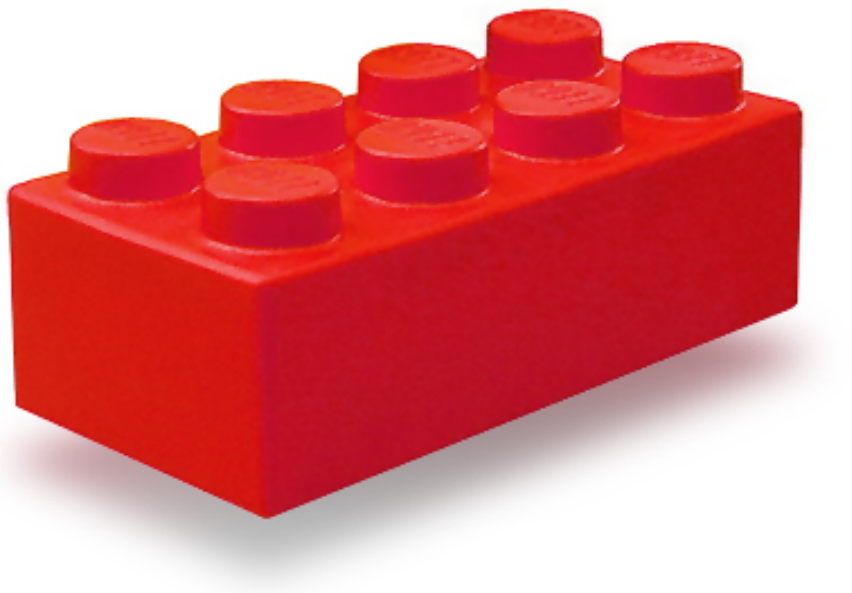
The FLQuant class



Maritime Affairs Unit G04 - IPSC
European Commission
Joint Research Center

Class structure

`array`

- 6 dims: `(quant)`, `year`, `unit`, `season`, `area`, `iter`

attributes

Class structure

`array`

- 6 dims: `(quant)`, `year`, `unit`, `season`, `area`, `iter`

attributes

- units: `character`

6D array

```
> array(1:144, dim=c(3,3,2,2,2,2))
, , 1, 1, 1, 1
     [,1] [,2] [,3]
[1,]    1    4    7
[2,]    2    5    8
[3,]    3    6    9

, , 2, 1, 1, 1
     [,1] [,2] [,3]
[1,]   10   13   16
[2,]   11   14   17
[3,]   12   15   18
```

2D vs . . .

```
> dfa[1:10,]
   d1 d2 d3 d4 d5 d6 data
1   1  1  1  1  1  1    1
2   2  1  1  1  1  1    2
3   3  1  1  1  1  1    3
4   1  2  1  1  1  1    4
5   2  2  1  1  1  1    5
6   3  2  1  1  1  1    6
7   1  3  1  1  1  1    7
8   2  3  1  1  1  1    8
9   3  3  1  1  1  1    9
10  1  1  2  1  1  1   10
```

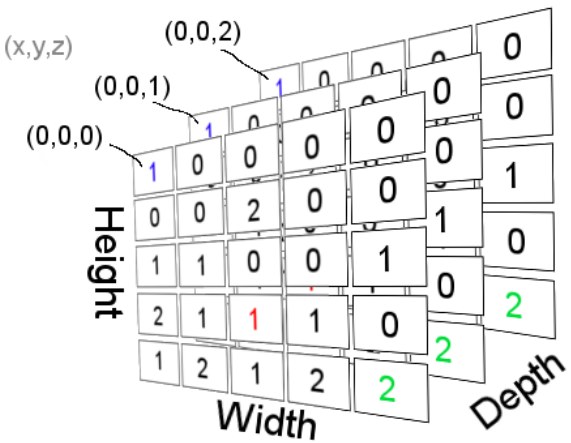
... 6D

```
> arr[,,,1,1,1]
, , 1
     [,1] [,2] [,3]
[1,]    1    4    7
[2,]    2    5    8
[3,]    3    6    9

, , 2
     [,1] [,2] [,3]
[1,]   10   13   16
[2,]   11   14   17
[3,]   12   15   18
```

