PI: Jack Ireland/L3 Communications Government Services Inc. Title: Mapping the Inner Heliosphere: Implementing Ajax Technologies for LWS

Abstract: Recent developments in web based client-server technologies have brought substantial innovation to commercial websites. A landmark application of this new approach known as Ajax, is the Google(TM) Maps website http://maps.google.com. The software driving Google(TM) Maps allows users to pan, scan and zoom at will over what appears to be a single, enormous image of the Earth in a natural and intuitively appealing way. We will take open source equivalent technology into the realm of Living With a Star (LWS) applications by creating a suite of image retrieval, processing, display and storage algorithms that will implement the functionality required to be able to view and monitor features on the Sun and inner heliosphere simultaneously. This core suite of algorithms will be the engine that will power new and natural ways of visualizing the Sun and the inner heliosphere for the LWS program.