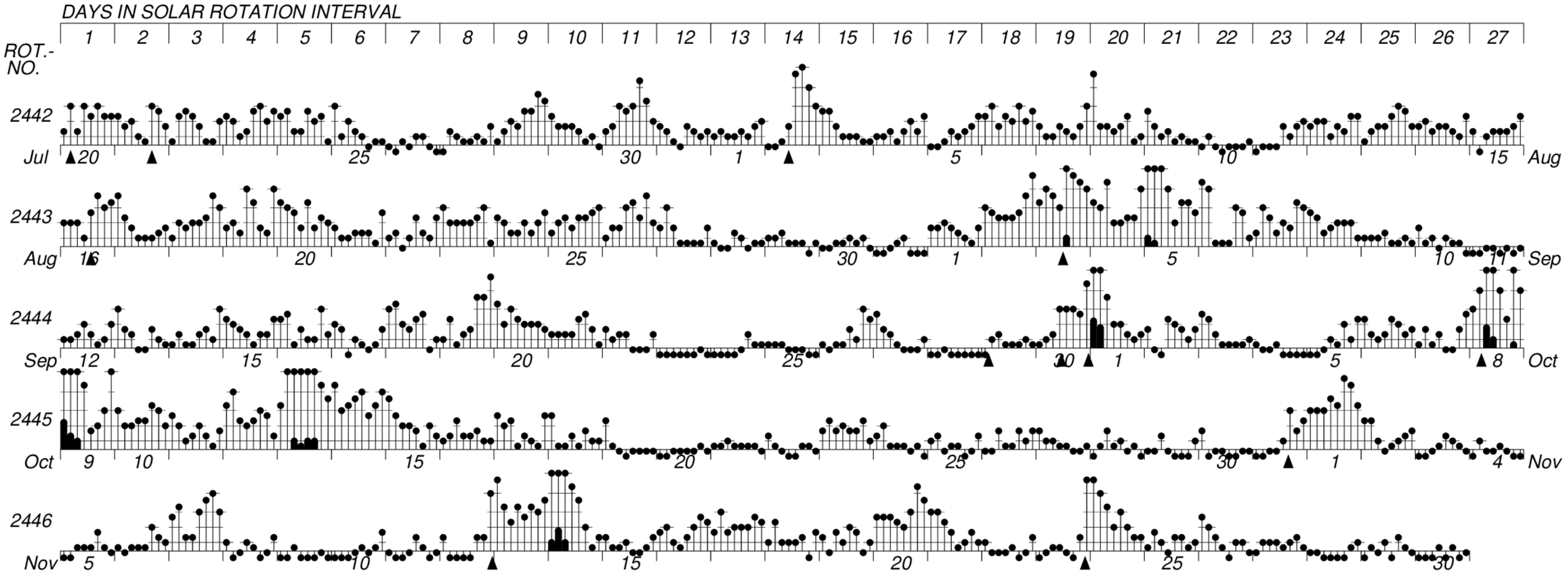


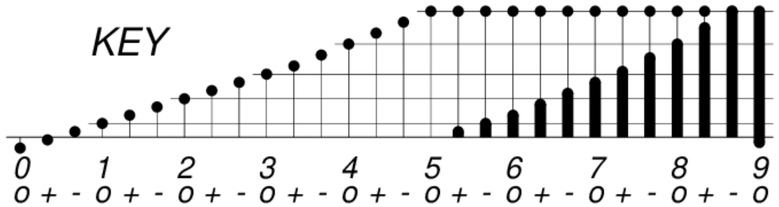


▲ = sudden commencement

GFZ Helmholtz Centre for Geosciences

# PLANETARY MAGNETIC THREE-HOUR-RANGE INDICES

## Kp till 2012 Nov 30