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Sentinel-3 Metadata Indexes

DHuS Open Source Framework

Role/Title	Name	Signature	Date
Authors	Calogera Tona – OSF		02/05/2016
	Manager		
	Cristina Arcari-DHuS		
	Developer		
Reviewed	Guido Vingione		
Approved	Andrea Tesseri –Contract		
	Manager		





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Change register

Version/Rev.	Date	Reason for Change	Pages modified
1.0	02/05/2016	First issue	

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Applicable Document

Id	Title	Reference	Issue
AD-1	OSF ICD	SPA-COPE-OSF-TN-005	1.1

Table 1 Applicable Documents

Reference Documents

Id	Title		Reference	Issue
RD-1	OData		http://www.odata.org/d	
			ocumentation/odata-	
			version-2-0/	
RD-2	Apache Solr Refe	rence Guide	https://www.apache.org	
	Covering Apache S	olr 4.7	/dyn/closer.cgi/lucene/	
			solr/ref-guide/	
RD-3	Product Data	Format		
	Specification -	Product	S3IPF.PDS.002	n1.6, 10/02/2015
	Structures			
RD-4	Product Data	Format	S3IPF.PDS.001	n1.7, 10/02/2015
	Specification - Lev	el 0 Products	33147.403.001	111.7, 10/02/2013
RD-5	Product Data	Format	S3IPF.PDS.003	n1.9, 10/02/2015
	Specification – SRAL-MWR		331FT.FD3.003	111.9, 10/02/2013
RD-6	Product Data	Format	S3IPF.PDS.004	n1.10, 28/05/2015
	Specification - OLC	I	33177.703.004	111.10, 20/03/2013





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RD-7	Product Specification	Data n - SLSTR	Format	S3IPF.PDS.005	n1.11, 28/05/2015
RD-8	Product Specification	Data n - SYNERO	Format SY	S3IPF.PDS.006	n1.6, 28/05/2015

Table 2 Reference Documents



serco

reference SPA-COPE-OSF-TN-009

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1 Open Data Indexes

1.1 Introducing the Sentinel-3 products formatting

SENTINEL-3 data products, as described in the Sentinel-3 Product Specification (see RD-3), are distributed

using a SENTINEL-specific variation of the Standard Archive Format for Europe (SAFE) format

specification. The SAFE format has been designed to act as a common format for archiving and conveying

data within ESA Earth Observation archiving facilities.

The SENTINEL-SAFE format wraps a folder containing image data in a binary data format and product

metadata in XML. This flexibility allows the format to be scalable enough to represent all levels of

SENTINEL products.

A SENTINEL product refers to a directory folder that contains a collection of information. It includes:

• a 'manifest.safe' file which holds the general product information in XML

• subfolders for measurement datasets containing image data in various binary formats

• a preview folder containing 'quicklooks' in PNG format, Google Earth overlays in KML format and

HTML preview files

an annotation folder containing the product metadata in XML as well as calibration data

• a support folder containing the XML schemes describing the product XML.

The data delivered is packaged as a file structure containing a manifest file in XML format listing general

product metadata and subfolders for measurement data, annotations, previews and support files.

1.2 Inspection of Product Nodes

The DHuS recognises the Sentinel-3 products at ingestion time and makes products nodes accessible through

the OData Protocol. The following odata query returns the list of nodes within the document root (first

level). Note that both UUID and product name are needed.

/odata/v1/Products['UUID']/Nodes('PRODUCT_NAME.SEN3')/Nodes

Contract: 40000113153

Serco Public





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```

```
https://131.176.236.22/odata/v1/Products('3fb4a1de-ac5f-4d09-aa7e-b714a5ec66f3')/Nodes('S3A_OL_0_EFR____20130708T033958_20130708T034158_20150807T000558_0119_015_289_____SVL_0_NR_001.SEN3')/Nodes
```

An example of the xml returned by the previous query is shown below. The nodes are provided in the <entry> blocks.

