Motion Wind Ino

Allow to add wind flow lines to the image.

It uses an art drawing method, usually seen in animation, to represent a fast motion.

Adds the effect of fast motion to the brightest pixels of the image.

--- Inputs ---

Source

Connect the image to be processed.

Reference

Connect the reference image to assign the strength of the effect into each pixel.

--- Settings ---

Direction

Specify the direction of the motion lines.

Options available are: Right, Up, Left, Down.

The default setting is Right.

Direction is fixed for the default orientation of the image. If the column/layer is rotated, motion lines will rotate with it.

Dark

When inactive motion lines will spread from brightest parts of the image.

When active motion lines will spread from darkest parts of the image..

The default setting is inactive.

Alpha Rendering

This option is valid only when there is an Alpha channel.

When inactive, it masks the changes in the RGB values using the original Alpha of the image.

When active, the effect will be able to modify the Alpha channel, extending it as necessary to reproduce the full span of the effect.

The default setting is ON.

Length Min
Length Max

Specify the length of the motion lines.

The unit is millimeters.

Specify a value in the range from 0 to 1000.

Decimal places are also taken into account, for subtle changes in the length.

If Min and Max are different, the lenght of each motion line will be random, between those values.

When Min and Max are the same, all motion lines will have the same lenght.

The default value for Min is 0, and Max is 8.573.

--> See "Figure 1: Length Wind" .

--> See "Figure 4: Force is 1 and Density is 1" .

--> See "Figure 7: Length Wind and Force is 10" .

Length Bias

Allows to introduce a deviation in the random pattern of the length.

Using values between 0.1 and 1.0, will make prevail shorter lines.

Using a value of 1.0, the pattern will be uniform.

Using values between 1.0 and 10.0, will make prevail longer lines.

The default value is 1.

--> See "Figure 1: Length Wind" .

Length Seed

This seed controls the random pattern for the length.

Specify an integer value greater than or equal to 0.

If the same value is given to the same image, it will produce the same pattern.

Changing the value will produce different patterns.

For example, if you want an ever changing pattern of lines from a single image,

you can animate the seed value on a frame by frame basis.

The default value is set to 1.

Force Min

Force Max

Allows to define the decay rate of the motion lines.

Values between 0.1 and 1.0, will cause a fast decay rate,

A value of 1.0 will produce a linear decay rate,

Values between 1.0 and 10.0, will cause a slow decay rate,

If Min and Max are different, the decay rate of each motion line will be random,

between those values.

When Min and Max are the same, all motion lines will have the same decay rate.

The default value is 1 for both.

--> See "Figure 2: Force Wind" .

--> See "Figure 5: Force is 0.1" .

--> See "Figure 7: Length Wind and Force is 10" .

Force Bias

Allows to introduce a deviation in the random pattern of decay.

Using values between 0.1 and 1.0, will make a strong decay prevail.

Using a value of 1.0, the decay pattern will be uniform.

Using values between 1.0 and 10.0, will make a weak decay prevail.

The default value is 1.

--> See "Figure 2: Force Wind" .

Force Seed

This seed controls the random pattern for the decay rate.

The options are similar to "Length Seed".

Density Min
Density Max

Allows to define the density of the motion lines.

If it is 0, there will be no motion lines effect.

Values between 0 and 1.0 will produce low densities.

A value of 1.0 will produce a standard density.

Values greater than 1.0 will produce high densities. The maximum value is 100.

If Min and Max are different, density will be random between those values.

When Min and Max are the same, density will be uniform.

The default value is 1 for both.

--> See "Figure 3: Density Wind" .

--> See "Figure 6: Density is 0.2" .

Density Bias

Allows to introduce a deviation in the random pattern of density.

Using values between 0.1 and 1.0, will make lower densities prevail.

Using a value of 1.0, the density pattern will be uniform.

Using values between 1.0 and 10.0, will make higher densities prevail..

The default value is 1.

--> See "Figure 3: Density Wind" .

Density Seed

This seed controls the random pattern for the density.

The options are similar to "Length Seed".

In order to achieve a uniform lines effect:
>   The same values should be assigned to "Length Min" and "Length Max",
>   "Force Min" and "Force Max", "Density Min" and "Density Max" parameters,
>   to produce uniform lines.

To synchronize random patterns:
>   If "Length Seed", "Force Seed", and "Density Seed" are set to the same value
>   at the same frame, its patterns will match, and it will become stronger and
>   weaker at the same time.
>   Using different values will produce different patterns for each parameter.

To fix a random pattern when the camera is moving:
>   When moving the camera over a background image, the random pattern changes
>   on each frame according to the change of the picture.
>   To fix the pattern the entire backgroung image must be processed.

Length Ref
>   When inactive there will be no reference image driving the Length.
>   When active, the image connected to the Reference port will drive the Length.
>   The values of the selected channel in the Reference parameter, will drive the Length.
>   If no reference image is available, the length will be determined by the Source image
>   brightness.
>   The darker the pixel where lines begin, the shorter they will be.
>   As the whole image tone is lowered, please adjust the Min and Max Length values.
>   The default state is inactive.

Force Ref
>   When inactive there will be no reference image driving the Force.
>   When active, the image connected to the Reference port will drive the Force.
>   The values of the selected channel in the Reference parameter, will drive the Force.
>   If no reference image is available, the force will be determined by the Source image
>   brightness.
>   The darker the pixel where lines begin, the weaker they will be.
>   As the whole image tone is lowered, please adjust the Min and Max Force values.
>   The default state is inactive.

Density Ref

When inactive there will be no reference image driving the Density.

When active, the image connected to the Reference port will drive the Density.

The values of the selected channel in the Reference parameter, will drive the Density.

If no reference image is available, the density will be determined by the Source image brightness.

The darker the pixel where lines begin, the thinner they will be.

As the whole image tone is lowered, please adjust the Min and Max Density values.

The default state is inactive.

Reference

Choose how the Reference image values are used to set the strength of the effect into each pixel.

Choose from Red/Green/Blue/Alpha/Luminance.

Choose Nothing to disable the effect.

The default value is Red.

