792

IRIS
VOYAGER 1 & 2 SATURN ENCOUNTER
77-084A-03D & 77-076A-03F
VOYAGER 1 & 2 JUPTER ENCOUNTER
77-084A-03C & 77-076A-03E
VOYAGER 2 URANUS ENCOUNTER
77-076A-03G
VOYAGER 2 NEPTUNE ENCOUNTER
77-076A-03H

792	77-076A-03E	PSPA-00295
792	77-076A-03F	PSPA-00110
792	77-076A-03G	PSPA-00182
792	77-076A-03H	PSPA-00232
792	77-084A-03C	PSPA-00072
792	77-084A-03D	PSPA-00111

Table of Contents

1. Introduction

2. Errata/Change Log

3. LINKS TO RELEVANT INFORMATION IN THE ONLINE NSSDC INFORMATION SYSTEM

4. Catalog Materials

    a. Associated Documents

    b. Core Catalog Materials

---

1. INTRODUCTION:

The documentation for this data set was originally on paper, kept in NSSDC's Data Set Catalogs (DSCs). The paper documentation in the Data Set Catalogs have been made into digital images, and then collected into a single PDF file for each Data Set Catalog. The inventory information in these DSCs is current as of July 1, 2004. This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system. The information existing in the DSCs is now not needed for locating the data files, but we did not remove that inventory information.

The offline tape datasets have now been migrated from the original magnetic tape to Archival Information Packages (AIP's).

A prior restoration may have been done on data sets, if a requestor of this data set has questions; they should send an inquiry to the request office to see if additional information exists.

2. ERRATA/CHANGE LOG:

NOTE: Changes are made in a text box, and will show up that way when displayed on screen with a PDF reader.

When printing, special settings may be required to make the text box appear on the printed output.

Version	Date	Person	Page	Description of Change
01				
02				

3 LINKS TO RELEVANT INFORMATION IN THE ONLINE NSSDC INFORMATION SYSTEM:

http://nssdc.gsfc.nasa.gov/nmc/

[NOTE: This link will take you to the main page of the NSSDC Master Catalog. There you will be able to perform searches to find additional information]

4. CATALOG MATERIALS:

a. Associated Documents To find associated documents you will need to know the document ID number and then click here.
http://nssdcftp.gsfc.nasa.gov/miscellaneous/documents/

b. Core Catalog Materials

VOYAGER 1 & 2

IRIS

This data set consists of 4 magnetic tapes. The tapes are 8mm cartridges. The tapes are created with the VAX/VMS backup utility as a single save-set. The C tapes are 4mm cartridages, also created as a single save-set. The D and C number and the time of encounter is as follow:

VOYAGER 1 & 2 SATURN ENCOUNTER 77-084A-03D & 77-076A-03F

D#	C#	FILES	LABELED	SAT	TIME SPAN
D-108379	C-032559	23	VG_SAT	VG1	11/11/80 - 11/14/80
				VG2	08/24/81 - 08/27/81

VOYAGER 1 & 2 JUPITER ENCOUNTER 77-084A-03C & 77-076A-03E

D#	C#	FILES	LABELED		TIME SPAN
D-108380	C-032560	25	VG_JUP	VG1	03/02/79 - 03/08/79
				VG2	07/06/79 - 07/13/79

VOYAGER 2 URANUS ENCOUNTER 77-076A-03G

D#	C#	FILES	LABELED	TIME SPAN
D-108381	C-032561	17	VG_URA	01/22/86 - 01/26/86

VOYAGER 2 NEPTUNE ENCOUNTER 77-076A-03H

D#	C#	FILES	LABELED	TIME SPAN
D-108382	C-032562	17	VG_NEP	08/23/89 - 08/26/89

ALL NEW I. D.'s ARE ON DSC COVER

77-089A-03D
77-076A-03I p.1

```
CCSD3ZF0000100000001NJPL3IF0PDS200000001 = SFDU_LABEL
RECORD_TYPE                    = STREAM
OBJECT                         = VOLUME
  VOLUME_SERIES_NAME           = "Voyagers to the Outer Planets"
  VOLUME_SET_NAME              = "IRIS Full Resolution Spectra"
  VOLUME_SET_ID                = USA_NASA_PDS_VG_2001
  VOLUMES                      = 1
  VOLUME_NAME                  = "Voyager 1 and 2 Saturn Encounter"
  VOLUME_ID                    = VG_2001_SAT
  VOLUME_VERSION_ID            = "VERSION 1"
  PUBLICATION_DATE             = 1994-02-15
  DATA_SET_ID                  = "VG1/VG2-S-IRIS-3-RDR-V1.0"
  MEDIUM_TYPE                  = "8-MM HELICAL SCAN TAPE"
  MEDIUM_FORMAT                = "58 MB"
  VOLUME_FORMAT                = "VAX-BACKUP"
  HARDWARE_MODEL_ID            = "VAX 4000/60"
  OPERATING_SYSTEM_ID          = "VMS 5.5-1"
  TRANSFER_COMMAND_TEXT        = "BACKUP ARIES1:[PDS_WORKSHOP.SATURN...]*.*
                                        MUAO:VGR_SAT_IRIS.BCK/SAVE/LIST" **
  DESCRIPTION                     = "This tape volume contains IRIS full
resolution spectra data and associated pointing and geometric
information for both Voyager 1 and 2 Saturn encounters.  Also
included in this volume is calibration information for the IRIS
instrument on each spacecraft, PDS catalog information describing the
IRIS instruments and the Saturn dataset, and PDS labels and record
structure information for the data set."

  MISSION_NAME                 = VOYAGER
  SPACECRAFT_NAME              = {VOYAGER_1,VOYAGER_2}
  SPACECRAFT_ID                = {VG1,VG2}
  INSTRUMENT_NAME              =
      "INFRARED INTERFEROMETER SPECTROMETER AND RADIOMETER"
  INSTRUMENT_ID                = IRIS

  OBJECT                       = DATA_PRODUCER
    INSTITUTION_NAME           = "GODDARD SPACE FLIGHT CENTER"
    FACILITY_NAME              = "PDS ATMOSPHERES SUBNODE"
    FULL_NAME                  = "Dr. Barney J. Conrath"
    DISCIPLINE_NAME            = "INFRARED RADIOMETRY AND SPECTROSCOPY"
    ADDRESS_TEXT               = "GODDARD SPACE FLIGHT CENTER \n
                                  CODE 693.2 \n
                                  GREENBELT, MD 20771 \n
                                  USA"
  END_OBJECT                   = DATA_PRODUCER

  OBJECT                       = DATA_SUPPLIER
    INSTITUTION_NAME           = "UNIVERSITY OF COLORADO - LASP"
    FACILITY_NAME              = "PDS ATMOSPHERES NODE"
    FULL_NAME                  = "Dr. Steven W. Lee"
    DISCIPLINE_NAME            = "PLANETARY ATMOSPHERES"
    ADDRESS_TEXT               = "LASP \n
                                  UNIVERSITY OF COLORADO \n
                                  CAMPUS BOX 392 \n
                                  BOULDER, CO 80309 \n
                                  USA"
  END_OBJECT                   = DATA_SUPPLIER

  OBJECT                       = CATALOG
    ^CATALOG                   = {"VG1_IRIS_INST.CAT",
                                  "VG2_IRIS_INST.CAT",
                                  "SAT_DS.CAT"}
  END_OBJECT                   = CATALOG

END_OBJECT                     = VOLUME
END
```

Listing of save set(s)