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
▼<feed xmlns="http://www.w3.org/2005/Atom" xmlns:m="http://schemas.microsoft.com/ado/2007/08/dataservices/metadata"
 xmlns:d="http://schemas.microsoft.com/ado/2007/08/dataservices" xml:base="https://131.176.236.22/dhus/odata/v1/Products('3fb4a1de-ac5f-4d09-aa7e-b714a5ec66f3')/Nodes('S3A_OL_0_EFR___20130708T033958_20130708T034158_20150807T000558_0119_015_289____SVL_O_NR_001.5EN3')/">
     https://131.176.236.22/dhus/odata/v1/Products('3fb4a1de-ac5f-4d09-aa7e-
     b714a5ec66f3')/Nodes('S3A_OL_0_EFR___20130708T033958_20130708T034158_20150807T000558_0119_015_289_____SVL_0_NR_001.SEN3')/Nodes
   <title type="text">Nodes</title>
   <updated>2015-09-14T08:27:53.198Z</updated>
  ▼<author>
     <name/>
   </author>
   k href="Nodes" rel="self" title="Nodes"/>
  ▼<entry>
    ▼<id>
       https://131.176.236.22/dhus/odata/v1/Products('3fb4a1de-ac5f-4d09-aa7e-
       b714a5ec66f3')/Nodes('S3A_OL_0_EFR___20130708T033958_20130708T034158_20150807T000558_0119_015_289____SVL_O_NR_001.SEN3')/Nodes('ISPAnnotation.dat')
     <title type="text">ISPAnnotation.dat</title>
     <updated>2015-09-14T08:27:53.199Z</updated>
     Category term="DHUS.Node" scheme="http://schemas.microsoft.com/ado/2007/08/dataservices/scheme"/>
k href="Nodes('ISPAnnotation.dat')" rel="edit" title="Node"/>
<lik href="Nodes('ISPAnnotation.dat')/$value" rel="edit-media" type="application/octet-stream"/>
      clink href="Nodes('ISPAnnotation.dat')/Nodes" rel="http://schemas.microsoft.com/ado/2007/08/dataservices/related/Nodes" title="Nodes"
      type="application/atom+xml;type=feed"/>
      xlink href="Nodes('ISPAnnotation.dat')/Attributes" rel="http://schemas.microsoft.com/ado/2007/08/dataservices/related/Attributes" title="Attributes"
      type="application/atom+xml; type=feed"/
     k href="Nodes('ISPAnnotation.dat')/Class" rel="http://schemas.microsoft.com/ado/2007/08/dataservices/related/Class" title="Class"
     type="application/atom+xml; type=entry"/
      <content type="application/octet-stream" src="Nodes('ISPAnnotation.dat')/$value"/>
    ▼<m:properties>
       <d:Id>ISPAnnotation.dat</d:Id>
       <d:Name>ISPAnnotation.dat</d:Name>
        <d:ContentType>Item</d:ContentType>
       <d:ContentLength>409050</d:ContentLength>
<d:ChildrenNumber>0</d:ChildrenNumber>
        <d:Value m:null="true"/>
     </m:properties>
   </entry>
  ▼<entrv>
```

To inspect the nodes of lower levels,

/odata/v1/Products['UUID']/Nodes('PRODUCT NAME.SEN3')/Nodes('nodename')/Nodes





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The Content Type property reveals the type of the Node content. <d:ContentType>

If the content type of a node is 'Item' and the number of its children is 0, the node is actually a leaf and it has a value. The user might get this value by appending the string /Value/\$value to the leaf path.

The following example will return the value of the constant in an xml file:

Getting the metadata included in the leaf '/'S3-Level-0/ 'generalProductInformation'/...' of the Product (XML response)

/odata/v1/Products('3fb4a1de-ac5f-4d09-aa7e-b714a5ec66f3')/Nodes('S3A_OL_0_EFR___20130708T033958_20130708T034158_20150807T000558_0119_015_289___SVL_O_NR_001.SEN3')/Nodes('xfdumanif est.xml')/Nodes('XFDU')/Nodes('metadataSection')/Nodes('metadataObject%5B4%5D')/Nodes('metadataWrap')/Nodes('xmlData')/Nodes('generalProductInformation')/Nodes('productType')/Value/\$value

If the node has content type different from 'item' (e.g XML Document (eXtensible Markup Language), SAFE Manifest, etc..), the content download is allowed by appending the string /\$value to the node path.

The following example will download the xfdumanifest.xml of a product:

Getting the manifest of a product

