
ASTRFI	38.150	OBSERV. ASTROFISICO ARCET	RICCARDO ANDREONI	ASTRFI::SYSTEM	ASTRONOMY
ASTRMP	17.60	OBSERVATORIO ASTRONOMIC	DOMENICO NANNI	ASTRMP::NANNI	ASTRONOMY
ASTRNA	39.124	OBSERV. ASTR. CAPODIMONTE	GIUSEPPE LONGO	ASTRNA::SYSTEM	ASTRONOMY
ASTRO	9.56	NASA/JSC	ALEX POPE	B92::POPE	PLANETARY
ASTROG	5.301	USGS	JOHN ZABEL	ASTROG::JZABEL	PLANETARY/GEOL
ASTROM	39.122	UNIV ROMA "LA SAPIENZA"	GIUSEPPE A. DE BI	ASTROM::SYSTEM	ASTRONOMY
ASTRPD	39.91	OSSERVATORIO ASTRONOMIC	LEOPOLDO BENACCHI	ASTRPD::BENACCHIO	ASTRONOMY
ASTRTO	39.167	UNIVERSITA TORINO	SILVANO MASSAGLIA	ASTRTO::MASSAGLIA	ASTRONOMY
ASTRTS	39.121	OBSERV. ASTRONOMIC TRIES	FABIO PASIAN	ESRIN1::VAXLNF::A	ASTRONOMY
ASTT02	39.63	OBSERV. ASTRON. PIND TORI	ENZO ANDERLUCCI	ASTT02::SYSTEM	ASTRONOMY
ATD1	5.257	TRW INC.	DON PLEBUCH	TRWATD::SYSTEM	ALL
ATD2	5.259	TRW INC.	DON PLEBUCH	TRWATD::SYSTEM	ALL
ATHENE	7.66	STANFORD UNIV	FAISAL KHAN	MCCOY::KHAN	SOLAR-TERRS/ATM
ATDM	7.28	NASA/MSFC	TIM BALDRIDGE	SSL::BALDRIDGE	ATOMIC PHYSICS
ATSVAX	7.135	UNIV OF MIAMI-PALM BAY	PAUL EDEN	ATSVAX::EDEN	OCEANS
AUGGIE	7.149	AUGSBURG COLLEGE	MARK ENGBRETSON	AUGGIE::SYSTEM	UPPER ATMOSPHER
AURDRA	7.61	UNIV OF IOWA	MARYRAE DVORSKY	IOWASP::BRECHWALD	SPACE PHYSICS
AUSTR1	5.938	CALTECH	ALAN MATHIOWETZ	WAQVAX::AMM	CHEMISTRY
AVALON	6.478	SPACE TELESCOPE INSTITUTE	TOM COMEAU	SCIVAX::TCOMEAU	

B32 9.11 NASA/JSC  
 BALI 33.61 UNIV OF COLORADO  
 BARANY 24.116 MASSACHUSETTS INST. OF TE  
 BARNEY 5.266 UNIV OF ALASKA/GEOPHYSICA  
 BARDN 28.293 MAX PLANCK INST FUER KERN  
 BARTOL 6.216 UNIV OF DELAWARE  
 BASHFL 5.106 NASA/JPL  
 BATSE 7.82 UNIV OF MICHIGAN  
 BBXRT 6.51 NASA/GSFC  
 BERLIN 5.148 NASA/JPL  
 BIGELO 3.17 RSMAS  
 BLACK 6.155 WOODS HOLE OCEANOGRAPHIC  
 BLUE 6.152 WOODS HOLE OCEANOGRAPHIC  
 BOHR 7.37 NASA/MSFC  
 BONNIE 5.708 UCLA  
 BOREAL 5.939 CALTECH  
 BOU 9.200 NASA/JSC  
 BRONZE 6.169 WOODS HOLE OCEANOGRAPHIC  
 BRUNET 5.708 UCLA  
 BUASTA 6.501 BOSTON UNIV  
 BUASTB 6.682 BOSTON UNIV  
 C3PC 5.872 CALTECH  
 C717 6.78 NASA/GSFC  
 CADLCK 9.85 LOCKHEED ENGINEERING SERV  
 CADR1A 5.890 CALTECH  
 CADR1B 5.891 CALTECH  
 CADR2A 5.889 CALTECH  
 CADR2B 5.892 CALTECH  
 CADR3A 5.883 CALTECH  
 CADR3B 5.888 CALTECH  
 CADRE1 5.880 CALTECH  
 CADRE2 5.881 CALTECH  
 CADRE3 5.882 CALTECH  
 CAFDS0 27.1023 UNIV OF CALIF/IRVINE  
 CAFMV1 27.289 UNIV OF CALIF/IRVINE  
 CAFMV2 27.204 UNIV OF CALIF/IRVINE  
 CALDCK 9.84 LOCKHEED ENGINEERING SERV  
 CALVIN 24.53 MASSACHUSETTS INST. OF TE  
 CANAL1 6.176 WOODS HOLE OCEANOGRAPHIC  
 CANCEL 18.109 UNIV OF CALGARY  
 CANEDM 18.105 UNIV OF ALBERTA  
 CANLON 18.102 UNIV OF WESTERN ONTARIO  
 CANDTT 18.100 CANADIAN DATA ANALYSIS NE  
 CANSAS 18.101 UNIV OF SASKATCHEWAN  
 CAPA 6.301 APPLIED PHYSICS LABORATOR  
 CAPB 6.302 APPLIED PHYSICS LABORATOR  
 CAPC 6.303 APPLIED PHYSICS LABORATOR  
 CAPD 6.304 APPLIED PHYSICS LABORATOR  
 CAPE 6.305 APPLIED PHYSICS LABORATOR  
 CAPF 6.306 APPLIED PHYSICS LABORATOR  
 CAPVAX 6.300 APPLIED PHYSICS LABORATOR  
 CARA 5.906 CALTECH  
 CARINA 33.84 UNIV OF COLORADO-BOULDER  
 CASA 33.333 UNIV OF COLORADO-BOULDER  
 CASS 27.130 UNIV OF CALIF/SAN DIEGO  
 CASS01 27.131 UNIV OF CALIF/SAN DIEGO  
 CASTOR 6.141 NASA/HEADQUARTERS  
 CBEAM 6.185 UNIV OF RHODE ISLAND  
 CBZEUS 28.222 MAX PLANCK INST FUER KERN  
 CCPVGR 6.281 UNIV OF ARIZONA  
 CDDIS 6.137 NASA/GSFC  
 CDSDE 9.74 NASA/JSC  
 CDSXB1 17.500 OBSERV ASTRONOMIQUE DE ST  
 CDSXB2 17.501 OBSERV ASTRONOMIQUE DE ST  
 CEBAF1 6.270 CEBAF  
 CERES 7.82 UNIV OF IOWA

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 LORA L. SUTHER  
 LORA L. SUTHER  
 CHRIS LEE  
 PHIL EVANS  
 PHIL EVANS  
 RICHARD BENTLEY  
 ED HOOPES  
 MICHAEL C. NEWELL  
 DAN HOLLOWAY  
 HANS DOEBBELING  
 JOE GOTOBED  
 CAREY NOLL  
 CHUCK THOMAS  
 FRANCOIS BONNAREL  
 FRANCOIS BONNAREL  
 RICHARD GLASS  
 SCOTT ALLENDORF

B32::POPE  
 FIJI::TEDWADE  
 KARMAN::BRUEN  
 FRED::DICK  
 ECD1::NETMGR  
 BARTOL::PENGUIN  
 BASHFL::JDP  
 SPRLA::TERRY  
 LHEAVX::MARY  
 BERLIN::BURNETTE  
 MIAMI::JANETOBIG  
 RED::SPAN\_MANAGER  
 RED::SPAN\_MANAGER  
 SSL::RANSOM  
 BONNIE::ZDENKA  
 WAGVAX::AMM  
 FPEO::FERRIS  
 RED::SPAN\_MANAGER  
 BRUNET::EDSON  
 BUASTA::BRADFORD  
 BUASTA::BRADFORD  
 HAMLET::BOB  
 C717::SYSTEM  
 LOCK::NGUYEN  
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 KARMAN::BRUEN  
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 CANEDM::SAMSON  
 CANLON::JOHN  
 CANDTT::ACTION  
 CANSAS::KOEHLER  
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 URI::DAN  
 ECD1::NETMGR  
 LOONEY::GOTOBED  
 CDDIS::ACTMGR  
 CTSD2::CHUCKS  
 CDSXB1::SYSTEM  
 CDSXB1::SYSTEM  
 CEBAF1::GLASS  
 CERES::SYSTEM

PLANETARY  
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 GENERAL  
 SPACE SCIENCES  
 PHYSICS  
 SOLAR-TERRS/PLA  
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 SOLAR-TERRS  
 SOLAR-TERRS  
 ASTRONOMY  
 ASTROPHYSICS/AS  
  
 ASTROPHYSICS  
 SOLAR-TERRS/AST  
 OFFICE AUTOMATI  
 OCEANS  
 SPACE SCIENCES  
 PLANETARY  
 ALL  
 PLANETARY  
 ASTRONOMY  
 ASTRONOMY  
 ENERGY PHYSICS  
 ASTRONOMY



CFA	6.555	SMITHSONIAN ASTROPHY OBSE	ROGER HAUCK	CFA::HAUCK	ASTROPHYSICS
CFA1	6.531	SMITHSONIAN ASTROPHY OBSE	STEVE VAITONES	CFA::VAITONES	ASTRONOMY
CFA2	6.532	SMITHSONIAN ASTROPHY OBSE	ROGER HAUCK	CFA2::HAUCK	ASTROPHYSICS
CFA3	6.533	SMITHSONIAN ASTROPHY OBSE	STEVE VAITONES	CFA::VAITONES	ASTROPHYSICS
CFA4	6.534	SMITHSONIAN ASTROPHY OBSE	STEVE VAITONES	CFA::VAITONES	ASTROPHYSICS
CFA5	6.535	SMITHSONIAN ASTROPHY OBSE	STEVE VAITONES	CFA::VAITONES	ASTROPHYSICS
CFA6	6.536	SMITHSONIAN ASTROPHY OBSE	STEVE VAITONES	CFA::VAITONES	ASTROPHYSICS
CFA7	6.537	SMITHSONIAN ASTROPHY OBSE	STEVE VAITONES	CFA::VAITONES	ASTROPHYSICS
CFA8	6.538	SMITHSONIAN ASTROPHY OBSE	STEVE VAITONES	CFA::VAITONES	ASTROPHYSICS
CFA9	6.539	SMITHSONIAN ASTROPHY OBSE	STEVE VAITONES	CFA::VAITONES	ASTROPHYSICS
CFABOK	6.549	SMITHSONIAN ASTROPHY OBSE	MIKE KURTZ	CFA::KURTZ	ASTRONOMY
CFACE1	6.542	SMITHSONIAN ASTROPHY OBSE	STEVE WARD	CFA::WARD	ASTROPHYSICS
CFAEXI	6.550	SMITHSONIAN ASTROPHY OBSE	MIKE GARCIA	CFA::GARCIA	ASTRONOMY
CFAFIR	6.546	SMITHSONIAN ASTROPHY OBSE	WES TRAUB	CFA::TRAUB	ASTROPHYSICS
CFAGSF	6.600	SMITHSONIAN ASTROPHY OBSE	DOUG KLINE	CFA::KLINE	ASTROPHYSICS
CFAIPD	6.543	SMITHSONIAN ASTROPHY OBSE	EMILIO FALCO-ACOS	CFA::FALCO	ASTROPHYSICS
CFAIRT	6.544	SMITHSONIAN ASTROPHY OBSE	CHARLES MAXSON	CFA::MAXSON	ASTROPHYSICS
CFANXT	6.558	SMITHSONIAN ASTROPHY OBSE	DOUG KLINE	CFA::KLINE	ASTROPHYSICS
CFAPS1	6.558	SMITHSONIAN ASTROPHY OBSE	BRIAN MARSDEN	CFA::MARSDEN	ASTROPHYSICS
CFAPS2	6.557	SMITHSONIAN ASTROPHY OBSE	ROGER HAUCK	CFA::HAUCK	ASTROPHYSICS
CFAPS3	6.559	SMITHSONIAN ASTROPHY OBSE	ROGER HAUCK	CFAPS3::SYSTEM	ASTROPHYSICS
CFAPS4	6.560	SMITHSONIAN ASTROPHY OBSE	SHOSHONA ROSENTHAL	CFA::HAUK	ASTROPHYSICS
CFARG1	6.551	SMITHSONIAN ASTROPHY OBSE	SHOSHONA ROSENTHAL	CFA::SROSENTHAL	ASTRONOMY
CFARG2	6.552	SMITHSONIAN ASTROPHY OBSE	SHOSHONA ROSENTHAL	CFA::SROSENTHAL	ASTRONOMY
CFARG3	6.548	SMITHSONIAN ASTROPHY OBSE	SHOSHONA ROSENTHAL	CFA::SROSENTHAL	ASTRONOMY
CFAROS	6.541	SMITHSONIAN ASTROPHY OBSE	JOHN MCSWEENEY	CFA::MCSWEENEY	ASTROPHYSICS
CFASHA	6.545	SMITHSONIAN ASTROPHY OBSE	BILL WYATT	CFA::WYATT	ASTROPHYSICS
CFATA1	6.553	SMITHSONIAN ASTROPHY OBSE	ALAN LIGHTMAN	CFA::LIGHTMAN	ASTRONOMY
CFATA2	6.554	SMITHSONIAN ASTROPHY OBSE	ALAN LIGHTMAN	CFA::LIGHTMAN	ASTRONOMY
CFATYC	6.547	SMITHSONIAN ASTROPHY OBSE	BOB KIRSHNER	CFA::KIRSHNER	ASTROPHYSICS
CHAMP	6.25	NASA/GSFC	FRANK KEEFER	CHAMP::KEEFER	ALL
CHADS0	28.203	MAX PLANCK INST FUER KERN	HANS DOEBBELING	ECD1::NETMGR	SPACE SCIENCES
CHM2	6.194	UNIV OF RHODE ISLAND	DAN HOLLOWAY	URI::DON	ALL
CITHEX	41.60	CALTECH	KENNETH ADELMAN	HAMLET::KEN	ENERGY PHYSICS
CITNMR	5.924	CALTECH	DAVE MALERBA	XHMEIA::DEM	CHEMISTRY
CITSRL	5.873	CALTECH	CARL LYDICK	CITHEX::CARL	ENERGY PHYSICS
CLAMS	6.159	WOODS HOLE OCEANOGRAPHIC	WARREN SASS	RED::SPAN_MANAGER	OCEANS
CLYDE	5.709	UCLA	DR. ZDENKA PLAVEC	BONNIE::ZDENKA	ASTRONOMY
COBEIT	6.41	NASA/GSFC	TOM ERICKSON	CSDR::XRMBI	ALL
COMET	5.297	LOCKHEED PALO ALTO RESEAR	DAYTON DATLOWE	LOCKHD::DATLOWE	SOLAR-TERRS/ATM
COMI	5.199	NASA/JPL	PAUL WEISSMAN	COMI::PWEISSMAN	SOLAR-TERRS/PLA
CPWANG	6.471	UNIV OF MARYLAND	CHING-PING S. WAN	CPWANG::WANG	PHYSICS
CRPEIS	28.63	CNET-PAB	EDMOND PAWELA	CRPEIS::PAWELA	PHYSICS
CRUX	5.241	NRAD	STEVE GRANDI	DRACO::GRANDI	ASTRONOMY
CRYDEL	9.331	NIST	RICHARD E. HARRIS	CRYDEL::HARRIS	PHYSICS
CSDR	6.29	NASA/GSFC	TOM ERICKSON	CSDR::XRMBI	ALL
CSDR2	6.656	NASA/GSFC	TOM ERICKSON	CSDR::XRMBI	ASTRONOMY
CSO	5.909	CALTECH	BOB LOGAN	HAMLET::BOB	ASTRONOMY
CSPARA	7.11	UNIV OF ALABAMA-HUNTSVILL	HAROLD PIRTLE	CSPARA::PIRTLE	SOLAR TERRES.
CSPARC	7.25	UNIV OF ALABAMA-HUNTSVILL	MIKE GOODMAN	METEOR::GOODMAN	ATMOSPHERIC/MET
CSSL	9.86	NASA/JSC	KYLE SHELTON	LOCK::SHELTON	PLANETARY
CTARGD	5.915	CALTECH	GEORGE DJORGOVSKI	6036::GEORGE	ASTROPHYSICS
CTCM1	9.85	NASA/JSC	CHUCK ALLEN	TCD::ALLEN	PLANETARY
CTD02	6.168	WOODS HOLE OCEANOGRAPHIC	WARREN SASS	RED::SPAN_MANAGER	OCEANS
CTD03	6.168	WOODS HOLE OCEANOGRAPHIC	WARREN SASS	RED::SPAN_MANAGER	OCEANS
CTDP	9.64	NASA/JSC	ERIC BARNHART	CTDP::BARNHART	PLANETARY
CTIOV1	6.503	CERRO TOLOLO INTER-AMERIC	JIM HUGHES	CTIOV1::SYSTEM	ASTRONOMY
CTIOV2	6.504	CERRO TOLOLO INTER-AMERIC	JIM HUGHES	CTIOV1::SYSTEM	ASTRONOMY
CTSD1	9.3	NASA/JSC	CHUCK THOMAS	CTSD2::CHUCKS	PLANETARY
CTSD2	9.79	NASA/JSC	CHUCK THOMAS	CTSD2::CHUCKS	PLANETARY
CTSD3	9.73	NASA/JSC	CHUCK THOMAS	CTSD2::CHUCKS	PLANETARY
CTSD4	9.72	NASA/JSC	CHUCK THOMAS	CTSD2::CHUCKS	PLANETARY
CUBLDR	33.99	UNIV OF COLORADO-BOULDER	KARL PYATT	AQUILA::EVANS	ATMOSPHERIC/OCE
CURLY	7.271	NASA/MSFC	RICH DRINKARD	CURLY::CLMANAGER	DATA REDUCTION
CUSPIF	6.143	CORNELL UNIV	BRIAN CARCICH	CUSPIF::CARCICH	PLANETARY
CYGNUS	33.35	UNIV OF COLORADO-BOULDER	PHIL EVANS	AQUILA::EVANS	ASTROPHYSICS/AS

CYQX1	83.89	UNIV OF COLORADO-Boulder	PHIL EVANS	AQUILA::EVANS	ASTROPHYSICS/AS
DE814	6.46	NASA/GSFC	BOB TURKELSON	PACF::TURKELSON	ALL
DE898	6.47	NASA/GSFC	LES SALTER	LEPVAX::U4LMS	ALL
DECSAO	6.315	APPLIED PHYSICS LABORATORY	LORA L. SUTHER	APLSP::SUTHER	SDLAR-TERRS
DEIMOS	5.901	CALTECH	CHRISTOPHER K. LE	DEIMOS::CKL	ASTRONOMY
DEIO	6.45	NASA/GSFC	LES SALTER	LEPVAX::U4LMS	ALL
DELOCN	6.145	UNIV OF DELAWARE	FERRIS WEBSTER	DELOCN::FERRIS	OCEANS
DEMIAP	6.15	NASA/GSFC	CHARLES COSNER	MPP::COSNER	ALL
DENALI	7.174	UNIV OF IOWA	ROBERT L. MUTEL	DENALI::SYSTEM	ASTROPHYSICS
DENE8	33.29	UNIV OF COLORADO-Boulder	PHIL EVANS	AQUILA::EVANS	ATMOSPHERIC/OCE
DEPWI	7.172	UNIV OF IOWA	RICHARD HUFF	IOWASP::BRECHWALD	PLASMA WAVE
DERPS	5.928	CALTECH	D. ZIRIN	SHAKES::"ZAR"	CHEMISTRY
DESIGN	5.884	CALTECH	ERIK ANTONSSON	DESIGN::ANTONSSON	CADRE
DEWY	9.77	NASA/JSC	SHARON LAFUSE	CTSD2::SHARON	PLANETARY
DFTNIC	6.4	NASA/GSFC	CHARLES COSNER	SDCCL::COSNER	ALL
DIATOM	6.59	NASA/GSFC	ROSA KAO	OCEAN1::ROSA	ALL
DIQLIB	6.223	DARTMOUTH COLLEGE	DOUGLAS A. FRASER	THAYER::DOUGF	ASTRONOMY
DIRAC2	5.298	THE AEROSPACE CORPORATION	JANET CARRE	DIRAC2::CARRE	SPACE SCIENCES
DIRBE	6.34	NASA/GSFC	TOM ERICKSON	CSDR::XRMBI	ALL
DISCO	24.253	USGS	JOHN FIFE	MOQ::SYSTEM	EARTH SCIENCES
DMR	6.35	NASA/GSFC	TOM ERICKSON	CSDR::XRMBI	ALL
DOC	5.188	NASA/JPL	JOHN PIOTROWSKI	DOC::JDP	SOLAR-TERRS/PLA
DONALD	9.78	NASA/JSC	SHARON LAFUSE	CTSD2::SHARON	PLANETARY
DOPEY	5.182	NASA/JPL	JOHN PIOTROWSKI	HAPPY::JDP	SOLAR-TERRS/PLA
DPSD1	9.55	NASA/JSC	DAN ANDERSON	SN::DAN	PLANETARY
DRACO	5.236	NOAD	NIGEL SHARP	DRACO::SHARP	ASTRONOMY
DSPLY1	6.181	UNIV OF RHODE ISLAND			OCEANS
DSPLY2	6.182	UNIV OF RHODE ISLAND			OCEANS
DSTL86	6.17	NASA/GSFC	GARY DORMAN	DSTL86::DORMAN	ALL
DSTL88	6.18	NASA/GSFC	GARY DORMAN	DSTL86::DORMAN	ALL
DUSTY	28.223	MAX PLANCK INST FUER KERN	HANS DOEBBELING	ECD1::NETMGR	SPACE SCIENCES
EARTH1	5.953	CALTECH	CARLOS SALINAS	EARTH1::MANAGER	PLANETARY
EAST	6.769	NASA/GSFC	TODD BUTLER	NSSDCA::NETMGR	SUPPORT
ECD1	28.1	EUROPEAN SPACE OPERATIONS	JENNY FRANKS	ECD1::NETMGR	SPACE SCIENCES
ECGPX	9.71	NASA/JSC	CHUCK THOMAS	CTSD2::CHUCKS	
EDMUND	24.186	MASSACHUSETTS INST. OF TE	ROBERT BRUEN	KARMAN::BRUEN	AERONAUTICAL EN
EDRL01	5.886	CALTECH	JON MELVIN	CADRES::JDM	CADRE
EGRET	6.52	NASA/GSFC	MARY ANN ESFANDIA	LHEAVX::SYSTEM	ALL
EKJ	28.291	MAX PLANCK INST FUER KERN	HANS DOEBBELING	ECD1::NETMGR	SPACE SCIENCES
ELAN	6.420	SPACE TELESCOPE INSTITUTE	TOM COMEAU	SCIVAX::TCOMEAU	ASTROPHYSICS
ELDYN	6.58	NASA/GSFC	MARY MILLER	ELDYN::UBMLM	ALL
ELROY	33.87	UNIV OF COLORADO-Boulder	PHIL EVANS	AQUILA::EVANS	ASTROPHYSICS/AS
ELVIS	8.73	UNIV OF MIAMI	BARRY MILLER	CABLES::BARRY	OCEANS
EMBL	28.304	EUROPEAN MOLECULAR BIOLOG	ROY OMOND	EMBL::OMOND	SPACE SCIENCES
ENVNET	6.188	NASA/GSFC	FRANK J. ANDRASCO	ENVNET::ANDRASCO	ALL
EPLAB	9.432	NASA/JSC	BILL BAKER	MEDICS::WBAKER	LIFE SCIENCES
EPLAB	9.183	NASA/JSC	BILL BAKER	MEDICS::WBAKER	LIFE SCIENCES
EP0780	17.18	ESA/ESRIN	MARTIN SPENCE	EP0780::SPENCE	EARTH RESOURCES
EPOMON	17.15	ESA/ESRIN	MARTIN SPENCE	EP0780::SPENCE	EARTH RESOURCES
EPDMV1	17.11	ESA/ESRIN	MARTIN SPENCE	EP0780::SPENCE	EARTH RESOURCES
EQL	5.970	CALTECH	KEN MCCUE	EQL::MCCUE	ALL
ERIN	5.941	CALTECH	PAST HUBER	ERIN::PAT	KELLOGG RADIATI
ERNST	24.113	MASSACHUSETTS INST. OF TE	ROBERT BRUEN	KARMAN::BRUEN	AERONAUTICAL EN
ERDSA	7.189	USGS/EROS DATA CENTER	TOM BODAH	ERDSA::SYSTEM	EARTH RESOURCES
ERSMV1	17.14	ESA/ESRIN	MARTIN SPENCE	EP0780::SPENCE	EARTH RESOURCES
ERSWS1	17.12	ESA/ESRIN	MARTIN SPENCE	EP0780::SPENCE	EARTH RESOURCES
ESAHQ0	28.859	ESA/HEADQUARTERS	GERBRAND VELDMAN	ESTCS1::GVELDMAN	SPACE RESEARCH
ESDC	7.273	NASA/MSFC	RICH DRINKARD	CURLY::CLMANAGER	DATA REDUCTION
ESIS	17.1	ESA/ESRIN	MIKE BRETT	ESRIN1::MIKE	ASTROPHYSICS
ESOMC1	28.82	EUROPEAN SOUTHERN OBSERVA	RICHARD HOOK	ESOMC1::HOOK	ASTROPHYSICS
ESRIN1	28.2	ESA/ESRIN	JORDI PASCUAL	ESRIN1::JORDI	ASTROPHYSICS
ESRIN2	17.2	ESA/ESRIN	MIGUEL ALBRECHT	ESIS::MIGUEL	ASTROPHYSICS
ESSDP1	1.15	LDS ALAMOS NATIONAL LABOR	JIM KRONE	ESSDP2::SYSTEM	SOLAR-TERRS
ESSDP2	1.5	LDS ALAMOS NATIONAL LABOR	JIM KRONE	ESSDP2::SYSTEM	SOLAR-TERRS
ESTCS0	28.50	ESA/ESTEC	GERBRAND VELDMAN	ESTCS1::GVELDMAN	SPACE RESEARCH
ESTCS1	28.21	ESA/ESTEC	GERBRAND VELDMAN	ESTCS1::GVELDMAN	SPACE SCIENCES

ESTCS2	28.48	ESA/ESTEC	GERBRAND VELDMAN	ESTCS1::GVELDMAN	SPACE SCIENCE
ESTCS3	28.47	ESA/ESTEC	GERBRAND VELDMAN	ESTCS1::GVELDMAN	SPACE SCIENCE
ESTERS	28.43	ESA/ESTEC	C. GARRIDO	ECD1::NETMGR	SPACE SCIENCES
ESTIFA	6.55	NASA/QSFC	STEVE SCOTT	ESTIFA::SYSTEM	ALL
ESTLCC	9.18	NASA/JSC	CHUCK ALLEN	TCD::ALLEN	PLANETARY
ESTLRT	9.19	NASA/JSC	LINDA BROMLEY	ESTLRT::BROMLEY	PLANETARY
ESTMAN	28.855	ESA/ESTEC	GERBRAND VELDMAN	ESTCS1::GVELDMAN	SPACE RESEARCH
ESTSA1	28.22	ESA/ESTEC	URBAN FRISK	ECD1::NETMGR	SPACE SCIENCES
ESTSA2	28.28	ESA/ESTEC	M. PERRYMAN	ESTSA2::MIKE	SPACE SCIENCES
ESTSA5	28.864	ESA/ESTEC	U. FRISK		SPACE SCIENCE
ESTSA6	28.865	ESA/ESTEC	U. FRISK		SPACE SCIENCE
ESTSC1	28.35	ESA/ESTEC	S.T. HO	ECD1::NETMGR	SPACE SCIENCES
ESTTP1	28.24	ESA/ESTEC	NEIL CABLE	ECD1::NETMGR	SPACE SCIENCES
ESTTP2	28.28	ESA/ESTEC	TON VAN OVERBEEK	ECD1::NETMGR	SPACE SCIENCES
ESTTP3	28.27	ESA/ESTEC	TON VAN OVERBEEK	ECD1::NETMGR	SPACE SCIENCES
ESTTR1	28.23	ESA/ESTEC	WERNER KRIEDTE	ECD1::NETMGR	SPACE SCIENCES
ESTTR2	28.25	ESA/ESTEC	WERNER KRIEDTE	ECD1::NETMGR	SPACE SCIENCES
ESTTR3	28.30	ESA/ESTEC	WERNER KRIEDTE	ECD1::NETMGR	SPACE SCIENCES
ESTWD1	28.39	ESA/ESTEC	MATHIEU	ECD1::NETMGR	SPACE SCIENCES
ESTWD2	28.40	ESA/ESTEC	MATHIEU	ECD1::NETMGR	SPACE SCIENCES
ESTWDX	28.41	ESA/ESTEC	MATHIEU	ECD1::NETMGR	SPACE SCIENCES
ESTWDY	28.42	ESA/ESTEC	MATHIEU	ECD1::NETMGR	SPACE SCIENCES
ESTWG1	28.38	ESA/ESTEC	MATHIEU	ECD1::NETMGR	SPACE SCIENCES
ESTWG2	28.37	ESA/ESTEC	MATHIEU	ECD1::NETMGR	SPACE SCIENCES
ESTWG3	28.38	ESA/ESTEC	MATHIEU	ECD1::NETMGR	SPACE SCIENCES
ESTWK4	28.868	ESA/ESTEC	TON VAN OVERBEEK	ESTTP2::SYSTEM	SPACE SCIENCES
ESTXE1	28.29	ESA/ESTEC	JAKOB HAMMER	ECD1::NETMGR	SPACE SCIENCES
ESTXE2	28.858	ESA/ESTEC	IAN M. ROBERTS	SENIOR ANTENNA E	ELECTRO MAGNETI
EWOK	7.278	NASA/MSFC	RICH DRINKARD	CURLY::CLMANAGER	DATA REDUCTION
EXOSA3	28.882	ESA/ESTEC	ANDY POLLOCK	EXOSAT::ANDY	SPACE SCIENCE
EXOSA4	28.883	ESA/ESTEC	ANDY POLLOCK	EXOSAT::ANDY	SPACE SCIENCE
EXOSAT	28.31	ESA/ESTEC	RICK SHAFER	ESTSA2::RICK	ASTRONOMY
F1D01	6.311	APPLIED PHYSICS LABORATOR	LORA L. SUTHER	APLSP::SUTHER	SOLAR-TERRS
F2A00	6.312	APPLIED PHYSICS LABORATOR	LORA L. SUTHER	APLSP::SUTHER	SOLAR-TERRS
F2A01	6.313	APPLIED PHYSICS LABORATOR	LORA L. SUTHER	APLSP::SUTHER	SOLAR-TERRS
F2A02	6.314	APPLIED PHYSICS LABORATOR	LORA L. SUTHER	APLSP::SUTHER	SOLAR-TERRS
FDE0	9.22	NASA/JSC	TONY SKELTON	FDE0::SKELTON	FLIGHT DATA ANA
FIJI	33.80	UNIV OF COLORADO-DENVER	TED WADE	FIJI::TEDWADE	ATMOSPHERIC/OCE
FIRAS	6.33	NASA/QSFC	TOM ERICKSON	CSDR::XRMBI	ALL
FOCA	6.411	SPACE TELESCOPE INSTITUTE	TOM COMEAU	SCIVAX::TCOMEAU	ASTROPHYSICS
FOCB	6.412	SPACE TELESCOPE INSTITUTE	TOM COMEAU	SCIVAX::TCOMEAU	ASTROPHYSICS
FOSA	6.414	SPACE TELESCOPE INSTITUTE	IAN EVANS	FOSA::EVANS	ASTROPHYSICS
FPED	9.1	NASA/JSC	CHUCK WHEELLOCK	FPED::WHEELLOCK	PLANETARY
FRANNY	28.204	MAX PLANCK INST FUER KERN	HANS DOEBBELING	ECD1::NETMGR	SPACE SCIENCES
FRED	5.264	UNIV OF ALASKA/GEOPHYSICA	DICK MILLION	FRED::DICK	ALL
FSCARF	5.712	UCLA	ROBERT J. STRANGE	FSCARF::STRANGewa	SOLAR-TERRS/PHY
FSHEP0	7.311	FLORIDA STATE UNIV	DR. J. HARVEY GOL	FSHEP0::GOLDMAN	HIGH ENERGY PHY
FSHEP1	7.358	FLORIDA STATE UNIV	DR. J. HARVEY GOL	FSHEP0::GOLDMAN	HIGH ENERGY PHY
FSHEP2	7.357	FLORIDA STATE UNIV	DR. J. HARVEY GOL	FSHEP0::GOLDMAN	HIGH ENERGY PHY
FSHEP3	7.358	FLORIDA STATE UNIV	DR. J. HARVEY GOL	FSHEP0::GOLDMAN	HIGH ENERGY PHY
FSHEP4	7.359	FLORIDA STATE UNIV	DR. J. HARVEY GOL	FSHEP0::GOLDMAN	HIGH ENERGY PHY
FSHEP5	7.361	FLORIDA STATE UNIV	DR. J. HARVEY GOL	FSHEP0::GOLDMAN	HIGH ENERGY PHY
FSHEP6	7.360	FLORIDA STATE UNIV	DR. J. HARVEY GOL	FSHEP0::GOLDMAN	HIGH ENERGY PHY
FSHEP7	7.362	FLORIDA STATE UNIV	DR. J. HARVEY GOL	FSHEP0::GOLDMAN	HIGH ENERGY PHY
FSHEP8	7.363	FLORIDA STATE UNIV	DR. J. HARVEY GOL	FSHEP0::GOLDMAN	HIGH ENERGY PHY
FSHEP9	7.364	FLORIDA STATE UNIV	DR. J. HARVEY GOL	FSHEP0::GOLDMAN	HIGH ENERGY PHY
FSUHEP	7.355	FLORIDA STATE UNIV	DR. J. HARVEY GOL	FSHEP0::GOLDMAN	HIGH ENERGY PHY
GABLES	3.74	UNIV OF MIAMI	BARRY MILLER	CABLES::BARRY	OCEANS
GAL	24.33	NASA/AMES	DONNA FLEURY	GAL::FLEURY	ASTRONOMY/SPACE
GALAXY	33.332	UNIV OF COLORADO-BOULDER	PHIL EVANS	AQUILA::EVANS	
GARFLD	7.278	NASA/MSFC	RICH DRINKARD	CURLY::CLMANAGER	DATA REDUCTION
GLENN	24.103	MASSACHUSETTS INST. OF TE	ROBERT BRUEN	KARMAN::BRUEN	AERONAUTICAL EN
GLL1	5.240	NRAC	STEVE GRANDI	DRACO::GRANDI	ASTRONOMY
GMV1	5.931	CALTECH	ALAN MATHIOWETZ	WAGVAX::AMM	CHEMISTRY
GOLD	6.162	WOODS HOLE OCEANOGRAPHIC	WARREN SASS	RED::SPAN MANAGER	OCEANS
GONZO	7.272	NASA/MSFC	RICH DRINKARD	CURLY::CLMANAGER	DATA REDUCTION

