Patent Search

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Abstract:

The invention relates to a method and apparatus for monitoring and analyzing wildlife habitats through the integration of advanced remote sensing technologies. Th utilizes data collected from multiple sources, including satellites, unmanned aerial vehicles (UAVs), and ground-based sensors, to provide a comprehensive view of en conditions. By employing machine learning algorithms, the system processes this data in real-time to detect changes in land cover, vegetation health, and wildlife acti invention offers enhanced capabilities for habitat conservation, enabling timely detection of environmental changes, early warning of potential threats, and the gene actionable insights for effective wildlife management. This approach addresses the limitations of traditional monitoring methods by providing a more efficient, cost-e scalable solution for wildlife habitat analysis.

Complete Specification

Description:The embodiments of the present invention generally relates to the field of environmental monitoring and wildlife conservation, specifically using advan remote sensing technologies to observe, analyze, and manage wildlife habitats. This invention leverages satellite imagery, UAVs (unmanned aerial vehicles), and gro based sensors to collect comprehensive data on ecological conditions, allowing for enhanced assessment and protection of wildlife environments.

BACKGROUND OF THE INVENTION

The following description of related art is intended to provide background information pertaining to the field of the disclosure. This section may include certain asp the art that may be related to various features of the present disclosure. However, it should be appreciated that this section be used only to enhance the understan the reader with respect to the present disclosure, and not as admissions of prior art.

Wildlife habitats are facing unprecedented pressures from human activities such as deforestation , Claims:1. A method for monitoring and analyzing wildlife hab method comprising:

collecting data from a plurality of remote sensing platforms, including satellites, UAVs, and ground-based sensors;

transmitting the collected data to a central processing unit;

analyzing the data using machine learning algorithms to detect changes in land cover, vegetation health, and wildlife activity;

generating habitat analysis reports based on the analyzed data;

providing real-time alerts in response to detected anomalies or significant changes in habitat conditions

View Application Status