

Reply to Editor Comments, 01.02.2021

1) Comment 1: Please modify or discard Figure 13

Figure 13 shows examples of reflectance spectra, however, it remains unclear to the reader what is displayed: the naming of the spectra are numbers that do not appear as codes in the table, the Y-axis does not show the scaling of the unit of reflectance (that would be here 0 -1 * scaling factor), you could either add in figure 13 the labels that you also present in the tables or discard figure 13.

Figure 13 has been modified; the full sample names have been added in the legend (e.g. "Apl1_A_13b [5x5AVG]" instead of "13b")

The data scaling has been added in the caption (between 0-10000).

2) Comment 2: Please add information on the scaling factor that you use for your reflectance data as

- a sentence in the manuscript, e.g. would fit well in 3.3 Hyperspectral Data Processing

**- a sentence in your data publication abstracts at GFZ data services
reflectance is expressed either as 0-100 % or 0 -1 unitless (as the theoretical ratio of outgoing energy / radiance versus incoming energy / radiance)
in the case of your published data sets,
reflectance is expressed unitless with a scaling factor that needs to be described in the manuscript text and in the data publication abstracts.**

The scaling from 0 – 10.000 is based on the HySpex sensor calibration and the Reflectance Retrieval Routine described in Rogass et al., 2017. We added the information regarding this unitless scaling in Chapter 3.3 of the manuscript as well as in the caption of Figure 13, where the scaling of the spectra appears. As the other figures showing the spectral libraries are stacked, here the scaling is not shown.

The information regarding the scaling were added to the data reports hosted on the GFZ Data Service website and are already online. This information is added in the Abstract as well as the "Hyperspectral Measurement" section.