

544-43

ARIS ONLY

2527

17

REMOTE SENSING FOR HURRICANE ANDREW IMPACT ASSESSMENT

Bruce A. Davis
National Aeronautics and Space Administration
John C. Stennis Space Center, MS 39529

Nicholas Schmidt
Sverdrup Technology, Inc.
John C. Stennis Space Center, MS 39529

ABSTRACT

Stennis Space Center personnel flew a Learjet equipped with instrumentation designed to acquire imagery in many spectral bands into areas most damaged by Hurricane Andrew. The Calibrated Airborne Multispectral Scanner (CAMS), a NASA-developed sensor, and a Zeiss camera acquired images of these areas. The information derived from the imagery was used to assist Florida officials in assessing the devastation caused by the hurricane. The imagery provided the relief teams with an assessment of the debris covering roads and highways so cleanup plans could be prioritized. The imagery also mapped the level of damage in residential and commercial areas of southern Florida and provided maps of beaches and land cover for determination of beach loss and vegetation damage, particularly the mangrove population.

Stennis Space Center personnel demonstrated the ability to respond quickly and the value of such response in an emergency situation. The digital imagery from the CAMS can be processed, analyzed, and developed into products for field crews faster than conventional photography. The resulting information is versatile and allows for rapid updating and editing. Stennis Space Center and state officials worked diligently to compile information to complete analyses of the hurricane's impact.