CM401 COPY OF D-108379

```
Save set:          VGR_SAT_IRIS.BCK
Written by:        LEE
JIC:               [000310,000206]
Date:              15-FEB-1994 21:51:30.49
Command:           BACKUP/NOASSIST/BLOCK=32768/NOREWIND/IGNORE=(INTER,LABEL)/
                     INTERCHANGE/NOCRC/GROUP=0/NOASSIST/LABEL=VG_SAT ARIES1:
                     [PDS_WORKSHOP.SATURN...] ARIES$MKA500:VGR_SAT_IRIS.BCK/LOG
Operating system:  VAX/VMS version V5.5
BACKUP version:    V5.5
CPU ID register:   12000003
Node name:         _ARIES::
Written on:        _ARIES$MKA500:
Block size:        8192
Buffer count:      38

[PDS_WORKSHOP.SATURN]AAREADME.TXT;1                          14  15-FEB-1994 20:3
[PDS_WORKSHOP.SATURN]CALIB.DIR;1                              1  14-FEB-1994 23:5
[PDS_WORKSHOP.SATURN.CALIB]VG1PREST.DAT;1                  2211  13-FEB-1994 22:0
[PDS_WORKSHOP.SATURN.CALIB]VG1PREST.LBL;1                    10  15-FEB-1994 19:5
[PDS_WORKSHOP.SATURN.CALIB]VG1PSTST.DAT;1                  1332  13-FEB-1994 22:0
[PDS_WORKSHOP.SATURN.CALIB]VG1PSTST.LBL;1                    10  15-FEB-1994 19:5
[PDS_WORKSHOP.SATURN.CALIB]VG1SNESR.DAT;1                    10  27-JAN-1994 17:1
[PDS_WORKSHOP.SATURN.CALIB]VG2PREST.DAT;1                  2091  13-FEB-1994 22:0
[PDS_WORKSHOP.SATURN.CALIB]VG2PREST.LBL;1                    10  15-FEB-1994 20:0
[PDS_WORKSHOP.SATURN.CALIB]VG2SNESR.DAT;1                    10   8-FEB-1993 12:2
[PDS_WORKSHOP.SATURN]CATALOG.DIR;1                            1  14-FEB-1994 23:5
[PDS_WORKSHOP.SATURN.CATALOG]SAT_DS.CAT;1                    77  15-FEB-1994 20:2
[PDS_WORKSHOP.SATURN.CATALOG]VG1_IRIS.CAT;1                  53  25-JAN-1994 00:2
[PDS_WORKSHOP.SATURN.CATALOG]VG2_IRIS.CAT;1                  53  25-JAN-1994 00:2
[PDS_WORKSHOP.SATURN]DATA.DIR;1                               1  14-FEB-1994 23:5
[PDS_WORKSHOP.SATURN.DATA]VG1_SAT.DAT;1                   55676  14-FEB-1994 01:1
[PDS_WORKSHOP.SATURN.DATA]VG1_SAT.LBL;1                      11  15-FEB-1994 20:1
[PDS_WORKSHOP.SATURN.DATA]VG2_SAT.DAT;1                   57443  14-FEB-1994 22:2
[PDS_WORKSHOP.SATURN.DATA]VG2_SAT.LBL;1                      11  15-FEB-1994 20:1
[PDS_WORKSHOP.SATURN]LABEL.DIR;1                              1  14-FEB-1994 23:5
[PDS_WORKSHOP.SATURN.LABEL]IRISHEDR.FMT;1                    48  15-FEB-1994 20:5
[PDS_WORKSHOP.SATURN.LABEL]IRISTRGP.FMT;1                    29  15-FEB-1994 20:5
[PDS_WORKSHOP.SATURN]VOLDESC.CAT;1                            7  15-FEB-1994 20:3

Total of 23 files, 119110 blocks
End of save set
```

77-084A-03C
77-076A-03E p 1

```
CCSD3ZF0000100000001NJPL3IF0PDS200000001 = SFDU_LABEL
RECORD_TYPE                    = STREAM
OBJECT                         = VOLUME
  VOLUME_SERIES_NAME           = "Voyagers to the Outer Planets"
  VOLUME_SET_NAME              = "IRIS Full Resolution Spectra"
  VOLUME_SET_ID                = USA_NASA_PDS_VG_2001
  VOLUMES                      = 1
  VOLUME_NAME                  = "Voyager 1 and 2 Jupiter Encounter"
  VOLUME_ID                    = VG_2001_JUP
  VOLUME_VERSION_ID            = "VERSION 1"
  PUBLICATION_DATE             = 1994-02-14
  DATA_SET_ID                  = "VG1/VG2-J-IRIS-3-RDR-V1.0"
  MEDIUM_TYPE                  = "8-MM HELICAL SCAN TAPE"
  MEDIUM_FORMAT                = "98 MB"
  VOLUME_FORMAT                = "VAX-BACKUP"
  HARDWARE_MODEL_ID            = "VAX 4000/60"
  OPERATING_SYSTEM_ID          = "VMS 5.5-1"
  TRANSFER_COMMAND_TEXT        = "BACKUP ARIES1:[PDS_WORKSHOP.JUPITER...]*.*
                                        MUAO:VGR_JUP_IRIS.BCK/SAVE/LIST"
  DESCRIPTION                     = "This tape volume contains IRIS full
resolution spectra data and associated pointing and geometric
information for both Voyager 1 and 2 Jupiter encounters.  Also
included in this volume is calibration information for the IRIS
instrument on each spacecraft, PDS catalog information describing the
IRIS instruments and the Jupiter dataset, and PDS labels and record
structure information for the data set."

  MISSION_NAME                 = VOYAGER
  SPACECRAFT_NAME              = {VOYAGER_1,VOYAGER_2}
  SPACECRAFT_ID                = {VG1,VG2}
  INSTRUMENT_NAME              =
      "INFRARED INTERFEROMETER SPECTROMETER AND RADIOMETER"
  INSTRUMENT_ID                = IRIS

  OBJECT                       = DATA_PRODUCER
    INSTITUTION_NAME           = "GODDARD SPACE FLIGHT CENTER"
    FACILITY_NAME              = "PDS ATMOSPHERES SUBNODE"
    FULL_NAME                  = "Dr. Barney J. Conrath"
    DISCIPLINE_NAME            = "INFRARED RADIOMETRY AND SPECTROSCOPY"
    ADDRESS_TEXT               = "GODDARD SPACE FLIGHT CENTER \n
                                  CODE 693.2 \n
                                  GREENBELT, MD 20771 \n
                                  USA"
  END_OBJECT                   = DATA_PRODUCER

  OBJECT                       = DATA_SUPPLIER
    INSTITUTION_NAME           = "UNIVERSITY OF COLORADO - LASP"
    FACILITY_NAME              = "PDS ATMOSPHERES NODE"
    FULL_NAME                  = "Dr. Steven W. Lee"
    DISCIPLINE_NAME            = "PLANETARY ATMOSPHERES"
    ADDRESS_TEXT               = "LASP \n
                                  UNIVERSITY OF COLORADO \n
                                  CAMPUS BOX 392 \n
                                  BOULDER, CO 80309 \n
                                  USA"
  END_OBJECT                   = DATA_SUPPLIER

  OBJECT                       = CATALOG
    ^CATALOG                   = {"VG1_IRIS_INST.CAT",
                                  "VG2_IRIS_INST.CAT",
                                  "JUP_DS.CAT"}
  END_OBJECT                   = CATALOG

END_OBJECT                     = VOLUME
END
```

Listing of save set(s)

