

# Data Manager

## *User Interface :*

Commands Available:

```
newrecord <record_name> <field_name>...
delrecord <record_name>
records
newdataset <data_name> <record_name> <length>
deldataset <data_name>
datas
newinput <input_name> lower_index upper_index start_value step
delinput <input_name>
inputs
newmap <map_name> <calculator_name> <output_field_name> <input_field_name>...
delmap <map_name>
maps
load <data_name> <input_name>
```

<p><b>Record:</b></p> <ul style="list-style-type: none"><li>- identifier unique to records</li><li>- list of field identifier names</li></ul> <p>Purpose: used to template a data set with identifiable field names</p>	<p><b>Data Set:</b></p> <ul style="list-style-type: none"><li>- identifier unique to data sets</li><li>- associated record name</li><li>- array of field identifiers</li><li>- integer dimensions of array</li><li>- 2-dimensional data array</li></ul> <p>Purpose: Used to hold set of input data and output data.</p>
<p><b>Set_Input:</b></p> <ul style="list-style-type: none"><li>- identifier unique to set_inputs</li><li>- lower index/upper index (ints)</li><li>- start value / incrementer (floats)</li></ul> <p>Purpose: used to initialise a data set prior to calculations being performed upon the data set.</p>	<p><b>Input_Output Map</b></p> <ul style="list-style-type: none"><li>- associated calculator name</li><li>- array of input fields</li><li>- single output field</li></ul> <p>Purpose: Describes how to do a calculation. Instructs Director to pick out particular input field data from a particular data set array, send initialisations to a particular calculator for evaluation and store the single complex result in the output field specified of that particular data set.</p>

Data Manager keeps separate lists of records, data sets, set\_inputs and IO\_maps. Each item in a list has an identifying name unique to that list.

All UI commands are publicly accessible member functions of the Data Manager