

09_amh_posthoc – AMH as biological validation (post-hoc)
AMH is NOT used to define clusters; it is analyzed as an external validator.

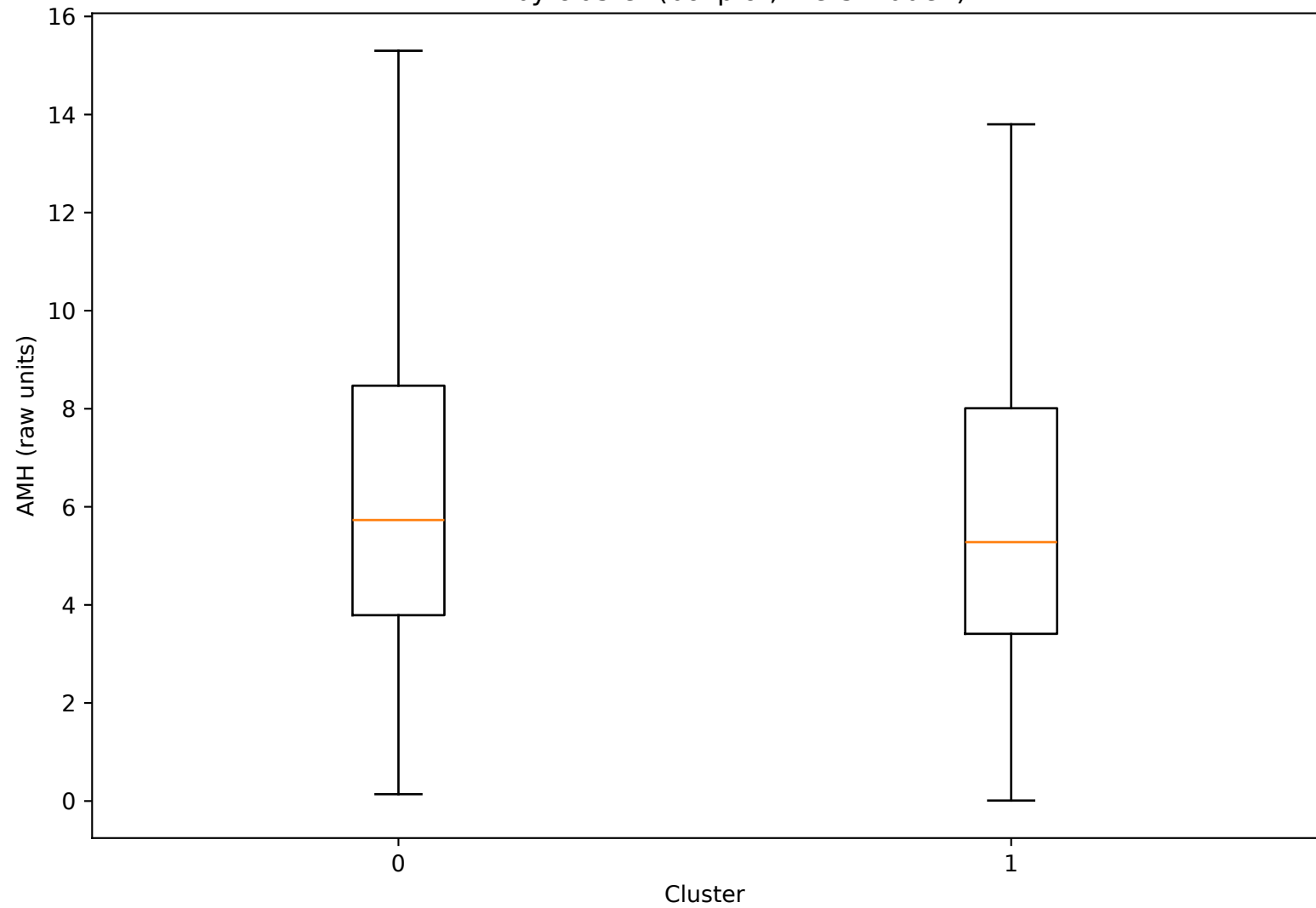
RUN_ID: 20260220T160847Z
Timestamp (UTC): 2026-02-20T16:08:48.198702Z
JOIN_KEY: row_index_in_data_clean | fallback_used=True
AMH column: AMH | units: raw units
N total: 1032
N with AMH: 970 (94.0%)

Tests:

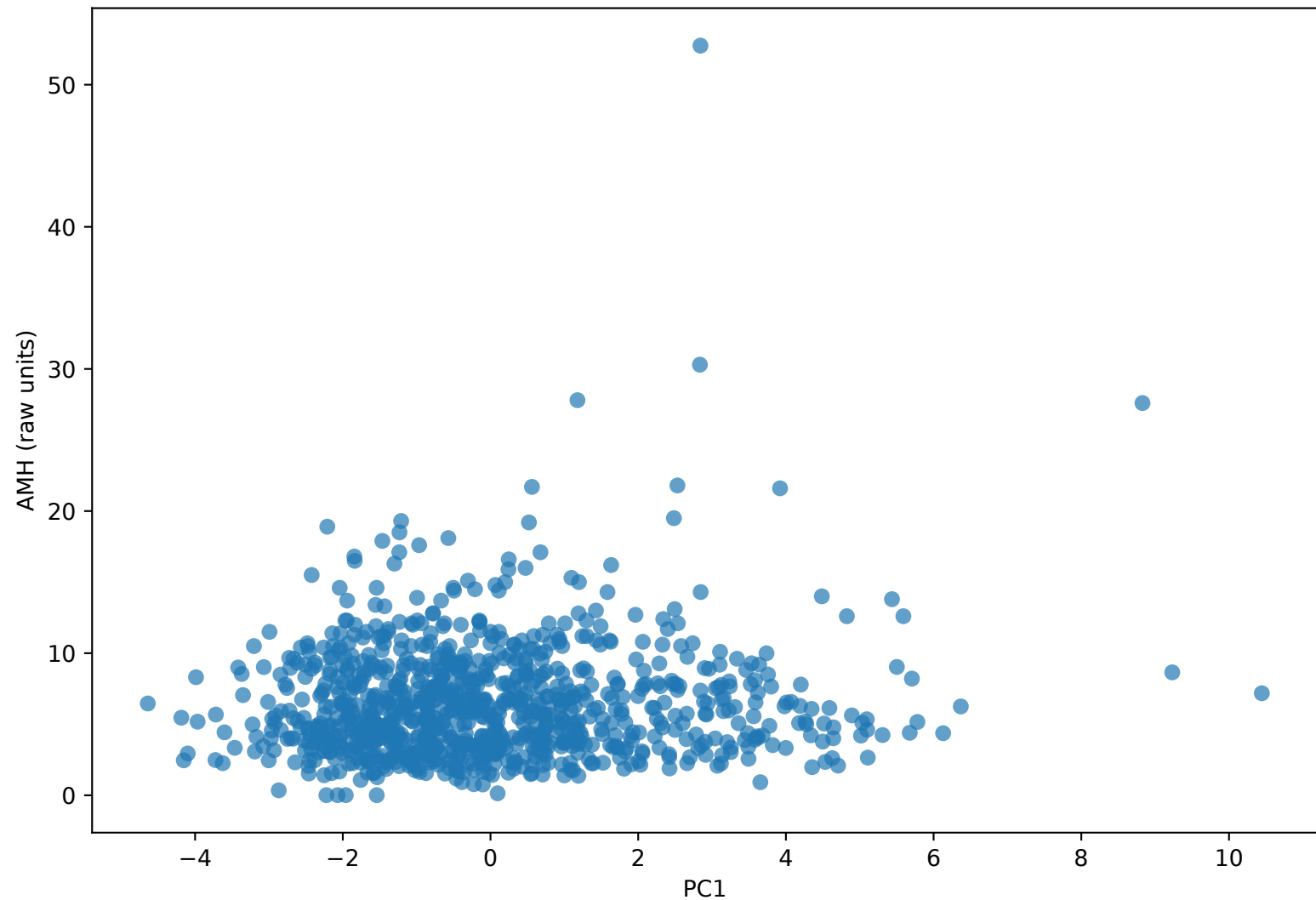
- Kruskal-Wallis: $p = 0.18$
- Mann-Whitney U (2 clusters): $p = 0.181$, Cliff's delta = 0.0942
- Dunn post-hoc with BH-FDR across pairwise comparisons (pipeline consistency)

- Spearman AMH vs PC1: $\rho=0.040$, $p=0.208$ ($n=970$)
- Spearman AMH vs PC2: $\rho=-0.123$, $p=0.000124$ ($n=970$)