CM402 COPY OF D-108380
==========

```
Save set:          VGR_JUP_IRIS.BCK
Written by:        LEE
JIC:               [000310,000206]
Date:              14-FEB-1994 22:58:15.22
Command:           BACKUP/NOASSIST/BLOCK=32768/NOREWIND/IGNORE=(INTER,LABEL)/IN
Operating system:  VAX/VMS version V5.5
BACKUP version:    V5.5
CPU ID register:   12000003
Node name:         _ARIES::
Written on:        _ARIES$MKA500:
Block size:        8192
Buffer count:      38

[PDS_WORKSHOP.JUPITER]AAREADME.TXT;1                          15  14-FEB-1994 22:1
[PDS_WORKSHOP.JUPITER]CALIB.DIR;1                              1  14-FEB-1994 20:2
[PDS_WORKSHOP.JUPITER.CALIB]VG1JNESR.DAT;1                    10   3-NOV-1993 00:1
[PDS_WORKSHOP.JUPITER.CALIB]VG1PREJT.DAT;1                  1147  13-FEB-1994 22:1
[PDS_WORKSHOP.JUPITER.CALIB]VG1PREJT.LBL;1                    10  14-FEB-1994 21:3
[PDS_WORKSHOP.JUPITER.CALIB]VG1PSTJT.DAT;1                  2193  13-FEB-1994 22:1
[PDS_WORKSHOP.JUPITER.CALIB]VG1PSTJT.LBL;1                    10  14-FEB-1994 21:3
[PDS_WORKSHOP.JUPITER.CALIB]VG2JNESR.DAT;1                    10   3-NOV-1993 00:1
[PDS_WORKSHOP.JUPITER.CALIB]VG2PREJT.DAT;1                  1989  13-FEB-1994 22:1
[PDS_WORKSHOP.JUPITER.CALIB]VG2PREJT.LBL;1                    10  14-FEB-1994 21:3
[PDS_WORKSHOP.JUPITER.CALIB]VG2PSTJT.DAT;1                  2257  13-FEB-1994 22:1
[PDS_WORKSHOP.JUPITER.CALIB]VG2PSTJT.LBL;1                    10  14-FEB-1994 21:4
[PDS_WORKSHOP.JUPITER]CATALOG.DIR;1                            1  14-FEB-1994 19:5
[PDS_WORKSHOP.JUPITER.CATALOG]JUP_DS.CAT;1                    78  14-FEB-1994 19:5
[PDS_WORKSHOP.JUPITER.CATALOG]VG1_IRIS.CAT;1                  53  14-FEB-1994 20:0
[PDS_WORKSHOP.JUPITER.CATALOG]VG2_IRIS.CAT;1                  53  14-FEB-1994 20:0
[PDS_WORKSHOP.JUPITER]DATA.DIR;1                               1  14-FEB-1994 21:5
[PDS_WORKSHOP.JUPITER.DATA]VG1_JUP.DAT;1                   84157   2-NOV-1993 23:2
[PDS_WORKSHOP.JUPITER.DATA]VG1_JUP.LBL;1                      11  14-FEB-1994 22:1
[PDS_WORKSHOP.JUPITER.DATA]VG2_JUP.DAT;1                  107522   3-NOV-1993 00:1
[PDS_WORKSHOP.JUPITER.DATA]VG2_JUP.LBL;1                      11  14-FEB-1994 22:1
[PDS_WORKSHOP.JUPITER]LABEL.DIR;1                              1  14-FEB-1994 21:4
[PDS_WORKSHOP.JUPITER.LABEL]IRISHEDR.FMT;1                    48  14-FEB-1994 21:4
[PDS_WORKSHOP.JUPITER.LABEL]IRISTRGP.FMT;1                    29  14-FEB-1994 21:5
[PDS_WORKSHOP.JUPITER]VOLDESC.CAT;1                            7  14-FEB-1994 22:1

Total of 25 files, 199634 blocks
End of save set
```

```
CCSD3ZF0000100000001NJPL3IF0PDS200000001 = SFDU_LABEL
RECORD_TYPE                    = STREAM
OBJECT                         = VOLUME
  VOLUME_SERIES_NAME           = "Voyagers to the Outer Planets"
  VOLUME_SET_NAME              = "IRIS Full Resolution Spectra"
  VOLUME_SET_ID                = USA_NASA_PDS_VG_2001
  VOLUMES                      = 1
  VOLUME_NAME                  = "Voyager 2 Uranus Encounter"
  VOLUME_ID                    = VG_2001_URA
  VOLUME_VERSION_ID            = "VERSION 1"
  PUBLICATION_DATE             = 1994-02-13
  DATA_SET_ID                  = "VG2-U-IRIS-3-RDR-V1.0"
  MEDIUM_TYPE                  = "8-MM HELICAL SCAN TAPE"
  MEDIUM_FORMAT                = "10.8 MB"
  VOLUME_FORMAT                = "VAX-BACKUP"
  HARDWARE_MODEL_ID            = "VAX 4000/60"
  OPERATING_SYSTEM_ID          = "VMS 5.5-1"
  TRANSFER_COMMAND_TEXT        = "BACKUP ARIES1:[PDS_WORKSHOP.URANUS...]*.*
                                        MUAO:VGR_URA_IRIS.BCK/SAVE/LIST"
  DESCRIPTION                    = "This tape volume contains IRIS full
resolution spectra data and associated pointing and geometric
information for the Voyager 2 Uranus encounter.  Also included in
this volume is calibration information for the IRIS instrument, PDS
catalog information describing the IRIS instrument and the dataset,
and PDS labels and record structure information for the data set."

  MISSION_NAME                 = VOYAGER
  SPACECRAFT_NAME              = VOYAGER_2
  SPACECRAFT_ID                = VG2
  INSTRUMENT_NAME              =
      "INFRARED INTERFEROMETER SPECTROMETER AND RADIOMETER"
  INSTRUMENT_ID                = IRIS

  OBJECT                       = DATA_PRODUCER
    INSTITUTION_NAME           = "GODDARD SPACE FLIGHT CENTER"
    FACILITY_NAME              = "PDS ATMOSPHERES SUBNODE"
    FULL_NAME                  = "Dr. Barney J. Conrath"
    DISCIPLINE_NAME            = "INFRARED RADIOMETRY AND SPECTROSCOPY"
    ADDRESS_TEXT               = "GODDARD SPACE FLIGHT CENTER \n
                                  CODE 693.2 \n
                                  GREENBELT, MD 20771 \n
                                  USA"
  END_OBJECT                   = DATA_PRODUCER

  OBJECT                       = DATA_SUPPLIER
    INSTITUTION_NAME           = "UNIVERSITY OF COLORADO - LASP"
    FACILITY_NAME              = "PDS ATMOSPHERES NODE"
    FULL_NAME                  = "Dr. Steven W. Lee"
    DISCIPLINE_NAME            = "PLANETARY ATMOSPHERES"
    ADDRESS_TEXT               = "LASP \n
                                  UNIVERSITY OF COLORADO \n
                                  CAMPUS BOX 392 \n
                                  BOULDER, CO 80309 \n
                                  USA"
  END_OBJECT                   = DATA_SUPPLIER

  OBJECT                       = CATALOG
    ^CATALOG                   = {"VG2_IRIS.CAT",
                                  "URA_DS.CAT"}
  END_OBJECT                   = CATALOG

END_OBJECT                     = VOLUME
END
```

Listing of save set(s)

CM403 COPY OF D-108381

```
Save set:          VGR_URA_IRIS.BCK
Written by:        LEE
JIC:               [000310,000206]
Date:              14-FEB-1994 00:38:35.31
Command:           BACKUP/NOASSIST/BLOCK=32768/NOREWIND/IGNORE=(INTER,LABEL)/
                   INTERCHANGE/NOCRC/GROUP=0/NOASSIST/LABEL=VG_URA DISKF:
                   [PDS_WORKSHOP.URANUS...] ARIES$MKA500:VGR_URA_IRIS.BCK/LOG
Operating system:  VAX/VMS version V5.5
BACKUP version:    V5.5
CPU ID register:   12000003
Node name:         _ARIES::
Written on:        _ARIES$MKA500:
Block size:        8192
Buffer count:      38

[PDS_WORKSHOP.URANUS]AAREADME.TXT;1                          12  13-FEB-1994 21:3
[PDS_WORKSHOP.URANUS]CALIB.DIR;1                              1  25-JAN-1994 04:2
[PDS_WORKSHOP.URANUS.CALIB]VG2PREUT.DAT;1                   459  25-JAN-1994 04:5
[PDS_WORKSHOP.URANUS.CALIB]VG2PREUT.LBL;1                    10  13-FEB-1994 03:4
[PDS_WORKSHOP.URANUS.CALIB]VG2PSTUT.DAT;1                   394  25-JAN-1994 05:0
[PDS_WORKSHOP.URANUS.CALIB]VG2PSTUT.LBL;1                    10  13-FEB-1994 03:5
[PDS_WORKSHOP.URANUS.CALIB]VG2UNESR.DAT;1                     4  25-JAN-1994 04:5
[PDS_WORKSHOP.URANUS]CATALOG.DIR;1                            1  25-JAN-1994 04:2
[PDS_WORKSHOP.URANUS.CATALOG]URA_DS.CAT;1                    64  14-FEB-1994 00:0
[PDS_WORKSHOP.URANUS.CATALOG]VG2_IRIS.CAT;1                  53  13-FEB-1994 03:5
[PDS_WORKSHOP.URANUS]DATA.DIR;1                               1  25-JAN-1994 04:2
[PDS_WORKSHOP.URANUS.DATA]VG2_URA.DAT;1                   21129   5-AUG-1993 14:5
[PDS_WORKSHOP.URANUS.DATA]VG2_URA.LBL;1                      10  13-FEB-1994 03:5
[PDS_WORKSHOP.URANUS]LABEL.DIR;1                              1  25-JAN-1994 04:2
[PDS_WORKSHOP.URANUS.LABEL]IRISHEDR.FMT;1                    48  10-JUN-1993 20:3
[PDS_WORKSHOP.URANUS.LABEL]IRISTRGP.FMT;1                    29  14-FEB-1994 00:1
[PDS_WORKSHOP.URANUS]VOLDESC.CAT;1                            6  13-FEB-1994 21:3

Total of 17 files, 22232 blocks
End of save set
```

