



The Digital Geographic Information Exchange Standard (DIGEST)

Part 2 - Annex E STANDARD ASCII TABLE of CONTENTS

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Annex E

Standard ASCII Table of Contents

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E.1 DEFINITIONS

DIGEST Exchange Medium

A “DIGEST Exchange Medium” comprises a collection of “DIGEST Information Packages” and may contain other sets of non-DIGEST Geo Data File(s), gathered together for the purpose of exchange (e.g., a CD-ROM containing DIGEST data). The medium contains spatial information over one or more “Geographic Areas of Interest”.

Geographic Area of Interest (AOI)

A “DIGEST Exchange Medium” provides information pertaining to one or more “Geographic Areas of Interest”. “Geographic Areas of Interest” are defined by Minimum Bounding Rectangles (MBR) and the spatial information for them are contained in one or more “Information Packages”. A “Geographic Areas of Interest” may refer to a parent database composed of all the “DIGEST Exchange Media” necessary to provide the spatial information over the total extent of the “Geographic Areas of Interest”.

Information Package

A collection of files stored on a medium according to a product specification and/or an exchange standard specification is called an “Information Package”. The Standard ASCII Table of Contents, described in this Annex, handles two types of “Information Package”: “DIGEST Information Packages” and sets of non-DIGEST Geo Data Files. The composition of an “Information Package” and the hierarchy of directories where the composing files are stored is standard and/or product specification dependent. Components of an “Information Package” may pertain to zero, one or more “Mosaics” designed over the “Geographic Area of Interest” to which the “Information Package” pertains.

DIGEST Information Package

The DIGEST interchange unit is called a “DIGEST Information Package”. A “DIGEST Information Package” may contain different data types as described in the theoretical model and/or use different encapsulations as described in the Annexes A to D. A DIGEST Information Package is composed of one or more DIGEST Geo Datasets [Libraries]. Each DIGEST Geo Dataset [Library] is composed of one or more DIGEST layers [coverages].

Mosaic

A “Mosaic” is a set of frames of uniform size organized in rows and columns, designed to cover an entire “Geographic Area of Interest”. If present on the “DIGEST Exchange Medium”, each frame is a component of an “Information Package” pertaining to the “Geographic Area of Interest” covered by the “Mosaic”.

Parent Database

A standard DIGEST Parent Database can be delivered using one or more DIGEST Exchange Mediums. Normally the Parent Database will be a DIGEST source, however, there may be hybrid cases when non-DIGEST sources are included (see Example E.3.4).

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E.2 STANDARD ASCII TABLE OF CONTENTS General Description

The purpose of the Standard ASCII Table of Contents (SATOC) is to:

- provide details about the contents of a DIGEST Exchange Medium (i.e., identify the different areas of interest it covers and its parent database, normally one developed in accordance with the DIGEST standard)
- list and provide direct access to the different Information Packages (i.e., identify the names of individual DIGEST Information Packages, the Geo Datasets [Libraries] within each DIGEST Information Package, the Layers [Coverages] within each Dataset [Library], and any other non-DIGEST file or files, describe the way each file is encapsulated, identify the components taking part into mosaics designed over the areas of interest).

Information contained in the Standard ASCII Table of Contents may duplicate information of the DIGEST Information Package Metadata Subset (see Section Two, Clause 9).

The SATOC is stored in a separate file named SATOC.TXT. It is, in effect, a supplemental file in the sense of being additional to the DIGEST Information Package Metadata Subsets of the different DIGEST Information Packages present on the DIGEST Exchange Medium.

The SATOC is encapsulated as a plain ASCII text file that requires no special software for interpretation. It uses key words and data separated with colons as described in Clause E.4 to allow correct interpretation by software.

It is the first file in the DIGEST Exchange Medium. The path to this SATOC.TXT file is considered to be the root of the DIGEST Exchange Medium, any path identified in the SATOC will be relative to the position of the SATOC.TXT file.

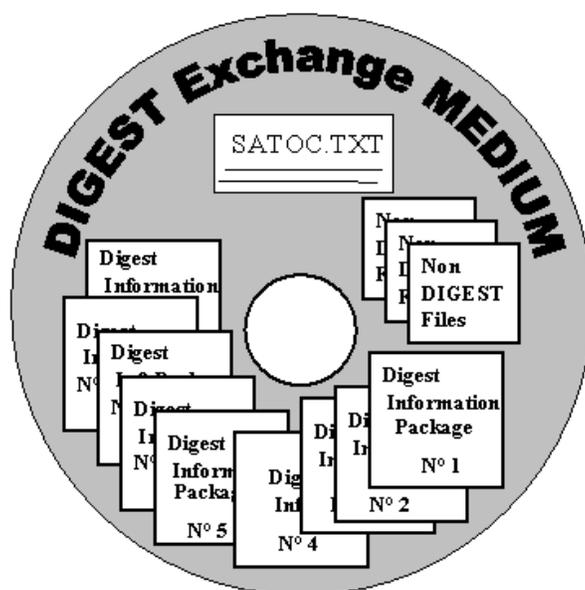


Figure E-1 Content of a DIGEST Exchange Medium

The SATOC is:

- mandatory whenever the DIGEST Exchange Medium contains more than one kind of data structure or encapsulation; or
- encouraged if there is need to provide an easy-to-read description of the content of the DIGEST Exchange Medium. For example, it could provide a useful index to specific files when a DIGEST Information Package contains multiple datasets arranged in a row/column grid (mosaic) of a geographic area.

E.3 DIGEST EXCHANGE MEDIUM EXAMPLES

The data of a DIGEST Exchange Medium may be simple or complex. It may contain data over one or more Areas of Interest (AOIs). The data may be all of one type (e.g., vector data) or a mix of several data types. Information packages and datasets may be stacked over the AOI and/or arranged in a row/column pattern to mosaic a large image, map, or terrain elevation spatial data domain. Alternatively, the datasets may contain layers or be a combination of stacking and layers. This section is written to define terms and provide some examples of how the SATOC provides a description of the content of a DIGEST Exchange Medium composed of one or more DIGEST Information Packages. It is helpful to think of the data organization, within the DIGEST Exchange Medium, in terms of a data directory structure of a DIGEST Exchange Medium, such as a CD-ROM. Among other things, the SATOC provides path names to the directory where specific data are stored.

The following examples begin with some simple DIGEST Exchange Mediums and expand to more complex ones intended to typify how data may be bundled to support specific needs.

The examples are not intended to be all-inclusive but will hopefully develop a structure robust enough to satisfy future requirements. Other compliant structures for DIGEST Exchange Mediums can be implemented if necessary.

E.3.1 A Single Data Type Over a Single AOI

This example is a DIGEST Exchange Medium containing a single Information Package, which is a DIGEST Information Package composed of a single dataset [library] of vector data over a selected AOI. The whole DIGEST Information Package is encapsulated in accordance with DIGEST Annex C. While the metadata provisions of Annex C are quite comprehensive, and themselves provide a good description of dataset contents, the SATOC provides a quick summary of the AOI spatial extent and names of the vector layers.

The name of the dataset is **vexam_1**. Annex C requires the Dataset [Library] to be contained within a database. For this example, this database is called **simpledb**. Two supporting tables are also required:

dht (Database Header Table)...transmittal information

lat (Library Attribute Table)...table of contents

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For the example, let there be four layers [coverages], named; vegetation (**veget**), transportation (**trans**), culture (**cultu**), and hydrography (**hydro**). Four support tables are also included:

lht (Library Header Table)...contents, security, source, etc.

cat (Coverage Attribute Table)...coverage names, topology level, etc.

grt (Geographic Reference Table)...coordinate system parameters

dqt (Data Quality Table)...data quality information

The directory structure would look like Figure E-2. According to DIGEST 2 Annex C, all directory and file names in VRF databases are to be in lower case. However, it is acknowledged that, when CD-ROM output is generated by conversion software compliant with ISO 9660, directory and file names are automatically converted to upper case.

The SATOC would have a DIGEST Exchange Medium Description set of lines, within which a single DIGEST Information Package would be identified over a single AOI with no mosaics. Section E.5.1. contains the full description of the SATOC file for this example.

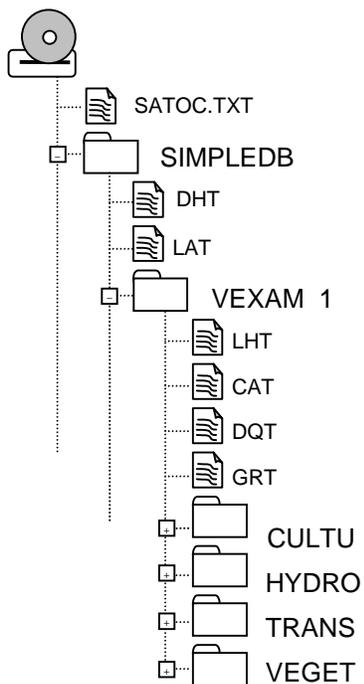


Figure E-2 Example of Vector Data Over Single AOI

E.3.2 A Single Data Type with Multiple Datasets in a Row / Column Mosaic

This example is a mosaic of multiple DIGEST datasets of raster data within a single DIGEST Information Package over a selected AOI. The name of the mosaic is **REXAM_1**. The AOI metadata identifies the spatial extent of the entire mosaic. The datasets will each have a MBR designating their unique spatial extent. Individual datasets are encapsulated in accordance with DIGEST Annex D. As allowed in DIGEST Part 2 Clause 12.2.4, the SATOC file is used as the encapsulation of the DIGEST Information Package Metadata Subset.

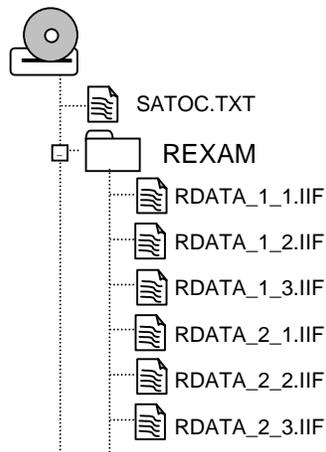


Figure E-3 Directory for Multiple Packages in a Mosaic

Assume the mosaic consist of 2 rows and 3 columns. Let individual datasets be named; **RDATA_1_1.IIF, RDATA_1_2.IIF, ..., RDATA_2_3.IIF**. The “.IIF” extension stands for Image Interchange Format as defined in Annex D. The directory structure would be as shown in Figure E-3.

The SATOC would identify the single overall AOI with a single Information Package, composed of multiple datasets that are involved in generating a single mosaic over this AOI. Within the AOI Description Set of Lines, a field would be generated to show the spatial extent of the AOI. In addition, the Mosaic description subset of lines would identify the total number of rows and columns in the mosaic, and the Dataset description subset of lines would identify row and column number and provide direct access to each frame within the mosaic. Section E.5.2. contains the full description of the SATOC file for this example.

E.3.3 Mixed Data Types within a Single Information Package Having a Single Dataset with Multiple Layers Over a Single AOI

This example is a single package composed of a single dataset with several layers, some of which are rasters and some are vectors. The vector layers are encapsulated in accordance with Annex C and the raster layers in accordance with Annex D. A single AOI is involved, and all layers cover the same spatial extent. Let the dataset name be **mix_exam** and it is within a database called **mixeddb**. This dataset is composed of 5 layers. Four of the layers are vector coverages named as in E.3.1: **trans, hydro, cultu, and veget**. The fifth layer is a raster image **image_1** contained in the **IMAGE_1.IIF** file.

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The directory structure would be as shown in Figure E-4. According to DIGEST 2 Annex C, all directory and file names in VRF databases are to be in lower case. However, it is acknowledged that, when CD-ROM output is generated by conversion software compliant with ISO 9660, directory and file names are automatically converted to upper case.

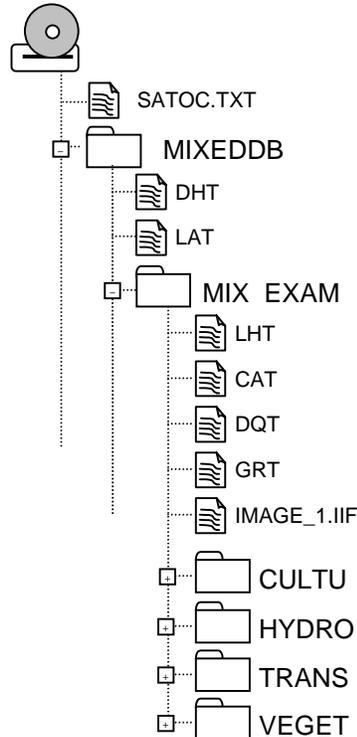


Figure E-4 Mixed Data Types in a Single Dataset

The SATOC would have a DIGEST Exchange Medium Description, which would identify a single AOI. The AIO Description Set of Lines would identify a single DIGEST Information Package.

