

## LFR-FSW - Bug #166

### PACKET LENGTH erroné pour TM\_LFR\_SCIENCE\_BURST\_BP1\_F1 et TM\_LFR\_SCIENCE\_BURST\_BP2\_F1

10/06/2014 08:15 AM - Veronique bouzid

<b>Status:</b>	Closed	<b>Start date:</b>	10/06/2014
<b>Priority:</b>	Immediate	<b>Due date:</b>	
<b>Assignee:</b>	Veronique bouzid	<b>% Done:</b>	0%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>		<b>Spent time:</b>	0.20 hour
<b>revision:</b>	r0		

#### Description

EN analysant le fichier 2014\_06\_05-12\_11\_54-Detail.txt correspondant au test

SVS-0090/generate\_science\_all\_modes.py

2 pbs sur le parametre PACKET LENGTH, la longueur du packet de telemetry ne correspond pas au champ contenu dans PACKET\_LENGTH

- 16:42:38.053034, TM\_LFR\_SCIENCE\_BURST\_BP1\_F0, CCSDS\_VERSION\_NUMBER = 0, PACKET\_TYPE: TM\_PACKET = 0, DATA\_FIELD\_HEADER\_FLAG: WITH\_HEADER = 1, PROCESS\_ID: RPW\_PID\_2 = 76, PACKET\_CATEGORY: PRIVATE\_SCIENCE\_OR\_TELECOMMAND = 12, (PACKET\_ID=0xccc), SEGMENTATION\_GROUPING\_FLAG: STANDALONE\_PACKET = 3, SEQUENCE\_CNT=3, (PACKET\_SEQUENCE\_CONTROL=0xc003), PACKET\_LENGTH=217, SPARE\_1=0, PUS\_VERSION = 1, SPARE\_2=0, SERVICE\_TYPE: SCIENCE\_DATA\_TRANSFER = 21, SERVICE\_SUBTYPE: SCIENCE\_REPORT = 3, DESTINATION\_ID: GROUND = 0, TIME=0x80000025ac28, PA\_LFR\_SID\_PKT: SC\_B\_BP1\_F0 = 17, PA\_BIA\_MODE\_MUX\_SET: SET\_0 = 0, PA\_BIA\_MODE\_HV\_ENABLED: DISABLED = 0, PA\_BIA\_MODE\_BIAS1\_ENABLED: DISABLED = 0, PA\_BIA\_MODE\_BIAS2\_ENABLED: DISABLED = 0, PA\_BIA\_MODE\_BIAS3\_ENABLED: DISABLED = 0, PA\_BIA\_ON\_OFF: OFF = 0, PA\_LFR\_ACQUISITION\_TIME=0x80000025ac28, PA\_LFR\_B\_BP1\_BLK\_NR\_F0=22

16:42:38.064438, TM\_LFR\_SCIENCE\_BURST\_BP1\_F1, CCSDS\_VERSION\_NUMBER = 0, PACKET\_TYPE: TM\_PACKET = 0, DATA\_FIELD\_HEADER\_FLAG: WITH\_HEADER = 1, PROCESS\_ID: RPW\_PID\_2 = 76, PACKET\_CATEGORY: PRIVATE\_SCIENCE\_OR\_TELECOMMAND = 12, (PACKET\_ID=0xccc), SEGMENTATION\_GROUPING\_FLAG: STANDALONE\_PACKET = 3, SEQUENCE\_CNT=4, (PACKET\_SEQUENCE\_CONTROL=0xc004),  
/!\PACKET\_LENGTH=217(exp=(Number of bytes in Packet Data Field)-1=253).....

- 16:42:38.053034, TM\_LFR\_SCIENCE\_BURST\_BP1\_F0, CCSDS\_VERSION\_NUMBER = 0, PACKET\_TYPE: TM\_PACKET = 0, DATA\_FIELD\_HEADER\_FLAG: WITH\_HEADER = 1, PROCESS\_ID: RPW\_PID\_2 = 76, PACKET\_CATEGORY: PRIVATE\_SCIENCE\_OR\_TELECOMMAND = 12, (PACKET\_ID=0xccc), SEGMENTATION\_GROUPING\_FLAG: STANDALONE\_PACKET = 3, SEQUENCE\_CNT=3, (PACKET\_SEQUENCE\_CONTROL=0xc003), PACKET\_LENGTH=217, SPARE\_1=0, PUS\_VERSION = 1, SPARE\_2=0, SERVICE\_TYPE: SCIENCE\_DATA\_TRANSFER = 21, SERVICE\_SUBTYPE: SCIENCE\_REPORT = 3, DESTINATION\_ID: GROUND = 0, TIME=0x80000025ac28, PA\_LFR\_SID\_PKT: SC\_B\_BP1\_F0 = 17, PA\_BIA\_MODE\_MUX\_SET: SET\_0 = 0, PA\_BIA\_MODE\_HV\_ENABLED: DISABLED = 0, PA\_BIA\_MODE\_BIAS1\_ENABLED: DISABLED = 0, PA\_BIA\_MODE\_BIAS2\_ENABLED: DISABLED = 0, PA\_BIA\_MODE\_BIAS3\_ENABLED: DISABLED = 0, PA\_BIA\_ON\_OFF: OFF = 0, PA\_LFR\_ACQUISITION\_TIME=0x80000025ac28, PA\_LFR\_B\_BP1\_BLK\_NR\_F0=22

