An analysis of the time series of MODIS-based and AERONET aerosol records over Beijing reveals two distinct periods, before and after 2007. The MODIS data from both the Terra and Aqua satellites were processed with the new Multi-Angle Implementation of Atmospheric Correction (MAIAC) algorithm. A comparison of MAIAC and AERONET AOT shows that whereas MAIAC consistently underestimated peak AOT values by 10-20% prior to 2007, the bias disappears after 2007. As MAIAC was using the same aerosol model for the entire 2000-2010 period, this difference can only be explained by a decrease of aerosol absorption caused by the reduction of the local black carbon emissions. An independent analysis of the AERONET dataset revealed no or negligible change in the effective radii of the fine and coarse fractions and of the Angstrom exponent. At the same time, it showed an increasing trend in the single scattering albedo, by ~0.02 in 9 years. The observed changes correlate in time with the Chinese government's broad measures to improve air quality in Beijing during preparations for the Summer Olympics of 2008.