

Visual Geometry Benchmark (Pose AUC)

+35.7% Improvement

Baseline context: VGGT: 46.8% avg → DA3-Large: **67.3% avg** | Relative improvement: **+44%** |
Coverage: SOTA on 18/20 settings | (Perfect alignment = 100% AUC) | Datasets: HiRoom (synthetic), ETH3D, DTU, 7Scenes, ScanNet++ (all real-world LiDAR)

Method	Setting	HiRoom	ScanNet++	7Scenes	Avg
DUSt3R	Pose-Free	38.4	45.2	32.1	38.6
VGGT	Pose-Free	42.1	62.6	35.8	46.8
DA3-Large ★	Pose-Free	64.5	85.0	52.3	67.3

✓ SOTA on 18/20 Settings

* DA3 sets new state-of-the-art across diverse benchmarks

+35.7%

CAMERA POSE ACCURACY

+23.6%

GEOMETRIC ACCURACY

Evaluation Pipeline

▶ Feed-Forward: Predict Pose + Depth



☒ Alignment: Robust RANSAC (inlier subset selection) + evo



▣ Fusion: TSDF Fusion → Point Cloud

Geometric Accuracy Gap

accuracy (Higher is Better)

