**CIVA DVAL and others checks**

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**Data sets:**

RL-C-CIVA-2-FSS-V1.0

RL-C-CIVA-3-FSS-V1.0

RL-CAL-CIVA-2-PDCS-V1.0

RL-CAL-CIVA-2-PHC-V1.0

RL-CAL-CIVA-3-PDCS-V1.0

RL-CAL-CIVA-3-PHC-V1.0

Delivered on 18/01/2016 (first delivery on 14/01)

NB: The check has been done with the Lander Clock kernel that we have just produced. DVAL time only gives warnings of less of 1 second.

NB PDS notes added on 10/02

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| **Experiment** | CIVA | **RID Nr.** |  |
| **Title** | CALIB/\* | | |
| **Dataset** | ALL | | |
| **Validation step** | DVALNG and readpds | | |
| **Description** | Table badly defined cannot be open by readpds | | |
| **SOLUTION** | MB did the correction for the review. Please, check the corrections to be done | | |

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| **Experiment** | CIVA | **RID Nr.** |  |
| **Title** | DOCUMENT/CIVA\_CALIBRATION\_DESC.LBL | | |
| **Dataset** | ALL | | |
| **Validation step** | Manual/DVAL | | |
| **Description** | In the LBL the pointer points to CIVA\_CALIBRATION\_DESC.TXT instead of .ASC  In all IMG file the link is to TXT instead of ASC. | | |
| **SOLUTION** | Change the link in the IMG to the proper file name.  NB: I don’t know if it is already done by the team or if I corrected this myself. Sorry for raising this point if it was corrected. | | |

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| **Experiment** | CIVA | **RID Nr.** |  |
| **Title** | Non ASCII character | | |
| **Dataset** | ALL | | |
| **Validation step** | DVAL NG Encoding | | |
| **Description** | The file DOCUMENT/ TIMELINE\_SDL\_RBD\_FSS.TXT has non ASCII character  Same in PDCS data set for DOCUMENT/TIMELINE\_PDCS.TXT  Same in PHC with DOCUMENT/TIMELINE\_PHC.TXT | | |
| **SOLUTION** | Remove the NON ASCII character. (replace the TAB by spaces) | | |

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| **Experiment** | CIVA | **RID Nr.** |  |
| **Title** | Image size file is wrong | | |
| **Dataset** | RL-C-CIVA-2-FSS | | |
| **Validation step** | DVALNG Size | | |
| **Description** | Three data files have incorrect size:  Size expected is record\_bytes\*file-records = 2119680 | | |
| **SOLUTION** | There are additional characters ( 0D0A in CIVA\_FS2\_141113061353\_6\_0.IMG -2.  0A for CIVA\_FS2\_141113061443\_4\_0.IMG -1.  0A for CIVA\_FS2\_141113061413\_1\_0.IMG – 1.) | | |

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| **Experiment** | CIVA | **RID Nr.** |  |
| **Title** | PDF A version | | |
| **Dataset** | ALL | | |
| **Validation step** | PDS | | |
| **Description** | PDF document must be in PDF A format | | |
| **SOLUTION** | Convert to PDF A format | | |

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| **Experiment** | CIVA | **RID Nr.** |  |
| **Title** | EXTENSION IN CALINFO.TXT | | |
| **Dataset** | ALL but FSS data sets | | |
| **Validation step** | PDS | | |
| **Description** | typo: For the non-FSS data sets, the last line should be corrected. "CIVA\_CALIBRATION\_DESC.TXT" => "CIVA\_CALIBRATION\_DESC.ASC". | | |
| **SOLUTION** | Correct | | |

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| **Experiment** | CIVA | **RID Nr.** |  |
| **Title** | Catalog versions | | |
| **Dataset** | ALL | | |
| **Validation step** | PDS/PSa | | |
| **Description** | Ensure the catalog versions are up to date | | |
| **SOLUTION** | Check the version of the catalog files | | |

