Data format sd_mode_cycl

Summarized:

Contents

1 General information

the data structure sd_mode_cycl are exclusively produced by the command MODE_ITER_CYCL. This one calculates the eigen modes of a structure with cyclic symmetry.

2 Tree structure of Data format

```
the sd_mode_cycl (K8)

      (O)  ".CYCL_TYPE"    :   OJB   S   V   K8     long=1

      (O)  ".CYCL_DESC"    :   OJB   S   V   I      long=4

      (O)  ".CYCL_DIAM"    :   OJB   S   V   I

      (O)  ".CYCL_NBSC"    :   OJB   S   V   I      long=1

      (O)  ".CYCL_REFE"    :   OJB   S   V   K24    long=3

      (O)  ".CYCL_FREQ"    :   OJB   S   V   R

      (O)  ".CYCL_NUIN"    :   OJB   S   V   I      long=3

      (O)  ".CYCL_CMODE"   :   OJB   S   V   C
```

2.1 Contained JEVEUX objects

2.1.1 Object .CYCL_REFE

```
".CYCL_REFE": S V I LONG=3
```

V (1)	name of the concept sd_maillage
V (2)	name of the concept of the dynamic interface (sd_interf_dyna_clas)
V (3)	name of the concept sd_base_modale

2.1.2 Object .CYCL_TYPE

```
".CYCL_TYPE": S V K8 LONG=1
```

V (1)	name of the concept sd_maillage

2.1.3 Object .CYCL_NUIN

```
".CYCL_NUIN": S V I LONG=3
```

V (1)	number of the interface of right
V (2)	number of the interface of left

V (3)	number of the interface of the axis if there is 1 axis. 0 if not.

2.1.4 Object .CYCL_NBSC

".CYCL_NBSC": S V I LONG=1

V (1)	many sectors

2.1.5 Object .CYCL_DESC

".CYCL_DESC": S V I LONG=4

V (1)	nb_mod	number of modes of the base used
V (2)	nb_ddl	number of ddls of the left interface (or right)
V (3)	nb_ddli	number of ddls of the axis if there exists. 0 if not.
V (4)	nb_freq	many frequencies calculated by nodal diameter

2.1.6 Object .CYCL_DIAM

".CYCL_DIAM": S V I LONG=2*nb_diam

V (1 with nb_diam)	number of the nodal diameters
V (nb_diam+1 with 2*nb_diam)	many modes per diameter

2.1.7 Object .CYCL_CMODE

".CYCL_CMODE": S V C LONG=nb_diam*nb_freq* (nb_mod+nb_ddl+nb_ddli)

Values of different the ddls generalized for each nodal diameter and each frequency.

Convention of storage: if it were a table with 3 indices, it would be: CYCL_MODE (i_ddl, i_freq, i_diam)

2.1.8 Object .CYCL_FREQ

".CYCL_FREQ": S V C LONG=nb_diam*nb_freq

Value of the frequencies for each nodal diameter.

Convention of storage: if it were a table with 2 indices, it would be: CYCL_FREQ (i_freq, i_diam)