

PDS Standards Reference

INDEX

A

AAREADME.TXT	9-2, 19-8, A-126, G-2
contents	D-1
example	D-2
Acronym list	
Standards Reference.....	F-1
ALIAS object	
definition	A-3
aliases	
for data types.....	3-1
alternate time zone	7-4
ancillary data product	
contents	6-2
contents (diagram)	6-2
ancillary files.....	19-2
ancillary volume.....	19-2
archive quality	
data set	6-1
data set collection.....	6-1
ARRAY object.....	A-1, A-39
definition	A-4
ASCII files	
containing markup	9-4
format.....	9-3
record format.....	15-2
ASCII tables.....	A-105
AXIS_ITEMS	A-4
AXIS_NAME	A-83

B

BAND_BIN	A-81
BAND_STORAGE_TYPE.....	A-68
BANDS	A-68
Bernoulli Disks	
delivery medium	11-1
binary data	
bit string format.....	3-6
integer formats	3-5
binary storage formats.....	C-1

binary tables	A-108
spare bytes.....	A-108
BINHEX utility	11-3
bit field representation	3-6
BIT_COLUMN object	A-20, A-108
definition	A-8
BIT_COLUMNS.....	3-6
BIT_DATA_TYPE	
standard values.....	3-1
BIT_ELEMENT object.....	A-1
definition	A-12
BIT_STRING.....	3-6
body coordinates	
prime meridians	2-1
spin axes.....	2-1
BYTES	A-18, A-58, A-105

C

CALIB subdirectory.....	19-12
calibration data.....	6-2
calibration files.....	19-12
calibration subdirectory	19-12
CALINFO.TXT	19-12
CATALOG directory	B-1
catalog information	6-2
catalog object files	19-8
CATALOG object	
definition	A-13
catalog objects.....	B-1
DATA_SET	B-4, B-28, B-29
DATA_SET_COLL_ASSOC_DATA_SETS	B-11
DATA_SET_COLLECTION	B-13
DATA_SET_COLLECTION_INFO	B-16
DATA_SET_COLLECTION_REF_INFO	B-12
DATA_SET_HOST	B-4, B-5, B-18
DATA_SET_INFORMATION	B-4, B-19
DATA_SET_MAP_PROJECTION.....	B-23, B-27
DATA_SET_MAP_PROJECTION_INFO	B-26
DATA_SET_TARGET.....	B-29
DS_MAP_PROJECTION_REF_INFO	B-30
how to supply	19-9
IMAGE_MAP_PROJECTION.....	B-31
INSTRUMENT.....	B-37, B-49
INSTRUMENT_HOST	B-41, B-43, B-45
INSTRUMENT_HOST_INFORMATION	B-41, B-43

INSTRUMENT_HOST_REFERENCE_INFO	B-41, B-45
INSTRUMENT_INFORMATION	B-37, B-46
INSTRUMENT_REFERENCE_INFO	B-37, B-49
INVENTORY	B-50, B-52
INVENTORY_DATA_SET_INFO	B-52, B-53
INVENTORY_NODE_MEDIA_INFO	B-53
MISSION	B-54, B-59, B-60, B-61, B-62
MISSION_HOST	B-54, B-59, B-63
MISSION_INFORMATION	B-54, B-60
MISSION_REFERENCE_INFORMATION	B-54, B-62
MISSION_TARGET	B-63
PERSONNEL	B-64, B-66, B-67
PERSONNEL ELECTRONIC_MAIL	B-64, B-66
PERSONNEL_INFORMATION	B-64, B-67
REFERENCE	B-28, B-68
SOFTWARE	B-75, B-77, B-78
SOFTWARE_INFORMATION	B-77
SOFTWARE_ONLINE	B-78
SOFTWARE_PURPOSE	B-79
TARGET	B-80, B-82, B-83
TARGET_INFORMATION	B-80, B-82
TARGET_REFERENCE_INFORMATION	B-83
catalog pointer	19-9
CATALOG subdirectory	19-8, 19-12
CATALOG.CAT	19-9
CATINFO.TXT	19-8
CD-Recordable	
delivery medium	11-1
CD-ROM	
delivery medium	11-1
formatting recommendations	11-2
premastering	11-2
CHECKSUM	A-70
citations	H-1
contents	
articles	H-2
books	H-2
CDs H-4	
DVDs	H-4
electronic journal articles	H-4
electronic publications	H-4
meeting papers	H-3
Internet sources	H-5
CITATION_DESC	B-21
example	B-5
formation rule	B-21

