

3.1 Schema of L2A GIPP FILE

GIPPs are configured in an XML file named L2A_GIPP.xml, located in the <cfg> subdirectory of the Sen2Cor home directory which is specified by the environment variable \$SEN2COR_HOME, and can be configured by the user (exceptions which should not be configured by standard users are marked with an asterisk (*)). For each processed Level 2A tile, the GIPP xml file will be renamed to:

- S2A_USER_GIP_L2A_TL_<TILE_ID> (up to PSD V 13.1)
- GIP_TL (for PSD V.14.2 and above)

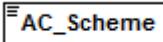
and subsequently copied into the AUX_DATA subfolder of the corresponding granule for documentation purposes.

schema location: [L2A_GIPP.xsd](#)

Elements

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[Adj_Km](#)
[Aerosol_Type](#)
[Altitude](#)
[Atmospheric_Correction](#)
[BRDF_Correction](#)
[BRDF_Lower_Bound](#)
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[DEM_Directory](#)
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[Lib_Dir](#)
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[UP_Scheme_1C](#)
[UP_Scheme_2A](#)
[VIS_Update_Mode](#)
[Visibility](#)
[WV_Correction](#)
[WV_Threshold_Cirrus](#)
[WV_Watermask](#)

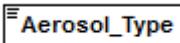
element AC_Scheme

diagram							
type	restriction of xs:string						
properties	content simple						
used by	element Common_Section						
facets	<table> <thead> <tr> <th>Kind</th> <th>Value</th> <th>Annotation</th> </tr> </thead> <tbody> <tr> <td>pattern</td> <td>L2(.)+.xsd</td> <td></td> </tr> </tbody> </table>	Kind	Value	Annotation	pattern	L2(.)+.xsd	
Kind	Value	Annotation					
pattern	L2(.)+.xsd						

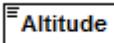
element Adj_Km

diagram										
type	restriction of xs:decimal									
properties	content simple									
used by	element Calibration									
facets	<table> <thead> <tr> <th>Kind</th> <th>Value</th> <th>Annotation</th> </tr> </thead> <tbody> <tr> <td>minInclusive</td> <td>0</td> <td></td> </tr> <tr> <td>maxInclusive</td> <td>10</td> <td></td> </tr> </tbody> </table>	Kind	Value	Annotation	minInclusive	0		maxInclusive	10	
Kind	Value	Annotation								
minInclusive	0									
maxInclusive	10									

element Aerosol_Type

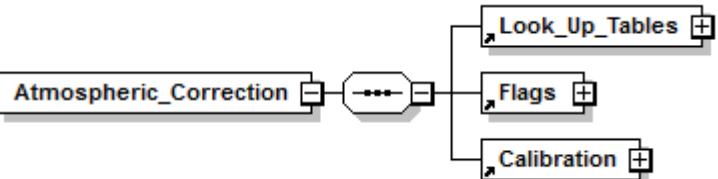
diagram													
type	restriction of xs:string												
properties	content simple												
used by	element Look Up Tables												
facets	<table> <thead> <tr> <th>Kind</th> <th>Value</th> <th>Annotation</th> </tr> </thead> <tbody> <tr> <td>enumeration</td> <td>RURAL</td> <td></td> </tr> <tr> <td>enumeration</td> <td>MARITIME</td> <td></td> </tr> <tr> <td>enumeration</td> <td>AUTO</td> <td></td> </tr> </tbody> </table>	Kind	Value	Annotation	enumeration	RURAL		enumeration	MARITIME		enumeration	AUTO	
Kind	Value	Annotation											
enumeration	RURAL												
enumeration	MARITIME												
enumeration	AUTO												

element Altitude

diagram							
type	restriction of xs:decimal						
properties	content simple						
used by	element Calibration						
facets	<table> <thead> <tr> <th>Kind</th> <th>Value</th> <th>Annotation</th> </tr> </thead> <tbody> <tr> <td>minInclusive</td> <td>0</td> <td></td> </tr> </tbody> </table>	Kind	Value	Annotation	minInclusive	0	
Kind	Value	Annotation					
minInclusive	0						

	maxInclusive 2.5
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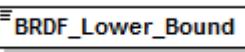
element Atmospheric_Correction

diagram	 <pre> classDiagram class Atmospheric_Correction class LookUpTables class Flags class Calibration Atmospheric_Correction < --> LookUpTables Atmospheric_Correction < --> Flags Atmospheric_Correction < --> Calibration </pre>
properties	content complex
children	Look Up Tables Flags Calibration
used by	element Level-2A Ground Image Processing Parameter

