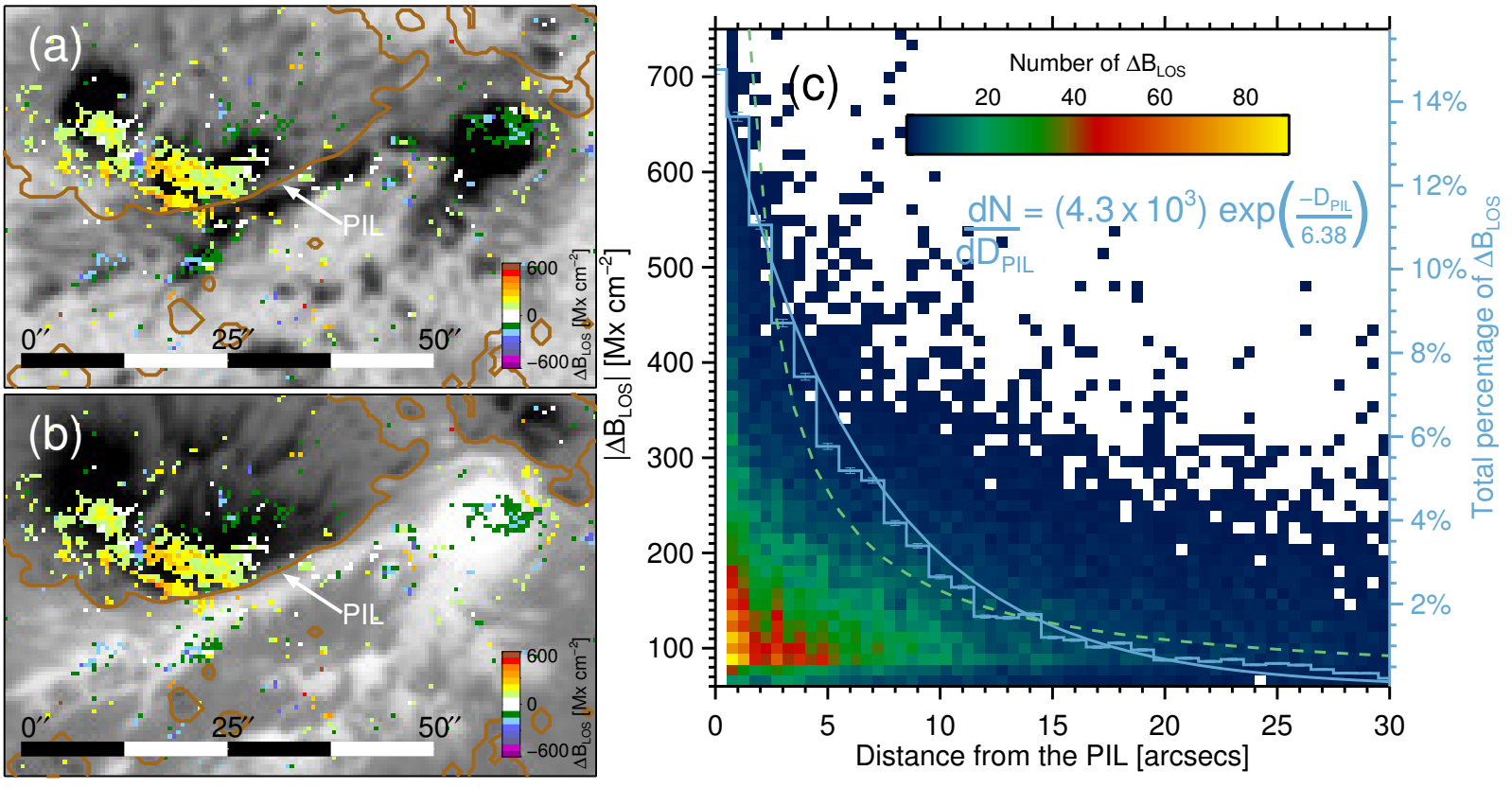

Abstract: Abrupt and permanent changes of photospheric magnetic fields have been observed during solar flares. The changes seem to be linked to the reconfiguration of magnetic fields, but their origin is still unclear. We carried out a statistical analysis of permanent line-of-sight magnetic field (B_{LOS}) changes during **18 X-, 37 M-, 19 C- and 1 B-class flares** using data from SDO/HMI. We investigated the properties of permanent changes, such as frequency, areas, and locations. **We detected changes of B_{LOS} in 59/75 flares**. We find that strong flares are more likely to show changes, with all flares $\geq$ M1.6 exhibiting them. For weaker flares, permanent changes are observed in 6/17 C-flares. 34.3% of the permanent changes occurred in the penumbra and 18.9% in the umbra. Parts of the penumbra appeared or disappeared in 23/75 flares. The area where permanent changes occur is larger for stronger flares. Strong flares also show a larger change of flux, but there is no dependence of the magnetic flux change on the heliocentric angle. The mean rate of change of flare-related magnetic field changes is 20.7 Mx cm^{-2} min^{-1}. The number of permanent changes decays exponentially with distance from the polarity inversion line. **The frequency of the strength of permanent changes decreases exponentially, and permanent changes up to 750 Mx cm^{-2} were observed. We conclude that permanent magnetic field changes are a common phenomenon during flares**, and future studies will clarify their relation to accelerated electrons, white light emission, and sunquakes to further investigate their origin.