

Initiation and Propagation Characteristics of Radio-Loud CMEs

PANKAJ KUMAR¹ and P.K. MANOHARAN²

¹*Aryabhata Research Institute of Observational Sciences (ARIES), Manora Peak,
Nainital-263 129, India.*

²*Radio Astronomy Centre, National Centre for Radio Astrophysics, Tata Institute of
Fundamental Research, Udhagamandalam (Ooty)-643 001, India.*

Coronal Mass Ejections (CMEs) are the integral part of space weather. The initiation and the propagation characteristics of the CMEs in the interplanetary medium is not well understood. We prepared a catalog of radio-loud CMEs associated with M and X-class flares, showing radio flux more than 10,000 sfu to study the initiation and propagation characteristics of these CMEs. Preliminary results of our study suggest that most of the radio-loud CMEs are initiated in the emerging flux region satisfying the tether cutting scenario. We interpret our results in the light of existing theories and models of CMEs.