

## ☰ Documentation

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### API Collection

# Vector-to-vector minima and maxima

Compute the element-wise minimum or maximum values or magnitudes in a vector.

## Topics

### Vector-to-Vector Minima

`static func minimum<U>(U, U) -> [Double]`

Returns a double-precision array containing the minimum of the corresponding values of two vectors.

`static func minimum<U>(U, U) -> [Float]`

Returns a single-precision array containing the minimum of the corresponding values of two vectors.

`static func minimum<U, V>(U, U, result: inout V)`

Calculates the double-precision minimum of the corresponding values of two vectors.

`static func minimum<U, V>(U, U, result: inout V)`

Calculates the single-precision minimum of the corresponding values of two vectors.

`vDSP_vmin`

Calculates the single-precision minimum of the corresponding values of two vectors using specified strides.

`vDSP_vminD`

Calculates the double-precision minimum of the corresponding values of two vectors using specified strides.

## vDSP\_vminmg

Calculates the single-precision minimum magnitude of the corresponding values of two vectors using specified strides.

## vDSP\_vminmgD

Calculates the double-precision minimum magnitude of the corresponding values of two vectors using specified strides.

# Vector-to-Vector Maxima

`static func maximum<U>(U, U) -> [Double]`

Returns a double-precision array containing the maximum of the corresponding values of two vectors.

`static func maximum<U>(U, U) -> [Float]`

Returns a single-precision array containing the maximum of the corresponding values of two vectors.

`static func maximum<U, V>(U, U, result: inout V)`

Calculates the maximum of the corresponding double-precision values of two vectors.

`static func maximum<U, V>(U, U, result: inout V)`

Calculates the maximum of the corresponding single-precision values of two vectors.

## vDSP\_vmax

Calculates the single-precision maximum of the corresponding values of two vectors using specified strides.

## vDSP\_vmaxD

Calculates the double-precision maximum of the corresponding values of two vectors using specified strides.

## vDSP\_vmaxmg

Calculates the single-precision maximum magnitude of the corresponding values of two vectors using specified strides.

## vDSP\_vmaxmgD

Calculates the double-precision maximum magnitude of the corresponding values of two vectors using specified strides.

## See Also

### Vector-to-vector extrema functions

Extrema finding functions

Extract the values from a vector that fall outside a range.