The DIGEST Information Package Description set of lines would identify a single collection composed of a DIGEST Dataset, would provide direct access paths, and would identify encapsulation for each of the five layers. Clause E.5.3 contains the full description of the SATOC file for this example.

E.3.4 Mixed Data Types within Multiple Packages Where Each Package Has Only One Data Type but May Have a Dataset with Multiple Layers Over a Single AOI

This example is a DIGEST Exchange Medium with more than one package over the same AOI. Each DIGEST Information Package comprises a single dataset. One of the information packages comprises a single dataset [library] composed of several layers [coverages] of vector data and is encapsulated in accordance with Annex C. The other information package comprises a single dataset [library] composed of a single layer of raster image data and is encapsulated in accordance with Annex D. This, in fact, could be the same data described in **E.3.3** above, but organized differently in the directory.

The directory would be as shown in Figure E-5. According to DIGEST Part 2 Annex C, all directory and file names in VRF databases are to be in lower case. However, it is acknowledged that when CD-ROM output is generated by conversion software compliant with ISO 9660, directory and file names are automatically converted to upper case.

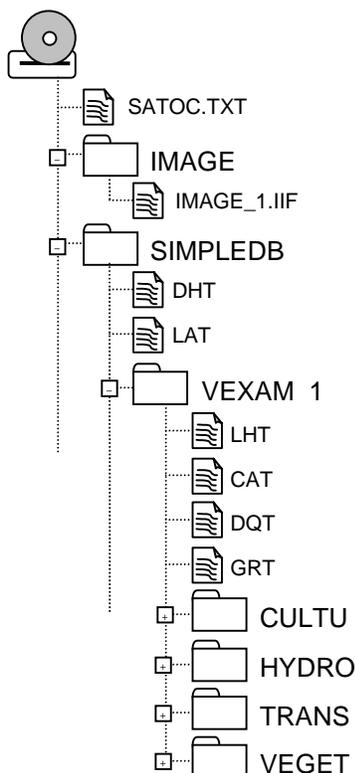


Figure E-5 Multiple Datasets Over a Single AOI

The SATOC would have a DIGEST Exchange Medium Description set of lines, within which the single AOI would be identified. The AOI Description would identify the two DIGEST Information Packages. One DIGEST Information Package Description Subset of lines would identify the vector dataset and provide access to the four vector layers. The other DIGEST Information Package Description Subset of lines would describe the single image layer.

E.3.5 Mixed Data Types with a Single DIGEST Information Package together with non-DIGEST Set of Files Over a Single AOI

This example describes a DIGEST Exchange Medium within which a single DIGEST Information Package with multiple datasets, all encapsulated in accordance with Annex D, is stored together with Digital Mean Elevation Data (DMED) and Digital Terrain Elevation Data (DTED) Levels 1 and 2 files compliant with DTED format as defined by MIL-PRF-89020B.

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In this example four information packages, a DIGEST Information Package and three Non-DIGEST (DTED) sets of files, refer to a single AOI.

The DIGEST Information Package includes Annex D encapsulated files for Terrain Height Error Data (THED), Ascending Orthorectified Image Mosaic (AOIM), Descending Orthorectified Image Mosaic (DOIM), and Seam Hole Composite Map (SHCM) contained within Longitude directories. As allowed in DIGEST Part 2 Clause 12.2.4, the SATOC file is used as the encapsulation of the DIGEST Information Package Metadata Subset.

The first non-DIGEST set of files includes a single file for Digital Mean Elevation Data (DMED) covering the entire AOI. The second non-DIGEST set of files includes DTED Level 1 files contained within Longitude directories. The third non-DIGEST set of files includes DTED Level 2 files contained within Longitude directories.

Longitude directories have six files for each included latitude. These are the two DTED files, one THED file, one AOIM file, one DOIM file, and one SHCM file. The example describes a situation where there are 10 latitude cells (46n to 55n) in a single longitude directory (087w). The directory structure would be as shown in Figure E-6.

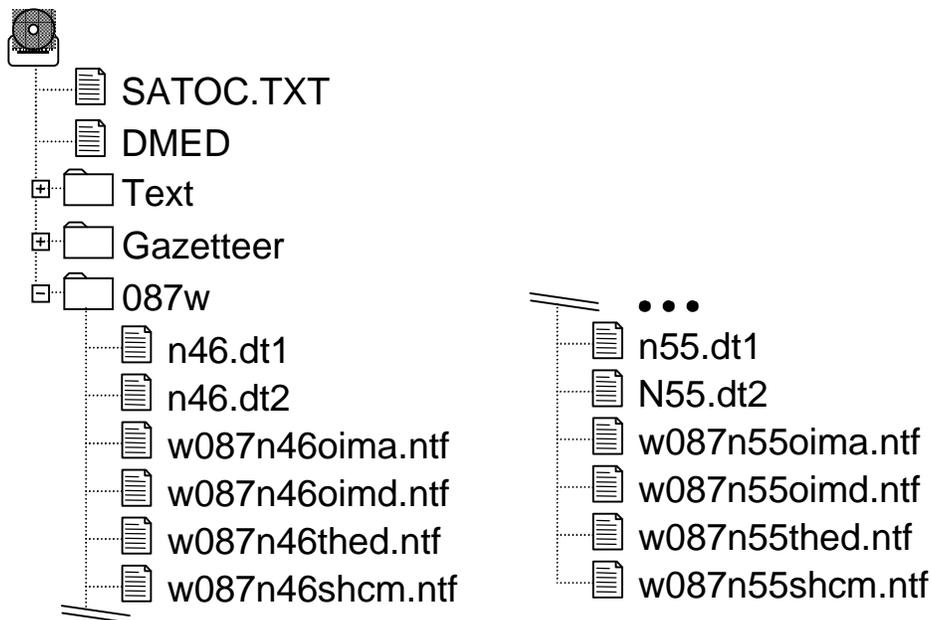


Figure E-6

Mixed Data Types with Multiple Packages including non-DIGEST Files
over a Single AOI

The SATOC DIGEST Exchange Medium Description would identify the single overall AOI and its overall spatial extent with four information packages pertaining to the AOI. Each Information Package Description set of lines provides direct access to files within the DIGEST Exchange Medium. Clause E.5.5 contains the full description of the SATOC file for this example.

Note that the exact same directory structure could be implemented in the SATOC as a single non-DIGEST set of files composed of three collections of files: the DMED file and all DTED files and four DIGEST Information Packages each comprised of ten DIGEST datasets, each of them corresponding to a single IIF/NSIF file. Detailed description of this alternative example is not provided but could be derived from the example described in E.3.6.

E.3.6 Mixed Data Types with Multiple Packages together with non-DIGEST Files in a Mosaic Over a Single AOI

This example describes a DIGEST Exchange Medium within which several DIGEST Information Packages with multiple datasets, all encapsulated in accordance with Annex D, are stored together with Digital Mean Elevation Data (DMED) and Digital Terrain Elevation Data (DTED) Levels 1 and 2 files compliant with DTED format as defined by MIL-PRF-89020B. DIGEST Information Packages and DTED Levels 1 and 2 are arranged in a row/column pattern over a single AOI.

This, in fact, could be the same kind of data as described in **E.3.5** above but is organized differently in the directory. AOIM and DOIM are omitted from the example but would follow the same pattern as shown for THED and SHCM. The file naming convention is changed to allow flexibility in directory structure. Thus, a file name reflects both latitude and longitude.

In this example, three information packages, two DIGEST Information Packages and one non-DIGEST (DTED) set of files, refer to a single AOI.

Each DIGEST Information Package includes Annex D encapsulated files, Terrain Height Error Data (THED) for the first DIGEST Information Package and Seam Hole Composite Map (SHCM) for the second one. As allowed in DIGEST Part 2 Clause 12.2.4, the SATOC file is used as the encapsulation of the DIGEST Information Package Metadata Subset. Within each DIGEST Information Package, datasets are arranged into a single mosaic over the AOI, M_THED (a 2 by 2 mosaic for THED), and M_SHCM (a 2 by 2 mosaic for SHCM). There is one different directory for each DIGEST Information Package.

The non-DIGEST set of files includes three groups of files: one collection of a single DMED file, and two mosaics, M_DTED1 (a 2 by 2 mosaic for DTED Level 1) and M_DTED2 (a 2 by 2 mosaic for DTED Level 2).

The directory structure would be as shown in Figure E-7.

The SATOC DIGEST Exchange Medium Description would identify the single overall AOI, and its overall spatial extent with three information packages pertaining to the AOI. Each Information Package Description set of lines would identify the different collection of files or mosaics of frames covering the AOI. In addition, the Mosaic description subset of lines would identify the total number of rows and columns in the mosaic and the Dataset description subset of lines would identify row and column number and provide direct access to each frame within the mosaic. Clause E.5.6. contains the full description of the SATOC file for this example.

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Note that the exact same directory structure could be implemented in the SATOC as a single non-DIGEST set of files and a single DIGEST Information Package composed of eight DIGEST datasets, each of them corresponding to a single IIF/NSIF file, arranged in two different mosaics. Detailed description of this alternative example is not provided.

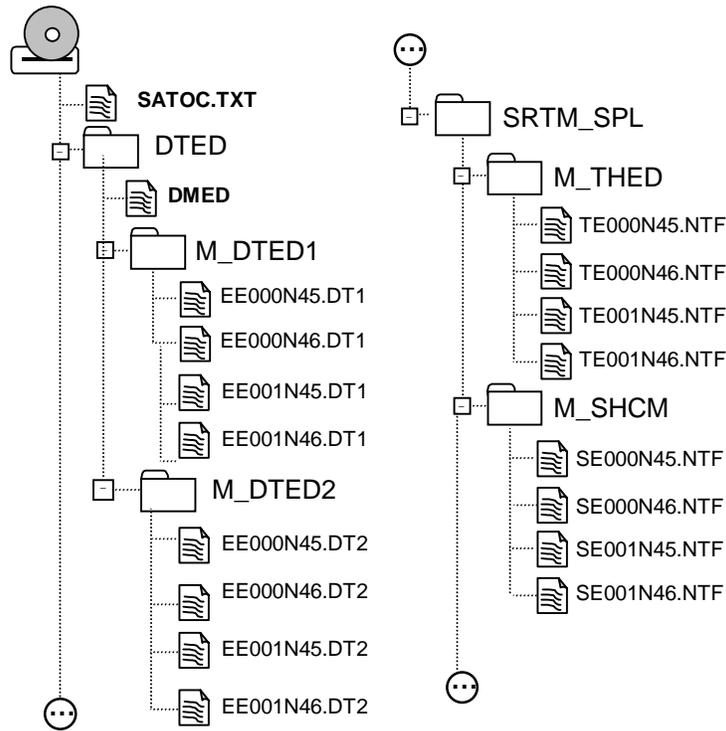


Figure E-7
Mixed Data Types with Multiple Packages including non-DIGEST Files
in Mosaics Over a Single AOI

E.3.7 ASRP or USRP DIGEST Information Packages

Having been initially designed for magnetic tape exchange, ASRP and USRP specifications do not include standard directories and files hierarchy. Two different implementation of the same ASRP DIGEST Information Package composed of a single raster dataset identified as "ASRP" are shown in Figure E-8.

On DIGEST Exchange Medium identified as ProducerF, the five files composing the single dataset ASRP of the DIGEST Information Package are gathered in a directory placed directly under the root of the DIGEST Information Package. On DIGEST Exchange Medium identified as ProducerU, one additional level is included in the hierarchy and the five files composing the single dataset ASRP of the DIGEST Information Package are gathered in a sub-directory of the "ASRP" directory placed under the root of the DIGEST Information Package.

The SATOC direct access mechanism allows software to access data independently of the producers' specific ways of implementing. Clause E.5.7 contains the full description of the SATOC files for this example.