/odata/v1/Products('3fb4a1de-ac5f-4d09-aa7e-b714a5ec66f3')/Nodes('S3A_OL_0_EFR____20130708T033958_20130708T034158_20150807T000558_0119_015_289_____SVL_0_NR_001.SEN3')/Nodes('xfdumanifest.xml')/\$val





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2 Open Search Indexes -Sentinel-3 Metadata Indexes table

The following table contains the list of Sentinel-3 metadata indexed for Open Search.

N.B.: every open search is triggered by adding to the dhus path the string "/search?q=" followed by the example provided in the last column below.

2.1 Sentinel-3 Primary Metadata

The following table contains the list of Sentinel-3 Primary Metadata, common to all Sentinel 3 Products

Metadata Name	Index Name	Description	Example
Sensing start	beginposition	Sensing Start time of the data segment in UTC format	haginnacition (2015-07
		(yyyy-mm-ddThh:mm:ss.sssssZ)	beginposition:[2015-07-
			08T11:41:39.000Z TO NOW]
			beginposition:"2015-07-
			08T11:41:39.000Z"
Sensing stop	endposition	Sensing Stop time of the data segment in UTC format	
		(yyyy-mm-ddThh:mm:ss.sssssZ)	endposition:[2015-07-
			04T10:24:27.000Z TO NOW
			endposition:"2015-07-
			04T10:24:27.000Z"





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Metadata Name	Index Name	Description	Example
NSSDC identifier	platformidentif ier	Univocally identifies the mission according to standard defined by the World Data Centre for Satellite Information (WDCdlSI), available at http://nssdc.gsfc.nasa.gov/nmc/sc-query.html (0000-000A)	platformidentifier:0000-000A
Footprint	GMLfootprint	Product footprint using Geography markup language coordinates (http://en.wikipedia.org/wiki/Geography_Markup_Lang uage).	
JTS footprint	footprint	Product footprint using Java topology suite coordinates (http://en.wikipedia.org/wiki/JTS_Topology_Suite).	footprint:"Intersects(POLYGON((- 13.115927734375 27.752507427949,37.509072265625 27.752507427949,37.509072265625 61.475999093721,-13.115927734375 61.475999093721,-13.115927734375 27.752507427949)))"
Satellite	-	The expanded mission name (Sentinel-3)	
Satellite name	platformname	The expanded mission name (Sentinel-3)	
Satellite	-	The description of the satellite is linked to	
description		https://sentinel.esa.int/web/sentinel/missions/sentinel-	





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Metadata Name	Index Name	Description	Example
		<u>3</u>	
Satellite	-	An alphanumeric identifier of the platform within the	
number		mission (A or B)	
Mission type	-	Mission type: Earth Observation	
Operator	-	European Space Agency	
Instrument	-	An acronym for the instrument name. Possible values	
		are:	
		- OLCI	
		- SLSTR	
		- SRAL	
		- DORIS	
		- MWR	
		- GNSS	
		- SYNERGY	
		- HKTM	
		- NAVATT	
Instrument	instrumentnam	Instrument name.	instrumentname:"Ocean Land Colour
name	е	Possible values are:	Instrument"
		- Ocean Land Colour Instrument	
		- Sea and Land Surface Temperature Radiometer	
		- Sar Radar ALtimeter	
		- Doppler Orbitography and Radiopositionning Integrated	
		by Satellite	
		- Microwave Radiometer	
		- Global Navigation Satellite System	
		- Synergy	





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Metadata Name	Index Name	Description	Example
		- Housekeeping Telemetry	
		- Navigation and Attitude data	
Instrument	instrumentshor	An acronym for the instrument name. Possible values	instrumentshortname:OLCI
abbreviation	tname	are:	
		- OLCI	
		- SLSTR	
		- SRAL	
		- DORIS	
		- MWR	
		- GNSS	
		- SYNERGY	
		- HKTM	
		- NAVATT	
Instrument	sensoroperatio	Instrument mode used to acquire the data segment.	sensoroperational mode: "Earth
mode	nalmode	Possible values are:	Observation"
		- Earth Observation	
		- Radiometric Calibration	
		- Radiometric Calibration Spectral Relaxed	
		- Spectral Calibration	
		- Calibration	
		- Navigation	
		- Satellite	
Mode	mode	Identifier of the instrument mode.	mode:EO
		Values:	
		- EO	
		- RAC	





