First Results from the Atmospheric Imaging Assembly

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On February 11, 2010 at about 10:23 EST the Solar Dynamics Observatory (SDO) Atlas 5 launched from the Kennedy Spacecraft Center in central Florida. As this abstract is being written SDO is circling the Earth in preparation for injection into its final geosynchronous orbit. The current schedule plans the Atmospheric Imaging Assembly (AIA) instrument doors will open in 37 days from launch. After a week of checking systems and initial calibration initial observations will begin or on about 31 March. In the next very few weeks several observing sequences will be tested to evaluate normal and various special sequences. By the time of the AOGS initial observations and evaluation of initial sequences will have been completed and several solar rotations observed. A summary of the initial observations will be presented. Because AIA, HMI, and EVE have open data policies the SDO mission represents a huge step forward in the amount and quality of solar data available to the science community. Significant international effort has gone into developing tools for both visualizing and mining the SDO database. Both the data and the data mining tools will be demonstrated.