GPXICE	33.251	UNIV OF COLORADO-BOULDER	LARRY BOLEF	KADLIN:;BOLEF	ATMOSPHERIC/OCE
GPXTQV	39.218	UNIV ROMA "TOR VERGATA"	RENATA KWATERA	VAXTOV:;SYSTEM	ASTRONOMY
GRAY	8.154	WOODS HOLE OCEANOGRAPHIC	WARREN SASS	RED:;SPAN_MANAGER	OCEANS
GREEN	8.158	WOODS HOLE OCEANOGRAPHIC	WARREN SASS	RED:;SPAN_MANAGER	DCEANS
GROUCH	5.3	NASA/JPL	ZONDRA SUNSERI	GROUCH:;ZUS	SPACE SCIENCES
GRUMPY	5.184	UCLA	BOB MEHLMAN	GRUMPY:;RMEHLMAN	PLANETARY
GUAM	5.48	NASA/JPL	DON BAKER	GUAM:;BAKER	ALL
GUS	24.118	MASSACHUSETTS INST. OF TE	ROBERT BRUEN	KARMAN:;BRUEN	AERONAUTICAL EN
GVS1	5.932	CALTECH	ALAN MATHIOWETZ	WAGVAX:;AMM	CHEMISTRY
GVS2	5.933	CALTECH	ALAN MATHIOWETZ	WAGVAX:;AMM	CHEMISTRY
GVS3	5.934	CALTECH	ALAN MATHIOWETZ	WAGVAX:;AMM	CHEMISTRY
HAIL	33.334	UNIV OF COLORADO-BOULDER	PHIL EVANS	AQUILA:;EVANS	
HAL	24.58	NASA/AMES	DONNA FLEURY	GAL:;FLEURY	ASTRONOMY/SPACE
HALOE	18.7	NASA/LANGLEY	MARSHA SHERLAND	HALOE:;SYSTEM	ATMOSPHERIC SCI
HAMLET	5.858	CALTECH	VALERIE OKINAKA	HAMLET:;VALERIE	ALL
HAPPY	5.188	NASA/JPL	JOHN PIOTROWSKI	HAPPY:;JDP	SOLAR-TERRS/PLA
HARDY	7.53	STANFORD UNIV	BRIAN ANDERSEN	HARDY:;ANDERSEN	SOLAR-TERRS/ATM
HAWAII	5.278	UNIV OF HAWAII/GEDPHYSICS	JEFF BOSEL	HAWAII:;POSTMASTE	PLANETARY/GEDLO
HDRAV8	5.893	CALTECH	JON MELVIN	CADRES:;JDM	CADRE
HEA758	6.18	NASA/GSFC	GARY DORMAN	DSTL86:;DORMAN	ALL
HEC	24.84	NASA/AMES	DONNA FLEURY	GAL:;FLEURY	ASTRONOMY/SPACE
HELENA	8.588	NASA/HEADQUARTERS	MICHAEL C. NEWELL	POLLUX:;MNEWELL	OFFICE AUTOMATI
HERING	28.228	MAX PLANCK INST FUER KERN	HANS DOEBBELING	ECD1:;NETMGR	SPACE SCIENCES
HERMAN	24.111	MASSACHUSETTS INST. OF TE	ROBERT BRUEN	KARMAN:;BRUEN	AERONAUTICAL EN
HERMIT	7.158	NASA/MSFC	DAVE MERCIER	HERMIT:;MERCIER	PROGRAM DEVELOP
HFL	9.58	NASA/JSC	TED KELL	HFL:;KELL	PLANETARY
HIASMS	18.151	CANADIAN DATA ANALYSIS NE	DAVE ANGLIN	HIAULY:;DAVE	SPACE PHYSICS/A
HIASOL	18.152	CANADIAN DATA ANALYSIS NE	DAVE ANGLIN	HIAULY:;DAVE	SPACE PHYSICS/A
HIAULY	18.158	CANADIAN DATA ANALYSIS NE	DAVE ANGLIN	HIAULY:;DAVE	SPACE PHYSICS/A
HMF	8.38	NASA/JSC	BILL BAKER	MEDICS:;WBAKER	LIFE SCIENCES
HRS	8.28	NASA/GSFC	FRANK KEEFER	CHAMP:;KEEFER	SPACE PHYSICS/A
HUEY	9.78	NASA/JSC	SHARON LAFUSE	CTSD2:;SHARON	PLANETARY
HYADES	33.48	UNIV OF COLORADO-BOULDER	PHIL EVANS	AQUILA:;EVANS	ASTROPHYSICS
HYDRA8	5.885	CALTECH	JON MELVIN	CADRES:;JDM	CADRE
HYRAX	5.328	THE RAND CORPORATION	TIM COLVIN	HYRAX:;COLVIN	PLANETARY
IAC	28.172	INSTITUTO DE ASTROFISICA	PEDRO MARTIN	IAC:;SYSTEM	
IAF	6.2	NASA/GSFC	CHARLES COSNER	MPP:;COSNER	ALL
IAGO	5.854	CALTECH	VALERIE OKINAKA	HAMLET:;VALERIE	ALL
IAPC89	28.529	OBSERVATOIRE DE PARIS	PASCAL BLONDE	IAPC89:;PASCAL	ASTRONOMY/SPACE
IAPOBS	28.82	INSTITUT D'ASTROPHYSIQUE	D. CESARSKY	ECD1:;NETMGR	ASTROPHYSICS
IASETC	28.73	OBSERVATOIRE DE PARIS-MEU	V. TRAN	ECD1:;NETMGR	ASTRONOMY/SPACE
IASLAB	28.72	OBSERVATOIRE DE PARIS-MEU	V. TRAN	ECD1:;NETMGR	ASTRONOMY/SPACE
IASSET	28.78	OBSERVATOIRE DE PARIS-MEU	V. TRAN	ECD1:;NETMGR	ASTRONOMY/SPACE
IASTER	28.71	OBSERVATOIRE DE PARIS-MEU	V. TRAN	ECD1:;NETMGR	ASTRONOMY/SPACE
IFKKI	28.151	UNIV OF KIEL	QUENTER GREEN	IFKKI:;GREEN	PHYSICS
IFSI	17.78	IFSI	CECILIA CECCARELL	IFSI:;SYSTEM	ASTROPHYSICS
IGOR	28.224	MAX PLANCK INST FUER KERN	HANS DOEBBELING	ECD1:;NETMGR	SPACE SCIENCES
IGOR	24.188	MASSACHUSETTS INST. OF TE	ROBERT BRUEN	KARMAN:;BRUEN	AERONAUTICAL EN
ILLITE	33.48	UNIV OF COLORADO-BOULDER	LARRY BOLEF	RASTER:;BOLEF	EARTH SCIENCE
IMAGE	8.482	UNIV OF MARYLAND	LAWRENCE BLEAU	UMAIP:;SYSMGR	VISIBLE ASTROND
IMC	5.923	CALTECH	MANFRED MORARI	IMC:;MM	CHEMICAL ENGINE
IMG	8.484	UNIV OF MARYLAND	LAWRENCE BLEAU	UMAIP:;SYSMGR	VISIBLE ASTROND
INO	7.183	NORDA	DEEDEE GARCIA	INO:;NETMAN	OCEANS
ION	7.32	NASA/MSFC	JEANETTE RANSOM	SSL:;RANSOM	MAGNETOSPHERIC
IOWA	7.84	UNIV OF IOWA	LARRY SCHRDEDER	IOWASP:;BRECHWALD	PHYSICS
IOWASP	7.83	UNIV OF IOWA	BILL ROBINSON	IOWASP:;SYSTEM	SPACE PHYSICS
IPAC	5.857	CALTECH	RICK EBERT	ROMEDLL"RICKXIPAC	ASTRONOMY
IPDGW1	8.93	NASA/GSFC	DAVE WYCKOFF	IPDGW1:;WYCKOFF	ALL
ISAS	8.379	ISAS	DR. TAKAHIRO OBAR	NSSDCA:;PSIXKYOTO	
ISIS	8.84	NASA/GSFC	JOE GURMAN	SOLMAX:;GURMAN	ALL
ISOEOM	7.78	NASA/MSFC	TIM BALDRIDGE	SSL:;BALDRIDGE	ATOMIC PHYSICS
ISPIR1	3.78	UNIV OF MIAMI	BARRY MILLER	CABLES:;BARRY	OCEANS
ISSAC	5.4	NASA/JPL	JOHN PIOTROWSKI	ISSAC:;JDP	SOLAR-TERRS/PLA
IUE	6.28	NASA/GSFC	FRANK KEEFER	CHAMP:;KEEFER	ALL
IUESDC	8.92	NASA/GSFC	CHARLES COSNER	MPP:;COSNER	OCEANS
JEC	9.2	NASA/JSC	VICKY LUEBE	JEC:;VICKY	PLANETARY

JEDAC	27.157	SCRIPPS INST OF OCEANOGR	STEPHEN PAZAN	JEDAC:PAXAN	OCEANS
JEFFS	24.54	MASSACHUSETTS INST. OF TE	ROBERT BRUEN	KARMAN:BRUEN	AERONAUTICAL EN
JEROME	24.107	MASSACHUSETTS INST. OF TE	ROBERT BRUEN	KARMAN:BRUEN	AERONAUTICAL EN
JPL84A	5.124	NASA/JPL	MALCOM RAYFIELD	JPL84A:MJR	VLSI DEVELOPMEN
JPL84B	5.125	NASA/JPL	MALCOM RAYFIELD	JPL84A:MJR	VLSI DEVELOPMEN
JPL85A	5.20	NASA/JPL	ROBERT NORTON	JPL85A:NORTON	ALL
JPL85B	5.21	NASA/JPL	DAVID LEVINE	JPL85B:SYSTEM	ALL
JPL85C	5.22	NASA/JPL	DAVID LEVINE	JPL85C:SYSTEM	ALL
JPL85D	5.23	NASA/JPL	DAVID LEVINE	JPL85D:SYSTEM	ALL
JPL85E	5.24	NASA/JPL	DAVID LEVINE	JPL85E:SYSTEM	ALL
JPL85F	5.25	NASA/JPL	DAVID LEVINE	JPL85F:SYSTEM	ALL
JPL85G	5.26	NASA/JPL	DAVID LEVINE	JPL85G:SYSTEM	ALL
JPL85H	5.27	NASA/JPL	DAVID LEVINE	JPL85H:SYSTEM	ALL
JPL85I	5.28	NASA/JPL	DAVID LEVINE	JPL85H:SYSTEM	ALL
JPL85J	5.29	NASA/JPL	DAVID LEVINE	JPL85H:SYSTEM	ALL
JPLGP	5.7	NASA/JPL	CHRISTINA SIDROW	JPLGP:CSIDROW	ALL
JPLIF	5.8	NASA/JPL	JOHN PIOTROWSKI	ISSAC:JDP	ALL
JPLLSI	5.11	NASA/JPL	CHUCK MOBLEY	JPLLSI:MOBLEY	ALL
JPLMAD	5.13	NASA/JPL	EUGENE Y. CHU	JPLMAD:SYSTEM	VLSI DEVELOPMEN
JPLNG	5.8	NASA/JPL	CHRISTINA SIDROW	JPLNG:CSIDROW	ALL
JPLOCN	5.57	NASA/JPL	I-LIN TANG	JPLOCN:SYSTEM	OCEAN
JPLOCS	5.143	NASA/JPL	RON TENCATI	JPLOCS:TENCATI	ENGINEERING DEV
JPLPDS	5.1	NASA/JPL	ERIC THEIS	JPLPDS:WSWARTZBA	PLANETARY/ASTRO
JPLRAG	5.12	NASA/JPL	TIM THOMPSON	JPLRAG:THOMPSON	RADIO/SUBMILLIM
JPLSCI	5.14	NASA/JPL	JOHN PIOTROWSKI	ISSAC:JDP	SOLAR-TERRS/PLA
JPLSP	5.5	NASA/JPL	DOUG CLAY	JPLSP:DCLAY	PLASMA WAVE
JPLSP1	5.43	NASA/JPL	BRUCE GOLDSTEIN	JPLSP1:BGOLDSTEI	SPACE PHYSICS
JULIET	5.852	CALTECH	VALERIE OKINAKA	HAMLET:VALERIE	ALL
JUPI11	5.955	CALTECH	ED DANIELSON	JUPT1:JED	PLANETARY
KAOLIN	33.48	UNIV OF COLORADO-BOULDER	LARRY BOLEF	RASTER:BOLEF	EARTH SCIENCE
KARMAN	24.108	MASSACHUSETTS INST. OF TE	ROBERT BRUEN	KARMAN:BRUEN	AERONAUTICAL EN
KAYZ	6.234	DARTMOUTH COLLEGE	DAVE HELLER	KAYZ:DEH	ASTRONOMY
KECK24	5.887	CALTECH	JON MELVIN	CADRES:JDM	CADRE
KELLY	5.940	CALTECH	PAT HUBER	ERIN:PAT	KELLOGG RADIATI
KEPLER	6.406	SPACE TELESCOPE INSTITUTE	TOM COMEAU	SCIVAX:TCOMEAU	ASTROPHYSICS
KRAKO	28.296	MAX PLANCK INST FUER KERN	HANS DOEBBELING	ECD1:NETMGR	SPACE SCIENCES
KRYOS	33.250	UNIV OF COLORADO-BOULDER	LARRY BOLEF	KAOLIN:BOLEF	GLACIOLOGY/OCEA
KSCDL1	7.121	NASA/KSC	MARK JUHR	KSCDL1:JUHR	ENGINEERING DEV
KSCDL2	7.122	NASA/KSC	MARK JUHR	KSCDL1:JUHR	ENGINEERING DEV
KSCDL3	7.123	NASA/KSC	MARK JUHR	KSCDL1:JUHR	ENGINEERING DEV
KSCP01	7.131	NASA/KSC	MARK JUHR	KSCDL1:JUHR	SPACELAB/SPACE
KSCP02	7.132	NASA/KSC	MARK JUHR	KSCDL1:JUHR	SPACELAB/SPACE
KSCP03	7.133	NASA/KSC	MARK JUHR	KSCDL1:JUHR	SPACELAB/SPACE
KSCP04	7.134	NASA/KSC	MARK JUHR	KSCDL1:JUHR	SPACELAB/SPACE
KSCRTR	7.124	NASA/KSC	MARK JUHR	KSCDL1:JUHR	ENGINEERING DEV
KUMGM	7.225	UNIV OF KANSAS	MICHAEL HOLMES	KUPHSX:SYSTEM	SOLAR-TERRS
KUPHSX	7.220	UNIV OF KANSAS	MICHAEL HOLMES	KUPHSX:SYSTEM	SOLAR-TERRS
KYOTO	6.144	KYOTO UNIV	TOYO KAMEI	NSSDCA:PSIJKYOTO	SPACE SCIENCES
LAMPS	7.44	UNIVERSITIES SPACE RESEAR	JAYANTHI SRIKISHE	LAMPS:JSRIKISHEN	ATMOSPHERIC PHY
LASR	7.20	UNIV OF CHICAGO	GORDON LENTZ	LASR:LENTZ	ASTROPHYSICS
LAUREL	7.52	STANFORD UNIV	BRIAN ANDERSEN	HARDY:ANDERSEN	SOLAR-TERRS/ATM
LCP	11.50	NRL	ROB SCOTT	LCP:SCOTT	COMPUTER SCIENC
LEPVAX	6.21	NASA/GSFC	MARK SILVERSTEIN	LEPVAX:U2MJS	SPACE PHYSICS
LEWY	9.78	NASA/JSC	SHARON LAFUSE	CTSD2:SHARON	PLANETARY
LHEAVX	6.53	NASA/GSFC	PHIL NEWMAN	LHEAVX:SYSTEM	ALL
LIBRA	10.2	YORK UNIV	FLO VEEL	CANDTT:ACTION	SPACE PHYSICS/A
LINWPI	28.350	MAX PLANCK INST FUER AERO	HANS-JUERGEN MUEL	SYS MANAGER	SPACE SCIENCES
LIONEL	6.469	UNIV OF MARYLAND	DR. NICHOLAS S. C	UMDENP:CHANT	NUCLEAR PHYSICS
LMCX1	33.36	UNIV OF COLORADO-BOULDER	PHIL EVANS	AQUILA:EVANS	ASTROPHYSICS/AS
LMPVAX	24.114	MASSACHUSETTS INST. OF TE	ROBERT BRUEN	KARMAN:BRUEN	AERONAUTICAL EN
LMPWSD	24.115	MASSACHUSETTS INST. OF TE	ROBERT BRUEN	KARMAN:BRUEN	AERONAUTICAL EN
LOCAL	6.461	UNIV OF MARYLAND	LAWRENCE BLEAU	UMAIP:SYSMGR	VISIBLE ASTRONO
LOCK	9.80	LOCKHEED ENGINEERING SERV	NEIL WOLFE	LOCK:WOLFE	OFFICE AUTOMATI
LOCKHD	5.298	LOCKHEED PALD ALTO RESEAR	DAYTON DATLOWE	LOCKHD:NETMGR	SOLAR-TERRS/ATM
LOGDS	5.911	CALTECH	JOHN PIOTROWSKI	ISSAC:JDP	17.5ASTRONOMY
LOKI	6.413	SPACE TELESCOPE INSTITUTE	TOM COMEAU	SCIVAX:TCOMEAU	ASTROPHYSICS

LOLA 27.5 SDSC  
 LOONEY 5.280 UNIV OF ARIZONA  
 LPI 9.42 NASA/JSC  
 LRSP 5.10 NASA/JPL  
 LSDNM 9.61 NASA/JSC  
 LSPD 9.43 NASA/JSC  
 LSUOVX 7.459 LOUISIANA STATE UNIV  
 LTP 6.5 NASA/GSFC  
 LTP2 6.6 NASA/GSFC  
 LUAC 27.2 SDSC  
 LUDWIG 24.109 MASSACHUSETTS INST. OF TE  
 LVPCA 27.441 SAIC  
 LVVA 27.486 SAIC  
 LVVB 27.496 SAIC  
 LVVC 27.437 SAIC  
 LVVD 27.438 SAIC  
 LVVE 27.439 SAIC  
 LVVI 27.440 SAIC  
 LYNX 33.32 UNIV OF COLORADO-BOULDER  
 M5 27.7 SDSC  
 MADMAX 24.265 USGS  
 MADRAF 7.141 UNIV OF WISCONSIN  
 MAGDAT 7.31 NASA/MSFC  
 MAGRPH 7.33 NASA/MSFC  
 MAQSPA 6.49 NASA/GSFC  
 MAIA 33.74 UNIV OF COLORADO-BOULDER  
 MANONO 6.90 NASA/GSFC  
 MAP 11.84 NRL  
 MARGED 6.199 UNIV OF RHODE ISLAND  
 MARS1 5.954 CALTECH  
 MARVEL 6.466 UNIV OF MARYLAND  
 MCCOY 7.47 STANFORD UNIV  
 MCLOCK 9.81 LOCKHEED ENGINEERING SERV  
 MEDIC2 9.429 NASA/JSC  
 MEDICS 9.37 NASA/JSC  
 MEGASA 28.56 OBSERVATOIRE DE PARIS-MEU  
 MELAMA 28.57 OBSERVATOIRE DE PARIS-MEU  
 MELAMB 28.58 OBSERVATOIRE DE PARIS-MEU  
 MELAMC 28.59 OBSERVATOIRE DE PARIS-MEU  
 MERCU1 5.951 CALTECH  
 MESPOA 28.60 OBSERVATOIRE DE PARIS-MEU  
 MESPOB 28.61 INSTITUT D'ASTROPHYSICS D  
 METEOR 7.27 UNIV OF ALABAMA-HUNTSVILL  
 MEUDON 28.51 OBSERVATOIRE DE PARIS-MEU  
 MIAMI 3.2 RSMAS  
 MIPL1 5.151 NASA/JPL  
 MIPL2 5.152 NASA/JPL  
 MIPL3 5.153 NASA/JPL  
 MIPL4 5.154 NASA/JPL  
 MIRA 5.722 UCLA  
 MITCCD 10.822 MASSACHUSETTS INST. OF TE  
 MLSRAC 5.19 NASA/JPL  
 MMM 9.344 NCAR  
 MODAL1 9.16 NASA/JSC  
 MODAL2 9.17 NASA/JSC  
 MOG 24.252 USGS  
 MORITZ 28.290 MAX PLANCK INST FUER KERN  
 MOSS1 6.419 SPACE TELESCOPE INSTITUTE  
 MOSS2 5.111 NASA/JPL  
 MOTHRA 5.333 UNIV OF WASHINGTON  
 MPE 28.101 MAX PLANCK INST FUER ASTR  
 MPEI1 28.104 MAX PLANCK INST FUER ASTR  
 MPEI2 28.107 MAX PLANCK INST FUER ASTR  
 MPEX1 28.102 MAX PLANCK INST FUER ASTR  
 MPP 6.1 NASA/GSFC  
 MSD1 9.6 NASA/JSC

GERARD K. NEWMAN  
 TERRY FORRESTER  
 KINPONG LEUNG  
 JOHN PIDTROWSKI  
 LOU PADULA  
 HASAN RAHMAN  
 T. GREGORY GUZIK  
 SHAHIN SAMADI  
 SHAHIN SAMADI  
 GERARD K. NEWMAN  
 ROBERT BRUEN  
 ROBERT CRAY  
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 ROBERT CRAY  
 PHIL EVANS  
 GERARD K. NEWMAN  
 GARY CLOW  
 STEPHAN JANSEN  
 JEANETTE RANSOM  
 EDWARD WEST  
 EDWIN FUNG  
 PHIL EVANS  
 GENE CARL FELDMAN  
 STEFAN THONNARD  
 JIM DOLAN  
 CARLOS SALINAS  
 DR. NICHOLAS S. C  
 FAISAL KHAN  
 SUE PIOTROWSKI  
 BILL BAKER  
 BILL BAKER  
 FRANCOISE PERRIER  
 ANDREE FERNANDEZ  
 V. TRAN  
 V. TRAN  
 CARLOS SALINAS  
 PAULETTE MICHENEA  
 DIEGO A. CESARSKI  
 BILL TEOH  
 CHRIS HARVEY  
 JIM BROWN  
 SCOTT FULLNER  
 SCOTT FULLNER  
 SCOTT FULLNER  
 TOM GREER  
 DR. ZDENKA PLAVEC  
 PETER FORD  
 JOHN BURKE  
 PAT WAUKAU  
 CHUCK MITCHELL  
 DAN ANDERSON  
 JOHN FIFE  
 HANS DOEBBELING  
 TOM COMEAU  
 ZONDRA SUNSERI  
 STEVEN JONES  
 KARLHEINZ MUEHLHA  
 MUEHLHAUSER  
 ARLO REEVES  
 MUEHLHAUSER  
 CHARLES COSNER  
 BOB DOUGHTY

SDSC::QKN  
 LOONEY::FORRESTER  
 LPI::LEUNG  
 ISSAC::JDP  
 NEWTON::PADULA  
 LSPD::RAHMAN  
 LSUOVX::GUZIK  
 LTP::SHAHIN  
 LTP::SHAHIN  
 SDSC::GKN  
 KARMAN::BRUEN  
 LVVA::POSTMASTER  
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 LVVA::POSTMASTER  
 AQUILA::EVANS  
 SDSC::QKN  
 MADMAX::CLOW  
 MADRAF::JANSEN  
 SSL::RANSOM  
 MAGRPH::WEST  
 CSDR::NNEHF  
 AQUILA::EVANS  
 SAVAII::GENE  
 MAP::THONNARD  
 MARGED::SYSTEM  
 EARTH1::MANAGER  
 UMDENP::CHANT  
 MCCOY::KHAN  
 MCLOCK::PIOTROWSKI  
 MEDICS::WBAKER  
 MEDICS::WBAKER  
 MEGASA::PERRIER  
 MELAMA::FERNANDEZ  
 ECD1::NETMGR  
 ECD1::NETMGR  
 EARTH1::MANAGER  
 MESPOA::MICHENEA  
 IAOBS::DIEGO  
 METEOR::TEOH  
 MEUDON::HARVEY  
 MIAMI::JIM  
 MIPL3::SEF001  
 MIPL3::SEF001  
 MIPL3::SEF001  
 MIPL3::TCQ000  
 BONNIE::ZDENKA  
 MITCCD::PQF  
 MLSRAC::OPER  
 WMM::WAUKAU  
 MODAL1::MITCHELL  
 SN::DAN  
 MOG::SYSTEM  
 ECD1::NETMGR  
 SCIVAX::TCOMEAU  
 MOSS2::ZUS  
 MOTHRA::NETMGR  
 MPE::KZM  
 ECD1::NETMGR  
 ECD1::NETMGR  
 ECD1::NETMGR  
 MPP::COSNER  
 MSD2::DOUGHTY

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 EARTH SCIENCES  
 SPACE SCIENCES  
 ASTROPHYSICS  
 SPACE SCIENCES  
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 ASTROPHYSICS  
 ASTROPHYSICS  
 ASTROPHYSICS  
 ALL  
 PLANETARY

MSD2	9.7	NASA/JSC	DONALD YOUNG	QWKDRW::YOUNG	PLANETARY
MUON	5.15	NASA/JPL	ZONDRA SUNSERI	MUON::ZUS	SPACE SCIENCES
MV1	6.11	NASA/GSFC	BRIAN SQUIBB	VAP::SQUIBB	ALL
MV2	6.12	NASA/GSFC	BRIAN SQUIBB	VAP::SQUIBB	ALL
MV3	6.13	NASA/GSFC	BRIAN SQUIBB	VAP::SQUIBB	ALL
MV4	6.14	NASA/GSFC	BRIAN SQUIBB	VAP::SQUIBB	ALL
MV7770	11.38	NRL	JOE WHITE	VX7770::WHITE	COMPUTER APPLIC
MVXNA1	39.205	UNIV OF NAPOLI	PAOLO LO RE	VAXNA::SYSTEM	ASTRONOMY
MVXDAC	39.165	OBSERV. ASTR. CAPODIMONTE	GIUSEPPE LONGO	ASTRNA::SYSTEM	ASTRONOMY
MVXDAT	39.91	OBSERV. ASTRONOMIC TRIES	ROBERTO KRASNA	ASTRTS::SYSTEM	ASTRONOMY
NAS4	28.225	MAX PLANCK INST FUER KERN	HANS DOEBBELING	ECD1::NETMGR	SPACE SCIENCES
NAIF	5.2	NASA/JPL	ZONDRA SUNSERI	NAIF::ZUS	SPACE SCIENCES
NB11	28.201	MAX PLANCK INST FUER KERN	HANS DOEBBELING	ECD1::NETMGR	SPACE SCIENCES
NCF	6.139	NASA/GSFC	DOLORES PARKER	NCF::PARKER	ALL
NCFMV1	6.131	NASA/GSFC	TODD BUTLER	NCFMV1::TBUTLER	ALL
NEFC01	6.173	WOODS HOLE OCEANOGRAPHIC	WARREN SASS	RED::SYSTEM_WJS	OCEANS
NEPTU1	5.958	CALTECH	MARK ALLEN		PLANETARY
NEWT	6.407	SPACE TELESCOPE INSTITUTE	TOM COMEAU	SCIVAX::TCOMEAU	ASTROPHYSICS
NEWTON	9.82	NASA/JSC	J.M. ENDSLEY	NEWTON::ENDSLEY	OFFICE AUTOMATI
NILAS	33.181	UNIV OF COLORADO-BOULDER	LARRY BOLEF	AQUILA::EVANS	ATMOSPHERIC/OCE
NIMI1	5.9	NASA/JPL	JOHN PIOTROWSKI	ISSAC::JDP	ALL
NM1	6.221	DARTMOUTH COLLEGE	DOUGLAS A. FRASER	THAYER::DOUGF	ASTRONOMY
NM2	6.222	DARTMOUTH COLLEGE	DOUGLAS A. FRASER	THAYER::DOUGF	ASTRONOMY
NMCC	9.38	NASA/JSC	GLEN PROW	LOCK::PROW	PLANETARY
NODC	6.215	US DEPT OF COMMERCE/NOAA/	JANET WARD	NODC::WARD	OCEANS
NORDAS	7.205	NORDA	MONTY PEFFLEY	NORDAS::PEFFLEY	OCEANS
NPQATE	9.237	NCAR	JON CORBET	RDSS::SYSTEM	
NPSOPT	5.590	NAVAL POST GRADUATE SCHOD	DAVID CLEARY	NPSOPT::CLEARY	SPACE PHYSICS
NRAO	6.510	NATIONAL RADIO ASTRONOMY	AL BRAUN	NRAO::ABRAUN	ASTRONOMY
NRL	11.6	NRL	PAUL LANG	NRL::LANG	COMPUTER SCIENC
NRL1	11.2	NRL	PAUL LANG	NRL::LANG	COMPUTER SCIENC
NRL2	11.3	NRL	PAUL LANG	NRL::LANG	COMPUTER SCIENC
NRLDR1	11.214	NRL	PAUL LANG	LCP::LANG	COMPUTER SCIENC
NRLPLA	11.230	NRL	CHUNGSAN LIN	NRLPLA::LIN	SOLAR-TERRS
NSCAT	5.30	NASA/JPL	CHRISTOPHER FINCH	STANS::CJF	PLANETARY/OCEAN
NSFQW	9.364	NCAR	DON MORRIS		
NSIG3	6.19	NASA/GSFC	EDWIN FUNG	CSDR::NNEHF	ALL
NSSDC	6.132	NASA/GSFC	DOLORES PARKER	NSSDCA::PARKER	ALL
NSSDCA	6.133	NASA/GSFC	DOLORES PARKER	NSSDCA::PARKER	ALL
DAL28A	7.29	UNIV OF ALABAMA-HUNTSVILL	TIM BALDRIDGE	SSL::BALDRIDGE	APPLIED OPTICS
OBIWAN	7.279	NASA/MSFC	RICH DRINKARD	CURLY::CLMANAGER	DATA REDUCTION
OCEAN1	6.58	NASA/GSFC	ROSA KAO	OCEAN1::ROSA	ALL
OCEAN2	6.60	NASA/GSFC	ROSA KAO	OCEAN1::ROSA	ALL
OCIW	5.918	MT. WILSON & LAS CAMPANAS	KEN CLARDY	OCIW::SYSTEM	ASTRONOMY
ODC00	6.375	US DEPT OF COMMERCE/NOAA/	JANET WARD	ODC00::SYSTEM	OCEANS
ODIE	7.277	NASA/MSFC	RICH DRINKARD	CURLY::CLMANAGER	DATA REDUCTION
OKOS	5.912	CALTECH	JOHN PIOTROWSKI	ISSAC::JDP	ASTRONOMY
OLEMAX	6.66	NASA/GSFC	JOSEPH B. GURMAN	OLEMAX::GURMAN	SOLAR PHYSICS
OLIVER	27.9	SDSC	GERARD K. NEWMAN	SDSC::GKN	ALL
OLIVER	28.297	MAX PLANCK INST FUER KERN	HANS DOEBBELING	ECD1::NETMGR	SPACE SCIENCES
OLLI	28.292	MAX PLANCK INST FUER KERN	HANS DOEBBELING	ECD1::NETMGR	SPACE SCIENCES
OOEPE6	28.161	INSTITUTE FOR OPTOELECTRO	GERD ENDERLEIN	OOEPE6::SYSTEM	SPACE SCIENCES
OORT	24.62	NASA/AMES	DONNA FLEURY	GAL::FLEURY	ASTRONOMY/SPACE
OPTICS	7.40	UNIV OF ALABAMA-HUNTSVILL	JIM TROLINGER	OPTICS::TROLINGER	SOLAR-TERRS
ORIENT	5.945	CALTECH	DAN ZIRIN	POSTMASTER@HAMLET	ENGINEERING DEV
ORION	33.22	UNIV OF COLORADO-BOULDER	PHIL EVANS	AQUILA::EVANS	PLANETARY/ATMOS
OTTO	24.101	MASSACHUSETTS INST. OF TE	ROBERT BRUEN	KARMAN::BRUEN	AERONAUTICAL EN
OVRD	5.902	CALTECH	STEVE SCOTT	OVRD::SLS	ASTRONOMY
PACF	6.23	NASA/GSFC	BOB TURKELSON	PACF::TUEKELSON	ALL
PAGES	27.3	SDSC	GERARD K. NEWMAN	SDSC::GKN	ALL
PAL	6.629	NASA/GSFC	WILLIAM THOMPSON	CHAMP::THOMPSON	ALL
PAMB	9.301	NCAR	JOE CHOY	TQCM::CHOY	SOLAR-TERRS/ATM
PARC	9.383	NCAR	BASIL IRWIN		
PAVO	5.117	NASA/JPL	RALPH WEST	LOGOS::WEST	ASTRONOMY
PC01	6.316	APPLIED PHYSICS LABORATOR	LORA L. SUTHER	APLSP::SUTHER	SOLAR-TERRS
PHOBOS	5.900	CALTECH	CHRIS LEE	DEIMOS::CK1	ASTRONOMY

