

RADIO TELESCOPE DATA ANALYSIS REPORT

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Data File: radio_data_clean_20250704_095529.csv
Analysis Date: 2025-07-04 09:55:41

Observation Duration: 9.9 seconds (0.2 minutes)
Total Data Points: 100
Average Sample Rate: 10.1 Hz

SIGNAL STATISTICS:

	raw_adc	voltage	smoothed	baseline_diff	signal_strength
count	100.000000	100.000000	100.000000	100.000000	100.000000
mean	25.790000	0.126040	25.953000	7.953000	8.908000
std	10.030554	0.049074	10.042496	10.042496	9.197109
min	15.000000	0.073000	13.890000	-4.110000	0.010000
25%	17.000000	0.083000	17.880000	-0.120000	1.260000
50%	20.500000	0.100500	20.820000	2.820000	3.620000
75%	34.250000	0.167250	34.322500	16.322500	16.322500
max	48.000000	0.235000	47.760000	29.760000	29.760000

SIGNAL DETECTION (3-sigma threshold):
Detection Threshold: 36.50
Number of signal events: 0

RECOMMENDATIONS:

1. Point antenna at Sun during day for strong radio source
2. Try observations at different times of day
3. Look for periodic variations in signal strength
4. Compare signal levels when pointing at different sky regions
5. Record weather conditions and correlate with signal variations