

# Hspec

May 27, 2026

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`i2xy`

*Convert (x,y)-coordinates to single-number indices and back.*

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## Description

Convert (x,y)-coordinates on the chip (and in the CEL file) to the single-number indices used in AffyBatch and CDF environment, and back.

## Usage

```
i2xy(i)
xy2i(x,y)
```

## Arguments

<code>x</code>	numeric. x-coordinate (from 1 to 1164)
<code>y</code>	numeric. y-coordinate (from 1 to 1164)
<code>i</code>	numeric. single-number index (from 1 to 1354896)

## Details

Type `i2xy` and `xy2i` at the R prompt to view the function definitions.

## See Also

[hspec](#)

## Examples

```
xy2i(5,5)
i      = 1:(1164*1164)
coord = i2xy(i)
j      = xy2i(coord[, "x"], coord[, "y"])
stopifnot(all(i==j))
range(coord[, "x"])
range(coord[, "y"])
```

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hspec	<i>hspec</i>
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**Description**

environment describing the CDF file

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hspecdim	<i>hspecdim</i>
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**Description**

environment describing the CDF dimensions

# Index

## \* datasets

hspec, 2

hspecdim, 2

i2xy, 1

hspec, 1, 2

hspecdim, 2

i2xy, 1

xy2i (i2xy), 1