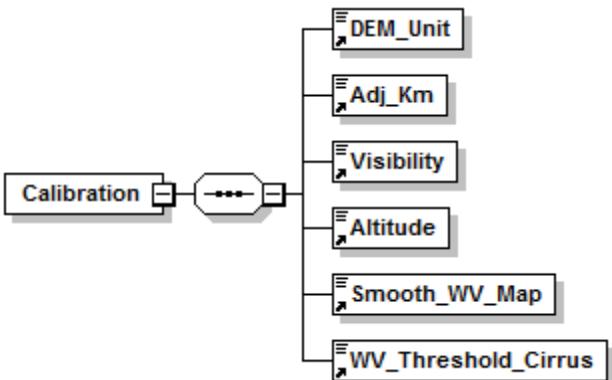
element BRDF_Correction

diagram																									
type	restriction of xs:byte																								
properties	content simple																								
used by	element Flags																								
facets	<table> <thead> <tr> <th>Kind</th> <th>Value</th> <th>Annotation</th> </tr> </thead> <tbody> <tr> <td>enumeration</td> <td>0</td> <td></td> </tr> <tr> <td>enumeration</td> <td>1</td> <td></td> </tr> <tr> <td>enumeration</td> <td>2</td> <td></td> </tr> <tr> <td>enumeration</td> <td>11</td> <td></td> </tr> <tr> <td>enumeration</td> <td>12</td> <td></td> </tr> <tr> <td>enumeration</td> <td>22</td> <td></td> </tr> <tr> <td>enumeration</td> <td>21</td> <td></td> </tr> </tbody> </table>	Kind	Value	Annotation	enumeration	0		enumeration	1		enumeration	2		enumeration	11		enumeration	12		enumeration	22		enumeration	21	
Kind	Value	Annotation																							
enumeration	0																								
enumeration	1																								
enumeration	2																								
enumeration	11																								
enumeration	12																								
enumeration	22																								
enumeration	21																								

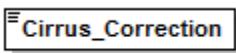
element BRDF_Lower_Bound

diagram										
type	restriction of xs:decimal									
properties	content simple									
used by	element Flags									
facets	<table> <thead> <tr> <th>Kind</th> <th>Value</th> <th>Annotation</th> </tr> </thead> <tbody> <tr> <td>minInclusive</td> <td>0.1</td> <td></td> </tr> <tr> <td>maxInclusive</td> <td>0.25</td> <td></td> </tr> </tbody> </table>	Kind	Value	Annotation	minInclusive	0.1		maxInclusive	0.25	
Kind	Value	Annotation								
minInclusive	0.1									
maxInclusive	0.25									

