

Abstract

This chapter discusses the dynamical properties of eruptive prominences in relation to coronal mass ejections (CMEs). The fact that eruptive prominences are a part of CMEs is emphasized in terms of their physical association and kinematics. The continued propagation of prominence material into the heliosphere is illustrated using in-situ observations. The solar-cycle variation of eruptive prominence locations is discussed with a particular emphasis on the rush-to-the-pole (RTTP) phenomenon. One of the consequences of the RTTP phenomenon is polar CMEs, which are shown to be similar to the low-latitude CMEs. This similarity is important because it provides important clues to the mechanism by which CMEs erupt. The nonradial motion of CMEs is discussed, including the deflection by coronal holes that have important space weather consequences. Finally, the implications of the presented observations for the modeling CME modeling are outlined.