16:42:38.064438, TM\_LFR\_SCIENCE\_BURST\_BP1\_F1, CCSDS\_VERSION\_NUMBER = 0, PACKET\_TYPE: TM\_PACKET = 0, DATA\_FIELD\_HEADER\_FLAG: WITH\_HEADER = 1, PROCESS\_ID: RPW\_PID\_2 = 76, PACKET\_CATEGORY: PRIVATE\_SCIENCE\_OR\_TELECOMMAND = 12, (PACKET\_ID=0xccc), SEGMENTATION\_GROUPING\_FLAG: STANDALONE\_PACKET = 3, SEQUENCE\_CNT=4, (PACKET\_SEQUENCE\_CONTROL=0xc004),  
/!\PACKET\_LENGTH=217(exp=(Number of bytes in Packet Data Field)-1=253),

Ce probleme est présent sur d'autres tests (vu également sur 1.0.0.6)

#### Contexte

LPPMON Version = 0.2.2, Branch = default, Changeset = 835955994d5f

Carte mini-LFR: LFR-172200 dev V1.0; No série 5

Vhdl: 0.0.16

Soft: 1.0.0.7 (variante sur carte finale)

Brique Star-Dundee S/N XX.

#### History

#1 - 10/06/2014 08:57 AM - Veronique bouzid

Hello,

Désolée, j ai mis 2 fois la meme trace.

Voici l'erreur pour TM\_LFR\_SCIENCE\_BURST\_BP2\_F1

16:42:41.077471, TM\_LFR\_SCIENCE\_BURST\_BP2\_F1, CCSDS\_VERSION\_NUMBER = 0, PACKET\_TYPE: TM\_PACKET = 0, DATA\_FIELD\_HEADER\_FLAG: WITH\_HEADER = 1, PROCESS\_ID: RPW\_PID\_2 = 76, PACKET\_CATEGORY: PRIVATE\_SCIENCE\_OR\_TELECOMMAND = 12, (PACKET\_ID=0xccc), SEGMENTATION\_GROUPING\_FLAG: STANDALONE\_PACKET = 3, SEQUENCE\_CNT=12, (PACKET\_SEQUENCE\_CONTROL=0xc00c), **!\\PACKET\_LENGTH=679(exp=(Number of bytes in Packet Data Field)-1=799)**, SPARE\_1=0, PUS\_VERSION = 1, SPARE\_2=0, SERVICE\_TYPE: SCIENCE\_DATA\_TRANSFER = 21, SERVICE\_SUBTYPE: SCIENCE\_REPORT = 3, DESTINATION\_ID: GROUND = 0, TIME=0x80000028b4ca, PA\_LFR\_SID\_PKT: SC\_B\_BP2\_F1 = 23, PA\_BIA\_MODE\_MUX\_SET: SET\_0 = 0, PA\_BIA\_MODE\_HV\_ENABLED: DISABLED = 0, PA\_BIA\_MODE\_BIAS1\_ENABLED: DISABLED = 0, PA\_BIA\_MODE\_BIAS2\_ENABLED: DISABLED = 0, PA\_BIA\_MODE\_BIAS3\_ENABLED: DISABLED = 0, PA\_BIA\_ON\_OFF: OFF = 0, PA\_LFR\_ACQUISITION\_TIME=0x80000028b4ca, PA\_LFR\_B\_BP2\_BLK\_NR\_F1=26

La taille du TM\_LFR\_SCIENCE\_BURST\_BP2\_F1 doit etre <= 806 octets (cf p13 de RPW-SYS-MEB-LFR-ICD-0097 (2.2) la long du buffer recu est de 799 ce qui donne 799+1+6=806 octets donc c'est correct.

