

# SDM BINARY DATA FORMAT:

DEVELOPMENT,  
SPECIFICATION  
&  
EVLA ISSUES

## Where we are, and how we got there

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- Common descriptive document written by Pokorny, based on Pisano's and Viallefond's work, and reviewed and modified by Pisano.
- Awaiting final round of schema modifications and document review by Viallefond.

- Aggregation
  - Integrations aggregated into a single file by sub-scan.
  - Somewhat less flexible than previously proposed WIDAR format, but sufficient.
  - No index section (could perhaps be slipped in on the sly).
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- “Weights” binary attachment with values in lookup table → adopted

- Data processors

The SDM BDF can accommodate many different “data processor” outputs, not only correlator outputs. Significant parts of the specification are devoted to describing possible format variations to allow for a variety of instruments.

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- ALMA-B correlator
- ACA correlator
- ALMA total power detector
- WIDAR wideband auto-correlations?

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- Telescope-dependent constraints

- ALMA would like to include the limits on a variety of elements in the BDF into the XML schema that defines the header format.
- I have argued for their elimination.
- These limits are still included, and are, at the moment, hard-coded in the schema.

- Everything specifying the SDM BDF format will soon be in one project under revision control.
- One descriptive document with application-specific annotations as desired, and one appendix for each application.
- Descriptive document has link to applicable XML schema documents.



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- Will the BDF be used for WIDAR wideband auto-correlation data?