

Dear Editor,

Thank you for your comment and for providing us the opportunity to clarify the technical points on the quality flag. Below, you will find the original comments from the reviewers in black, followed by our responses in blue and italic.

Public justification (visible to the public if the article is accepted and published):

I would like to thank the authors for the revised submission that addresses the reviewers' comments.

Before publication, I would like the authors to provide a bit more detail on one of the reviewer comments, which I still find a bit confusing. Using plain language rather than referring to a flag that merges several different criteria, would be good. For example, 10xxxx and 01xxxx have very different numeric values, but in the end one has missing images at the end and the other at the beginning. It is not clear to me that these numbers are quantitatively comparable.

Line 407 – “. A quality flag lower than 11110 is a good compromise to keep DCS little impacted by imagery issues”. > I feel that this section should still be reformulated given that the quality flag, which I assume is binary/ bitwise merges several different qualities. Could you please specify here what requirements have to be met to be included. I suggest to use plain language rather than the quality flag code.

Thank you. We have improved the paragraph for clarity.

Line 419: Quality control can raise a number of issues with the data, such as missing lines or images which can affect the tracking of systems in various ways. The user is informed of the issues thanks to a flag coded as a five digits number. The first digit indicates whether a DCS is born naturally or due to consecutive missing images, while the second digit indicates whether a DCS dissipates naturally or as a result of consecutive missing images. The third digit reveals if a DCS is impacted by the edges of the image, some missing lines or pixels. Values of these three digits greater than one indicate problems in initiation, dissipation, missing lines or touching the edge of the image. The last two digits of the quality flag represent the number of missing images during the lifecycle of a given DCS. A typical conservative filtering approach would include only systems unaffected by quality control issues, identified by a flag value less than 11110.