Covariate Study Summary: Ar1
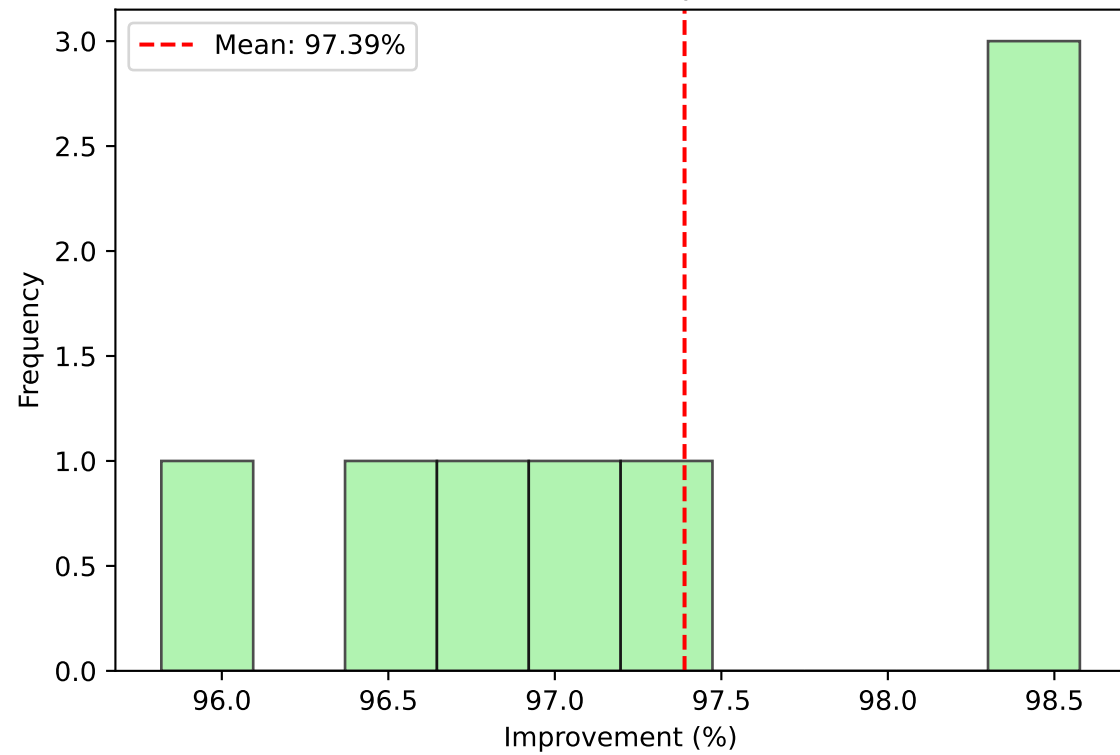
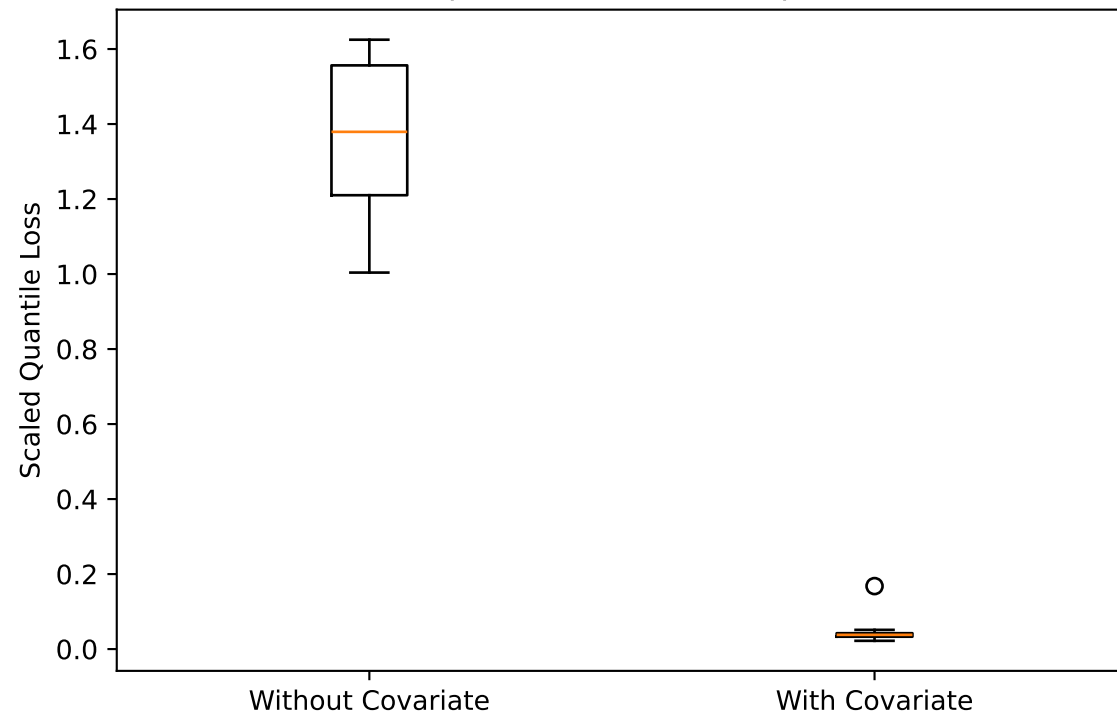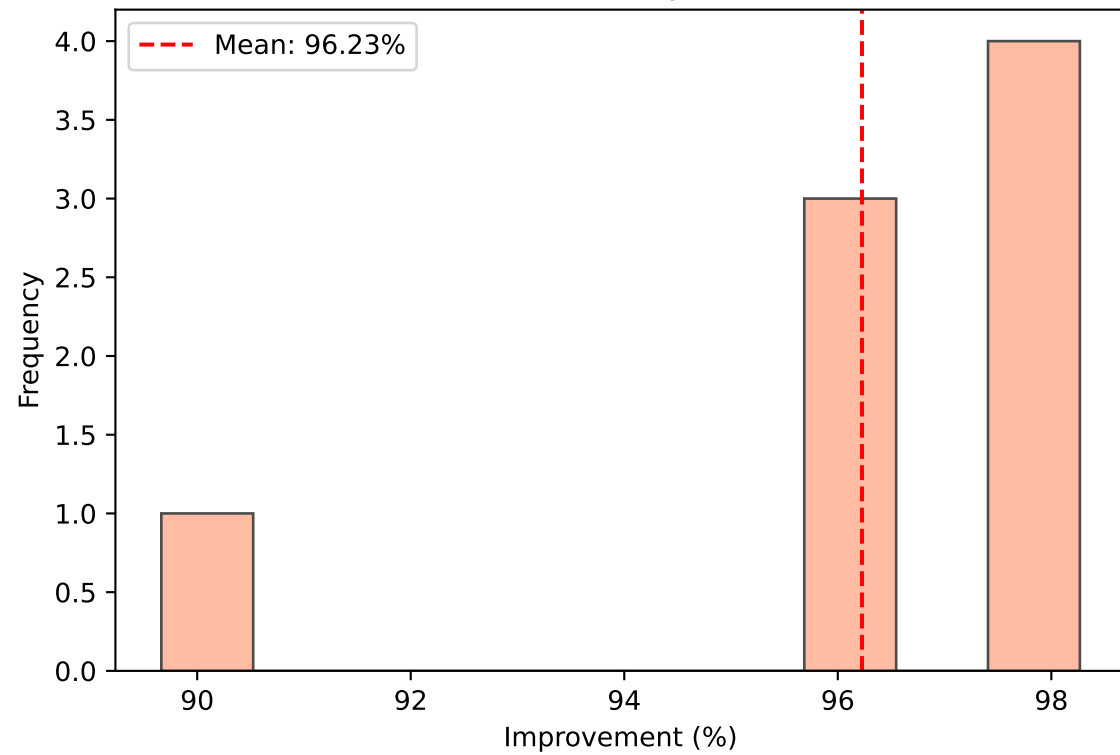# Detailed Statistics

```
Covariate Study Detailed Results
Covariate Types: ar1
Number of Experiments: 8

MASE Results:
- Without Covariate: 2.9935 ± 0.5750
- With Covariate: 0.0740 ± 0.0196
- Average Improvement: 97.39%
- Median Improvement: 97.32%

SQL Results:
- Without Covariate: 1.3505 ± 0.2237
- With Covariate: 0.0526 ± 0.0443
- Average Improvement: 96.23%
- Median Improvement: 97.03%

Study Parameters:
- Weight: 1.0
- Relation: additive
- Train Ratio: 0.6
- Covariate Weights: Randomized per experiment (Dirichlet distribution)

Best Performing Experiment (MASE):
- Experiment 7: 98.58% improvement

Worst Performing Experiment (MASE):
- Experiment 8: 95.82% improvement
```