PHOTON	33.252	UNIV OF COLORADO-BOULDER	LARRY BOLEF	KADLIN:BOLEF	ATMOSPHERIC/OCE
PHYVAX	3.89	UNIV OF MIAMI	MARCO MONTI	PHYVAX:MARCO	PHYSICS
PISCES	33.28	UNIV OF COLORADO-BOULDER	PHIL EVANS	AQUILA:EVANS	ATMOSPHERIC/OCE
PIXE	28.295	MAX PLANCK INST FUER KERN	HANS DOEBBELING	ECD1:NETMGR	SPACE SCIENCES
PLAFYS	17.150	THE ROYAL INST OF TECHNOL	BENGT H. NILSSON	ESRIN2:PLAFYS:N	PLASMA PHYSICS
PLAID1	9.59	NASA/JSC	BOB DOUGHTY	MSD2:DOUGHTY	PLANETARY
PLAID2	9.82	NASA/JSC	DOUG DOUGHTY	MSD2:DOUGHTY	PLANETARY
PLASMA	6.235	DARTMOUTH COLLEGE	DAVE HELLER	THAYER:DEH	PHYSICS
PLDSJ1	6.47	NASA/JPL	GEORGE KARAS	PLDSJ1:GEORGE	ALL
PLUM	6.181	WOODS HOLE OCEANOGRAPHIC	WARREN SASS	RED:SPAN MANAGER	OCEANS
PLUTO	3.30	RSMAS	JIM BROWN	MIAMI:JIM	OCEANS
PLUTD1	5.959	CALTECH	CARLOS SALINAS	EARTH1:MANAGER	PLANETARY
POLLUX	6.142	NASA/HEADQUARTERS	MICHAEL C. NEWELL	PDLUX:MNEWELL	OFFICE AUTOMATI
PPD	9.45	NASA/JSC	ROBERT KIDD	PPD:KIDD	PLANETARY
PRO2	7.51	STANFORD UNIV	FAISAL KHAN	MCCOY:KHAN	SOLAR-TERRS/ATM
PROC	6.320	APPLIED PHYSICS LABORATOR	LORA L. SUTHER	APLSP:SUTHER	SOLAR-TERRS
PROC1	6.321	APPLIED PHYSICS LABORATOR	LORA L. SUTHER	APLSP:SUTHER	SOLAR-TERRS
PROC3	6.323	APPLIED PHYSICS LABORATOR	LORA L. SUTHER	APLSP:SUTHER	SOLAR-TERRS
PS300	5.937	CALTECH	ALAN MATHIOWETZ	WAGVAX:AMW	CHEMISTRY
PSIKEY	3.350	PLANETARY SCIENCE INSTITU	STEVE B. HOWELL	PSIKEY:SYSTEM	ASTRONOMY/PLANE
PSNCLU	39.117	PSN/CNR SEZ. MATERA	ESTORE STELLA	PSNMT:SYSTEM	ASTRONOMY/SPACE
PSNMT	39.191	PSN/CNR SEZ. MATERA	ETTORE STELLA	PSNMT:SYSTEM	ASTRONOMY/SPACE
PSNMT1	39.118	CNR/IRA	ETTORE STELLA	PSNMT:SYSTEM	ASTRONOMY/SPACE
PSUMDS	6.480	PENN STATE UNIV	PAUL SHARUM	PSUV01:SHARUM	CLIMATE
PSUV01	6.431	PENN STATE UNIV	PAUL SHARUM	PSUV01:SHARUM	CLIMATE
PUCE	6.183	WOODS HOLE OCEANOGRAPHIC	WARREN SASS	RED:SPAN MANAGER	OCEANS
RADLAB	9.30	NASA/JSC	ALVA HARDY	RADLAB:HARDY	SOLAR-TERRS/ATM
RANGE	6.483	UNIV OF MARYLAND	LAWRENCE BLEAU	UMAIP:SYSMGR	ASTROPHYSICS
RAP	9.303	NCAR	SHERRY COMES	RAP:SYSTEM	
RAPID	6.362	AFGL	DAGMAR RAPP	AFGL:RAPP	SOLAR-TERRS
RASTER	33.268	UNIV OF COLORADO-BOULDER	LARRY BOLEF	RASTER:BOLEF	EARTH SCIENCE
RDSS	9.298	NCAR	JON CORBET	RDSS:SYSTEM	
RED	6.151	WOODS HOLE OCEANOGRAPHIC	WARREN SASS	RED:SYSTEM_WJS1	OCEANS
RENOIR	9.75	NASA/JSC			PLANETARY
REZIM	28.299	MAX PLANCK INST FUER KERN	HANS DOEBBELING	ECD1:NETMGR	SPACE SCIENCES
RICE	9.201	RICE UNIV	BRYAN BALES	RICE:BALES	ASTRONOMY/SPACE
RIGEL	5.723	UCLA	DR. ZDENKA PLAVEC	BONNIE:ZDENKA	ASTRONOMY
ROBERT	24.102	MASSACHUSETTS INST. OF TE	ROBERT BRUEN	KARMAN:BRUEN	AERONAUTICAL EN
ROMEO	5.851	CALTECH	VALERIE OKINAKA	HAMLET:VALERIE	ALL
ROSAT	6.186	NASA/GSFC	JEANNE BEHNKE	ROSAT:ACTMGR	ALL
ROUTER	7.38	NASA/MSFC	LINDA PORTER	SSL:PORTERL	SPACE SCIENCES
RPS	6.410	SPACE TELESCOPE INSTITUTE	TOM COMEAU	SCIVAX:TCOMEAU	ASTROPHYSICS
RSB	6.417	SPACE TELESCOPE INSTITUTE	TOM COMEAU	SCIVAX:TCOMEAU	ASTROPHYSICS
RSMAS	3.1	RSMAS	JIM BROWN	MIAMI:JIM	ALL
RWATTS	6.183	UNIV OF RHODE ISLAND	DAN HOLLOWAY	URI:DAN	OCEANS
S1P001	6.352	APPLIED PHYSICS LABORATOR	STUART NYLUND	AMPTE:NYLUND	SOLAR-TERRS
S1P002	6.352	APPLIED PHYSICS LABORATOR	STUART NYLUND	AMPTE:NYLUND	SOLAR-TERRS
SAL	6.65	NASA/GSFC	JOE GURMAN	SOLMAX:GURMAN	ALL
SAW	7.35	NASA/MSFC	LINDA PORTER	SSL:PORTERL	SPACE SCIENCES/
SANDOR	33.319	UNIV OF COLORADO-BOULDER	PHIL EVANS	AQUILA:EVANS	
SANTA	5.145	NASA/JPL	CHRISTOPHER FINCH	STANS:CJF	OCEAN
SARIN	33.321	UNIV OF COLORADO-BOULDER	PHIL EVANS	AQUILA:EVANS	
SATUR1	5.956	CALTECH	CARLOS SALINAS	EARTH1:MANAGER	PLANETARY
SAVAII	6.91	NASA/GSFC	CHARLES COSNER	MPP:COSNER	OCEANS
SBRI	9.431	NASA/JSC	BILL BAKER	MEDICS:WBAKER	LIFE SCIENCES
SBRI	9.182	NASA/JSC	BILL BAKER	MEDICS:WBAKER	LIFE SCIENCES
SCALAR	5.907	CALTECH	CHRIS LEE	DEIMOS:CK1	ASTRONOMY
SCFMVS	6.30	NASA/GSFC	HERB DURBECK	STAR:"K3HRD0SCFV	ALL
SCFVM	6.322	NASA/GSFC	HERB DURBECK	STAR:"K3HRD0SCFV	ALL
SCINT	6.38	NASA/GSFC	TOM ERICKSON	CSDR:XRMBI	ALL
SCIVAX	6.465	SPACE TELESCOPE INSTITUTE	DAVE STERN	6559:STERN	ASTROPHYSICS
SCOTTY	7.50	STANFORD UNIV	FAISAL KHAN	MCCOY:KHAN	SOLAR-TERRS/ATM
SCOX1	33.81	UNIV OF COLORADO-BOULDER	PHIL EVANS	AQUILA:EVANS	ASTROPHYSICS/AS
SDCC1	27.140	UNIV OF CALIF/SAN DIEGO	ED HOOPES	CASS:SYSTEM	ACADEMIC COMPUT
SDCC2	27.141	UNIV OF CALIF/SAN DIEGO	ED HOOPES	CASS:SYSTEM	ACADEMIC COMPUT
SDCC4	27.142	UNIV OF CALIF/SAN DIEGO	ED HOOPES	CASS:SYSTEM	ACADEMIC COMPUT



SDCC6	27.148	UNIV OF CALIF/SAN DIEGO	ED HOOPES	CASS::SYSTEM	ACADEMIC COMPUT
SDCC8	27.144	UNIV OF CALIF/SAN DIEGO	ED HOOPES	CASS::SYSTEM	ACADEMIC COMPUT
SDCD	6.7	NASA/GSFC	CHARLES COSNER	MPP::COSNER	ALL
SDCDCL	6.9	NASA/GSFC	CHARLES COSNER	MPP::COSNER	ALL
SDCTSS	27.8	SDSC	GERARD K. NEWMAN	SDSC::GKN	ALL
SDLS2	9.180	NASA/JSC	BILL BAKER	MEDICS::WBAKER	LIFE SCIENCES
SDPH	27.174	UNIV OF CALIF/SAN DIEGO	ED HOOPES	CASS::SYSTEM	ALL
SDPSL0	27.175	UNIV OF CALIF/SAN DIEGO	DR. KYLE WOODWARD	SDPSL0::WOODWARD	ENGINEERING DEV
SDS	27.4	UNIV OF CALIF/SAN DIEGO	E. PAUL LOVE	SDSC::LVEEPP	MATH/COMPUTER S
SDSC	27.1	SDSC	GERARD K. NEWMAN	SDSC::GKN	ALL
SDSD	9.33	NASA/JSC	WAYNE WOLZ	SDSD::WOLZ	PLANETARY
SED	9.9	NASA/JSC	ALEX POPE	B32::POPE	PLANETARY
SEKVAX	5.942	CALTECH	PAT HUBER	ERIN::PAT	KELLOGG RADIATI
SELVAX	9.339	NIST	JIM WILKELMAN	SELVAX::JWINKELMA	SPACE ENVIRONME
SILVER	6.165	WOODS HOLE OCEANOGRAPHIC	WARREN SASS	RED::SPAN MANAGER	OCEANS
SIRIS	6.22	NASA/GSFC	MARK SILVERSTEIN	LEPVAX::U2MJS	ALL
SISSA	37.132	SISSA/ISAS	ROBERTO INNOCENTE	SISSA::SYSTEM	OCEANS
SLATE	6.167	WOODS HOLE OCEANOGRAPHIC	WARREN SASS	RED::SPAN MANAGER	SOLAR-TERRS/PLA
SLEEPY	5.101	NASA/JPL	JOHN PIOTROWSKI	HAPPY::JDP	PLANETARY
SMD	9.13	NASA/JSC	ROBERT ANDERSON	SMD::ANDY	SPACE SCIENCES
SN	9.31	NASA/JSC	DAN ANDERSON	SN::DAN	SOLAR-TERRS
SNAQW	6.332	APPLIED PHYSICS LABORATOR	LORA L. SUTHER	APLSP::SUTHER	SOLAR-TERRS/PLA
SNEEZY	5.103	NASA/JPL	JOHN PIOTROWSKI	HAPPY::JDP	CHEMISTRY
SNINAA	9.32	NASA/JSC	DAVID MITTFELDEHL	SNINAA::DUCK	SOLAR-TERRS
SODA	9.293	SOUTHWEST RES. INSTITUTE	RON JANETZKE	SWRI::RON	PLANETARY/ASTRO
SOL1	5.950	CALTECH	JEFF HESTER	SOL1::JJH	SOLAR-TERRS/ATM
SOLAR	7.48	STANFORD UNIV	RICK BOGART	CORONA::RSB	ATMOSPHERIC/AST
SOLARX	33.90	UNIV OF COLORADO-BOULDER	URI TOOMRE	AQUILA::EVANS	ALL
SOLMAX	6.63	NASA/GSFC	JOE GURMAN	SOLMAX::GURMAN	PROGRAM DEVELOP
SPACE	5.265	UNIV OF ALASKA/GEOPHYSICA	RICHARD GURITZ	SPACE::GURITZ	DATA REDUCTION
SPACE1	7.274	NASA/MSFC	RICH DRINKARD	CURLY::CLMANAGER	DATA REDUCTION
SPACE2	7.275	NASA/MSFC	RICH DRINKARD	CURLY::CLMANAGER	OCEANS
SPANKY	6.171	WOODS HOLE OCEANOGRAPHIC	WARREN SASS	RED::SPAN MANAGER	ATMOSPHERIC/MET
SPARC	7.26	UNIV OF ALABAMA-HUNTSVILL	MIKE GOODMAN	METEOR::GOODMAN	SOLAR PHYSICS
SPB	7.34	NASA/MSFC	JEANETTE RANSOM	SSL::RANSOM	ATMOSPHERIC/OCE
SPICA	33.30	UNIV OF COLORADO-BOULDER	PHIL EVANS	AQUILA::EVANS	STAR::CAL
SPDCK	7.46	STANFORD UNIV	CALVIN TEAGUE	STAR::CAL	ATMOSPHERIC/AST
SPRLA	7.85	UNIV OF MICHIGAN	TERRY WEATHERHOLT	SPRLA::TERRY	ATMOSPHERIC/AST
SPRLB	7.86	UNIV OF MICHIGAN	TERRY WEATHERHOLT	SPRLA::TERRY	ATMOSPHERIC/AST
SPRLC	7.90	UNIV OF MICHIGAN	TERRY WEATHERHOLT	SPRLA::TERRY	ATMOSPHERIC/AST
SPRLD	7.92	UNIV OF MICHIGAN	TERRY WEATHERHOLT	SPRLA::TERRY	ATMOSPHERIC/AST
SPRLF	7.91	UNIV OF MICHIGAN	TERRY WEATHERHOLT	SPRLA::TERRY	ALL
SSBUV	6.84	NASA/GSFC	HARPER PRYOR	SSBUV::PRYOR	EARTH SCIENCES
SSCSTL	7.690	NASA/JOHN C.STENNIS	LES BAHAM	SSCSTL::BAHAM	ASTRONOMY
SSD0	11.70	NRL	JOHN ADAMS	SSD0::SYSTEM	SPACE SCIENCES
SSL	7.39	NASA/MSFC	LINDA PORTER	SSL::PORTERL	OCEANS
SSURF	27.150	UNIV OF CALIF/SAN DIEGO	CHRISTOPHER GARRO	SSURF::GARROD	PLANETARY/OCEAN
STANS	5.32	NASA/JPL	FRANK SALAMONE	STANS::SYSTEM	SOLAR-TERRS/ATM
STAR	7.45	STANFORD UNIV	CALVIN TEAGUE	STAR::CAL	SOLAR-TERRS/ATM
STAR1	7.49	STANFORD UNIV	CALVIN TEAGUE	STAR::CAL	PLANETARY
STD	9.25	NASA/JSC	BOB DOUGHTY	MSD2::DOUGHTY	ALL
STDVAX	6.32	NASA/GSFC	GARY E. MOSIER	STDVAX::SYSTEM	SOLAR-TERRS
STI	6.337	APPLIED PHYSICS LABORATOR	LORA L. SUTHER	APLSP::SUTHER	SOLAR-TERRS
STR	6.335	APPLIED PHYSICS LABORATOR	LORA L. SUTHER	APLSP::SUTHER	SOLAR-TERRS
STR2	6.336	APPLIED PHYSICS LABORATOR	LORA L. SUTHER	APLSP::SUTHER	ASTROPHYSICS
STSCI	6.427	SPACE TELESCOPE INSTITUTE	TOM COMEAU	SCIVAX::TCOMEAU	ALL
STX	6.180	SAR	LARRY BASILEY	STX::BASILEY	ASTRONOMY
SUNDOG	5.905	CALTECH	HAL ZIRIN	SUNDOG::HZ	SOLAR-TERRS
SWNMR	9.298	SOUTHWEST RES. INSTITUTE	RON JANETZKE	SWRI::RON	SOLAR-TERRS/ATM
SWRI	9.291	SOUTHWEST RES. INSTITUTE	RON JANETZKE	SWRI::RON	SOLAR-TERRS
SWRIMV	9.292	SOUTHWEST RES. INSTITUTE	RON JANETZKE	SWRI::RON	ASTRONOMY
T1	6.227	DARTMOUTH COLLEGE	DOUGLAS A. FRASER	THAYER::DOUGF	ASTRONOMY
T2	6.226	DARTMOUTH COLLEGE	DOUGLAS A. FRASER	THAYER::DOUGF	PHYSICS
TACDS	5.903	CALTECH	BOB LOGAN	TACDS::RTM	ATMOSPHERIC/OCE
TAMDCN	9.210	TEXAS A & M UNIV	STEVEN WORLEY	TAMDCN::WORLEY	OCEANS
TAN	6.160	WOODS HOLE OCEANOGRAPHIC	WARREN SASS	RED::SPAN_MANAGER	

TARDIS	5.904	CALTECH	CHRIS LEE	DEIMOS::CK1	ASTRONOMY
TAURUS	88.87	UNIV OF COLORADO-BOULDER	PHIL EVANS	AQUILA::EVANS	ASTROPHYSICS/AS
TCB	9.8	NASA/JSC	CHUCK ALLEN	TCB::ALLEN	PLANETARY
TELAC	24.120	MASSACHUSETTS INST. OF TE	ROBERT BRUEN	KARMAN::BRUEN	AERONAUTICAL EN
THALIA	88.71	UNIV OF COLORADO-BOULDER	PHIL EVANS	AQUILA::EVANS	ATMOSPHERIC/OCE
THAYER	6.220	DARTMOUTH COLLEGE	DOUGLAS A. FRASER	THAYER::DOUGF	ASTRONOMY
THENIC	25.213	UNIV OF TEXAS	DONALD NASH	THENIC::DON	
THEVAX	5.719	UCLA	DON RUDY	THEVAX::DJR	PLANETARY SCIEN
THISLE	6.170	WOODS HOLE OCEANOGRAPHIC	WARREN SASS	RED::SPAN MANAGER	OCEANS
THOR	8.4	RSMAS	DENNIS CLARK	MIAMI::"DENNISOTH	OCEANS
TOGA	6.172	WOODS HOLE OCEANOGRAPHIC	WARREN SASS	RED::SPAN MANAGER	OCEANS
TONYS	5.81	NASA/JPL	CHRISTOPHER FINCH	STANS::CJF	PLANETARY/OCEAN
TPLOCK	9.83	LOCKHEED ENGINEERING SERV	BEN NGUYEN	TPLOCK::NGUYEN	OFFICE AUTOMATI
TRWSP	5.260	TRW INC.	MARK ISKRA	TRWSP::ISKRA	ENERGY PHYSICS
TRWSSD	5.268	TRW INC.	SANDY CHANG	TRWSSD::CHANG	SPACE SCIENCES
TSD	9.27	NASA/JSC	JIM CLARKE	TSD::CLARKE	PLANETARY
TSMI10	87.127	SISSA/ISAS	ROBERTO INNOCENTE	SISSA::SYSTEM	
TSMI11	87.128	SISSA/ISAS	ROBERTO INNOCENTE	SISSA::SYSTEM	
TSMI118	87.135	SISSA/ISAS	ROBERTO INNOCENTE	SISSA::SYSTEM	
TSMI12	87.129	SISSA/ISAS	ROBERTO INNOCENTE	SISSA::SYSTEM	
TSMI13	87.130	SISSA/ISAS	ROBERTO INNOCENTE	SISSA::SYSTEM	
TSMI14	87.131	SISSA/ISAS	ROBERTO INNOCENTE	SISSA::SYSTEM	
TSMI15	87.133	SISSA/ISAS	ROBERTO INNOCENTE	SISSA::SYSTEM	
TSMIV1	87.118	SISSA/ISAS	ROBERTO INNOCENTE	SISSA::SYSTEM	
TSMIV2	87.119	SISSA/ISAS	ROBERTO INNOCENTE	SISSA::SYSTEM	
TSMIV3	87.120	SISSA/ISAS	ROBERTO INNOCENTE	SISSA::SYSTEM	
TSMIV4	87.121	SISSA/ISAS	ROBERTO INNOCENTE	SISSA::SYSTEM	
TSMIV5	87.122	SISSA/ISAS	ROBERTO INNOCENTE	SISSA::SYSTEM	
TSMIV6	87.123	SISSA/ISAS	ROBERTO INNOCENTE	SISSA::SYSTEM	
TSMIV7	87.124	SISSA/ISAS	ROBERTO INNOCENTE	SISSA::SYSTEM	
TSMIV8	87.125	SISSA/ISAS	ROBERTO INNOCENTE	SISSA::SYSTEM	
TSMIV9	87.126	SISSA/ISAS	ROBERTO INNOCENTE	SISSA::SYSTEM	
TSMIX1	87.134	SISSA/ISAS	ROBERTO INNOCENTE	SISSA::SYSTEM	
TUCANA	5.242	NRAO	STEVE GRANDI	DRACO::GRANDI	ASTRONOMY
TUVA	27.455	SAIC	ELIZABETH GILES	TUVA::SYSTEM	MATH/COMPUTER S
TWEED	6.174	WOODS HOLE OCEANOGRAPHIC	WARREN SASS	RED::SYSTEM WJS1	OCEANS
TYCHO	88.837	UNIV OF COLORADO-BOULDER	PHIL EVANS	AQUILA::EVANS	
UADP	24.129	NASA/LANGLEY	MARSHA SHERLAND	UADP::SYSTEM	ATMOSPHERIC
UAHOAL	7.80	UNIV OF ALABAMA-HUNTSVILL	TIM BALDRIDGE	SSL::BALDRIDGE	APPLIED OPTICS
UAP	11.72	NRL	KATHERINE ANDERSE	UAP::ANDERSEN	UPPER ATMOSPHER
UCBRT0	88.70	UNIV OF COLORADO-BOULDER	PHIL EVANS	AQUILA::EVANS	ATMOSPHERIC/OCE
UCBSP	5.209	UNIV OF CALIF/BERKELEY	DAVID CURTIS	UCBSP::SYSTEM	SPACE PHYSICS
UCIAST	27.201	UNIV OF CALIF/IRVINE	DR. GARY CHANAN	UCIAST::GCHANAN	ASTROPHYSICS
UCIHW	27.278	UNIV OF CALIF/IRVINE	HYSICS	UCIHW::SYSTEM	ENERGY PHYSICS
UCIQCD	27.287	UNIV OF CALIF/IRVINE	HYSICS	UCIHW::SYSTEM	ENERGY PHYSICS
UCLAUE	5.725	UCLA	STEPHEN COX	UCLAUE::COX	
UCMBO	5.294	UNIV OF CALIF/SANTA BARBA	KAREN BAKER	UCMBO::KAREN	OCEANS
UCR	27.870	UNIV OF CALIF/RIVERSIDE	GORDON J. VANDALE	UCF::VANDALEN	PHYSICS
UCRAC1	27.851	UNIV OF CALIF/RIVERSIDE	DON JENKINS	UCRAC1::SYSTEM	ACADEMIC COMPUT
UCRAC2	27.852	UNIV OF CALIF/RIVERSIDE	DON JENKINS	UCRAC1::SYSTEM	ACADEMIC COMPUT
UCRAC3	27.853	UNIV OF CALIF/RIVERSIDE	DON JENKINS	UCRAC1::SYSTEM	ACADEMIC COMPUT
UCRAC4	27.854	UNIV OF CALIF/RIVERSIDE	DON JENKINS	UCRAC1::SYSTEM	ACADEMIC COMPUT
UCRAC5	27.855	UNIV OF CALIF/RIVERSIDE	DON JENKINS	UCRAC1::SYSTEM	ACADEMIC COMPUT
UCRBC1	27.867	UNIV OF CALIF/RIVERSIDE	DON JENKINS	UCRAC1::SYSTEM	ACADEMIC COMPUT
UCRBV	27.868	UNIV OF CALIF/RIVERSIDE	DON JENKINS	UCRAC1::SYSTEM	ACADEMIC COMPUT
UCRCH1	27.868	UNIV OF CALIF/RIVERSIDE	DON JENKINS	UCRAC1::SYSTEM	ACADEMIC COMPUT
UCRCS	27.869	UNIV OF CALIF/RIVERSIDE	DON JENKINS	UCRAC1::SYSTEM	ACADEMIC COMPUT
UCRDJ	27.867	UNIV OF CALIF/RIVERSIDE	DON JENKINS	UCRAC1::SYSTEM	ACADEMIC COMPUT
UCRPC1	27.869	UNIV OF CALIF/RIVERSIDE	DON JENKINS	UCRAC1::SYSTEM	ACADEMIC COMPUT
UCRPC8	27.868	UNIV OF CALIF/RIVERSIDE	DON JENKINS	UCRAC1::SYSTEM	ACADEMIC COMPUT
UCRPH1	27.871	UNIV OF CALIF/RIVERSIDE	GORDON J. VANDALE	UCF::VANDALEN	PHYSICS
UCRPH2	27.872	UNIV OF CALIF/RIVERSIDE	GORDON J. VANDALE	UCF::VANDALEN	PHYSICS
UCRPH3	27.873	UNIV OF CALIF/RIVERSIDE	GORDON J. VANDALE	UCF::VANDALEN	PHYSICS
UCRPH5	27.875	UNIV OF CALIF/RIVERSIDE	GORDON J. VANDALE	UCF::VANDALEN	PHYSICS
UCRPH7	27.877	UNIV OF CALIF/RIVERSIDE	GORDON J. VANDALE	UCF::VANDALEN	PHYSICS
UCRPHY	87.879	UNIV OF CALIF/RIVERSIDE	GORDON J. VANDALE	UCF::VANDALEN	PHYSICS

UCRWS	27.356	UNIV OF CALIF/RIVERSIDE	DON JENKINS	UCRAC1::SYSTEM	ACADEMIC COMPUT
UIT	6.26	NASA/GSFC	FRANK KEEFER	CHAMP::KEEFER	ALL
UMAIP	6.466	UNIV OF MARYLAND	LAWRENCE BLEAU	UMAIP::SYSMGR	VISIBLE ASTRONO
UMDENP	6.470	UNIV OF MARYLAND	DR. NICHOLAS S. C	UMDENP::CHANT	EXPERIMENTAL NU
UMDHEP	6.468	UNIV OF MARYLAND	STEPHANIE C. BROW	UMDHEP::MANAGER	HIGH ENERGY PHY
UMDSP	6.402	UNIV OF MARYLAND	DALE BROWN	UMDSP::SYSTEM	SOLAR-TERRS
UMDSPA	6.403	UNIV OF MARYLAND	DALE BROWN	UMDSP::SYSTEM	SOLAR-TERRS
UMDSW	6.400	UNIV OF MARYLAND	ALLON STERN	UMDSW::SYSTEM	SOLAR-TERRS
UMDUAP	6.401	UNIV OF MARYLAND	LARRY LUTZ	UMDSW::LARRY	SOLAR-TERRS
UMIAMI	3.78	UNIV OF MIAMI	BARRY MILLER	GABLES::SYSTEM	OCEANS
UNHRCC	6.721	UNIV OF NEW HAMPSHIRE	BARRY REINHOLD	UNHRCC::BBR	ALL
URANU1	5.957	CALTECH	CARLOS SALINAS	EARTH1::MANAGER	PLANETARY
URCHIN	8.75	NASA/GSFC	ROSA KAO	OCEAN1::ROSA	ALL
URI	6.180	UNIV OF RHODE ISLAND	DAN HOLLOWAY	URI::DAN	OCEANS
URIGSO	6.195	UNIV OF RHODE ISLAND			OCEANS
URMI	28.294	MAX PLANCK INST FUER KERN	HANS DOEBBELING	ECD1::NETMGR	SPACE SCIENCES
USU	7.70	UTAH STATE UNIV	RAY RAWLINS	USU::SYSTEM	MAGNETOSPHERIC
USUISO	7.75	UNIV OF ALABAMA-HUNTSVILL	TIM BALDRIDGE	USUISO::BALDRIDGE	ATOMIC PHYSICS
USUJRD	7.161	UTAH STATE UNIV	JOE DOUPNIK	USU::JRD	SPACE PHYSICS
USUMVA	7.80	UTAH STATE UNIV	RAY RAWLINS	USU::SYSTEM	NONE
UTADNX	26.40	UNIV OF TEXAS	RICK WATSON	UTADNX::CCA#001	
UTD750	9.261	UNIV OF TEXAS-DALLAS	BOB POWERS		SOLAR-TERRS/ATM
UTSPAN	25.128	UNIV OF TEXAS-AUSTIN	RICK WATSON	UTSPAN::R.WATSON	COMPUTER SCIENC
UWFPC	7.142	UNIV OF WISCONSIN	CHRIS ANDERSON	MADRAF::SYSTEM	ASTROPHYSICS
UWSAL	7.143	UNIV OF WISCONSIN	AURA LEIGH BERQUI	MADRAF::SYSTEM	ASTROPHYSICS
UXNHDS	28.221	MAX PLANCK INST FUER KERN	HANS-WERNER HEYNG	UXNHDS::HWH	SPACE SCIENCES
VA	11.41	NRL	GLENN JOYCE	VA::JOYCE	PLASMA THEORY
VAMPI	28.208	MAX PLANCK INST FUER KERN	HANS DOEBBELING	ECD1::NETMGR	SPACE SCIENCES
VAP	6.3	NASA/GSFC	BRIAN SQUIBB	VAP::SQUIBB	ALL
VAX1	6.513	NATIONAL RADIO ASTRONOMY	AL BRAUN	NRAO::ABRAUN	ASTRONOMY
VAXCA2	39.208	UNIV OF CAGLIARI	IGNAZIO PORCEDDU	VAXCA2::PORCEDDU	ASTRONOMY
VAXFI	39.15	UNIVERSITA' DI FIRENZE &	ROBERTO CECCHINI	VAXFI::SYSTEM	HIGH ENERGY
VAXGE	38.254	INSTIT NAZIONALE DI FISICA	CORRADO SALVO	VAXGE::SYSTEM	ASTRONOMY
VAXGEA	38.276	INSTIT NAZIONALE DI FISIC	CORRADO SALVO	VAXGE::SYSTEM	ASTRONOMY
VAXNA1	39.65	UNIV OF NAPOLI	PAOLO LO RE	VAXNA::SYSTEM	ASTRONOMY
VAXTOV	39.58	UNIV OF ROMA *TOR VERGATA	RENATA KWATERA	VAXTOV::SYSTEM	ASTRONOMY
VAXUSR	11.102	NRL	PAUL DOUPONT	VAXUSR::DOUPONT	
VECTOR	5.908	CALTECH	CHRIS LEE	DEIMOS::CK1	ASTRONOMY
VEGA	33.73	UNIV OF COLDRADO-BOULDER	PHIL EVANS	AQUILA::EVANS	ATMOSPHERIC/OCE
VELA	5.237	NRAO	STEVE GRANDI	DRACO::GRANDI	ASTRONOMY
VENUS1	5.952	CALTECH	CARLOS SALINAS	EARTH1::MANAGER	PLANETARY
VESTA	33.31	UNIV OF COLDRADO-BOULDER	PHIL EVANS	AQUILA::EVANS	ATMOSPHERIC/OCE
VILSPA	28.171	ESA VILLAFRANCA SATELLITE	FRANCISCO MARCELO	VILSPA::SYS	
VIRGO	33.28	UNIV OF COLDRADO-BOULDER	PHIL EVANS	AQUILA::EVANS	ATMOSPHERIC/OCE
VIRIS	6.74	NASA/GSFC	MARK SILVERSTEIN	LEPVAX::U2MJS	PLANETARY
VME	11.45	NRL	GLENN JOYCE	VA::JOYCE	PLASMA THEORY
VMS001	6.310	APPLIED PHYSICS LABORATOR	LORA L. SUTHER	APLSP::SUTHER	SOLAR-TERRS
VMSG	9.346	NCAR	CRAIG RUFF		
VORTEX	5.985	CALTECH	PHILIP SAFFMAN	VORTEX::SAFFMAN	APPLIED MATH
VULCAN	33.338	UNIV OF COLDRADO-BOULDER	PHIL EVANS	AQUILA::EVANS	
VX740	6.31	NASA/GSFC	RUTH ANN CROUGH	VX740::CROUGH	ALL
VX7770	11.39	NRL	JOE WHITE	VX7770::WHITE	COMPUTER APPLIC
VXBMS	5.701	UCLA	STEPHEN COX	UCLASP::SYSTEM	PLANETARY
WAGVAX	5.930	CALTECH	ALAN MATHIOWETZ	WAGVAX::AMM	CHEMISTRY
WALTER	24.110	MASSACHUSETTS INST. OF TE	ROBERT BRUEN	KARMAN::BRUEN	MECHANICAL ENGI
WARREN	24.117	MASSACHUSETTS INST. OF TE	ROBERT BRUEN	KARMAN::BRUEN	MECHANICAL ENGI
WAVE	27.166	SCRIPPS INST OF OCEANOGR	JUDY ILLEMAN	WAVE::SYSTEM	OCEANS
WAVES	7.151	UNIV OF MINNESOTA	KEITH GOETZ	SCIENTIST	PLASMA WAVES
WERNER	24.112	MASSACHUSETTS INST. OF TE	ROBERT BRUEN	KARMAN::BRUEN	AERONAUTICAL EN
WFPC	5.980	CALTECH	JEFF HESTER	WFPC::JJH	PLANETARY
WFPC1	5.112	NASA/JPL	DWIGHT C. MOODY J	WFPC1::MOODY	ASTRONOMY/SPACE
WFPC2	5.113	NASA/JPL	DWIGHT C. MOODY J	WFPC1::MOODY	ASTRONOMY/SPACE
WFPCST	6.418	SPACE TELESCOPE INSTITUTE	TOM COMEAU	SCIVAX::TCOMEAU	ASTROPHYSICS
WFPCT1	5.238	NRAO	EARL O'NEIL	DRACO::ONEIL	ASTRONOMY
WFPCT2	5.239	NRAO	EARL O'NEIL	DRACO::ONEIL	ASTRONOMY
WHITE	6.153	WOODS HOLE OCEANOGRAPHIC	WARREN SASS	RED::SPAN_MANAGER	OCEANS

WILBUR	24.52	MASSACHUSETTS INST. OF TE	ROBERT BRUEN	KARMAN::BRUEN	AERONAUTICAL EN
WILLI	28.229	MAX PLANCK INST FUER KERN	HANS DOEBBELING	ECD1::NETMGR	SPACE SCIENCES
WILY	5.38	NASA/JPL	I-LIN TANG	WILY::SYSTEM	OCEANS
WITCH	6.108	NASA/JPL	JOHN PIOTROWSKI	WITCH::JDP	SOLAR-TERRS/PLA
WOWERI	28.289	MAX PLANCK INST FUER KERN	HANS DOEBBELING	ECD1::NETMGR	SPACE SCIENCES
WRF	28.228	MAX PLANCK INST FUER KERN	HANS DOEBBELING	ECD1::NETMGR	SPACE SCIENCES
WUINAA	7.303	WASHINGTON UNIV	SUSAN SLAVNEY	WURST::SLAVNEY	SPACE SCIENCES
WUMV1	7.301	WASHINGTON UNIV	SUSAN SLAVNEY	WURST::SLAVNEY	PLANETARY/GEOLO
WUMV2	7.304	WASHINGTON UNIV	SUSAN SLAVNEY	WURST::SLAVNEY	PLANETARY/GEOLO
WUPRC	7.302	WASHINGTON UNIV	SUSAN SLAVNEY	WURST::SLAVNEY	PLANETARY/GEOLO
WURST	7.300	WASHINGTON UNIV	SUSAN SLAVNEY	WURST::SLAVNEY	PLANETARY/GEOLO
XENOS	5.910	CALTECH	JOHN PIOTROWSKI	ISSAC::JDP	ASTRONOMY
XHMEIA	5.920	CALTECH	DAVE MALERBA	XHMEIA::DEM	CHEMISTRY
XRAY	5.921	CALTECH	DAVE MALERBA	XHMEIA::DEM	CHEMISTRY
YODA	7.270	NASA/MSFC	RICH DRINKARD	CURLY::CLMANAGER	DATA REDUCTION
ZODIAC	33.34	UNIV OF COLORADO-BOULDER	PHIL EVANS	AQUILA::EVANS	ASTROPHYSICS
ZOEY	28.205	MAX PLANCK INST FUER KERN	HANS DOEBBELING	ECD1::NETMGR	SPACE SCIENCES
ZYKLOP	28.226	MAX PLANCK INST FUER KERN	HANS DOEBBELING	ECD1::NETMGR	SPACE SCIENCES

B. SPAN\_NIC Online Data Base System: Output by Country/Institution

The following is a listing of SPAN registered nodes currently in the SPAN Network Information Center Online Data Base System (SPAN\_NIC). These nodes are grouped alphabetically. Institutions appear in alphabetical order within country listings.

