# `Severity` Class Cheat Sheet

The `Severity` call signature, `sev_xs`, `sev_ps` equal `dsev` outcomes and probabilities,

m `Severity(name, sev_name='', sev_a=np.nan, sev_b=0, sev_mean=0, sev_cv=0, sev_loc=0, sev_scale=0, sev_xs=None, sev_ps=None, sev_wt=1, sev_lb, sev_ub, sev_conditional=True)`

The following tables show all m `methods`, and fields or properties (used interchangeably). Comments elucidate the meaning of more obscure entries.

### 1. Specification & creation

`a`, `attachment`, `b`, `badvalue`, `conditional`, `detachment`, `extradoc`, `limit`, `long_name`, `name`, `note`, `numargs`, `program`, `sev_loc`, `sev_name`, `sev_wt`, `shapes`,

### 2. Update

m `cv_to_shape`, m `mean_to_scale`, `pattach`, `pdetach`,

### 3. Moments

m `generic_moment`, m `mean`, m `median`, m `moment`, m `moment_type`, m `moms`, `sev1`, `sev2`, `sev3`, m `stats`, m `std`, m `support`, m `var`,

### 4. Statistical functions

m `cdf`, m `entropy`, m `expect`, m `interval`, m `isf`, m `logcdf`, m `logpdf`, m `logsf`, m `nnlf`, m `pdf`, m `ppf`, m `rvs`, m `sf`, m `vecentropy`,

### 5. Validation

*None*

### 6. Output dataframes

*None*

### 7. Reinsurance

*None*

### 8. Visualization

m `plot`,

### 9. Risk and pricing

*None*

### 10. Approximations

m `fit`, m `fit_loc_scale`, m `freeze`,

### 11. Meta

`fz`, `random_state`, `xtol`,

**Notes:**

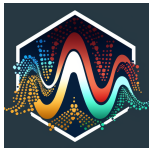
[0]: Arguments `sev_pick_attachments=None`, `sev_pick_losses=None`, omitted; see help.

[1]: matches `Portfolio`

Any vectorizable input accepts numeric or iterable datatypes.

Abbreviations: gcn=gross (subject), ceded, and net; stats: m=mean, cv=coefficient of variation, sd=standard deviation, var=variance, skew(ness); VaR=value-at-risk





`aggregate 0.18.0`

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