

NAME

deva-compare-boundaries – compare one set of boundaries to another

SYNOPSIS

deva-compare-boundaries [*options*] *standard.png comparison.png coordinates visualization.png*

DESCRIPTION

Compares a binary image presumed to represent the location of real boundary elements (e.g., from geometry) to a comparison binary image presumed to represent the location of boundary elements to be compared to the standard (e.g., luminance values). The output is a visualization of the distance, in visual angle, from each real boundary element to the nearest comparison boundary element.

OPTIONS**--red-gray**

Larger distance (usually associated with estimated visibility hazards) shown in red and other geometric standard boundary elements that are closer (usually associated with elements estimated to be less of a potential visibility hazard) shown in dark gray. Default.

--red-green

Larger distance (usually associated with estimated visibility hazards) shown in red and other geometric standard boundary elements that are closer (usually associated with elements estimated to be less of a potential visibility hazard) shown in green.

--Gaussian=<sigma>

Visualization based on distance weighted by an unnormalized Gaussian function with standard deviation <sigma>. Default visualization weighting is **--Gaussian=0.75**.

--reciprocal=<scale>

Visualization based on reciprocal of distance, with distance scaled by <scale>.

--linear=<max>

Visualization linearly scaled to a maximum distance of <max>.

--quantscore

Annotate the output image with the average hazard value over all of the boundary elements in the standard. Only available if compiled with the Cairo library option.

ARGUMENTS

standard.png

Binary image file, with *TRUE* indicated by non-zero value. Represents the standard to compare against (e.g., geometry).

comparison.png

Binary image file, with *TRUE* indicated by non-zero value. Represents the boundary elements to be compare to the standard (e.g., luminance boundaries).

coordinates

A two line text file. The first line specifies the units for the *xyz.txt* and *dist.txt* files. The second line is the same as the VIEW record in *input.hdr*. See **make-coordinates-file** for information on how to create this file.

visualization.png

Output visualization file.

AUTHOR

William B. Thompson