Advanced Computer Vision Change Detection Report

Executive Summary

The Advanced Computer Vision method processed satellite imagery and detected 877,507 pixels of change across 1 distinct regions, representing 93.55% of the total image area. Processing completed in 0.065 seconds. The average confidence score for detected changes was 0.164.

Method Description

This method employs sophisticated computer vision algorithms including adaptive thresholding, multi-scale analysis, and advanced morphological operations. It uses edge detection, feature matching, and statistical analysis to improve change detection accuracy. The method includes noise reduction techniques and region growing algorithms to better handle complex change patterns and varying lighting conditions.

Results Summary

Metric	Value
Total Change Pixels	877,507
Number of Change Regions	1
Total Change Area	877507.00 sq units
Processing Time	0.065 seconds
Image Dimensions	1024 x 916
Average Confidence	0.164

Change Statistics

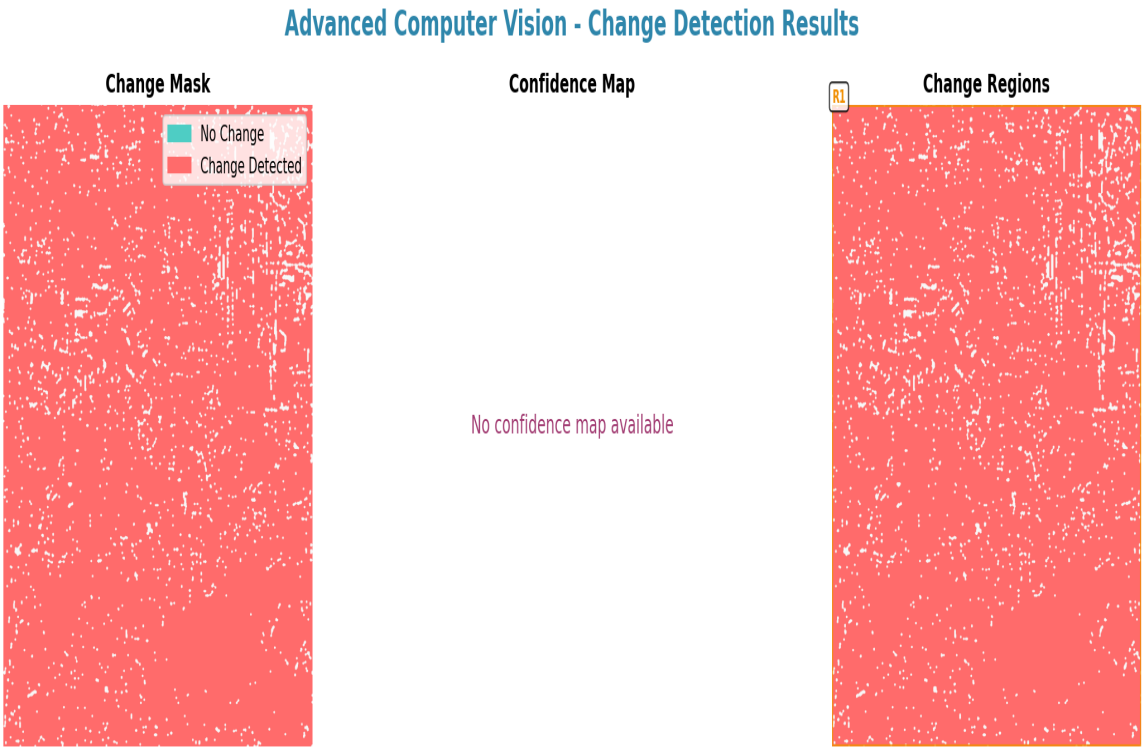
Region Size Analysis:

- Largest region: 877,507 pixels
- Smallest region: 877,507 pixels
- Average region size: 877,507 pixels
- Median region size: 877,507 pixels

Technical Details

Parameter	Value
Implementation	Advanced Computer Vision
Version	1.0
Timestamp	2025-08-24 19:51:14
Input Image 1	orlando2010.png
Input Image 2	orlando2023.png
scales	[1.0, 0.5, 0.25]
threshold_method	adaptive
morphology_kernel	(5, 5)
min_area	100

Visualizations



Report generated on 2025-08-24 19:51:16