class word	
defined.....	6-7
CODMAC numbers	<i>See</i> data processing level
COLLECTION object.....	A-1, A-4, A-6, A-39
definition	A-16
COLUMN object	A-3, A-8, A-88, A-104
and CONTAINER.....	A-23
definition	A-18
vectors	A-18
COMPLEX	C-9
Compliance waivers.....	1-1
COMPRESSED_FILE	20-2
CONFIDENCE_LEVEL_NOTE	
headings	B-21
CONTAINER object.....	A-18
definition	A-23
in TABLE.....	A-121
CUMINDEX.LBL	19-11
CUMINDEX.TAB	19-11
cumulative index	19-11

D

DAT tape	
delivery medium	11-1
data compression.....	20-1
Zip	20-1
example	20-3
file format	20-1
on archive volumes	20-3
data delivery	
media.....	11-1
data dictionary files	
PDSDD.FUL.....	6-3, 19-13
PDSDD.IDX	19-13
<i>See</i> Planetary Science Data Dictionary.....	19-13
data elements	
data identification.....	5-15
descriptive	5-17
file characteristics	5-11
locally defined.....	5-19
proposing new	5-15
required and optional	5-11
standards identifiers	5-10
syntax	5-20

data files	
contents	19-10
record format.....	15-1
data identification data elements.....	5-15
data identification elements	
required for ancillary data.....	5-16
required for Earth-based data.....	5-16
required for spacecraft data.....	5-16
data objects.....	A-1
ALIAS.....	A-3
ARRAY.....	A-4
BIT_COLUMN.....	A-8
BIT_ELEMENT.....	A-12
CATALOG	A-13
COLLECTION	A-16
COLUMN	A-18
CONTAINER	A-23
DATA_PRODUCER	A-30
DATA_SUPPLIER	A-32
definition of.....	5-12
DIRECTORY	A-34
DOCUMENT	A-36
ELEMENT	A-39
FIELD	A-41
FILE	A-44
GAZETTEER_TABLE.....	A-48
HEADER	A-58
HISTOGRAM.....	A-60
HISTORY	A-63
IMAGE	A-67, A-77
INDEX_TABLE	A-72
object definition	5-17
PALETTE	A-77
QUBE.....	A-80
SERIES	A-88
SPECTRUM	A-93
SPICE_KERNEL	A-96
SPREADSHEET	A-99
standard data objects	5-17
TABLE.....	A-104
TEXT	A-126
VOLUME	A-128
data pointers	14-1
data processing level	6-7
CODMAC numbers	6-6
Data Preparation Workbook	1-1

DATA_PRODUCER object	A-32
definition	A-30
data product	
and PRODUCT_ID	4-1
definition	4-1, 6-2
file configurations	4-2
labels	5-1
label example	4-2
primary data object	4-1
relation to data set	6-1
relation to data set collection	6-1
secondary data object	4-1
data representation	
internal	C-1
data set	
contents	6-1
definition	6-1
naming and identification	6-3
processing level	6-7
relation to data products	6-1
reprocessed, version number	6-9
data set collection	
contents	6-1
contents (diagram)	6-2
definition	6-1
naming and identification	6-4
relation to data products	6-1
reprocessed, version number	6-9
data set type	
acronyms	6-7
DATA_SET object	A-44, B-18, B-19, B-28, B-29
definition	B-4
DATA_SET_COLL_ASSOC_DATA_SETS object	
definition	B-11
DATA_SET_COLLECTION object	B-11, B-12, B-16, B-17
definition	B-12
DATA_SET_COLLECTION_DESC	B-16
DATA_SET_COLLECTION_ID	
constituent components	6-4
data set type	6-7
description	6-8
example	6-10
standard acronyms and abbreviations	6-5
syntax	6-4
version number	6-9
DATA_SET_COLLECTION_INFO object	

