Tasks Monad functionalities	**Time series analysis**	**Time series forecast**	**Finding outliers and anomalies**	**Clean data**	**Finding structural breaks**	**Finding of local extrema in noisy data**	**Derivation of representative simulations** (for what if scenarios)

Least Squares Fit with a specified functions basis (the first argument is the basis or an integer specifying a number of Chebyshev functions.)	Standard application.
	
	`QRMonUnit[ts]⟹`
	`QRMonFit[n]⟹`
	`QRMonPlot`
		Find trend with a suitable set of infinite domain functions. (E.g. {1,x} or a Sin/Cos basis.)
		Find a drift to be used together with a random walk simulation.
					Find of a fit with suitable function basis, e.g. {1,x}		

Quantile Regression Fit with with a specified functions basis (see above)	Standard application with sufficiently large number of regression quantiles. `QRMonQuantileRegressionFit[n, probs]`	Same as above.	Finding of suitable top and bottom regression quantiles.				Find suitable number of regression quantiles.
Quantile Regression with B-spline basis (specify knots and probabilities)	Standard application with sufficiently large number of regression quantiles. `QRMonQuantileRegression[knots, probs]`		Finding of suitable top and bottom regression quantiles.		Finding of suitable top and bottom regression quantiles.	Fit top and bottom regression quantiles, find their extrema and use nearest neighbors scanning to find the local extrema. `QRMonFindLocalExtrema[opts]`	Find suitable number of regression quantiles.

Conditional CDF and PDF	Produce CDF or PDF at different points of interest.
	
	`QRMonConditionalCDF[points]⟹`
	`QRMonConditionalCDFPlot`
		Use together with the drift.					Direct utilization. Applied inside `QRMonSimulate`.

Outliers finding (local/contextual outliers) (outliers are point-wise anomalies)	Outliers finding by using top an/or bottom regression quantiles.		The outliers are the points above and below the top and bottom regression quantiles respectively.
			
			`QRMonUnit[ts]⟹`
			`QRMonQuantileRegression[knots, {0.02,0.98}]⟹`
			`QRMonOutliers⟹`
			`QRMonOutliersPlot`
				Remove the found outliers.			Use [0,0.01] and [0.99,1] to produce outliers in the simulations.

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Anomalies detection (both points and sequences)	Find and plot the anomalies.		Finding anomalies by residuals. 1) Find the median/mean quantile (curve). 2) Find deviations/errors from it. 3) Pick a threshold and extract deviations above the threshold. 4) Alternatively, find deviations outliers. `QRMonUnit[ts]⟹ QRMonQuantileRegression[knots,0.5]⟹ QRMonFindAnomaliesByResiduals[opts]`		Systematic application of Chow test in signal's domain. Find local maxima in the Chow test result — those are the structural breaks. `QRMonUnit[ts]⟹ QRMonFindChowTestLocalMaxima[opts]⟹ QRMonPlotStructuralBreakSplits[opts]`	The local extrema can be seen as contextual point anomalies.	
Simulation		Simulate de-trended time series and add drift. (See above.)					Choose number of points to simulate within the domain. `QRMonUnit[ts]⟹ QRMonQuantileRegression[knots,probs]⟹ QRMonSimulate[npoints]`
Pick points close to path(s)			Fit mean, or median, or other regression quantile and points away from it.	Fit mean, or median, or other regression quantile and points close to it.	Make separate fits between the structural breaks and pick points close to each fitted line/curve.		Can be used to "normalize" the simulated data.
Signal discretization (discretize between the regression quantiles, or by a regular grid over the response variable.)	Discretize the time series an analyze the sequences. `QRMonUnit[ts]⟹ QRMonQuantileRegression[knots,probs]⟹ QRMonBandsSequence`	Predict the range/segment of the response variable using sequence mining techniques. (E.g. with Prefix trees.)	Find anomalous sub-sequences.	Delete elements corresponding to low probability sub-sequences.			