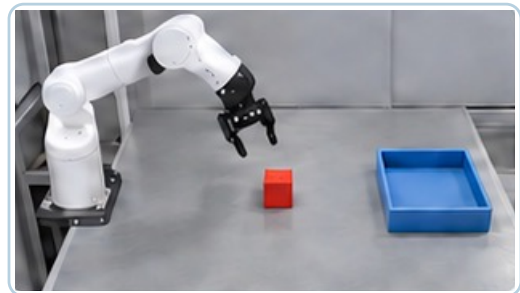


(a) Future prediction with and without causal CoT

Without explicit CoT

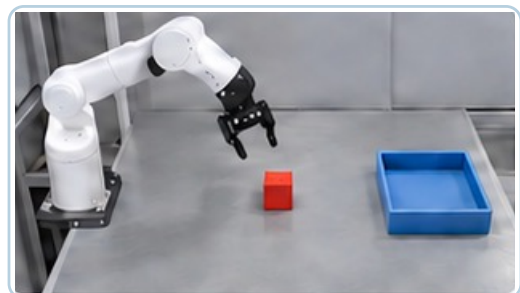


Observed scene

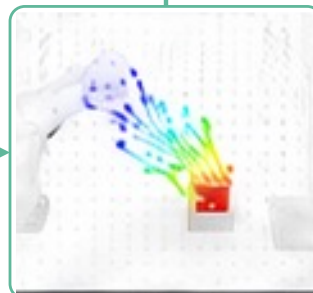


Future RGB

CausalWM



Observed scene



Motion



Geometry

...