77-076A-0311 p.1

```
CCSD3ZF0000100000001NJPL3IF0PDS200000001 = SFDU_LABEL
RECORD_TYPE                    = STREAM
OBJECT                         = VOLUME
  VOLUME_SERIES_NAME           = "Voyagers to the Outer Planets"
  VOLUME_SET_NAME              = "IRIS Full Resolution Spectra"
  VOLUME_SET_ID                = USA_NASA_PDS_VG_2001
  VOLUMES                      = 1
  VOLUME_NAME                  = "Voyager 2 Neptune Encounter"
  VOLUME_ID                    = VG_2001_NEP
  VOLUME_VERSION_ID            = "VERSION 1"
  PUBLICATION_DATE             = 1994-02-13
  DATA_SET_ID                  = "VG2-U-IRIS-3-RDR-V1.0"
  MEDIUM_TYPE                  = "8-MM HELICAL SCAN TAPE"
  MEDIUM_FORMAT                = "11 MB"
  VOLUME_FORMAT                = "VAX-BACKUP"
  HARDWARE_MODEL_ID            = "VAX 4000/60"
  OPERATING_SYSTEM_ID          = "VMS 5.5-1"
  TRANSFER_COMMAND_TEXT        = "BACKUP ARIES1:[PDS_WORKSHOP.NEPTUNE...]*.*
                                        MUAO:IRISNEP.BCK/SAVE/LIST"
  DESCRIPTION                    = "This tape volume contains IRIS full
resolution spectra data and associated pointing and geometric
information for the Voyager 2 Neptune encounter.  Also included in
this volume is calibration information for the IRIS instrument, PDS
catalog information describing the IRIS instrument and the dataset,
and PDS labels and record structure information for the data set."

  MISSION_NAME                 = VOYAGER
  SPACECRAFT_NAME              = VOYAGER_2
  SPACECRAFT_ID                = VG2
  INSTRUMENT_NAME              =
      "INFRARED INTERFEROMETER SPECTROMETER AND RADIOMETER"
  INSTRUMENT_ID                = IRIS

  OBJECT                       = DATA_PRODUCER
    INSTITUTION_NAME           = "GODDARD SPACE FLIGHT CENTER"
    FACILITY_NAME              = "PDS ATMOSPHERES SUBNODE"
    FULL_NAME                  = "Dr. Barney J. Conrath"
    DISCIPLINE_NAME            = "INFRARED RADIOMETRY AND SPECTROSCOPY"
    ADDRESS_TEXT               = "GODDARD SPACE FLIGHT CENTER \n
                                  CODE 693.2 \n
                                  GREENBELT, MD 20771 \n
                                  USA"
  END_OBJECT                   = DATA_PRODUCER

  OBJECT                       = DATA_SUPPLIER
    INSTITUTION_NAME           = "UNIVERSITY OF COLORADO - LASP"
    FACILITY_NAME              = "PDS ATMOSPHERES NODE"
    FULL_NAME                  = "Dr. Steven W. Lee"
    DISCIPLINE_NAME            = "PLANETARY ATMOSPHERES"
    ADDRESS_TEXT               = "LASP \n
                                  UNIVERSITY OF COLORADO \n
                                  CAMPUS BOX 392 \n
                                  BOULDER, CO 80309 \n
                                  USA"
  END_OBJECT                   = DATA_SUPPLIER

  OBJECT                       = CATALOG
    ^CATALOG                   = {"VG2_IRIS.CAT",
                                  "NEP_DS.CAT"}
  END_OBJECT                   = CATALOG

END_OBJECT                     = VOLUME
END
```

Listing of save set(s)

CM404 COPY OF D-108382
==========

```
Save set:          VGR_NEP_IRIS.BCK
Written by:        LEE
JIC:               [000310,000206]
Date:              14-FEB-1994 01:13:38.86
Command:           BACKUP/NOASSIST/BLOCK=32768/NOREWIND/IGNORE=(INTER,LABEL)/
                   INTERCHANGE/NOCRC/GROUP=0/NOASSIST/LABEL=VG_NEP DISKF:
                   [PDS_WORKSHOP.NEPTUNE...] ARIES$MKA500:VGR_NEP_IRIS.BCK/LOG
Operating system:  VAX/VMS version V5.5
BACKUP version:    V5.5
CPU ID register:   12000003
Node name:         _ARIES::
Written on:        _ARIES$MKA500:
Block size:        8192
Buffer count:      38

[PDS_WORKSHOP.NEPTUNE]AAREADME.TXT;1                          12  13-FEB-1994 21:2
[PDS_WORKSHOP.NEPTUNE]CALIB.DIR;1                              1  13-FEB-1994 20:5
[PDS_WORKSHOP.NEPTUNE.CALIB]VG2NNESR.DAT;1                     4  19-JUL-1993 17:2
[PDS_WORKSHOP.NEPTUNE.CALIB]VG2PRENT.DAT;1                  1063  13-FEB-1994 22:3
[PDS_WORKSHOP.NEPTUNE.CALIB]VG2PRENT.LBL;1                    10  13-FEB-1994 23:2
[PDS_WORKSHOP.NEPTUNE.CALIB]VG2PSTNT.DAT;1                   647  13-FEB-1994 22:3
[PDS_WORKSHOP.NEPTUNE.CALIB]VG2PSTNT.LBL;1                    10  13-FEB-1994 23:5
[PDS_WORKSHOP.NEPTUNE]CATALOG.DIR;1                            1  13-FEB-1994 20:5
[PDS_WORKSHOP.NEPTUNE.CATALOG]NEP_DS.CAT;1                    63  13-FEB-1994 23:3
[PDS_WORKSHOP.NEPTUNE.CATALOG]VG2_IRIS.CAT;1                  53  13-FEB-1994 23:3
[PDS_WORKSHOP.NEPTUNE]DATA.DIR;1                               1  13-FEB-1994 20:5
[PDS_WORKSHOP.NEPTUNE.DATA]VG2_NEP.DAT;1                   21475   5-AUG-1993 14:5
[PDS_WORKSHOP.NEPTUNE.DATA]VG2_NEP.LBL;1                      10  13-FEB-1994 23:4
[PDS_WORKSHOP.NEPTUNE]LABEL.DIR;1                              1  13-FEB-1994 20:5
[PDS_WORKSHOP.NEPTUNE.LABEL]IRISHEDR.FMT;1                    48  10-JUN-1993 20:3
[PDS_WORKSHOP.NEPTUNE.LABEL]IRISTRGP.FMT;1                    29  13-FEB-1994 23:5
[PDS_WORKSHOP.NEPTUNE]VOLDESC.CAT;1                            6  13-FEB-1994 21:1

Total of 17 files, 23434 blocks
End of save set
```

77L084A
77-076A

```
CCSD3ZF0000100000001NJPL3IF0PDS200000001 = SFDU_LABEL
RECORD_TYPE                    = STREAM
MISSION_NAME                   = VOYAGER
SPACECRAFT_NAME                = {VOYAGER_1,VOYAGER_2}
SPACECRAFT_ID                  = {VG1,VG2}
INSTRUMENT_NAME                =
  "INFRARED INTERFEROMETER SPECTROMETER AND RADIOMETER"
INSTRUMENT_ID                  = IRIS
DATA_SET_ID                    = "VG1/VG2-S-IRIS-3-RDR-V1.0"
OBJECT                         = TEXT
  NOTE                         = "Introduction to this tape volume."
  PUBLICATION_DATE             = 1994-02-15
END_OBJECT                     = TEXT
END
```

1. Introduction

This tape volume contains IRIS full resolution spectra data and associated pointing and geometric information for both the Voyager 1 and Voyager 2 Saturn encounters. Also included in this volume is calibration information for the IRIS instrument on each spacecraft, PDS catalog information describing the IRIS instrument and Saturn data set, and PDS labels and record structure information for the data set.

2. Tape Contents

This tape contains the following files, created with the VAX/VMS Backup utility as a single save-set. The following directories/files are included:

Directory/Filename	Description
VOLDESC.CAT	PDS Volume Object description.
AAREADME.TXT	This file.
[CATALOG]SAT_DS.CAT	PDS catalog object describing the VGR IRIS Saturn data set.
[CATALOG]VG1_IRIS.CAT	PDS catalog object describing the VGR 1 IRIS instrument.
[CATALOG]VG2_IRIS.CAT	PDS catalog object describing the VGR 2 IRIS instrument.
[CALIB]VG1SNESR.DAT	Voyager 1 interferometer noise equivalent spectral radience data file.
[CALIB]VG2SNESR.DAT	Voyager 2 interferometer noise equivalent spectral radience data file.
[CALIB]VG1PREST.LBL	PDS label for Voyager 1 target plate calibration for radiometer pre-Saturn encounter period.
[CALIB]VG1PREST.DAT	Voyager 1 target plate calibration data for pre-Saturn encounter period.
[CALIB]VG2PREST.LBL	PDS label for Voyager 2 target plate calibration for radiometer pre-Saturn encounter period.
[CALIB]VG2PREST.DAT	Voyager 2 target plate calibration data for pre-Saturn encounter period.
[CALIB]VG1PSTST.LBL	PDS label for Voyager 1 target plate calibration for radiometer post-Saturn encounter period.
[CALIB]VG1PSTST.DAT	Voyager 1 target plate calibration data for post-Saturn encounter period.
[LABEL]IRISHEDR.FMT	PDS label format file describing header fields that preceed each IRIS spectral record.
[LABEL]IRISTRGP.FMT	PDS label format file describing fields in target plate calibration data files.
[DATA]VG1_SAT.LBL	PDS label describing VG1 IRIS Saturn data file and associated NESR file.
[DATA]VG1_SAT.DAT	VG1 IRIS Saturn data, approximately

	28.5 MB. The data are ordered by FDS count.
[DATA]VG2_SAT.LBL	PDS label describing VG2 IRIS Saturn data file and associated NESR file.
[DATA]VG2_SAT.DAT	VG2 IRIS Saturn data, approximately 29.4 MB. The data are ordered by FDS count.

