

**Test Number:** NPP\_PGE302\_StrayLight\_Verification

**Test Definition Date:** 4/29/14

**Test Revision Date:**

**Discipline:** DNB SDR/GEO

**Test Title:** NPP PGE302 Validation of VCST Stray Light Correction

**Test Objective:** This test will aid in evaluating that the stray light correction is working properly in all variations of PGE302, OPS and LPA, those for forward and reprocessing streams. It will also aid in evaluating the Stray Light Correction LUTs provided by VCST for the C1.1 reprocessing by comparing datasets generated using the IDPS Stray Light Correction LUTs to datasets generated using the VCST LUTs. In addition, this test will verify that the implementation of scaling in the NPP\_VDNE\_L1 products is as desired.

**Data Time Interval:** 2013-246 00:00:00 – 2013-254 00:00:00

**Machine/Archive Set:** ops7, archive sets to be assigned by operator. Four archive sets are needed in total.

- 1 for OPS PGE302 vP2.3.2 – has correction for stray light correction implementation
- 1 for LPA PGE302 vP2.3.2.1 – same as OPS PGE302 vP2.3.2 but has TC DNB Geolocation
- 1 for LPA PGE302 vP2.3.2.2 – same as OPS PGE302 vP2.3.2 but has TC DNB Geolocation and uses C1.1 LUTs
- 1 for LPA PGE302 vP2.3.2.3 – same as OPS PGE302 vP2.3.2 but has TC dNB Geolocation, uses C1.1 LUTs and NPP\_VDNE\_L1 product is scaled.

**Related Test(s):** NPP\_PGE302\_StrayLight\_Scaling\_Checks

**Baseline DataSet:** data will be compared against AS3100

**Input DataSet:** Sync the data listed below from laads AS3001 to working archive sets ops7:

NP5\_RVIRS\_L0  
NPP\_TLE  
NPP\_USNOPW

**Special Processing Instructions:**

In the OPS PGE302 vP2.3.2 run, NPP\_0Cmcl and NPP\_1Cmcl should be executed using a start and end profile of 1 to reduce outputs generated to NPP\_IMFT\_L1, NPP\_MOFT\_L1 and NPP\_DNFT\_L1 from NPP\_0Cmc and NPP\_VIAE\_L1, NPP\_VMAE\_L1, NPP\_VDNE\_L1 and their corresponding coarse products from NPP\_1Cmc. The NPP\_VIIRS\_L0 products generated in this archive should be cloned to the other 3 test archive areas for use.

In the remaining 3 test archives, for the NPP\_1amcl and NPP\_1bmcl, again use start and end profiles of 1 to help reduce the outputs generated.

**Recipes/PGEs to be executed for OPS PGE302 vP2.3.2 test case:**

<u>Recipe</u>	<u>Version</u>	<u>PGE</u>	<u>Version</u>	<u>Type</u>	<u>PGE Name</u>
0Cmc	2.3.5	301	P2.3.0	OPS	Verified RDR
		302a	P2.3.2	OPS	VIIRS L1 Geolocation
1bmc	2.3.2	302b	P2.3.2	OPS	VIIRS L1 SDR

**Recipes/PGEs to be executed for LPA PGE302 vP2.3.2.1 test case:**

<u>Recipe</u>	<u>Version</u>	<u>PGE</u>	<u>Version</u>	<u>Type</u>	<u>PGE Name</u>
1amcl	2.3.1	302a	P2.3.2.1	LPA	VIIRS L1 Geolocation
1bmcl	2.3.4	302b	P2.3.2.1	LPA	VIIRS L1 SDR

**Recipes/PGEs to be executed for LPA PGE302 vP2.3.2.2 test case:**

<u>Recipe</u>	<u>Version</u>	<u>PGE</u>	<u>Version</u>	<u>Type</u>	<u>PGE Name</u>
1amcl	2.3.2	302a	P2.3.2.2	LPA	VIIRS L1 Geolocation
1bmcl	2.3.5	302b	P2.3.2.2	LPA	VIIRS L1 SDR

**Recipes/PGEs to be executed for LPA PGE302 vP2.3.2.3 test case:**

<u>Recipe</u>	<u>Version</u>	<u>PGE</u>	<u>Version</u>	<u>Type</u>	<u>PGE Name</u>
1amcl	2.3.3	302a	P2.3.2.3	LPA	VIIRS L1 Geolocation
1bmcl	2.3.6	302b	P2.3.2.3	LPA	VIIRS L1 SDR

**NOTE on LUT usage in test runs:**

OPS PGE302 vP2.3.2 and LPA PGE302 vP2.3.2.1 will use all IDPS LUTs. The STRAY-LIGHT LUT that will be used will be named VIIRS-SDR-DNB-STRAY-LIGHT-LUT\_20130829210947\_v1.5.07.02\_LP – this is the LUT that went into use at IDPS operations on 8/29/13 21:09:47. The corresponding IDPS name for this same LUT is: VIIRS-SDR-DNB-STRAY-LIGHT-CORRECTION-LUT\_npp\_20130701000000Z\_20130708000000Z\_ee00000000000000Z\_PS-1-O-CCR-13-1154-JPSS-DPA-003-PE\_noaa\_all\_all-\_all.bin.

LPA PGE302 vP2.3.2.2 and LPA PGE302 vP2.3.2.3 will use the LUTs from the C1.1 Reprocessing. The STRAY-LIGHT-LUT that will be used in this archive set is VIIRS-SDR-DNB-STRAY-LIGHT-LUT\_20120902000000\_vcst\_LP, which corresponds to the big Endean VCST LUT named VIIRS-SDR-DNB-STRAY-LIGHT-CORRECTION-LUT\_20120916\_v01\_vcst.bin. VCST names the stray light LUTs based on the new moon date, but the LUT is actually valid from full moon to full moon, so based on direction from VCST the LPEATE little Endean variations of the LUTs were named 14 days earlier than the date in the VCST files to have proper staging.

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NPP Production Group Notes  
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Changes to Production Plan:

Final Plan Approved by:  
Date:

Reprocessing Started:  
Reprocessing Completed:  
Verified in LAADS

Production Notes:

\*\*\*Additional Processing Notes:

Post validation of these test results, all outputs and entries in ops7 should be wiped out, as well as in LAADS in preparation for the full reprocessing.

Outputs to be synched to LAADS from all 4 test runs:

NPP\_DNFT\_L1  
NPP\_IMFT\_L1  
NPP\_MOFT\_L1  
NPP\_VDNE\_L1  
NPP\_VDNE\_L1C  
NPP\_VIAE\_L1  
NPP\_VIAE\_L1C  
NPP\_VMAE\_L1  
NPP\_VMAE\_L1C

Production Results:

Data Set Removal Information

Date:  
Approved by: