See spec at <https://manual.nexusformat.org/classes/applications/NXxas.html>. This is current format, see also NXxas\_new

Smr notes added

Variable names

Serialization scheme

entry/ (Group) [entry NX\_CHAR required]

    attributes:

entry/definition *(Dataset);* [required]

*shape: (), dims: 0; dtype: object*

*Data value:* **NXxas**

*attributes:*

entry/start\_time *(Dataset); [*required*]*

*shape: (), dims: 0; dtype: object*

*Data value:* **2021-03-29T15:51:45.626352**

*attributes:*

entry/title *(Dataset);*

*shape: (), dims: 0; dtype: object [*required*]*

*Data value:* **SAMPLE-CHAR-DATA**

*attributes:*

*entry/instrument/ (Group)*

*attributes:*

*entry/instrument/source/ (Group)*

*attributes:*

*entry/*instrument/source/name *(Dataset); [*required*]*

*shape: (), dims: 0; dtype: NX\_Char*

*Data value:* **SAMPLE-CHAR-DATA**

*attributes:*

*entry/*instrument/source/probe *(Dataset); [*required*]*

*shape: (), dims: 0; dtype: NX\_CHAR*

*Data value:* **x-ray**

*attributes:*

*entry/*instrument/source/type *(Dataset); [*required*]*

*shape: (), dims: 0; dtype: NX\_CHAR*

*Data value:* **SAMPLE-CHAR-DATA**

*attributes:*

*entry/instrument/monochromator/ (Group)*

*attributes:*

*Data: entry/*instrument/ monochromator /energy [an array, Not in example, , link to entry/data/energy] [required]

[*NX\_FLOAT*](https://manual.nexusformat.org/nxdl-types.html#nx-float)*(Rank: 1, Dimensions: [nP])*[*⤆*](https://manual.nexusformat.org/classes/base_classes/NXmonochromator.html#nxmonochromator-energy-field)

*entry/*instrument/absorbed\_beam*/ (Group)* [data array, link to entry/data/absorbed\_beam] [required] note discussion for NXxas new:

*attributes: none*

[NX\_NUMBER](https://manual.nexusformat.org/nxdl-types.html#nx-number) (Rank: 1, Dimensions: [nP])

*entry/*instrument/incoming\_beam*/ (Group)* [data array, link to monitor/data?] [required]

*attributes:*

*entry/instrument/incoming\_beam/data (Dataset);*

*NX\_NUMBER (Rank: 1, Dimensions: [nP])*

*attributes:*

*entry/sample/ (Group)*

*attributes:*

*entry/*sample/name *(Dataset);* [required]

*shape: (), dims: 0; dtype: NX\_CHAR*

*Data value:* **SAMPLE-CHAR-DATA**

*attributes:*

*entry/monitor/ (Group)*

*attributes:*

*entry/monitor/data (Dataset);* [This field could be a link to ``/NXentry/NXinstrument/incoming\_beam:NXdetector/data] [required]

NX\_NUMBER (Rank: 1, Dimensions: [nP])

*attributes:*

*entry/*monitor/mode *(Dataset);* [required]

*shape: (), dims: 0; dtype: object*

*Data value:* **monitor**  [enum: {monitor; timer} ]

*attributes:*

*entry/*monitor/preset *(Dataset);* [required]

*shape: (), dims: 0; dtype: float64*

*attributes:*

*entry/data/ (Group)*

*attributes:*

*entry/data/*absorbed\_beam *(Dataset);* [target="/NXentry/NXinstrument/ absorbed\_beam:NXdetector/data] [required]

*shape: (), dims: 0; dtype: int64*

*attributes:*

*entry/data/*energy *(Dataset);* [target="/NXentry/NXinstrument/ monochromator:NXmonochromator/energy] [required]

*shape: (), dims: 0; dtype: float64*

*attributes:*

*entry/data/*mode[required]

[not in example; enumeration: { "Total Electron Yield" ,"Partial Electron Yield","Auger Electron Yield","Fluorescence Yield","Transmission"};