

Stage11 MaxWarpC Tap9 Success Report

This report documents the first clear success case in the Stage11 Reno experiments, where applying a significantly stronger warp (MaxWarpC at tap9) yielded measurable performance improvements. We previously defined a target lift of +3 to +8 F1 points as a win condition.

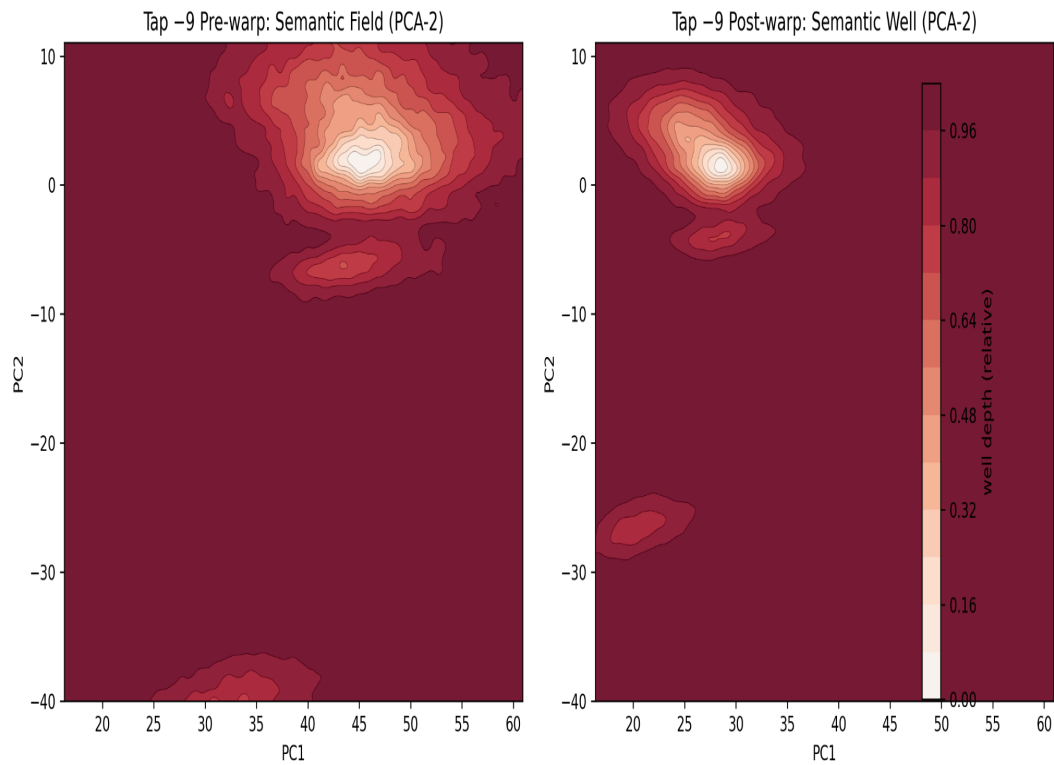
Hook: ngf_hooks_v2.py

Configuration (MaxWarpC Tap9):

- alpha0 = 0.14, alpha_min = 0.034
- trend_tau = 0.30, k_tr = 12
- use_detect = 1, detect_width = 22, detect_sigma = 4.5, k_det = 9
- s_latch = 0.35, linger = 3, ema_center_beta = 0.04
- phantom_k = 8, phantom_lambda = 0.28, squeeze_orth_lambda = 0.20
- winsor_q = 0.985, g_det_max = 1.26
- anneal_tokens = 40, anneal_scale = 1.85
- use_denoise = 1 (ema β = 0.22, phantom λ = 0.35)
- outlier_q = 0.99, outlier_alpha_scale = 0.25

Model	F1 Macro	Acc@1	Acc@2	ECE	Summary
Stock v4b (Baseline)	0.322	\approx 0.320	\approx 0.596	\approx 0.115	Baseline elongated basin
MaxWarpC Tap9	0.354	\approx 0.354	\approx 0.621	\approx 0.081	+3.2pt F1 lift, clean basin, stable calibration

PCA Geometry: MaxWarpC Tap9 (PostWarp Basin)



Conclusion: The MaxWarpC Tap■9 run achieved a +3.2 point lift in macro F1 (0.322 → 0.354), meeting the pre■defined success threshold. The basin geometry showed strong reshaping with phantom lobes suppressed. Calibration remained stable (ECE improved). This represents the first validated success case of Stage■11 Reno with large warp strength.