

☰ Documentation

[Accelerate](#) / [vDSP](#) / Sliding-window reduction functions

API Collection

Sliding-window reduction functions

Calculate maximum values and sums of values in a sliding window.

Topics

Sliding-window maximum functions

The functions in this group find the maximum value in a sliding window within an input vector.

`vDSP_vswmax`

Finds the maximum value in a sliding window at each possible position in a single-precision input vector.

`vDSP_vswmaxD`

Finds the maximum value in a sliding window at each possible position in a double-precision input vector.

Sliding-window summation functions

The functions in this group calculate a sliding-window sum for a vector.

```
static func slidingWindowSum<U>(U, usingWindowLength: Int) -> [Double]
```

Returns the double-precision sliding window sum of a vector.

```
static func slidingWindowSum<U>(U, usingWindowLength: Int) -> [Float]
```

Returns the single-precision sliding window sum of a vector.

```
static func slidingWindowSum<U, V>(U, usingWindowLength: Int, result: inout V)
```

Calculates the double-precision sliding window sum of a vector.

```
static func slidingWindowSum<U, V>(U, usingWindowLength: Int, result:  
inout V)
```

Calculates the single-precision sliding window sum of a vector.

vDSP_vswsum

Finds the sum of values in a sliding window at each possible position in a single-precision input vector.

vDSP_vswsumD

Finds the sum of values in a sliding window at each possible position in a double-precision input vector.