NODE NUMBER	NODE NAME	INSTITUTION	CITY	COUNTRY
18.100	CANOTT	CANADIAN DATA ANALYSIS NETWORK	OTTAWA	CANADA
18.150	HIAULY	CANADIAN DATA ANALYSIS NETWORK	OTTAWA	CANADA
18.151	HIASMS	CANADIAN DATA ANALYSIS NETWORK	OTTAWA	CANADA
18.152	HIASOL	CANADIAN DATA ANALYSIS NETWORK	OTTAWA	CANADA
18.105	CANEDM	UNIV OF ALBERTA	EDMONTON	CANADA
18.103	CANCAL	UNIV OF CALGARY	CALGARY	CANADA
18.101	CANSAS	UNIV OF SASKATCHEWAN	SASKATOON	CANADA
18.102	CANLON	UNIV OF WESTERN ONTARIO	LONDON	CANADA
18.2	LIBRA	YORK UNIV	DOWNSVILLE	CANADA
6.503	CTIOV1	CERRO TOLOLO INTER-AMERICAN OBSERV	SANTIAGO	CHILE
6.504	CTIOV2	CERRO TOLOLO INTER-AMERICAN OBSERV	SANTIAGO	CHILE
28.83	CRPEIS	CNET-PAB	ISSY LES MOULINEAUX	FRANCE
28.859	ESAHQ0	ESA/HEADQUARTERS	75798 PARIS	FRANCE
28.81	MESPOB	INSTITUT D'ASTROPHYSICS DE PARIS	75014 PARIS	FRANCE
28.82	IAP0BS	INSTITUT D'ASTROPHYSIQUE DE PARIS	75014 PARIS	FRANCE
17.500	CDSXB1	OBSERV ASTRONMIQUE DE STRASBOURG	STRASBOURG	FRANCE
17.501	CDSXB2	OBSERV ASTRONMIQUE DE STRASBOURG	STRASBOURG	FRANCE
28.529	IAPC09	OBSERVATOIRE DE PARIS	PARIS	FRANCE
28.51	MEUDON	OBSERVATOIRE DE PARIS-MEUDON	MEUDON	FRANCE
28.50	MEGASA	OBSERVATOIRE DE PARIS-MEUDON	MEUDON	FRANCE
28.57	MELAMA	OBSERVATOIRE DE PARIS-MEUDON	MEUDON	FRANCE
28.58	MELAMB	OBSERVATOIRE DE PARIS-MEUDON	MEUDON	FRANCE
28.59	MELAMC	OBSERVATOIRE DE PARIS-MEUDON	MEUDON	FRANCE
28.60	MESPOA	OBSERVATOIRE DE PARIS-MEUDON	MEUDON	FRANCE
28.70	IASSET	OBSERVATOIRE DE PARIS-MEUDON	MEUDON	FRANCE
28.71	IASTER	OBSERVATOIRE DE PARIS-MEUDON	MEUDON	FRANCE
28.72	IASLAB	OBSERVATOIRE DE PARIS-MEUDON	MEUDON	FRANCE
28.73	IASETC	OBSERVATOIRE DE PARIS-MEUDON	MEUDON	FRANCE
28.28	ESTTP2	ESA/ESTEC	NOORDWIJK-AAN-ZEE	HOLLAND
28.27	ESTTP3	ESA/ESTEC	NOORDWIJK-AAN-ZEE	HOLLAND
28.668	ESTWK4	ESA/ESTEC	NOORDWIJK-AAN-ZEE	HOLLAND
37.189	ASTB01	C.N.R.	BOLOGNA	ITALY
39.116	PSNMT1	CNR/IRA	MATERA	ITALY
17.50	ARCNR	CONSIGLIO NAZIONALE DELLE RICERCHE	FRASCATI	ITALY
17.51	ARCNRI	CONSIGLIO NAZIONALE DELLE RICERCHE	FRASCATI	ITALY
17.1	ESIS	ESA/ESRIN	ROME	ITALY
17.10	EPO780	ESA/ESRIN	FRASCATI	ITALY
17.11	EPOMV1	ESA/ESRIN	FRASCATI	ITALY
17.12	ERSWS1	ESA/ESRIN	FRASCATI	ITALY
17.14	ERSMV1	ESA/ESRIN	FRASCATI	ITALY
17.15	EPOMON	ESA/ESRIN	FRASCATI	ITALY
17.2	ESRIN2	ESA/ESRIN	ROME	ITALY
28.2	ESRIN1	ESA/ESRIN	ROME	ITALY
29.123	ASTRBA	IESI/CNR	BARI	ITALY
17.70	IFSI	IFSI	C.P. 27	ITALY
38.254	VAXGE	INSTIT NAZIONAL DI FISICA NUCLEARE	GENOA	ITALY
38.276	VAXGEA	INSTIT NAZIONALE DI FISICA NUCLEARE	GENOA	ITALY
39.187	ASTMIM	OBSERV. ASTR. BRERA (MERATE)	MERATE	ITALY
29.188	ASTMIB	OBSERV. ASTR. BRERA (MILAND)	MILAND	ITALY
39.124	ASTRNA	OBSERV. ASTR. CAPODIMONTE	NAPOLI	ITALY
39.165	MVXOAC	OBSERV. ASTR. CAPODIMONTE	NAPOLI	ITALY
38.150	ASTRFI	OBSERV. ASTROFISICO ARCETRI	FIRENZE	ITALY
38.70	ASTRCT	OBSERV. ASTROFISICO CATANIA	CATANIA	ITALY
17.81	ASTMP1	OBSERV. ASTRON. DI ROMA	MONTE PORZIO CATONE	ITALY
39.83	ASTT02	OBSERV. ASTRON. PINO TORINESE	PINO TORINESSE (TO)	ITALY
39.121	ASTRTS	OBSERV. ASTRONOMIC TRIESTE	TRIESTE	ITALY
39.91	MVXDAT	OBSERV. ASTRONOMIC TRIESTE	TRIESTE	ITALY

17.60	ASTRMP	OBSERVATORIO ASTRONOMIC DI ROMA	MONTE PORZIO CATONE	ITALY
38.91	ASTRPD	OSSERVATORIO ASTRONOMIC	PADOVA	ITALY
39.117	PSNCLU	PSN/CNR SEZ. MATERA	MATERA	ITALY
39.191	PSNMT	PSN/CNR SEZ. MATERA	MATERA	ITALY
37.118	TSMIV1	SISSA/ISAS	TRIESTE	ITALY
37.119	TSMIV2	SISSA/ISAS	TRIESTE	ITALY
37.120	TSMIV3	SISSA/ISAS	TRIESTE	ITALY
37.121	TSMIV4	SISSA/ISAS	TRIESTE	ITALY
37.122	TSMIV6	SISSA/ISAS	TRIESTE	ITALY
37.123	TSMIV6	SISSA/ISAS	TRIESTE	ITALY
37.124	TSMIV7	SISSA/ISAS	TRIESTE	ITALY
37.125	TSMIV8	SISSA/ISAS	TRIESTE	ITALY
37.126	TSMIV9	SISSA/ISAS	TRIESTE	ITALY
37.127	TSMI10	SISSA/ISAS	TRIESTE	ITALY
37.128	TSMI11	SISSA/ISAS	TRIESTE	ITALY
37.129	TSMI12	SISSA/ISAS	TRIESTE	ITALY
37.130	TSMI13	SISSA/ISAS	TRIESTE	ITALY
37.131	TSMI14	SISSA/ISAS	TRIESTE	ITALY
37.132	SISSA	SISSA/ISAS	TRIESTE	ITALY
37.133	TSMI16	SISSA/ISAS	TRIESTE	ITALY
37.134	TSMIX1	SISSA/ISAS	TRIESTE	ITALY
37.135	TSMI116	SISSA/ISAS	TRIESTE	ITALY
38.191	ASTB03	UNIV OF BOLOGNA	BOLOGNA	ITALY
39.206	VAXCA2	UNIV OF CAGLIARI	CAGLIARI	ITALY
39.188	ASTMI1	UNIV OF MILANO	MILANO	ITALY
39.205	VMXNA1	UNIV OF NAPOLI	NAPOLI	ITALY
39.05	VAXNA1	UNIV OF NAPOLI	NAPOLI	ITALY
39.56	VAXTOV	UNIV OF ROMA "TOR VERGATA"	ROME	ITALY
39.122	ASTROM	UNIV ROMA "LA SAPIENZA"	ROME	ITALY
39.213	GPXTOV	UNIV ROMA "TOR VERGATA"	ROME	ITALY
39.187	ASTRTO	UNIVERSITA TORIND	TORINO	ITALY
39.15	VAXFI	UNIVERSITA' DI FIRENZE & INFN	FIRENZE	ITALY
6.379	ISAS	ISAS	KANAGAWA	JAPAN
6.144	KYOTO	KYOTO UNIV	KYOTO	JAPAN
28.171	VILSPA	ESA VILLAFRANCA SATELLITE TRCK. STA.	MADRID	SPAIN
28.172	IAC	INSTITUTO DE ASTROFISICA DE CANARIAS	TENERIFE	SPAIN
17.160	PLAFY5	THE ROYAL INST OF TECHNOLOGY (KTH)	STOCKHOLM	SWEDEN
28.21	ESTCS1	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.22	ESTSA1	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.23	ESTTR1	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.24	ESTTP1	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.25	ESTTR2	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.28	ESTSA2	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.29	ESTXE1	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.30	ESTTR3	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.31	EXOSAT	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.35	ESTSC1	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.36	ESTWG1	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.37	ESTWG2	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.38	ESTWG3	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.39	ESTWD1	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.40	ESTWD2	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.41	ESTWDX	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.42	ESTWDY	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.43	ESTERS	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.46	ESTCS2	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.47	ESTCS3	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.50	ESTCS0	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.658	ESTXE2	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.662	EXOSA3	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.663	EXOSA4	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.664	ESTSA5	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.665	ESTSA6	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
28.855	ESTMAN	ESA/ESTEC	NOORDWIJK-AAN-ZEE	THE NETHERLANDS
6.361	AIMS	AFGL	BEDFORD	UNITED STATES
6.362	RAPID	AFGL	BEDFORD	UNITED STATES

6.363	ARCIP	AFGL	BEDFORD	UNITED STATES
6.364	AFQLSC	AFGL	BEDFORD	UNITED STATES
6.365	ARCDEV	AFGL	BEDFORD	UNITED STATES
6.366	CAPVAX	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.361	CAPA	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.362	CAPB	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.363	CAPC	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.364	CAPD	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.365	CAPE	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.366	CAPF	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.310	VMS001	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.311	F1D01	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.312	F2A00	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.313	F2A01	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.314	F2A02	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.315	DECSA0	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.316	PC01	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.320	PROC	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.321	PROC1	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.323	PROC3	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.332	SNAGW	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.335	STR	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.336	STR2	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.337	STI	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.350	APLSP	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.351	AMPTE	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.352	S1P001	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
6.352	S1P002	APPLIED PHYSICS LABORATORY (JHU APL)	LAUREL	UNITED STATES
7.149	AUGGIE	AUGSBURG COLLEGE	MINNEAPOLIS	UNITED STATES
6.501	BUASTA	BOSTON UNIV	BOSTON	UNITED STATES
6.682	BUASTB	BOSTON UNIV	BOSTON	UNITED STATES
41.60	CITHEX	CALTECH	PASADENA	UNITED STATES
5.850	HAMLET	CALTECH	PASADENA	UNITED STATES
5.851	ROMEO	CALTECH	PASADENA	UNITED STATES
5.852	JULIET	CALTECH	PASADENA	UNITED STATES
5.854	IAGO	CALTECH	PASADENA	UNITED STATES
5.857	IPAC	CALTECH	PASADENA	UNITED STATES
5.872	C9PC	CALTECH	PASADENA	UNITED STATES
5.873	CITSRL	CALTECH	PASADENA	UNITED STATES
5.880	CADRE1	CALTECH	PASADENA	UNITED STATES
5.881	CADRE2	CALTECH	PASADENA	UNITED STATES
5.882	CADRE3	CALTECH	PASADENA	UNITED STATES
5.883	CADR3A	CALTECH	PASADENA	UNITED STATES
5.884	DESIGN	CALTECH	PASADENA	UNITED STATES
5.885	HYDRA0	CALTECH	PASADENA	UNITED STATES
5.886	EDRL01	CALTECH	PASADENA	UNITED STATES
5.887	KECK24	CALTECH	PASADENA	UNITED STATES
5.888	CADR3B	CALTECH	PASADENA	UNITED STATES
5.889	CADR2A	CALTECH	PASADENA	UNITED STATES
5.890	CADR1A	CALTECH	PASADENA	UNITED STATES
5.891	CADR1B	CALTECH	PASADENA	UNITED STATES
5.892	CADR2B	CALTECH	PASADENA	UNITED STATES
5.893	HDRAV0	CALTECH	PASADENA	UNITED STATES
5.900	PHOBOS	CALTECH	PASADENA	UNITED STATES
5.901	DEIMOS	CALTECH	PASADENA	UNITED STATES
5.902	DVRO	CALTECH	PASADENA	UNITED STATES
5.903	TACOS	CALTECH	PASADENA	UNITED STATES
5.904	TARDIS	CALTECH	PASADENA	UNITED STATES
5.905	SUNDOG	CALTECH	PASADENA	UNITED STATES
5.906	CARA	CALTECH	PASADENA	UNITED STATES
5.907	SCALAR	CALTECH	PASADENA	UNITED STATES
5.908	VECTOR	CALTECH	PASADENA	UNITED STATES
5.909	CSO	CALTECH	PASADENA	UNITED STATES
5.910	XENOS	CALTECH	PASADENA	UNITED STATES
5.911	LOGOS	CALTECH	PASADENA	UNITED STATES
5.912	OKOS	CALTECH	PASADENA	UNITED STATES

6.915	CTARGO	CALTECH	PASADENA	UNITED STATES
6.920	XHMEIA	CALTECH	PASADENA	UNITED STATES
6.921	XRAY	CALTECH	PASADENA	UNITED STATES
6.922	ALCHMY	CALTECH	PASADENA	UNITED STATES
6.923	IMC	CALTECH	PASADENA	UNITED STATES
6.924	CITNMR	CALTECH	PASADENA	UNITED STATES
6.926	DERPS	CALTECH	PASADENA	UNITED STATES
6.930	WAQVAX	CALTECH	PASADENA	UNITED STATES
6.931	QMV1	CALTECH	PASADENA	UNITED STATES
6.932	QVS1	CALTECH	PASADENA	UNITED STATES
6.933	QVS2	CALTECH	PASADENA	UNITED STATES
6.934	QVS3	CALTECH	PASADENA	UNITED STATES
6.937	PS300	CALTECH	PASADENA	UNITED STATES
6.938	AUSTR1	CALTECH	PASADENA	UNITED STATES
6.939	BOREAL	CALTECH	PASADENA	UNITED STATES
6.940	KELLY	CALTECH	PASADENA	UNITED STATES
6.941	ERIN	CALTECH	PASADENA	UNITED STATES
6.942	SEKVAX	CALTECH	PASADENA	UNITED STATES
6.945	ORIENT	CALTECH	PASADENA	UNITED STATES
6.950	SOL1	CALTECH	PASADENA	UNITED STATES
6.951	MERCU1	CALTECH	PASADENA	UNITED STATES
6.952	VENUS1	CALTECH	PASADENA	UNITED STATES
6.953	EARTH1	CALTECH	PASADENA	UNITED STATES
6.954	MARS1	CALTECH	PASADENA	UNITED STATES
6.955	JUPIT1	CALTECH	PASADENA	UNITED STATES
6.956	SATUR1	CALTECH	PASADENA	UNITED STATES
6.957	URANU1	CALTECH	PASADENA	UNITED STATES
6.958	NEPTU1	CALTECH	PASADENA	UNITED STATES
6.959	PLUTO1	CALTECH	PASADENA	UNITED STATES
6.960	WFPC	CALTECH	PASADENA	UNITED STATES
6.965	VORTEX	CALTECH	PASADENA	UNITED STATES
6.970	EQL	CALTECH	PASADENA	UNITED STATES
6.270	CEBAF1	CEBAF	NEWPORT NEWS	UNITED STATES
6.143	CUSP1F	CORNELL UNIV	ITHACA	UNITED STATES
6.220	THAYER	DARTMOUTH COLLEGE	HANOVER	UNITED STATES
6.221	NM1	DARTMOUTH COLLEGE	HANOVER	UNITED STATES
6.222	NM2	DARTMOUTH COLLEGE	HANOVER	UNITED STATES
6.223	DIGLIB	DARTMOUTH COLLEGE	HANOVER	UNITED STATES
6.226	T2	DARTMOUTH COLLEGE	HANOVER	UNITED STATES
6.227	T1	DARTMOUTH COLLEGE	HANOVER	UNITED STATES
6.234	KAYZ	DARTMOUTH COLLEGE	HANOVER	UNITED STATES
6.235	PLASMA	DARTMOUTH COLLEGE	HANOVER	UNITED STATES
7.311	FSHEP0	FLORIDA STATE UNIV	TALLAHASSEE	UNITED STATES
7.355	FSUHEP	FLORIDA STATE UNIV	TALLAHASSEE	UNITED STATES
7.356	FSHEP1	FLORIDA STATE UNIV	TALLAHASSEE	UNITED STATES
7.357	FSHEP2	FLORIDA STATE UNIV	TALLAHASSEE	UNITED STATES
7.358	FSHEP3	FLORIDA STATE UNIV	TALLAHASSEE	UNITED STATES
7.359	FSHEP4	FLORIDA STATE UNIV	TALLAHASSEE	UNITED STATES
7.360	FSHEP5	FLORIDA STATE UNIV	TALLAHASSEE	UNITED STATES
7.361	FSHEP6	FLORIDA STATE UNIV	TALLAHASSEE	UNITED STATES
7.362	FSHEP7	FLORIDA STATE UNIV	TALLAHASSEE	UNITED STATES
7.363	FSHEP8	FLORIDA STATE UNIV	TALLAHASSEE	UNITED STATES
7.364	FSHEP9	FLORIDA STATE UNIV	TALLAHASSEE	UNITED STATES
9.80	LOCK	LOCKHEED ENGINEERING SERVICES	HOUSTON	UNITED STATES
9.81	MLOCK	LOCKHEED ENGINEERING SERVICES	HOUSTON	UNITED STATES
9.83	TPLOCK	LOCKHEED ENGINEERING SERVICES	HOUSTON	UNITED STATES
9.84	CALOCK	LOCKHEED ENGINEERING SERVICES	HOUSTON	UNITED STATES
9.85	CADLOK	LOCKHEED ENGINEERING SERVICES	HOUSTON	UNITED STATES
6.296	LOCKHD	LOCKHEED PALO ALTO RESEARCH LABS	PALO ALTO	UNITED STATES
6.297	COMET	LOCKHEED PALO ALTO RESEARCH LABS	PALO ALTO	UNITED STATES
1.15	ESSDP1	LOS ALAMOS NATIONAL LABORATORY	LOS ALAMOS	UNITED STATES
1.5	ESSDP2	LOS ALAMOS NATIONAL LABORATORY	LOS ALAMOS	UNITED STATES
7.459	LSU0VX	LOUISIANA STATE UNIV	BATON ROUGE	UNITED STATES
10.822	MITCCD	MASSACHUSETTS INST. OF TECHNOLOGY	CAMBRIDGE	UNITED STATES
24.100	IQOR	MASSACHUSETTS INST. OF TECHNOLOGY	CAMBRIDGE	UNITED STATES
24.101	OTTO	MASSACHUSETTS INST. OF TECHNOLOGY	CAMBRIDGE	UNITED STATES



24.102	ROBERT	MASSACHUSETTS	INST. OF TECHNOLOGY	CAMBRIDGE	UNITED STATES
24.103	GLENN	MASSACHUSETTS	INST. OF TECHNOLOGY	CAMBRIDGE	UNITED STATES
24.104	AMELIA	MASSACHUSETTS	INST. OF TECHNOLOGY	CAMBRIDGE	UNITED STATES
24.105	EDMUND	MASSACHUSETTS	INST. OF TECHNOLOGY	CAMBRIDGE	UNITED STATES
24.106	KARMAN	MASSACHUSETTS	INST. OF TECHNOLOGY	CAMBRIDGE	UNITED STATES
24.107	JEROME	MASSACHUSETTS	INST. OF TECHNOLOGY	CAMBRIDGE	UNITED STATES
24.109	LUDWIG	MASSACHUSETTS	INST. OF TECHNOLOGY	CAMBRIDGE	UNITED STATES
24.110	WALTER	MASSACHUSETTS	INST. OF TECHNOLOGY	CAMBRIDGE	UNITED STATES
24.111	HERMAN	MASSACHUSETTS	INST. OF TECHNOLOGY	CAMBRIDGE	UNITED STATES
24.112	WERNER	MASSACHUSETTS	INST. OF TECHNOLOGY	CAMBRIDGE	UNITED STATES
24.113	ERNST	MASSACHUSETTS	INST. OF TECHNOLOGY	CAMBRIDGE	UNITED STATES
24.114	LMPVAX	MASSACHUSETTS	INST. OF TECHNOLOGY	CAMBRIDGE	UNITED STATES
24.115	LMPWSD	MASSACHUSETTS	INST. OF TECHNOLOGY	CAMBRIDGE	UNITED STATES
24.116	BARANY	MASSACHUSETTS	INST. OF TECHNOLOGY	CAMBRIDGE	UNITED STATES
24.117	WARREN	MASSACHUSETTS	INST. OF TECHNOLOGY	CAMBRIDGE	UNITED STATES
24.118	GUS	MASSACHUSETTS	INST. OF TECHNOLOGY	CAMBRIDGE	UNITED STATES
24.120	TELAC	MASSACHUSETTS	INST. OF TECHNOLOGY	CAMBRIDGE	UNITED STATES
24.52	WILBUR	MASSACHUSETTS	INST. OF TECHNOLOGY	CAMBRIDGE	UNITED STATES
24.53	CALVIN	MASSACHUSETTS	INST. OF TECHNOLOGY	CAMBRIDGE	UNITED STATES
24.54	JEFFS	MASSACHUSETTS	INST. OF TECHNOLOGY	CAMBRIDGE	UNITED STATES
5.910	OCIW	MT. WILSON & LAS CAMPANAS OBSERV		PASADENA	UNITED STATES
24.33	GAL	NASA/AMES		MOFFETT FIELD	UNITED STATES
24.50	HAL	NASA/AMES		MOFFETT FIELD	UNITED STATES
24.62	DORT	NASA/AMES		MOFFETT FIELD	UNITED STATES
24.64	HEC	NASA/AMES		MOFFETT FIELD	UNITED STATES
6.1	MPP	NASA/GSFC		GREENBELT	UNITED STATES
6.11	MV1	NASA/GSFC		GREENBELT	UNITED STATES
6.12	MV2	NASA/GSFC		GREENBELT	UNITED STATES
6.13	MV3	NASA/GSFC		GREENBELT	UNITED STATES
6.130	ENVNET	NASA/GSFC		GREENBELT	UNITED STATES
6.131	NCFMV1	NASA/GSFC		GREENBELT	UNITED STATES
6.132	NSSDC	NASA/GSFC		GREENBELT	UNITED STATES
6.133	NSSDCA	NASA/GSFC		GREENBELT	UNITED STATES
6.136	ROSAT	NASA/GSFC		GREENBELT	UNITED STATES
6.137	CDDIS	NASA/GSFC		GREENBELT	UNITED STATES
6.139	NCF	NASA/GSFC		GREENBELT	UNITED STATES
6.14	MV4	NASA/GSFC		GREENBELT	UNITED STATES
6.15	DEMIAF	NASA/GSFC		GREENBELT	UNITED STATES
6.18	HEA750	NASA/GSFC		GREENBELT	UNITED STATES
6.17	DSTL85	NASA/GSFC		GREENBELT	UNITED STATES
6.18	DSTL80	NASA/GSFC		GREENBELT	UNITED STATES
6.19	NSIG3	NASA/GSFC		GREENBELT	UNITED STATES
6.2	IAF	NASA/GSFC		GREENBELT	UNITED STATES
6.20	IUE	NASA/GSFC		GREENBELT	UNITED STATES
6.21	LEPVAX	NASA/GSFC		GREENBELT	UNITED STATES
6.22	SIRIS	NASA/GSFC		GREENBELT	UNITED STATES
6.23	PACF	NASA/GSFC		GREENBELT	UNITED STATES
6.25	CHAMP	NASA/GSFC		GREENBELT	UNITED STATES
6.26	UIT	NASA/GSFC		GREENBELT	UNITED STATES
6.28	HRS	NASA/GSFC		GREENBELT	UNITED STATES
6.29	CSDR	NASA/GSFC		GREENBELT	UNITED STATES
6.3	VAP	NASA/GSFC		GREENBELT	UNITED STATES
6.30	SCFMVS	NASA/GSFC		GREENBELT	UNITED STATES
6.31	VX740	NASA/GSFC		GREENBELT	UNITED STATES
6.32	STDVAX	NASA/GSFC		GREENBELT	UNITED STATES
6.322	SCFVM	NASA/GSFC		GREENBELT	UNITED STATES
6.33	FIRAS	NASA/GSFC		GREENBELT	UNITED STATES
6.34	DIRBE	NASA/GSFC		GREENBELT	UNITED STATES
6.35	DMR	NASA/GSFC		GREENBELT	UNITED STATES
6.38	SCINT	NASA/GSFC		GREENBELT	UNITED STATES
6.4	DFTNIC	NASA/GSFC		GREENBELT	UNITED STATES
6.41	COBEIT	NASA/GSFC		GREENBELT	UNITED STATES
6.45	DEIO	NASA/GSFC		GREENBELT	UNITED STATES
6.46	DE014	NASA/GSFC		GREENBELT	UNITED STATES
6.47	DE090	NASA/GSFC		GREENBELT	UNITED STATES
6.49	MAGSPA	NASA/GSFC		GREENBELT	UNITED STATES

6.5	LTP	NASA/QSFC	GREENBELT	UNITED STATES
6.50	ELDYN	NASA/QSFC	GREENBELT	UNITED STATES
6.51	BBXRT	NASA/QSFC	GREENBELT	UNITED STATES
6.52	EGRET	NASA/QSFC	GREENBELT	UNITED STATES
6.53	LHEAVX	NASA/QSFC	GREENBELT	UNITED STATES
6.55	ESTIFA	NASA/QSFC	GREENBELT	UNITED STATES
6.58	OCEAN1	NASA/QSFC	GREENBELT	UNITED STATES
6.59	DIATOM	NASA/QSFC	GREENBELT	UNITED STATES
6.6	LTP2	NASA/QSFC	GREENBELT	UNITED STATES
6.60	OCEAN2	NASA/QSFC	GREENBELT	UNITED STATES
6.629	PAL	NASA/QSFC	GREENBELT	UNITED STATES
6.63	SOLMAX	NASA/QSFC	GREENBELT	UNITED STATES
6.64	ISIS	NASA/QSFC	GREENBELT	UNITED STATES
6.65	SAL	NASA/QSFC	GREENBELT	UNITED STATES
6.656	CSDR2	NASA/QSFC	GREENBELT	UNITED STATES
6.66	OLEMAX	NASA/QSFC	GREENBELT	UNITED STATES
6.7	SDCD	NASA/QSFC	GREENBELT	UNITED STATES
6.70	ALF	NASA/QSFC	GREENBELT	UNITED STATES
6.74	VIRIS	NASA/QSFC	GREENBELT	UNITED STATES
6.75	URCHIN	NASA/QSFC	GREENBELT	UNITED STATES
6.769	EAST	NASA/QSFC	GREENBELT	UNITED STATES
6.78	C717	NASA/QSFC	GREENBELT	UNITED STATES
6.84	SSBUV	NASA/QSFC	GREENBELT	UNITED STATES
6.9	SDCDCL	NASA/QSFC	GREENBELT	UNITED STATES
6.90	MANONO	NASA/QSFC	GREENBELT	UNITED STATES
6.91	SAVAII	NASA/QSFC	GREENBELT	UNITED STATES
6.92	IUESOC	NASA/QSFC	GREENBELT	UNITED STATES
6.93	IPDQW1	NASA/QSFC	GREENBELT	UNITED STATES
6.141	CASTOR	NASA/HEADQUARTERS	WASHINGTON	UNITED STATES
6.142	POLLUX	NASA/HEADQUARTERS	WASHINGTON	UNITED STATES
6.500	HELENA	NASA/HEADQUARTERS	WASHINGTON	UNITED STATES
7.690	SSCSTL	NASA/JOHN C.STENNIS	STENNIS SPACE CENTER	UNITED STATES
5.1	JPLPDS	NASA/JPL	PASADENA	UNITED STATES
5.10	LRSP	NASA/JPL	PASADENA	UNITED STATES
5.100	HAPPY	NASA/JPL	PASADENA	UNITED STATES
5.101	SLEEPY	NASA/JPL	PASADENA	UNITED STATES
5.102	DOPEY	NASA/JPL	PASADENA	UNITED STATES
5.103	SNEEZY	NASA/JPL	PASADENA	UNITED STATES
5.105	BASHFL	NASA/JPL	PASADENA	UNITED STATES
5.106	DOC	NASA/JPL	PASADENA	UNITED STATES
5.108	WITCH	NASA/JPL	PASADENA	UNITED STATES
5.11	JPLLSI	NASA/JPL	PASADENA	UNITED STATES
5.111	MOSS2	NASA/JPL	PASADENA	UNITED STATES
5.112	WFPC1	NASA/JPL	PASADENA	UNITED STATES
5.113	WFPC2	NASA/JPL	PASADENA	UNITED STATES
5.117	PAVD	NASA/JPL	PASADENA	UNITED STATES
5.12	JPLRAG	NASA/JPL	PASADENA	UNITED STATES
5.124	JPL34A	NASA/JPL	PASADENA	UNITED STATES
5.125	JPL34B	NASA/JPL	PASADENA	UNITED STATES
5.13	JPLMAD	NASA/JPL	PASADENA	UNITED STATES
5.14	JPLSCI	NASA/JPL	PASADENA	UNITED STATES
5.143	JPLOCS	NASA/JPL	PASADENA	UNITED STATES
5.145	SANTA	NASA/JPL	PASADENA	UNITED STATES
5.148	BERLIN	NASA/JPL	PASADENA	UNITED STATES
5.15	MUDN	NASA/JPL	PASADENA	UNITED STATES
5.151	MIPL1	NASA/JPL	PASADENA	UNITED STATES
5.152	MIPL2	NASA/JPL	PASADENA	UNITED STATES
5.153	MIPL3	NASA/JPL	PASADENA	UNITED STATES
5.154	MIPL4	NASA/JPL	PASADENA	UNITED STATES
5.19	MLSRAC	NASA/JPL	PASADENA	UNITED STATES
5.199	COMI	NASA/JPL	PASADENA	UNITED STATES
5.2	NAIF	NASA/JPL	PASADENA	UNITED STATES
5.20	JPL35A	NASA/JPL	PASADENA	UNITED STATES
5.21	JPL35B	NASA/JPL	PASADENA	UNITED STATES
5.22	JPL35C	NASA/JPL	PASADENA	UNITED STATES
5.23	JPL35D	NASA/JPL	PASADENA	UNITED STATES

