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Cosmic Rays in Magnetospheres of the Earth and other Planets

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Frequently used Abbreviations and Notations

ACE	Advanced Composition Explorer satellite
a_n^m, b_n^m	Gauss coefficients for planetary magnetic field
CME	coronal mass ejection
CR	cosmic ray
<i>Dst</i>	disturbance storm time index
<i>E</i>	energy of CR particles
E_0	energy of primary CR particle
ESO	Israel–Italian Emilio Segre’ Observatory
FAC	field-aligned currents
FEP	Flare Energetic Particles
GLE	ground level event of solar CR increasing
<i>H</i>	altitude
<i>h</i>	atmospheric pressure
h_o	pressure on the level of observations
IC	ionization chamber, shielded by 10 cm Pb
ICME	interplanetary coronal mass ejections
ICRC	Israel Cosmic Ray Center (1992–2002)
ICR&SWC	Israel Cosmic Ray & Space Weather Center (from 2003)
ICRS	International Cosmic Ray Service (proposed in 1991)
IEF	interplanetary electric field
IGY	International Geophysical Year (July 1957–December 1958)
IMF	interplanetary magnetic field
IQSY	International Quiet Sun Year (1964–1965)
<i>L</i>	McIlwain parameter.
MC	magnetic cloud
m w.e.	meters of water equivalent
M_E	magnetic moment of the earth