Natchimuthuk Gopalswamy / Goddard Space Flight Center Coronal Mass Ejection Data Products for LWS Science

Data products based on coronal mass ejection measurements are currently made available on line (cdaw.gsfc.nasa.gov). In order to facilitate and enhance the data analysis and modeling activities geared towards achieving the goals of the Living with a Star program, the data base needs to be continually updated and maintained. We propose to enhance the CDAW data center with new value-added products such as mass of the CMEs and online computing facilities for easy accessibility and utility for modelers. The data base will also support the development of automatic CME detection schemes, which will become inevitable when LWS missions start collecting data The data base will also be used the develop the understanding of CME-rate variability over the current solar cycle (23).