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Metadata Name	Index Name	Description	Example
		- RACSR	
		- SC	
		- CAL	
		- NAV	
		- SAT	
Leap Second (s)	leapsecond	Signed duration of the leap second (leap second sign is	
		positive if difference between GPS time and UTC is	
		increasing).	
		Values:	
		- 1	
		1	
Leap Second	leapsecondocc	Time of occurrence of leap second in UTC format (if leap	
Occurrence	urrence	second occurred in the product time window); it	
		represents the time after the leap second occurrence	
		(i.e. midnight of day after the leap second)	
Product Type	producttype	Product identification corresponding to the	producttype:OL_0_EFR
		concatenation between the Data Source (2*uc),	
		Processing Level (1*uc) and the Data Type (6*uc) fields of	
		the product name (e.g. OL_1_ERR , ref. Sentinel 3	
		PDGS File Naming Convention)	
Product Level	productlevel	Product Level.	productlevel::L1
		Values are:	
		- LO	
		- L1	
		- L2	





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Metadata Name	Index Name	Description	Example
Format	format	Product file format (e.g. SAFE)	format:SAFE
Filename	filename	Product name	
Timeliness Category	timeliness	2 uppercase letters/digits indicating the applicability of the file in terms of timeliness (XX in the class_id of the filename). Values: - Near Real Time - Short Time Critical - Non Time Critical	timeliness:"Near Real Time"
Baseline Collection	collection	3 letters/digits indicating the baseline collection	collection:001
Creation Date	creationdate	Product Creation date Consists of 15 characters, either uppercase letters or digits and is applicable both to the Instrument Data Products and the Auxiliary Data Format: - 8 char., all digits, for the date: "YYYYMMDD", year, month, day - 1 uppercase T: "T" 6 char., all digits, for the time: "HHMMSS", hour, minutes, seconds	creationdate:"2015-08- 07T00:05:58.000Z"
Ingestion Date	-	Product Ingestion date in UTC format	
Date	-	Start time of the acquisition period of the sensor in UTC format (yyyy-mm-ddThh:mm:ss.sssssZ)	





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Metadata Name	Index Name	Description	Example		
Size	size	Total size of product (including all sub-files, except manifest) in bytes	size:"437.09 MB"		
PDU Duration (s)	pduduration	optional field only present for frame and stripe PDU			
PDU Along Track Coordinate (s)	pdualongtrackc oord	optional field only present only for frame			
PDU Tile identifier	pdutileid	optional field only present only for tiles Values (from S3 File Naming Convention): AFRICA NORTH_AMERICA SOUTH_AMERICA CENTRAL_AMERICA NORTH_ASIA WEST_ASIA SOUTH_EAST_ASIA ASIAN_ISLANDS AUSTRALASIA EUROPE			
Orbit number (start)	orbitnumber	Absolute "start" orbit number. Indicates if the orbit number refers to the oldest or the most recent data unit. If the start and stop orbit numbers are identical, only this metadata is present. First value is 1.	orbitnumber:5351		
Orbit number	lastorbitnumbe	Absolute "stop" orbit number.	lastorbitnumber:10701		





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Metadata Name	Index Name	Description	Example
(stop)	r	Indicates if the orbit number refers to the oldest or the	
		most recent data unit.	
		If the start and stop orbit numbers are different, this	
		metadata is present.	
Orbit Direction	orbitdirection	Track direction related to absolute "start" orbit number.	orbitdirection:ascending
(start)		Values:	
		- ascending	
		- descending	
Orbit Direction	lastorbitdirecti	Track direction related to absolute "stop" orbit number	lastorbitdirection:ascending
(stop)	on	(if available).	
		Values:	
		- ascending	
		- descending	
Relative Orbit	relativeorbitnu	Relative "start" orbit number.	relativeorbitnumber:288
(start)	mber	Indicates if the relative orbit number refers to the oldest	
		or the most recent data unit.	