3. File Format

Most files on this tape have a label encoded in the Object Description Language (ODL) developed by the Planetary Data System (PDS). An ODL label is readable by both humans and computers. It provides a formal description of the format and content of a file. For some files the ODL label appears at the beginning of the file (as is the case for this file). Binary data files provided on this tape are described by detached ODL labels. The detached labels end in a .lbl extension and the associated data file ends in a .dat extension.

PDS label formats and documentation conform to standards as defined by the Planetary Data System Standards Reference (JPL D-7669, Part 2, November 1992, Version 3.0) and the Planetary Science Data Dictionary (JPL D-7116, November 1992, Rev. C) with the following exceptions. Data product labels for the products were approved prior to the release of the Version 3.0 Standards Reference, so do not strictly conform to the Data Product Label standard in Ch. 5 of the PDS Standards Reference, Version 3.0. In particular, the Standard Formatted Data Unit (SFDU) standard from Chapter 17 of the Planetary Data System Data Preparation Workbook - Volume 2, Standards, May 3, 1991, Version 2.0 is used.

4. On-line Analysis and Ordering Capabilities

Portions of this data set are available on-line through the Planetary Atmospheres Node Data Analysis (PANDA) system at the PDS Atmospheres node, and a variety of data analysis services are available. In addition, subsets of this data set meeting various user-supplied selection criteria are also available for electronic delivery.

5. Whom to Contact for Information

PDS Atmospheres Node Manager

Dr. Steven W. Lee
Laboratory for Atmospheric and Space Physics
University of Colorado
Campus Box 392
Boulder, CO 80309

303/492-5348
SPAN: ARIES::LEE
Internet: lee@aries.colorado.edu

6. Cognizant Persons

IRIS data and calibration information were prepared by Barney Conrath (GSFC), John Pearl (GSFC), and Carolyn Staub (GSFC). Catalog templates were prepared by Barney Conrath and Steve Lee (LASP). Labels and documentation were prepared by Sally Lasater (LASP), Steve Lee (LASP), Randy Davis (LASP) and Sue Hess (JPL).

7. Peer Review

This data was peer reviewed under the direction of the PDS Atmospheres Node in April of 1993. The following persons participated in this review:

Chris Barnet

```
CCSD3ZF0000100000001NJPL3IF0PDS200000001 = SFDU_LABEL
RECORD_TYPE                        = FIXED_LENGTH
RECORD_BYTES                       = 4736
FILE_RECORDS                       = 6019
INTERCHANGE_FORMAT                 = BINARY

/* Pointers to Principal Objects */

^TABLE                             = "VG1_SAT.DAT"
^SPECTRAL_SERIES                   = "VG1_SAT.DAT"
^SPECTRUM                          = "VG1SNESR.DAT"

/* Observation Description */

DATA_SET_ID                        = "VG1/VG2-S-IRIS-3-RDR-V1.0"
SPACECRAFT_ID                      = VG1
MISSION_PHASE_NAME                 = "SATURN ENCOUNTER"
TARGET_NAME                        = SATURN
START_TIME                         = 1980-316T01:21:32
STOP_TIME                          = 1980-319T07:46:20
SPACECRAFT_CLOCK_START_COUNT       = "3488600"
SPACECRAFT_CLOCK_STOP_COUNT        = "3498401"

/* Instrument Description */

INSTRUMENT_NAME                  = "INFRARED INTERFEROMETER SPECTROMETER AND RADIOMETER"
INSTRUMENT_ID                    = IRIS

/* Description */

DESCRIPTION                        = "
  This file contains the IRIS data for the Voyager 1 encounter with Saturn."

/* Object Descriptions */

OBJECT                           = TABLE
  NAME                             = IRIS_HEADER
  INTERCHANGE_FORMAT               = BINARY
  COLUMNS                          = 85
  ROWS                             = 6019
  ROW_BYTES                        = 364
  ROW_SUFFIX_BYTES                 = 4372
  ^STRUCTURE                       = "IRISHEDR.FMT"
  DESCRIPTION                      = "
    IRIS data files contain reformated IRIS RDR records (header and
    radiance data) in ascending FDSC time order. The first 364 bytes of
    each record forms a row in this table, which consists of 85 columns
    or fields.  Each field has been extracted from the original IRIS
    RDR header and some fields have been reformated.  Each field is
    fully described in the associated format file IRISHEDR.FMT."
END_OBJECT                       = TABLE

OBJECT                           = SPECTRAL_SERIES
  NAME                             = IRIS_SPECTRA
  INTERCHANGE_FORMAT               = BINARY
  COLUMNS                          = 1
  ROWS                             = 6019
  ROW_BYTES                        = 4372
  ROW_PREFIX_BYTES                 = 364
  SAMPLING_PARAMETER_NAME          = TIME
```

```
CCSD3ZF000010C000001NJPL3IFOPDS200000001 = SFDU_LABEL
RECORD_TYPE                        = FIXED_LENGTH
RECORD_BYTES                       = 4736
FILE_RECORDS                       = 6210
INTERCHANGE_FORMAT                 = BINARY

/* Pointers to Principal Objects */

^TABLE                             = "VG2_SAT.DAT"
^SPECTRAL_SERIES                   = "VG2_SAT.DAT"
^SPECTRUM                          = "VG2SMESR.DAT"

/* Observation Description */

DATA_SET_ID                        = "VG1/VG2-S-IRIS-3-RDR-V1.0"
SPACECRAFT_ID                      = VG2
MISSION_PHASE_NAME                 = "SATURN ENCOUNTER"
TARGET_NAME                        = SATURN
START_TIME                         = 1981-236T02:54:33
STOP_TIME                          = 1981-239T20:30:32
SPACECRAFT_CLOCK_START_COUNT       = "4394500"
SPACECRAFT_CLOCK_STOP_COUNT       = "4405700"

/* Instrument Description */

INSTRUMENT_NAME                   = "INFRARED INTERFEROMETER SPECTROMETER AND RADIOMETER"
INSTRUMENT_ID                     = IRIS

/* Description */

DESCRIPTION                        = "
  This file contains the IRIS data for the Voyager 2 encounter with Saturn."

/* Object Descriptions */

OBJECT                            = TABLE
  NAME                              = IRIS_HEADER
  INTERCHANGE_FORMAT                = BINARY
  COLUMNS                           = 85
  ROWS                              = 6210
  ROW_BYTES                         = 364
  ROW_SUFFIX_BYTES                  = 4372
  ^STRUCTURE                        = "IRIS_ROWFMT.FMT"
  DESCRIPTION                       = "
    IRIS data files contain reformated IRIS RDR records (header and
    radiance data) in ascending FDSC time order. The first 364 bytes of
    each record forms a row in this table, which consists of 85 columns
    or fields.  Each field has been extracted from the original IRIS
    RDR header and some fields have been reformated.  Each field is
    fully described in the associated format file IRIS_ROWFMT.FMT."
END_OBJECT                        = TABLE

OBJECT                            = SPECTRAL_SERIES
  NAME                              = IRIS_SPECTRA
  INTERCHANGE_FORMAT                = BINARY
  COLUMNS                           = 1
  ROWS                              = 6210
  ROW_BYTES                         = 4372
  ROW_PREFIX_BYTES                  = 364
  SAMPLING_PARAMETER_NAME           = TIME
```

77-084A - C3C
77-076A - C3E
DSC 7/2

```
CCSD3ZF0000100000001NJPL3IF0PDS200000001 = SFDU_LABEL
RECORD_TYPE                        = STREAM
MISSION_NAME                       = VOYAGER
SPACECRAFT_NAME                    = {VOYAGER_1,VOYAGER_2}
SPACECRAFT_ID                      = {VG1,VG2}
INSTRUMENT_NAME                    =
  "INFRARED INTERFEROMETER SPECTROMETER AND RADIOMETER"
INSTRUMENT_ID                      = IRIS
DATA_SET_ID                        = "VG1/VG2-J-IRIS-3-RDR-V1.0"
OBJECT                             = TEXT
  NOTE                             = "Introduction to this tape volume."
  PUBLICATION_DATE                 = 1994-02-14
END_OBJECT                         = TEXT
END
```

1. Introduction

This tape volume contains IRIS full resolution spectra data and associated pointing and geometric information for both the Voyager 1 and Voyager 2 Jupiter encounters. Also included in this volume is calibration information for the IRIS instrument on each spacecraft, PDS catalog information describing the IRIS instrument and Jupiter data set, and PDS labels and record structure information for the data set.