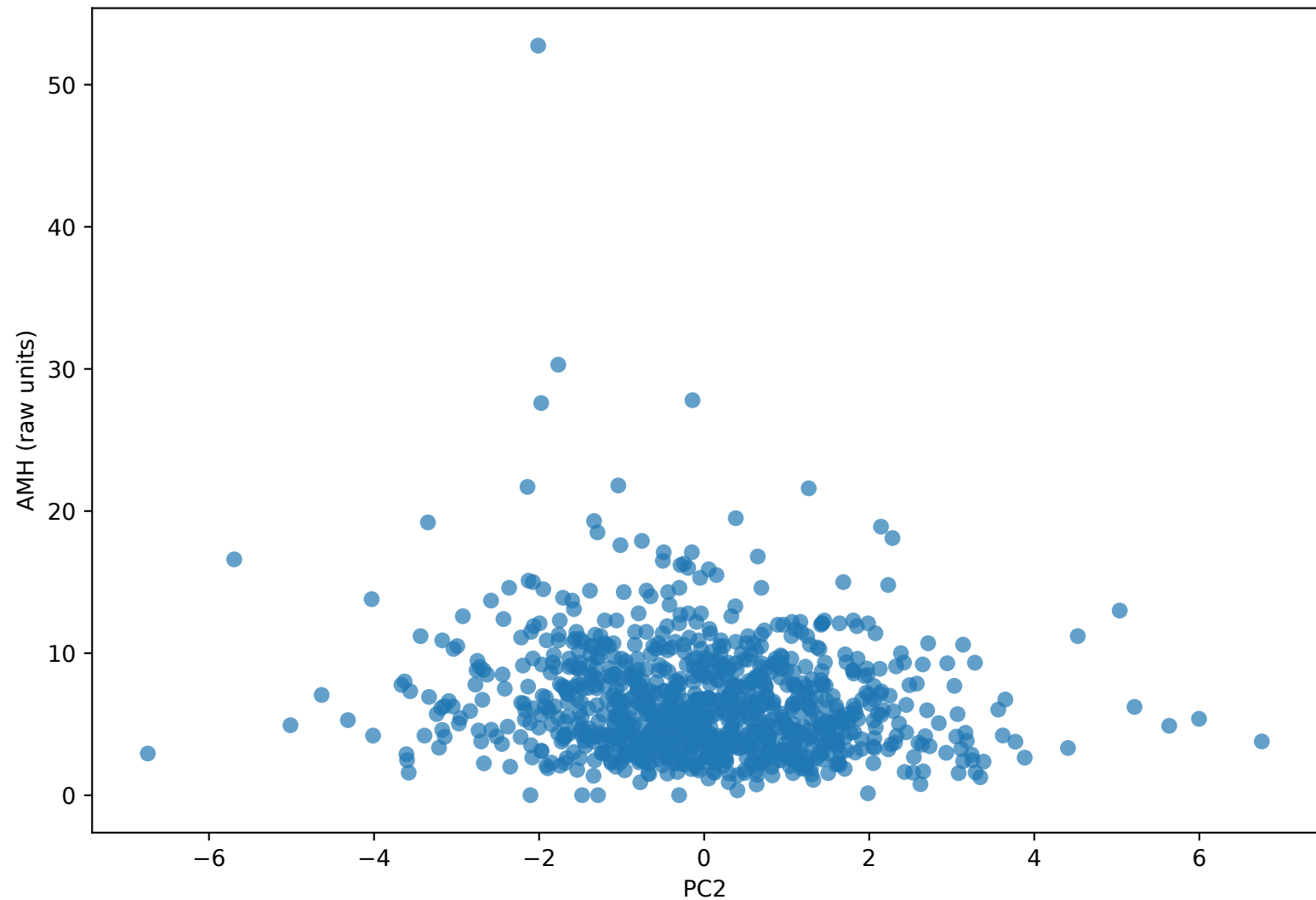
AMH by cluster (boxplot; fliers hidden)



AMH vs PC1 (scatter)



AMH vs PC2 (scatter)



AMH summary by cluster (median/IQR + missingness):

section	cluster	n_total_cluster	n_with_amh	missing_amh_pct	amh_units	n	median	q1	q3	iqr	mean	sd
summary	0	954	897	5.97	raw units	897	5.73	3.79	8.47	4.68	6.49	3.99
summary	1	78	73	6.41	raw units	73	5.28	3.41	8.01	4.6	5.96	4.23

Dunn post-hoc (first 80 rows):

section	group_a	group_b	n_a	n_b	mean_rank_a	mean_rank_b	z	p_value	q_value_bh
dunn_posthoc	0	1	897	73	488.937012	443.267123	1.34	0.18	0.18