definition	B-16
headings	B-17
DATA_SET_COLLECTION_NAME	
constituent components.....	6-4
example	6-10
DATA_SET_COLL_REF_INFO object	
definition	B-12
DATA_SET_DESC	B-1
headings	B-20
subheading formats	B-1
data set description	
acronyms	6-8
DATA_SET_HOST object	
definition	B-18
DATA_SET_ID	6-2, A-133, A-134, B-52
constituent components.....	6-3
data set type.....	6-7
description.....	6-8
example	6-9
satellite and ring names in.....	6-6
standard acronyms and abbreviations	6-5
syntax	6-4
version number.....	6-9
DATA_SET_INFORMATION object	
definition	B-19
DATA_SET_MAP_PROJECTION object	B-26 B-31
definition	B-23
DATA_SET_MAP_PROJECTION_INFO object	B-30
definition	B-26
DATA_SET_NAME	
consituent components.....	6-3
example	6-9
satellite and ring names in.....	6-6
DATA_SET_REFERENCE_INFORMATION object	B-4, B-5
definition	B-28
DATA_SET_TARGET object	B-4, B-5
definition	B-29
DATA_SET_TERSE_DESC	
example	B-5
DATA subdirectory	19-10
data submission.....	11-1
DATA_SUPPLIER object	A-30
definition	A-32
data type	
data elements.....	3-1
DATA_TYPE	

standard values.....	3-1
data types	
table of data element	3-2
table of standard values.....	3-4
date format	
conventional.....	7-2
native.....	7-2
precision.....	7-1
syntax	7-1
delivery media.....	11-1
description pointers.....	14-2
descriptive data elements	5-17
directories	
path names	8-4
reserved names.....	8-1, 10-3
standard directories	8-1
DIRECTORY.....	8-4
directory names	
and ISO 9660	8-2
syntax	8-2
directory naming	8-1
DIRECTORY object.....	A-130
definition	A-34
directory paths	
and ISO 9660	8-4
syntax	8-4
directory structure	
example	8-3
on sequential media.....	8-4
Distributed Inventory System	
DISLBL.....	G-2
DOCINFO.TXT	9-2, 19-12, A-126
DOCUMENT	9-2
ASCII version	A-36
DOCUMENT object	9-2
definition	A-36
DOCUMENT subdirectory.....	19-12, 19-13, 20-3
documentation.....	6-2, 9-1
and DOCUMENT object	A-36
ASCII file format	9-3
ASCII version	A-36
criteria for inclusion	9-1
example	
attached TEXT	9-5
detached	9-6
with graphics.....	9-6

file labelling	
DOCUMENT object, use of	A-36
format	9-1
HTML	9-1, 9-4
labels for	9-2
markup files	9-4
non-ASCII files	9-5
required ASCII format	9-1
TeX/LaTeX	9-1
validation	9-5
DS_MAP_PROJECTION_REF_INFO object	
definition	B-30
DVD media	
archive format	11-2
DVD-R	
delivery medium	11-1
DVD-ROM	
delivery medium	11-1
formatting recommendations	11-2
premastering	11-2
UDF	11-2

E

EARTH_BASE_ID	B-37
ELEMENT object	A-1, A-6
definition	A-39
ENCODING_TYPE	9-5, 20-1
END statement	5-18, 16-5
Ephemeris time (ET)	7-4
ERRATA.TXT	19-8
Exabyte tape	
delivery medium	11-1
extensions	
table of	9-3
Extended Attribute Records (XARs)	
on delivery disks	11-2
EXTRAS subdirectory	19-13
EXTRINFO.TXT	19-14

F

field delimiters	A-123
file characteristics data elements	5-11
file extensions	
reserved extensions	10-3

