

## Comments on VM0009 v3.1

Submitted by:

Tilmann Silber, [t.silber@southpolecarbon.com](mailto:t.silber@southpolecarbon.com)

Florian Reimer, [f.reimer@southpolecarbon.com](mailto:f.reimer@southpolecarbon.com)

South Pole Carbon

Technoparkstrasse 1

8005 Zurich

Switzerland

We are please to observe the continuous evolution of this methodology, and the broadening of the context in which it can be applied. At the same time, we acknowledge the great progress that the methodology has already made from earlier versions. In particular, we welcome the developers' progress in improving the readability of the methodology compared to earlier versions by adding more guidance for the reader.

In order to further enhance the integrity and consistency of the methodology, we submit the below comments where we suggest improvements.

1.

The numbering of monitoring periods appears inconsistent throughout the methodology, which has impacts on the calculation of NERs. In section 2.2.8, page 17, the first monitoring period is defined as  $m=1$ . In other sections of the document (e.g. 6.14, p. 67 or Annex H, p. 197), parameters denoted by  $m=0$  are described as being monitored during the first monitoring period. This essentially means mixing up the time before project start with the first monitoring period, which should be avoided. We suggest that parameters denoted by  $m=0$  are monitored prior to project start, not during the first monitoring period, in order to avoid over-estimation of NERs.

2.

The expansion of VM0009 for crediting avoided grassland conversion has low compatibility with the other setup of the methodology. The visual image interpretation of sample points on medium resolution (30m pixel) multispectral imagery is insufficient both for observing degradation of forest due to harvesting and conversion of grasslands to other non-forest land uses. The application of visual interpretation on sample locations for neither of these two land use changes does not comply with best practice literature for forest carbon monitoring via remote sensing data like the GOF-C-GOLD Sourcebook. Other "non-grassland" non-forest land use types have strong seasonal variability (e.g. cotton plantations) between high and low carbon stocking during the year. At many phases such could be confused with presence or absence of grassland. Grassland itself has strong season photoactive (and therefore spectral) variability throughout the year. There are not sufficient safeguards against erroneous classification of presence / absence of grassland in the methodology proposal and it seems unclear how such could be implemented in visual interpretation without systematic ground truth data, map accuracy assessment or hyper-spectral imagery analysis.

3.

The posterior land use change of grassland to "non-grassland" is not clearly defined. A more precise definition of post-grassland land uses and their assumed carbon stock differences should be made more explicit.

4.

Already from the anterior version of the methodology, v2.1, the calculation of baseline carbon stock change from avoided planned deforestation in baseline types F-P1 is vaguely defined to be based on "results of the PRA or expert knowledge" (page 64). While other Avoided Planned Deforestation methodologies determine planned deforestation baseline emissions by very detailed harvesting plans, VM0009 is giving a very broad spectrum including in transparent data hard to verify independently.