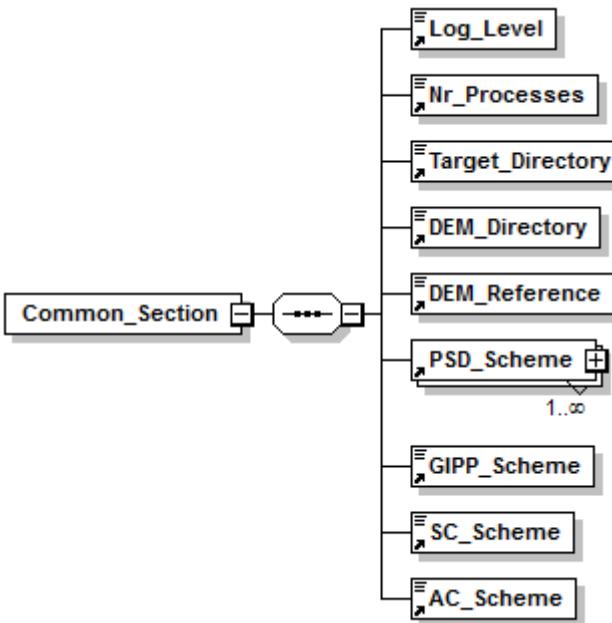
element Calibration

diagram	 <pre> graph LR Calibration[Calibration] --- DEM_Unit[DEM_Unit] Calibration --- Adj_Km[Adj_Km] Calibration --- Visibility[Visibility] Calibration --- Altitude[Altitude] Calibration --- Smooth_WV_Map[Smooth_WV_Map] Calibration --- WV_Threshold_Cirrus[WV_Threshold_Cirrus] </pre>
properties	content complex
children	DEM_Unit Adj_Km Visibility Altitude Smooth_WV_Map WV_Threshold_Cirrus
used by	element Atmospheric Correction

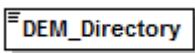
element Cirrus_Correction

diagram	 <pre> graph LR Cirrus_Correction[Cirrus_Correction] </pre>									
type	restriction of xs:byte									
properties	content simple									
used by	element Flags									
facets	<table> <thead> <tr> <th>Kind</th> <th>Value</th> <th>Annotation</th> </tr> </thead> <tbody> <tr> <td>enumeration</td> <td>0</td> <td></td> </tr> <tr> <td>enumeration</td> <td>1</td> <td></td> </tr> </tbody> </table>	Kind	Value	Annotation	enumeration	0		enumeration	1	
Kind	Value	Annotation								
enumeration	0									
enumeration	1									

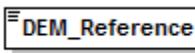
element Common_Section

diagram	 <pre> classDiagram class Common_Section { Log_Level Nr_Processes Target_Directory DEM_Directory DEM_Reference PSD_Scheme GIPP_Scheme SC_Scheme AC_Scheme } Common_Section "1..∞" *-- PSD_Scheme </pre>
properties	content complex
children	Log_Level Nr_Processes Target_Directory DEM_Directory DEM_Reference PSD_Scheme GIPP_Scheme SC_Scheme AC_Scheme
used by	element Level-2A_Ground_Image_Processing_Parameter

element DEM_Directory

diagram	 <pre> classDiagram class DEM_Directory </pre>
type	restriction of <code>xs:string</code>
properties	content simple
used by	element Common_Section

element DEM_Reference

diagram	 <pre> classDiagram class DEM_Reference </pre>
type	<code>xs:anyURI</code>
properties	content simple
used by	element Common_Section

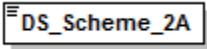
element DEM_Unit

diagram													
type	restriction of xs:byte												
properties	content simple												
used by	element Calibration												
facets	<table> <thead> <tr> <th>Kind</th> <th>Value</th> <th>Annotation</th> </tr> </thead> <tbody> <tr> <td>enumeration</td> <td>0</td> <td></td> </tr> <tr> <td>enumeration</td> <td>1</td> <td></td> </tr> <tr> <td>enumeration</td> <td>2</td> <td></td> </tr> </tbody> </table>	Kind	Value	Annotation	enumeration	0		enumeration	1		enumeration	2	
Kind	Value	Annotation											
enumeration	0												
enumeration	1												
enumeration	2												

element DS_Scheme_1C

diagram							
type	restriction of xs:string						
properties	content simple						
used by	element PSD Scheme						
facets	<table> <thead> <tr> <th>Kind</th> <th>Value</th> <th>Annotation</th> </tr> </thead> <tbody> <tr> <td>pattern</td> <td>S2(.)+\.xsd</td> <td></td> </tr> </tbody> </table>	Kind	Value	Annotation	pattern	S2(.)+\.xsd	
Kind	Value	Annotation					
pattern	S2(.)+\.xsd						

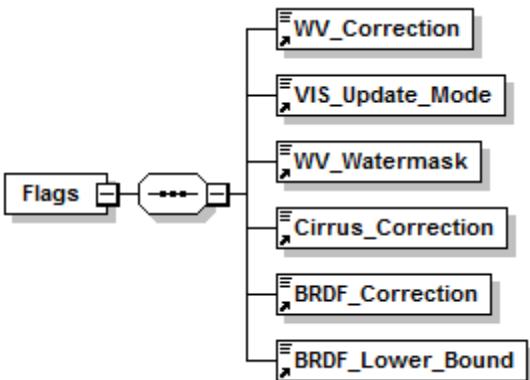
element DS_Scheme_2A

diagram							
type	restriction of xs:string						
properties	content simple						
used by	element PSD Scheme						
facets	<table> <thead> <tr> <th>Kind</th> <th>Value</th> <th>Annotation</th> </tr> </thead> <tbody> <tr> <td>pattern</td> <td>S2(.)+\.xsd</td> <td></td> </tr> </tbody> </table>	Kind	Value	Annotation	pattern	S2(.)+\.xsd	
Kind	Value	Annotation					
pattern	S2(.)+\.xsd						

