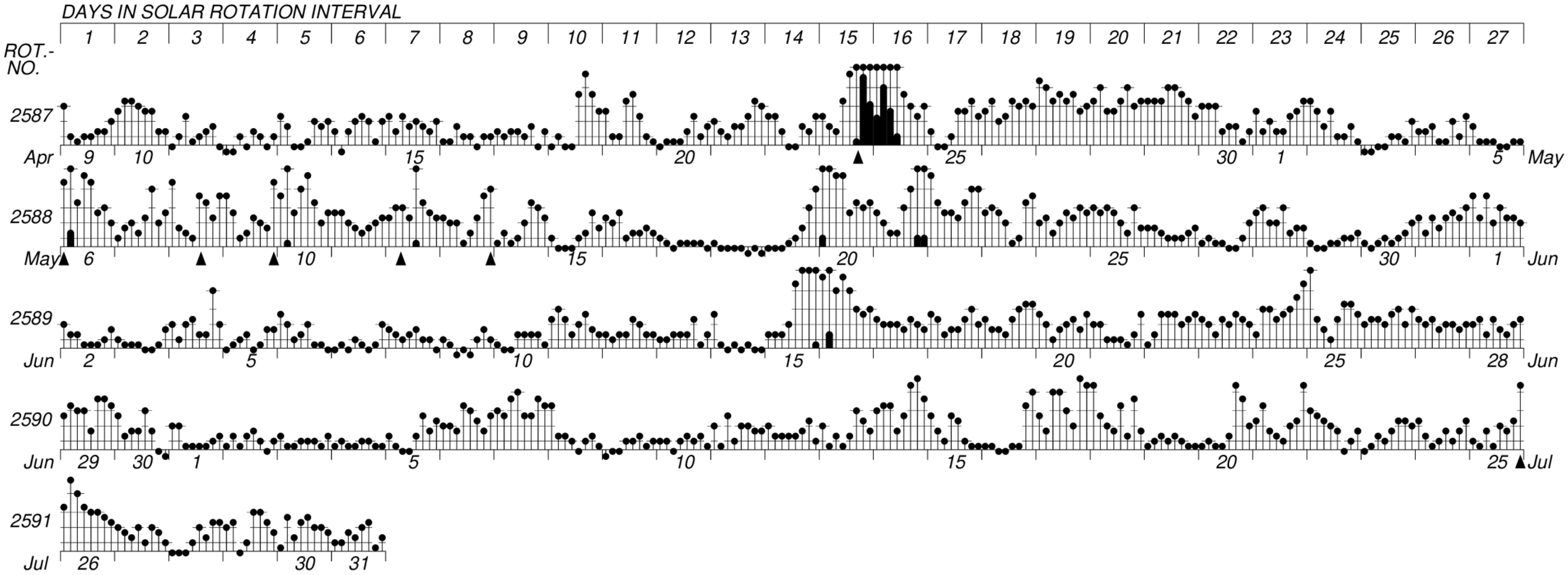


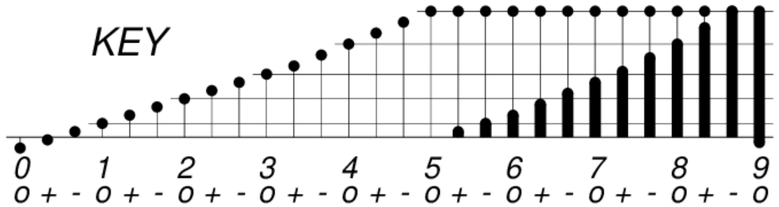


▲ = sudden commencement

GFZ Helmholtz Centre for Geosciences

# PLANETARY MAGNETIC THREE-HOUR-RANGE INDICES

## Kp till 2023 Jul 31