		If the start and stop orbit numbers are identical, only this	
		metadata is present.	
		First value is 1.	
Relative Orbit	lastrelativeorbi	Relative "stop" orbit number.	lastrelativeorbitnumber:289
(stop)	tnumber	Indicates if the relative orbit number refers to the oldest	
		or the most recent data unit.	
		If the start and stop relative orbit numbers are different,	
		this metadata is present.	
Relative Orbit	relorbitdir	Track direction related to relative "start" orbit number.	
Direction		Values:	





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Metadata Name	Index Name	Description	Example
(start)		- ascending	
		- descending	
Relative Orbit	lastrelorbitdire	Track direction related to relative "stop" orbit number (if	
Direction (stop)	ction	available).	
		Values:	
		- ascending	
		- descending	
Pass (start)	passnumber	Absolute "start" pass number.	passnumber:10701
		Indicates if the pass number refers to the oldest or the	
		most recent data unit.	
		If the start and stop pass numbers are identical, only this	
		metadata is present.	
		First value is 1	
Pass (stop)	lastpassnumbe	Absolute "stop" pass number.	lastpassnumber:10701
	r	Indicates if the pass number refers to the oldest or the	
		most recent data unit.	
		If the start and stop pass numbers are different, this	
		metadata is present.	
Pass direction	passdirection	Track direction related to absolute "start" pass number.	
(start)		Values:	
		- ascending	
		- descending	
Pass direction	lastpassdirectio	Track direction related to absolute "stop" pass number	
(stop)	n	(if available).	
		Values:	
		- ascending	





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Metadata Name	Index Name	Description Example	
		- descending	
Relative Pass	relpassnumber	Relative "start" pass number.	relpassnumber: 577
(start)		Indicates if the relative pass number refers to the oldest	
		or the most recent data unit.	
		If the start and stop relative pass numbers are identical,	
		only this metadata is present.	
		First value is 1	
Relative Pass	lastrelpassnum	Relative "stop" pass number.	lastrelpassnumber: 577
(stop)	ber	Indicates if the relative pass number refers to the oldest	
		or the most recent data unit.	
		If the start and stop relative pass numbers are different,	
		this metadata is present.	
Relative Pass	relpassdirectio	Track direction related to relative "start" pass number.	
Direction	n	Values:	
(start)		- ascending	
		- descending	
Relative Pass lastrelpassdirec		Track direction related to relative "stop" pass number (if	
Direction (stop)	tion	available).	
		Values:	
		- ascending	
		- descending	
Cycle number cyclenumber		"Cycle number to which the oldest data unit of the data	cyclenumber:15
		object refers.	
		First value is 1.	
Processing	processingnam	The name of the processing. This attribute is mandatory	processingname:"Data Processing"
name	е	and should never be bound to the empty string.	





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Metadata Name	Index Name	Description	Example
		Value: DataProcessing	
Processing	processinglevel	The level of the output processing.	processinglevel:2
Level		Values:	
		- 0	
		-1	
		- 2	
		- 3	
Processing	procfacilitynam	Name of the organisation authority responsible of the	
Facility Name	е	facility	
		Value:	
		- Land OLCI Processing and Archiving Centre [LN1]	
		- Land SLSTR and SYN Processing and Archiving Centre	
		[LN2]	
		- Land Surface Topography Mission Processing and	
		Archiving Centre [LN3]	
		- Marine Processing and Archiving Centre [MAR]	
	- Svalbard Satellite Core Ground Station [SVL]		
Processing	procfacilityorg	Explicit name of the organisation responsible of the	
Facility		facility. This name may be an agency or company name.	
Organization		Value:	
	- European Space Agency		
		- European Organisation for the Exploitation of	
		Meteorological Satellites	
