

**AUC and Budget-Normalized Metrics by Operator Mode and Run**  
**(Per-Genome Metrics Enable Fair Comparison Across Different Budgets)**

Operator Mode	Total Genome	Min	Max	Avg	AUC	AUC/G	AvgGain/Gen	Max/Genome	AUC/Genome	AvgGain/Gen	Max/Genome
OPS - Run 1	26	0.0246	0.8205	0.1406	36.2677	0.7254	0.4708	0.031558	1.394910	0.018106	
OPS - Run 2	32	0.0178	0.5922	0.0996	22.6453	0.4529	0.2952	0.018506	0.707667	0.009225	
OPS - Run 3	17	0.0114	0.3775	0.0483	16.1314	0.3226	0.1644	0.022206	0.948909	0.009672	
OPS - Run 4	27	0.0128	0.4257	0.0752	20.3909	0.4078	0.2427	0.015767	0.755219	0.008990	
OPS - Run 5	14	0.0151	0.5025	0.0706	19.4779	0.3896	0.1907	0.035893	1.391279	0.013618	
OPS - Run 6	39	0.0109	0.3610	0.0683	16.8491	0.3370	0.1676	0.009256	0.432028	0.004297	
OPS - Run 7	16	0.0117	0.3758	0.0532	14.9911	0.2998	0.1347	0.023488	0.936947	0.008420	
OPS - Run 8	17	0.0261	0.8697	0.1414	36.0637	0.7213	0.5562	0.051159	2.121394	0.032716	
OPS - Run 9	10	0.0143	0.4747	0.0672	18.4164	0.3683	0.1989	0.047470	1.841645	0.019893	
OPS - Run 10	11	0.0144	0.4789	0.0691	21.0594	0.4212	0.2518	0.043536	1.914495	0.022890	
<b>OPS - Aggrega</b>	<b>209</b>	<b>0.0109</b>	<b>0.8697</b>	<b>0.0834</b>	<b>22.2293</b>	<b>0.4446</b>	<b>0.2673</b>	<b>0.029884</b>	<b>1.244449</b>	<b>0.014783</b>	
COMB - Run 1	37	0.0129	0.4269	0.0895	19.8151	0.3963	0.1417	0.011538	0.535545	0.003830	
COMB - Run 2	74	0.0141	0.4712	0.0843	21.3271	0.4265	0.2683	0.006368	0.288204	0.003626	
COMB - Run 3	114	0.0120	0.3992	0.0757	17.6303	0.3526	0.1949	0.003502	0.154651	0.001710	
COMB - Run 4	50	0.0120	0.4015	0.0746	19.7143	0.3943	0.2361	0.008030	0.394287	0.004722	
COMB - Run 5	83	0.0120	0.3972	0.0679	17.2391	0.3448	0.1754	0.004786	0.207700	0.002113	
COMB - Run 6	18	0.0128	0.4269	0.0807	18.8226	0.3765	0.2322	0.023717	1.045700	0.012897	
COMB - Run 7	13	0.0177	0.5885	0.0630	17.1753	0.3435	0.1784	0.045269	1.321177	0.013724	
COMB - Run 8	34	0.0138	0.4576	0.0794	19.2473	0.3849	0.2155	0.013459	0.566097	0.006340	
COMB - Run 9	12	0.0181	0.6025	0.0673	24.4520	0.4890	0.3239	0.050208	2.037667	0.026995	
COMB - Run 10	3	0.0181	0.6025	0.0727	18.2145	0.3643	0.1992	0.200833	6.071500	0.066397	
<b>COMB - Aggreg</b>	<b>438</b>	<b>0.0120</b>	<b>0.6025</b>	<b>0.0755</b>	<b>19.3638</b>	<b>0.3873</b>	<b>0.2166</b>	<b>0.036771</b>	<b>1.262253</b>	<b>0.014235</b>	