On devrait donc avoir dans PACKET\_LENGTH=799

#### #2 - 10/06/2014 12:30 PM - bruno katra

- Priority changed from Normal to Immediate

#### #3 - 12/06/2014 07:36 AM - paul leroy

- Status changed from New to Resolved

- Assignee changed from paul leroy to Veronique bouzid

fsw >= 1.0.0.9

bug identifié et corrigé dans les cas TM\_LFR\_SCIENCE\_BURST\_BP2\_F1 et TM\_LFR\_SCIENCE\_BURST\_BP1\_F1

ATTENTION: dans la première trace que tu avais mis, je pense qu'il faut lire TM\_LFR\_SCIENCE\_BURST\_BP1\_F1 au lieu de TM\_LFR\_SCIENCE\_BURST\_BP1\_F0, il doit y avoir une erreur dans le décodage du type de paquet. D'ailleurs dans le sujet de cette issue, tu mets bien BP2\_F1 et BP1\_F1 (et pas BP1\_F0). Tu peux vérifier?

#### #4 - 12/06/2014 08:29 AM - Veronique bouzid

Je reformule ce point car le sujet du redmine est correct mais les traces décrivant le pb sont erronées.

Ce bug concerne bien les paquets TM\_LFR\_SCIENCE\_BURST\_BP1\_F1 et TM\_LFR\_SCIENCE\_BURST\_BP2\_F1.

Voici les traces

11:08:40.980997, **TM\_LFR\_SCIENCE\_BURST\_BP1\_F1**, CCSDS\_VERSION\_NUMBER = 0, PACKET\_TYPE: TM\_PACKET = 0, DATA\_FIELD\_HEADER\_FLAG: WITH\_HEADER = 1, PROCESS\_ID: RPW\_PID\_2 = 76, PACKET\_CATEGORY: PRIVATE\_SCIENCE\_OR\_TELECOMMAND = 12, (PACKET\_ID=0xccc), SEGMENTATION\_GROUPING\_FLAG: STANDALONE\_PACKET = 3, SEQUENCE\_CNT=2, (PACKET\_SEQUENCE\_CONTROL=0xc002), **!\\PACKET\_LENGTH=217(exp=(Number of bytes in Packet Data Field)-1=253)**, SPARE\_1=0, PUS\_VERSION = 1, SPARE\_2=0, SERVICE\_TYPE: SCIENCE\_DATA\_TRANSFER = 21, SERVICE\_SUBTYPE: SCIENCE\_REPORT = 3, DESTINATION\_ID: GROUND = 0, TIME=0x80000e75ae23, PA\_LFR\_SID\_PKT: SC\_B\_BP1\_F1 = 18, PA\_BIA\_MODE\_MUX\_SET: SET\_0 = 0, PA\_BIA\_MODE\_HV\_ENABLED: DISABLED = 0, PA\_BIA\_MODE\_BIAS1\_ENABLED: DISABLED = 0, PA\_BIA\_MODE\_BIAS2\_ENABLED: DISABLED = 0, PA\_BIA\_MODE\_BIAS3\_ENABLED: DISABLED = 0, PA\_BIA\_ON\_OFF: OFF = 0, PA\_LFR\_ACQUISITION\_TIME=0x80000e75ae23, PA\_LFR\_B\_BP1\_BLK\_NR\_F1=26

11:08:44.997538, **TM\_LFR\_SCIENCE\_BURST\_BP2\_F1**, CCSDS\_VERSION\_NUMBER = 0, PACKET\_TYPE: TM\_PACKET = 0, DATA\_FIELD\_HEADER\_FLAG: WITH\_HEADER = 1, PROCESS\_ID: RPW\_PID\_2 = 76, PACKET\_CATEGORY: PRIVATE\_SCIENCE\_OR\_TELECOMMAND = 12, (PACKET\_ID=0xccc), SEGMENTATION\_GROUPING\_FLAG: STANDALONE\_PACKET = 3,

SEQUENCE\_CNT=12, (PACKET\_SEQUENCE\_CONTROL=0xc00c), /!\**PACKET\_LENGTH=679**(exp=(Number of bytes in Packet Data Field)-1=799), SPARE\_1=0, PUS\_VERSION = 1, SPARE\_2=0, SERVICE\_TYPE: SCIENCE\_DATA\_TRANSFER = 21, SERVICE\_SUBTYPE: SCIENCE\_REPORT = 3, DESTINATION\_ID: GROUND = 0, TIME=0x80000e79ae14, PA\_LFR\_SID\_PKT: SC\_B\_BP2\_F1 = 23, PA\_BIA\_MODE\_MUX\_SET: SET\_0 = 0, PA\_BIA\_MODE\_HV\_ENABLED: DISABLED = 0, PA\_BIA\_MODE\_BIAS1\_ENABLED: DISABLED = 0, PA\_BIA\_MODE\_BIAS2\_ENABLED: DISABLED = 0, PA\_BIA\_MODE\_BIAS3\_ENABLED: DISABLED = 0, PA\_BIA\_ON\_OFF: OFF = 0, PA\_LFR\_ACQUISITION\_TIME=0x80000e79ae14, PA\_LFR\_B\_BP2\_BLK\_NR\_F1=26

