Solar Panel Detection Report

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Executive Summary

The analysis successfully identified **7** solar panel installations out of **8** total rooftop detections in the provided image. The detection confidence averaged **46.9%**, indicating reliable identification of solar infrastructure.

Detection Summary

Metric	Value	Status
Total Detections	8	
Solar Panels	7	■
Non-Solar Rooftops	3	
Average Confidence	46.9%	
Detection Coverage	80.0%	

Visual Analysis

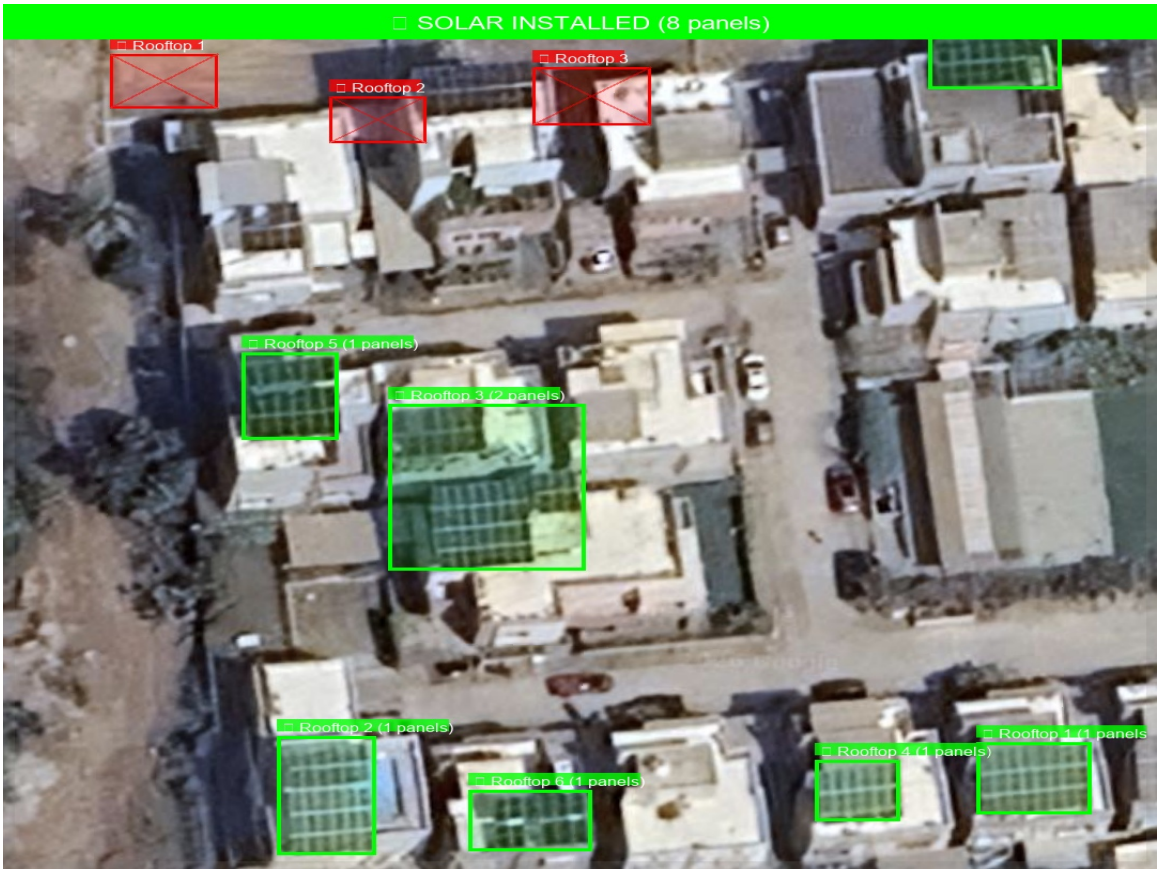

Figure 1: Solar Panel Detection Analysis with Classification Markers

Detailed Detection Results

#	Type	Confidence	X	Y	Width	Height
1	Solar Panel	79.7%	964	1006	107	93
2	Solar Panel	76.4%	302	1029	92	154
3	Solar Panel	75.2%	472	671	143	130
4	Solar Panel	72.6%	798	1022	79	79
5	Solar Panel	62.0%	403	552	86	65
6	Solar Panel	60.4%	268	510	90	113
7	Solar Panel	52.3%	492	1062	115	79
8	Rooftop	47.5%	927	69	124	82
9	Rooftop	28.3%	445	108	122	76
10	Rooftop	4.0%	250	288	58	60
11	Rooftop	2.3%	1048	98	61	107
12	Rooftop	1.8%	1070	992	17	95

Recommendations

For Existing Solar Installations:
• Monitor panel performance regularly
• Schedule periodic maintenance and cleaning
• Consider energy storage integration
• Monitor for shading issues from vegetation growth

For Non-Solar Rooftops:
• Evaluate remaining rooftop areas for expansion
• Conduct feasibility studies for additional installations
• Consider energy consumption patterns for sizing

Technical Information

Image Processing:
• Original Image Size: 1079x1125
• Processing Time: 2.76 seconds
• Model Version: v2.1
• Confidence Threshold: 40%

Detection Parameters:
• Analysis Type: Automated AI Detection
• Classification: Solar Panel vs Non-Solar Rooftop
• Coverage Area: 80.0%
• Total Detections: 8