5.24	JPL36E	NASA/JPL	PASADENA	UNITED STATES
5.25	JPL36F	NASA/JPL	PASADENA	UNITED STATES
5.26	JPL36G	NASA/JPL	PASADENA	UNITED STATES
5.27	JPL36H	NASA/JPL	PASADENA	UNITED STATES
5.28	JPL36I	NASA/JPL	PASADENA	UNITED STATES
5.29	JPL36J	NASA/JPL	PASADENA	UNITED STATES
5.3	GROUCH	NASA/JPL	PASADENA	UNITED STATES
5.30	NSCAT	NASA/JPL	PASADENA	UNITED STATES
5.31	TONYS	NASA/JPL	PASADENA	UNITED STATES
5.32	STANS	NASA/JPL	PASADENA	UNITED STATES
5.36	WILY	NASA/JPL	PASADENA	UNITED STATES
5.4	ISSAC	NASA/JPL	PASADENA	UNITED STATES
5.40	QUAM	NASA/JPL	PASADENA	UNITED STATES
5.43	JPLSP1	NASA/JPL	PASADENA	UNITED STATES
5.47	PLDSJ1	NASA/JPL	PASADENA	UNITED STATES
5.5	JPLSP	NASA/JPL	PASADENA	UNITED STATES
5.57	JPL0CN	NASA/JPL	PASADENA	UNITED STATES
5.6	JPLIF	NASA/JPL	PASADENA	UNITED STATES
5.7	JPLQP	NASA/JPL	PASADENA	UNITED STATES
5.8	JPLNG	NASA/JPL	PASADENA	UNITED STATES
5.9	NIMI1	NASA/JPL	PASADENA	UNITED STATES
9.1	FPE0	NASA/JSC	HOUSTON	UNITED STATES
9.11	B32	NASA/JSC	HOUSTON	UNITED STATES
9.13	SMD	NASA/JSC	HOUSTON	UNITED STATES
9.16	MODAL1	NASA/JSC	HOUSTON	UNITED STATES
9.17	MODAL2	NASA/JSC	HOUSTON	UNITED STATES
9.18	ESTLCC	NASA/JSC	HOUSTON	UNITED STATES
9.180	SDLS2	NASA/JSC	HOUSTON	UNITED STATES
9.182	SBRI	NASA/JSC	HOUSTON	UNITED STATES
9.183	EPLAB	NASA/JSC	HOUSTON	UNITED STATES
9.19	ESTLRT	NASA/JSC	HOUSTON	UNITED STATES
9.2	JEC	NASA/JSC	HOUSTON	UNITED STATES
9.200	BOU	NASA/JSC	HOUSTON	UNITED STATES
9.22	FDE0	NASA/JSC	HOUSTON	UNITED STATES
9.25	STD	NASA/JSC	HOUSTON	UNITED STATES
9.27	TSD	NASA/JSC	HOUSTON	UNITED STATES
9.3	CTSD1	NASA/JSC	HOUSTON	UNITED STATES
9.30	RADLAB	NASA/JSC	HOUSTON	UNITED STATES
9.31	SN	NASA/JSC	HOUSTON	UNITED STATES
9.32	SNINAA	NASA/JSC	HOUSTON	UNITED STATES
9.33	SDSD	NASA/JSC	HOUSTON	UNITED STATES
9.36	HMF	NASA/JSC	HOUSTON	UNITED STATES
9.37	MEDICS	NASA/JSC	HOUSTON	UNITED STATES
9.38	NMCC	NASA/JSC	HOUSTON	UNITED STATES
9.39	AID	NASA/JSC	HOUSTON	UNITED STATES
9.42	LPI	NASA/JSC	HOUSTON	UNITED STATES
9.429	MEDIC2	NASA/JSC	HOUSTON	UNITED STATES
9.43	LSPD	NASA/JSC	HOUSTON	UNITED STATES
9.431	SBRI	NASA/JSC	HOUSTON	UNITED STATES
9.432	EPLAB	NASA/JSC	HOUSTON	UNITED STATES
9.45	PPD	NASA/JSC	HOUSTON	UNITED STATES
9.5	ASD	NASA/JSC	HOUSTON	UNITED STATES
9.55	DPSD1	NASA/JSC	HOUSTON	UNITED STATES
9.56	ASTRO	NASA/JSC	HOUSTON	UNITED STATES
9.58	HFL	NASA/JSC	HOUSTON	UNITED STATES
9.59	PLAID1	NASA/JSC	HOUSTON	UNITED STATES
9.6	MSD1	NASA/JSC	HOUSTON	UNITED STATES
9.60	AML	NASA/JSC	HOUSTON	UNITED STATES
9.61	LSDNM	NASA/JSC	HOUSTON	UNITED STATES
9.62	PLAID2	NASA/JSC	HOUSTON	UNITED STATES
9.64	CTDP	NASA/JSC	HOUSTON	UNITED STATES
9.65	CTCM1	NASA/JSC	HOUSTON	UNITED STATES
9.66	CSSL	NASA/JSC	HOUSTON	UNITED STATES
9.7	MSD2	NASA/JSC	HOUSTON	UNITED STATES
9.70	DONALD	NASA/JSC	HOUSTON	UNITED STATES
9.71	ECQPX	NASA/JSC	HOUSTON	UNITED STATES

9.72	CTSD4	NASA/JSC	HOUSTON	UNITED STATES
9.73	CTSD3	NASA/JSC	HOUSTON	UNITED STATES
9.74	CDSDB	NASA/JSC	HOUSTON	UNITED STATES
9.75	RENOIR	NASA/JSC	HOUSTON	UNITED STATES
9.76	HUEY	NASA/JSC	HOUSTON	UNITED STATES
9.77	DEWY	NASA/JSC	HOUSTON	UNITED STATES
9.78	LEWY	NASA/JSC	HOUSTON	UNITED STATES
9.79	CTSD2	NASA/JSC	HOUSTON	UNITED STATES
9.8	TCD	NASA/JSC	HOUSTON	UNITED STATES
9.82	NEWTON	NASA/JSC	HOUSTON	UNITED STATES
9.9	SED	NASA/JSC	HOUSTON	UNITED STATES
7.121	KSCDL1	NASA/KSC	KENNEDY SPACE CENTER	UNITED STATES
7.122	KSCDL2	NASA/KSC	KENNEDY SPACE CENTER	UNITED STATES
7.123	KSCDL3	NASA/KSC	KENNEDY SPACE CENTER	UNITED STATES
7.124	KSCRTR	NASA/KSC	KENNEDY SPACE CENTER	UNITED STATES
7.131	KSCP01	NASA/KSC	KENNEDY SPACE CENTER	UNITED STATES
7.132	KSCP02	NASA/KSC	KENNEDY SPACE CENTER	UNITED STATES
7.133	KSCP03	NASA/KSC	KENNEDY SPACE CENTER	UNITED STATES
7.134	KSCP04	NASA/KSC	KENNEDY SPACE CENTER	UNITED STATES
10.7	HALOE	NASA/LANGLEY	HAMPTON	UNITED STATES
24.129	UADP	NASA/LANGLEY	HAMPTON	UNITED STATES
7.150	HERMIT	NASA/MSFC	HUNTSVILLE	UNITED STATES
7.270	YODA	NASA/MSFC	HUNTSVILLE	UNITED STATES
7.271	CURLY	NASA/MSFC	HUNTSVILLE	UNITED STATES
7.272	GONZO	NASA/MSFC	HUNTSVILLE	UNITED STATES
7.273	ESDC	NASA/MSFC	HUNTSVILLE	UNITED STATES
7.274	SPACE1	NASA/MSFC	HUNTSVILLE	UNITED STATES
7.275	SPACE2	NASA/MSFC	HUNTSVILLE	UNITED STATES
7.276	GARFLD	NASA/MSFC	HUNTSVILLE	UNITED STATES
7.277	ODIE	NASA/MSFC	HUNTSVILLE	UNITED STATES
7.278	EWOK	NASA/MSFC	HUNTSVILLE	UNITED STATES
7.279	OBIWAN	NASA/MSFC	HUNTSVILLE	UNITED STATES
7.28	ATOM	NASA/MSFC	HUNTSVILLE	UNITED STATES
7.31	MAGDAT	NASA/MSFC	HUNTSVILLE	UNITED STATES
7.32	ION	NASA/MSFC	HUNTSVILLE	UNITED STATES
7.33	MAGRPH	NASA/MSFC	HUNTSVILLE	UNITED STATES
7.34	SPB	NASA/MSFC	HUNTSVILLE	UNITED STATES
7.35	SAM	NASA/MSFC	HUNTSVILLE	UNITED STATES
7.37	BOHR	NASA/MSFC	HUNTSVILLE	UNITED STATES
7.38	ROUTER	NASA/MSFC	HUNTSVILLE	UNITED STATES
7.39	SSL	NASA/MSFC	HUNTSVILLE	UNITED STATES
7.78	ISOEOM	NASA/MSFC	HUNTSVILLE	UNITED STATES
6.510	NRAO	NATIONAL RADIO ASTRONOMY OBSERV.	SOCORRO	UNITED STATES
6.513	VAX1	NATIONAL RADIO ASTRONOMY OBSERV.	SOCORRO	UNITED STATES
5.590	NPSOPT	NAVAL POST GRADUATE SCHOOL	MONTEREY	UNITED STATES
9.236	RDSS	NCAR	BOULDER	UNITED STATES
9.237	NPQATE	NCAR	BOULDER	UNITED STATES
9.301	PAMB	NCAR	BOULDER	UNITED STATES
9.303	RAP	NCAR	BOULDER	UNITED STATES
9.344	MMM	NCAR	BOULDER	UNITED STATES
9.346	VMSG	NCAR	BOULDER	UNITED STATES
9.358	AAP1	NCAR	BOULDER	UNITED STATES
9.359	AAP2	NCAR	BOULDER	UNITED STATES
9.363	PARC	NCAR	BOULDER	UNITED STATES
9.364	NSFGW	NCAR	BOULDER	UNITED STATES
9.367	ACDURS	NCAR	BOULDER	UNITED STATES
9.331	CRYOEL	NIST	BOULDER	UNITED STATES
9.339	SELVAX	NIST	BOULDER	UNITED STATES
5.236	DRACO	NOAO	TUCSON	UNITED STATES
7.103	INO	NORDA	STENNIS SPACE CENTER	UNITED STATES
7.205	NORDAS	NORDA	STENNIS SPACE CENTER	UNITED STATES
5.237	VELA	NRAO	TUCSON	UNITED STATES
5.238	WFPCT1	NRAO	TUCSON	UNITED STATES
5.239	WFPCT2	NRAO	TUCSON	UNITED STATES
5.240	GLL1	NRAO	TUCSON	UNITED STATES
5.241	CRUX	NRAO	TUCSON	UNITED STATES

6.242	TUCANA	NRAO	TUCSON	UNITED STATES
11.102	VAXUSR	NRL	WASHINGTON	UNITED STATES
11.2	NRL1	NRL	WASHINGTON	UNITED STATES
11.214	NRLDR1	NRL	WASHINGTON	UNITED STATES
11.230	NRLPLA	NRL	WASHINGTON	UNITED STATES
11.3	NRL2	NRL	WASHINGTON	UNITED STATES
11.30	MV7770	NRL	WASHINGTON	UNITED STATES
11.39	VX7770	NRL	WASHINGTON	UNITED STATES
11.41	VA	NRL	WASHINGTON	UNITED STATES
11.45	VME	NRL	WASHINGTON	UNITED STATES
11.50	LCP	NRL	WASHINGTON	UNITED STATES
11.6	NRL	NRL	WASHINGTON	UNITED STATES
11.70	SSD0	NRL	WASHINGTON	UNITED STATES
11.72	UAP	NRL	WASHINGTON	UNITED STATES
11.84	MAP	NRL	WASHINGTON	UNITED STATES
6.430	PSUMDS	PENN STATE UNIV	UNIV PARK	UNITED STATES
6.431	PSUV01	PENN STATE UNIV	UNIV PARK	UNITED STATES
3.350	PSIKEY	PLANETARY SCIENCE INSTITUTE	TUCSON	UNITED STATES
9.201	RICE	RICE UNIV	HOUSTON	UNITED STATES
3.1	RSMAS	RSMAS	MIAMI	UNITED STATES
3.17	BIGELO	RSMAS	WEST BOOTHBAY HARBOR	UNITED STATES
3.2	MIAMI	RSMAS	MIAMI	UNITED STATES
3.30	PLUTO	RSMAS	MIAMI	UNITED STATES
3.4	THOR	RSMAS	WASHINGTON	UNITED STATES
27.435	LVVA	SAIC	LAS VEGAS	UNITED STATES
27.436	LVVB	SAIC	LAS VEGAS	UNITED STATES
27.437	LVVC	SAIC	LAS VEGAS	UNITED STATES
27.438	LVVD	SAIC	LAS VEGAS	UNITED STATES
27.439	LVVE	SAIC	LAS VEGAS	UNITED STATES
27.440	LVVI	SAIC	LAS VEGAS	UNITED STATES
27.441	LVPCA	SAIC	LAS VEGAS	UNITED STATES
27.455	TUVA	SAIC	TUCSON	UNITED STATES
6.130	STX	SAR	LANHAM	UNITED STATES
27.157	JEDAC	SCRIPPS INST OF OCEANOGRAPHY	LA JOLLA	UNITED STATES
27.166	WAVE	SCRIPPS INST OF OCEANOGRAPHY	LA JOLLA	UNITED STATES
27.1	SDSC	SDSC	SAN DIEGO	UNITED STATES
27.2	LUAC	SDSC	SAN DIEGO	UNITED STATES
27.3	PAGES	SDSC	SAN DIEGO	UNITED STATES
27.5	LOLA	SDSC	SAN DIEGO	UNITED STATES
27.7	M6	SDSC	SAN DIEGO	UNITED STATES
27.8	SDCTSS	SDSC	SAN DIEGO	UNITED STATES
27.9	OLIVER	SDSC	SAN DIEGO	UNITED STATES
6.631	ARGOS0	SERVICE ARGOS INC	LANDOVER	UNITED STATES
6.531	CFA1	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.532	CFA2	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.533	CFA3	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.534	CFA4	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.535	CFA5	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.536	CFA6	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.537	CFA7	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.538	CFA8	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.539	CFA9	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.541	CFAR0S	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.542	CFACE1	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.543	CFAIPO	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.544	CFAIRT	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.545	CFASHA	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.546	CFAFIR	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.547	CFATYC	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.548	CFAR09	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.549	CFAB0K	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.550	CFAEXI	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.551	CFAR01	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.552	CFAR02	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.553	CFATA1	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.554	CFATA2	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES

6.555	CFA	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.556	CFAPS1	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.557	CFAPS2	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.558	CFANXT	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.559	CFAPS3	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.560	CFAPS4	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
6.600	CFAQSF	SMITHSONIAN ASTROPHY OBSERV.	CAMBRIDGE	UNITED STATES
9.291	SWRI	SOUTHWEST RES. INSTITUTE	SAN ANTONIO	UNITED STATES
9.292	SWRIMV	SOUTHWEST RES. INSTITUTE	SAN ANTONIO	UNITED STATES
9.293	SODA	SOUTHWEST RES. INSTITUTE	SAN ANTONIO	UNITED STATES
9.296	SWNMR	SOUTHWEST RES. INSTITUTE	SAN ANTONIO	UNITED STATES
6.405	SCIVAX	SPACE TELESCOPE INSTITUTE	BALTIMORE	UNITED STATES
6.406	KEPLER	SPACE TELESCOPE INSTITUTE	BALTIMORE	UNITED STATES
6.407	NEWT	SPACE TELESCOPE INSTITUTE	BALTIMORE	UNITED STATES
6.410	RPS	SPACE TELESCOPE INSTITUTE	BALTIMORE	UNITED STATES
6.411	FQCA	SPACE TELESCOPE INSTITUTE	BALTIMORE	UNITED STATES
6.412	FQCB	SPACE TELESCOPE INSTITUTE	BALTIMORE	UNITED STATES
6.413	LOKI	SPACE TELESCOPE INSTITUTE	BALTIMORE	UNITED STATES
6.414	FQSA	SPACE TELESCOPE INSTITUTE	BALTIMORE	UNITED STATES
6.416	WFPCST	SPACE TELESCOPE INSTITUTE	BALTIMORE	UNITED STATES
6.417	RSB	SPACE TELESCOPE INSTITUTE	BALTIMORE	UNITED STATES
6.419	MOSS1	SPACE TELESCOPE INSTITUTE	BALTIMORE	UNITED STATES
6.420	ELAN	SPACE TELESCOPE INSTITUTE	BALTIMORE	UNITED STATES
6.427	STSCI	SPACE TELESCOPE INSTITUTE	BALTIMORE	UNITED STATES
6.476	AMBER	SPACE TELESCOPE INSTITUTE	BALTIMORE	UNITED STATES
6.478	AVALON	SPACE TELESCOPE INSTITUTE	BALTIMORE	UNITED STATES
7.45	STAR	STANFORD UNIV	STANFORD	UNITED STATES
7.46	SPOCK	STANFORD UNIV	STANFORD	UNITED STATES
7.47	MCCOY	STANFORD UNIV	STANFORD	UNITED STATES
7.48	SOLAR	STANFORD UNIV	STANFORD	UNITED STATES
7.49	STAR1	STANFORD UNIV	STANFORD	UNITED STATES
7.50	SCOTTY	STANFORD UNIV	STANFORD	UNITED STATES
7.51	PRO2	STANFORD UNIV	STANFORD	UNITED STATES
7.52	LAUREL	STANFORD UNIV	STANFORD	UNITED STATES
7.53	HARDY	STANFORD UNIV	STANFORD	UNITED STATES
7.54	APOLLO	STANFORD UNIV	STANFORD	UNITED STATES
7.55	ATHENE	STANFORD UNIV	STANFORD	UNITED STATES
9.210	TAMDCN	TEXAS A & M UNIV	COLLEGE STATION	UNITED STATES
5.298	DIRAC2	THE AEROSPACE CORPORATION	LOS ANGELES	UNITED STATES
5.320	HYRAX	THE RAND CORPORATION	SANTA MONICA	UNITED STATES
5.257	ATD1	TRW INC.	REDONDO BEACH	UNITED STATES
5.258	TRWSSD	TRW INC.	REDONDO BEACH	UNITED STATES
5.259	ATD2	TRW INC.	REDONDO BEACH	UNITED STATES
5.260	TRWPSP	TRW INC.	REDONDO BEACH	UNITED STATES
5.104	GRUMPY	UCLA	LOS ANGELES	UNITED STATES
5.701	VXBMS	UCLA	LOS ANGELES	UNITED STATES
5.706	BRUNET	UCLA	LOS ANGELES	UNITED STATES
5.708	BONNIE	UCLA	LOS ANGELES	UNITED STATES
5.709	CLYDE	UCLA	LOS ANGELES	UNITED STATES
5.712	FSCARF	UCLA	LOS ANGELES	UNITED STATES
5.719	THEVAX	UCLA	LOS ANGELES	UNITED STATES
5.722	MIRA	UCLA	LOS ANGELES	UNITED STATES
5.723	RIGEL	UCLA	LOS ANGELES	UNITED STATES
5.725	UCLAUE	UCLA	LOS ANGELES	UNITED STATES
7.11	CSPARA	UNIV OF ALABAMA-HUNTSVILLE	HUNTSVILLE	UNITED STATES
7.25	CSPARC	UNIV OF ALABAMA-HUNTSVILLE	HUNTSVILLE	UNITED STATES
7.26	SPARC	UNIV OF ALABAMA-HUNTSVILLE	HUNTSVILLE	UNITED STATES
7.27	METEOR	UNIV OF ALABAMA-HUNTSVILLE	HUNTSVILLE	UNITED STATES
7.29	OAL29A	UNIV OF ALABAMA-HUNTSVILLE	HUNTSVILLE	UNITED STATES
7.30	UAHOAL	UNIV OF ALABAMA-HUNTSVILLE	HUNTSVILLE	UNITED STATES
7.40	OPTICS	UNIV OF ALABAMA-HUNTSVILLE	HUNTSVILLE	UNITED STATES
7.75	USUISO	UNIV OF ALABAMA-HUNTSVILLE	HUNTSVILLE	UNITED STATES
5.264	FRED	UNIV OF ALASKA/GEOPHYSICAL INST	FAIRBANKS	UNITED STATES
5.265	SPACE	UNIV OF ALASKA/GEOPHYSICAL INST	FAIRBANKS	UNITED STATES
5.266	BARNEY	UNIV OF ALASKA/GEOPHYSICAL INST	FAIRBANKS	UNITED STATES
5.280	LOONEY	UNIV OF ARIZONA	TUCSON	UNITED STATES

5.281	CCPVQR	UNIV OF ARIZONA	TUCSON	UNITED STATES
5.289	UCBSP	UNIV OF CALIF/BERKELEY	BERKELEY	UNITED STATES
27.1023	CAFDS0	UNIV OF CALIF/IRVINE	IRVINE	UNITED STATES
27.201	UCIAST	UNIV OF CALIF/IRVINE	IRVINE	UNITED STATES
27.204	CAFV2	UNIV OF CALIF/IRVINE	IRVINE	UNITED STATES
27.278	UCIHHW	UNIV OF CALIF/IRVINE	IRVINE	UNITED STATES
27.287	UCIQCD	UNIV OF CALIF/IRVINE	IRVINE	UNITED STATES
27.289	CAFV1	UNIV OF CALIF/IRVINE	IRVINE	UNITED STATES
27.351	UCRAC1	UNIV OF CALIF/RIVERSIDE	RIVERSIDE	UNITED STATES
27.352	UCRAC2	UNIV OF CALIF/RIVERSIDE	RIVERSIDE	UNITED STATES
27.353	UCRAC3	UNIV OF CALIF/RIVERSIDE	RIVERSIDE	UNITED STATES
27.354	UCRAC4	UNIV OF CALIF/RIVERSIDE	RIVERSIDE	UNITED STATES
27.355	UCRAC5	UNIV OF CALIF/RIVERSIDE	RIVERSIDE	UNITED STATES
27.358	UCRWS	UNIV OF CALIF/RIVERSIDE	RIVERSIDE	UNITED STATES
27.357	UCRDJ	UNIV OF CALIF/RIVERSIDE	RIVERSIDE	UNITED STATES
27.358	UCRBV	UNIV OF CALIF/RIVERSIDE	RIVERSIDE	UNITED STATES
27.359	UCRPC1	UNIV OF CALIF/RIVERSIDE	RIVERSIDE	UNITED STATES
27.368	UCRPC8	UNIV OF CALIF/RIVERSIDE	RIVERSIDE	UNITED STATES
27.367	UCRBC1	UNIV OF CALIF/RIVERSIDE	RIVERSIDE	UNITED STATES
27.368	UCRCH1	UNIV OF CALIF/RIVERSIDE	RIVERSIDE	UNITED STATES
27.389	UCRCS	UNIV OF CALIF/RIVERSIDE	RIVERSIDE	UNITED STATES
27.370	UCR	UNIV OF CALIF/RIVERSIDE	RIVERSIDE	UNITED STATES
27.371	UCRPH1	UNIV OF CALIF/RIVERSIDE	RIVERSIDE	UNITED STATES
27.372	UCRPH2	UNIV OF CALIF/RIVERSIDE	RIVERSIDE	UNITED STATES
27.373	UCRPH3	UNIV OF CALIF/RIVERSIDE	RIVERSIDE	UNITED STATES
27.375	UCRPH5	UNIV OF CALIF/RIVERSIDE	RIVERSIDE	UNITED STATES
27.377	UCRPH7	UNIV OF CALIF/RIVERSIDE	RIVERSIDE	UNITED STATES
37.379	UCRPHY	UNIV OF CALIF/RIVERSIDE	RIVERSIDE	UNITED STATES
27.130	CASS	UNIV OF CALIF/SAN DIEGO	LA JOLLA	UNITED STATES
27.131	CASS01	UNIV OF CALIF/SAN DIEGO	LA JOLLA	UNITED STATES
27.140	SDCC1	UNIV OF CALIF/SAN DIEGO	LA JOLLA	UNITED STATES
27.141	SDCC2	UNIV OF CALIF/SAN DIEGO	LA JOLLA	UNITED STATES
27.142	SDCC4	UNIV OF CALIF/SAN DIEGO	LA JOLLA	UNITED STATES
27.143	SDCC5	UNIV OF CALIF/SAN DIEGO	LA JOLLA	UNITED STATES
27.144	SDCC8	UNIV OF CALIF/SAN DIEGO	LA JOLLA	UNITED STATES
27.150	SSURF	UNIV OF CALIF/SAN DIEGO	LA JOLLA	UNITED STATES
27.174	SDPH	UNIV OF CALIF/SAN DIEGO	LA JOLLA	UNITED STATES
27.175	SDPSL0	UNIV OF CALIF/SAN DIEGO	LA JOLLA	UNITED STATES
27.4	SDS	UNIV OF CALIF/SAN DIEGO	SAN DIEGO	UNITED STATES
5.294	UCMBO	UNIV OF CALIF/SANTA BARBARA	SANTA BARBARA	UNITED STATES
7.20	LASR	UNIV OF CHICAGO	CHICAGO	UNITED STATES
33.01	BALI	UNIV OF COLORADO	DENVER	UNITED STATES
33.101	NILAS	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.21	ARIES	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.22	ORION	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.25	AQUILA	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.250	KRYOS	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.251	GPXICE	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.252	PHOTON	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.258	RASTER	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.28	PISCES	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.28	VIRGO	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.29	DENE8	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.30	SPICA	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.31	VESTA	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.319	SANDOR	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.32	LYNX	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.321	SARIN	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.332	GALAXY	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.333	CASA	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.334	HAIL	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.337	TYCHO	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.338	VULCAN	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.34	ZODIAC	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.35	CYGNUS	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.36	LMCX1	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES

33.37	TAURUS	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.39	CYGX1	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.40	HYADES	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.46	ILLITE	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.47	ALBEDO	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.48	KAOLIN	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.70	UCBRT0	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.71	THALIA	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.73	VEGA	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.74	MAIA	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.76	ALGOL	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.81	SCOX1	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.83	ARLAC	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.84	CARINA	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.87	ELROY	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.90	SOLARX	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.99	CUBLDR	UNIV OF COLORADO-BOULDER	BOULDER	UNITED STATES
33.60	FIJI	UNIV OF COLORADO-DENVER	DENVER	UNITED STATES
6.145	DELOCN	UNIV OF DELAWARE	LEWES	UNITED STATES
6.210	BARTOL	UNIV OF DELAWARE	NEWARK	UNITED STATES
5.270	HAWAII	UNIV OF HAWAII/GEDPHYSICS INST	HONOLULU	UNITED STATES
7.172	DEPWI	UNIV OF IOWA	IOWA CITY	UNITED STATES
7.174	DENALI	UNIV OF IOWA	IOWA CITY	UNITED STATES
7.61	AURORA	UNIV OF IOWA	IOWA CITY	UNITED STATES
7.62	CERES	UNIV OF IOWA	IOWA CITY	UNITED STATES
7.63	IOWASP	UNIV OF IOWA	IOWA CITY	UNITED STATES
7.64	IOWA	UNIV OF IOWA	IOWA CITY	UNITED STATES
7.220	KUPHSX	UNIV OF KANSAS	LAWRENCE	UNITED STATES
7.225	KUMGM	UNIV OF KANSAS	LAWRENCE	UNITED STATES
6.400	UMDSW	UNIV OF MARYLAND	COLLEGE PARK	UNITED STATES
6.401	UMDUAP	UNIV OF MARYLAND	COLLEGE PARK	UNITED STATES
6.402	UMDSP	UNIV OF MARYLAND	COLLEGE PARK	UNITED STATES
6.403	UMDSPA	UNIV OF MARYLAND	COLLEGE PARK	UNITED STATES
6.460	UMAIP	UNIV OF MARYLAND	COLLEGE PARK	UNITED STATES
6.461	LOCAL	UNIV OF MARYLAND	COLLEGE PARK	UNITED STATES
6.462	IMAGE	UNIV OF MARYLAND	COLLEGE PARK	UNITED STATES
6.463	RANGE	UNIV OF MARYLAND	COLLEGE PARK	UNITED STATES
6.464	IMG	UNIV OF MARYLAND	COLLEGE PARK	UNITED STATES
6.466	MARVEL	UNIV OF MARYLAND	COLLEGE PARK	UNITED STATES
6.468	UMDHEP	UNIV OF MARYLAND	COLLEGE PARK	UNITED STATES
6.469	LIONEL	UNIV OF MARYLAND	COLLEGE PARK	UNITED STATES
6.470	UMDENP	UNIV OF MARYLAND	COLLEGE PARK	UNITED STATES
6.471	CPWANG	UNIV OF MARYLAND	COLLEGE PARK	UNITED STATES
3.70	ISPIR1	UNIV OF MIAMI	CORAL GABLES	UNITED STATES
3.73	ELVIS	UNIV OF MIAMI	CORAL GABLES	UNITED STATES
3.74	GABLES	UNIV OF MIAMI	CORAL GABLES	UNITED STATES
3.76	UMIAMI	UNIV OF MIAMI	CORAL GABLES	UNITED STATES
3.89	PHYVAX	UNIV OF MIAMI	CORAL GABLES	UNITED STATES
7.135	ATSVAX	UNIV OF MIAMI-PALM BAY	PALM BAY	UNITED STATES
7.82	BATSE	UNIV OF MICHIGAN	ANN ARBOR	UNITED STATES
7.86	SPRLA	UNIV OF MICHIGAN	ANN ARBOR	UNITED STATES
7.88	SPRLB	UNIV OF MICHIGAN	ANN ARBOR	UNITED STATES
7.90	SPRLC	UNIV OF MICHIGAN	ANN ARBOR	UNITED STATES
7.91	SPRLF	UNIV OF MICHIGAN	ANN ARBOR	UNITED STATES
7.92	SPRLD	UNIV OF MICHIGAN	ANN ARBOR	UNITED STATES
7.151	WAVES	UNIV OF MINNESOTA	MINNEAPOLIS	UNITED STATES
6.721	UNHRCC	UNIV OF NEW HAMPSHIRE	DURHAM	UNITED STATES
6.180	URI	UNIV OF RHODE ISLAND	NARRAGANSETT	UNITED STATES
6.181	DSPLY1	UNIV OF RHODE ISLAND	NARRAGANSETT	UNITED STATES
6.182	DSPLY2	UNIV OF RHODE ISLAND	NARRAGANSETT	UNITED STATES
6.183	RWATTS	UNIV OF RHODE ISLAND	NARRAGANSETT	UNITED STATES
6.185	CBEAM	UNIV OF RHODE ISLAND	NARRAGANSETT	UNITED STATES
6.194	CHM2	UNIV OF RHODE ISLAND	KINGSTON	UNITED STATES
6.195	URIQSO	UNIV OF RHODE ISLAND	NARRAGANSETT	UNITED STATES
6.199	MARGEO	UNIV OF RHODE ISLAND	KINGSTON	UNITED STATES
25.213	THENIC	UNIV OF TEXAS	AUSTIN	UNITED STATES