FILE object	20-2, A-34
definition	A-44
explicit	5-9
implicit	5-9, A-44
table of required and optional elements	A-45
FILE_NAME	5-12, A-44
file names	10-1
27.3 convention	10-2
8.3 convention	10-2
ISO 9660 Level 1	10-2
ISO 9660 Level 2	10-2
NAIF conventions	E-13
reserved extensions	10-3
reserved names	10-3
sequential file names	10-5
syntax	10-2
FILE_RECORDS	5-11
file specification	
definition	10-1
example	10-1
file specification and naming	
required file examples	D-11
FILE_STATE	A-81
FLOAT	C-6
floating point	3-6
floating point representation	3-6
FORMAT70 program	B-2
format specifications	3-6
for ASCII data files	3-6
for binary data files	3-6

G

gazetteer data	6-3
GAZETTER subdirectory	19-14
gazetteer table	19-15
GAZETTEER_TABLE object	
definition	A-48
GAZETTER.LBL	19-15
GAZETTER.TAB	19-15
GAZETTER.TXT	19-15
GAZINFO.TXT	19-14
geometry data	6-2
GEOMETRY subdirectory	19-15
GEOMINFO.TXT	19-15
GROUP	12-15

in HISTORY object	A-63
in QUBE.....	A-81
PDS use	12-16

H

HEADER object.....	A-113
definition	A-58
secondary data object.....	4-1
HISTOGRAM object.....	A-81
definition	A-60
secondary data object.....	4-1
HISTORY object	
and QUBE.....	A-81
definition	A-63

I

IEEE_COMPLEX	
storage format	C-9
IEEE_REAL	
storage format	C-6
IMAGE object.....	A-77, A-81
and PALETTE	A-77
compression	20-1
definition	A-67
primary data object	4-1
stored with TABLE object.....	A-120
IMAGE_MAP_PROJECTION object.....	A-81, B-23
definition	B-31
include files	19-15
include pointers	14-1
index files.....	6-3
INDEX subdirectory	19-10
INDEX_TABLE	19-11
contents	A-72
INDEX_TABLE object	
definition	A-72
INDEX_TYPE	A-72
INDEX.LBL.....	19-11
INDEX.TAB	19-11
INDEX.TXT	G-2
IDXINFO.TXT	19-10
example	D-8
INSTRUMENT object	
definition	B-37

INSTRUMENT_DESC.....	B-1
headings	B-46
subheading formats	B-1
INSTRUMENT_HOST object	
definition	B-41
INSTRUMENT_HOST_DESC,	
headings	B-43
INSTRUMENT_HOST_ID	B-37
INSTRUMENT_HOST_INFORMATION object	
definition	B-43
INSTRUMENT_HOST_REFERENCE_INFO object	
definition	B-45
INSTRUMENT_INFORMATION object	
definition	B-46
INSTRUMENT_REFERENCE_INFO object	
definition	B-49
INTEGER	C-1
integer representations	
least significant byte first (LSB).....	3-5
most significant byte first (MSB)	3-5
signed vs. unsigned	3-5
INTERCHANGE_FORMAT	A-104
INVENTORY object	
definition	B-50
INVENTORY_DATA_SET_INFO object	
definition	B-52
INVENTORY_NODE_MEDIA_INFO object	
definition	B-53
ISIS Software	
QUBE object.....	A-80
ITEM_BITS	A-8
ITEM_BYTES	3-1, A-18
ITEM_OFFSET	A-8, A-18
ISO 9660	
Level 1 file names	10-2
Level 2 file names	10-2
ITEM_TYPE (<i>obsolete</i>).....	3-1
ITEMS.....	3-1, A-8, A-18
J	
Jaz disks	
delivery medium	11-1

