In this work, the proton and helium nuclei spectra measured by the PAMELA experiment from July 2006 to September 2014 will be presented. Time-dependent energy spectra of galactic cosmic rays carry fundamental information regarding their origin and propagation. We present the time profile of the proton-to-helium flux ratio over a nearly complete solar cycle. The observed dependencies are also addressed to different shapes of the local interstellar proton and helium-nuclei spectra applying a simple model (force-field approximation).