

## Coronal mass ejection properties at Earth's vicinity

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It has been now over 20 years of nearly continuous coverage of solar coronagraphs and interplanetary monitors in the near Earth space. Several studies have addressed the challenge of predicting interplanetary disturbance parameters from solar observations. Special attention has been given to the coronal mass ejections (CMEs) because they are among the main origins of geomagnetic disturbances. They change the properties of the near-earth interplanetary medium, enhancing some key parameters, such as the southward interplanetary magnetic field and the solar wind speed. These quantities are known to be related to the energy transfer from the solar wind to the Earth's magnetosphere via the magnetic reconnection process. Among the several attempts to establish correlations between CMEs and their interplanetary counterpart (ICME) properties, it was found that the average CME propagation speed to 1AU is highly correlated to the ICME peak speed (Dal Lago et al, 2004). In this work, we present an extended study of such correlation, which confirms the results found in our previous study.

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