

	Method	Benchmark																		Scalability						Stability					Quality control					
		Metrics				Sources				Trajectory types										10k cells			10k features			Overall	Ordering	Topology	Features	Clusters	Category					
		Ordering	Topology	Features	Clusters	Gold	Silver	Dyngen	Dyntoy	PROSST	Splatter	Cycle	Linear	Bifurcation	Convergence	Multifurcation	Tree	Acyclic	Connected	Disconnected	1k features	10k features	100k features	1k cells	10k cells						100k cells	Availability	Behaviour	Code assurance	Code quality	Documentation
graph	graph	PAGA																		1m	1m	1m	24s	1m	4m											
		Projected PAGA																		56s	55s	1m	23s	55s	2m											
Tree	Tree	RaceID / StemID																		1h	2h	3h	6m	2h	1d											
		SLICER																		1h	43m	34m	32s	43m	2d											
		Slingshot																		25m	20m	22m	17s	20m	22h											
		PAGA Tree																		1m	1m	1m	24s	1m	4m											
		Projected Slingshot																		27m	22m	27m	20s	22m	1d											
		Projected TSCAN																		1m	4m	23m	38s	4m	36m											
		Monocle ICA																		15m	22m	55m	2m	22m	2h											
		pCreode																		53m	42m	37m	3m	42m	9h											
		Projected Monocle																		1h	5h	1d	10m	5h	>7d											
		SLICE																		28m	58m	4h	2m	58m	1d											
		SCUBA																		2h	1h	2h	6m	1h	1d											
		cellTree maptpx																		1h	3h	14h	13m	3h	2d											
		cellTree VEM																		32m	37m	1h	1m	37m	12h											
		Monocle DDRTree																		1h	6h	2d	12m	6h	>7d											
		Sincell																		5m	10m	39m	18s	10m	5h											
		EIPiGraph																		27m	51m	1h	10m	51m	3h											
		CellRouter																		37m	39m	58m	2m	39m	12h											
		URD																		1h	2h	2h	15m	2h	17h											
		Mpath																		32m	3h	1d	7m	3h	>7d											
		CellTrails																		3h	19h	5d	1h	19h	>7d											
		MERLoT																		3h	5h	16h	21m	5h	6d											
CALISTA																		4h	6h	7h	1h	6h	22h													
cellTree Gibbs																		3h	1d	>7d	4h	1d	>7d													
Multifurcation	Multifurcation	GrandPrix																	10m	33m	3h	18m	33m	59m												
		STEMNET																	3m	5m	10m	49s	5m	29m												
		FateID																	49m	1h	2h	3m	1h	2d												
		MFA																	1h	8h	2d	1h	8h	2d												
		GPfates																	2h	4h	7h	24m	4h	1d												
		SCOUP																	7h	4d	>7d	9h	4d	>7d												
Bifurcation	Bifurcation	Projected DPT																	18m	18m	30m	38s	18m	7h												
		DPT																	16m	15m	24m	34s	15m	5h												
		Wishbone																	23m	44m	1h	3m	44m	9h												
Linear	Linear	SCORPIUS																	1m	12m	1h	47s	12m	5h												
		MATCHER																	4m	5m	7m	53s	5m	28m												
		TSCAN																	1m	4m	19m	34s	4m	31m												
		Embeddr																	6m	7m	12m	19s	7m	6h												
		EIPiGraph linear																	5m	11m	17m	2m	11m	42m												
		Wanderlust																	19m	36m	1h	2m	36m	8h												
		Waterfall																	45s	46s	51s	7s	46s	5m												
		topslam																	1h	5h	1d	32m	5h	2d												
		ouijaflow																	8m	29m	1h	8m	29m	1h												
		PhenoPath																	38m	22h	>7d	4h	22h	5d												
		FORKS																	2m	2m	3m	9s	2m	42m												
		pseudogp																	>7d	>7d	6d	6h	>7d	>7d												
		SCIMITAR																	1d	>7d	>7d	>7d	>7d	>7d												
		ouija																	5d	>7d	>7d	6d	>7d	>7d												
Cycle	Cycle	EIPiGraph cycle																	6m	11m	17m	2m	11m	40m												
		reCAT																	1h	1h	3h	12m	1h	7h												
Offtheshelf	Offtheshelf	GNG																	1s	2s	3s	1s	2s	3s												
		Angle																	2s	9s	19s	2s	9s	16s												
		Component 1																																		