

Weight and Weight Spectrum

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Current Definition

- ▣ Sigma: Float(N_c)
 - ▣ Estimated RMS noise for single channel
- ▣ WEIGHT: Float(N_c)
 - ▣ Weight for whole data matrix
- ▣ WEIGHT_SPECTRUM: Float(N_c, N_f)
 - ▣ Weight for each channel

If WEIGHT_SPECTRUM exists it is assumed to override the Weight column.

Proposed Changes

- Drop usage of Weight in the functional code
 - Use [Corrected]_Weight_Spectrum everywhere
 - Add a Corrected_Weight_Spectrum column
 - May be virtual, generated OTF etc.
 - Consider the Weight Column on disk to be a compressed storage of the Weight Spectrum
 - Will need hints from functional code as to when to use
 - Only accessed managed via the VI/VB framework
 - Probably store per channel weight rather than sum
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Backwards Compatability

- Add keyword to Weight Header denoting that it is of the new form.