

NAME

wallis – Wallis filter

SYNOPSIS

wallis [-**f** *filtersize*] [-**m** *mean*] [-**s** *stdev*] [-**a** *alfa*] [-**l** *limit*]

DESCRIPTION

wallis performs a Wallis filtering on a byte image sequence. *fwallis* performs a Wallis filtering on a float image sequence. This equation is used:

$$\text{pixel}(i,j) = \text{alfa} * \text{mean} + (1 - \text{alfa}) * m(i,j) + (\text{pixel}(i,j) - m(i,j)) * \text{stdev} / (\text{stdev} / \text{limit} + s(i,j)).$$

$m(i,j)$ is the local mean and $s(i,j)$ is the local standard deviation.

Input sequence must be byte (*wallis*) or float (*fwallis*) and the output sequence is float.

OPTIONS

- f** the local window size; default is 3 (x3)
- m** the desired value of mean; default is 127 (*wallis*) or 0.0 (*fwallis*)
- s** the desired value of standard deviation; default is 10.0 (*wallis*) or 50.0 (*fwallis*)
- a** the value of alfa; default is 0.0
- l** the value of limit; default is 10.0

SEE ALSO

mask(1), fmask(1)

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