K

KERNEL_TYPE	
table of file extensions	A-96

L

label files	
contents	19-10
LABEL_RECORDS	5-11
LABEL_REVISION_NOTE	5-11
LABEL subdirectory	19-15
labeling methods	5-1
attached	5-1
case	5-3
combined detached.....	5-1
detached	5-1
example	5-1
line lengths	5-3
labels	5-1
and SFDU labels	5-11, 5-18
attached	5-1
case	5-3
character set	5-3
combined detached.....	5-1, 5-6
descriptive text pointers	5-17
detached	5-1
END statement	5-18
FILE object, explicit	5-9
FILE object, implicit.....	5-9
format	5-3
character set	5-3
line length.....	5-3
minimal	5-8, 5-9
Object Description Language (ODL).....	5-1
object pointers	5-12
attached label examples	5-14
detached label examples	5-15
padding.....	5-3
pointers	
to data objects	5-12
to descriptive text.....	5-17
to structure files	5-17
standard data objects	5-17
standards identifiers	5-10
structure	

attached and detached	5-4
attached/detached example	5-5
combined detached	5-6
combined detached example	5-7
minimal	5-9
minimal example	5-10
structure pointers	5-17
LABINFO.TXT	19-15
least significant byte first (LSB) storage format	C-3
line terminators and delimiters	
vis-a-vis byte counts in objects	
exclusion of line terminators and delimiters in objects	A-18
LINE_DISPLAY_DIRECTION	A-68
LINE_FIRST_PIXEL	B-31
LINE_LAST_PIXEL	B-31
LINE_PREFIX_BYTES	A-67
LINE_SAMPLES	A-67
LINE_SUFFIX_BYTES	A-67
LINES	A-67
locally defined data elements	5-19
control authority	5-21
custodians	5-21
examples	5-19
identification of	5-21
justification for	5-19
namespace	5-21
review and use	5-21
scope of use	5-19
locally defined data elements	19-13
data dictionary files	19-13
local time	7-4
LOCAL_TIME	7-4
logical volumes	
multiple logical volumes (definition)	19-1
naming	19-19
single logical volume (definition)	19-1
VOLDESC.CAT	D-12
LOGICAL_VOLUME_PATH_NAME	A-133, A-134
LOGICAL_VOLUMES	A-133, A-135
LSB integers	<i>See</i> integer representations
LSB_BIT_STRING	
storage format	C-16
LSB_INTEGER	
storage format	C-3
LSB_UNSIGNED_INTEGER	
storage format	C-5

M

MAC_COMPLEX	C-9
MAC_INTEGER	C-1
MAC_REAL	C-6
MAC_UNSIGNED_INTEGER.....	C-2
Management Council	1-1
MAP_PROJECTION_DESC	
headings	B-26
map resolution.....	2-5
MAXIMUM_SAMPLING_PARAMETER	A-88
MEDIUM_FORMAT	A-130
MEDIUM_TYPE	A-130
minimal labels	5-8, 5-14, G-2
MINIMUM_SAMPLING_PARAMETER.....	A-88
MISSION object	B-59, B-60, B-62, B-63
definition	B-54
MISSION_DESC	
headings	B-61
MISSION_HOST object	
definition	B-59
MISSION_INFORMATION object	
definition	B-60
MISSION_OBJECTIVES_SUMMARY	
headings	B-61
MISSION_REFERENCE_INFORMATION object	
definition	B-62
MISSION_TARGET object	
definition	B-63
most significant byte (MSB) first integers.....	C-1
MSB integers	<i>See integer representations</i>
and compressed data	20-2
contain no data object definitions	5-20
MSB_BIT_STRING	
storage format	C-15
MSB_INTEGER	
storage format	C-1
MSB_UNSIGNED_INTEGER	
storage format	C-2

N

N/A constant	17-1
NAIF	
file naming conventions	E-13
NAIF Toolkit	A-96

directory structure	E-1
using	E-12
NAME.....	A-44
namespace	<i>See locally defined data elements</i>
NASA processing levels.	<i>See data processing level</i>
native time	
examples	7-3
Not Applicable constant.....	17-1
NULL constant.....	17-1

O

OBJECT.....	12-15
object definitions....	1-3
format.....	5-17
URL.....	A-1
Object Description Language (ODL).....	5-1
character set	12-3
comments	12-13
date and time formats.....	12-8
date formats.....	12-9
END statement	12-13
file format.....	12-13
identifiers	
reserved.....	12-12
syntax	12-11
implementation	
date and time.....	12-9
implementation notes	12-2
integer formats	12-6, 12-7
language summary	12-21
lexical elements.....	12-6
numeric values	12-17
Parameter Value Language (PVL).....	12-25
PDS implementation	12-2
date and time.....	12-9
sets	12-21
symbolic literals.....	12-20
PVL guidelines.....	12-26
PVL restrictions on archive files.....	12-25
real number formats	12-7
revision notes	12-23
version 0.....	12-24
version 1.....	12-23
sample data label.....	12-1
sequences	12-20

sets.....	12-21
special characters	12-12
specification	12-1
statements.....	12-12
assignment	12-14
GROUP	12-15
OBJECT.....	12-15
pointer	12-14
symbol strings	12-11
symbolic literals	12-20
text string values	12-18
text strings.....	12-10
time formats	12-9
units of measure	12-17
object pointers.....	5-12
attached label examples	5-12
formats	5-12
syntax	5-13
objects	<i>See</i> data object. <i>See</i> catalog objects
generic.....	13-1
example.....	13-1
primitive.....	13-2
specific	13-1
example.....	13-1
standard objects.....	13-1
objects, data	
SERIES	
use of spare fields	A-125
SPECTRUM	
use of spare fields	A-125
observing campaign	
as MISSION.....	B-54

P

PALETTE object	A-81
definition	A-77
secondary data object.....	4-1
Parameter Value Language (PVL).....	12-2, 12-25
PC_INTEGER.....	C-3
PC_REAL	C-9
PC_UNSIGNED_INTEGER	C-5
PDS catalog	
on-line search	H-1
references on-line.....	H-1
PDS objects.....	<i>See</i> data objects. <i>See</i> catalog objects

PDS Software Inventory	B-75
PDS_USER_ID.....	B-64
PDS_VERSION_ID.....	5-10
PERSONNEL object.....	B-66, B-67
definition	B-64
PERSONNEL_ELECTRONIC_MAIL object	
definition	B-66
PERSONNEL_INFORMATION object	
definition	B-67
physical media formats	11-1
physical media	
organization.....	19-1
Planetary Science Data Dictionary (PSDD)	1-1, 3-1, 5-1, 5-15, 5-17
file labeling	19-13
locally defined data elements.....	19-13
PDSDD.FUL.....	19-13
PDSDD.IDX	19-13
pointers	
catalog	19-9
data	14-1
in attached labels.....	14-1
in detached labels.....	14-1
description.....	14-2
include.....	14-1
rules for resolving	14-3
structure pointers.....	5-17
to descriptive text.....	5-17
use in labels.....	14-1
prefix or suffix data	
in QUBE object.....	A-86
in TABLE object.....	A-121, A-125
primary data object	
IMAGE object.....	4-1
SERIES object	4-1
SPECTRUM object.....	4-1
SPREADSHEET object.....	4-1
TABLE object.....	4-1
primitive data objects	A-1
primitive objects	
ARRAY.....	A-4
BIT_ELEMENT	A-12
COLLECTION	A-16
ELEMENT	A-39
processing level number	<i>See</i> data processing level
PRODUCT_ID.....	4-1, A-97