25.40	UTADNX	UNIV OF TEXAS	AUSTIN	UNITED STATES
25.128	UTSPAN	UNIV OF TEXAS-AUSTIN	AUSTIN	UNITED STATES
9.261	UTD750	UNIV OF TEXAS-DALLAS	RICHARDSON	UNITED STATES
5.333	MOTHRA	UNIV OF WASHINGTON	SEATTLE	UNITED STATES
7.141	MADRAF	UNIV OF WISCONSIN	MADISON	UNITED STATES
7.142	UWFPC	UNIV OF WISCONSIN	MADISON	UNITED STATES
7.143	USVAL	UNIV OF WISCONSIN	MADISON	UNITED STATES
7.44	LAMPS	UNIVERSITIES SPACE RESEARCH ASSOC	HUNTSVILLE	UNITED STATES
6.215	NODC	US DEPT OF COMMERCE/NOAA/NESDIS/NODC	WASHINGTON	UNITED STATES
6.375	ODC80	US DEPT OF COMMERCE/NOAA/NESDIS/NODC	WASHINGTON	UNITED STATES
24.252	MOG	USGS	PALO ALTO	UNITED STATES
24.253	DISCO	USGS	PALO ALTO	UNITED STATES
24.255	MADMAX	USGS	MENLO PARK	UNITED STATES
5.301	ASTROG	USGS	FLAGSTAFF	UNITED STATES
7.189	EROSA	USGS/EROS DATA CENTER	SIOUX FALLS	UNITED STATES
7.161	USUJRD	UTAH STATE UNIV	LOGAN	UNITED STATES
7.70	USU	UTAH STATE UNIV	LOGAN	UNITED STATES
7.80	USUMVA	UTAH STATE UNIV	LOGAN	UNITED STATES
7.300	WURST	WASHINGTON UNIV	ST. LOUIS	UNITED STATES
7.301	WUMV1	WASHINGTON UNIV	ST. LOUIS	UNITED STATES
7.302	WUPRO	WASHINGTON UNIV	ST. LOUIS	UNITED STATES
7.303	WUINAA	WASHINGTON UNIV	ST. LOUIS	UNITED STATES
7.304	WUMV2	WASHINGTON UNIV	ST. LOUIS	UNITED STATES
6.151	RED	WOODS HOLE OCEANOGRAPHIC INSTITUTION	WOODS HOLE	UNITED STATES
6.152	BLUE	WOODS HOLE OCEANOGRAPHIC INSTITUTION	WOODS HOLE	UNITED STATES
6.153	WHITE	WOODS HOLE OCEANOGRAPHIC INSTITUTION	WOODS HOLE	UNITED STATES
6.154	GRAY	WOODS HOLE OCEANOGRAPHIC INSTITUTION	WOODS HOLE	UNITED STATES
6.155	BLACK	WOODS HOLE OCEANOGRAPHIC INSTITUTION	WOODS HOLE	UNITED STATES
6.156	GREEN	WOODS HOLE OCEANOGRAPHIC INSTITUTION	WOODS HOLE	UNITED STATES
6.159	CLAMS	WOODS HOLE OCEANOGRAPHIC INSTITUTION	WOODS HOLE	UNITED STATES
6.160	TAN	WOODS HOLE OCEANOGRAPHIC INSTITUTION	WOODS HOLE	UNITED STATES
6.161	PLUM	WOODS HOLE OCEANOGRAPHIC INSTITUTION	WOODS HOLE	UNITED STATES
6.162	GOLD	WOODS HOLE OCEANOGRAPHIC INSTITUTION	WOODS HOLE	UNITED STATES
6.163	PUCE	WOODS HOLE OCEANOGRAPHIC INSTITUTION	WOODS HOLE	UNITED STATES
6.164	AQUA	WOODS HOLE OCEANOGRAPHIC INSTITUTION	WOODS HOLE	UNITED STATES
6.165	SILVER	WOODS HOLE OCEANOGRAPHIC INSTITUTION	WOODS HOLE	UNITED STATES
6.166	CTD03	WOODS HOLE OCEANOGRAPHIC INSTITUTION	WOODS HOLE	UNITED STATES
6.167	SLATE	WOODS HOLE OCEANOGRAPHIC INSTITUTION	WOODS HOLE	UNITED STATES
6.168	CTD02	WOODS HOLE OCEANOGRAPHIC INSTITUTION	WOODS HOLE	UNITED STATES
6.169	BRONZE	WOODS HOLE OCEANOGRAPHIC INSTITUTION	WOODS HOLE	UNITED STATES
6.170	THISLE	WOODS HOLE OCEANOGRAPHIC INSTITUTION	WOODS HOLE	UNITED STATES
6.171	SPANKY	WOODS HOLE OCEANOGRAPHIC INSTITUTION	WOODS HOLE	UNITED STATES
6.172	TQGA	WOODS HOLE OCEANOGRAPHIC INSTITUTION	WOODS HOLE	UNITED STATES
6.173	NEFC01	WOODS HOLE OCEANOGRAPHIC INSTITUTION	WOODS HOLE	UNITED STATES
6.174	TWEED	WOODS HOLE OCEANOGRAPHIC INSTITUTION	WOODS HOLE	UNITED STATES
6.176	CANAL1	WOODS HOLE OCEANOGRAPHIC INSTITUTION	WOODS HOLE	UNITED STATES
28.304	EMBL	EUROPEAN MOLECULAR BIOLOGY LABORATORY	6900 HEIDELBERG	WEST GERMANY
28.305	ALKOR	EUROPEAN MOLECULAR BIOLOGY LABORATORY	6900 HEIDELBERG	WEST GERMANY
28.82	ESDMC1	EUROPEAN SOUTHERN OBSERVATORY	GARCHING-BEI-MUENCHE	WEST GERMANY
28.1	ECD1	EUROPEAN SPACE OPERATIONS CENTRE	6100 DARMSTADT	WEST GERMANY
28.101	OOPEP5	INSTITUTE FOR OPTOELECTRONICS	8031 OBERPFAFFENHOFE	WEST GERMANY
28.350	LINMPI	MAX PLANCK INST FUER AERONMIE	LINDAU(HARZ)	WEST GERMANY
28.101	MPE	MAX PLANCK INST FUER ASTROPHYSIK	8046 GARCHING	WEST GERMANY
28.102	MPEX1	MAX PLANCK INST FUER ASTROPHYSIK	8046 GARCHING	WEST GERMANY
28.104	MPEI1	MAX PLANCK INST FUER ASTROPHYSIK	8046 GARCHING	WEST GERMANY
28.107	MPEI2	MAX PLANCK INST FUER ASTROPHYSIK	8046 GARCHING	WEST GERMANY
28.201	NB11	MAX PLANCK INST FUER KERNPHYSIK	6900 HEIDELBERG	WEST GERMANY
28.203	CHAOS0	MAX PLANCK INST FUER KERNPHYSIK	6900 HEIDELBERG	WEST GERMANY
28.204	FRANNY	MAX PLANCK INST FUER KERNPHYSIK	6900 HEIDELBERG	WEST GERMANY
28.205	ZOOEY	MAX PLANCK INST FUER KERNPHYSIK	6900 HEIDELBERG	WEST GERMANY
28.206	VAMPI	MAX PLANCK INST FUER KERNPHYSIK	6900 HEIDELBERG	WEST GERMANY
28.220	HERING	MAX PLANCK INST FUER KERNPHYSIK	6900 HEIDELBERG	WEST GERMANY
28.221	UXNHDS	MAX PLANCK INST FUER KERNPHYSIK	6900 HEIDELBERG	WEST GERMANY
28.222	CBZEUS	MAX PLANCK INST FUER KERNPHYSIK	6900 HEIDELBERG	WEST GERMANY
28.223	DUSTY	MAX PLANCK INST FUER KERNPHYSIK	6900 HEIDELBERG	WEST GERMANY
28.224	IGOR	MAX PLANCK INST FUER KERNPHYSIK	6900 HEIDELBERG	WEST GERMANY

28.225	NA84	MAX PLANCK INST FUER KERNPHYSIK	6900	HEIDELBERG	WEST GERMANY
28.226	ZYKLOP	MAX PLANCK INST FUER KERNPHYSIK	6900	HEIDELBERG	WEST GERMANY
28.228	WRF	MAX PLANCK INST FUER KERNPHYSIK	6900	HEIDELBERG	WEST GERMANY
28.229	WILLI	MAX PLANCK INST FUER KERNPHYSIK	6900	HEIDELBERG	WEST GERMANY
28.289	WOWERI	MAX PLANCK INST FUER KERNPHYSIK	6900	HEIDELBERG	WEST GERMANY
28.290	MORITZ	MAX PLANCK INST FUER KERNPHYSIK	6900	HEIDELBERG	WEST GERMANY
28.291	EKJ	MAX PLANCK INST FUER KERNPHYSIK	6900	HEIDELBERG	WEST GERMANY
28.292	OLLI	MAX PLANCK INST FUER KERNPHYSIK	6900	HEIDELBERG	WEST GERMANY
28.293	BARON	MAX PLANCK INST FUER KERNPHYSIK	6900	HEIDELBERG	WEST GERMANY
28.294	URMI	MAX PLANCK INST FUER KERNPHYSIK	6900	HEIDELBERG	WEST GERMANY
28.295	PIXE	MAX PLANCK INST FUER KERNPHYSIK	6900	HEIDELBERG	WEST GERMANY
28.296	KRAKO	MAX PLANCK INST FUER KERNPHYSIK	6900	HEIDELBERG	WEST GERMANY
28.297	OLIVER	MAX PLANCK INST FUER KERNPHYSIK	6900	HEIDELBERG	WEST GERMANY
28.299	REZIM	MAX PLANCK INST FUER KERNPHYSIK	6900	HEIDELBERG	WEST GERMANY
28.800	AIBONN	UNIV OF BONN	BONN 1		WEST GERMANY
28.151	IFKKI	UNIV OF KIEL	2300	KIEL	WEST GERMANY

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Air Force Geophysics Laboratory (AFGL)	Mike Houle	AFGLSC::HOULE	617/977-2411	GSFC
Ames Research Center (ARC)	Mike Rodericks	SAT::SYSTEM	414/694-6923	JPL
Applied Physics Laboratory (APL)	Lore Suther	APLSP::SUTHER	901/953-5000 (x8412)	GSFC
Arizona State University	Don Anderson	ASUIPF::ANDERSON	602/965-6936	JPL
Augsburg College	Merk Engebretson	AUGGIE::SYSTEM	612/390-1067	MSFC
Bartol Research Foundation	Paul Evanson	BARTOL::PENGUIN	302/451-8111	GSFC
Bendix Field Engineering	David R. Fink	BFEC9::SYSDRF	901/964-7673	GSFC
Boston University	David Bradford	BUASTA::BRADFORD	617/359-4884	GSFC
Brown University	Rob Demillo	BRNLPSG::RD	401/863-3769	JPL
California Institute of Technology (CalTech)	Den Zirin	HAMLET::ZAR	818/356/8861	JPL
Canadian Data Analysis Network	Daniel Servrancck	CANDTT::ACTION	613/990-0806	GSFC
Centre de Recherche en Physique de l'Environnement (CRPE)	Edmond Pawela	CRPEIS::PAWELA	+33-1-4529-4602	ESOC
Cerro Tololo Inter-American Observatory	Jim Hughes	CTIOV1::SYSTEM	+011-50-51-213-352 (x230)	GSFC
Continuous Electron Beam Acceleration Facility (CEBAF)	Richard Glass	CEBAF1::GLASS	804/249-7100	GSFC
Cornell University	Brian Carcich	CUSPIF::CARCICH	607/255-5908	GSFC
Dartmouth College	Doug Frezer	T1::DOUGF	603/646-3522	GSFC
Department of Plasma Physics, KTH	Bengt H. Nilsson	ESRIN2::PLAFYS::NILSSON	+46-8-7907693	ESOC
Earth Resources Observation Systems (EROS) Data Center	Tom Bodah	EROSA::SYSTEM	FTS 704-7890	MSFC
Earthnet Programme Office	Martin Spence	EP0780::SPENCE	+39-6-94180420	ESOC
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Food and Agriculture Organisation (FAO) of the U.N.	K. Mead	FAO::SYSTEM	+39-6-5797-4744	ESOC
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Goddard Space Flight Center (GSFC)	Todd Butler	NCF::TBUTLER	301/286-7251	GSFC
Goddard Space Flight Center/Local Area Communications Network (GSFC/LACN)	Jerome Bennett	SDCDCL::BENNETT	301/286-4655	GSFC
Grueman Corporate Research Center	Nance Jennerich	NSSDCA::CRCVAX::SYSTEM	510/346-6147	GSFC
International Ultraviolet Explorer (IUE) Observatory	Francisco Marcelo	VILSPA::SYS	+34-1401-9661	ESOC
Institut d'Astrophysique de Paris	Diego Cesaraki	IAP0BS::DIEGO	+33-1-4320-1425	ESOC
Institute for Optoelectronics	Gerd Enderlein	OOPEE6::SYSTEM	+49-8153-28789	ESOC
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Istituto di Fisica dello Spazio Interplanetario (IFSI)	Cecilia Ceccerelli	IFSI::CECILIA	+39-6-9423801	ESOC
Istituto Nazionale di Fisica Nucleare (INFN)	Massimo Piatoni	VAXLNF::MASSIMO	+39-6-9408840	ESOC
Jet Propulsion Laboratory (JPL)	Sanford George	JPLNG::GEORGE	918/354-4334	JPL
Johnson Space Center (JSC)	Den Anderson	JN::DAN	713/489-5144	JPL
Kennedy Space Center	Mark Juhr	KSCDL1::JUHR	305/867-3127	MSFC
Kyoto University	Toyo Kamei	NSSDCA::PSIKKYOTO::TOYO	+81-75-722-0865	GSFC
Lockheed Palo Alto Research Laboratories	Dayton Detlowe	LOCKHD::NETMGR	415/424-3274	JPL
Los Alamos National Laboratories	Steve Blair	ESDP2::089804	505/867-9211	JPL
Louisiana State University (LSU)	T. Gregory Guzik	LSUGWS::GUZIK	504/388-8597	MSFC
Lunar and Planetary Institute	Kinpong Leung	LPI::LEUNG	713/486-2165	JPL
Marshall Space Flight Center (MSFC)	Ann Beckman	SSL::BECKMAN	205/544-7668	MSFC
Massachusetts Institute of Technology (MIT)	Diane Spiegel	6394::SYSTEM	617/253-5955	GSFC
Max Planck Institute for Aeronomy	Hans-Juergen Mueller	LINMPI::MUELLER	+49-555-841-301	ESOC
Max Planck Institute for Extraterrestrial Physics	Karlheinz Muehleuser	MPE::KZM	+49-89-3299-520	ESOC
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NASA Science Management Information National Center for Atmospheric Research (NCAR)	Harrell Phillips	MIPSI::SYSTEM	305/867-7897	MSFC
National Oceanic and Atmospheric Administration/National Bureau of Standards (NOAA/NIST)	Basil Irwin	AAP2::IRWIN	303/497-1261	JPL
National Optical Astronomy Observatory (NOAO)	Jim Winkelman	CRYDEL::WINKELMAN	303/497-3283	JPL
National Radio Astronomy Observatory (NRAO)	Steve Grandt	DRACO::GRANDI	602/325-9228	JPL
Naval Ocean Research and Development Activity (NORDA)	Al Braun	NRAO::ABRAUN	505/772-4335	GSFC
Naval Postgraduate School	DeeDee Garcia	INO::NETMAN	601/688-4827	MSFC
Naval Research Laboratory (NRL)	James Mueller	408/646-3266	408/646-3266	JPL
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Rice University			+44-295-446511	ESOC
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Rutherford Appleton Laboratory (RAL) (JANET Network)				ESOC

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Service Argos, Inc.	Dan Mitchum		801/925-4411	GSFC
Smithsonian Astrophysics Observatory (SAO)	Van McGlasson	CFAZ::BOGART	617/495-7392	GSFC
Solar Magnetograph	Edward West	MAGRPH::WEST	205/544-7625	MSFC
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Space Telescope Institute	Dave Stern	6559::STERN	301/338-4585	GSFC
Stanford University	Dr. Calvin C. Teague	STAR::CAL	415/723-9596	MSFC
Stennis Space Center	Chuck Martin	SSCSTL::SYSTEM	601/688-1370	MSFC
The Aerospace Corporation	Lynn Freisen	DIRAC2::FREISEN	219/648-5992	JPL
TRW	Carol Lowry	TRWATD::SYSTEM	219/535-2417	JPL
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United States Department of Commerce/ NOAA/NESDIS/NODC	Janet Ward	NODC::WARD	202/673-5509	GSFC
United States Geological Survey (USGS)	Jim Fisher	ISDRES::JFISHER	709/648-7026	GSFC
United States Geological Survey (USGS) (Flagstaff)	John Zabel	IFLAG1::JZABEL	602/527-7113	JPL
Universities Space Research Association	Jayanthi Srikishen	LAMPS::SYSTEM	205/895-0502	MSFC
University of Alabama, Huntsville	Harold Pirtle	CSPARA::PIRTLE	205/895-0664	MSFC
University of Alaska	Jeff Harrison	FRED::DICK	907/474-0329	JPL
University of Arizona	Joe Gotobed	LDOONEY::GOTOBED	602/621-6949	JPL
University of California-Berkeley	David Curtia	L009::SYSTEM	415/642-0549	JPL
University of California-Los Angeles (UCLA)	Stephen Cox	UCLASP::SCOX	213/825-6899	JPL
University of California-Santa Barbara	Roger Lenard	UCMBO::ROG	805/961-4541	JPL
University of Chicago	Gordon Lentz	LASR::LENTZ	312/702-7886	MSFC
University of Colorado	Phil Evans	AQUILA::EVANS	303/492-1104	JPL
University of Delaware	Walt Dabel	DELCN::WALT	302/645-4225	GSFC
University of Hawaii	Jeff Bosei	HAWAII::POSTMASTER	808/948-6321	JPL
University of Iowa	Bill Robison	IOWASP::SYSTEM	319/335-1746	MSFC
University of Kansas	Vince Reinert	KUPHSX::SYSTEM	913/864-8610	MSFC
University of Kiel	Gunter Green	IFKKI::GREEN	+49-431-88-2491	ESDC
University of Maryland	Larry Lutz	UMDSW::LARRY	301/454-6555	GSFC
University of Miami	James Brown	MIAMI::JIM	305/361-4770	MSFC
University of Michigan	Jeff Hays	SPRLC::JHAYS	313/747-3705	MSFC
University of Minnesota	Keith Goetz	WAVES::GOETZ	612/624-3520	MSFC
University of New Hampshire	Berry Reinhold	UNHRCC::BBR	603/862-4582	GSFC
University of Rhode Island	Den Holloway	URI::DAN	401/792-6831	GSFC
University of Texas-Austin	Rick Watson	UTSPANI::R.WATSON	512/471-8220	JPL
University of Tubingen	Dominic Scales	TUEBINI::SCALES	+49-7071-29-6197	ESDC
University of Washington	Douglas W. Potter	MOTHRA::STENVIK	206/543-2552	JPL
University of Washington	Tracy Stanvik	MADRAF::PODGER	206/549-5976	JPL
University of Wisconsin	Nancy Podger	USU::SYSTEM	608/262-2198	MSFC
Utah State University	Ray Rawline	WURST::SLAVNEY	801/750-2401	MSFC
Washington University	Susan Slavney	RED::SPAN MANAGER	314/889-5493	MSFC
Woods Hole Oceanographic Institute	Warren Sasz		508/548-1400 (x2875)	GSFC

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B. Goddard Space Flight Center SPAN Routing Center

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Updated 6/18/89

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Goddard Space Flight Center (GSFC)

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GSFC-Served SPAN Sites

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AIR FORCE GEOPHYSICS LABORATORY (AFGL) Discipline: Solar Terrestrial

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Technical: Mike Houle (AFGLSC::HOULE)

Air Force Geophysics Laboratory (AFGL)

Hanscom AFB, MA

617/377-2478

Science: Donna Pelekasis

Security: Mike Houle (AFGLSC::HOULE)

Len D'Alberti

617/377-2411

APPLIED PHYSICS LABORATORY (APL) Discipline: Solar Terrestrial

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Technical: Lora Suther (APLSP::SUTHER)

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BARTOL RESEARCH FOUNDATION Discipline: Physics

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Newark, DE 19716

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BENDIX FIELD ENGINEERING

Discipline:

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Columbia, MD 21045  
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Science: Bruce Schupler  
301/964-7901  
Security: David R. Fink (BFEC3:: SYSDRF)

BOSTON UNIVERSITY

Discipline: Astronomy

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Boston University  
725 Commonwealth Avenue  
Boston, MA 02215  
617/353-4884  
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CANADIAN DATA ANALYSIS NETWORK

Discipline: Space Physics and Aeronomy

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National Research Council of Canada  
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CERRO TOLLO INTER-AMERICAN OBSERVATORY

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CORNELL UNIVERSITY

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Disciplines:

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EUROPEAN SPACE OPERATIONS CENTER (ESDC)

Discipline: Space Sciences

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GRUMMAN CORPORATE RESEARCH CENTER

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Discipline: Space Sciences

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MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT)

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Technical: Diane Spiegel (6394::SYSTEM)  
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Science:  
Security: Diane Spiegel (6394::SYSTEM)



NASA HEADQUARTERS

Discipline: All

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Technical: Mike Newell (POLLUX::MNEWELL)  
NASA Headquarters  
Washington, DC 20546  
202/453-8752  
Science:  
Security: Mike Newell (POLLUX::MNEWELL)

NATIONAL RADIO ASTRONOMY OBSERVATORY (NRAO)

Discipline: Astronomy

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Technical: Al Braun (NRAO::ABRAUN)  
Warren Richardson, Charlottesville, VA  
804/296-0213  
National Radio Astronomy Observatory (NRAO)  
1000 Bullock  
Socorro, NM 87801  
505/772-4335  
Science:  
Security: Al Braun (NRAO::ABRAUN)

NAVAL RESEARCH LABORATORY (NRL)

Discipline: Computer Sciences

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Technical: Paul Lang (11314::LANG)  
Naval Research Laboratory (NRL)  
Code 4706  
Plasma Physics Division  
4555 Overlook Avenue  
Washington, DC 20375  
202/767-3903, FTS 297-3093  
Science: Dr. Paul Rodriguez  
Security: Paul Lang (11314::LANG)  
Bill Yurcik (NRL::YURCIK)

PENNSYLVANIA STATE UNIVERSITY

Discipline: Climate

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423 Walker Building  
University Park, PA 16802  
Science: Jim Breon  
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SERVICE ARGOS, INC.

Discipline:

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Technical: Dan Mitchum (NSSDCA::ARGOS6::MITCHUM)  
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Science:  
Security: Howard Sparks (NSSDCA::ARGOS6::SPARKS)

SMITHSONIAN ASTROPHYSICS OBSERVATORY (SAO)

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60 Garden Street  
B-211/MS-39  
Cambridge, MA 02138  
Science: Roger Hauck (CFA2::ROGER)  
Security: Van McGlasson (CFA7::BOGART)

SPACE TELESCOPE INSTITUTE

Discipline: Astrophysics

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Science: Dr. Peter Shames (SCIVAX::SHAMES)  
301/338-4748  
Security: Dave Stern (8559::STERN)  
Doris McClure (SCIVAX::MCCLURE)  
301/338-4401

UNITED STATES DEPARTMENT OF COMMERCE/  
NATIONAL OCEANOGRAPHIC AND ATMOSPHERIC  
ADMINISTRATION (NOAA)/NATIONAL  
ENVIRONMENTAL SATELLITE, DATA, AND  
INFORMATION SERVICE (NESDIS)/NATIONAL  
OCEANOGRAPHIC DATA CENTER (NODC)

Discipline: Oceans

-----  
Technical: Janet Ward (NODC::WARD)  
United States Department of Commerce/NOAA/NESDIS/NODC  
1025 Connecticut Avenue  
Washington, DC 20235  
202/673-5509  
Science:  
Security: Janet Ward (NODC::WARD)

UNITED STATES GEOLOGICAL SURVEY (USGS)

Discipline:

-----  
Technical: Jim Fisher (ISDRES::JFISHER)  
United States Geological Survey (USGS)  
National Center  
Reston, VA 22092  
703/648-7026, FTS 959-7026  
Science:  
Security: Jim Fisher (ISDRES::JFISHER)

UNIVERSITY OF DELAWARE

Discipline: Oceans

-----  
Technical: Walt Dabell (DELOCN::WALT)  
University of Delaware  
College of Marine Studies  
700 Pilottown Road  
Lewes, DE 19958  
302/645-4225  
Science: Walt Dabell (DELOCN::WALT)  
Security: Walt Dabell (DELOCN::WALT)

UNIVERSITY OF MARYLAND

Discipline: Solar Terrestrial

-----  
Technical: Larry Lutz (UMDSW::LARRY)  
Department of Physics and Astronomy  
University of Maryland  
College Park, MD 20742  
301/454-4655  
Science: Dr. Chuck Goodrich  
301/454-5938  
Security: Larry Bleu (UMAIP::SYSMGR)  
301/454-8384

UNIVERSITY OF NEW HAMPSHIRE

Discipline:

-----  
Technical: Barry Reinhold (UNHRCC::BBR)  
University of New Hampshire  
Science and Engineering Research  
Durham, NH 03825  
603/862-4532  
Science:  
Security: Barry Reinhold (UNHRCC::BBR)

UNIVERSITY OF RHODE ISLAND

Discipline: Oceans

-----  
Technical: Dan Holloway (URI::DAN)  
University of Rhode Island  
Graduate School of Oceanography  
Kingston, RI 02882  
401/792-6831  
Science: Peter Cornillon  
401/792-6283  
Security: Dan Holloway (URI::DAN)

WOODS HOLE OCEANOGRAPHIC INSTITUTE

Discipline: Oceans

-----  
Technical: Warren Sess (RED::SPAN\_MANAGER)  
508/548-1400 (x2875)  
Cindy Chandler (RED::CCHANDLER)  
Woods Hole Oceanographic Institute  
Clark 1  
Woods Hole, MA 02543  
Science: Andy Maffie (AQUA::AMAFFIE)  
508/548-1400 (x2764)  
Security: Warren Sess (RED::SPAN\_MANAGER)  
TCP/IP: Andy Maffie (AQUA::AMAFFIE)

=====
C. Marshall Space Flight Center SPAN Routing Center
=====
Updated 5/18/89

MARSHALL SPACE FLIGHT CENTER (MSFC) Discipline: Solar Terrestrial, Planetary

MSFC/SPAN Routing Center Manager: Ann Beckman (SSL:BECKMAN)
205/544-7668, FTS 824-7668

SPAN OSI Transition Manager: Linda Porter (SSL:PORTERL)
205/544-7588, FTS 824-7588

Marshall Space Flight Center (MSFC)
Mail Code ES01
Huntsville, AL 35812
Science: Dennis Gallagher (SSL:GALLAGHER)
205/544-7587
Security: Linda Porter (SSL:PORTERL)

NASA SCIENCE MANAGEMENT INFORMATION Discipline: Spacelab, Space Station

Technical: Harrell Phillips (MIPS1:SYSTEM)
NASA Science Management Information
Code EL29
NASA/Marshall Space Flight Center (MSFC)
Huntsville, AL 35812
305/867-7897, FTS 824-2248
Science:
Security: Harrell Phillips (MIPS1:SYSTEM)

SOLAR MAGNETOGRAPH Discipline: Solar Physics

Technical: Edward West (MAQRPH:WEST)
Solar Magnetograph
Code ES52
NASA/Marshall Space Flight Center (MSFC)
Huntsville, AL 35812
205/544-7625, FTS 824-7625
Science: Mona Hagyard (SSL:HAGYARD)
205/544-7612, FTS 824-7612
Security: Edward West (MAQRPH:WEST)

=====
MSFC-Served SPAN Sites
=====

AUGSBURG COLLEGE Discipline: Upper Atmospheric Physics

Technical: Mark Engebretson (AUGGIE:SYSTEM)
Augsburg College
781 21st Avenue S.
Minneapolis, MN 55454
612/338-1887
Science:
Security: Mark Engebretson (AUGGIE:SYSTEM)

EARTH RESOURCES OBSERVATION SYSTEMS (EROS)      Discipline: Earth Resources  
DATA CENTER

-----  
Technical: Tom Bodah (EROSA::SYSTEM)  
Earth Resources Observation Systems (EROS) Data Center  
MUNDT Federal Building  
Sioux Falls, SD 57198  
FTS 784-7830  
Science:  
Security: Tom Bodah (EROSA::SYSTEM)

FLORIDA STATE UNIVERSITY      Discipline: Meteorology

-----  
Technical: Tom Kitterman (METDAT::TWK)  
          904/644-4488  
          Doug Lee (SCRI::SYSTEM)  
          904/644-2276, FTS 985-7202  
Florida State University  
Love Building, Room 319  
Tallahassee, FL 32306  
Science: Eric Smith  
          904/644-4253  
Security: Doug Lee (SCRI::SYSTEM)  
          Tom Kitterman (METDAT::TWK)

KENNEDY SPACE CENTER      Discipline: Spacelab, Space Station

-----  
Technical: Mark Jühr (KSCDL1::JUHR)  
          Shawn Riley (KSCDL1::RILEY)  
          305/867-7897, FTS 823-7897  
McDonnell Douglas Space Systems Company  
Dept. F888 Gateway Building  
P. O. Box 21233  
Kennedy Space Center, FL 32815  
305/867-3127, FTS 823-3127  
Science: Jerry Barnes (KSCDL1::BARNES)  
Security: Mark Jühr (KSCDL1::JUHR)

LOUISIANA STATE UNIVERSITY (LSU)      Discipline: Particle Astrophysics

-----  
Technical: T. Gregory Guzik (LSU@WS::GUZIK)  
Louisiana State University (LSU)  
Physics Department  
Baton Rouge, LA 70803  
504/388-8597  
Science: T. Gregory Guzik (LSU@WS::GUZIK)  
Security: T. Gregory Guzik (LSU@WS::GUZIK)

NAVAL OCEAN RESEARCH AND DEVELOPMENT      Discipline: Oceans  
ACTIVITY (NORDA)

-----  
Technical: DeeDee Garcia (INO::NETMAN)  
Naval Ocean Research and Development Activity (NORDA)  
Code 117  
Stennis Space Center, MS 39529  
601/688-4827, FTS 494-4827  
Science: Monty Peffley (NORDA::PEFFLEY)  
          601/688-4895  
Security: Jim Hamcock (INO::NETMAN)  
          601/688-4791

STANFORD UNIVERSITY

-----  
Technical: Dr. Calvin C. Teague (STAR::CAL)  
Stanford University  
Center for Radar Astronomy  
Durand Building, Room 229  
Stanford, CA 94305  
415/725-3598  
Science: Dr. Calvin C. Teague (STAR::CAL)  
Security: Dr. Calvin C. Teague (STAR::CAL)

Discipline: Solar Terrestrial and Atmospheric  
Physics, Spacelab

STENNIS SPACE CENTER

-----  
Technical: Chuck Martin (SSCSTL::SYSTEM)  
Stennis Space Center  
Lockheed  
Building 1210  
Stennis Space Center, MS 39529-6000  
601/688-1370, FTS 494-1370  
Science:  
Security:

Discipline:

UNIVERSITIES SPACE RESEARCH ASSOCIATION

-----  
Technical: Jayanthi Srikishen (LAMPS::SYSTEM)  
Universities Space Research Association  
Atmospheric Sciences Division  
4950 Corporate Dr., Suite 100  
Huntsville, AL 35808  
205/895-0582, 205/544-8005  
Science: Matt Smith (LAMPS::MSMITH)  
205/544-8963  
Security:

Discipline: Atmospheric Physics

UNIVERSITY OF ALABAMA, HUNTSVILLE

-----  
Technical: Harold Pirtle (CSPARA::PIRTLE)  
University of Alabama, Huntsville  
Research Institute Bldg.  
Huntsville, AL 35899  
205/895-6664  
Science: Roy Torbert (CSPARA::TORBERT)  
205/895-6417  
Security: Harold Pirtle (CSPARA::PIRTLE)

Discipline: Solar Terrestrial

UNIVERSITY OF CHICAGO

-----  
Technical: Gordon Lentz (LASR::LENTZ)  
University of Chicago  
Laboratory for Astrophysics and Space Research  
Enrico Fermi Institute  
953 E. 56th Street  
Chicago, IL 60637  
312/702-7836  
Science: Gordon Lentz (LASR::LENTZ)  
Security: Gordon Lentz (LASR::LENTZ)

Discipline: Astrophysics

UNIVERSITY OF IOWA

Discipline: Space Physics

-----  
Technical: Bill Robison (IOWASP::SYSTEM)  
Machine Room Operator: 319/335-1747  
University of Iowa  
Department of Physics and Astronomy  
Iowa City, IA 52242  
319/335-1748  
Science: Robert L. Brechwald (IOWASP::BRECHWALD)  
319/335-1745  
Security: Bill Robison (IOWASP::SYSTEM)

UNIVERSITY OF KANSAS

Discipline: Solar Terrestrial

-----  
Technical: Vince Reinert (KUPHSX::SYSTEM)  
University of Kansas  
Department of Physics and Astronomy  
Lawrence, KS 66045  
913/864-3610  
Science: Ed Bell (KUPHSX::BELL)  
Security:

UNIVERSITY OF MIAMI

Discipline: Oceans

-----  
Technical: James Brown (MIAMI::JIM)  
Otis Brown (MIAMI::OTIS)  
University of Miami  
RSMAS/MPO  
4600 Rickenbacker Causeway  
Miami, FL 33149  
305/361-4770, 305/361-4018  
Science: Robert H. Evans (MIAMI::BOB)  
Security: James Brown (MIAMI::JIM)

UNIVERSITY OF MICHIGAN

Discipline: Atmospheric Physics, Astrophysics

-----  
Technical: Jeff Hays (SPRLC::JHAYS)  
University of Michigan  
Space Physics Research Laboratory  
2455 Hayward  
Ann Arbor, MI 48109  
313/747-8705  
Science: Salim Linggi  
Security: Jeff Hays (SPRLC::JHAYS)

UNIVERSITY OF MINNESOTA

Discipline: Plasma Physics

-----  
Technical: Keith Goetz (WAVES::GOETZ)  
University of Minnesota  
School of Physics and Astronomy  
116 Church Street, S.E.  
Minneapolis, MN 55455  
612/624-3520  
Science:  
Security: Keith Goetz (WAVES::GOETZ)

UNIVERSITY OF WISCONSIN

Discipline: Astrophysics

-----  
Technical: Nancy Podger (MADRAF::PODGER)  
University of Wisconsin  
Madison, WI 53706  
608/262-2198  
Science: Chris Anderson (MADRAF::ANDERSON)  
608/262-0492  
Security: Chris Anderson (MADRAF::ANDERSON)

UTAH STATE UNIVERSITY

Discipline: Magnetospheric Science

-----  
Technical: Ray Rawlins (USU::SYSTEM)  
Utah State University  
Center for Atmospheric and Space Sciences, UMC-34  
Logan, UT 84322-4405  
801/750-2401  
Science: Prof. Joe R. Douplik (USU::JRD)  
801/750-2982  
Security: Prof. Joe R. Douplik (USU::JRD)

WASHINGTON UNIVERSITY

Discipline: Planetary Geology

-----  
Technical: Susan Slavney (WURST::SLAVNEY)  
Washington University  
St. Louis, MO 63130  
314/889-5493  
Science:  
Security: Susan Slavney (WURST::SLAVNEY)



=====
D. Jet Propulsion Laboratory SPAN Routing Center
=====
Updated 4/18/89

JET PROPULSION LABORATORY (JPL)

Discipline: Solar Terrestrial, Planetary, Earth Science, Oceans

Technical: Sanford George (JPLNG::GEORGE)
Jet Propulsion Laboratory (JPL)
M/S 802-145
4800 Oak Grove Drive
Pasadena, CA 91109
818/354-4334, FTS 792-4334
Science:
Security: Ron Tencati (ISSAC::RDT)
818/354-4725, FTS 792-4725
Joe Wisclawek
818/354-2419, FTS 792-2419

=====
JPL-Served SPAN Sites
=====

AMES RESEARCH CENTER (ARC)

Discipline: Earth Science

Technical: Mike Rodericks (SAT::SYSTEM)
Ames Research Center (ARC)
Mail Stop 233-15
Moffett Field, CA 94035
414/894-6923, FTS 464-6923
Science: Jim Hart (SAT::HART)
Security:

ARIZONA STATE UNIVERSITY

Discipline: Galileo

Technical: Don Anderson (ASUIPF::ANDERSON)
Arizona State University
Geology
Tempe, AZ 85287-1404
802/965-6336
Science: Ron Greeley (ASUIPF::GREELEY)
Security: Don Anderson (ASUIPF::ANDERSON)

BROWN UNIVERSITY

Discipline: Planetary and Geology, Galileo

Technical: Rob Demillo (BRNPSQ::RD)
Brown University
Box 1846
Providence, RI 02912
401/863-3769
Science:
Security: Rob Demillo (BRNPSQ::RD)

CALIFORNIA INSTITUTE OF TECHNOLOGY (CALTECH)

Discipline: Planetary, Galileo

-----  
Technical: Dan Zirin (HAMLET::ZAR)  
California Institute of Technology (CalTech)  
Geology and Planetary Science  
169D S. Mudd  
Pasadena, CA 91125  
818/356-6861  
Science: Ed Danielson (HAMLET::JED)  
818/356-6970  
Security: Dan Zirin (HAMLET::ZAR)

LOCKHEED PALO ALTO RESEARCH LABORATORIES

Discipline: Solar Terrestrial

-----  
Technical: Dayton Datlowe (LOCKHD::NETMGR)  
Lockheed Palo Alto Research Laboratories  
0/91-20 B 255  
3170 Porter Drive  
Palo Alto, CA 94304  
415/424-3274  
Science:  
Security: Dayton Datlowe (LOCKHD::DATLOWE)