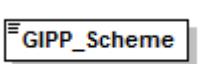
element Filters

diagram	
properties	content complex
children	Median_Filter
used by	element Scene Classification

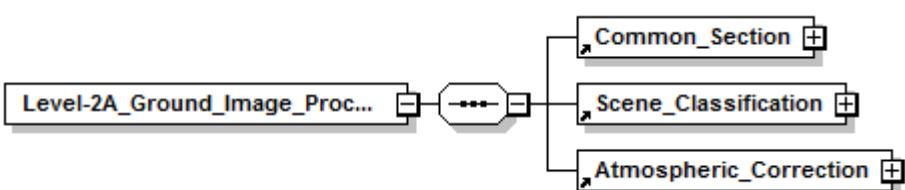
element Flags

diagram	
properties	content complex
children	WV_Correction VIS_Update_Mode WV_Watermask Cirrus_Correction BRDF_Correction BRDF_Lower_Bound
used by	element Atmospheric Correction

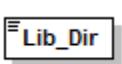
element GIPP_Scheme

diagram	
type	restriction of xs:string
properties	content simple
used by	element Common Section
facets	Kind Value Annotation pattern L2(.)+.xsd

element Level-2A_Ground_Image_Processing_Parameter

diagram	
properties	content complex
children	Common Section Scene Classification Atmospheric Correction

element Lib_Dir

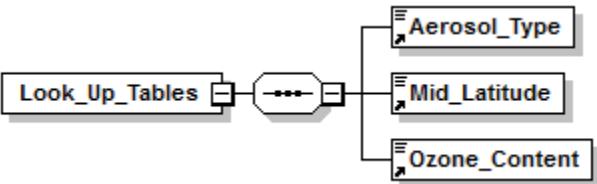
diagram	
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type	restriction of xs:string		
properties	content simple		
facets	Kind enumeration	Value lib	Annotation

element Log_Level

diagram																			
type	restriction of xs:string																		
properties	content simple																		
used by	element Common Section																		
facets	<table> <tr> <td>Kind enumeration</td> <td>Value INFO</td> <td>Annotation</td> </tr> <tr> <td>enumeration</td> <td>NOTSET</td> <td></td> </tr> <tr> <td>enumeration</td> <td>DEBUG</td> <td></td> </tr> <tr> <td>enumeration</td> <td>WARNING</td> <td></td> </tr> <tr> <td>enumeration</td> <td>ERROR</td> <td></td> </tr> <tr> <td>enumeration</td> <td>CRITICAL</td> <td></td> </tr> </table>	Kind enumeration	Value INFO	Annotation	enumeration	NOTSET		enumeration	DEBUG		enumeration	WARNING		enumeration	ERROR		enumeration	CRITICAL	
Kind enumeration	Value INFO	Annotation																	
enumeration	NOTSET																		
enumeration	DEBUG																		
enumeration	WARNING																		
enumeration	ERROR																		
enumeration	CRITICAL																		

element Look_Up_Tables

diagram	
properties	content complex
children	Aerosol Type Mid Latitude Ozone Content
used by	element Atmospheric Correction

element Median_Filter

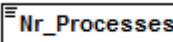
diagram				
type	restriction of xs:byte			
properties	content simple			
used by	element Filters			
facets	<table> <tr> <td>Kind minInclusive</td> <td>Value 0</td> <td>Annotation</td> </tr> </table>	Kind minInclusive	Value 0	Annotation
Kind minInclusive	Value 0	Annotation		

	maxInclusive 10
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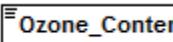
element Mid_Latitude