2. Tape Contents

This tape contains the following files, created with the VAX/VMS Backup utility as a single save-set. The following directories/files are included:

Directory/Filename	Description
VOLDESC.CAT	PDS Volume Object description.
AAREADME.TXT	This file.
[CATALOG]JUP_DS.CAT	PDS catalog object describing the VGR IRIS Jupiter data set.
[CATALOG]VG1_IRIS.CAT	PDS catalog object describing the VGR 1 IRIS instrument.
[CATALOG]VG2_IRIS.CAT	PDS catalog object describing the VGR 2 IRIS instrument.
[CALIB]VG1JNESR.DAT	Voyager 1 interferometer noise equivalent spectral radience data file.
[CALIB]VG2JNESR.DAT	Voyager 2 interferometer noise equivalent spectral radience data file.
[CALIB]VG1PREJT.LBL	PDS label for Voyager 1 target plate calibration for radiometer pre-Jupiter encounter period.
[CALIB]VG1PREJT.DAT	Voyager 1 target plate calibration data for pre-Jupiter encounter period.
[CALIB]VG2PREJT.LBL	PDS label for Voyager 2 target plate calibration for radiometer pre-Jupiter encounter period.
[CALIB]VG2PREJT.DAT	Voyager 2 target plate calibration data for pre-Jupiter encounter period.
[CALIB]VG1PSTJT.LBL	PDS label for Voyager 1 target plate calibration for radiometer post-Jupiter encounter period.
[CALIB]VG1PSTJT.DAT	Voyager 1 target plate calibration data for post-Jupiter encounter period.
[CALIB]VG2PSTJT.LBL	PDS label for Voyager 2 target plate calibration for radiometer post-Jupiter encounter period.
[CALIB]VG2PSTJT.DAT	Voyager 2 target plate calibration data for post-Jupiter encounter period.
[LABEL]IRISHEDR.FMT	PDS label format file describing header fields that preceed each IRIS spectral record.

[LABEL]IRISTRGP.FMT	PDS label format file describing fields in target plate calibration data files.
[DATA]VG1_JUP.LBL	PDS label describing VG1 IRIS Jupiter data file and associated NESR file.
[DATA]VG1_JUP.DAT	VG1 IRIS Jupiter data, approximately 43 MB. The data are ordered by FDS count.
[DATA]VG2_JUP.LBL	PDS label describing VG2 IRIS Jupiter data file and associated NESR file.
[DATA]VG2_JUP.DAT	VG2 IRIS Jupiter data, approximately 55 MB. The data are ordered by FDS count.

3. File Format

Most files on this tape have a label encoded in the Object Description Language (ODL) developed by the Planetary Data System (PDS). An ODL label is readable by both humans and computers. It provides a formal description of the format and content of a file. For some files the ODL label appears at the beginning of the file (as is the case for this file). Binary data files provided on this tape are described by detached ODL labels. The detached labels end in a .lbl extension and the associated data file ends in a .dat extension.

PDS label formats and documentation conform to standards as defined by the Planetary Data System Standards Reference (JPL D-7669, Part 2, November 1992, Version 3.0) and the Planetary Science Data Dictionary (JPL D-7116, November 1992, Rev. C) with the following exceptions. Data product labels for the products were approved prior to the release of the Version 3.0 Standards Reference, so do not strictly conform to the Data Product Label standard in Ch. 5 of the PDS Standards Reference, Version 3.0. In particular, the Standard Formatted Data Unit (SFDU) standard from Chapter 17 of the Planetary Data System Data Preparation Workbook - Volume 2, Standards, May 3, 1991, Version 2.0 is used.

4. On-line Analysis and Ordering Capabilities

Portions of this data set are available on-line through the Planetary Atmospheres Node Data Analysis (PANDA) system at the PDS Atmospheres node, and a variety of data analysis services are available. In addition, subsets of this data set meeting various user-supplied selection criteria are also available for electronic delivery.

5. Whom to Contact for Information

PDS Atmospheres Node Manager

Dr. Steven W. Lee
Laboratory for Atmospheric and Space Physics
University of Colorado
Campus Box 392
Boulder, CO 80309

303/492-5348
SPAN: ARIES::LEE
Internet: lee@aries.colorado.edu

6. Cognizant Persons

IRIS data and calibration information were prepared by Barney Conrath (GSFC), John Pearl (GSFC), and Carolyn Staub (GSFC). Catalog templates were prepared by Barney Conrath and Steve Lee (LASP). Labels and documentation were prepared by Sally Lasater (LASP), Steve Lee (LASP), Randy Davis (LASP) and Sue Hess (JPL).

7. Peer Review

This data was peer reviewed under the direction of the PDS Atmospheres Node in April of 1993. The following persons participated in this review:

Chris Barnet
Reta Beebe
Barney Conrath
Luke Dones
Peter Gierasch
Sue Hess
Sally Lasater
Steve Lee
Julio Magalhaes
Glen Orton
John Pearl
Bill Sandel
Mark Showalter
Andrew Weir

```
CCSD3ZF0000100000001NJPL3IF0PDS200000001 = SFDU_LABEL
RECORD_TYPE                        = FIXED_LENGTH
RECORD_BYTES                       = 4736
FILE_RECORDS                       = 9098
INTERCHANGE_FORMAT                 = BINARY

/* Pointers to Principal Objects */

^TABLE                             = "VG1_JUP.DAT"
^SPECTRAL_SERIES                   = "VG1_JUP.DAT"
^SPECTRUM                          = "VG1JNESR.DAT"

/* Observation Description */

DATA_SET_ID                        = "VG1/VG2-J-IRIS-3-RDR-V1.0"
SPACECRAFT_ID                      = VG1
MISSION_PHASE_NAME                 = "JUPITER ENCOUNTER"
TARGET_NAME                        = JUPITER
START_TIME                         = 1979-061T18:57:33
STOP_TIME                          = 1979-067T02:57:41
SPACECRAFT_CLOCK_START_COUNT       = "1630800"
SPACECRAFT_CLOCK_STOP_COUNT        = "1646800"

/* Instrument Description */

INSTRUMENT_NAME                  = "INFRARED INTERFEROMETER SPECTROMETER AND RADIOMETER"
INSTRUMENT_ID                    = IRIS

/* Description */

DESCRIPTION                        = "
  This file contains the IRIS data for the Voyager 1 encounter with Jupiter."

/* Object Descriptions */

OBJECT                             = TABLE
  NAME                               = IRIS_HEADER
  INTERCHANGE_FORMAT                 = BINARY
  COLUMNS                            = 85
  ROWS                               = 9098
  ROW_BYTES                          = 364
  ROW_SUFFIX_BYTES                   = 4372
  ^STRUCTURE                         = "IRISHEDR.FMT"
  DESCRIPTION                        = "
    IRIS data files contain reformated IRIS RDR records (header and
    radiance data) in ascending FDSC time order. The first 364 bytes of
    each record forms a row in this table, which consists of 85 columns
    or fields.  Each field has been extracted from the original IRIS
    RDR header and some fields have been reformated.  Each field is
    fully described in the associated format file IRISHEDR.FMT."
END_OBJECT                         = TABLE

OBJECT                             = SPECTRAL_SERIES
  NAME                               = IRIS_SPECTRA
  INTERCHANGE_FORMAT                 = BINARY
  COLUMNS                            = 1
  ROWS                               = 9098
  ROW_BYTES                          = 4372
  ROW_PREFIX_BYTES                   = 364
  SAMPLING_PARAMETER_NAME            = TIME
```

```
CCSD3ZF0000100000001NJPL3IF0PDS200000001 = SFDU_LABEL
RECORD_TYPE                        = FIXED_LENGTH
RECORD_BYTES                       = 4736
FILE_RECORDS                       = 11624
INTERCHANGE_FORMAT                 = BINARY

/* Pointers to Principal Objects */

^TABLE                             = "VG2_JUP.DAT"
^SPECTRAL_SERIES                   = "VG2_JUP.DAT"
^SPECTRUM                          = "VG2JNESR.DAT"

/* Observation Description */

DATA_SET_ID                        = "VG1/VG2-J-IRIS-3-RDR-V1.0"
SPACECRAFT_ID                      = VG2
MISSION_PHASE_NAME                 = "JUPITER ENCOUNTER"
TARGET_NAME                        = JUPITER
START_TIME                         = 1979-187T11:42:32
STOP_TIME                          = 1979-194T02:54:32
SPACECRAFT_CLOCK_START_COUNT       = "2055600"
SPACECRAFT_CLOCK_STOP_COUNT        = "2075500"

/* Instrument Description */

INSTRUMENT_NAME                  = "INFRARED INTERFEROMETER SPECTROMETER AND RADIOMETER"
INSTRUMENT_ID                    = IRIS

/* Description */

DESCRIPTION                        = "
  This file contains the IRIS data for the Voyager 2 encounter with Jupiter."

/* Object Descriptions */

OBJECT                             = TABLE
  NAME                               = IRIS_HEADER
  INTERCHANGE_FORMAT                 = BINARY
  COLUMNS                            = 85
  ROWS                               = 11624
  ROW_BYTES                          = 364
  ROW_SUFFIX_BYTES                   = 4372
  ^STRUCTURE                         = "IRISHEDR.FMT"
  DESCRIPTION                        = "
    IRIS data files contain reformated IRIS RDR records (header and
    radiance data) in ascending FDSC time order. The first 364 bytes of
    each record forms a row in this table, which consists of 85 columns
    or fields.  Each field has been extracted from the original IRIS
    RDR header and some fields have been reformated.  Each field is
    fully described in the associated format file IRISHEDR.FMT."
END_OBJECT                         = TABLE

OBJECT                             = SPECTRAL_SERIES
  NAME                               = IRIS_SPECTRA
  INTERCHANGE_FORMAT                 = BINARY
  COLUMNS                            = 1
  ROWS                               = 11624
  ROW_BYTES                          = 4372
  ROW_PREFIX_BYTES                   = 364
  SAMPLING_PARAMETER_NAME            = TIME
```