Online Quality	onlinequalitych	Online quality flag (based on the results of quality	onlinequalitycheck:FAILED
Check	eck	checks).	
		Values (TBC by OLQC):	





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Metadata Name	Index Name	Description	Example
		- PASSED	
		- DEGRADED	
		- FAILED	

Table 2-1 Sentinel-3 Primary Metadata

2.2 Sentinel-3 Secondary Metadata (L0)

The following table contains the list of Sentinel-3 Metadata specific for Level 0 Products

Metadata Name	Index Name	Description	Example		
ISP Count	ispcount	Number of ISPs contained in the product			
OLCI	olcicalseq	Indicate the OLCI calibration sequence information.	olcicalseq:S05		
Calibration		Values:			
Sequence		- S01			
		- S02			
		- S03			
		- S04			
		- S05			
		- S06			
		- S07			
		- S08			
		- S09			
OLCI	olcicaltriggers	Indicate the OLCI calibration triggers information.			
Calibration		Values:			
Triggers		- RAC			
		- SPC			





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Metadata Name	Index Name	Description	Example
		- NONE	
OLCI	olcicaldescripti	Values:	
Calibration	on	- RADIOMETRIC CALIBRATION	
Description		- SPECTRAL CALIBRATION with DIFF1 at ORBIT N	
		- SPECTRAL CALIBRATION with DIFF3 at ORBIT N+1	
		- DIFFUSER1 AGEING at ORBIT N	
		- DIFFUSER1 AGEING at ORBIT N+1	
		- ORBITAL STABILITY	
		- SPECTRAL CALIBRATION using Solar Fraunhofer lines	
		- RADIOMETRIC CALIBRATION for observation of atmospheric	
		absorption lines	
		- OBSERVATION of atmospheric absorption lines	

Table 2-2 Sentinel-3 Metadata Specific for Level 0 Products

2.3 Sentinel-3 Secondary Metadata (SRAL)

The following table contains the list of Sentinel-3 Metadata specific for Specific for Level 1 and Level 2 SRAL Products.

Metadata Name	Index Name	Description	Example
Measurement	Irmpercentage	Percentage of Measurement records detected	Irmpercentage:[90 TO 100]
Records in		in LRM mode	
LRM Mode (%)			
Measurement	sarpercentage	Percentage of Measurements records	sarpercentage:[90 TO 100]
Records in SAR		detected in SAR mode	





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Metadata Name	Index Name	Description	Example
Mode (%)			
Measurement	landpercentage	Percentage of Measurement records detected	landpercentage:[90 TO 100]
Records on		on land	
Land (%)			
Measurement	closedseapercentage	Percentage of Measurement records detected	closedseapercentage:[90 TO 100]
Records on		on closed sea	
Closed Sea (%)			
Measurement	continentalicepercentage	Percentage of Measurement records detected	continentalicepercentage:[90 TO 100]
Records on		on continental ice	
Continental Ice			
(%)			
Measurement	openseapercentage	Percentage of Measurement records detected	
Records on		on open ocean	
Open Ocean			
(%)			

Table 2-3 Sentinel-3 Metadata Specific for L1/L2 SRAL Products

2.4 Sentinel-3 Secondary Metadata (OLCI)

The following table contains the list of Sentinel-3 Metadata specific for Specific for Level 1 and Level 2 OLCI Products.

Metadata Name	Index Name	Description	Example
Bright Pixels (%)	brightpixels	Percentage of bright pixels.	brightpixels:[0 TO 0.5]
Saline Water Pixels (%)	salinewaterpixels	Percentage of saline water pixels	salinewaterpixels:[0 TO 0.5]





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Metadata Name	Index Name	Description	Example
Coastal Pixels (%)	coastalpixels	Percentage of coastal pixels	coastalpixels:[0 TO 0.5]
Fresh Inland Water Pixels (%)	freshwaterpixels	Percentage of fresh inland water pixels	freshwaterpixels:[0 TO 0.5]
Tidal Region Pixels (%)	tidalregionpixels	Percentage of tidal region pixels	tidalregionpixels:[0 TO 0.5]
Land Pixels (%)	landpixels	Percentage of land pixels	landpixels:[0 TO 0.5]
Cloudy Pixels (%)	cloudypixels	Percentage of cloud pixels	cloudypixels:[0 TO 0.5]
ECMWF Type	ecmwf	Type of ECMWF data used	ecmwf:FORECAST

Table 2-4 Sentinel-3 Metadata Specific for L1/L2 OLCI Products

