Fast survey of interplanetary magnetic events in the early ascending phase of solar cycle 23

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The interplanetary magnetic field has been extensively studied since the first missions out of the Magnetosphere in 1965. Early results showed a wide variety of magnetic phenomena embedded in the solar wind, such as Magnetic Clouds and their associated shocks. Between both, complex magnetic structures have been reported showing fast and significant variations in the magnetic field direction and intensity. These structures may be related to interaction processes between the MC and its shock. In this work we address our attention on the comparison of the magnetic field measured by WIND and ACE in the early ascending phase of solar cycle 23. During this period both spacecrafts were close and this fact let us to study not only of the MC structure and the corresponding shock but the magnetic features in between and their variations from one point to the other. Finally, we have analyzed every magnetic events with theoretical models.