Relevant questions and clarifications related to the the EarthCARE Calibration and Validation opportunity submitted by PIs preparing proposals.

1. How soon after the launch will data be provided to the validation team?
At present the detailed sequence of operations in the commissioning phase is being established. This detailed sequence will not be available before the closing date of the AO call. Already it is clear that there will be large differences in the timing of preliminary data availability between the instruments: for example the CPR does not need decontamination whereas around 4 weeks are planned for the MSI. After decontamination, the calibration activities and processor verification activities can commence. As the processing algorithms are still under development, again no detailed schedule for the in-orbit processor verification and tuning tasks can be given. By the time of the validation workshop, time windows for the availability of the various products will be presented, taking into account commissioning uncertainties.

2. Will data be made available nearly instantaneously or in weekly packages, for example?
The architecture of the Payload Data Ground Segment is set up to allow access to the latest data in a continuous manner. This is the foreseen method also for preliminary data during the commissioning phase (after completion of processor verification and tuning tasks). But please note that contingencies may require activation of back-up options like FTP servers. Depending on the nature of the contingency, this may involve making data available in packages in stead of continuously.

3. What happens if a group is unable to provide deliverables by the agreed upon deadline?
Since the EarthCARE validation will depend on the agreed deliverables and deadlines, the group is requested to inform ESA well in advance of such an eventuality, so that ESA and the group can approach other parties to provide the missing deliverables. If the contribution of the group to the validation effort becomes insignificant because it cannot provide any of its deliverables, then the group will be removed from the validation team.

4. Are participants in the call expected to coordinate with one another beforehand and submit one large proposal covering the entire width of the call, or will individual proposals of various sizes be collected at ESA after the fact?
ESA will collect individual contributions and collaborative proposals after the closure of the call. Whilst such collaborative proposals are welcomed and encouraged, it is considered unlikely that any single proposal could cover the entire width of the call.

5. Since many ground-based and airborne validation data are not already available in the GEOMS format, should we use free naming conventions to describe them (or even just a verbal explanation of the parameters), or should we try to follow the GEOMS naming conventions?
For those datasets that cannot be described with GEOMS metadata at present, a verbal explanation of each parameter can be used when filling out the geophysical parameters form. (See also Chapter 4.5 of the submission guidelines)

6. Will the GEOMS format be required later on for the delivery of validation data, or will other formats also be accepted?
GEOMS is the metadata standard used in the EVDC. Tools are available at the EVDC for conversion of datasets. For earlier missions the GEOMS metadata standard and templates have been updated to include new parameters to describe the datasets of the PI, and

simultaneously the dataset conversion tools and templates have been updated to enable delivery in GEOMS format. Where needed a dedicated helpdesk has provided the PIs with support. For EarthCARE it is expected that this same process will be implemented.

7. As civil servant of a non-ESA-member state I am not eligible for funding so I cannot submit a proposal to ESA.
Proposals can be submitted by any entity, including government agencies of non-ESA-member states. As a baseline, this Announcement of Opportunity does not provide access to ESA funding. In stead, respondents (also those from ESA member states) should obtain funding from national, institutional or other sources. ESA members of the EarthCARE Cal/Val Team with exclusive access to preliminary datasets already during the commissioning phase, to pre-launch simulated data, and to the information flow from the latest pre-launch and post-launch developments on algorithms and instrument performance, in addition to workshops and exchanges within the EarthCARE Cal/Val Team