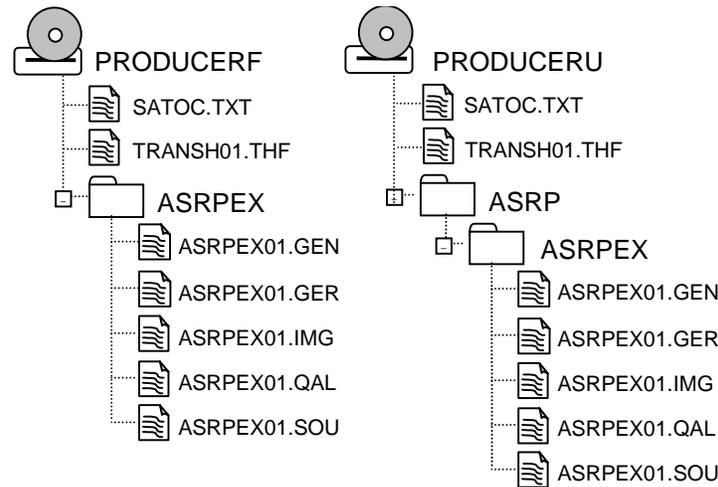


Figure E-8 Different Directory Structures for the Same Information Package

E.4 DETAILED REQUIREMENTS

This section provides detailed requirements for the SATOC.

E.4.1 ASCII Encapsulation

The SATOC is an ASCII file composed of variable length lines, ended by a <end-of-line> character sequence which may be one of the following: <CR>, <LF> or <CR><LF>.

Tabulations are prohibited. Valid characters within a line are ASCII 7-bit characters with an ASCII code in the range 32 to 126 (inclusive) (see Part 3 Clause 5).

Lines are composed of keywords and associated values. The keyword must start at the first character within each line and is separated from the value by a colon (:). It does not include any blank character. Blank characters found between the first character of the line and the colon (:) shall be ignored. The maximum keyword length is twenty characters. The associated value begins at the first non-blank character encountered at the right of the colon ending the keyword and ends at the end-of-line sequence.

Comment lines (keyword "C") and blank lines can be situated anywhere in the file.

E.4.2 Content of the Standard ASCII Table of Contents

The Standard ASCII Table of Contents begins with the "DIGEST Exchange Medium Description" set of lines.

The "DIGEST Exchange Medium Description" set of lines is followed by one "AOI Description" set of lines. The following pattern occurs once for each area of interest to which at least one information package stored on the Digest Exchange Medium pertains.

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Each "AOI Description" set of lines is then followed by one "Information Package Description" set of lines for each Information Package – DIGEST Information Package or non-DIGEST set of file(s) – pertaining the AOI.

Each "Information Package Description" set of lines begins with a "Information Package General Description" subset of lines, which includes a general description of the Information Package – DIGEST Information Package or non-DIGEST set of file(s) – together with its access path and identification. It is followed by the "Information Package Content" subset of lines which provides access path, identification and general description for each component – DIGEST dataset or non-DIGEST file – within the Information Package and also describes the role each component may play in mosaics designed over the AOI.

The General layout of the content of the Standard ASCII Table of Contents is as follows.

Standard ASCII Table of Contents:

DIGEST Exchange Medium Description Set of Lines

- Optional identification, Standard, security
- Number of AOI [NUM_AOI]

For Each AOI to which information within the DIGEST Exchange Medium pertain....

AOI Description Set of Lines

- MBR of AOI, optional reference to a parent database
- Number of Information Package within the DIGEST Exchange Medium pertaining to the AOI(DIGEST Information Package or set of non-DIGEST files) [AOI_NUM_PACK]

For Each Information Package (DIGEST Information Package or set of non-DIGEST files) within the DIGEST Exchange Medium pertaining to the AOI....

Information Package Description Set of Lines

- Information Package General Description subset of lines:
Access path, identification, Standard, security, encapsulation
- Information Package Content subset of lines (see E.4.2.3)

Tables E-1 to E-3 list the keywords composing each set or subset of lines. Keywords must be written in uppercase letters. Mandatory (M) keywords must be present in the same order as they appear in the tables. Optional (O) keywords may be absent, but when present must occur in the same order as they appear in the tables. Specific dependency conditions for presence or omission of keywords are documented in each table header.

Some of these keywords are used to provide direct access to the files composing the different Information Packages on the DIGEST Exchange Medium. Detailed requirements for populating lines beginning with these keywords are encapsulation dependent and are documented in Clause E.4.3.

E.4.2.1 “DIGEST Exchange Medium Description” Set of Lines

The “DIGEST Exchange Medium Description” set of lines identifies how many Areas of Interest are included. It may also identify the sequence number of the medium when it is part of set being used to transfer a large database. The standard used for the SATOC and other security information is included.

Table E- 1 Keywords of the “DIGEST Exchange Medium Description” Set of Lines

KEYWORD	M/O	Description
EXCH_MED_ID	O	A unique identifier for the Exchange Medium. This may be used to identify a pre-defined collection of DIGEST information Packages and non-DIGEST set of files
EXCH_MED_NUM	O	Sequence number of this DIGEST Exchange Medium within a pre-defined collection of DIGEST Exchange Medium. May not be present if the EXCH_MED_ID is absent.
STD_NAME	M	Edition Id of the standard used to producing the SATOC File
STD_AMDT	M	Amendment (or notice) number of the standard used to producing the SATOC File. Default value is 0
STD_DATE	M	Date of the edition or amendment considered (YYYYMMDD)
SECURITY_CLASS	M	Security classification of the DIGEST Exchange Medium : T (Top Secret), S (Secret), C (Confidential), R (Restricted or alternatively for official use only) or U (Unclassified)
RELEASIBILITY	M	Releasibility restrictions for this DIGEST Exchange Medium
NUM_AOI	M	Number of AOIs within the DIGEST Exchange Medium (at least one)

E.4.2.2 “AOI Description” Set of Lines

For each AOI, the “AOI Description” set of lines begins with an identification of the AOI; which includes a name, a WGS84 Minimum Bounding Rectangle, and when relevant, the description of the parent database to which it pertains. This identification is followed by the number of Information Packages, DIGEST Information Package or set of non-DIGEST files, which are associated with the AOI.

Table E- 2 Keywords of the “AOI Description” Set of Lines

KEYWORD	M/O	Description
		{text between curly brackets refers to Part 2 - 9 DIGEST INFORMATION PACKAGE METADATA : DATABASE CONTEXT}
AOI_NAME	M	Area of Interest designation or Database designation {DATABASE IDENTIFICATION: designation} Use of folder name is recommended when the DIGEST Exchange Medium comprises more than one AOI.

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MBR	M	WGS 84 MBR of the Area of Interest formatted as follows: <SW. Lon>; <SW.Lat>;<NE.Lon>;<NE.Lat> where : – <SW. Lon> and <SW. Lat> are respectively the WGS84 Longitude and Latitude (in decimal degrees) of the SW corner of the MBR – <NE. Lon> and <NE. Lat> are respectively the WGS84 Longitude and Latitude (in decimal degrees) of the NE corner of the MBR
DB_NUM_PACK	O	Total number of DIGEST Information Packages to be used to send the parent database or to cover the area of interest {DATABASE TRANSMISSION: total number of DIGEST Information Packages}
AOI_NUM_PACK	M	Total number of Information Package – DIGEST Information Package or non-DIGEST set of file(s) – within the exchange medium pertaining to the AOI. (at least one)

E.4.2.3 “Information Package Description” Set of Lines

For each Information Package – DIGEST Information Package or non-DIGEST set of file(s) – within the AOI, there is an Information Package Description set of lines that includes the main metadata information about the Information Package and its components – DIGEST Datasets or non-DIGEST files – and provides direct access to the files containing the information.

The General layout of the Information Package Description set of lines is as follows.

Information Package Description set of line

Information Package General Description Subset of Lines

- Access Path, identification, Standard, security, encapsulation

Information Package Content subset of Lines

- Total number of datasets [NUM_DATASETS]
- Number of groups of components [NUM_MOSCOLLECS]

For Each group of components....

- Mosaic flag
- If Mosaic, Mosaic description subset of lines: identification and total number of rows and columns in the mosaic
- Number of components [NUM_COMPONENTS]

For Each Dataset or file within the group....

Dataset description subset of lines

- If mosaic, Frame description: row and column number, update information

- Access Path, identification, security, structure, encapsulation
- Number of layers [NUM_LAYERS]

For Each Layer in the Dataset....

- Access Path, identification, structure, encapsulation

Each “Information Package Description” set of lines begins with an "Information Package General Description” subset of lines which provides identification and access path to the Information Package, identifies the standard used for the whole Information Package and the encapsulation used for the DIGEST Information Package Metadata subset. It is followed by the "Information Package Content” subset of lines.

Table E- 3a Keywords of the “Information Package General Description” Subset of Lines

Most keywords in this subset of lines repeat information that can be also found in the DIGEST Information Package Metadata Subset of the DIGEST Information Packages (See Part 2 Clause 9).

“(D)M” indicates the keyword is mandatory for DIGEST Information Packages only, and optional otherwise.

KEYWORD	M/O	Description
		{text between curly brackets refers to Part 2 - 9 DIGEST INFORMATION PACKAGE METADATA }
PACK_PATH	M	Path (file or folder name) providing access to the Information Package – DIGEST Information Package or non-DIGEST set of file(s) – (see E.4.3)
PACK_ID	^(D) M	Unique ID for this Information Package – DIGEST Information Package or non-DIGEST set of file(s). {DIGEST INFORMATION PACKAGE IDENTIFICATION: identifier} (mandatory also for non-DIGEST set of files if more than one set of files share the same access path [PACK_PATH])
PACK_EDN	^(D) M	Edition Number for this Information Package – DIGEST Information Package or non-DIGEST set of file(s). {DIGEST INFORMATION PACKAGE IDENTIFICATION: edition number}
CREATION_DATE	^(D) M	Creation date of this Information Package – DIGEST Information Package or non-DIGEST set of file(s). {DIGEST INFORMATION PACKAGE IDENTIFICATION: exchange date}
PACK_META_ENCAP	M	Identify the encapsulation used for the DIGEST Information Package metadata. File-naming conventions and directories structure depends on the encapsulation. A: (ISO 8211), B:(ISO 8824), C: (VPF/VRF), D: (IIF/NSIF), E: (SATOC used as the encapsulation for the DIGEST Information Package metadata when the DIGEST Information Package is composed of many IIF/NSIF encapsulated dataset) Z: non compliant with DIGEST

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STD_NAME	M	Edition id of the standard used to producing the whole Information Package – DIGEST Information Package or non-DIGEST set of file(s). Valid values are: DIGEST 1.2, DIGEST 2.0, MIL-STD-89020B, ...
STD_AMDT	M	Amendment (or notice) number of the standard used to producing the whole Information Package – DIGEST Information Package or non-DIGEST set of file(s). Default value is 0.
STD_DATE	M	Date of the edition or amendment considered
SECURITY_CLASS	M	Security classification of the Information Package – DIGEST Information Package or non-DIGEST set of file(s): T (Top Secret), S (Secret), C (Confidential), R (Restricted or alternatively for official use only) or U (Unclassified).
RELEASIBILITY	M	Releasibility restrictions for this DIGEST Information Package.

Components within the Information Package (DIGEST datasets within the DIGEST Information Package or non-DIGEST files within a set of non-DIGEST files) may be gathered in groups of components, which represent either a simple collection of components with no specific pattern or frames within a mosaic designed to cover the AOI to which the Information Package pertains.

Each "Information Package Content" subset of lines begins with the total number of components (DIGEST datasets or non-DIGEST files) within the Information Package, followed by the number of groups of components.

For each group of components, a Mosaic flag indicates whether this group is arranged as a mosaic over the AOI. If yes, the Mosaic flag is followed by the "Mosaic description" subset of lines.

The "Mosaic description" subset of lines indicates the mosaic name, the total number of columns (West to East) and total number of rows (North to South) of frames of uniform size within the Area of Interest. The size of each frame is given by the MBR for the dataset contained within the frame.

The "Mosaic description" subset of lines or, when the group of components is a simple collection, the Mosaic flag, is followed by the number of components (DIGEST datasets or non-DIGEST files) in the group .

It is then followed by one "Dataset Description" subset of lines for each DIGEST Dataset or Non-DIGEST file within the group.

Table E- 3b Keywords of the “Information Package Content” Subset of Lines (start)

Most keywords in this subset of lines repeat information that can be also found in the DIGEST Dataset Metadata Subset of the DIGEST Dataset (See Part 2 Clause 10).

“(D)M” indicates the keyword is mandatory for DIGEST Information Packages only, and optional otherwise.

“(M)M” indicates the keyword is mandatory for Groups arranged as a Mosaic (MOSAIC_FLAG=YES) and is omitted otherwise.

“(M)O” indicates the keyword is optional for Groups arranged as a Mosaic (MOSAIC_FLAG=YES) and is omitted otherwise.

“(1)” Occurs once for each group of components within the Information Package.

KEYWORD	M/O	Description {text between curly brackets refers to Part 2 — 10 GENERAL INFORMATION :DATASET IDENTIFICATION }
NUM_DATASETS	M	Total Number of Datasets within the DIGEST Information Package or Total Number of non-DIGEST file within a non-DIGEST set of files (at least one).
NUM_MOSCOLLECS	M	Number of mosaics or Collections within the Information Package. (at least one)
The following keywords occur once for each group of components within the Information Package		
MOSAIC_FLAG	⁽¹⁾ M	YES or NO (case independent). Indicates whether the group of component is arranged as a Mosaic over the AOI or not.
NAME_MOSAIC	^(1M) M	Name of mosaic.
NS_NUM_ROWS	^(1M) M	Number of frame rows (North to South) in the mosaic.
EW_NUM_COLS	^(1M) M	Number of frame columns (West to East) in the mosaic
DATA_TYPE	^(1M) O	Series Designator or Product type and level. Useful indication when common to frames of the Mosaic.
NUM_COMPONENTS	⁽¹⁾ M	Number of components (DIGEST datasets or non-DIGEST files) within the group (at least one).
A Dataset Description subset of lines occurs then once for each component within the group (see Table E-3c).		

If the group is arranged as a Mosaic, the “Dataset Description” subset of lines begins by the frame description, its column and row number within the mosaic, and update information. It is followed by its access path and identification, security information, data structure and encapsulation used for the Dataset Metadata Subset. This is followed, for DIGEST Datasets only, by the number of DIGEST Layers within the DIGEST Dataset.

The “DIGEST Dataset Description” subset of lines is followed by one “DIGEST Layer Description” subset of lines for each DIGEST Layer within the DIGEST Dataset.

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Table E- 3c Keywords “Dataset Description” Subset of Lines

Most keywords in this subset of lines repeat information that can be also found in the DIGEST Dataset Metadata Subset of the DIGEST Dataset (See Part 2 Clause 10).

“(D)M” indicates the keyword is mandatory for DIGEST Information Packages only, and optional otherwise.

“(M)M” indicates the keyword is mandatory for Groups arranged as a Mosaic (MOSAIC_FLAG=YES) and is omitted otherwise.

“(M)O” indicates the keyword is optional for Groups arranged as a Mosaic (MOSAIC_FLAG=YES) and is omitted otherwise.

“(1)” Occurs once for each Dataset or each non-DIGEST file within the group of components.

KEYWORD	M/O	Description {text between curly brackets refers to Part 2 — 10 GENERAL INFORMATION :DATASET IDENTIFICATION}
ROW	^(1M) M	Row number (North to South) of the frame
COL	^(1M) M	Col number (West to East) of the frame
NEW_REPLACE	^(1M) M	Update Flag: new or replacement data Default value is new
DATASET_NAME	⁽¹⁾ M	Short unique designation of this Dataset [Library] within the DIGEST Information Package or File Name within a non-DIGEST set of file(s). {designation} (see E.4.3)
DATASET_PATH	⁽¹⁾ M	Physical path to the dataset (standard dependent) (see E.4.3)
DATASET_META_ENCAP	⁽¹⁾ M	Identify the encapsulation used for the DIGEST Dataset [Library] metadata. File-naming conventions and directories structure depends on the encapsulation. A (ISO 8211), B (ISO 8824), C (VPF/VRF), D (IIF/NSIF) Z: non compliant with DIGEST {encapsulation}
DATA_TYPE	⁽¹⁾ O	Series Designator or Product type and level {dataset type}
DATA_STRUCTURE	⁽¹⁾ O	Code of Data Structure used primarily for this Dataset [Library] {structure} 0 = Monochrome Raster 1 = Matrix (Values) 2 = Matrix (Coded) 3 = Multiband Raster (RGB or YCbCr or other multiband imagery) 4 = Colour Coded Raster 5 = Vector (Level 0 Topology – Spaghetti) 6 = Vector (Level 1 Topology – Chain-node) 7 = Vector (Level 2 Topology – Planar Graph) 8 = Vector (Level 3 Topology – Full Topology) 9 = Mixed data Structures.
SECURITY_CLASS	⁽¹⁾ M	Security classification of dataset T (Top Secret), S (Secret), C (Confidential), R (Restricted or alternatively for official use only) or U (Unclassified).
RELEASIBILITY	⁽¹⁾ M	Releasibility restrictions for dataset.

MBR	⁽¹⁾ M	WGS 84 MBR of the Area of Interest formatted as follows: <SW. Lon>;<SW. Lat><NE. Lon>;<NE.Lat>; where : <ul style="list-style-type: none"> - <SW. Lon> and <SW. Lat> are respectively the WGS84 Longitude and Latitude (in decimal degrees) of the SW corner of the MBR. - <NE. Lon> and <NE. Lat> are respectively the WGS84 Longitude and Latitude (in decimal degrees) of the NE corner of the MBR.
NUM_LAYERS	⁽¹⁾ ^(D) M	Number DIGEST layers in the DIGEST dataset at least one for DIGEST Datasets, zero or omitted for non-DIGEST files (DATASET_META_ENCAP = Z)
A DIGEST Layer Description subset of lines occurs then once for each layer within the DIGEST Dataset (see Table E-3d).		

Table E- 3d Keywords of the “DIGEST Layer Description” Subset of Lines

Most keywords in this subset of lines repeat information that can be also found in the DIGEST Dataset Metadata Subset of the DIGEST Dataset (See Part 2 Clause 10).

“(D)M” indicates the keyword is mandatory for DIGEST Information Packages only, and optional otherwise.

“(2)” Occurs once for each DIGEST layer within the DIGEST dataset (omitted if [NUM_LAYERS] is omitted or null).

KEYWORD	M/O	Description
		{text between curly brackets refers to Part 2 — 10 GENERAL INFORMATION: CONTENT LAYER [COVERAGE]: IDENTIFICATION}
LAYER_NAME	⁽²⁾ ^(D) M	Short unique designation of this Layer within the dataset{designation }(see E.4.3)
LAYER_PATH	⁽²⁾ ^(D) M	Physical path to the Layer (standard dependent) (see E.4.3)
LAYER_ENCAPSULATION	⁽²⁾ ^(D) M	Code identifying the encapsulation used for the DIGEST Exchange Medium of this Layer {encapsulation} A:(ISO 8211), B:(ISO 8824), C:(VPF/VRF), D:(IIF/NSIF)
LAYER_NUM	⁽²⁾ ^(D) O	A sequential number for the Layer [Coverage]
LAYER_DESCRIPTION	⁽²⁾ ^(D) O	Full description of this Layer {description}
LAYER_DATA_STRUCTURE	⁽²⁾ ^(D) M	Code of Data Structure used for this Layer {structure} 0 = Monochrome Raster 1 = Matrix (Values) 2 = Matrix (Coded) 3 = Multiband Raster (RGB or YCbCr or other multiband imagery) 4 = Colour Coded Raster 5 = Vector (Level 0 Topology – Spaghetti) 6 = Vector (Level 1 Topology – Chain-node) 7 = Vector (Level 2 Topology – Planar Graph) 8 = Vector (Level 3 Topology – Full Topology.

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E.4.3 Access Mechanism to the Files within the DIGEST Exchange Medium

The Standard ASCII Table of Contents includes pathnames to the DIGEST Information Package, dataset, and layer files. The pathnames and files in the SATOC are written in upper case, and the directory delimiters are given as backward slashes (\).

The root directory for a given DIGEST Exchange Medium shall be the directory where the SATOC.TXT file is located. Any other path within the SATOC will be expressed relative to this root directory. Path names within the SATOC will begin with a dot (.) character indicating the root directory for the DIGEST Exchange Medium. Path names within the SATOC will not include a backward slash at their end. Generally, the path name to a specific file does not include the file name.

In DIGEST, file naming convention depends on the encapsulation. Table E-4 documents how the appropriate keywords are populated in the DIGEST Information Package description set of lines, depending on the different encapsulations, except Annex B Encapsulated Data, which would not normally use this type of exchange.

Table E- 4a Names and Pathnames within DIGEST Information Package Description
Subset of Lines for Annex A and Annex C Encapsulated Data

PACK_META_ENCAP	A	C
PACK_PATH	Pathname from the DIGEST Exchange Medium root to the TRANSH01.THF file	Pathname from the DIGEST Exchange Medium root to the dht, lat files
PACK_ID	Same as the Digest Information Package identifier in THF.VDR.URF	Same as the transmittal_id in the dht file

DATASET_META_ENCAP	A	C
DATASET_NAME	Same as the Dataset designation (ZZZZZZ) in THF.FDR.NAM	Same as the library_name in the lat file (lowercase)
DATASET_PATH	Pathname from the DIGEST Exchange Medium root to the ZZZZZZ01.GEN file	Pathname from the DIGEST Exchange Medium root to the lht, cat files

LAYER_ENCAPSULATION	A	C
LAYER_NAME	Same as the Layer file name (ZZZZZDD.xxx) in GIN.SPR.BAD	Same as the coverage_name in the cat file. (lower case)
LAYER_PATH	Pathname from the DIGEST Exchange Medium root to the ZZZZZZDD.xxx Geo Data file	Pathname from the DIGEST Exchange Medium root to the fcs file.

Table E- 4b Names and Pathnames within DIGEST Information Package Description
Subset of Lines for Annex D Encapsulated Data

PACK_META_ENCAP	D	E (DIGEST allows to gather several IIF files in a single DIGEST Information package using the SATOC file as the DIGEST Information Package Metadata subset encapsulation see Clause 12.2.4)
PACK_PATH	Pathname from the DIGEST Exchange Medium root to the IIF file (does not include the name of the IIF file)	DIGEST Exchange Medium root
PACK_ID	Name of the IIF file	A unique ID defined by the producer of the DIGEST Exchange Medium.

DATASET_META_ENCAP	D	
DATASET_NAME	Name of the IIF file	
DATASET_PATH	Pathname from the DIGEST Exchange Medium root to the IIF file (does not include the name of the IIF file)	

LAYER_ENCAPSULATION	D	
LAYER_NAME	Same as the Image Identifier 1 (IID1) in the image subheader.	
LAYER_PATH	Pathname from the DIGEST Exchange Medium root to the IIF file, including the IIF file name.	

Use of Access mechanism is standard dependent. When non-DIGEST set of file(s) are included in the DIGEST Exchange Medium (PACK_META_ENCAP or DATASET_META_ENCAP with a "Z" value), standard ways of filling those fields are defined in the product specification.

Table E- 4c Names and Pathnames within DIGEST Information Package Description
Subset of Lines for non-DIGEST Set of Files

PACK_META_ENCAP	Z	
PACK_PATH	Pathname from the DIGEST Exchange Medium root to the set of non-DIGEST files.	
PACK_ID	A unique ID defined by the producer of the DIGEST Exchange Medium.	

