Here is a summary of how I have implemented the last round of requested changes for the manuscript essd-2019-77:

1. The abstract is changed as follows:

Original:

The Multi-angle Imaging SpectroRadiometer (\textsc{MISR}) is one of the five instruments hosted on-board the NASA Terra platform, launched on 18 December 1999. This instrument has been operational since 24 February 2000 and is still acquiring Earth Observation data as of this writing. The primary missions of \textsc{MISR} are to document the state and properties of the atmosphere, and in particular the clouds and aerosols it contains, as well as the planetary surface, on the basis of 36 data channels collectively gathered by its nine cameras (pointing in different directions along the orbital track) in four spectral bands (blue, green, red and near-infrared). The Radiometric Camera-by-Camera Cloud Mask (\textsc{RCCM}) is derived from the calibrated measurements at the nominal top of the atmosphere, and is provided separately for each of the nine cameras. This \textsc{RCCM} data product is permanently archived at the NASA Atmospheric Science Data Center (ASDC) in Langley, VA, USA and is openly accessible (\cite{Diner:1999:ATBD-RCCM} and \texttt{https://doi.org/10.5067/Terra/MISR/MIRCCM_L2.004}). For various technical reasons described in this paper, this \textsc{RCCM} product exhibits missing data, even though an estimate of the clear or cloudy status of the environment at each individual observed location can be deduced from the available measurements. The aims of this paper are (1) to describe how to replace over 99\% of the missing values by estimates and (2) to briefly describe the software to replace missing \textsc{RCCM} values, which is openly available to the community from the GitHub web site \texttt{\url{https://github.com/mmverstraete}} or \texttt{https://doi.org/10.5281/zenodo.3240018}. Limited amounts of updated \textsc{MISR} \textsc{RCCM} data products are also archived in South Africa and can be made available upon request.

Updated:

The Multi-angle Imaging SpectroRadiometer (\textsc{MISR}) is one of the five instruments hosted on-board the NASA Terra platform, launched on 18 December 1999. This instrument has been operational since 24 February 2000 and is still acquiring Earth Observation data as of this writing. The primary missions of \textsc{MISR} are to document the state and properties of the atmosphere, and in particular the clouds and aerosols it contains, as well as the planetary surface, on the basis of 36 data channels collectively gathered by its nine cameras (pointing in different directions along the orbital track) in four spectral bands (blue, green, red and near-infrared). The Radiometric Camera-by-Camera Cloud Mask (\textsc{RCCM}) is derived from the calibrated measurements at the nominal top of the atmosphere, and is provided separately for each of the nine cameras. This \textsc{RCCM} data product is permanently archived at the NASA Atmospheric Science Data Center (ASDC) in Hampton, VA, USA and is openly accessible (\cite{Diner:1999:ATBD-RCCM} and \texttt{url{https://doi.org/10.5067/Terra/MISR/MIRCCM_L2.004}}). For various technical

reasons described in this paper, this \textsc{RCCM} product exhibits missing data, even though an estimate of the clear or cloudy status of the environment at each individual observed location can be deduced from the available measurements. The aims of this paper are (1) to describe how to replace over 99\% of the missing values by estimates and (2) to briefly describe the software to replace missing \textsc{RCCM} values, which is openly available to the community from the GitHub web site \texttt{\url{https://github.com/mmverstraete}} or \texttt{https://doi.org/10.5281/zenodo.3240018}. Two additional sets of resources are also made available on the Research Data Repository of GFZ Data Services in conjunction with this paper: (A) The first set (\cite{Verstraete:2020:RCCM-Out}, \url{https://doi.org/10.5880/fidgeo.2020.004}) includes 3 items: (A1) a compressed archive \texttt{RCCM_Out.zip} containing all intermediary, final and ancillary outputs created while generating the Figures of this manuscript, (A2) a User Manual \texttt{RCCM_Out.pdf} describing how to install, uncompress and explore those files, and (A3) a separate input MISR data archive \texttt{RCCM_input_68050.zip} for Path 168, Orbit 68050. This latter archive is usable with (B) the second set (\cite{Verstraete:2020:RCCM-Soft-Win}, \url{https://doi.org/10.5880/fidgeo.2020.008}), which includes (B1) a stand-alone, self-contained, executable version of the RCCM correction codes \texttt{RCCM_Soft_Win.zip} using the IDL Virtual Machine technology that does not require a paid IDL license, as well as (B2) a User Manual \texttt{RCCM_Soft_Win.pdf} to explain how to install, uncompress and use this software.
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2. Concerning the headline "Sample availability", and following our latest email exchanges, I have replaced the text in that section by a slightly edited version of the same information in the abstract:

