Covariate Study Summary: Ar1
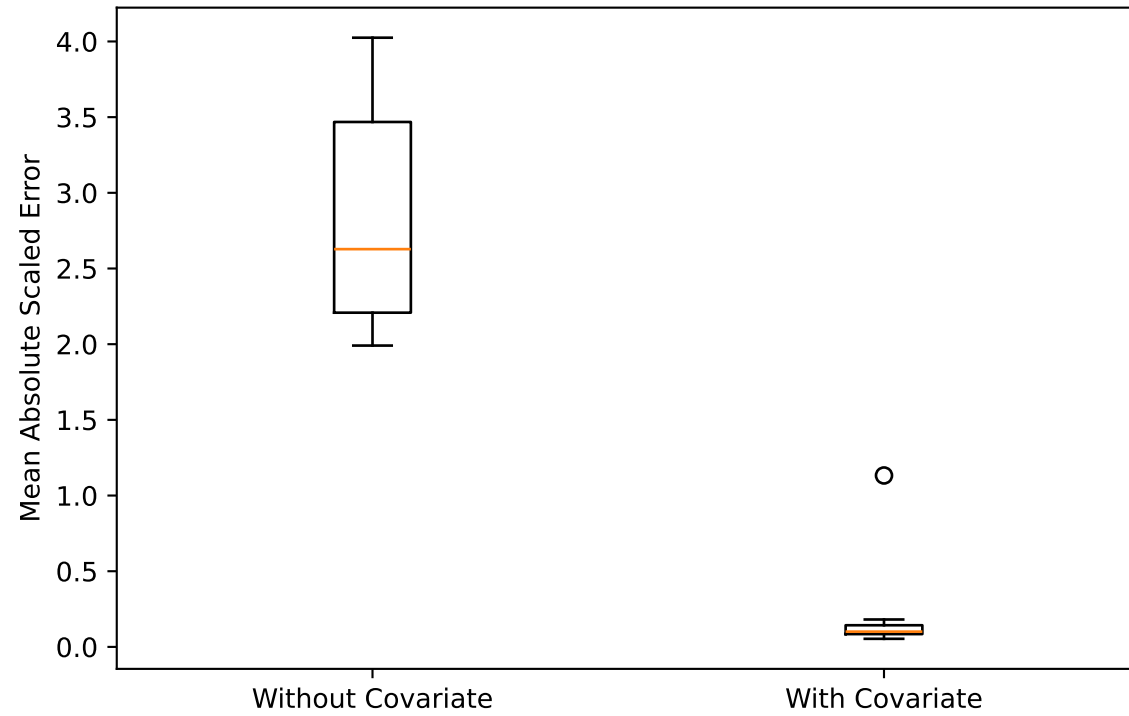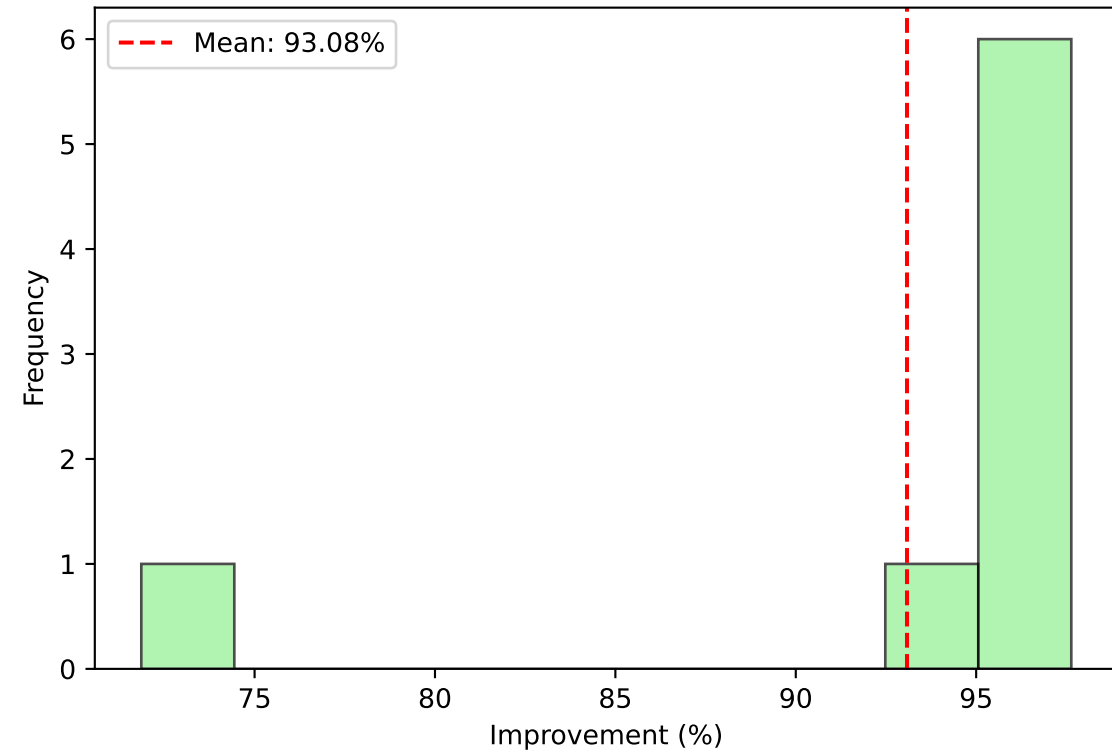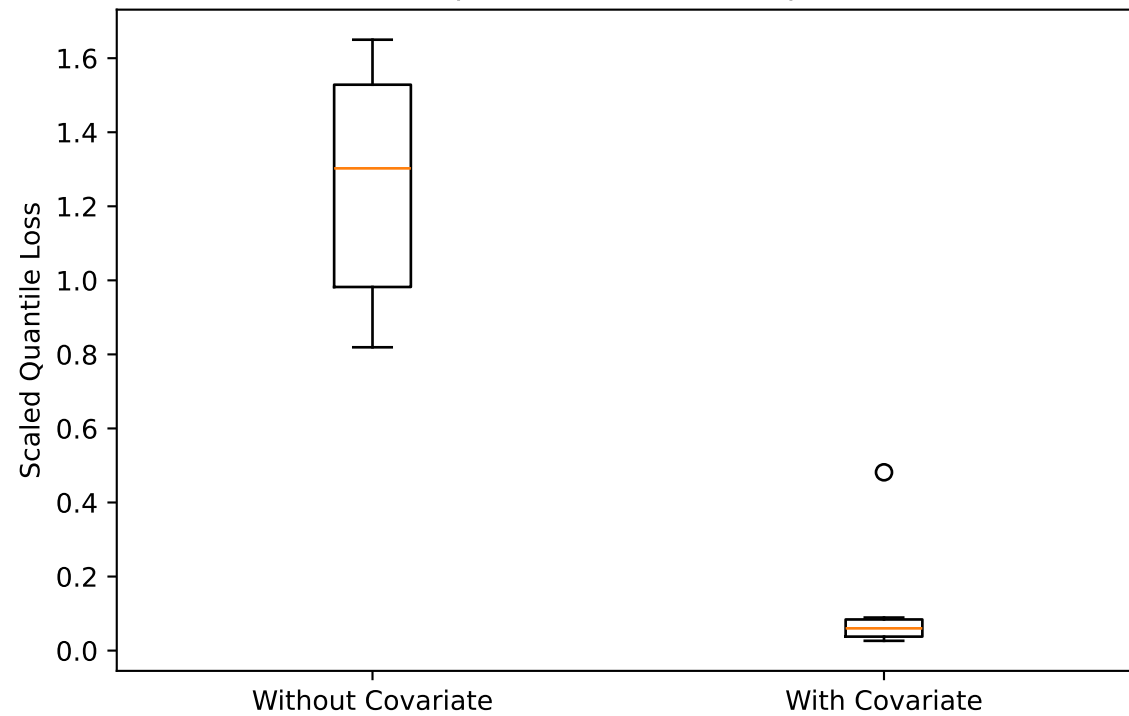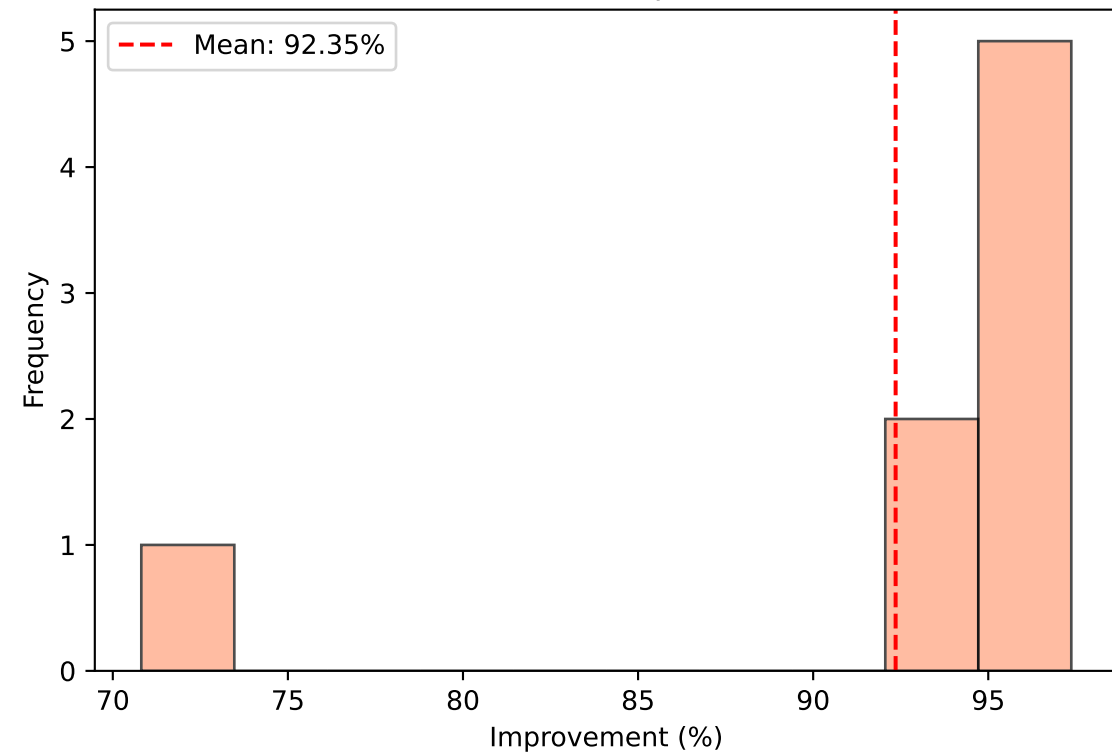
Detailed Statistics

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

MASE Results:
- Without Covariate: 2.8506 ± 0.7533
- With Covariate: 0.2322 ± 0.3423
- Average Improvement: 93.08%
- Median Improvement: 96.39%

SQL Results:
- Without Covariate: 1.2639 ± 0.3118
- With Covariate: 0.1090 ± 0.1424
- Average Improvement: 92.35%
- Median Improvement: 95.48%

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

Best Performing Experiment (MASE):
- Experiment 6: 97.64% improvement

Worst Performing Experiment (MASE):
- Experiment 4: 71.86% improvement
```