## Impact of Mini-CMEs on the Quiet Sun Solar Corona

DAVINA E. INNES

Max-Planck-Institut für Sonnensystemforschung

Mini-CMEs (Coronal Mass ejections) are small-scale eruptions that in sequences of extreme ultraviolet (EUV) images look like scaled down versions of large CMEs. They show flare-like brightening at the onset site, dark cloud or filament ejections, and fast, faint dimming waves moving out from the eruption site. An estimate of the occurrence rate is about 1400 events per day over the whole Sun<sup>[1]</sup>. STEREO observations show that about one third of these events are associated with waves. Typically, the waves last for about 30 min and travel a distance of 80 Mm, so at any one time they cover 1/50th of the lower corona.

They often originate from regions of mixed polarity magnetic fields that are twisted in photospheric downdrafts at supergranular junctions. Recent STEREO quadrature observations show that the eruptions are preceded by coronal dimming, and thus, like CMEs, coronal restructuring is an integral part of their initiation.

I will discuss characteristics of mini-CMEs seen in the EUV, putting special emphasis on the signatures of coronal restructuring and mass transfer due to the ejection of chromospheric material.

Keywords: Sun; coronal mass ejection; solar corona; EUV radiation.

## References

[1] D.E. Innes, A. Genetelli, R. Attie and H. Potts, A & A, 495, 319 (2009).