

REMOTE SENSING APPLICATIONS ON USDA NATIONAL FORESTS

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ABSTRACT

The management of National Forest land requires current and accurate natural resource information. The USDA Forest Service uses a variety of remote sensing systems to provide resource managers the information required to address National Forest management issues. Conventional 9"x9" large scale photography continues to be the most common type of photography used in the field. Small scale high altitude aerial photography is being used to prepare orthophoto maps, and to create and update topographic maps. The NASA ER-2 high altitude aircraft and sensors such as the Large Format Camera, Optical Bar and Metric Mapping cameras are used for forest pest management projects, and creating and updating resource inventories. In addition, the Forest Service utilizes small format cameras (35 mm and 70 mm) and airborne video systems to provide low cost, near real time imagery for monitoring applications.

The Forest Service also utilizes airborne electro-optical sensors such as Multispectral Scanners, Thermal Scanners and SPOT and LANDSAT satellite imagery to provide large scale coverage for a number of resource monitoring and inventory applications. The Forest Service has recently initiated a program to develop procedures and methods for incorporating remote sensing information into GIS data bases.