

Latitudinal variation of current helicity in active regions

H. Q. Xu, Y. Gao and H. Zhang

National Astronomical Observatories, Chinese Academy of Sciences, Beijing, China
(xhq@sun10.bao.ac.cn)

The hemispheric sign rule of helicity was studied. We chose 524 active regions observed with the vector magnetograph at HSOS during the period of 1992 —2000. The primal result is that: when we use only the data points with longitudinal magnetic fields $|B_z| < 500G$, the hemispheric sign rule holds both solar cycles 22 and 23. When we use only the data points with longitudinal magnetic fields $|B_z| > 500G$, the hemispheric sign rule doesn't hold in solar cycle 23.