Two sets of resources are made available on the Research Data Repository of GFZ Data Services in conjunction with this paper: (A) The first set (\cite{Verstraete:2020:RCCM-Out}, \url{https://doi.org/10.5880/fidgeo.2020.004}) includes 3 items: (A1) a compressed archive \texttt{RCCM_Out.zip} containing all intermediary, final and ancillary outputs created while generating the Figures of this manuscript, (A2) a User Manual \texttt{RCCM_Out.pdf} describing how to install, uncompress and explore those files, and (A3) a separate input MISR data archive \texttt{RCCM_input_68050.zip} for Path 168, Orbit 68050. This latter archive is usable with (B) the second set (\cite{Verstraete:2020:RCCM-Soft-Win}, \url{https://doi.org/10.5880/fidgeo.2020.008}), which includes (B1) a stand-alone, self-contained, executable version of the RCCM correction codes \texttt{RCCM_Soft_Win.zip} using the IDL Virtual Machine technology that does not require a paid IDL license, as well as (B2) a User Manual \texttt{RCCM_Soft_Win.pdf} to explain how to install, uncompress and use this software.
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and moved this paragraph in the Section "Data availability". The earlier heading "Sample availability" has been deleted altogether.

3. I have also updated the manuscript on page 3 to note that MISR "offers a unique opportunity to study environmental issues over a continuous span of 20+ years.", instead of 19+ as was mentioned in the preprint submitted last year.

4. I have modified the LaTeX source code of the manuscript to use a "[$\bullet$]" symbol to denote items in all lists, rather than the default "-" symbol, because the latter could the mistaken for a minus sign on page 4. Using the same convention throughout the manuscript also seemed more coherent than using different conventions on different pages.

5. I have deleted the reference to the IDL routines to process AGP files on page 23 because this particular repository is not actually used in the RCCM case: it is required for the L1B2 paper, though.

6. The incorrect references to the GFZ DOIs were due to the insertion of the full https address in the DOI fields of the BibTeX file, while the double hyperlink associated with the citation to the paper by Diner et al. was due to an extra blank space: both problems have been addressed.

7. Please remember that while the DOIs of the GFZ resources are known, the definitive DOI of the main manuscript is still unknown, as of this writing: I will thus have to update the two User Manuals, to point to the final version of the manuscript, rather than the preprint 'Discussion' paper. That is not a major problem because we can upgrade the content of the GFZ web pages without changing their DOIs.

8. However, when I will update the IDL software routines on my GitHub page to point to the citation and DOI of the final manuscript, Zenodo will automatically assign new DOIs to those software repositories: hence, I will need to provide you with those updated references after the ESSD manuscript DOI is finalized. You may want to warn the staff in charge of the final publication that this extra step should be expected.

Lastly, the PDF version of the manuscript, with those changes implemented, is attached below (file 'MISR_RCCM_v13_small3.pdf'). I have used the commercial tool "PDF Expert" to reduce the size of the PDF file generated by LaTeX from 13.0 to 2.9 MB, with no apparent effect on my MacBook Pro. However, if that causes production problems, I'll be able to provide you with the larger version: Let me know if you need this.