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| **Experiment** | CIVA | **RID Nr.** |  |
| **Title** | DATASET.CAT | | |
| **Dataset** |  | | |
| **Validation step** |  | | |
| **Description** | --> [DISCUSS] The DATA\_SET\_DESC is very very sparse and NOT unique to a data set. Should it be expanded? For example to say briefly what CIVAM and CIVAP data are and when they are or are not included.  --> typo: First word in Coordinate System section of DATA\_SET\_DESC should be changed from 'he' to 'The'.  🡪 Suggest adding mention to ABSTRACT\_DESC when you have CIVAM data or not. | | |
| **SOLUTION** | Improve the DATASET.CAT | | |

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| **Experiment** | CIVA | **RID Nr.** |  |
| **Title** | INST.CAT | | |
| **Dataset** | ALL but FSS | | |
| **Validation step** | Manual | | |
| **Description** | FSS has a better copy of this file than is found in other phases. Please replace with the most up to date copy. There is no reason this file should be different between phases | | |
| **SOLUTION** |  | | |

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| **Experiment** | CIVA | **RID Nr.** |  |
| **Title** | DATA/\*.IMG | | |
| **Dataset** | ALL | | |
| **Validation step** | Manual | | |
| **Description** | - For the geometry keywords (SC\_TARGET\_POSITION\_VECTOR, SC\_TARGET\_VELOCITY\_VECTOR, SPACECRAFT\_ALTITUDE, SUB\_SPACECRAFT\_LATITUDE, SUB\_SPACECRAFT\_LONGITUDE) are specified as "N/A", but is that true? Would the value of "0" or "UNK" more appropriate? Would it be different for comet vs calibration targeted data sets?  - Why is the EXPOSURE\_DURATION\_DESC keyword commented out? It is not a defined PDS3 keyword, but it could easily be added to Rosetta mission dictionary.  - Why is the FOCAL\_PLANE\_TEMPERATURE\_DESC keyword commented out? It is not a defined PDS3 keyword, but it could easily be added to Rosetta mission dictionary.  - FOCAL\_PLANE\_TEMPERATURE has a series of values that are defined in FOCAL\_PLANE\_TEMPERATURE\_DESC. Is this a misuse of this keyword?  - FOCAL\_PLANE\_TEMPERATURE has values of 999.99 which appear to be signifying an invalid value, but no where is this defined.  - There are several keywords that have a series of values (one for each camera), but is only defined as being such for one of those keywords. It would be good to have a general note added to describe what is going on.  Not described: INST\_CMPRS\_RATE, GAIN\_NUMBER  Already described: INSTRUMENT\_MODE\_ID, EXPOSURE\_DURATION  Suggest adding FORMAT fields to all TIME and CHARACTER fields. They should follow the pattern FORMAT = "A###" where "###" is the number of bytes.  Suggest adding FORMAT fields to all ASCII\_INTEGER fields. They should follow the pattern FORMAT = "I###" where "###" is the number of bytes. | | |
| **SOLUTION** |  | | |

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| **Experiment** | CIVA | **RID Nr.** |  |
| **Title** | Difference between level 2 and 3 in Documentation | | |
| **Dataset** | ALL | | |
| **Validation step** | Manual | | |
| **Description** | Why is this file very different (and in ways that should not be) between level 2 and 3 and between some phases? (Used FSS level 2 for basis of comparison) | | |
| **SOLUTION** |  | | |

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| **Experiment** | CIVA | **RID Nr.** |  |
| **Title** | Missing keyword | | |
| **Dataset** | ALL | | |
| **Validation step** | PDS | | |
| **Description** | "BROWSE\_INDEX\_TABLE" does not contain required element "INDEX\_TYPE". | | |
| **SOLUTION** |  | | |

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| **Experiment** | CIVA | **RID Nr.** |  |
| **Title** | VOLDESC.CAT | | |
| **Dataset** | ALL | | |
| **Validation step** | PDS | | |
| **Description** | The value for VOLUMES is not accurate. VOLUMES should be the number of volumes contained in the VOLUME\_SET\_ID. Note that this team is also varying the VOLUME\_SET\_ID so this value may be 1. | | |
| **SOLUTION** |  | | |

