Summary

1. We confirm the polarity rule in the behaviour of the amplitudes of the 27-day variations of the GCR anisotropy and intensity observed by NMs in the solar minima: 23/24 (2007-2009) and 24/25 (2017-2019), namely larger amplitudes are observed for A > 0 polarity epoch.

2. The amplitudes of the 27-day variations of the GCR intensity observed by ACE/CRIS, STEREO A, B and SOHO/EPHIN, in the solar minima 23/24 and 24/25 remain at the same level and do not seem to be polarity dependent.

3. Recurrent variations connected with the solar rotation for low energy (< 1GeV) cosmic rays are more sensitive to the enhanced diffusion effects, leading to the same level of the 27-day amplitudes for A > 0 and A < 0 polarities. Whereas high energy (> 1GeV) cosmic rays observed by NMs, are more sensitive to the large-scale drift effect resulting in the 22-year Hale cycle of the 27-day GCR variations, with the larger amplitudes in the A > 0 polarity than in the A < 0. Nevertheless, processes around CIR are more complex and need further study, e.g. because of competition between modulation and acceleration of cosmic rays around stream interaction regions.