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This is documentation for an old release of SciPy (version 0.14.0). Search for this page ([https://docs.scipy.org/doc/scipy/search.html?q=scipy.ndimage.filters.minimum\\_filter](https://docs.scipy.org/doc/scipy/search.html?q=scipy.ndimage.filters.minimum_filter)) in the documentation of the latest stable release (<https://docs.scipy.org/doc/scipy/reference/>) (version 1.12.0).

## scipy.ndimage.filters.minimum\_filter

**scipy.ndimage.filters.minimum\_filter**(*input*, *size=None*, *footprint=None*, *output=None*, *mode='reflect'*, *cval=0.0*, *origin=0*) [\[source\]](#)  
(<http://github.com/scipy/scipy/blob/v0.14.0/scipy/ndimage/filters.py#L913>)

Calculates a multi-dimensional minimum filter.

**Parameters:** **input** : *array\_like*

Input array to filter.

**size** : *scalar or tuple, optional*

See footprint, below

**footprint** : *array, optional*

Either *size* or *footprint* must be defined. *size* gives the shape that is taken from the input array, at every element position, to define the input to the filter function. *footprint* is a boolean array that specifies (implicitly) a shape, but also which of the elements within this shape will get passed to the filter function. Thus *size*=(*n*, *m*) is equivalent to *footprint*=*np.ones*((*n*, *m*)). We adjust *size* to the number of dimensions of the input array, so that, if the input array is shape (10,10,10), and *size* is 2, then the actual size used is (2,2,2).

**output** : *array, optional*

The *output* parameter passes an array in which to store the filter output.

**mode** : { 'reflect' , 'constant' , 'nearest' , 'mirror' , 'wrap' }, *optional*

The *mode* parameter determines how the array borders are handled, where *cval* is the value when mode is equal to 'constant' . Default is 'reflect'

**cval** : *scalar, optional*

Value to fill past edges of input if *mode* is 'constant' . Default is 0.0

**origin** : *scalar, optional*

The *origin* parameter controls the placement of the filter. Default 0.0.

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