N97-076A-C3G

p 2

```
CCSD3ZF0000100000001NJPL3IF0PDS200000001 = SFDU_LABEL
RECORD_TYPE                    = STREAM
MISSION_NAME                   = VOYAGER
SPACECRAFT_NAME                = VOYAGER_2
SPACECRAFT_ID                  = VG2
INSTRUMENT_NAME                =
  "INFRARED INTERFEROMETER SPECTROMETER AND RADIOMETER"
INSTRUMENT_ID                  = IRIS
DATA_SET_ID                    = "VG2-U-IRIS-3-RDR-V1.0"
OBJECT                         = TEXT
  NOTE                         = "Introduction to this tape volume."
  PUBLICATION_DATE             = 1994-02-13
END_OBJECT                     = TEXT
END
```

1. Introduction

This tape volume contains IRIS full resolution spectra data and associated pointing and geometric information for the Voyager 2 Uranus encounter. Also included in this volume is calibration information for the IRIS instrument, PDS catalog information describing the IRIS instrument and Uranus data set, and PDS labels and record structure information for the data set.

2. Tape Contents

This tape contains the following files, created with the VAX/VMS Backup utility as a single save-set. The following directories/files are included:

Directory/Filename	Description
VOLDESC.CAT	PDS Volume Object description.
AAREADME.TXT	This file.
[CATALOG]URA_DS.CAT	PDS catalog object describing the VGR IRIS Uranus data set.
[CATALOG]VG2_IRIS.CAT	PDS catalog object describing the VGR 2 IRIS instrument.
[CALIB]VG2UNESR.DAT	Voyager 2 interferometer noise equivalent spectral radience data file.
[CALIB]VG2PREUT.LBL	PDS label for Voyager 2 target plate calibration for radiometer pre-Uranus encounter period.
[CALIB]VG2PREUT.DAT	Voyager 2 target plate calibration data for pre-Uranus encounter period.
[CALIB]VG2PSTUT.LBL	PDS label for Voyager 2 target plate calibration for radiometer post-Uranus encounter period.
[CALIB]VG2PSTUT.DAT	Voyager 2 target plate calibration data for post-Uranus encounter period.
[LABEL]IRISHEDR.FMT	PDS label format file describing header fields that preceed each IRIS spectral record.
[LABEL]IRISTRGP.FMT	PDS label format file describing fields in target plate calibration data files.
[DATA]VG2_URA.LBL	PDS label describing VG2 IRIS Uranus data file and associated NESR file.
[DATA]VG2_URA.DAT	VG2 IRIS Uranus data, approximately 10.8 MB. The data are ordered by FDS count.

3. File Format

Most files on this tape have a label encoded in the Object Description Language (ODL) developed by the Planetary Data System (PDS). An ODL label is readable by both humans and computers. It provides a formal description of the format and content of a file. For some files the ODL label appears at the beginning of the file (as is the case for this

file). Binary data files provided on this tape are described by detached ODL labels. The detached labels end in a .lbl extension and the associated data file ends in a .dat extension.

PDS label formats and documentation conform to standards as defined by the Planetary Data System Standards Reference (JPL D-7669, Part 2, November 1992, Version 3.0) and the Planetary Science Data Dictionary (JPL D-7116, November 1992, Rev. C) with the following exceptions. Data product labels for the products were approved prior to the release of the Version 3.0 Standards Reference, so do not strictly conform to the Data Product Label standard in Ch. 5 of the PDS Standards Reference, Version 3.0. In particular, the Standard Formatted Data Unit (SFDU) standard from Chapter 17 of the Planetary Data System Data Preparation Workbook - Volume 2, Standards, May 3, 1991, Version 2.0 is used.

4. On-line Analysis and Ordering Capabilities

Portions of this data set are available on-line through the Planetary Atmospheres Node Data Analysis (PANDA) system at the PDS Atmospheres node, and a variety of data analysis services are available. In addition, subsets of this data set meeting various user-supplied selection criteria are also available for electronic delivery.

5. Whom to Contact for Information

PDS Atmospheres Node Manager

Dr. Steven W. Lee
Laboratory for Atmospheric and Space Physics
University of Colorado
Campus Box 392
Boulder, CO 80309

303/492-5348
SPAN: ARIES::LEE
Internet: lee@aries.colorado.edu

6. Cognizant Persons

IRIS data and calibration information were prepared by Barney Conrath (GSFC), John Pearl (GSFC), and Carolyn Staub (GSFC). Catalog templates were prepared by Barney Conrath and Steve Lee (LASP). Labels and documentation were prepared by Sally Lasater (LASP), Steve Lee (LASP), Randy Davis (LASP) and Sue Hess (JPL).

7. Peer Review

This data was peer reviewed under the direction of the PDS Atmospheres Node in April of 1993. The following persons participated in this review:

Chris Barnet
Reta Beebe
Barney Conrath
Luke Dones
Peter Gierasch
Sue Hess
Sally Lasater
Steve Lee
Julio Magalhaes
Glen Orton
John Pearl
Bill Sandel
Mark Showalter
Andrew Weir

```
CCSDSZF0000100000001NJPL3IF0PDS200000001 = SFDU_LABEL
RECORD_TYPE                        = FIXED_LENGTH
RECORD_BYTES                       = 1576
FILE_RECORDS                       = 6864
INTERCHANGE_FORMAT                 = BINARY

/* Pointers to Principal Objects */

^TABLE                             = "VG2_URA.DAT"
^SPECTRAL_SERIES                   = "VG2_URA.DAT"
^SPECTRUM                          = "VG2UNESR.DAT"

/* Observation Description */

DATA_SET_ID                        = "VG2-U-IRIS-3-RDR-V1.0"
SPACECRAFT_ID                      = VG2
MISSION_PHASE_NAME                 = "URANUS ENCOUNTER"
TARGET_NAME                        = URANUS
START_TIME                         = 1986-022T14:06:33
STOP_TIME                          = 1986-026T18:54:33
SPACECRAFT_CLOCK_START_COUNT       = "2678300"
SPACECRAFT_CLOCK_STOP_COUNT        = "2690900"

/* Instrument Description */

INSTRUMENT_NAME                    = "INFRARED INTERFEROMETER SPECTROMETER AND RADIOMETER"
INSTRUMENT_ID                      = IRIS

/* Description */

DESCRIPTION                        = "
  This file contains the IRIS data for the Voyager 2 encounter with Uranus."

/* Object Descriptions */

OBJECT                             = TABLE
  NAME                               = IRIS_HEADER
  INTERCHANGE_FORMAT                 = BINARY
  COLUMNS                            = 85
  ROWS                               = 6864
  ROW_BYTES                          = 364
  ROW_SUFFIX_BYTES                   = 1212
  ^STRUCTURE                         = "IRISHEDR.FMT"
  DESCRIPTION                        = "
    IRIS data files contain reformated IRIS RDR records (header and
    radiance data) in ascending FDSC time order. The first 364 bytes of
    each record forms a row in this table, which consists of 85 columns
    or fields.  Each field has been extracted from the original IRIS
    RDR header and some fields have been reformated.  Each field is
    fully described in the associated format file IRISHEDR.FMT."
END_OBJECT                         = TABLE

OBJECT                             = SPECTRAL_SERIES
  NAME                               = IRIS_SPECTRA
  INTERCHANGE_FORMAT                 = BINARY
  COLUMNS                            = 1
  ROWS                               = 6864
  ROW_BYTES                          = 1212
  ROW_PREFIX_BYTES                   = 364
  SAMPLING_PARAMETER_NAME            = TIME
```

