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- I will show example files and ASCII metadata dumps
- A real file will always contain more data and this will not break the standard compliance!



# Scans and Rastering

- Come in all shapes and sizes
- Captured by rules:
  - Store all varied parameters as arrays of length NP at the appropriate place in the NeXus hierarchy
  - For multi detectors, NP, number of scan points is always the first dimension
  - In NXdata: create links to counts and varied variables



#### Scan Example 1: rotating sample

```
entry: NXentry
sample: NXsample
       rotation angle [NP], axis=1 (1)
instrument: NXinstrument
       detector: NX detector
              data[NP], signal=1 (2)
control: NXmonitor
       data[NP]
data: NXdata
       link to (1)
       link to (2)
```



### Scan Example 2: complex scan in Q

```
entry: NXentry
sample: NXsample
       rotation angle[NP], axis=1 (1)
       phi[NP], axis=1 (2)
       chi[NP], axis=1(3)
       h[NP], axis=1 (4), primary=1
       k[NP], axis=1 (5)
       I[NP], axis=1 (6)
instrument: NXinstrument
       detector: NX detector
              data[NP], signal=1 (7)
              polar angle[NP], signal=1 (8)
data: NXdata
       link to (1)
       link to (2)
       link to (...)
```

link to (8)

### Scan Example 3: sample rotation, area detector

```
entry: NXentry
sample: NXsample
       rotation angle [NP], axis=1 (1)
instrument: NXinstrument
       detector: NX detector
              data[NP,xsize,ysize],signal=1 (2)
control: NXmonitor
       data[NP]
data: NXdata
       link to (1)
       link to (2)
```