NATIONAL OPTICAL ASTRONOMY OBSERVATORY (NOAO)

Discipline: Astronomy

-----  
Technical: Steve Grandi (DRACO::GRANDI)  
National Optical Astronomy Observatory (NOAO)  
950 N. Cherry  
Tucson, AZ 85719  
602/325-9228  
Science:  
Security: Steve Grandi (DRACO::GRANDI)

NAVAL POSTGRADUATE SCHOOL

Discipline: Oceans

-----  
Technical: James Mueller  
Naval Postgraduate School  
Department of Oceanography  
Monterey, CA 93943-5100  
408/646-3266  
Science:  
Security: James Mueller

OREGON STATE UNIVERSITY

Discipline: Oceans

-----  
Technical: E. L. Beals (OSUVAX::BEALS)  
Oregon State University  
College of Oceanography  
Corvallis, OR 97331  
503/754-4017  
Science:  
Security: E. L. Beals (OSUVAX::BEALS)

PLANETARY SCIENCE INSTITUTE

Discipline: Galileo

-----  
Technical:  
Planetary Science Institute  
Tucson, AZ  
Science:  
Security:

RAND SANTA MONICA

-----  
Technical: Tim Colvin (HYRAX::COLVIN)  
RAND Santa Monica  
RAND Corporation  
Santa Monica, CA  
213/393-0411  
Science: Merv Davies (HYRAX::DAVIES)  
Security: Tim Colvin (HYRAX::COLVIN)

Discipline: Galileo

S-CUBED

-----  
Technical: Gary A. Jongeward  
S-Cubed  
P.O. Box 1020  
La Jolla, CA 92038  
619/453-0000  
Science:  
Security: Gary A. Jongeward

Discipline:

SAN DIEGO SUPERCOMPUTER CENTER

-----  
Technical: E. Paul Love (SDSC::LOVEEP)  
San Diego Supercomputer Center  
San Diego, CA 92038  
619/455-4474  
Science:  
Security: E. Paul Love (SDSC::LOVEEP)

Discipline: Solar Terrestrial, Astrophysics

THE AEROSPACE CORPORATION

-----  
Technical: Lynn Freisen (DIRAC2::FREISEN)  
The Aerospace Corporation  
Mail Stop M2-269  
220 South Douglas, El Segundo  
P.O. Box 92957  
Los Angeles, CA 90009  
213/648-5992  
Science:  
Security: Lynn Freisen (DIRAC2::FREISEN)

Discipline: Solar Terrestrial

TRW

---  
Technical: Carol Lowry (TRWATD::SYSTEM)  
TRW  
One Space Park  
Building R1/1170  
Redondo Beach, CA 90278  
213/535-2417  
Science:  
Security:

Discipline: Solar Terrestrial, Planetary

TRW  
-----  
Technical: Paula Evron (TRWSQG::SYSTEM)  
TRW  
One Space Park  
M/S 02/2751  
Redondo Beach, CA 90278  
213/535-5083  
Science:  
Security:

Discipline: Science Operations Ground  
System

UNITED STATES GEOLOGICAL SURVEY (USGS)  
(FLAGSTAFF)  
-----  
Technical: John Zabel (IFLAG1::JZABEL)  
United States Geological Survey (USGS) (Flagstaff)  
Astrogeology  
2266 N. Gemini Drive  
Flagstaff, AZ 86001  
602/527-7113  
Science:  
Security: John Zabel (IFLAG1::JZABEL)

Discipline: Planetary, Galileo

UNIVERSITY OF ALASKA  
-----  
Technical: Jeff Harrison (FRED::DICK)  
University of Alaska  
Geophysical Institute  
Juneau, AK 99775  
907/474-6329  
Science:  
Security: Jeff Harrison (FRED::DICK)

Discipline: Solar Terrestrial, Atmospheric,  
Oceans

UNIVERSITY OF ARIZONA  
-----  
Technical: Joe Gotobed (LOONEY::GOTOBED)  
University of Arizona  
Lunar and Planetary Laboratory  
Tucson, AZ 85721  
602/621-6949  
Science:  
Security: Joe Gotobed (LOONEY::GOTOBED)

Discipline: Planetary

UNIVERSITY OF CALIFORNIA-BERKELEY  
-----  
Technical: David Curtis (5409::SYSTEM)  
University of California-Berkeley  
Space Science Laboratory  
Berkeley, CA 94720  
415/642-0549  
Science: Dr. Forrest Moser  
415/642-5998  
Security: David Curtis (5409::SYSTEM)

Discipline: Solar Terrestrial

UNIVERSITY OF CALIFORNIA-LOS ANGELES (UCLA)  
-----  
Technical: Stephen Cox (UCLASP::SCOX)  
University of California-Los Angeles (UCLA)  
Institute of Geophysics and Planetary Physics  
Los Angeles, CA 90024  
213/825-6899  
Science: Neal Cline (UCLASP::NCLINE)  
Security: Stephen Cox (UCLASP::SCOX)

Discipline: Planetary, Galileo

UNIVERSITY OF CALIFORNIA-SANTA BARBARA

-----  
Technical: Roger Lenard (UCMBD::ROG)  
University of California-Santa Barbara  
Geography Department  
Santa Barbara, CA  
805/961-4541  
Science:  
Security: Roger Lenard (UCMBD::ROG)

Discipline: Oceans

UNIVERSITY OF COLORADO

-----  
Technical: Phil Evans (AQUILA::EVANS)  
University of Colorado  
Boulder, CO 80309  
303/492-1164  
Science: Randy Davis (AQUILA::DAVIS)  
Security: Phil Evans (AQUILA::EVANS)

Discipline: Atmospheric, Oceans, Galileo

UNIVERSITY OF HAWAII

-----  
Technical: Jeff Bosel (HAWAII::POSTMASTER)  
University of Hawaii  
Planetary Geosciences  
2525 Correa Road  
Honolulu, HI 96822  
808/948-6321  
Science:  
Security: Jeff Bosel (HAWAII::POSTMASTER)

Discipline: Planetary and Geology, Galileo

UNIVERSITY OF WASHINGTON

-----  
Technical: Douglas W. Potter  
George Pitt  
University of Washington  
Geophysics Program, AK-50  
Seattle, WA 98195  
206/543-2652  
Science: Douglas W. Potter  
Security: Douglas W. Potter

Discipline: Solar Terrestrial

UNIVERSITY OF WASHINGTON

-----  
Technical: Tracy Stenvik (MOTHRA::STENVIK)  
University of Washington  
3737 Brookman Avenue, N.E.  
Seattle, WA 98195  
206/543-5376  
Science:  
Security: Tracy Stenvik (MOTHRA::STENVIK)

Discipline:

=====
E. Johnson Space Center SPAN Routing Center
=====

Updated 10/28/88

JOHNSON SPACE CENTER (JSC)

Discipline: Planetary

JSC/SPAN Routing Center Manager: Dan Anderson (SN:IDAN)
NASA/Johnson Space Center (JSC)
Mail Code SN
Houston, TX 77058
713/483-5144, FTS 525-5144
Science: Dan Anderson (SN:IDAN)
Security: Dan Anderson (SN:IDAN)

=====
JSC-Served SPAN Sites
=====

LOS ALAMOS NATIONAL LABORATORIES

Discipline: Solar Terrestrial

Technical: Steve Blair (ESSDP2:080804)
Anthony Salazar (ESSDP2:100034)
Marti Hill (ESSDP2:103071)
Los Alamos National Laboratories
Mail Stop D440
P.O. Box 1603
Los Alamos, NM 87545
505/667-9211
Science:
Security: Jim Krone (ESSDP2:SYSTEM)
505/667-7457, FTS 843-7457

LUNAR AND PLANETARY INSTITUTE

Discipline: Planetary

Technical: Kinpong Leung (LPI:LEUNG)
Lunar and Planetary Institute
McGetchin Hall
3303 NASA Road One
Houston, TX 77058
713/486-2165
Science: Kinpong Leung (LPI:LEUNG)
Security: Kinpong Leung (LPI:LEUNG)

NATIONAL CENTER FOR ATMOSPHERIC RESEARCH (NCAR)

Discipline: Atmospheric, Oceans

Technical: Basil Irwin (AAP2:IRWIN)
National Center for Atmospheric Research (NCAR)
P.O. Box 8000
Boulder, CO 80307
303/497-1261
Science:
Security: Basil Irwin (AAP2:IRWIN)

NATIONAL OCEANIC AND ATMOSPHERIC  
ADMINISTRATION/NATIONAL INSTITUTE OF  
STANDARDS AND TECHNOLOGY (NOAA/NIST)

Discipline: Solar Terrestrial, Space  
Environment

-----  
Technical: Jim Winkelman (CRYOEL::WINKELMAN)  
National Oceanic and Atmospheric Administration/  
National Institute of Standards and  
Technology (NOAA/NIST)  
325 Broadway  
Boulder, CO 80303  
303/497-3283, FTS 320-3283  
Science: Joe H. Allen  
303/497-6323  
Dick Grubb  
FTS 320-3284  
Security: Dick Harris (CRYOEL::HARRIS)  
303/497-3776, FTS 320-3776

RICE UNIVERSITY

Discipline: Astronomy, Space Physics

-----  
Technical: Bryan Bales (RICE::BALES)  
Rice University  
Department of Space Physics and Astrophysics  
P.O. Box 1892  
Houston, TX 77251  
703/527-4940  
Science: Patricia Reiff (RICE::REIFF)  
703/527-8101 (x2650)  
Security: Bryan Bales (RICE::SYSTEM or RICE::BALES)

SOUTHWEST RESEARCH INSTITUTE

Discipline: Solar Terrestrial, Atmospheric,  
SpaceLab

-----  
Technical: Ron Williams (SWRI::SYSTEM)  
Southwest Research Institute  
Division 15  
P.O. Drawer 28510  
San Antonio, TX 78284  
512/522-3490, 512/684-5111 (x3310)  
Science: Ron Janetske (SWRI::RON)  
512/522-3310  
Security: Ron Janetske (SWRI::RON)

UNIVERSITY OF COLORADO

Discipline: Atmospheric, Oceans

-----  
Technical: Phil Evans (ARIES::EVANS)  
University of Colorado  
Laboratory for Astroscience and Space (LASP)  
Boulder, CO 80309  
303/492-1164, 303/492-8951, 303/492-7941  
Science: Randy Davis (AQUILA::DAVIS)  
303/492-8867  
Security: Phil Evans (AQUILA::EVANS)

UNIVERSITY OF TEXAS-AUSTIN

Discipline: Oceans

-----  
Technical: Rick Watson (UTSPAN::R.WATSON)  
University of Texas-Austin  
Center for Space Research  
Austin, TX 78712  
512/471-8220, FTS 770-8220  
Science: Bob E. Schutz (UTSPAN::UTCSR::SCHUTZ)  
Security: Rick Watson (UTSPAN::R.WATSON)  
Bill Bard (UTSPAN::B.BARD)  
512/471-3241

=====

F. European-SPAN (E-SPAN) Routing Center

=====

European-SPAN (E-SPAN) has two major routing centers which serve many different countries in Europe. They are located at the following institutes: --

European Space Operations Center (ESOC) in Darmstadt, West Germany  
European Space Research Institute (ESRIN) in Frascati, Italy

This section on E-SPAN lists institutions by country for ease of use.

AUSTRIA

=====

SPACE RESEARCH INSTITUTE  
(Not Yet Connected - 1/4/89)

Discipline:

-----  
Technical: Gerald Rabl (GRAZ::RABLL)  
Space Research Institute  
Halbaerthgasse 1  
Graz  
Austria  
+43-316  
Science:  
Security:

FRANCE

=====

CENTRE DE RECHERCHE EN PHYSIQUE  
DE L'ENVIRONNEMENT (CRPE)

Discipline:

-----  
Technical: Edmond Pawela (CRPEIS::PAWELA)  
Centre de Recherche en Physique  
de l'Environnement (CRPE)  
Centre National d'Etudes en  
Telecommunication (CNET)  
3, Avenue de la Republique  
92131 Issy les Moulineaux  
Paris  
France  
+33-1-4529-4602  
Science: Patrick Canu (CRPEIS::CANU)  
Security:

EUROPEAN SPACE AGENCY, HEADQUARTERS

Discipline:

-----  
Technical: Gerbrand Veldman (ESAHQ0::GVELDMAN)  
European Space Agency, Headquarters  
8-10 Rue Mario Nikis  
75788 Paris Cedex 15  
France  
+33-14273-7654  
Science: Nick v.d. Heijden  
Security: Gerbrand Veldman (ESAHQ0::GVELDMAN)



INSTITUT D'ASTROPHYSICS DE PARIS

Discipline: Astrophysics

-----  
Technical: Diego Cesareki (IAPOBS::DIEGO)  
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Science:  
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OBSERVATOIRE ASTRONOMIQUE DE STRASBOURG

Discipline: Astronomy

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Observatoire Astronomique de Strasbourg  
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France F-6700  
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Science:  
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OBSERVATOIRE DE PARIS-MEUDON

Discipline: Space Physics

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Security:

GERMANY  
\*\*\*\*\*

EUROPEAN SPACE OPERATIONS CENTER (ESOC)

Discipline: All

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EUROPEAN MOLECULAR BIOLOGY LABORATORY (EMBL)

Discipline:

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Science:  
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EUROPEAN SOUTHERN OBSERVATORY

Discipline: \_\_\_\_\_

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Science: Piero Benvenuti (ESOMC1::PIERO)  
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GERMAN AEROSPACE RESEARCH ESTABLISHMENT

Discipline: \_\_\_\_\_

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Technical: Manfred Exner (MUSC2::SYSTEM)  
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Science:  
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GERMAN SPACE OPERATION CENTER

Discipline: \_\_\_\_\_

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Science:  
Security:

INSTITUTE FOR OPTOELECTRONICS

Discipline: \_\_\_\_\_

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MAX PLANCK INSTITUTE FOR AERONOMY

Discipline: \_\_\_\_\_

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MAX PLANCK INSTITUTE FOR  
EXTRATERRESTRIAL PHYSICS

Discipline:

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MAX PLANCK INSTITUTE FOR NUCLEAR PHYSICS

Discipline:

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Science: Hans-Werner Heyng (UXNHDS::HWH)  
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TECHNICAL UNIVERSITY OF MUNICH

Discipline:

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Science:  
Security:

UNIVERSITY OF KIEL

Discipline:

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UNIVERSITY OF TUBINGEN

Discipline:

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Science:  
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ITALY

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EUROPEAN SPACE RESEARCH INSTITUTE (ESRIN)

Discipline: All

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Security:

CONSIGLIO NAZIONALE DELLE RICERCHE CENTRO  
PER L'ASTRONOMIA INFRAROSSA E LO STUDIO  
DEL MEZZO INSTELEARE (CNR/CAISMI)

Discipline:

-----  
Technical:

Consiglio Nazionale delle Ricerche/  
Centro per l'Astronomia Infrarossa e lo  
Studio del Mezzo Instellare (CNR/CAISMI)

Largo Enrico Fermi 5

50125 Firenze

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Science:

Security:

DELL'UNIVERSITA SEZIONE ASTROFISICA

Discipline:

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Technical:

Dipartimento di Fisica dell'Universita  
Sezione Astrofisica

Universita di Milano

Via Celoria 16

20133 Milano

Italy

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Science:

Security:

DIPARTIMENTO DI FISICA TOR VERGATA

Discipline:

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Technical:

Dipartimento di Fisica Tor Vergata

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00178 Rome

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Science:

Security:

DIPARTIMENTO SCIENZE FISICHE,  
SEZIONE ASTROFISICA PLASMI

Discipline:

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Technical:  
Dipartimento Scienze Fisiche,  
Sezione Astrofisica Plasmi  
Universita di Napoli  
Mostra d'Oltremare  
80125 Napoli  
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+081-7253111  
Telex: 720320 INFNNA  
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Science:  
Security:

EARTHNET PROGRAMME OFFICE

Discipline: All

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00044 Frascati  
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Science:  
Security:

EUROPEAN SPACE RESEARCH INSTITUTE (ESRIN)

Discipline:

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European Space Research Institute (ESRIN)  
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Via Galileo Galilei  
00044 Frascati  
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+06-941801  
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FOOD AND AGRICULTURE ORGANISATION (FAO)  
OF THE U.N.

Discipline:

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Via delle Terme di Caracalla  
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LABORATORI DI FISICA COSMICA DEL CONSIGLIO  
NAZIONALE DELLE RICERCHE (CNR),  
ISTITUTO DI FISICA COSMICA, MILANO

Discipline:

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Technical:  
Laboratori di Fisica Cosmica del  
Consiglio Nazionale delle Ricerche (CNR)  
Istituto di Fisica Cosmica, Milano  
Via Bassini 15  
20133 Milano  
Italy  
+2-2363542  
Science:  
Security:

ISTITUTO ASTRONOMICICO

Discipline:

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Technical:  
Istituto Astronomico  
Universita di Roma la Sapienza  
Via Lancisi 29  
00161 Rome  
Italy  
+6-8830309  
Telex: 613255 INFNRO  
Telefax: +06-8831245  
Science:  
Security:

ISTITUTO DI ASTROFISICA SPAZIALE/CONSIGLIO  
NAZIONALE DELLE RICERCHE (IAS/CNR)

Discipline:

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Technical:  
Istituto di Astrofisica Spaziale/Consiglio  
Nazionale delle Ricerche (IAS/CNR)  
C.P. 67  
00044 Frascati  
Italy  
+06-9425651  
Telex: 680489 CNRFRA I  
Telefax: +06-9423847  
Science:  
Security:

ISTITUTO DI ASTROFISICA SPAZIALE/CONSIGLIO  
NAZIONALE DELLE RICERCHE (IAS/CNR)  
REPARTO DI PLANETOLOGIA

Discipline:

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Technical:  
Istituto di Astrofisica Spaziale/Consiglio  
Nazionale delle Ricerche (IAS/CNR)  
Reparto di Planetologia  
Via le dell'Universita 11  
00185 Rome  
Italy  
+06-4958951  
Telefax: +06-4954969  
Science:  
Security:

ISTITUTO DI ASTRONOMIA, UNIVERSITA  
DI FIRENZE

Discipline:

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Technical:  
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Universita di Firenze  
Largo Enrico Fermi 5  
50125 Firenze  
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+055-27521  
Telex: 572268 ARCETR I  
Telefax: +055-220039  
Science:  
Security:

ISTITUTO DI FISICA DELLO SPAZIO  
INTERPLANETARIO (IFSI)

Discipline: Plasma Physics Gravitational Waves,  
Infrared Astronomy

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Technical: Cecilia Ceccarelli (IFSI::CECILIA, IFSI::SUPERMAN)  
Brunella Nisini (IFSI::BRUNI)  
Istituto di Fisica dello Spazio Interplanetario (IFSI)  
Via Galileo Galilei  
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Science: Marino Dobrowolni (IFSI::DOBROW)  
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ISTITUTO DI FISICA GENERALE, SEZIONE ASTR.

Discipline:

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Technical:  
Istituto di Fisica Generale, Sezione Astr.  
Via Pietro Giuria 1  
10100 Torino  
Italy  
+011-65271  
Telex: 211041 INFNTO  
Telefax: +011-6599579  
Science:  
Security:

ISTITUTO DI RADIOASTRONOMIA DEL CONSIGLIO  
NAZIONALE DELLA RICERCHE (CNR)

Discipline:

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Technical:  
Istituto di Radioastronomia del Consiglio  
Nazionale della Ricerche (CNR)  
Via Irnerio 46  
40126 Bologna  
Italy  
+51-243144  
Telex: 250634 INFNBO I  
Telefax: +051-247244  
Science:  
Security:

ISTITUTO NAZIONALE DI FISICA NUCLEARE (INFN)

Discipline: Nuclear Physics Research

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Technical:

Istituto Nazionale di Fisica Nucleare (INFN)

Laboratori Nazionali di Frascati (LNF)

Via Enrico Fermi 40

00044 Frascati

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Science:

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ISTITUTO PER L'ELABORAZIONE DI SEGNALI  
ED IMMAGINI/CONSIGLIO NAZIONALE DELLE  
RICERCHE (IESI/CNR)

Discipline:

-----  
Technical:

Istituto per l'Elaborazione di Segnali  
ed Immagini/Consiglio Nazionale delle  
Ricerche (IESI/CNR)

Istituto di Fisica

Universita di Bari

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70126 Bari

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Telex: 810333 PHISBA 1

Science:

Security:

ISTITUTO TECNOLOGIE E STUDIO DELLE RADIAZIONI  
EXTRATERRESTRI/CONSIGLIO NAZIONALE  
DELLE RICERCHE (TESRE/CNR)

Discipline:

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Technical:

Istituto Tecnologie e Studio delle Radiazioni  
Extraterrestri/Consiglio Nazionale delle  
Ricerche (TESRE/CNR)

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Telex: 511950 CNR80 I

Telefax: +051-229702

Science:

Security:

OSSERVATORIO ASTROFISICO DI ARCETRI

Discipline:

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Technical:

Osservatorio Astrofisico di Arcetri

Dipartimento di Fisica, Gruppo Spazio

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Largo Enrico Fermi 2

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Italy

+55-27521

Telex: 572260 ARCETR I

Telefax: +055-220039

Science:

Security:



OSSERVATORIO ASTROFISICO DI CATANIA

Discipline:

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Technical:  
Osservatorio Astrofisico di Catania  
Istituto di Astronomia  
Universita di Catania  
Citta Universitaria  
Viale Andrea Doria 6  
95125 Catania  
Italy  
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Telex: 970359  
Telefax: +095-330592  
Science:  
Security:

OSSERVATORIO ASTRONOMICICO DI BOLOGNA

Discipline:

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Technical:  
Osservatorio Astronomico di Bologna  
Dipartimento di Astronomia  
Universita di Bologna  
C.P. 596  
40100 Bologna  
Italy  
+51-259301/259401  
Science:  
Security:

OSSERVATORIO ASTRONOMICICO DI BRERA

Discipline:

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Technical:  
Osservatorio Astronomico di Brera  
Via Brera 28  
20121 Milano  
Italy  
+2-874444  
Science:  
Security:

OSSERVATORIO ASTRONOMICICO DI BRERA  
(SUCCURSALE MERATE)

Discipline:

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Technical:  
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(Succursale Merate)  
Via E. Bianchi 48  
22055 Merate  
Italy  
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Telefax: +039/598492  
Science:  
Security:

OSSERVATORIO ASTRONOMICICO DI CAPODIMONTE

Discipline:

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80131 Napoli  
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Telex: 710223 ASTRNA I  
Telefax: +081-450710  
Science:  
Security:

OSSERVATORIO ASTRONOMIC DI COLLURANIA

Discipline:

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Italy  
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Telefax: 0861-210492  
Science:  
Security:

OSSERVATORIO ASTRONOMIC DI PADOVA

Discipline:

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Technical:  
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Istituto di Astronomia  
Universita di Padova  
Vicolo dell'Osservatorio 5  
35123 Padova  
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Telex: 432071 ASTROS I  
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Science:  
Security:

OSSERVATORIO ASTRONOMIC DI ROMA

Discipline:

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Telex: 626326 OA ROMA I  
Science:  
Security:

OSSERVATORIO ASTRONOMIC DI ROMA  
SEDE DI MONTE PORZIO

Discipline: Astronomy

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Science:  
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OSSERVATORIO ASTRONOMIC DI TORINO

Discipline:

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Technical:  
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Science:  
Security:

OSSERVATORIO ASTRONOMICCO DI TRIESTE

Discipline:

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OSSERVATORIO ASTRONOMICCO SEDE DI ASIAGO

Discipline:

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Universita di Padova  
Via dell'Osservatorio  
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Telex: 430110 SETOUR I  
Science:  
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SCUOLA INTERNAZIONALE SUPERIORE DI  
STUDI AVANZATI

Discipline:

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Technical:  
Scuola Internazionale Superiore di  
Studi Avanzati  
Sezione Astrofisica  
Strada Costiera 11  
34014 Trieste  
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Telex: 460392 ICTP  
Science:  
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SCUOLA NORMALE SUPERIORE

Discipline:

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Technical:  
Scuola Normale Superiore  
Piazza dei Cavalieri 6  
56100 Pisa  
Italy  
+050-597260  
Telex: 590548 SNSPI I  
Telefax: +050-563513  
Science:  
Security:

STAZIONE ASTRONOMIA, CAGLIARI

Discipline:

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Technical:  
Stazione Astronomica, Cagliari  
Via Ospedali 72  
09100 Cagliari  
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+70-863544/657757/711246  
Telex: 90326 OSSAST  
Science:  
Security:

UNIVERSITA DEGLI STUDI DI LECCE

Discipline:

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Technical:  
Universita Degli Studi di Lecce  
C.P. 195  
Via Arnesano  
73100 Lecce  
Italy  
+0832-627247  
Telex: 860128 UNSTLE I  
Science:  
Security:

UNIVERSITA DI PISA

Discipline:

-----  
Technical:  
Universita di Pisa  
Istituto di Astronomia  
Lungarno Pacinotti 43  
56100 Pisa  
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+050-597111  
Telex: 590035 UNIVPI I  
Science:  
Security:

THE NETHERLANDS

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EUROPEAN SPACE RESEARCH AND TECHNOLOGY  
CENTRE (ESTEC)

Discipline:

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EXOSAT OBSERVATORY

Discipline: Astrophysics

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INTERNATIONAL ULTRAVIOLET EXPLORER (IUE)      Discipline:  
OBSERVATORY

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INSTITUTO DE ASTROFISICA DE CANARIAS      Discipline: Astrophysics

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DEPARTMENT OF PLASMA PHYSICS, KTH      Discipline: Space and Laboratory Plasma  
Physics

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UNITED KINGDOM

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RUTHERFORD APPLETON LABORATORY (RAL)      Discipline:

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Technical:  
Rutherford Appleton Laboratory (RAL)  
Chilton  
Didcot  
Oxfordshire  
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+44-235-446511  
Science:  
Security:

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INDIRECTLY CONNECTED USING COLOUR BOOK SOFTWARE  
-----

RUTHERFORD APPLETON LABORATORY (RAL)  
(JANET NETWORK)

Discipline:

-----  
Technical: Mike Hapgood (UK.AC.RL.IB::CYM)  
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Science: Mike Hapgood (UK.AC.RL.IB::CYM)  
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## V. Technical References for the Space Physics Analysis Network

The following references can be obtained from the National Space Science Data Center upon request by electronic mail to the following accounts:

SPAN:           NCF::REQUEST  
                  or NSSDCA::REQUEST  
                  or NSSDC::REQUEST

INTERNET:       REQUEST@NSSDCA.GSFC.NASA.GOV  
                  or REQUEST@NSSDC.GSFC.NASA.GOV

or by writing to:

National Space Science Data Center  
Code 633.4  
Goddard Space Flight Center  
Greenbelt, Maryland 20771

Phone: (301) 286-6695 or FTS 888-6695

### SPAN Articles and Technical References

Green, J. L., J. H. Waite, J. F. E. Johnson, J. R. Doupnik, and R. Heelis, *MSFC/SCAN Network Stage 1 Workshop*, NASA TM-82514, April 1983.

Green, J. L., "Spacelab Data Analysis Using the SCAN System," *National Symposium and Workshop on Optical Platforms Proceedings*, SPIE 493 (C. Wyman, ed.), 370, 1984.

Salamone, P. P., *Science Computer Networking at NASA: The Space Physics Analysis Network*, Mitre Corporation contract report (limited distribution), September 1984.

Green, J. L., and D. J. Peters (eds.), *Introduction to the Space Physics Analysis Network (SPAN)*, NASA TM-86499, April 1985.

Gallagher, D. L., J. L. Green, and R. Newman, *SPAN Graphics Display Utilities Handbook*, NASA TM-86500, May 1985.

Sanderson, T., S. Ho, N. van der Heijden, E. Jabs, and J. L. Green, "Near-Realtime Data Transmission During the ICE-Comet Giacobini-Zinner Encounter," *ESA Bulletin*, 45, 21, 1986.

Green, J. L., and J. H. King, "Behind the Scenes During a Comet Encounter," *EOS* (feature article), 67, 105, March 1986.

Hahn, K. J., and H. J. Singer, *A Graphics Capability for the SPAN Network*, Air Force Geophysics Laboratory Technical Report, March 1986.

Green, J. L., D. J. Peters, N. van der Heijden, and B. Lopez-Swofford, *Management of the Space Physics Analysis Network (SPAN)*, First Edition, NSSDC Technical Report, July 1986.

Gary, P. J., E. D. Rothe, M. C. Spinolo, and M. Peters, *A High Speed Local Area Computer Network Across the Goddard Space Flight Center*, GSFC Technical Report, July 1986.

Quarterman, J. S., and J. C. Hoskins, "Notable Computer Networks," *Communications of the ACM*, Vol. 29, 10, October 1986.

Hapgood, M. A., *Access to the Space Physics Analysis Network (SPAN): A Guide for JANET Users*, RAL Technical Report, October 1986.

Rees, D., I. Perla, N. P. Meredith, J. L. Green, and N. van der Heijden, "Networking Ground-Based Images of Halley During the Giotto Encounter," *EOS* (feature article), 67, 1385, December 16, 1986.

Green, J. L., V. L. Thomas, B. Lopez-Swofford, and L. Z. Porter, *Introduction to the Space Physics Analysis Network (SPAN)*, Second Edition, NSSDC Technical Report, January 1987.

Green, J. L., D. J. Peters, N. van der Heijden, and B. Lopez-Swofford, *Management of the Space Physics Analysis Network (SPAN)*, Second Edition, NSSDC Technical Report, January 1987.

Ha, T., B. Lopez-Swofford, V. L. Thomas, and J. L. Green, *Space Physics Analysis Network Node Directory (The Yellow Pages)*, NSSDC Technical Report, January 1987.

Lopez-Swofford, B., and P. Gary, *SPAN: Network Security Guide*, NSSDC Technical Report, January 1987.

Thomas, V. L., J. L. Green, W. H. Warren Jr., and B. Lopez-Swofford, *SPAN: Astronomy and Astrophysics*, NSSDC Technical Report, January 1987.

Thomas, V. L., C. J. Koblinsky, F. Webster, V. Zlotnicki, and J. L. Green, *SPAN: Ocean Science*, NSSDC Technical Report, January 1987.

Green, J. L., R. McGuire, and B. Lopez-Swofford, *A Communications Model for the ISTP Correlative Data Analysis Network*, NSSDC Technical Report, January 1987.

Green, J. L., R. McGuire, and B. Lopez-Swofford, *A Communications Model for an ISAS to NASA SPAN Link*, NSSDC Technical Report, January 1987.



Koblinsky, C. (ed.), *Satellite Ocean Data System Science Working Group: Report of the SODSSWG Network Panel for 1986*, NASA/GSFC Technical Report, May 1987.

Ha, T., V. L. Thomas, and J. L. Green, *Space Physics Analysis Network Node Directory (The Yellow Pages)*, Second Edition, NSSDC Technical Report 87-20, October 1987.

Green, J. L., "The Space Physics Analysis Network," *Computer Physics Communications*, North-Holland, Amsterdam, 49, 205-213, 1988.

Sanderson, T., "The European Space Physics Analysis Network," *Proceedings from the 21st ESLAB Symposium*, Bolkesjo, Norway, ESA SP-275, 1988.

Ha, T., P. L. Sisson, V. L. Thomas, and J. L. Green, *Space Physics Analysis Network Node Directory (The Yellow Pages)*, Third Edition, NSSDC/WDC-A-R&S 88-04, March 1988.

Sanderson, T., M. Albrecht, W. Baumjohann, P. Benvenuti, J. Franks, G. Green, J. L. Green, M. A. Hapgood, C. Harvey, N. van der Heijden, E. Jabs, P. A. Lindqvist, D. de Pablo, F. Pasian, and G. Veldman, "The European Space Physics Analysis Network," *ESA Bulletin*, No. 53, p. 45, February 1988.

Green, J. L., "NSSDC Applications for Computer Networking," *Proceedings from the 1988 Workshop on Geophysical Informatics*, Moscow (to be published).

Green, J. L., "Communications Among Data and Science Centers," *Proceedings from the 1988 Workshop on Geophysical Informatics*, Moscow (to be published).

Green, J. L., and P. L. Sisson, "The 'Father Christmas' Worm," 1989 12th National Computer Security Conference Proceedings (to be published).

Thomas, V. L., and J. L. Green, "SPAN - A Revolutionary Tool for Scientific Research," *Journal of the National Technical Association*, p. 45, Winter 1989.

### **SPAN and DSUWG Newsletter Reports**

Greenstadt, E. W., and J. L. Green, "Data Systems Users Working Group," *EOS* (meeting report), 62, 50, 1981.

Baker, D. N., R. D. Zwickl, and J. L. Green, "NASA Data Systems Users: Recommendations for Improved Scientific Interactions," *EOS* (meeting report), 65, 46, February 1984.

Green, J. L., D. N. Baker, and R. D. Zwickl, "SPAN Pilot Project Report," *EOS* (meeting report), 65, 777, October 1984.

Green, J. L., D. N. Baker, and R. D. Zwickl, "DSUWG Meeting Report," *EOS* (meeting report), 66, 565, July 1985.

Green, J. L., and R. D. Zwickl, "Data Systems Users Working Group," *EOS* (meeting report), 67, 100, February 1986.

Winterhalter, S., "Technology Development Activities Support Voyager Uranus Encounter: 1. SPAN Accelerated Data Transfer to Remote Voyager Scientists, 2. PDS Increased Quick-Look Analysis for Voyager Scientists," *Information Systems Newsletter*, 5, p. 1, March 1986.

Peters, D. J., "Riding the PSCN Backbone with SPAN," *Information Systems Newsletter*, 5, p. 18, March 1986.

Thomas, V. L., and J. L. Green, "Data Systems User Group Advises SPAN," *Information Systems Newsletter*, 6, p. 20, June 1986.

Thomas, V. L., and J. L. Green, "SPAN Rapid Growth Due to Worldwide Networking Requests," *Information Systems Newsletter*, 7, p. 12, September 1986.

Thomas, V. L., and J. L. Green, "Data Center Hosts Data Systems User Group," *NSSDC News*, 3, p. 2, September 1986.

