

NAG Library Routine Document

F06EWF (DSCTR)

Note: before using this routine, please read the Users' Note for your implementation to check the interpretation of ***bold italicised*** terms and other implementation-dependent details.

1 Purpose

F06EWF (DSCTR) scatters the elements of a sparse real vector x stored in compressed form, into a real vector y in full storage form.

2 Specification

```
SUBROUTINE F06EWF (NZ, X, INDX, Y)
  INTEGER          NZ, INDX(*)
  double precision X(*), Y(*)
```

The routine may be called by its BLAS name ***dsctr***.

3 Description

None.

4 References

None.

5 Parameters

- | | | |
|----|--|---------------|
| 1: | NZ – INTEGER | <i>Input</i> |
| | <i>On entry:</i> the number of elements in the compressed vector x . | |
| 2: | $X(*)$ – <i>double precision</i> array | <i>Input</i> |
| | Note: the dimension of the array X must be at least $\max(1, \text{NZ})$. | |
| | <i>On entry:</i> the compressed vector x . | |
| 3: | INDX(*) – INTEGER array | <i>Input</i> |
| | Note: the dimension of the array INDX must be at least $\max(1, \text{NZ})$. | |
| | <i>On entry:</i> the indices of the elements in the compressed vector x . | |
| | <i>Constraint:</i> the indices must be distinct. | |
| 4: | $Y(*)$ – <i>double precision</i> array | <i>Output</i> |
| | Note: the dimension of the array Y must be at least $\max_k(\text{INDX}(k))$. | |
| | <i>On exit:</i> the vector y . Only elements corresponding to indices in INDX are altered. | |

6 Error Indicators and Warnings

None.

7 Accuracy

Not applicable.

8 Further Comments

None.

9 Example

None.