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DATASET_NAME	Name of the non-DIGEST file.
DATASET_PATH	Pathname from the DIGEST Exchange Medium root to the file identified by DATASET NAME (does not include the name of the non-DIGEST file).
DATASET_META_ENCAP	Z

E.5 EXAMPLES OF SATOC FILES

E.5.1 A Single Data Type Over a Single AOI

C: Begin the SATOC.TXT file

C: Begin the DIGEST Exchange Medium Description Set of Lines

STD_NAME: DIGEST 2.1
STD_AMDT: 0
STD_DATE: 20000901
SECURITY_CLASS: U
RELEASIBILITY: FOR OFFICIAL USE ONLY
NUM_AOI: 1

C: End of Exchange Medium Set of Lines

C: Begin the AOI Description Set of Lines

AOI_NAME: simpledb
MBR: -1.5;42.;6.0;51.5
AOI_NUM_PACK: 1

C: Begin the DIGEST Information Package Description Set of Lines

C: For the AOI

PACK_PATH: .\SIMPLEDB
PACK_ID: simpledb_DEM
PACK_EDN: 1
CREATION_DATE: 19990815
PACK_META_ENCAP: C
STD_NAME: Digest 2.0
STD_AMDT: A
STD_DATE: 19990228
SECURITY_CLASS: U
RELEASIBILITY: FOR OFFICIAL USE ONLY

NUM_DATASETS: 1
NUM_MOSCOLLECS: 1
MOSAIC_FLAG: no
NUM_COMPONENTS: 1

C:

C: Begin the Dataset Set of Lines

DATASET_NAME: vexam_1
DATASET_PATH: .\SIMPLEDB\VEXAM_1
DATASET_META_ENCAP: C
SECURITY_CLASS: U
RELEASIBILITY: FOR OFFICIAL USE ONLY

MBR: -1.5;42.;6.0;51.5

NUM_LAYERS: 4

C: Begin the Layer Set of Lines

LAYER_NAME: veget

LAYER_PATH: .\SIMPLEDB\VEXAM_1\VEGET

LAYER_ENCAPSULATION: C

LAYER_DATA_STRUCTURE: 8

C:

LAYER_NAME: trans

LAYER_PATH: .\SIMPLEDB\VEXAM_1\TRANS

LAYER_ENCAPSULATION: C

LAYER_DATA_STRUCTURE: 8

C:

LAYER_NAME: cultu

LAYER_PATH: .\SIMPLEDB\VEXAM_1\CULTU

LAYER_ENCAPSULATION: C

LAYER_DATA_STRUCTURE: 8

C:

LAYER_NAME: hydro

LAYER_PATH: .\SIMPLEDB\VEXAM_1\HYDRO

LAYER_ENCAPSULATION: C

LAYER_DATA_STRUCTURE: 8

C: End of Layer Set of Lines

C: End of Dataset Set of Lines

C: End of the DIGEST Information Package Description Set of Lines

C: End of the AIO Set of Lines

C: End of the SATOC.TXT file

E.5.2 A Single Data Type with Multiple Datasets in a Row / Column Mosaic

C: Begin the SATOC.TXT file

C: Begin the DIGEST Exchange Medium Description Set of Lines

STD_NAME: Digest 2.1

STD_AMDT: 0

STD_DATE: 20000901

SECURITY_CLASS: U

RELEASIBILITY: FOR OFFICIAL USE ONLY

NUM_AOI: 1

C: End of Exchange Medium Set of Lines

C: Begin the AOI Description Set of Lines

AOI_NAME: REXAM

MBR: -78;35;-75;37

AOI_NUM_PACK: 1

C: Begin the DIGEST Information Package Set of Lines

C: This DIGEST Information Package consists of Annex D encapsulated files

C: Using This SATOC file as the DIGEST Information Package Metadata Subset

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PACK_PATH: .
PACK_ID: REXAM
PACK_ED: 1
CREATION_DATE: 20000930
PACK_META_ENCAP: E
STD_NAME: Digest 2.1
STD_AMDT: A
STD_DATE: 20000901
SECURITY_CLASS: U
RELEASIBILITY: FOR OFFICIAL USE ONLY
NUM_DATASETS: 6
NUM_MOSCOLLECS: 1

C: Begin the description of group of components

MOSAIC_FLAG: YES

*C: *** !!! Begins the Mosaic description subset of lines*

NAME_MOSAIC: REXAM
NS_NUM_ROWS: 2
EW_NUM_COLS: 3
DATA_TYPE: DIGEST-D Raster, 1501
NUM_COMPONENTS: 6

*C: *** !!! !!! Begin the frames/datasets/components description*

ROW: 1
COL: 1
NEW_REPLACE: NEW
DATASET_NAME: RDATA_1_1.IIF
DATASET_PATH: ./REXAM
DATASET_META_ENCAP: D
DATA_STRUCTURE: 0
SECURITY_CLASS: U
RELEASIBILITY: FOR OFFICIAL USE ONLY
MBR: -78; 36; -77; 37
NUM_LAYERS: 1

C: Begin the Layer Set of Lines

LAYER_NAME: RDATA_1_1
LAYER_PATH: ./REXAM/RDATA_1_1.IIF
LAYER_ENCAPSULATION: D
LAYER_DATA_STRUCTURE: 1

C: End of first frame description

C: Beginning of second frame

ROW: 1
COL: 2
NEW_REPLACE: NEW
DATASET_NAME: RDATA_1_2.IIF
DATASET_PATH: ./REXAM
DATASET_META_ENCAP: D
DATA_STRUCTURE: 0

SECURITY_CLASS: U
RELEASIBILITY: FOR OFFICIAL USE ONLY
MBR: -77; 36; -76; 37
NUM_LAYERS: 1
C: Begin the Layer Set of Lines
LAYER_NAME: RDATA_1_2
LAYER_PATH: ./REXAM/RDATA_1_2.IIF
LAYER_ENCAPSULATION: D
LAYER_DATA_STRUCTURE: 1

C: Begin the third dataset/frame

ROW: 1
COL: 3
NEW_REPLACE: NEW
DATASET_NAME: RDATA_1_3.IIF
DATASET_PATH: ./REXAM
DATASET_META_ENCAP: D
DATA_STRUCTURE: 0
SECURITY_CLASS: U
RELEASIBILITY: FOR OFFICIAL USE ONLY
MBR: -76; 36; -75; 37
NUM_LAYERS: 1
C: Begin the Layer Set of Lines
LAYER_NAME: RDATA_1_3
LAYER_PATH: ./REXAM/RDATA_1_3.IIF
LAYER_ENCAPSULATION: D
LAYER_DATA_STRUCTURE: 1

C: Begin the forth dataset/frame

ROW: 2
COL: 1
NEW_REPLACE: NEW
DATASET_NAME: RDATA_2_1.IIF
DATASET_PATH: ./REXAM
DATASET_META_ENCAP: D
DATA_STRUCTURE: 0
SECURITY_CLASS: U
RELEASIBILITY: FOR OFFICIAL USE ONLY
MBR: -78; 35; -77; 36
NUM_LAYERS: 1
C: Begin the Layer Set of Lines
LAYER_NAME: RDATA_2_1
LAYER_PATH: ./REXAM/RDATA_2_1.IIF
LAYER_ENCAPSULATION: D
LAYER_DATA_STRUCTURE: 1

C: Begin the fifth dataset/frame

ROW: 2
COL: 2
NEW_REPLACE: NEW
DATASET_NAME: RDATA_2_2.IIF
DATASET_PATH: ./REXAM

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DATASET_META_ENCAP: D
DATA_STRUCTURE: 0
SECURITY_CLASS: U
RELEASIBILITY: FOR OFFICIAL USE ONLY
MBR: -77; 35; -76; 36
NUM_LAYERS: 1
C: Begin the Layer Set of Lines
LAYER_NAME: RDATA_2_2
LAYER_PATH: ./REXAM
LAYER_ENCAPSULATION: D
LAYER_DATA_STRUCTURE: 1

C: Begin the sixth dataset/frame
ROW: 2
COL: 3
NEW_REPLACE: NEW
DATASET_NAME: RDATA_2_3.IIF
DATASET_PATH: ./REXAM
DATASET_META_ENCAP: D
DATA_STRUCTURE: 0
SECURITY_CLASS: U
RELEASIBILITY: FOR OFFICIAL USE ONLY
MBR: -76; 35; -75; 36
NUM_LAYERS: 1
C: Begin the Layer Set of Lines
LAYER_NAME: RDATA_2_3
LAYER_PATH: ./REXAM/RDATA_2_3.IIF
LAYER_ENCAPSULATION: D
LAYER_DATA_STRUCTURE: 1

C:
*C: *** !!! !!! End of the frames/datasets/components description*
*C: *** !!! End of Mosaic description subset of lines*
C: End of DIGEST Information Package description set of lines
C: End of the AOI Description Set of Lines
C: End of the SATOC.TXT file

E.5.3 Mixed Data Types within a Single Information Package Having a Single Dataset with Multiple Layers Over a Single AOI

C: Begin the SATOC.TXT file
C: Begin the DIGEST Exchange Medium Description Set of Lines
STD_NAME: DIGEST 2.1
STD_AMDT: 0
STD_DATE: 20000901
SECURITY_CLASS: U
RELEASIBILITY: FOR OFFICIAL USE ONLY
NUM_AOI: 1
C: End of Exchange Media Set of Lines
C: Begin the AOI Description Set of Lines
AOI_NAME: mixeddb
MBR: -1.5;42.;6.0;51.5
AOI_NUM_PACK: 1
C:

C: Begin the DIGEST Information Package Description Set of Lines

PACK_PATH: .\MIXEDDB
PACK_ID: MixedExam_DEM
PACK_EDN: 1
CREATION_DATE: 19990812
PACK_META_ENCAP: C
STD_NAME: Digest 2.1
STD_AMDT: 0
STD_DATE: 20000901
SECURITY_CLASS: U
RELEASIBILITY: FOR OFFICIAL USE ONLY
NUM_DATASETS: 1
NUM_MOSCOLLECS: 1

C: Begin the description of group of components

MOSAIC_FLAG: NO

*C: *** !!! Begins the Collection description subset of lines*

NUM_COMPONENTS: 1

C: Begin the Dataset Description Set of Lines

DATASET_NAME: mix_exam
DATASET_PATH: .\MIXEDDB\MIX_EXAM
DATASET_META_ENCAP: C
SECURITY_CLASS: U
RELEASIBILITY: FOR OFFICIAL USE ONLY
MBR: -1.5;42;6.0;51.5
NUM_LAYERS: 5

C: Begin Layer Description Set of Lines

LAYER_NAME: veget
LAYER_PATH: .\MIXEDDB\MIX_EXAM\VEGET
LAYER_ENCAPSULATION: C
LAYER_DATA_STRUCTURE: 8

C:

LAYER_NAME: trans
LAYER_PATH: .\MIXEDDB\MIX_EXAM\TRANS
LAYER_ENCAPSULATION: C
LAYER_DATA_STRUCTURE: 8

C:

LAYER_NAME: cultu
LAYER_PATH: .\MIXEDDB\MIX_EXAM\CULTU
LAYER_ENCAPSULATION: C
LAYER_DATA_STRUCTURE: 8

C:

LAYER_NAME: hydro
LAYER_PATH: .\MIXEDDB\MIX_EXAM\HYDRO
LAYER_ENCAPSULATION: C
LAYER_DATA_STRUCTURE: 8

C:

LAYER_NAME: image_1
LAYER_PATH: .\MIXEDDB\MIX_EXAM\IMAGE_1.IIF
LAYER_ENCAPSULATION: D
LAYER_DATA_STRUCTURE: 1

C: End of Layer Description Set of Lines

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C: End of Dataset Description Set of Lines

C: End of the DIGEST Information Package Description Set of Lines

C: End of AOI Description Set of Lines

C: Ends the SATOC.TXT file

E.5.4 Mixed Data Types within Multiple Packages Where Each Package Has Only One Data Type but May Have Dataset with Multiple Layers Over a Single AOI

C: Begin the SATOC.TXT file

C: Begin the DIGEST Exchange Medium Description Set of Lines

STD_NAME: DIGEST 2.1

STD_AMDT: 0

STD_DATE: 20000901

SECURITY_CLASS: U

RELEASIBILITY: FOR OFFICIAL USE ONLY

NUM_AOI: 1

C: End of Exchange Media Set of Line

C: Begin the AOI/database Description Set of Lines

AOI_NAME: mixeddb

MBR: -1.5;42;6.0;51.5

AOI_NUM_PACK: 2

*C: *** Begin the First DIGEST Information Package Description Set of Lines*

*C: *** It consists of a single Annex D encapsulated file*

PACK_PATH: .\IMAGE

PACK_ID: IMAGE_1.IIF

PACK_EDN: 1

CREATION_DATE: 19990815

PACK_META_ENCAP: D

STD_NAME: Digest 2.0

STD_AMDT: A

STD_DATE: 19990228

SECURITY_CLASS: U

RELEASIBILITY: FOR OFFICIAL USE ONLY

NUM_DATASETS: 1

NUM_MOSCOLLECS: 1

MOSAIC_FLAG: no

NUM_COMPONENTS: 1

*C: *** *** Begin the description of the first dataset*

DATASET_NAME: IMAGE_1.IIF

DATASET_PATH: .\IMAGE

DATASET_META_ENCAP: D

SECURITY_CLASS: U

RELEASIBILITY: FOR OFFICIAL USE ONLY

MBR: -1.5;42;6.0;51.5

NUM_LAYERS: 1

C: Begin the layer description set of lines

LAYER_NAME: image_1

LAYER_PATH: .\IMAGE\IMAGE_1.IIF

LAYER_ENCAPSULATION: D
LAYER_DATA_STRUCTURE: 1

C: End of the layer description set of lines

*C: *** *** End of the description of the first dataset*

*C: *** End of the First DIGEST Information Package Description Set of Lines*

C: Begin the Second DIGEST Information Package Description Set of Lines

PACK_PATH: .\SIMPLEDB
PACK_ID: SIMPLEDB
PACK_EDN: 1
CREATION_DATE: 19990815
PACK_META_ENCAP: C
STD_NAME: Digest 2.0
STD_AMDT: 0
STD_DATE: 19990228
SECURITY_CLASS: U
RELEASIBILITY: FOR OFFICIAL USE ONLY

NUM_DATASETS: 1
NUM_MOSCOLLECS: 1
MOSAIC_FLAG: no
NUM_COMPONENTS: 1

C:

C: Begin First Dataset (2nd Package) Descriptive Set of Lines

DATASET_NAME: vexam_1
DATASET_PATH: .\SIMPLEDB\VEXAM_1
DATASET_META_ENCAP: C
SECURITY_CLASS: U
RELEASIBILITY: FOR OFFICIAL USE ONLY
MBR: -1.5;42;6.0;51.5
NUM_LAYERS: 4

C:

LAYER_NAME: veget
LAYER_PATH: .\SIMPLEDB\VEXAM_1\VEGET
LAYER_ENCAPSULATION: C
LAYER_DATA_STRUCTURE: 8

C:

LAYER_NAME: trans
LAYER_PATH: .\SIMPLEDB\VEXAM_1\TRANS
LAYER_ENCAPSULATION: C
LAYER_DATA_STRUCTURE: 8

C:

LAYER_NAME: cultu
LAYER_PATH: .\SIMPLEDB\VEXAM_1\CULTU
LAYER_ENCAPSULATION: C
LAYER_DATA_STRUCTURE: 8

C:

LAYER_NAME: hydro
LAYER_PATH: .\SIMPLEDB\VEXAM_1\HYDRO
LAYER_ENCAPSULATION: C
LAYER_DATA_STRUCTURE: 8

C: End of Layer Descriptive Set of Lines

C: End of First Dataset (2nd Package) Descriptive Set of Lines

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C: End of Second DIGEST Information Package Description Set of Lines

C: End of AOI Descriptive Set of Lines

C: Ends the SATOC.TXT file

E.5.5 Mixed Data Types with a Single DIGEST Information Package Together with non-DIGEST Set of Files Over a Single AOI

C: Begins the SATOC.TXT file

C: Begin the DIGEST Exchange Medium Description Set of Lines

EXCH_MED_ID: SRTM_87_4655-2002

STD_NAME: DIGEST 2.1

STD_AMDT: 0

STD_DATE: 20000901

SECURITY_CLASS: U

RELEASIBILITY: FOR OFFICIAL USE ONLY

NUM_AOI: 1

C: End of Exchange Media Set of Lines

*C: *** Begin the First AOI Description Set of Lines*

AOI_NAME: 87 WEST 46 TO 55 NORTH

MBR:-87.0;46.0;-86.0;56.0

AOI_NUM_PACK: 4

*C: *** Begin the First DIGEST Information Package Description Set of Lines*

*C: *** This DIGEST Information Package Consists of 40 *.NTF files,*

*C: *** each being a Annex D encapsulated Dataset*

*C: *** This SATOC file is the Annexe E encapsulated Digest Information Package*

*C: *** Metadata subset for this Digest Information Package.*

PACK_PATH: .

PACK_ID: 087W*.NTF

PACK_EDN: 1

CREATION_DATE: 20030901

PACK_META_ENCAP: E

STD_NAME: Digest 2.0

STD_AMDT: 0

STD_DATE: 19990228

SECURITY_CLASS: U

RELEASIBILITY: FOR OFFICIAL USE ONLY

NUM_DATASETS: 40

NUM_MOSCOLLECS: 1

MOSAIC_FLAG: no

NUM_COMPONENTS: 40

*C: *** *** Begin the description of the first dataset in the first Pack*

DATASET_NAME: W087N46AOIM.NTF

DATASET_PATH: .\087W

DATASET_META_ENCAP: D

SECURITY_CLASS: R

RELEASIBILITY: NATO ONLY

MBR: -87;46;-86;47

NUM_LAYERS: 1

LAYER_NAME: W087N46AOIM

LAYER_PATH: .\087W\W087N46AOIM.NTF
LAYER_ENCAPSULATION: D
LAYER_DATA_STRUCTURE: 1

C: *** *** End of the description of the first dataset

C:

C: *** *** Begin the description of the second dataset

DATASET_NAME: W087N46DOIM.NTF
DATASET_PATH: .\087W
DATASET_META_ENCAP: D
DATA_STRUCTURE: 0
SECURITY_CLASS: R
RELEASIBILITY: NATO ONLY
MBR: -87;46;-86;47
NUM_LAYERS: 1
LAYER_NAME: W087N46DOIM
LAYER_PATH: .\087W\W087N46DOIM.NTF
LAYER_ENCAPSULATION: D
LAYER_DATA_STRUCTURE: 1

C: *** *** End of the description of the second dataset

C:

C: *** *** Begin the description of the third dataset

DATASET_NAME: W087N46THED.NTF
DATASET_PATH: .\087W
DATASET_META_ENCAP: D
SECURITY_CLASS: R
RELEASIBILITY: NATO ONLY
MBR: -87;46;-86;47
NUM_LAYERS: 1
LAYER_NAME: W087N46THED
LAYER_PATH: .\087W\W087N46THED.NTF
LAYER_ENCAPSULATION: D
LAYER_DATA_STRUCTURE: 1

C: *** *** End of the description of the third dataset

C:

C: *** *** Begin the description of the fourth dataset

DATASET_NAME: W087N46SHCM.NTF
DATASET_PATH: .\087W
DATASET_META_ENCAP: D
DATA_STRUCTURE: 1
SECURITY_CLASS: R
RELEASIBILITY: NATO ONLY
MBR: -87;46;-86;47
NUM_LAYERS: 1
LAYER_NAME: W087N46SHCM
LAYER_PATH: .\087W\W087N46SHCM.NTF
LAYER_ENCAPSULATION: D
LAYER_DATA_STRUCTURE: 1

C: *** *** End of the description of the fourth dataset

.....
.....
.....

C: *** *** Begin the description of the Thirty-seventh dataset

DATASET_NAME: W087N55AOIM.NTF
DATASET_PATH: .\087W

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```
DATASET_META_ENCAP: D
DATA_STRUCTURE: 0
SECURITY_CLASS: R
RELEASIBILITY: NATO ONLY
MBR: -87;55;-86;56
NUM_LAYERS: 1
LAYER_NAME: W087N55AOIM
LAYER_PATH: .\087W\W087N55AOIM.NTF
LAYER_ENCAPSULATION: D
LAYER_DATA_STRUCTURE: 1
C: *** *** End of the description of the Thirty-seventh dataset
C:
C: *** *** Begin the description of the Thirty-eighth dataset
DATASET_NAME: W087N55DOIM.NTF
DATASET_PATH: .\087W
DATASET_META_ENCAP: D
SECURITY_CLASS: R
RELEASIBILITY: NATO ONLY
MBR: -87;55;-86;56
NUM_LAYERS: 1
LAYER_NAME: W087N55DOIM
LAYER_PATH: .\087W\W087N55DOIM.NTF
LAYER_ENCAPSULATION: D
LAYER_DATA_STRUCTURE: 1
C: *** *** End of the description of the Thirty-eighth dataset

C: *** *** Begin the description of the Thirty-ninth dataset
DATASET_NAME: W087N55THED.NTF
DATASET_PATH: .\087W
DATASET_META_ENCAP: D
SECURITY_CLASS: R
RELEASIBILITY: NATO ONLY
MBR: -87;55;-86;56
NUM_LAYERS: 1
C:
LAYER_NAME: W087N55THED
LAYER_PATH: .\087W\W087N55THED.NTF
LAYER_ENCAPSULATION: D
LAYER_DATA_STRUCTURE: 1
C: *** *** End of the description of the Thirty-ninth dataset

