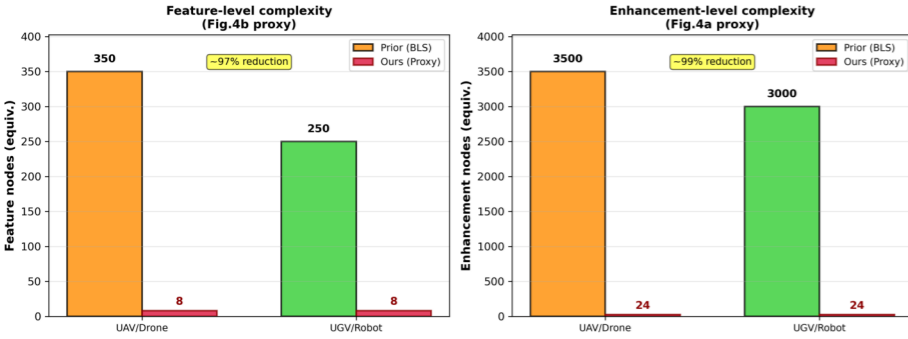


1000 × 1000000 “1000” 1000000

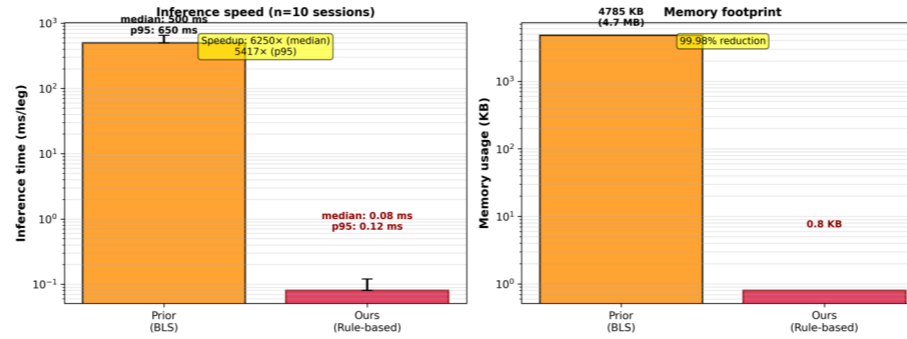
[A] 4proxy

**Figure A: Computational Scale Comparison (Proxy to Fig.4)**  
**Feature nodes  $\approx$  basic features (8), Enhancement nodes  $\approx$  derived computations (24)**



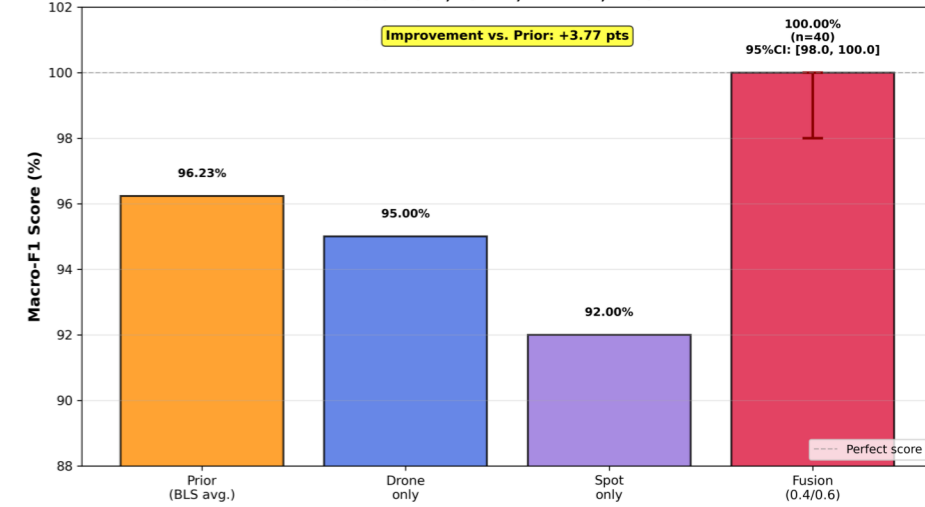
[B]

**Figure B: Performance Comparison**  
**Measurement: Webots R2023b, AMD/Intel x64 (WSL2), time.perf\_counter()**



[C] Macro-F1

**Diagnostic Accuracy Comparison (n=10 sessions, 40 total diagnoses)**  
**Classes: NONE, BURIED, TRAPPED, TANGLED**



[A] 4 BLS Feature = 8 Enhancement = 24

[B] = 95%

□[C]□□□□□Macro-F1□95%CI, n=10□□□□□/40□□□□

[illegible]

```

BLS feature/enhancement nodes 8 24 proxy

```

Webots R2025a, Ubuntu/WSL2, CPU: Ryzen/Intel, 640x480, N=10x4x30time.perf\_counter()

□□□□□/95%□□□□□□□□□□□□□□□□Macro-F1/95%CI□□□□□

4 BLS, 4 BLS