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| **Experiment** | CIVA | **RID Nr.** |  |
| **Title** | CORE\_NAME = RAW\_DATA\_NUMBER | | |
| **Dataset** | RL-CAL-CIVA-2-PHC-V1.0 | | |
| **Validation step** | PDS | | |
| **Description** | 'DATA/CIVAM/MI/CIVA\_FS2\_140421052109\_8\_B.QUB'  The value, "RAW\_DATA\_NUMBER", for "CORE\_NAME" is only valid when changed to "RAW DATA NUMBER". | | |
| **SOLUTION** | Comments:  CORE\_NAME = “RAW DATA NUMBER” is equivalent after PDS Standards to RAW\_DATA\_NUMBER.  This is rejected. | | |

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| **Experiment** | CIVA | **RID Nr.** |  |
| **Title** | Calibration description | | |
| **Dataset** | RL-CAL-CIVA-2-PHC-V1.0 | | |
| **Validation step** | PDS | | |
| **Description** | In file: 'DATA/CIVAM/MI/CIVA\_FS2\_140421052109\_8\_B.QUB'  Is the calibration for this file really described in this file: ^INSTRUMENT\_CALIBRATION\_DESC = "CIVA\_CALIBRATION\_DESC.ASC" | | |
| **SOLUTION** |  | | |

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| **Experiment** | CIVA | **RID Nr.** |  |
| **Title** | Point of discussion in CIVAM/MI QUBE | | |
| **Dataset** | RL-CAL-CIVA-2-PHC-V1.0 | | |
| **Validation step** | PDS | | |
| **Description** | Why is the EXPOSURE\_DURATION\_DESC keyword commented out? It is not a defined PDS3 keyword, but it could easily be added to Rosetta mission dictionary.  Why is the FOCAL\_PLANE\_TEMPERATURE\_DESC keyword commented out? It is not a defined PDS3 keyword, but it could easily be added to Rosetta mission dictionary.  FOCAL\_PLANE\_TEMPERATURE has a series of values that are defined in FOCAL\_PLANE\_TEMPERATURE\_DESC. Is this a misuse of this keyword?  ROSETTA:SPECTROMETER\_TEMPERATURE has a series of values that are defined in SPECTROMETER\_TEMPERATURE\_DESC. Is this a misuse of this keyword?  There are several keywords that have a series of values (one for each camera), but is only defined as being such for one of those keywords. It would be good to have a general note added to describe what is going on.  Not described: INST\_CMPRS\_RATE, GAIN\_NUMBER  Already described: INSTRUMENT\_MODE\_ID, EXPOSURE\_DURATION, ROSETTA:SPECTROMETER\_TEMPERATURE  file: 'DATA/CIVAM/MI/CIVA\_FS2\_140421052109\_8\_B.QUB'  Suggest adding FORMAT fields to all TIME and CHARACTER fields. They should follow the pattern FORMAT = "A###" where "###" is the number of bytes.  Suggest adding FORMAT fields to all ASCII\_INTEGER fields. They should follow the pattern FORMAT = "I###" where "###" is the number of bytes. | | |
| **SOLUTION** |  | | |

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| **Experiment** | CIVA | **RID Nr.** |  |
| **Title** | VOLDESC.CAT and VOLUME\_VERSION\_ID | | |
| **Dataset** | RL-CAL-CIVA-3-PHC-V1.0 | | |
| **Validation step** | Manual | | |
| **Description** | The VOLUME\_VERSION\_ID should be changed from "VERSION 3" to "VERSION 1". | | |
| **SOLUTION** |  | | |

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| **Experiment** | CIVA | **RID Nr.** |  |
| **Title** | No CIVAM in L3 | | |
| **Dataset** | RL-CAL-CIVA-3-PHC-V1.0 | | |
| **Validation step** | Manual | | |
| **Description** | Why is there no CIVAM data when there was in level 2 data set? | | |
| **SOLUTION** |  | | |