RADIO TELESCOPE DATA ANALYSIS REPORT

Data File: radio_data_clean_20250703_190630.csv

Analysis Date: 2025-07-03 19:06:41

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	100.00000	0 100.000000	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