Thomas, V. L., and J. L. Green, "SPAN's Rapid Development Spans Disciplines and Nations," *NSSDC News*, Vol. 2, 4, p. 13, December 1986.

Lopez-Swofford, B., "SPAN Information Center Open for Business," *Information Systems Newsletter*, 8, p. 5, December 1986.

Baker D. N., V. L. Thomas, D. L. Gallagher, J. L. Green, J. H. King, and R. D. Zwickl, "DSUWG Meeting Report," *EOS* (meeting report), 68, 45, January 20, 1987.

Gallagher, D. L., and V. L. Thomas, "SPAN Community Renews Commitment to Electronic Information Exchange," *Information Systems Newsletter*, 9, p. 8, March 1987.

Thomas, V. L., "NSSDC Hosts Data Systems Users Working Group," *NSSDC News*, Vol. 3, 1, p. 9, March 1987.

Dueck, S., "ISO Connects World-Wide Communication Network in Support of Supernova," *Information Systems Newsletter*, 10, p. 1, June 1987.

Thomas, V. L., J. L. Green, and L. Z. Porter, "SPAN Links Astronomers Around the Globe in Support of Supernova," *Information Systems Newsletter*, 10, p. 4, June 1987.

Thomas, V. L., J. L. Green, and B. McLendon, "SPAN Provides Electronic Transmission of Supernova Data," *NSSDC News*, Vol. 3, 2, p. 1, June 1987.

Green, J. L., "Message from the Director: Government Takes Steps to Curtail Illegal Computer Network Access," *NSSDC News*, Vol. 3, 3, p. 1, September 1987.

Green, J. L., "Message from the Director: European Authorities Seize Evidence of Unauthorized Computer Access by German 'Hacker Club'," *NSSDC News*, Vol. 3, 4, p. 1, December 1987.

Thomas, V. L., and J. L. Green, "Computer Hackers Attack SPAN," *Information Systems Newsletter*, 12, p. 36, January 1988.

Thomas, V. L., and J. L. Green, "Space Physics Analysis Network: A Quick-Response Capability," *Information Systems Newsletter*, 13, p. 30, April 1988.

Koblinsky, C. J., and J. Choy, "NASA/NSF/NCAR Computer Gateway," *EOS*, Vol. 69, p. 833, September 1988.

Green, J. L., "The Use of SPAN for Rapid Access to IUE Data," *Information Systems Newsletter*, 14, p. 39, August 1988.

Sanderson, T., "Major Milestones for European SPAN," *Information Systems Newsletter*, 14, p. 41, August 1988.

Thomas, V. L., and J. L. Green, *SPAN Justifications*, NSSDC 88-22, 1988.

Thomas, V. L., and J. L. Green, "'SPANNING' the Globe," *Information Systems Newsletter*, 15, p. 21, December 1988.

Zwickl, R. D., and V. L. Thomas, "SPAN: Riding the Winds of Change," *Information Systems Newsletter*, March 1989 (to be published).

Peters, D. J., "NSI Interoperable Gateway," *Information Systems Newsletter*, March 1989 (to be published).

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## **VI. Acknowledgments**

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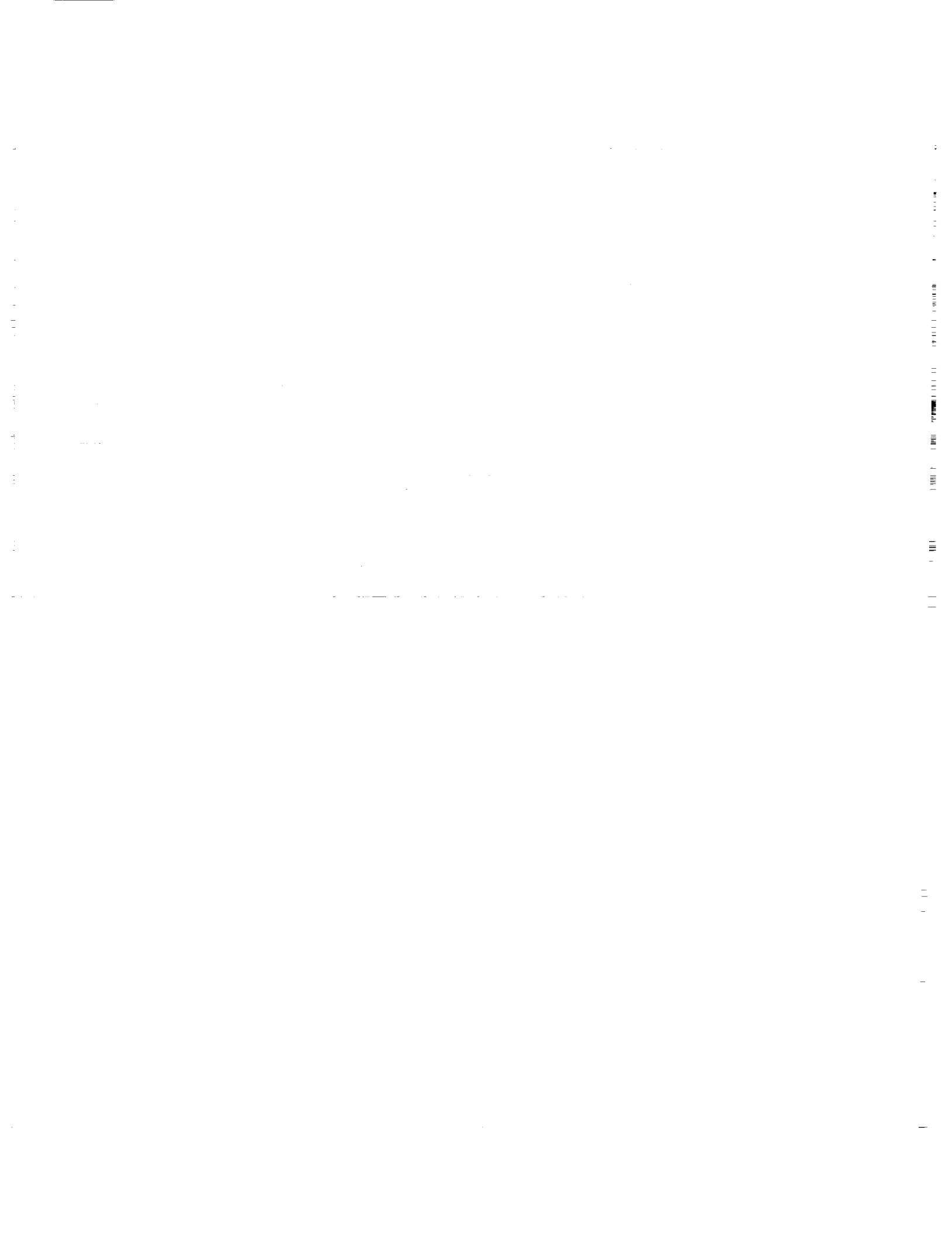
Trevor Sanderson, ESTEC, The Netherlands

for their useful suggestions for the layout of this document.



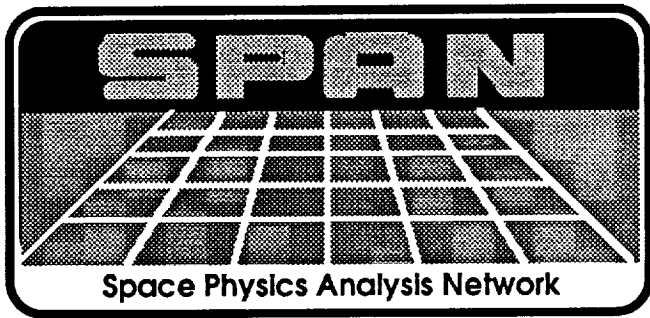
## **APPENDIX**

**Accessing SPAN from Non-SPAN Nodes  
(Dated August 1989)**





August 1989



# ACCESSING SPAN FROM NON-SPAN NODES

by

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If your computer is on a network other than the Space Physics Analysis Network (SPAN), you can still reach the Space Physics Analysis Network Online Data Base System (SPAN\_NIC).

A list of Internet mail addresses and a brief tutorial on how to access the SPAN\_NIC account follows. **PLEASE NOTE THAT THIS LIST IS CURRENT AS OF August 18, 1989. THE LATEST UPDATED ONLINE VERSION CAN BE FOUND IN THE SPAN\_NIC ACCOUNT AT THE NATIONAL SPACE SCIENCE DATA CENTER (NSSDC).**

T R A N S P A R E N T   D E C N E T   I N T E R N E T

SPAN-to-HEPNET

HEPNET is reachable in DECnet areas 41, 42, 43

\*\*\*\*\*

SPAN-to-DAN

DAN is reachable in DECnet area 18

\*\*\*\*\*

SPAN-to-THENET

TO: UTSPAN::UTADNX::hostname::username

THENET-to-SPAN

TO: UTADNX::UTSPAN::hostname::username

SPAN-to-ARPAhost on THENET

TO: UTSPAN::UTADNX::MAILER%"username@hostname.domain"

ARPAhost/THENET-to-SPAN

TO: hostname::username%UTSPAN.DECNET@UTADNX.CC.UTEXAS.EDU

(THENET = The University of Texas Network)

\*\*\*\*\*

SPAN-to-UARS

TO: NSSDCA::hostname::username  
TO: VIRGO::hostname::username  
TO: SPRLC::hostname::username

UARS-to-SPAN

TO: NSSDCA::hostname::username  
TO: VIRGO::hostname::username  
TO: SPRLC::hostname::username

\*\*\*\*\*

SPAN-to-SDSC

TO: SDSC::"username@hostname.SDSCNET"

SDSC-to-SPAN

TO: username@hostname.SPAN

\*\*\*\*\*

SPAN-to-SCFMVS (IBM 3081 at the Goddard Space Flight Center)

TO: DFTNIC::JNET%"username@SCFMVS"

S E L E C T E D X.25 W O R L D D E C N E T H O S T S

In Australia and New Zealand

Anglo-Australian Observatory (Epping, NSW, Australia) from SPAN

SPAN-to-AAOEPP

TO: NSSDCA::PSI%AAOEPP::user

TO: SSL::PSI%AAOEPP::user

SPAN-to-EPP75A

TO: NSSDCA::PSI%EPP75A::user

TO: SSL::PSI%EPP75A::user

\*\*\*\*\*

Mount Stromlo & Siding Spring Observatory (Canberra, NSW, Australia)

SPAN-to-MSSSQ

TO: NSSDCA::PSI%MSSSQ::user

INTERNET-to-MSSSQ

TO: NSSDCA::SMTP%"username@MSO.ANU.OZ.AU" (see other gateways)

\*\*\*\*\*

Mount Stromlo & Siding Spring Observatory (Canberra, NSW, Australia)

[ANU's computer services center]

SPAN-to-MSO

TO: NSSDCA::PSI%MSO::user

\*\*\*\*\*

University of Tasmania in Australia (at node DIEMEN)

SPAN-to-UNIVERSITY OF TASMANIA

TO: STAR::"munnari!physvax.utas.oz.au!USERNAME@uunet.uu.net"

TO: IO::"munnari!physvax.utas.oz.au!USERNAME@uunet.uu.net"

TO: FEDEX::"munnari!physvax.utas.oz.au!USERNAME@uunet.uu.net"

TO: NSFGW::"munnari!physvax.utas.oz.au!USERNAME@uunet.uu.net"

TO: PSI%EPP75A::acsnet%"USERNAME@physvax.utas.oz"

GSECMail-to-TASMANIA

To: [postman/nasa] nasamail/usa <ret>

Subj:

Text: to: <munnari!physvax.utas.oz.au!USERNAME@uunet.uu.net>

UNIVERSITY OF TASMANIA-to-SPAN

Use the normal INTERNET mail syntax.

\*\*\*\*\*

SPAN-to-AUSTRALIA'S NODE PHYSVAX

To: STAR::"munnari!physvax.oz.au!USERNAME@uunet.UU.NET"

AUSTRALIA'S NODE PHYSVAX-to-SPAN

Use the normal INTERNET mail syntax.

S E L E C T E D X.25 W O R L D D E C N E T H O S T S

\*\*\*\*\*

University of Newcastle (Newcastle, NSN, Australia) from SPAN

SPAN-to-NEWCASTLE

To: NSSDCA::PSI%NEWCASTLE::username

\*\*\*\*\*

University of Otago (Dunedin, New Zealand) from SPAN

SPAN-to-OTAGO

TO: NSSDCA::PSI%OTAGO::user

TO: SSL::PSI%OTAGO::user

\*\*\*\*\*

University of Canterbury (Christchurch, New Zealand) from SPAN

SPAN-to-UNICANT

TO: NSSDCA::PSI%UNICANT::user

In The Netherlands

Dwingeloo Observatory (Netherlands) from SPAN

SPAN-to-DWINGELOO

To: NSSDCA::PSI%DWINGELO::user

In Canada

Dominion Astrophysical Observatory (Victoria, Canada)

SPAN-to-DAO

TO: NSSDCA::PSI%DAO::user

In Chile

Cerro Tololo Inter-American Observatory (La Serena, Chile) from SPAN

SPAN-to-CTIOV1

TO: NSSDCA::PSI%CTIOV1::user

TO: SSL::PSI%CTIOV1::user

CTIOV1-to-SPAN

To: CTIOV1::PSI%NSSDCA::host::user

To: CTIOV1::PSI%SSL::host::user

S E L E C T E D X.25 W O R L D D E C N E T H O S T S

In Japan

Geophysical Institute, Kyoto University (Kyoto, JAPAN)

SPAN-to-KYOTO

TO: NSSDCA::PSI%KYOTO::user

TO: SSL::PSI%KYOTO::user

Hiraiso Solar Terrestrial Research Center, Communications Research  
Laboratory (Ibaraki, JAPAN)

SPAN-to-CRLHI

TO: NSSDCA::PSI%CRLHI::user

In West Germany

Deutsche Forschungnetz, West Germany

SPAN-to-DFN

TO: FEDEX::"user@ZPL.DFN.DBP.DE"

DFN-to-SPAN

TO: user%host.SPAN@STAR.STANFORD.EDU

\*\*\*\*\*  
NOTE: The names that appear after the PSI%\_\_\_\_\_ are defined on our  
host. We have created PSI logicals to make sending mail to certain  
sites easier on the end user. Please remember that these names equate  
to a DTE # (pad number) - these logicals are strictly host dependent.

PUBLIC PACKET MAIL SYNTAX

SPAN-to-NASAMAIL

AMES::"user@NASAMAIL"

NASAMAIL-to-SPAN

```
Command? compose
To: POSTMAN                |--POSTMAN account will
CC:                        |AUTOMATICALLY send your
Subject:                   |message...
Text:                      |--start your message text
TO: user%host@ames-io.arpa |--MUST BE FIRST LINE
                           |IN YOUR MAIL MESSAGE
                           |--finish your message
type the rest of your message here
```

\*\*\*\*\*

Examples:

To send a mail message to the user SPAN\_MGR from SPAN to NASAMAIL, you would do the following:

To: AMES::"SPAN\_MGR@NASAMAIL"

To send a mail message from NASAMAIL to the user NETMGR on SPAN, you would do the following:

```
Command? compose
To: POSTMAN
CC:
Subject:
Text:
TO: NETMGR%NSSDCA@ames-io.arpa
type the rest of your message here
```



PUBLIC PACKET MAIL SYNTAX

SPAN-to-GSFCMAIL

AMES::"user@GSFCMAIL"

GSFCMAIL-to-SPAN

Command? compose  
To: [POSTMAN/NASA] NASAMAIL !--POSTMAN account on NASAmail will  
CC: AUTOMATICALLY send your  
Subject: message...  
Text: !--start your message text  
TO: user%host@ames-io.arpa !--MUST BE FIRST LINE OF  
YOUR TEXT MESSAGE  
  
type the rest of your message here

or you can use the following OPTIONAL SYNTAX (in place of  
user%host@ames-io.arpa)  
To: user@host.SPAN.NASA.GOV

\*\*\*\*\*

Examples:

To send a mail message to the user SPAN\_MGR at GSFCMAIL from any  
SPAN host, you would do the following:

To: AMES::"SPAN\_MGR@GSFCMAIL"

To send a mail message from GSFCMAIL to the user NETMGR on the  
SPAN node NSSDCA, you would do the following:

Command? compose  
To: [POSTMAN/NASA] NASAMAIL  
CC:  
Subject:  
Text:  
TO: NETMGR%NSSDCA@ames-io.arpa  
type the rest of your message here

Or use the optional syntax:

Command? compose  
To: [POSTMAN/NASA] NASAMAIL  
CC:  
Subject:  
Text:  
TO: NETMGR@NSSDCA.span.nasa.gov  
type the rest of your message here

PUBLIC PACKET MAIL SYNTAX

GSFCMAIL-to-NASAMAIL

Command? compose  
To: [user/NASA] NASAMAIL  
cc:  
Subject:  
Text:  
type in your message

NASAMAIL-to-GSFCMAIL

Command? compose  
To: [user/GSFCMAIL] GSFC/USA  
CC:  
Subject:  
Text:  
type your message here

!--start your message text

PUBLIC PACKET MAIL SYNTAX

SPAN-to-TELEMAIL

To: AMES::"user/org@TELEMAIL.NASA.GOV"  
or To: JPLLSI::"user@TELEMAIL@ORION.ARPA"

TELEMAIL-to-SPAN

Command? compose  
To: [POSTMAN/NASA] NASAMAIL     !--POSTMAN account will  
CC:                                AUTOMATICALLY send your  
Subject:                           message...  
Text:                               !--start your message text  
TO: user%host@VLSI.JPL.NASA.GOV   !--MUST BE FIRST LINE OF  
                                  YOUR TEXT MESSAGE  
  
type your message here

or

command? compose  
To: user@host.SPAN

TELEMAIL-to-ARPA

command? compose  
To: user@host.ARPA

TELEMAIL-to-BITNET

command? compose  
To: [POSTMAN/NASA] NASAMAIL  
cc:  
Subject:  
Text  
TO: user@host.BITNET              !--MUST BE FIRST LINE OF  
                                  YOUR TEXT MESSAGE

PUBLIC PACKET MAIL SYNTAX

SPAN-to-OMNET

IO: "username%OMNET@AMES.ARC.NASA.GOV"  
or IO: "username%OMNET@AMES"

OMNET-to-SPAN

```
Command? compose
To: [POSTMAN/NASA] NASAMAIL      !--POSTMAN account will
CC:                                AUTOMATICALLY send your
Subject:                           message...
Text:                               !--start your message text
TO: user%host.SPAN@IO.ARC.NASA.GOV !--MUST BE FIRST LINE
                                     IN YOUR MAIL MESSAGE
type your message here           !--finish your message
```

\*\*\*\*\*

Examples:

To send a mail message to the support office at OMNET from any SPAN node, you would do the following:

```
To: IO: "omnet.service%OMNET@MAIL"
To: IO: "omnet.service%OMNET@AMES.ARC.NASA.GOV"
or  To: IO: "omnet.service%OMNET@AMES.ARPA"
```

To send a mail message from OMNET to the user NETMGR on the SPAN host NSSDCA, you would do the following:

```
Command? compose
To: [POSTMAN/NASA] NASAMAIL
CC:
Subject:
Text:
TO: NETMGR%NSSDCA@ames-io.arpa
type the rest of your message here
```

\*\*\*\*\*

*OMNET is an electronic mail management company. It provides communications consulting services. OMNET's SCIENCEnet is a communications network for International R & D companies.*

I N T E R N E T   M A I L   S Y N T A X

SPAN-TO-INTERNET

To:       NSSDCA::SMTP%"user@host.domain"       ! GSFC Gateway  
To:       DFTNIC::EXOS%"user@host.domain"       ! GSFC Gateway  
To:       AMES::"user@host.domain"            ! AMES Gateway  
To:       STAR::"user@host.domain"            ! STANFORD Gateway  
To:       WITCH::"user@host.domain"           ! JPL Gateway  
To:       SDSC::"user@host.domain"            ! U of CALIF/SAN DIE

To send to user INS\_AJPI at host JHUNIX.HCF.JHU.EDU (domain EDU)  
To:       DFTNIC::EXOS%"ins\_ajpi@jhunix.edu"

INTERNET-TO-SPAN

To:       user%host@NSSDCA.GSFC.NASA.GOV       ! GSFC Gateway  
To:       user%host.SPAN@DFTNIC.GSFC.NASA.GOV   ! GSFC Gateway  
To:       user@host.span.nasa.gov             ! AMES Gateway  
To:       user%host.SPAN@STAR.STANFORD.EDU     ! STANFORD Gateway  
To:       user%host.SPAN@WITCH.JPL.NASA.GOV    ! JPL Gateway  
To:       user%host.SPAN@SDS.SDSC.EDU         ! U of CALIF/SAN DIE

To send to user NETMGR at host NSSDCA.GSFC.NASA.GOV (domain GOV)  
To:       netmgr%nssdca.SPAN@STAR.STANFORD.EDU

=====

NOTES:

Gateways are at the following sites:  
GSFC       = Goddard Space Flight Center; Greenbelt, MD  
           contact for NSSDCA:   NCF::NETMGR  
                                  NETMGR@NSSDCA.GSFC.NASA.GOV  
           contact for DFTNIC:   DFTNIC::LEV  
                                  LEV@IAFBIT.GSFC.NASA.GOV  
AMES       = AMES Reserach Center; Moffett Field, CA  
STAR       = Stanford University; Stanford, CA  
JPL        = Jet Propulsion Laboratory; Pasadena, CA  
U of CA    = University of California; San Diego, CA

\*\*\*\*\*

*ARPA (Internet) - ARPANET (Advanced Research Projects Agency) is the oldest computer network in the U.S. Sponsored by the Department of Defense, it exists to facilitate sharing of resources at participating organizations and collaboration among researchers, as well as to provide a testbed or new developments in networking.*

**N S F n e t   M A I L   S Y N T A X**

SPAN-to-NSFnet

To: NSFGW::"host.domain!user"

NSFnet-to-SPAN

To: user%host.span@longs.ucar.edu

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*NSFnet - Operated by the National Science Foundation; based on the TCP/IP network protocol. The above gateway is located at NCAR, Scientific Computing Division (SCD), and runs on a MicroVAX II (ULTRIX operating system).*

# BITNET MAIL SYNTAX

## SPAN-TO-BITNET & EARN

To: DFTNIC::JNET%*"user@host"*  
To: STAR::*"user%host.BITNET@CUNYVM.CUNY.EDU"*  
or To: STAR::*"user@host.BITNET"*  
To: LSUVAX::*"IN%"*"user@host.BITNET"%"**

To send to user INS\_AJPI at host JHUVMS.HCF.JHU.EDU (domain EDU)  
To: DFTNIC::JNET%*"ins\_ajpi@jhuvms.hcf.jhu.edu"*

## BITNET & EARN-TO-SPAN

To: user%host.SPAN@DFTBIT ! DFTNIC Gateway  
To: user%host.SPAN@STAR.STANFORD.EDU  
To: user%host.SPAN@VLSI.JPL.NASA.GOV  
To: user%host.SPAN@VLSI.JPL.NASA.GOV@HAMLET.CALTECH.EDU  
To: user%host.SPAN@SDSC.BITNET  
To: user%host@UK.AC.EARN-RELAY  
To: user%host.SPAN@LSUVAX.LSU.EDU

To send to user NETMGR at host NSSDCA.GSFC.NASA.GOV (domain GOV)  
To: NETMGR%nssdca.SPAN@DFTBIT

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## NOTES:

Information on DFTNIC Gateway:  
DFTNIC = Goddard Space Flight Center; Greenbelt, MD  
Building 28  
Contact: DFTNIC::LEV (DECNET address)  
LEV%DFTBIT (BITNET address)

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*BITNET/EARN - BITNET (Because It's Time Network) links universities and research centers in the United States and Europe. In Europe, BITNET is called EARN (European Academic Research Network), and it is an integral part of BITNET, therefore, all European nodes are listed in the U.S. and vice versa.*

# JANET MAIL SYNTAX

## SPAN-TO-JANET

To: JPLLSI::"user%host@UKACRL.BITNET" (Most reliable)  
To: 19527::CBS%"janet-address::user"  
To: STAR::"user%host.BITNET@JADE.BERKELEY.EDU"  
To: JPLLSI::"user%host@NSS.CS.UCL.AC.UK"  
To: STAR::"user%host@NSS.CS.UCL.AC.UK"  
To: ECD1::MAILER  
(Then type the following as the FIRST line in the message)  
X-fwd-to: JANET%host::user (MAIL TO JANET)

To send to user CYM at host UK.AC.RL.IB  
To: JPLLSI::"cym@uk.ac.rl.ib@UKACRL.BITNET"

## JANET-TO-SPAN

To: user%host.SPAN%VLSI.JPL.NASA.GOV@UK.AC.UCL.CS.NSS  
To: "span\_node::user"@UK.AC.gateway  
To: user%host.SPAN%EDU.STANFORD.STAR@UK.AC.UCL.CS.NSS  
To: user%host.SPAN%EDU.STANFORD.STAR@UK.AC.RL.EARN  
To: user%host.SPAN%EDU.STANFORD.STAR@UK.AC.EARN-RELAY  
To: user%host.SPAN@STAR.STANFORD.EDU@UK.AC.UCL.CS.NSS

To send to user NETMGR at host NSSDCA.GSFC.NASA.GOV  
To: NETMGR%nssdca.SPAN%VLSI.JPL.NASA.GOV@UK.AC.UCL.CS.NSS

NOTE: In the past, the JANET gateway needed to have the address element (the part immediately left of the @) in U.K. order - with the domain first, then organization, location, etc. It will now handle addresses in both U.K. and U.S. (traditional ARPA) order; i.e.

user%host.SPAN%VLSI.JPL.NASA.GOV@UK.AC.EARN-RELAY (U.S.)  
and user%host.SPAN%GOV.NASA.JPL.VLSI@UK.AC.EARN-RELAY (U.K.)

are equally acceptable.

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*JANET - JANET (Joint Academic NETWORK) was created to provide network links to institutions in the United Kingdom and net access to the outside world. For more information, see the document "ACCESSING SPAN FROM NON-SPAN NODES: A Guide for Janet Users" by Mike Hapgood at the Rutherford Appleton Laboratory.*



M F E N E T   M A I L   S Y N T A X

SPAN-to-MFENET

TO: JPLLSI::"user%host.MFENET@NMFEECC.ARPA"  
TO: NSSDCA::SMTP%user%host.MFENET@NMFEECC.ARPA"  
TO: SDSC::"user@host.MFENET"

MFENET-to-SPAN

TO: user%host.SPAN@VLSI.JPL.NASA.GOV  
TO: user%host.SPAN@SDS

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*MFENET - MFEnet stands for the Magnetic Fusion Energy network. It links energy researchers at educational and research institutes around the country. The network is connected to the National Computer Center at Lawrence Livermore National Lab. The computer center houses five Cray computers, which are available or use by those connected to MFEnet. The National Magnetic Fusion Energy Computer Center (NMFEECC) at Livermore is responsible for the development and maintenance of the network.*

J U N E T   M A I L   S Y N T A X

SPAN-to-JUNET

TO: STAR::"user%host@RELAY.CS.NET"  
TO: NSSDCA::SMTP%"user@host"

JUNET-to-SPAN

User normal Internet MAIL syntax

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*JUNET - The purpose of JUNET is to promote information exchange among Japanese researchers and with researchers outside Japan. It is organized by a group of students at Tokyo Institute of Technology.*



U U C P   M A I L   S Y N T A X

SPAN-to-UUCP

TO: IO::"host2!host1!host!user@NOAO.ARIZONA.EDU"  
TO: NSSDCA::SMTP%"host2!host1!host!user@NOAO.ARIZONA.EDU"  
TO: JPLLSI::"host2!host1!host!user@NOAO.ARIZONA.EDU"  
(ex: TO: IO::"kddlab!yscvax!yamada@NOAO.ARIZONA.EDU")  
\*\*\*\*\* NOTE \*\*\*\*\*  
UUNET.UU.NET can be used in place of NOAO.ARIZONA.EDU

UUCP-to-SPAN

TO: user%host.SPAN@VLSI.JPL.NASA.GOV  
TO: user%host@AMES-IO.ARPA  
(ex: TO: kddlab!netmgr%nssdca@ames-io.arpa)

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*UUCP - UUCP stands for UNIX to UNIX CoPy. It connects a very diverse set of machines and users, with most host machines running the UNIX operating system.*

A C S N E T   M A I L   S Y N T A X

SPAN-TO-ACSNET

To: JPLLSI::"user@host.OZ.AU"  
To: NSSDCA::SMTP%"user%MUNNARI.OZ.AU@UUNET.UU.NET"  
To: NSSDCA::PSI%505228621001::ACSNET%"user@host"  
To: NSSDCA::PSI%505228621001::IN%"user@host"

To send to user POSTMASTER at host MUNNARI.OZ.AU  
To: JPLLSI::"postmaster@muninari.OZ.AU"

ACSNET-TO-SPAN

To: user%host.SPAN@VLSI.JPL.NASA.GOV

To send to user NETMGR at host NSSDCA.GSFC.NASA.GOV  
To: netmgr%nssdca.SPAN@VLSI.JPL.NASA.GOV

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*ACSNET - ACSNET (Australian Computer Science Network) is the main network in Australia. It is based on the University of Sydney UNIX Network (SUN) software.*

**A C C E S S I N G   T H E**  
**S P A C E   P H Y S I C S   A N A L Y S I S   N E T W O R K**  
**O N - L I N E   D A T A   B A S E   S Y S T E M   (S P A N \_ N I C)**  
 =====

SPAN\_NIC is a menu-driven Network Information Center data base system designed to help SPAN users with questions about the nodes connected to SPAN. This system also gives the latest up-to-date MAIL syntaxes for INTERNET mail. It also tells the users how to access other NICs, along with giving the SPAN users NEWS about the network and what links are down.

DECnet		INTERNET		System Type
NODENumber	NODEname	Number	Name	
6.132 (6276)	NSSDC	128.183.10.59	NSSDC.GSFC.NASA.GOV	VAX 11/780
6.133 (6277)	NSSDCA	128.183.10.4	NSSDCA.GSFC.NASA.GOV	VAX 8650

In the examples provided, remember you can either enter NSSDC or NSSDCA, depending on which machine you want to access.

To access NSSDC Computer Facility:

- from DECnet nodes:
 

system prompt (e.g., SPAN)	----- \$ Username:	you type ----- SET HOST NSSDCA <CR> SPAN_NIC <CR>
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- from TCP/IP nodes:
 

system prompt (i.e., Internet) [command is the same \$ or % for all TCP/IP nodes]	----- Username:	you type ----- TELNET NSSDCA.GSFC.NASA.GOV <CR> SPAN_NIC <CR>
--	--------------------	--
  
- for dial-in:
 

First, dial the phone number for the Rolm modem pool (baud rate is automatically self-adjusting):

  - for 8 bit/no parity (8 bits, 1 stop bit) ==> (301)286-9000
  - for even parity (7 bits, 1 stop bit) ==> (301)286-9500

system prompt ----- ENTER NUMBER? DIALING nnnnn CALL COMPLETE Username:	----- Username:	you type ----- nssdca <CR> <CR> SPAN_NIC <CR>
--	--------------------	---

- from Telenet:

To find the phone number of a Telenet PAD local to the area you are calling from, call the Telenet customer office, toll free, at 1-800-TELENET. First dial into the local Telenet PAD. When the PAD answers, hit several carriage returns until you get a prompt:

system prompt	you type
-----	-----
Terminal=	d1 <CR>
@	id ;32107035/gsfc
Password	036156
Username:	SPAN_NIC

If you are coming in from overseas, the access method from Telenet is slightly different. At the @ prompt, you will have to enter the following: id ;0311032107035

If you have any questions, please feel free to send mail to NCF::NETMGR, or call (301) 286-7251 or FTS 888-7251 for assistance.

Inquiries concerning network access to SPAN\_NIC should be directed to:

or Ms. Pat Sisson, SPAN Security Manager  
 Mr. Todd Butler, GSFC Routing Center Manager  
 Network Information Center  
 National Space Science Data Center  
 Code 630.2  
 Goddard Space Flight Center  
 Greenbelt, Maryland 20771

Telephone: (301)286-7251  
 FTS 888-7251  
 SPAN: NCF::NETMGR; NSSDCA::NETMGR; NSSDC::NETMGR  
 INTERNET: NETMGR@NSSDCA.GSFC.NASA.GOV

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We also have a SPAN passthrough account on the NSSDC Computer Facility. This account allows a user to use our system as a passthrough device to do the following:

go from SPAN to INTERNET and vice versa  
 go from SPAN to an X.29 host and vice versa  
 go from TELENET pad to SPAN or INTERNET

The access methods are the same as listed above for the SPAN\_NIC account. The only difference is as follows:

Username: SPAN  
 Password: please call our office for the password

**FUTURE ACCESS METHOD FROM TELENET PUBLIC PADS**  
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All TELENET public pad access to the NSSDC computer facility will eventually go through the DACs facility in Huntsville, Alabama. Before using a TELENET public pad, you will need to get a valid NPSS USERID and PASSWORD.

To obtain a USERID and PASSWORD for the NPSS Gateway, please submit the following information to NCF::NETMGR or call (301)286-7251 or FTS-888-7251.

User Name: \_\_\_\_\_  
User Phone: \_\_\_\_\_  
User Address: \_\_\_\_\_  
  
Employer: \_\_\_\_\_

Once you get your valid USERID and PASSWORD the steps are as follows:

**ERRORS:** If you make an error while typing please use the "Ctrl H" key to make a correction.

**TELENET ACCESS TO SPAN**  
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To find the phone number of a Telenet PAD local to the area you are calling from, call the Telenet customer office, toll free, at 1-800-TELENET.

- 1) First dial into the local Telenet PAD.
- 2) When the PAD answers hit several carriage returns until you get the 'Terminal=' prompt <CR> <CR>

<b>system prompt</b>	<b>you type</b>
-----	-----
Terminal=	d1 <CR>
@	c NASA <CR>
NASA connected	<CR>
*	logon <CR>
Enter USERID	ENTER your userid IN ALL <b>CAPS</b>
Enter PASSWORD	ENTER your password IN ALL <b>CAPS</b>
Enter SERVICE	NSSDC <CR>
	Username:

If you have any questions, please feel free to send mail to NCF::NETMGR, or call (301)286-7251 or FTS 888-7251 for assistance.