diagram	 Mid_Latitude												
type	restriction of xs:string												
properties	content simple												
used by	element Look Up Tables												
facets	<table> <thead> <tr> <th>Kind</th> <th>Value</th> <th>Annotation</th> </tr> </thead> <tbody> <tr> <td>enumeration</td> <td>SUMMER</td> <td></td> </tr> <tr> <td>enumeration</td> <td>WINTER</td> <td></td> </tr> <tr> <td>enumeration</td> <td>AUTO</td> <td></td> </tr> </tbody> </table>	Kind	Value	Annotation	enumeration	SUMMER		enumeration	WINTER		enumeration	AUTO	
Kind	Value	Annotation											
enumeration	SUMMER												
enumeration	WINTER												
enumeration	AUTO												

element Nr_Processes

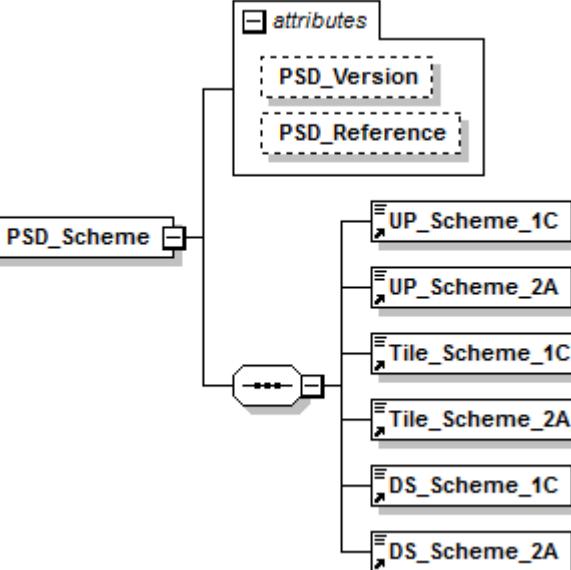
diagram	 Nr_Processes
type	union of (restriction of xs:string , restriction of xs:unsignedByte)
properties	content simple
used by	element Common Section

element Ozone_Content

diagram	 Ozone_Content																																				
type	restriction of xs:string																																				
properties	content simple																																				
used by	element Look Up Tables																																				
facets	<table> <thead> <tr> <th>Kind</th> <th>Value</th> <th>Annotation</th> </tr> </thead> <tbody> <tr> <td>enumeration</td> <td>0</td> <td></td> </tr> <tr> <td>enumeration</td> <td>f</td> <td></td> </tr> <tr> <td>enumeration</td> <td>g</td> <td></td> </tr> <tr> <td>enumeration</td> <td>h</td> <td></td> </tr> <tr> <td>enumeration</td> <td>i</td> <td></td> </tr> <tr> <td>enumeration</td> <td>j</td> <td></td> </tr> <tr> <td>enumeration</td> <td>k</td> <td></td> </tr> <tr> <td>enumeration</td> <td>t</td> <td></td> </tr> <tr> <td>enumeration</td> <td>u</td> <td></td> </tr> <tr> <td>enumeration</td> <td>v</td> <td></td> </tr> <tr> <td>enumeration</td> <td>w</td> <td></td> </tr> </tbody> </table>	Kind	Value	Annotation	enumeration	0		enumeration	f		enumeration	g		enumeration	h		enumeration	i		enumeration	j		enumeration	k		enumeration	t		enumeration	u		enumeration	v		enumeration	w	
Kind	Value	Annotation																																			
enumeration	0																																				
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enumeration	u																																				
enumeration	v																																				
enumeration	w																																				

	enumeration x enumeration y
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element PSD_Scheme

