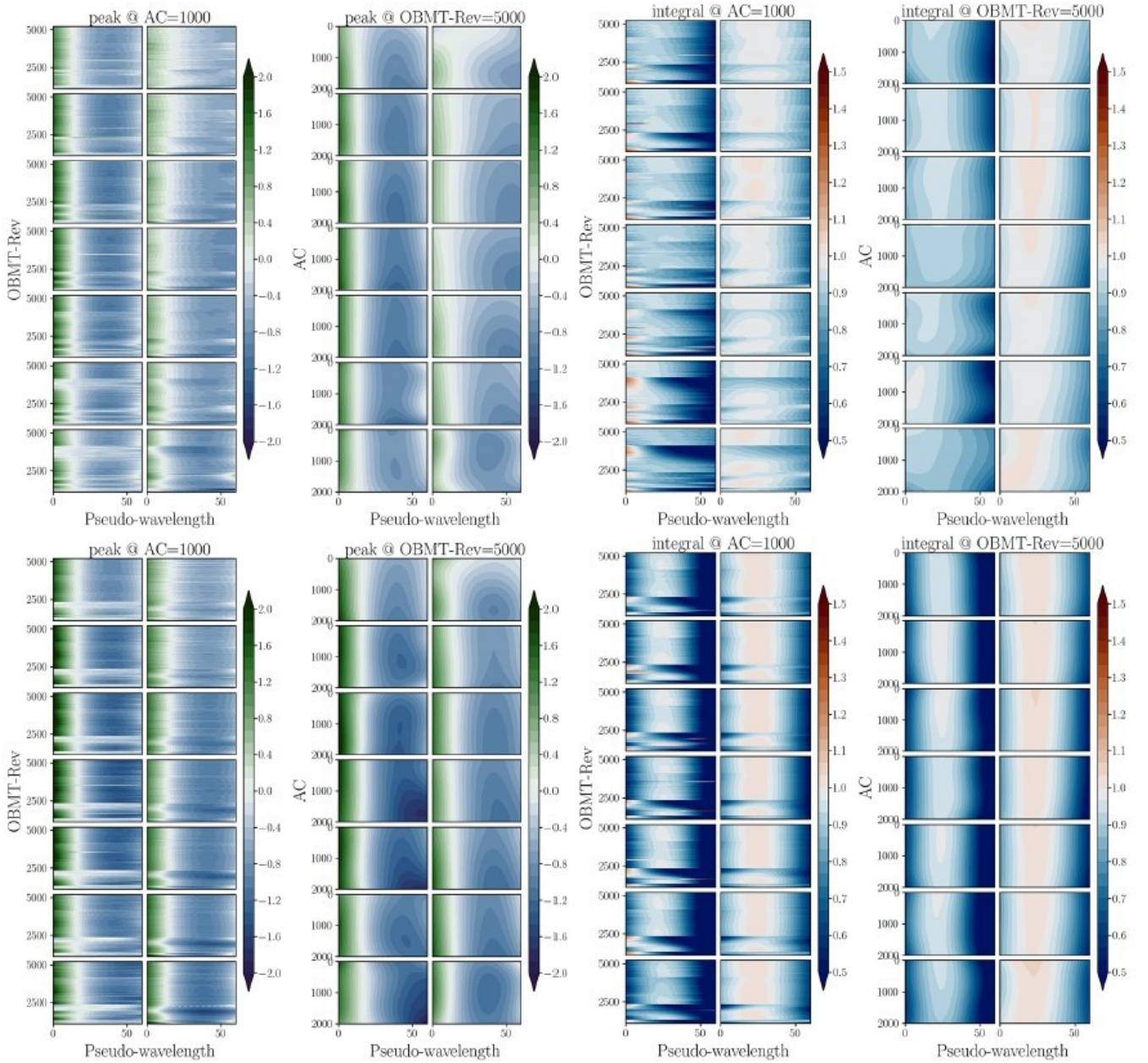




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**Fig. 7.** Overview of the BP and RP calibrations for the preceding (*first row of plots*) and following (*second row*) FoVs, ungated 1D configuration: peak and integral parameter variations vs. wavelength, time, and AC coordinate are shown for each CCD. Each set of 14 panels show the peak (first two sets) and integral (second two sets) variations (see the top title label and colour bar next to each set) as a function of different parameters: the first set shows the variation of the peak parameter in time (expressed in OBMT-Rev) and pseudo-wavelength, while the second set shows the variation of the same parameter in AC coordinate and pseudo-wavelength, the third and fourth sets show the same dependencies for the integral parameter. When showing the dependency in time and pseudo-wavelength, the parameters have been evaluated at the centre of each CCD in the AC direction (i.e. AC = 1000), while when showing variations with AC coordinate and pseudo-wavelength the reference time OBMT-Rev = 5000 was used. Within each set, the 14 panels show the BP case in the left column of 7 panels (one per CCD) and the RP case in the right column of 7 panels.

on the relative frequency of sources in the colour–magnitude diagram (see Sect. 3.2) are likely to be the cause of this. We remind readers that source-based weights were only adopted for the BP calibration to boost the leverage of rare blue sources and to help in the calibration of the bluest wavelength range where only very blue sources have significant flux. This may have affected the calibration process, particularly in magnitude ranges where the number of blue sources is very small because of the natural magnitude and colour distribution of sources in the sky: in these cases, a few blue outliers might adversely affect the solution.

The plots in Fig. 8 include only data and calibrations for the INIT period. As explained above, once a stable set of calibrations for the INIT period has been obtained and a reference set of mean spectra for the calibrators is established, these are used to generate consistent calibrations covering all the rest of the mission data collected so far. The distribution in time of the relative residuals covering the whole period included in *Gaia* DR3 is shown in Fig. 9 for BP and RP in the top and bottom panels, respectively.

The top panel shows that the calibration algorithm was not able to fully remove the large systematic effects that are present