C: *** *** Begin the description of the Fortieth dataset
DATASET_NAME: W087N55SHCM.NTF
DATASET_PATH: .\087W
DATASET_META_ENCAP: D
SECURITY_CLASS: R
RELEASIBILITY: NATO ONLY
MBR: -87;55;-86;56
NUM_LAYERS: 1
LAYER_NAME: W087N55SHCM
LAYER_PATH: .\087W\W087N55SHCM.NTF
LAYER_ENCAPSULATION: D
LAYER_DATA_STRUCTURE: 1
C: *** *** End of the description of the Fortieth dataset
```

C: *** End of the First DIGEST Information Package Description Set of Lines
C:
C: *** Begin the Second Information Package (and first non-DIGEST set of files)
C: *** Description Set of Lines
C: *** This is Digital Mean Elevation Data over the entire AOI

PACK_PATH: .
PACK_ID: DMED
PACK_EDN: 1
CREATION_DATE: 20000125
PACK_META_ENCAP: Z
STD_NAME: MIL-PRF-89020B
STD_AMDT: 0
STD_DATE: 19990427
SECURITY_CLASS: U
RELEASIBILITY: NATO ONLY

NUM_DATASETS: 1
NUM_MOSCOLLECS: 1
MOSAIC_FLAG: no
NUM_COMPONENTS: 1

C: *** *** Begins the description of the first Dataset (non-DIGEST file)
C: *** *** in the Second Information Package
DATASET_NAME: DMED
DATASET_PATH: .
DATASET_META_ENCAP: Z
SECURITY_CLASS: U
RELEASIBILITY: NATO ONLY
MBR: -87;46;-86;56
C: *** *** End of the description of the first non-DIGEST file
C: *** End of the Second Information Package (first non-DIGEST set of files)
C:*****Description Set of Lines
C:
C: *** Begin the Third Information Package (second non-DIGEST set of files)
C: *** Description Set of Lines
C: This is DTED Level 1 Data (files that end with *.DT1)

PACK_PATH: .\087W
PACK_ID: ZIZOU_DTED1
PACK_EDN: 1
CREATION_DATE: 20000125
PACK_META_ENCAP: Z
STD_NAME: MIL-PRF-89020B
STD_AMDT: 0
STD_DATE: 19990427
SECURITY_CLASS: R
RELEASIBILITY: NATO ONLY

NUM_DATASETS: 10
NUM_MOSCOLLECS: 1
MOSAIC_FLAG: no
NUM_COMPONENTS: 10

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*C: *** *** Begins the description of the First Dataset*

*C: *** in the second non-Digest set of files*

DATASET_NAME: N46.DT1

DATASET_PATH: .\087W

DATASET_META_ENCAP: Z

SECURITY_CLASS: R

RELEASIBILITY: NATO ONLY

MBR: -87;46;-86;47

*C: *** *** End of the description of the First Dataset*

C: in the second non-DIGEST set of files

.....
.....
.....

*C: *** *** Begins the description of the Tenth Dataset*

*C: ***in the second non-DIGEST set of files*

DATASET_NAME: N55.DT1

DATASET_PATH: .\087W

DATASET_ENCAP: Z

SECURITY_CLASS: R

RELEASIBILITY: NATO ONLY

MBR: -87;55;-86;56

*C: *** *** End of the description of the Tenth file*

*C: ***End of the second non-DIGEST set of files*

*C: *** (Third Information Package Description Set of Lines)*

C:

*C: *** Begin the Fourth Package and Third non-DIGEST set of files*

*C: *** Description Set of Lines*

*C: This is DTED Level 2 (files that end with *.DT2)*

PACK_PATH: .\087W

PACK_ID: THEZBAR_DTED2

PACK_EDN: 1

CREATION_DATE: 20000125

PACK_META_ENCAP: Z

STD_NAME: MIL-PRF-89020B

STD_AMDT: 0

STD_DATE: 19990427

SECURITY_CLASS: R

RELEASIBILITY: NATO ONLY

NUM_DATASETS: 10

NUM_MOSCOLLECS: 1

MOSAIC_FLAG: no

NUM_COMPONENTS: 1

*C: *** *** Begins the description of the First file in the*

*C: ***Third non-DIGEST set of files (Fourth Package)*

DATASET_NAME: N46.DT2

DATASET_PATH: .\087W

DATASET_META_ENCAP: Z

SECURITY_CLASS: R

RELEASIBILITY: NATO ONLY

MBR: -87;46;-86;47

*C: *** *** End of the description of the First Dataset*

*C: ***in the Third non-DIGEST set of files (Fourth Pack)*

.....
.....
.....

C: *** *** Begins the description of the Tenth Dataset

C: ***in the Fourth Pack

DATASET_NAME: N55.DT2

DATASET_PATH: .\087W

DATASET_ENCAP: Z

SECURITY_CLASS: R

RELEASIBILITY: NATO ONLY

MBR: -87;55;-86;56

C: *** *** End of the description of the Tenth Dataset in the

C: ***Third non-DIGEST set of files (Fourth Pack)

C: *** End of the Fourth Information Package Description Set of Lines

C: End of AOI Descriptive Set of Lines

C: Ends the SATOC.TXT file

E.5.6 Mixed Data Types with Multiple Packages Together with non-DIGEST Files in a Mosaic Over a Single AOI

C: Begin the SATOC.TXT file

C: Begin the DIGEST Exchange Medium Description Set of Lines

STD_NAME: DIGEST 2.1

STD_AMDT: 0

STD_DATE: 20000901

SECURITY_CLASS: R

RELEASIBILITY: LIMITED DISTRIBUTION

NUM_AOI: 1

C: End of Exchange Medium Set of Lines

C: Begin the AOI Description Set of Lines

AOI_NAME: MYPLACE

C: Normally the name should be a file folder or file name????

C: Maybe this should be optional when only one AOI is involved

MBR: 0;45;2;47

AOI_NUM_PACK: 3

C: Begins the first Information Package Description Set of Lines

C: (it is a non-DIGEST set of files)

PACK_PATH: .\DTED

PACK_ID: DTEDOVERMYPLACE

PACK_EDN: 1

CREATION_DATE: 20000125

PACK_META_ENCAP: Z

STD_NAME: MIL-PRF-89020B

STD_AMDT: 0

STD_DATE: 19990427

SECURITY_CLASS: R

RELEASIBILITY: NATO ONLY

NUM_DATASETS: 9

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NUM_MOSCOLLECS: 3

*C: *** *** Begins the first Group of components.*

*C: *** *** It is a collection of one non-DIGEST file: DMED over the total AOI*

MOSAIC_FLAG: NO

NUM_COMPONENTS: 1

*C: *** *** Begins the first Dataset Description Set of Lines (There is only one)*

DATASET_NAME: DMED

DATASET_PATH: .\DTED

DATASET_META_ENCAP: Z

SECURITY_CLASS: U

RELEASIBILITY: LIMITED DISTRIBUTION DUE TO COPYRIGHT ISSUES

MBR: 0;45;2;47

*C: *** *** End of the first Dataset Description Set of Lines*

*C: *** End of the first Group of components.*

*C: *** *** Begins the second Group of components.*

*C: *** *** It is a mosaic of DTED1 files over the AOI*

MOSAIC_FLAG: YES

NAME_MOSAIC: M_DTED1

NS_NUM_ROWS: 2

EW_NUM_COLS: 2

DATA_TYPE: DTED Level 1

NUM_COMPONENTS: 4

C: First Frame Dataset Description Set of Lines

ROW: 1

COL: 1

NEW_REPLACE: NEW

DATASET_NAME: EE000N46.DT1

DATASET_PATH: DTED\M_DTED1

DATASET_META_ENCAP: Z

SECURITY_CLASS: R

RELEASIBILITY: NATO ONLY

MBR: 1;46;2;47

C: End of First Frame Descriptive Set of Lines

C: Second Set of Frame Descriptive Set of Lines

ROW: 1

COL: 2

NEW_REPLACE: NEW

DATASET_NAME: EE001N46.DT1

DATASET_PATH: DTED\M_DTED1

DATASET_META_ENCAP: Z

SECURITY_CLASS: R

RELEASIBILITY: NATO ONLY

MBR: 1;46;2;47

C: End of Second Frame Descriptive Set of Lines

C: Third Set of Frame Descriptive Set of Lines

ROW: 2

COL: 1

NEW_REPLACE: NEW

DATASET_NAME: EE000N45.DT1

DATASET_PATH: DTED\M_DTED1

DATASET_META_ENCAP: Z

SECURITY_CLASS: R

RELEASIBILITY: NATO ONLY

MBR: 0;45;1;46

C: End of Third Frame Descriptive Set of Lines

C: Fourth Set of Frame Descriptive Set of Lines

ROW: 2

COL: 2

NEW_REPLACE: NEW

DATASET_NAME: EE001N45.DT1

DATASET_PATH: DTED\M_DTED1

DATASET_META_ENCAP: Z

SECURITY_CLASS: R

RELEASIBILITY: NATO ONLY

MBR: 1;45;2;46

C: End of Fourth Frame Descriptive Set of Lines

*C: *** *** End of the Second group of components (First Mosaic)*

C:

*C: *** *** Begins the Third Group of components.*

*C: *** *** It is a mosaic of DTED2 files over the AOI*

MOSAIC_FLAG: YES

NAME_MOSAIC: M_DTED2

NS_NUM_ROWS: 2

EW_NUM_COLS: 2

DATA_TYPE: DTED Level 2

NUM_COMPONENTS: 4

*C: *** For Each Frame, in the Second Mosaic, there will be a Frame*

*C: *** Dataset Description Set of Lines*

C: First Frame Dataset Descriptive Set of Lines

ROW: 1

COL: 1

NEW_REPLACE: NEW

DATASET_NAME: EE000N46.DT2

DATASET_PATH: DTED\M_DTED2

DATASET_META_ENCAP: Z

SECURITY_CLASS: R

RELEASIBILITY: NATO ONLY

MBR: 0;46;1;47

C: End of First Frame Descriptive Set of Lines

C: Second Set of Frame Descriptive Set of Lines

ROW: 1

COL: 2

NEW_REPLACE: NEW

DATASET_NAME: EE001N46.DT2

DATASET_PATH: DTED\M_DTED2

DATASET_META_ENCAP: Z

SECURITY_CLASS: R

RELEASIBILITY: NATO ONLY

MBR: 1;46;2;47

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C: End of Second Frame Descriptive Set of Lines

C: Third Set of Frame Descriptive Set of Lines

ROW: 2

COL: 1

NEW_REPLACE: NEW

DATASET_NAME: EE000N45.DT2

DATASET_PATH: DTED\M_DTED2

DATASET_META_ENCAP: Z

SECURITY_CLASS: R

RELEASIBILITY: NATO ONLY

MBR: 0;45;1;46

C: End of Third Frame Descriptive Set of Lines

C: Fourth Set of Frame Descriptive Set of Lines

ROW: 2

COL: 2

NEW_REPLACE: NEW

DATASET_NAME: EE001N45.DT2

DATASET_PATH: DTED\M_DTED2

DATASET_META_ENCAP: Z

SECURITY_CLASS: R

RELEASIBILITY: NATO ONLY

MBR: 1;45;2;46

C: End of Fourth Frame Descriptive Set of Lines

*C: *** *** End of the Third group of components (Second Mosaic)*

C: End of the first Information Package Description Set of Lines

C: Begins the second Information Package Description Set of Lines

C: This a DIGEST Information Package consisting of 4 Annex D encapsulated

C: files arranged in a Mosaic over the AOI.

C: The SATOC file is used as the Annex E encapsulated DIGEST Information Package

C: Metadata Subset

PACK_PATH: .

PACK_ID: SRTM_SPL_THED

PACK_EDN: 1

CREATION_DATE: 20000125

PACK_META_ENCAP: D

STD_NAME: DIGEST 2.1

STD_AMDT: 0

STD_DATE: 20000901

SECURITY_CLASS: U

RELEASIBILITY: FOR OFFICIAL USE ONLY

NUM_DATASETS: 4

NUM_MOSCOLLECS: 1

*C: *** Begin the Mosaic Description Subset of Lines*

MOSAIC_FLAG: YES

NAME_MOSAIC: M_THED

NS_NUM_ROWS: 2

EW_NUM_COLS: 2
DATA_TYPE: TERRAIN HEIGHT ERROR DATA
NUM_COMPONENTS: 4

C: First Frame Dataset Descriptive Set of Lines

ROW: 1
COL: 1
NEW_REPLACE: NEW
DATASET_NAME: TE000N46.NTF
DATASET_PATH: .\SRTM_SPL\M_THED
DATASET_META_ENCAP: D
DATA_STRUCTURE: 1
SECURITY_CLASS: R
RELEASIBILITY: NATO ONLY
MBR: 0;46;1;47
NUM_LAYERS: 1
LAYER_NAME: TE000N46
LAYER_PATH: .\SRTM_SPL\M_THED\TE000N46.NTF
LAYER_ENCAPSULATION: D
LAYER_DATA_STRUCTURE: 1

C: End of First Frame Descriptive Set of Lines

C: Second Set of Frame Descriptive Set of Lines

ROW: 1
COL: 2
NEW_REPLACE: NEW
DATASET_NAME: TE001N46.NTF
DATASET_PATH: .\SRTM_SPL\M_THED
DATASET_META_ENCAP:
SECURITY_CLASS: R
RELEASIBILITY: NATO ONLY
MBR: 1;46;2;47
NUM_LAYERS: 1
LAYER_NAME: TE001N46
LAYER_PATH: .\SRTM_SPL\M_THED\TE001N46.NTF
LAYER_ENCAPSULATION: Z
LAYER_DATA_STRUCTURE: 1

C: End of Second Frame Descriptive Set of Lines

C: Third Set of Frame Descriptive Set of Lines

ROW: 2
COL: 1
NEW_REPLACE: NEW
DATASET_NAME: TE000N45.NTF
DATASET_PATH: .\SRTM_SPL\M_THED
DATASET_META_ENCAP:
SECURITY_CLASS: R
RELEASIBILITY: NATO ONLY
MBR: 0;45;1;46
NUM_LAYERS: 1
LAYER_NAME: TE000N45
LAYER_PATH: .\SRTM_SPL\M_THED\TE000N45.NTF
LAYER_ENCAPSULATION: D
LAYER_DATA_STRUCTURE: 1

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C: End of Third Frame Descriptive Set of Lines

C: Fourth Set of Frame Descriptive Set of Lines

ROW: 2

COL: 2

NEW_REPLACE: NEW

DATASET_NAME: TE001N45.NTF

DATASET_PATH: .\SRTM_SPL\M_THED

DATASET_META_ENCAP:

SECURITY_CLASS: R

RELEASIBILITY: NATO ONLY

MBR: 1;45;2;46

NUM_LAYERS: 1

LAYER_NAME: TE001N45

LAYER_PATH: .\SRTM_SPL\M_THED\TE001N45.NTF

LAYER_ENCAPSULATION: D

LAYER_DATA_STRUCTURE: 1

C: End of Fourth Frame Descriptive Set of Lines

*C: *** !!! End of the First Mosaic in the second Information Package*

C: End of the second Information Package Description Set of Lines

C: Begins the third Information Package Description Set of Lines

C: This a DIGEST Information Package consisting of 4 Annex D encapsulated