**#5 - 13/06/2014 04:16 PM - bruno katra**

- Status changed from Resolved to Closed

Retesté en 1.0.0.9 : le bug est corrigé :

15:02:22.895342, TM\_LFR\_SCIENCE\_BURST\_BP1\_F1, CCSDS\_VERSION\_NUMBER = 0, PACKET\_TYPE: TM\_PACKET = 0, DATA\_FIELD\_HEADER\_FLAG: WITH\_HEADER = 1, PROCESS\_ID: RPW\_PID\_2 = 76, PACKET\_CATEGORY: PRIVATE\_SCIENCE\_OR\_TELECOMMAND = 12, (PACKET\_ID=0xcc), SEGMENTATION\_GROUPING\_FLAG: STANDALONE\_PACKET = 3, SEQUENCE\_CNT=4, (PACKET\_SEQUENCE\_CONTROL=0xc004), **PACKET\_LENGTH=253**, SPARE\_1=0, PUS\_VERSION = 1, SPARE\_2=0, SERVICE\_TYPE: SCIENCE\_DATA\_TRANSFER = 21, SERVICE\_SUBTYPE: SCIENCE\_REPORT = 3, DESTINATION\_ID: GROUND = 0, TIME=0x800000483738, PA\_LFR\_SID\_PKT: SC\_B\_BP1\_F1 = 18, PA\_BIA\_MODE\_MUX\_SET: SET\_0 = 0, PA\_BIA\_MODE\_HV\_ENABLED: DISABLED = 0, PA\_BIA\_MODE\_BIAS1\_ENABLED: DISABLED = 0, PA\_BIA\_MODE\_BIAS2\_ENABLED: DISABLED = 0, PA\_BIA\_MODE\_BIAS3\_ENABLED: DISABLED = 0, PA\_BIA\_ON\_OFF: OFF = 0, PA\_LFR\_ACQUISITION\_TIME=0x800000483738, PA\_LFR\_B\_BP1\_BLK\_NR\_F1=26

15:03:40.306714, TM\_LFR\_SCIENCE\_BURST\_BP2\_F1, CCSDS\_VERSION\_NUMBER = 0, PACKET\_TYPE: TM\_PACKET = 0, DATA\_FIELD\_HEADER\_FLAG: WITH\_HEADER = 1, PROCESS\_ID: RPW\_PID\_2 = 76, PACKET\_CATEGORY: PRIVATE\_SCIENCE\_OR\_TELECOMMAND = 12, (PACKET\_ID=0xcc), SEGMENTATION\_GROUPING\_FLAG: STANDALONE\_PACKET = 3, SEQUENCE\_CNT=41, (PACKET\_SEQUENCE\_CONTROL=0xc029), **PACKET\_LENGTH=799**, SPARE\_1=0, PUS\_VERSION = 1, SPARE\_2=0, SERVICE\_TYPE: SCIENCE\_DATA\_TRANSFER = 21, SERVICE\_SUBTYPE: SCIENCE\_REPORT = 3, DESTINATION\_ID: GROUND = 0, TIME=0x800000959d26, PA\_LFR\_SID\_PKT: SC\_B\_BP2\_F1 = 23, PA\_BIA\_MODE\_MUX\_SET: SET\_0 = 0, PA\_BIA\_MODE\_HV\_ENABLED: DISABLED = 0, PA\_BIA\_MODE\_BIAS1\_ENABLED: DISABLED = 0, PA\_BIA\_MODE\_BIAS2\_ENABLED: DISABLED = 0, PA\_BIA\_MODE\_BIAS3\_ENABLED: DISABLED = 0, PA\_BIA\_ON\_OFF: OFF = 0, PA\_LFR\_ACQUISITION\_TIME=0x800000959d26, PA\_LFR\_B\_BP2\_BLK\_NR\_F1=26

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Contexte:

LPPMON: Version=0.2.2 Branch=default Changeset=835955994d5f

Carte mini-LFR: LFR-172200 dev V1.0; No série III (sans connecteurs sub-click)

Vhdl: mini-lfr\_0.1.16

Brique Star-Dundee S/N 46120065.

Soft:1.0.0.9 (variante sur carte finale)

TEST CASE : SVS-0019