

5. APPLICATIONS

```
# category AXIS
loop_
_axis.id
_axis.type
_axis.equipment
_axis.depends_on
_axis.vector[1] _axis.vector[2] _axis.vector[3]
_axis.offset[1] _axis.offset[2] _axis.offset[3]
GONIOMETER_OMEGA rotation goniometer
. 1 0 0 . . .
GONIOMETER_KAPPA rotation goniometer
GONIOMETER_OMEGA 0.64279 0 0.76604 . . .
GONIOMETER_PHI rotation goniometer
GONIOMETER_KAPPA 1 0 0 . . .
SOURCE general source . 0 0 1 . . .
GRAVITY general gravity . 0 -1 0 . . .
DETECTOR_Z translation detector
. 0 0 -1 0 0 0
DETECTOR_Y translation detector
DETECTOR_Z 0 1 0 0 0 0
DETECTOR_X translation detector
DETECTOR_Y 1 0 0 0 0 0
DETECTOR_PITCH rotation detector
DETECTOR_X 0 1 0 0 0 0
ELEMENT_X translation detector
DETECTOR_PITCH 1 0 0 -94.0032 94.0032 0
ELEMENT_Y translation detector
ELEMENT_X 0 1 0 0 0 0

# category ARRAY_STRUCTURE_LIST
loop_
_array_structure_list.array_id
_array_structure_list.index
_array_structure_list.dimension
_array_structure_list.precedence
_array_structure_list.direction
_array_structure_list.axis_set_id
ARRAY1 1 2304 1 increasing ELEMENT_X
ARRAY1 2 2304 2 increasing ELEMENT_Y

# category ARRAY_STRUCTURE_LIST_AXIS
loop_
_array_structure_list_axis.axis_set_id
_array_structure_list_axis.axis_id
_array_structure_list_axis.displacement
_array_structure_list_axis.displacement_increment
ELEMENT_X ELEMENT_X 0.0408 0.0816
ELEMENT_Y ELEMENT_Y -0.0408 -0.0816

# category ARRAY_INTENSITIES
loop_
_array_intensities.array_id
_array_intensities.binary_id
_array_intensities.linearity
_array_intensities.gain
_array_intensities.gain_esd
_array_intensities.overload
_array_intensities.undefined_value
ARRAY1 1 linear 0.23 0.03 65000 0

# category ARRAY_STRUCTURE
loop_
_array_structure.id
_array_structure.encoding_type
_array_structure.compression_type
_array_structure.byte_order
ARRAY1 "signed 32-bit integer" packed little_endian
```

Fig. 5.6.4.1. (cont.)

```
# category ARRAY_DATA
loop_
_array_data.array_id
_array_data.binary_id
_array_data.data
ARRAY1 1 ?
```

Fig. 5.6.4.1. (cont.)

```
loop_
_axis.id
_axis.type
_axis.equipment
_axis.depends_on
_axis.vector[1] _axis.vector[2] _axis.vector[3]
_axis.offset[1] _axis.offset[2] _axis.offset[3]
GONIOMETER_OMEGA rotation goniometer
. 1 0 0 . . .
GONIOMETER_KAPPA rotation goniometer
GONIOMETER_OMEGA 0.64279 0 0.76604 . . .
GONIOMETER_PHI rotation goniometer
GONIOMETER_KAPPA 1 0 0 . . .
SOURCE general source
. 0 0 1 . . .
GRAVITY general gravity
. 0 -1 0 . . .
DETECTOR_Z translation detector
. 0 0 -1 0 0 0
DETECTOR_Y translation detector
DETECTOR_Z 0 1 0 0 0 0
DETECTOR_X translation detector
DETECTOR_Y 1 0 0 0 0 0
DETECTOR_PITCH rotation detector
DETECTOR_X 0 1 0 0 0 0
ELEMENT_X translation detector
DETECTOR_PITCH 1 0 0 -172.5 172.5 0
ELEMENT_Y translation detector
ELEMENT_X 0 1 0 0 0 0

loop_
_array_structure_list.array_id
_array_structure_list.index
_array_structure_list.precedence
_array_structure_list.direction
_array_structure_list.axis_set_id
ARRAY1 1 2300 1 increasing ELEMENT_X
ARRAY1 2 2300 2 increasing ELEMENT_Y

loop_
_array_structure_list_axis.axis_set_id
_array_structure_list_axis.axis_id
_array_structure_list_axis.displacement
_array_structure_list_axis.displacement_increment
ELEMENT_X ELEMENT_X 0.075 0.150
ELEMENT_Y ELEMENT_Y -0.075 -0.150

loop_
_array_intensities.array_id
_array_intensities.binary_id
_array_intensities.linearity
_array_intensities.gain
_array_intensities.gain_esd
_array_intensities.overload
_array_intensities.undefined_value
ARRAY1 1 linear 1.15 0.2 240000 0
```

Fig. 5.6.4.2. Part of the template file for a MAR345 detector. Values that differ from those in Fig. 5.6.4.1 are underlined.