SCIAMACHY	Operation Change Request	OCR No: 006 Issue: A

Title: INCREASE OF THE AMOUNT OF DARK CURRENT BLOCKS IN THE ECLIPSE TIMELINE.

Description of Request: Currently there are two blocks of the 5 dark current states in the eclipse timeline. This should be increased to at least three blocks. This is to assure that consolidated level 0 files will contain at least two complete blocks of the five dark current states. Consolidated level 0 files will be sliced at ANX, which in the summer time, will be in the middle of the last dark states block. The first block should be directly at the start of the eclipse timeline. The last block should be the last measurements in the eclipse timeline. The middle block should be somewhere in between the former two. This increase will improve the accuracy to which the dark signal can be determined. The currently foreseen level 1 to level 1 processor calibration of the dark signal will need at least two complete five dark states blocks in each level 0 file.

Originator: Q.L. Kleipool / SRON	Date of Issue: 26 Feb 2003	Signature: e-mail 26. Feb. 2003

Assessment of SSAG (necessary for requests by scientists):
The analysis of M. Buchwitz on using the new five dark states (“Quintus Darks”) presented at the last SADDU meeting has documented the improvement in CH4 retrieval. It is therefore important to assure that these dark current measurement blocks are not sliced and the consolidated L0 product will contain the relevant number of dark current blocks. The implementation of the proposed change is therefore recommended.

SSAG: H. Bovensmann	Date: 4.3.2003	Signature: e-mail 4. March 2003

Classification of OCR: D

OCR Analysis (incl. Implementation Option):
This OCR requires to modify timelines only (no state modification). Timelines 44 and 53 have to be modified such that in

- t/l 44 the last 3 nadir_aurora states are replaced by 5 dark current states at the end of the timeline
- t/l 53 the last 6 limb_mesosphere states are replaced by 5 dark current states at the end of the timeline

This reduces the time of scientific eclipse measurements by about 250 sec. Note that the scienfic eclipse measurements are thus mainly executed at low to mid latitudes (in winter they extend more north than in summer).

Likely implementation date is second half of April. Modified timelines have to be uploaded via the regular SCIAMACHY mission planning input. March planning input has already been delivered to ENVISAT. For the first half of April the planning input is currently in preparation such that the timeline changes might not yet be ready in time for the forthcoming delivery.

SOST: M. Gottwald, DLR-IMF (ESA, Industry if necessary)	Date: 28/02/2003	Signature: e-mail 28. Feb. 2003

Approval of Proposed Implementation:

Originator Approval: Q. Kleipool	Date: 2003-03-11	Signature: e-mail 2003-03-11
SSAG Approval: H. Bovensmann	Date: 2003-03-05	Signature: e-mail 2003-03-05

Decision / Approval:
The OCR shall be implemented as described in the OCR Analyis

DLR Approval: (if necessary NIVR, SPEC)	Date: 2003-03-12	Signature: e-mail 2003-03-12

Implementation by SOST :
Timelines 44 and 53 have been modified as described above. Timeline duration was in all cases set such that safe operations is ensured (no timeline overlap or measurement gap violation). The timelines have been converterd to CTI format and have been transferred to FOCC. They will be uploaded in orbit 5711 (April 4th) and executed from that time on each orbit in eclipse phase.

SOST: M. Gottwald, DLR-IMF	Date: 13/03/2003	Signature: e-mail 13/03/2003