C: files arranged in a Mosaic over the AOI.

C: The SATOC file is used as the Annex E encapsulated DIGEST Information Package

C: Metadata Subset

PACK_PATH: .

PACK_ID: SRTM_SPL_SHCM

PACK_EDN: 1

CREATION_DATE: 20000125

PACK_META_ENCAP: D

STD_NAME: DIGEST 2.1

STD_AMDT: 0

STD_DATE: 20000901

SECURITY_CLASS: U

RELEASIBILITY: FOR OFFICIAL USE ONLY

NUM_DATASETS: 4

NUM_MOSCOLLECS: 1

*C: *** !!! Begins the Mosaic, Third Pack, Description Subset of Lines*

MOSAIC_FLAG: YES

NAME_MOSAIC: M_SHCM

NS_NUM_ROWS: 2

EW_NUM_COLS: 2

DATA_TYPE: SEAM-HOLE COMPOSITE MAP

NUM_COMPONENTS: 4

C: First Frame Dataset Descriptive Set of Lines

ROW: 1

COL: 1

NEW_REPLACE: NEW

DATASET_NAME: SE000N46.NTF

DATASET_PATH: .\SRTM_SPL\M_THED

DATASET_META_ENCAP: D
SECURITY_CLASS: R
RELEASIBILITY: NATO ONLY
MBR: 0;46;1;47
NUM_LAYERS: 1
LAYER_NAME: SE000N46
LAYER_PATH: .\SRTM_SPL\M_THED\SE000N46.NTF
LAYER_ENCAPSULATION: D
LAYER_DATA_STRUCTURE: 1

C: End of First Frame Descriptive Set of Lines

C: Second Set of Frame Descriptive Set of Lines

ROW: 1
COL: 2
NEW_REPLACE: NEW
DATASET_NAME: SE001N46.NTF
DATASET_PATH: .\SRTM_SPL\M_THED
DATASET_META_ENCAP: D
SECURITY_CLASS: R
RELEASIBILITY: NATO ONLY
MBR: 1;46;2;47
NUM_LAYERS: 1
LAYER_NAME: SE001N46
LAYER_PATH: .\SRTM_SPL\M_THED\SE001N46.NTF
LAYER_ENCAPSULATION: D
LAYER_DATA_STRUCTURE: 1

C: End of Second Frame Descriptive Set of Lines

C: Third Set of Frame Descriptive Set of Lines

ROW: 2
COL: 1
NEW_REPLACE: NEW
DATASET_NAME: SE000N45.NTF
DATASET_PATH: .\SRTM_SPL\M_THED
DATASET_META_ENCAP: D
SECURITY_CLASS: R
RELEASIBILITY: NATO ONLY
MBR: 0;45;1;46
NUM_LAYERS: 1
LAYER_NAME: SE000N45
LAYER_PATH: .\SRTM_SPL\M_THED\SE000N45.NTF
LAYER_ENCAPSULATION: D
LAYER_DATA_STRUCTURE: 1

C: End of Third Frame Descriptive Set of Lines

C: Fourth Set of Frame Descriptive Set of Lines

ROW: 2
COL: 2
NEW_REPLACE: NEW
DATASET_NAME: SE001N45.NTF
DATASET_PATH: .\SRTM_SPL\M_THED
DATASET_META_ENCAP: D

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SECURITY_CLASS: R
RELEASIBILITY: NATO ONLY
MBR: 1;45;2;46
NUM_LAYERS: 1
LAYER_NAME: SE001N45.NTF
LAYER_PATH: .\SRTM_SPL\M_THED\SE001N45.NTF
LAYER_ENCAPSULATION: D
LAYER_DATA_STRUCTURE: 1
C: End of Fourth Frame Descriptive Set of Lines

C: End of Mosaic in the Third Information Package

C: End of Third Information Package Description Set of Lines

C: End of the DIGEST AOI Information Description Set of Lines
C: End of the SATOC.TXT file

E.5.7 ASRP or USRP DIGEST Information Packages

E.5.7.1 As Implemented by ProducerF

C: Begin the SATOC.TXT file

C: Begin the DIGEST Exchange Medium Description Set of Lines
STD_NAME: Digest 2.1
STD_AMDT: 0
STD_DATE: 20000901
SECURITY_CLASS: U
RELEASIBILITY: FOR OFFICIAL USE ONLY
NUM_AOI: 1
C: End of the DIGEST Exchange Medium Description Set of Lines

C: Begin the AOI Description Set of Lines
AOI_NAME: asrpex
MBR: 20;42;22;43
AOI_NUM_PACK: 1
C: End of the AOI Description Set of Lines

C: Begin the DIGEST Information Package Description Set of Lines
PACK_PATH: .
PACK_ID:12345
PACK_EDN: 1
CREATION_DATE: 19990405
PACK_META_ENCAP: A

STD_NAME: Digest 2.1
STD_AMDT: 0
STD_DATE: 20000901
SECURITY_CLASS: R
RELEASIBILITY: FOR OFFICIAL USE ONLY
NUM_DATASETS: 1
NUM_MOSCOLLECS: 1
*C: *** ** Begin the description of the first and unique collection*
MOSAIC_FLAG: NO

NUM_COMPONENTS: 1
DATASET_NAME: ASRPEX
DATASET_PATH: .\ASRPEX
DATASET_META_ENCAP: A
DATA_TYPE: ASRP, 1501
SECURITY_CLASS: U
RELEASIBILITY: FOR OFFICIAL USE ONLY
MBR: 20;42;22;43
NUM_LAYERS: 1
C:
LAYER_NAME: ASRPEX01.IMG
LAYER_PATH: .\ASRPEX
LAYER_ENCAPSULATION: A
LAYER_DATA_STRUCTURE: 4
C: *** *** End of the description of the first dataset
C: *** End of the First DIGEST Information Package Description Set of Lines
C:
C: End of the DIGEST Information Package Description Set of Lines
C:
C: End of the AOI Descriptive Set of Lines
C: Ends the SATOC.TXT file

E.5.7.2 As Implemented by ProducerU

C: Begin the SATOC.TXT file
C: Begin the DIGEST Exchange Medium Description Set of Lines
STD_NAME: Digest 2.1
STD_AMDT: 0
STD_DATE: 20000901
SECURITY_CLASS: U
RELEASIBILITY: FOR OFFICIAL USE ONLY
NUM_AOI: 1
C: End of the DIGEST Exchange Medium Description Set of Lines

C: Begin the AOI Description Set of Lines
AOI_NAME: asrpex
MBR: 20;42;22;43
AOI_NUM_PACK: 1
C: End of the AOI Description Set of Lines

C: Begin the DIGEST Information Package Description Set of Lines
PACK_PATH: .
PACK_ID:12345
PACK_EDN: 1
CREATION_DATE: 19990405
PACK_META_ENCAP: A

STD_NAME: Digest 2.1
STD_AMDT: 0
STD_DATE: 20000901
SECURITY_CLASS: R
RELEASIBILITY: FOR OFFICIAL USE ONLY
NUM_DATASETS: 1
NUM_MOSCOLLECS: 1

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C: *** *** Begin the description of the first dataset
MOSAIC_FLAG: NO
NUM_COMPONENTS: 1
DATASET_NAME: ASRPEX
DATASET_PATH: .\ASRP\ASRPEX
DATASET_META_ENCAP: A
DATA_TYPE: ASRP, 1501
SECURITY_CLASS: U
RELEASIBILITY: FOR OFFICIAL USE ONLY
MBR: 20;42;22;43
NUM_LAYERS: 1
LAYER_NAME: ASRPEX01.IMG
LAYER_PATH: .\ASRP\ASRPEX
LAYER_ENCAPSULATION: A
LAYER_DATA_STRUCTURE: 4
C: *** *** End of the description of the first dataset
C: *** End of the DIGEST Information Package Description Set of Lines
C:
C: End of the AOI Description Set of Lines
C:
C: End of the SATOC.TXT file

E.5.8 Template for Standard ASCII Table of Contents

C: Begin the SATOC.TXT file
C:
C: Begin the DIGEST Exchange Medium Description Set of Lines
C: <O> Unique identifier for the Exchange Medium
EXCH_MED_ID:
C: <O> Sequence number of this DIGEST Exchange Medium within a collection
EXCH_MED_NUM
C: <M> Edition id of the standard used to producing SATOC
STD_NAME:
C: <M> Amendment (or notice) number of the standard used to producing SATOC
STD_AMDT:
C: <M> Date of the edition or amendement considered
STD_DATE:
C: <M> Security classification of the DIGEST Exchange Medium
SECURITY_CLASS:
C: <M> Releasibility restrictions for this DIGEST Exchange Medium
RELEASIBILITY:
C: <M> Number of AOIs within the DIGEST Exchange Medium
NUM_AOI:
C: End of the DIGEST Exchange Medium Description Set of Lines
C: Begin the AOI Description Set of Lines
C: *** Begin the First AOI Description Set of Lines
C: <M> Area of Interest designation or Database designation
AOI_NAME:
C: <M> WGS 84 MBR of the Area of Interest <SW. Lon>;<SW. Lat>;<NE. Lon>;<NE.Lat>;
MBR:
C: <O> Total number of DIGEST Information Packages to be used to send the database
DB_NUM_PACK:

C: <M> Total number of Information Packages within the exchange medium pertaining to the AOI

AOI_NUM_PACK:

C: *** Begin the Information Package Description Set of Lines

C: *** *** Begin the First Information Package Description Set of Lines

C: <M> Path (file or folder name) providing access to the Information Package

PACK_PATH:

C: <DM> Unique Identifier of the Information Package...this should be a file or folder name

PACK_ID:

C: <DM> Edition Number for this DIGEST Information Package.

PACK_EDN:

C: <DM> Creation date of this DIGEST Information Package.

CREATION_DATE:

C: <M> Identify the encapsulation used for the DIGEST Information Package metadata

PACK_META_ENCAP:

C: <M> Edition id of the standard used to producing the DIGEST Information Package

STD_NAME:

C: <M> Amendment (or notice) number of the standard used

STD_AMDT:

C: <M> Date of the edition or amendment considered

STD_DATE:

C: <M> Security classification of the DIGEST Information Package

SECURITY_CLASS:

C: <M> Releasibility restrictions for this DIGEST Information Package

RELEASIBILITY:

C: <M> Total Number of Datasets within the DIGEST Information Package

NUM_DATASETS:

C: <M> Number of mosaics or Collections within the Information Package

NUM_MOSCOLLECS:

C: *** *** Begin the description of groups of components

C: *** *** !!! Begin the description of the First Mosaic or Collection

C: <M> Indicates whether the group of components is a mosaic (YES) or not (NO)

MOSAIC_FLAG:

C: <MM> Name of the Mosaic (normally a folder name) omitted if MOSAIC_FLAG=NO

NAME_MOSAIC:

C: <MM> Number of Rows (North to South) omitted if MOSAIC_FLAG=NO

NS_NUM_ROWS:

C: <MM> Number of Columns (West to East) omitted if MOSAIC_FLAG=NO

EW_NUM_COLS:

C: <MO> Common data or product type for the mosaic omitted if MOSAIC_FLAG=NO

DATA_TYPE:

C: <M> Total number of components within the mosaic or collection at least one

NUM_COMPONENTS:

C: *** *** !!! Begin the Dataset description subsets of lines

C: *** *** !!! !!! Begin the First Dataset description subsets of lines

C: <MM> Row number (North to South) of the frame (omitted if MOSAIC_FLAG=NO)

ROW:

C: <MM> Col number (West to East) of the frame (omitted if MOSAIC_FLAG=NO)

COL:

C: <MM> Update Flag: new or replacement data (omitted if MOSAIC_FLAG=NO)

NEW_REPLACE:

C: <M> Short unique designation of this Dataset [Library] or non-Digest file name

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DATASET_NAME:

C: <M> Physical path to the dataset (standard dependent) or non-Digest file

DATASET_PATH:

C: <M> identify the encapsulation used for Dataset [Library] metadata subset

DATASET_META_ENCAP:

C: <O> Series Designator or Product type and level

DATA_TYPE:

C: <O> Code of Data Structure used primarily for this Dataset [Library]

DATA_STRUCTURE:

C: <M> Security classification of dataset

SECURITY_CLASS:

C: <M> Releasibility restrictions for dataset

RELEASIBILITY:

C: <M> WGS 84 MBR of the Area of coverage of this dataset

MBR:

C: <DM> Number layers in the dataset

NUM_LAYERS:

C: *** *** !!! !!! +++ Begin the description of the first layer within the dataset

C: <M> Short unique designation of this Layer within the dataset

LAYER_NAME:

C: <M> Physical path to the Layer (standard dependent) (see E.4.3)

LAYER_PATH:

C: <DM> Code identifying the encapsulation used for the DIGEST Exchange Medium of this Layer

LAYER_ENCAPSULATION:

C: <O> A sequential number for the Layer [Coverage]

LAYER_NUM:

C: <O> Full description of this Layer

LAYER_DESCRIPTION:

C: <DM> Code of Data Structure used for this Layer

LAYER_DATA_STRUCTURE:

C: *** *** !!! !!! +++ End of the description of the first layer

C: within the dataset

C:*** *** !!! !!! Repeats once for each layer within the dataset

C:

C:*** *** !!! !!! End of the First Dataset description subsets of lines

C: *** *** !!! !!! Repeats once for each additional dataset in the group

C: of components

C: *** *** !!! End of the Dataset description subsets of lines

C:

C:*** *** !!! End of the Description of the First Mosaic or Collection

C:*** *** !!! Repeats once for each additional Mosaic or Collection

C:*** *** End of the description of groups of components

C:

C:*** *** End of the First Information Package Description Set of Lines

C:*** *** Repeats once for each additional Information Package

C: Pertaining to the AOI

C: *** End of the First AOI Description Set of Lines

C: *** Repeats once for each additional AOI within the DIGEST Exchange Medium

C: End of the AOI Description Set of Lines

C:

C: Ends the SATOC.TXT file