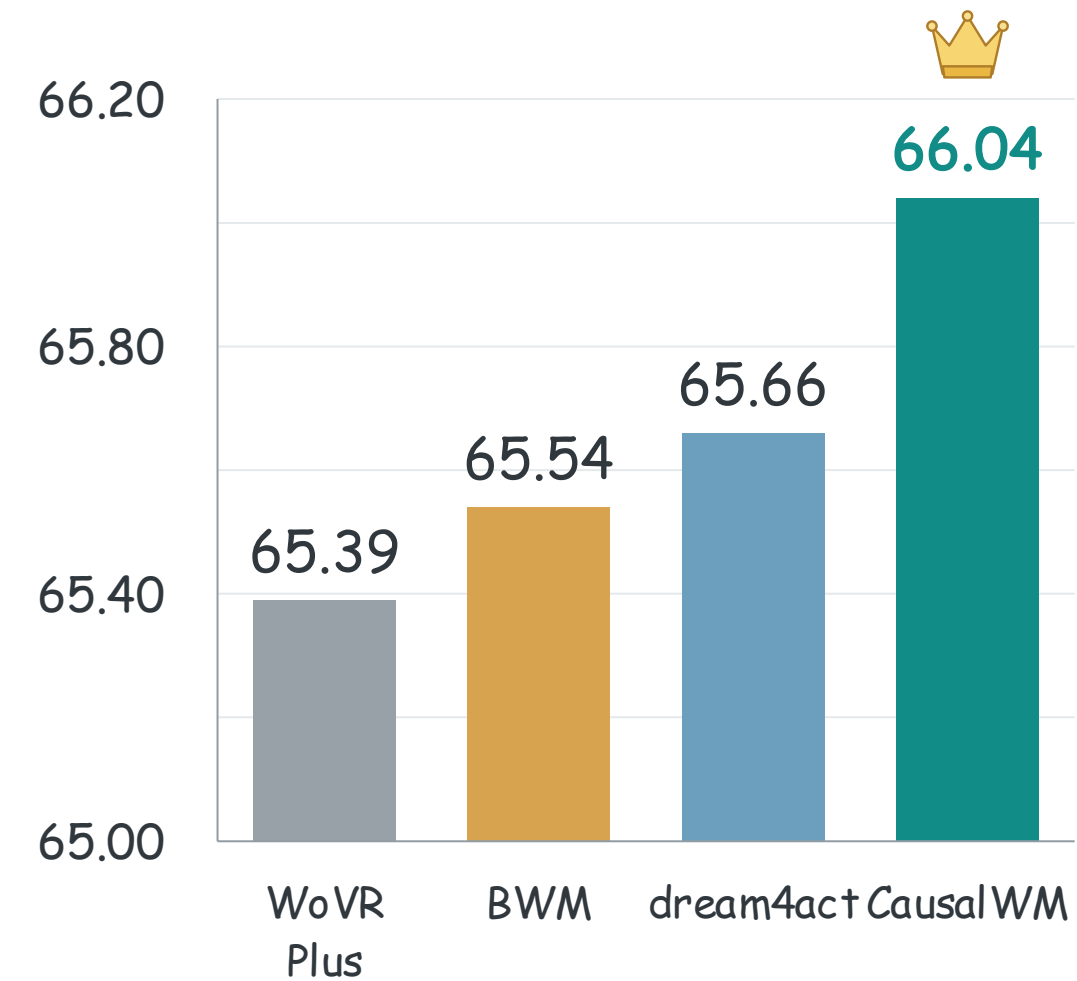
Future RGB

Instruction: "Place the red cube in the blue tray."

(b) Benchmark performance

TriWorldBench

TWB-Score

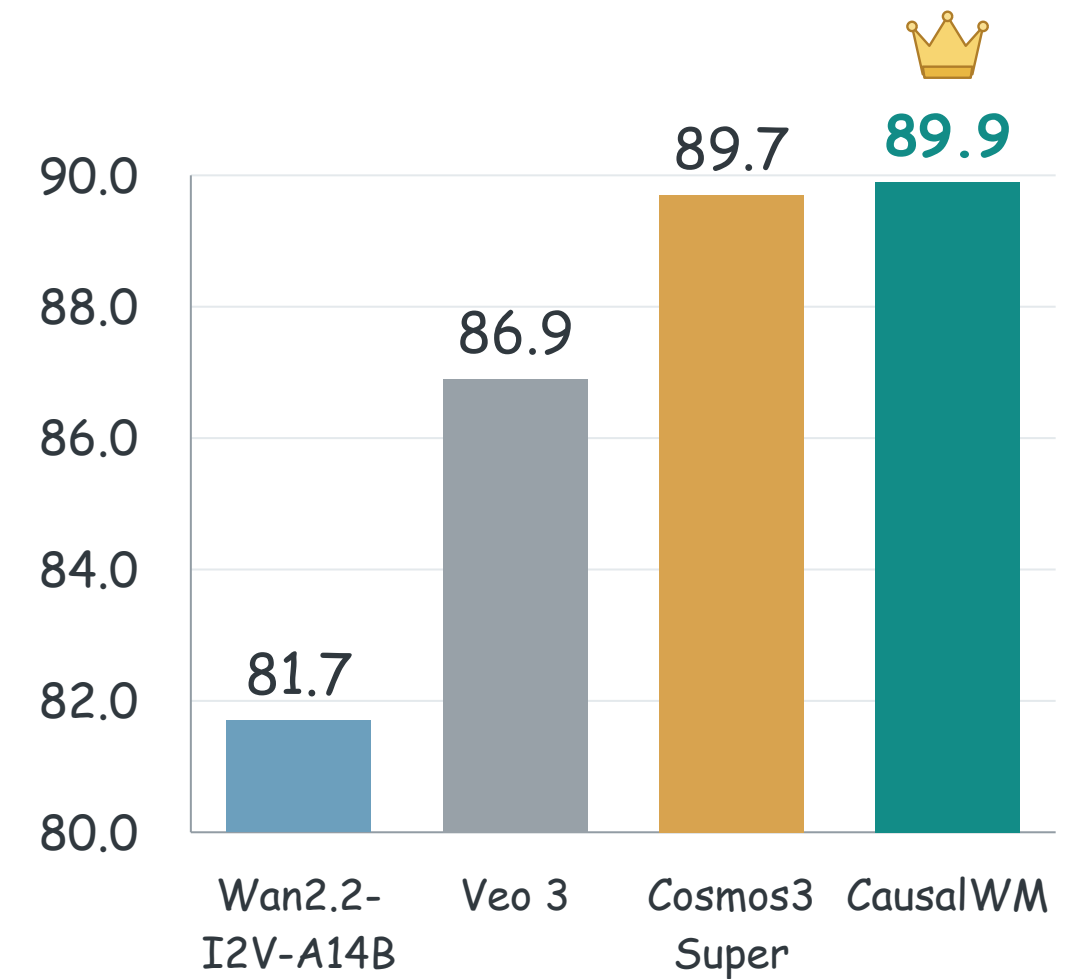


CausalWM: 66.04, ranked 1st

Official leaderboard, Sep. 11, 2026

PAI-Bench

Robot domain (RO)



CausalWM: 89.9, ranked 1st

Qwen3-VL-235B-A22B judge