

Distortion Class Cheat Sheet

The Distortion call signature follows the corresponding Decl clauses, using prefixes for exposure (including limit sub-clause), severity, occurrence reinsurance, frequency, aggregate reinsurance, and note. `sev_xs`, `sev_ps` equal `dsev` outcomes and probabilities, and `(occ|agg)_reins` clauses are lists of (share, limit, attachment) triples.

```
m Severity(name, exp_el=0, exp_premium=0, exp_lr=0, exp_en=0, exp_attachment=0, exp_limit=np.inf,
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_conditional=True,
occ_reins=None, occ_kind="", freq_name="", freq_a=0, freq_b=0, freq_zm=False, freq_p0=np.nan, agg_reins=None, agg_kind="", note="")[0]
```

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

1. Specification & creation assets, m average_distortion, col_x, col_y, df, display_name, m distortions_from_params, has_mass, mass, name, premium_target, r0, m s_gs_distortion, shape,	5. Validation m test,	8. Visualization m plot,
2. Update m bagged_distortion, error,	6. Output dataframes <i>None</i>	9. Risk and pricing m price, m price2,
3. Moments <i>None</i>	7. Reinsurance <i>None</i>	10. Approximations <i>None</i>
4. Statistical functions m g, m g_dual, m g_inv, m g_prime, m wtd_tvar,		11. Meta m available_distortions, m convex_example, renamer,

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