Q

QUBE object	
and HISTORY object.....	A-81
definition	A-80

R

REAL	C-6
RECORD_BYTES.....	5-11, A-111
record formats	15-1
blocking.....	15-1
FIXED_LENGTH.....	15-1
STREAM	15-2
UNDEFINED.....	15-3
VARIABLE_LENGTH	15-2
VAX counted byte strings.....	15-2
RECORD_TYPE	5-11,15-1, A-45
reference coordinates	2-1
body-fixed	2-2, 2-3
data elements.....	2-2
planetocentric	2-2, 2-3
planetographic.....	2-2, 2-3
ring systems	2-3
ring systems, data elements.....	2-4
reference frames	
B1950.....	2-1
standard inertial (J2000)	2-1
REFERENCE object.....	B-4, B-5, B-12, B-30, B-45, B-49, B-62, B-83
definition	B-68
reference surface models.....	2-5
digital image model (DIM)	2-5
digital terrain model (DTM)	2-5
references	
citations	H-1
contents	H-2
on-line access to PDS cataloged	H-1
what to reference	B-68, H-1
REFERENCE_KEY_ID	B-5, B-12, B-28, B-30, B-45, B-62, B-83
relative time	7-4
REPETITIONS	A-24
required files	
examples	D-1
REQUIRED_STORAGE_BYTES	20-3
ROOT directory files	19-8
rotation direction	

of Solar System bodies.....	2-2
ROTATIONAL_ELEMENT_DESC	
headings	B-26
ROW_BYTES	A-112
ROW_PREFIX_BYTES	A-67, A-89
use	A-120
ROW_SUFFIX_BYTES	A-67
use	A-120

S

safing data	G-1
criteria	G-1
procedures	G-1
standards	G-1
SAMPLE	A-77
SAMPLE_BITS	A-67
SAMPLE_DISPLAY_DIRECTION	A-68
SAMPLE_FIRST_PIXEL	B-31
SAMPLE_LAST_PIXEL	B-31
SAMPLE_TYPE	A-67
standard values.....	3-1
sampling parameter data	
in SERIES object	A-92
SAMPLING_PARAMETER_INTERVAL	A-88
SAMPLING_PARAMETER_RESOLUTION	18-1
SAMPLING_PARAMETER_UNIT	18-1
SAVED data.....	G-1
SCALING_FACTOR	A-70
sclk	<i>See</i> spacecraft clock count (sclk)
secondary data object	
HEADER object.....	4-1
HISTOGRAM object.....	4-1
PALETTE object	4-1
SEQUENCE_NUMBER	A-34, A-130
sequential media	A-34
SERIES object	A-18, A-111
definition	A-88
primary data object	4-1
TIME_SERIES	A-88
SOFTINFO.TXT	19-16, A-126
contents	D-9
example	D-9
software	
packaging for delivery	11-3
PDS inventory of tools and libraries	B-75

SOFTWARE object	B-77, B-78, B-79,
definition	B-75
software directory structure	
NAIF	E-1
software files	6-3
SOFTWARE subdirectory	19-16
SOFTWARE_INFORMATION object	
definition	B-77
SOFTWARE_ONLINE object	
definition	B-78
SOFTWARE_PURPOSE object	
definition	B-79
SOURCE_PRODUCT_ID	A-96
spacecraft clock count (sclk)	7-3
syntax	7-4
SPACECRAFT_ID	B-37
SPACECRAFT_CLOCK_START_COUNT	7-3, 7-4
SPACECRAFT_CLOCK_STOP_COUNT	7-3, 7-4
SPARE bytes	A-108, A-121
spare fields	
use in TABLE, SPECTRUM and SERIES objects	A-125
SPECTRUM object	A-18, A-111
definition	A-93
primary data object	4-1
SPICE kernels	
labelling	A-96
SPICE system	
kernel file extensions	A-96
SPICE_KERNEL object	
definition	A-96
SPREADSHEET object	A-96
CSV file format	A-100
definition	A-99
example	A-101
field delimiters	A-101
formats	A-101
primary data object	4-1
SRC directory	
in NAIF distribution	E-4
Standard Formatted Data Unit (SFDU)	5-11, 5-18
AMMOS usage	16-5
definition	16-1
examples	
FIXED_LENGTH file	16-8
STREAM file	16-8
UNDEFINED file	16-8

