The Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER; http://asterweb.jpl.nasa.gov/) is a NASA satellite imaging system that provides synoptic remotely sensed coverage of the earth's surface. Standard ASTER data products from NASA are difficult to process for potential users who are not well versed in image processing or do not have access to the appropriate software. We designed a web-based system that allows a user to identify ASTER scenes of interest and then process them to produce images of broad potential use. These output files are useful at a number of levels of sophistication varying from low level presentation (.jpg) to incorporation into higher level Geographic Information Systems (GIS; full resolution and rectified GEOTIFF).

Our ASTER scene processing and delivery method uses a Java Servlet Engine with a Java server to link ARCIMS to our image processing scripts which are written in the Interactive Data Language (IDL). The IDL scripts take the original ASTER image data as delivered from NASA, uncompresses, reformat, performs the requested band extraction and combinations, projects, and then converts to GeoTIFF and JPEG.