# 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 0.057 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	0.057 seconds
Image Dimensions	1024 x 916
Average Confidence	0.164

### **Change Statistics**

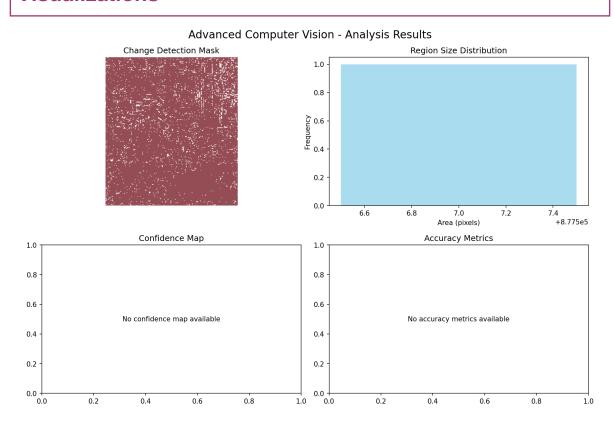
### **Region Size Analysis:**

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 19:04:36
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 19:04:37