VARIABLE_LENGTH file.....	16-8
exceptions	16-9
I class	16-2, 16-6
K class	16-5
usage in PDS products	16-1
versions	16-1
Z class	16-2, 16-5
standards identifier data elements.....	5-10
START_BYTE	A-4, A-16, A-39, A-105
START_TIME	7-3, A-88
STOP_TIME	7-3, A-88
storage formats	
binary integers.....	3-5
STREAM	15-2
STRUCTURE pointer.....	A-109
STUFFIT utility	11-3
SUN_COMPLEX	C-9
SUN_INTEGER	C-1
SUN_REAL.....	C-6
SUN_UNSIGNED_INTEGER	C-2
Syquest disks	
delivery medium	11-1
Systeme Internationale d'Unites (SI)	18-1

T

TABLE object.....	A-18, A-67, A-81
and CONTAINER.....	A-121
ASCII field delimiters.....	A-123
ASCII tables.....	A-105
binary tables	A-108
definition	A-104
INDEX_TABLE	A-72
more than one in a single file	A-117
PALETTE	A-77
primary data object	4-1
SERIES object	A-88
spare bytes.....	A-121
SPARE bytes.....	A-108
SPECTRUM object.....	A-93
stored with IMAGE object.....	A-120
STRUCTURE pointer.....	A-109
variations.....	A-111
tables	
multiple tables in single file.....	A-117
tape volumes	8-4

tar utility.....	11-4
target	
acronyms	6-5
named features	19-14
TARGET object.....	B-82, B-83
definition	B-80
TARGET_INFORMATION object	
definition	B-82
TARGET_NAME	
acronym list.....	6-5
TARGET_REFERENCE_INFORMATION object	B-80
definition	B-83
TEXT	9-2
text	
plain text formatting.....	A-126
TEXT object.....	9-2
definition	A-126
time format	
conventional.....	7-2
native.....	7-3
PDS standard time format.....	7-3
precision.....	7-1
syntax	7-1
time tags	
format.....	2-1
two's complement.....	C-1

U

UNCOMPRESSED_FILE	20-2
UNCOMPRESSED_FILE_NAME	20-3
UNDEFINED.....	15-3
units of measure	18-1
default units.....	18-1
SI prefixes	18-2
SI units	18-1
supplementary units	18-3
symbols	18-1
Universal Time Coordinated (UTC)	<i>See</i> time format
date/time formats, use in	
UTC, use of.....	7-4
in labels and catalog files.....	7-3
UNK constant.....	17-1
Unknown constant	17-1
UNSIGNED_INTEGER	C-2

V

VARIABLE_LENGTH	15-2
VAX_BIT_STRING	C-16
VAX_COMPLEX	
storage format	C-15
VAX_DOUBLE.....	C-12
VAX_INTEGER.....	C-3
VAX_REAL	
storage format	C-12
VAX_UNSIGNED_INTEGER	C-5
VAXG_COMPLEX.....	C-15
VAXG_REAL	
storage format	C-12
version number.....	6-9
VICAR headers.....	A-58
VOLDESC.CAT	19-8, 19-19, A-13, A-130
VOLDESC.SFD.....	19-8
VOLINFO.TXT	19-12, 19-13, A-126
VOLUME	8-4, 19-8
volume	
ancillary volumes	19-2
definition	19-1
IDs.....	19-18
exceptions	19-20
logical volume naming.....	19-20
names	19-18
volume index.....	19-11
VOLUME object.....	A-13, A-30, A-32, A-34, A-44, A-133
definition	A-128
volume organization and naming.....	19-1
volume set	
definition	19-1
IDs.....	19-19
names	19-19
organization	
many data sets, many volumes	19-2, 19-7
many data sets, one physical volume.....	19-1, 19-6
many data sets, one volume	19-1, 19-5
one data set, many volumes	19-1, 19-4
one data set, one volume.....	19-1, 19-3
recommendations	19-7
types	19-1
VOLUME_FORMAT.....	A-130
VOLUME_ID	19-19, G-1
VOLUME_SET_ID	19-19

VOLUME_VERSION_ID.....	19-19
volumes, logical	19-10

W

Waiver (compliance).....	1-1
WORM disk	
delivery medium	11-1

Z

Zip compression.....	20-1
Zip disks	
delivery medium	11-1
ZIPINFO.TXT	20-3, 20-4