diagram	 <pre> classDiagram class PSD_Scheme { PSD_Version PSD_Reference } class UP_Scheme_1C class UP_Scheme_2A class Tile_Scheme_1C class Tile_Scheme_2A class DS_Scheme_1C class DS_Scheme_2A PSD_Scheme "1" -- "2" UP_Scheme_1C PSD_Scheme "1" -- "2" UP_Scheme_2A PSD_Scheme "1" -- "2" Tile_Scheme_1C PSD_Scheme "1" -- "2" Tile_Scheme_2A PSD_Scheme "1" -- "2" DS_Scheme_1C PSD_Scheme "1" -- "2" DS_Scheme_2A </pre>																		
properties	content complex																		
children	UP_Scheme_1C UP_Scheme_2A Tile_Scheme_1C Tile_Scheme_2A DS_Scheme_1C DS_Scheme_2A																		
used by	element Common_Section																		
attributes	<table> <thead> <tr> <th>Name</th> <th>Type</th> <th>Use</th> <th>Default</th> <th>Fixed</th> <th>Annotation</th> </tr> </thead> <tbody> <tr> <td>PSD_Version</td> <td>derived by: xs:string</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PSD_Reference</td> <td>derived by: xs:string</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Name	Type	Use	Default	Fixed	Annotation	PSD_Version	derived by: xs:string					PSD_Reference	derived by: xs:string				
Name	Type	Use	Default	Fixed	Annotation														
PSD_Version	derived by: xs:string																		
PSD_Reference	derived by: xs:string																		

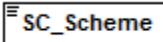
attribute PSD_Scheme/@PSD_Version

type	restriction of xs:string		
facets	Kind length	Value 2	Annotation
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attribute PSD_Scheme/@PSD_Reference

type	restriction of xs:string		
facets	Kind pattern	Value S2(.)+	Annotation

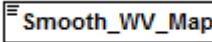
element SC_Scheme

diagram	
type	restriction of xs:string
properties	content simple
used by	element Common_Section
facets	Kind Value Annotation pattern L2(.)+.xsd

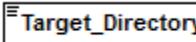
element Scene_Classification

diagram	
properties	content complex
children	Filters
used by	element Level-2A_Ground_Image_Processing_Parameter

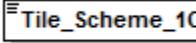
element Smooth_WV_Map

diagram	
type	restriction of xs:decimal
properties	content simple
used by	element Calibration
facets	Kind Value Annotation minInclusive 0 maxInclusive 300

element Target_Directory

diagram	
type	restriction of xs:string
properties	content simple
used by	element Common_Section

element Tile_Scheme_1C

diagram	
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type	restriction of xs:string		
properties	content simple		
used by	element PSD Scheme		
facets	Kind pattern	Value S2(.)+\xsd	Annotation

element Tile_Scheme_2A

diagram			
type	restriction of xs:string		
properties	content simple		
used by	element PSD Scheme		
facets	Kind pattern	Value S2(.)+\xsd	Annotation

element UP_Scheme_1C

diagram			
type	restriction of xs:string		
properties	content simple		
used by	element PSD Scheme		
facets	Kind pattern	Value S2(.)+\xsd	Annotation

element UP_Scheme_2A

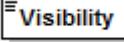
diagram			
type	restriction of xs:string		
properties	content simple		
used by	element PSD Scheme		
facets	Kind pattern	Value S2(.)+\xsd	Annotation

element VIS_Update_Mode

diagram	
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type	restriction of xs:byte		
properties	content simple		
used by	element Flags		
facets	Kind enumeration	Value 0	Annotation
	enumeration	1	

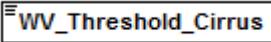
element Visibility

diagram	
type	restriction of xs:decimal
properties	content simple
used by	element Calibration
facets	Kind minInclusive Value 5 Annotation maxInclusive 120

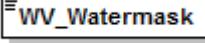
element WV_Correction

diagram	
type	restriction of xs:byte
properties	content simple
used by	element Flags
facets	Kind minInclusive Value 0 Annotation maxInclusive 4

element WV_Threshold_Cirrus

diagram	
type	restriction of xs:decimal
properties	content simple
used by	element Calibration
facets	Kind minInclusive Value 0.1 Annotation maxInclusive 1.0

element WV_Watermask

diagram	 WV_Watermask												
type	restriction of xs:byte												
properties	content simple												
used by	element Flags												
facets	<table> <thead> <tr> <th>Kind</th> <th>Value</th> <th>Annotation</th> </tr> </thead> <tbody> <tr> <td>enumeration</td> <td>0</td> <td></td> </tr> <tr> <td>enumeration</td> <td>1</td> <td></td> </tr> <tr> <td>enumeration</td> <td>2</td> <td></td> </tr> </tbody> </table>	Kind	Value	Annotation	enumeration	0		enumeration	1		enumeration	2	
Kind	Value	Annotation											
enumeration	0												
enumeration	1												
enumeration	2												