Figure 1: Length Wind

Bias is 0.1

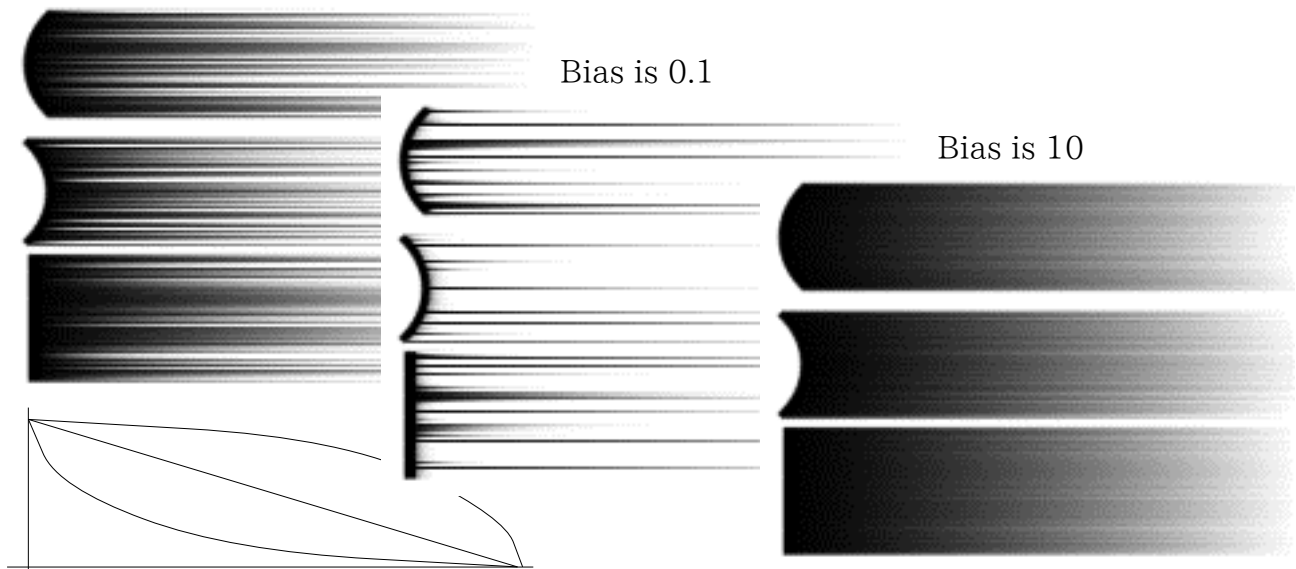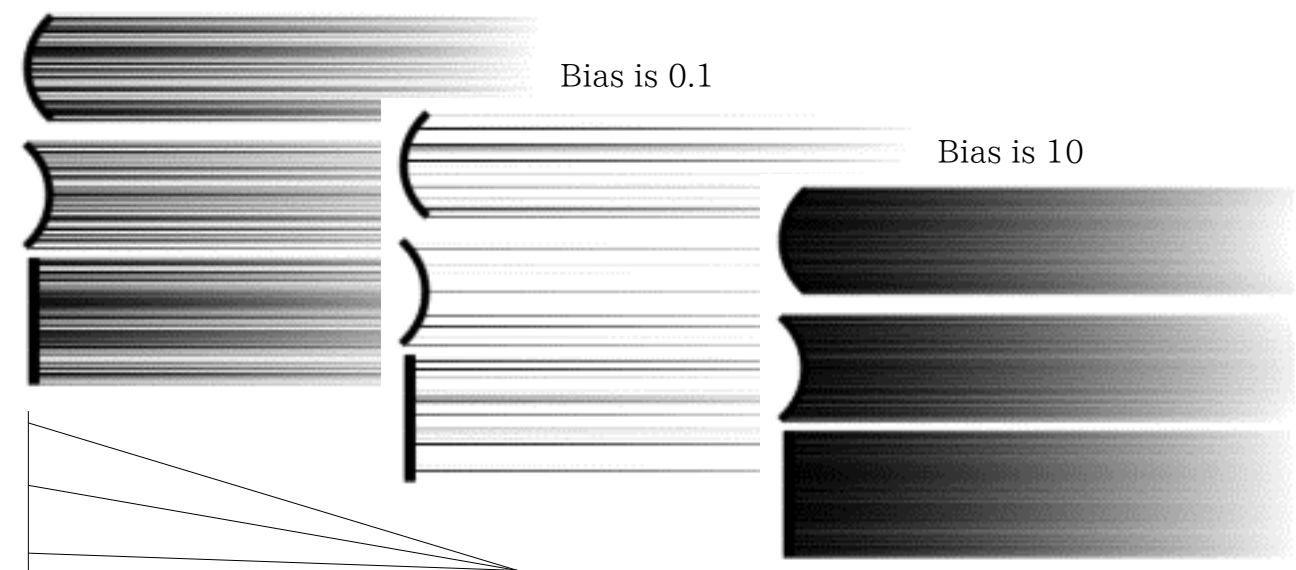Bias is 10