2.5 Sentinel-3 Secondary Metadata (SLSTR)

The following table contains the list of Sentinel-3 Metadata specific for Specific for Level 1 and Level 2 SLSTR Products.

Metadata	Index Name	Description	Example
Name			
ECMWF Type	ecmwf	Type of ECMWF data used	ecmwf:FORECAST

Table 2-5 Sentinel-3 Metadata Specific for L1/L2 SLSTR Products





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2.6 Sentinel-3 Secondary Metadata (SYNERGY)

The following table contains the list of Sentinel-3 Metadata specific for Specific for Level 1 and Level 2 SYNERGY Products.

Metadata Name	Index Name	Description	Example
Snow or Ice Pixels (%)	snoworicepixels	Percentage of measurements detected on snow or continental ice (10-2 %)	snoworicepixels[* TO 12]
Saline Water Pixels (%)	salinewaterpixels	Percentage of saline water pixels.	salinewaterpixels[* TO 12]
Land Pixels (%)	landpixels	Percentage of land pixels	landpixels[* TO 12]
Coastal Pixels (%)	coastalpixels	Percentage of coastal pixels	coastalpixels[* TO 12]
Fresh Inland Water Pixels (%)	freshwaterpixels	Percentage of fresh inland water pixels	freshwaterpixels[* TO 12]
Tidal Region Pixels (%)	tidalregionpixels	Percentage of tidal region pixels	tidalregionpixels[* TO 12]
Cloudy Pixels (%)	cloudypixels	Percentage of cloudy pixels	cloudypixels[* TO 12]

Table 2-6 Sentinel-3 Metadata Specific for L1/L2 SYNERGY Products





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3 Open Search Indexes -Sentinel-3 ADF Metadata Indexes table

The following table contains the list of Sentinel-3 Auxiliary Data Filemetadata indexed for Open Search.

N.B.: every open search is triggered by adding to the dhus path the string "/search?q=" followed by the example provided in the last column below.

3.1 Sentinel-3 ADF Metadata

The following table contains the list of Sentinel-3 ADF Metadata.

Metadata Name	Index Name	Description	Example
Validity start	beginposition	Validity Start time of the data segment in UTC format (yyyy-mm-ddThh:mm:ss.ssssssZ)	beginposition:[2015-07- 08T11:41:39.000Z TO NOW]
			beginposition:"2015-07- 08T11:41:39.000Z"
Validity stop	endposition	Validity Stop time of the data segment in UTC format (yyyy-mm-ddThh:mm:ss.sssssz)	endposition:[2015-07- 04T10:24:27.000Z TO NOW
			endposition:"2015-07- 04T10:24:27.000Z"





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Metadata Name	Index Name	Description	Example
Satellite	-	The expanded mission name (Sentinel-3)	
Satellite name	platformname	The expanded mission name (Sentinel-3)	
Satellite	-	An alphanumeric identifier of the platform within the	
number		mission (A or B)	
Product Type	producttype	Product identification corresponding to the	producttype:OL_0_EFR
		concatenation between the Data Source (2*uc),	
		Processing Level (1*uc) and the Data Type (6*uc) fields of	
		the product name (e.g. OL_1_ERR , ref. Sentinel 3	
		PDGS File Naming Convention)	
Format	format	Product file format (e.g. SAFE)	
			format:SAFE
Filename	filename	Product name	
Creation Date	creationdate	Product Creation date	creationdate:"2015-08-
		Consists of 15 characters, either uppercase letters or	07T00:05:58.000Z"
		digits and is applicable both to the	
		Instrument Data Products and the Auxiliary Data	
		Format:	
		- 8 char., all digits, for the date: "YYYYMMDD", year,	
		month, day	
		- 1 uppercase T: "T"	
		6 char., all digits, for the time: "HHMMSS", hour,	
	_	minutes, seconds	
Size	size	Total size of product (including all sub-files, except	size:"437.09 MB"
		manifest) in bytes	
ADF Quality	adfqualitycheck	ADF quality flag (based on the results of quality checks).	adfqualitycheck:FAILED





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Metadata Name	Index Name	Description	Example
Check		Values:	
		- PASSED	
		- DEGRADED	
		- FAILED	

Table 3-1 Sentinel-3 ADF Metadata