Costa Rica experience of a geomatic, airborne and remote sensing data laboratory

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The Centro Nacional de Alta Tecnología (CeNAT) is an inter-university government agency specialized in the development of research in high technology areas and technological innovation projects with strong links with government and business sectors.

Among the different areas in which CeNAT works PRIAS is a highly-developed geomatics, airborne and remote sensing data analysis laboratory that has several data sets for Costa Rica such as multispectral, hyperspectral, radar, LIDAR, digital camera imagery and satellite data for different years; PRIAS staff has developed wide experience working with all this data sets in different research projects at national and international level as well as knowledge transfer to students and researchers from universities, public and private sector.

PRIAS´s main research projects are the development of a Spectral Library for Costa Rica with a focus in prominent crops, a close range UAV´s has been acquired along with a high resolution camera to obtain data for land monitoring and emergency management purposes.

PRIAS-CeNAT has a long history of successfully planning, facilitating and carrying out airborne missions in Costa Rica developing an expertise in ground logistics required for an airborne data acquisition mission, and works with different institutions such as NASA, McGill University among others. In 2003 and 2005 PRIAS-CeNAT worked with NASA to plan and carry out two nationwide airborne imaging campaigns, collecting data sets from different sensors that cover nearly 85% of the country. Currently, PRIAS-CeNAT is the repository for these data and manages the access for individuals interested in using the imagery for research purposes.