POW! Toolbox Features

Ver 1.20 - 2.00

✔ = available ✔ *New* = new ✓ forthcoming in 2.00 SA = SA only

✔ b = in beta, full release in 2.00

		AA	SA
Problem Size Capabilities	Assets	240	Unlimited
	Factors	240	Unlimited
	Asset observations	Unlimited	Unlimited
	Factor observations	Unlimited	Unlimited

			Wizard	Bridge	Automation
Model types handled	Full covariance		✔	✓	✔
	OLS Time-series Factor		✔	✔ b	✔
	GLS Time-series Factor		✓	✔ b	✔
	Cross-sectional (fundamental factor)		SA ✓	SA ✓	SA ✓
	Step-wise		SA ✓	SA ✓	SA ✓
	Block-wise		SA ✓	SA ✓	SA ✓
	Constrained Factor		SA ✓	SA ✓	SA ✓
	Principal Component Analysis		✔	SA ✔ b	SA ✔ b
	Robust Component Analysis		SA ✓	SA ✔ b	SA ✔ b
	Maximum Likelihood Factor Analysis		SA ✓	SA ✔ b	SA ✔ b
	Bayesian Factor Analysis		SA ✓	SA ✔ b	SA ✔ b
	Combinations of the above		✔	✓	✔
	Specified-beta factor models		✓	✓	✓
Model options	Normalisation		SA ✓	SA ✓	SA ✓
	Winsorisation		✓	✓	✓
	Maximum Likelihood Missing Data Imputation		✓	✔ b	✔ b
	Desmoothing		✓	✓	✓
	Bootstrap	Basic	✓	✓	✔ b
		Balanced	✓	✓	✔ b
		Jackknife	✓	✓	✔ b
Data weighting	Linear decay		✔	✓	✔
	Exponential decay		✔	✓	✔
	Gaussian decay (one-sided)		✔	✓	✔
	Custom weighting series		✔	✓	✔
	Cross-sectional		SA ✓	SA ✓	SA ✓
	Cut-off		✔	✔ b	✔
	Any combination of the above		✔	✓	✔

			Wizard	*Bridge*	*Automation*
Inputs	Prices/indices		✔	✔ b	✔
	Exchange rates		✔	✔ b	✔
	Returns		✔	✔ b	✔
	Logarithmic Returns		✔	✔ b	✔
	Fundamental data		*SA* ✓	*SA* ✓	*SA* ✓
	Mixed input types		✓	✓	✔
	Series header offset		✔	✔	✔
	Date labelling series		✔	✓	✔
Conversion functions	Compound (for example, annualise)		✔	✓	✔
	Invert (for exchange rates)		✔	✓	✔
	Accumulate (integrate)		✔	✓	✔
	Unaccumulate (differentiate)		✔	✓	✔
Data returned	Series descriptions and output labels		✔	✓	✔
	Mean, standard deviation and variance		✔	✔ b	✔
	Skewness and kurtosis		✔	✓	✔
	Factor mean, standard deviation and variance		✔	✔ b	✔
	Factor alphas and betas		✔	✔ b	✔
	Residual data		✔	✔ b	✔
	Correlation matrices	Total	✔	✔ b	✔
		Factor	✔	✔ b	✔
		Residual	✔	✔ b	✔
		Posterior	*SA* ✓	*SA* ✔ b	✔ b
		Cross-sectional	*SA* ✓	*SA* ✓	*SA* ✓
	Covariance versions of the above		✔	✔ b	✔
	Estimation diagnostics	Parametric	✓	✔ b	✔ b
		Non-parametric (bootstrap)	✓	✔ b	✔ b
	Time series	Constant proportion	✓	✓	✓
		Factor-mimicking	*SA* ✓	*SA* ✓	*SA* ✓
		Factor premium	*SA* ✓	*SA* ✓	*SA* ✓
		Converted	✓	✓	✔
		Processed (eg desmoothed, filled)	✓	✓	
		Residual	✓	✔ b	✔
	Model definition summary		✔	✓	✔

		Wizard	***Bridge***	***Automation***
Interface with	***POW!*** Frontier, ***POW!*** Risk	✔	✔ b	✔
	Excel 97, 2000 and XP plus VBA	✔	✔ b	✔
	Visual Basic 5.0, 6.0			✔
	MS Access + all other OLE automation clients			✔
	C++			✔
OS supported	Windows 95, 98, ME	✔	✔ b	✔
	NT 3.51 and 4.0 (for Intel), 2000, XP	✔	✔ b	✔