AAREADME.TXT
77-076A-03H
p2

```
CCSD3ZF0000100000001NJPL3IF0PDS200000001 = SFDU_LABEL
RECORD_TYPE                    = STREAM
MISSION_NAME                   = VOYAGER
SPACECRAFT_NAME                = VOYAGER_2
SPACECRAFT_ID                  = VG2
INSTRUMENT_NAME                =
  "INFRARED INTERFEROMETER SPECTROMETER AND RADIOMETER"
INSTRUMENT_ID                  = IRIS
DATA_SET_ID                    = "VG2-N-IRIS-3-RDR-V1.0"
OBJECT                         = TEXT
  NOTE                         = "Introduction to this tape volume."
  PUBLICATION_DATE             = 1994-02-13
END_OBJECT                     = TEXT
END
```

1. Introduction

This tape volume contains IRIS full resolution spectra data and associated pointing and geometric information for the Voyager 2 Neptune encounter. Also included in this volume is calibration information for the IRIS instrument, PDS catalog information describing the IRIS instrument and Neptune data set, and PDS labels and record structure information for the data set.

2. Tape Contents

This tape contains the following files, created with the VAX/VMS Backup utility as a single save-set. The following directories/files are included:

Directory/Filename	Description
VOLDESC.CAT	PDS Volume Object description.
AAREADME.TXT	This file.
[CATALOG]NEP_DS.CAT	PDS catalog object describing the VGR IRIS Neptune data set.
[CATALOG]VG2_IRIS.CAT	PDS catalog object describing the VGR 2 IRIS instrument.
[CALIB]VG2NNESR.DAT	Voyager 2 interferometer noise equivalent spectral radience data file.
[CALIB]VG2PRENT.LBL	PDS label for Voyager 2 target plate calibration for radiometer pre-Neptune encounter period.
[CALIB]VG2PRENT.DAT	Voyager 2 target plate calibration data for pre-Neptune encounter period.
[CALIB]VG2PSTNT.LBL	PDS label for Voyager 2 target plate calibration for radiometer post-Neptune encounter period.
[CALIB]VG2PSTNT.DAT	Voyager 2 target plate calibration data for post-Neptune encounter period.
[LABEL]IRISHEDR.FMT	PDS label format file describing header fields that preceed each IRIS spectral record.
[LABEL]IRISTRGP.FMT	PDS label format file describing fields in target plate calibration data files.
[DATA]VG2_NEP.LBL	PDS label describing VG2 IRIS Neptune data file and associated NESR file.
[DATA]VG2_NEP.DAT	VG2 IRIS Neptune data, approximately 11 MB. The data are ordered by FDS count.

3. File Format

Most files on this tape have a label encoded in the Object Description Language (ODL) developed by the Planetary Data System (PDS). An ODL label is readable by both humans and computers. It provides a formal description of the format and content of a file. For some files the ODL label appears at the beginning of the file (as is the case for this

file). Binary data files provided on this tape are described by detached ODL labels. The detached labels end in a .lbl extension and the associated data file ends in a .dat extension.

PDS label formats and documentation conform to standards as defined by the Planetary Data System Standards Reference (JPL D-7669, Part 2, November 1992, Version 3.0) and the Planetary Science Data Dictionary (JPL D-7116, November 1992, Rev. C) with the following exceptions. Data product labels for the products were approved prior to the release of the Version 3.0 Standards Reference, so do not strictly conform to the Data Product Label standard in Ch. 5 of the PDS Standards Reference, Version 3.0. In particular, the Standard Formatted Data Unit (SFDU) standard from Chapter 17 of the Planetary Data System Data Preparation Workbook - Volume 2, Standards, May 3, 1991, Version 2.0 is used.

4. On-line Analysis and Ordering Capabilities

Portions of this data set are available on-line through the Planetary Atmospheres Node Data Analysis (PANDA) system at the PDS Atmospheres node, and a variety of data analysis services are available. In addition, subsets of this data set meeting various user-supplied selection criteria are also available for electronic delivery.

5. Whom to Contact for Information

PDS Atmospheres Node Manager

Dr. Steven W. Lee
Laboratory for Atmospheric and Space Physics
University of Colorado
Campus Box 392
Boulder, CO 80309

303/492-5348
SPAN: ARIES::LEE
Internet: lee@aries.colorado.edu

6. Cognizant Persons

IRIS data and calibration information were prepared by Barney Conrath (GSFC), John Pearl (GSFC), and Carolyn Staub (GSFC). Catalog templates were prepared by Barney Conrath and Steve Lee (LASP). Labels and documentation were prepared by Sally Lasater (LASP), Steve Lee (LASP), Randy Davis (LASP) and Sue Hess (JPL).

7. Peer Review

This data was peer reviewed under the direction of the PDS Atmospheres Node in April of 1993. The following persons participated in this review:

Chris Barnet
Reta Beebe
Barney Conrath
Luke Dones
Peter Gierasch
Sue Hess
Sally Lasater
Steve Lee
Julio Magalhaes
Glen Orton
John Pearl
Bill Sandel
Mark Showalter
Andrew Weir

```
CCSD3ZF0000100000001NJPL3IF0PDS200000001 = SFDU_LABEL
RECORD_TYPE                        = FIXED_LENGTH
RECORD_BYTES                       = 1760
FILE_RECORDS                       = 6247
INTERCHANGE_FORMAT                 = BINARY

/* Pointers to Principal Objects */

^TABLE                             = "VG2_NEP.DAT"
^SPECTRAL_SERIES                   = "VG2_NEP.DAT"
^SPECTRUM                          = "VG2NNESR.DAT"

/* Observation Description */

DATA_SET_ID                        = "VG2-N-IRIS-3-RDR-V1.0"
SPACECRAFT_ID                      = VG2
MISSION_PHASE_NAME                 = "NEPTUNE ENCOUNTER"
TARGET_NAME                        = NEPTUNE
START_TIME                         = 1989-235T05:18:33
STOP_TIME                          = 1989-236T21:18:32
SPACECRAFT_CLOCK_START_COUNT       = "1133200"
SPACECRAFT_CLOCK_STOP_COUNT        = "1144200"

/* Instrument Description */

INSTRUMENT_NAME                  = "INFRARED INTERFEROMETER SPECTROMETER AND RADIOMETER"
INSTRUMENT_ID                    = IRIS

/* Description */

DESCRIPTION                        = "
  This file contains the IRIS data for the Voyager 2 encounter with Neptune."

/* Object Descriptions */

OBJECT                             = TABLE
  NAME                               = IRIS_HEADER
  INTERCHANGE_FORMAT                 = BINARY
  COLUMNS                            = 85
  ROWS                               = 6247
  ROW_BYTES                          = 364
  ROW_SUFFIX_BYTES                   = 1396
  ^STRUCTURE                         = "IRISHEDR.FMT"
  DESCRIPTION                        = "
    IRIS data files contain reformated IRIS RDR records (header and
    radiance data) in ascending FDSC time order. The first 364 bytes of
    each record forms a row in this table, which consists of 85 columns
    or fields.  Each field has been extracted from the original IRIS
    RDR header and some fields have been reformated.  Each field is
    fully described in the associated format file IRISHEDR.FMT."
END_OBJECT                         = TABLE

OBJECT                             = SPECTRAL_SERIES
  NAME                               = IRIS_SPECTRA
  INTERCHANGE_FORMAT                 = BINARY
  COLUMNS                            = 1
  ROWS                               = 6247
  ROW_BYTES                          = 1396
  ROW_PREFIX_BYTES                   = 364
  SAMPLING_PARAMETER_NAME            = TIME
```