Figure 2: Force Wind

Bias is 0.1

Bias is 10

Figure 3: Density Wind

Bias is 0.1

Bias is 10
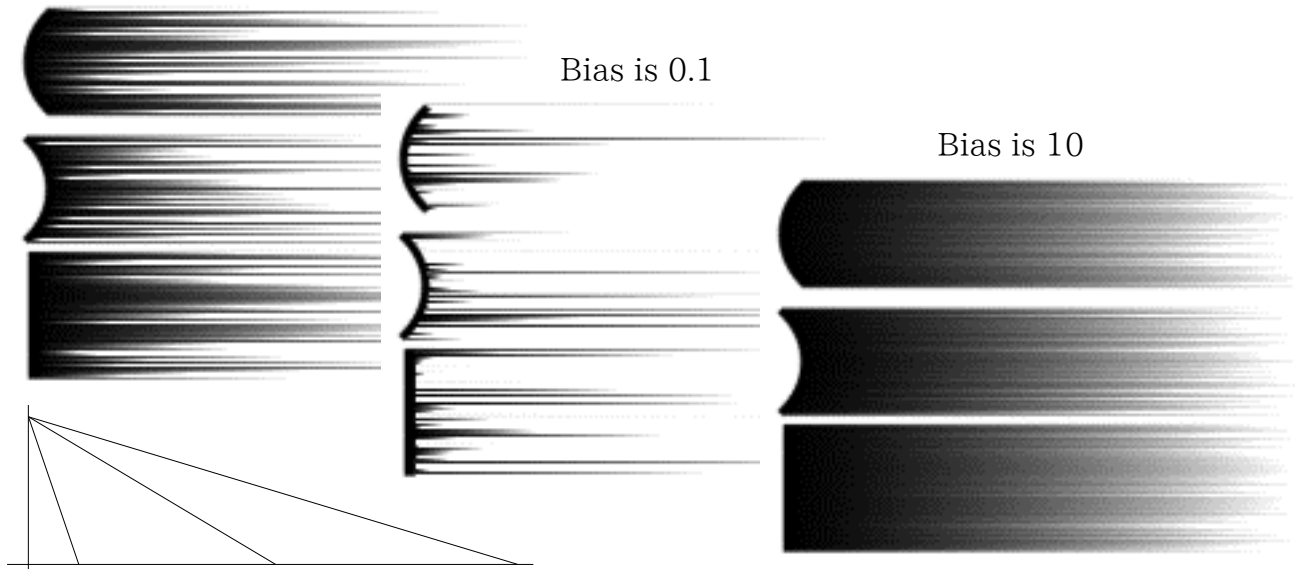
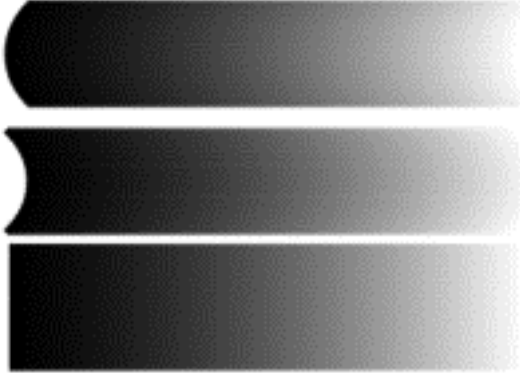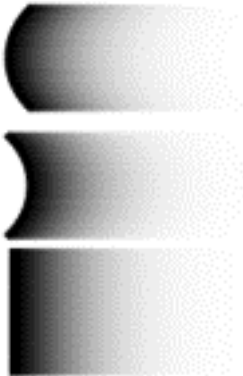## Length Min equal Max Wind

Figure 4: Force is 1 and Density is 1

Length Min equal Max Wind

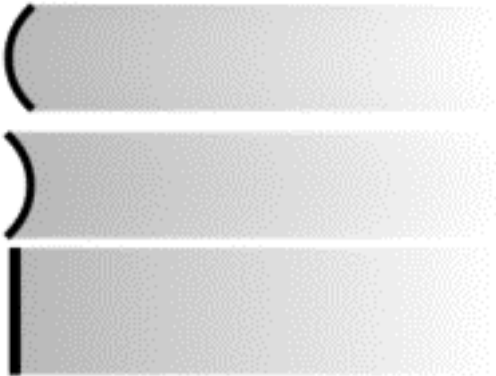Figure 5: Force is 0.1

Length Min equal Max Wind

Figure 6: Density is 0.2

Figure 7: Length Wind and Force is 10