

Figure 1. The components of the ET system.

The ET system consists of several components that work together to estimate and manage water requirements. These components include data collection, data processing, data storage, and data distribution. The system is designed to provide accurate and timely information to users, enabling them to make informed decisions about water management.

Data Collection

- Data is collected from various sources, including weather stations, soil moisture sensors, and satellite imagery.
- Weather stations provide real-time data on temperature, humidity, wind, and precipitation.
- Soil moisture sensors measure the amount of water in the soil at different depths.
- Satellite imagery provides spatially distributed data on vegetation and soil moisture.
- Data is collected continuously and stored in a central database for processing and analysis.

Data Processing and Storage

- Collected data is processed to calculate ET values for different crops and regions.
- The system uses advanced algorithms to analyze the data and generate ET estimates.
- Data is stored in a cloud-based database, ensuring accessibility and security.
- The system is designed to handle large volumes of data and process it efficiently.
- Data is updated regularly to provide the most current information.
- The system is scalable and can be adapted to different regions and crops.
- Data is processed and stored in a central database for processing and analysis.

Data Distribution

- The system provides data to users through a web-based interface and mobile applications.
- Users can access ET data in real-time and receive alerts and notifications.
- Data is distributed to various stakeholders, including farmers, researchers, and policymakers.
- The system is designed to be user-friendly and easy to navigate.
- Data is distributed through various channels, including email, SMS, and mobile apps.
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