

pandas.DataFrame.sem

DataFrame.sem(axis=None, skipna=True, ddof=1, numeric_only=False, **kwargs) [\[source\]](#)

Return unbiased standard error of the mean over requested axis.

Normalized by N-1 by default. This can be changed using the ddof argument

Parameters: **axis** : {index (0), columns (1)}

For Series this parameter is unused and defaults to 0.

skipna : bool, default True

Exclude NA/null values. If an entire row/column is NA, the result will be NA.

ddof : int, default 1

Delta Degrees of Freedom. The divisor used in calculations is N - ddof, where N represents the number of elements.

numeric_only : bool, default False

Include only float, int, boolean columns. Not implemented for Series.

Returns: **Series or DataFrame (if level specified)**

Examples

```
>>> s = pd.Series([1, 2, 3])
>>> s.sem().round(6)
0.57735
```

With a DataFrame

```
>>> df = pd.DataFrame({'a': [1, 2], 'b': [2, 3]}, index=['tiger', 'zebra'])
>>> df
   a  b
tiger 1  2
zebra 2  3
>>> df.sem()
a    0.5
b    0.5
dtype: float64
```

Using axis=1

```
>>> df.sem(axis=1)
tiger    0.5
zebra    0.5
dtype: float64
```

In this case, *numeric_only* should be set to *True* to avoid getting an error.

```
>>> df = pd.DataFrame({'a': [1, 2], 'b': ['T', 'Z']},
...                    index=['tiger', 'zebra'])
>>> df.sem(numeric_only=True)
a    0.5
dtype: float64
```

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DataFrame.sem()

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