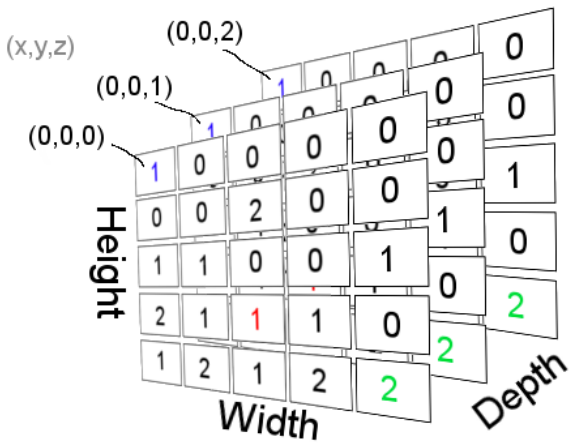
Characteristics

- *Arith* re-defined to always return an *FLQuant*

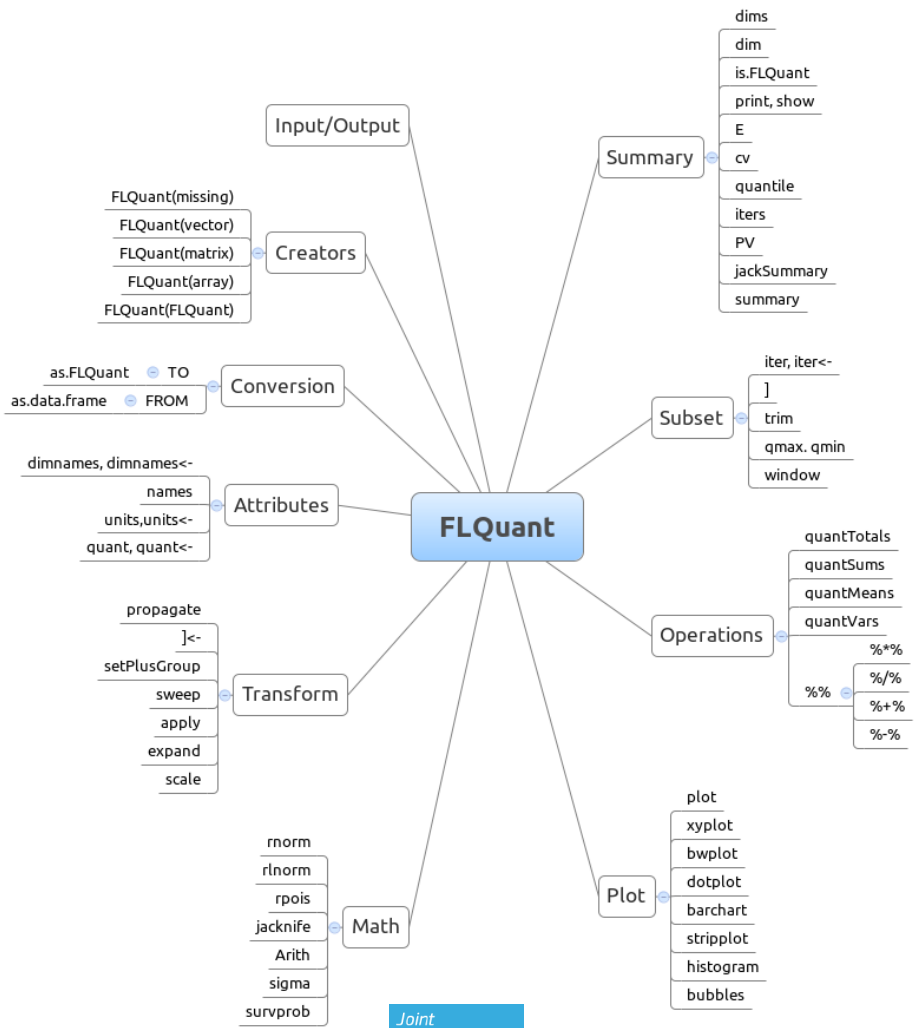


Characteristics

- *Arith* re-defined to always return an *FLQuant*
- Dimensions are not dropped even if of length=1



Methods


FLQuant
Input/Output
Summary
dims
dim
is.FLQuant
print, show
E
cv
quantile
iters
PV
jackSummary
summary
Creators
FLQuant(missing)
FLQuant(vector)
FLQuant(matrix)
FLQuant(array)
FLQuant(FLQuant)
Conversion
as.FLQuant
TO
as.data.frame
FROM
Subset
iter, iter<-
]
trim
qmax. qmin
window
Attributes
dimnames, dimnames<-
names
units,units<-
quant, quant<-
Operations
quantTotals
quantSums
quantMeans
quantVars
%%
%*%
%/%
%+%
%-%
Transform
propagate
]<-
setPlusGroup
sweep
apply
expand
scale
Plot
plot
xyplot
bwplot
dotplot
barchart
stripplot
histogram
bubbles
Math
rnorm
rlnorm
rpois
jacknife
Arith
sigma
survprob