Sharpinteg Flowchart

Read Data File
[One side of array is H (Horizontal),
other side is V (vertical)]

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Split based on HWP angle
(4 per file)

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Apply RGM

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Demodulate chop for each
HWP angle and nod position

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Set gains between H and V

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Set left side of array to H-V
right side to H+V

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For each HWP angle, compute average
and standard deviation for chop cycles
in the Left and Right beams separately

For H-V
only

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For each HWP angle, pixel, and
separately for the Left and Right beams,
reject chop cycles more than 3 sigma
from the mean (Chauvenet's Criterion)

Repeat until
no cycles
are rejected

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Apply flagging to H+V as
union of H-V flagged

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Compute Left-Right for each HWP angle

Compute Stokes Parameters
I = 1/4*(sum of HWP #1-#4)
Q = 1/2*(HWP #1 - HWP #3)
U = 1/2*(HWP #2 - HWP #4)

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Final flagging of bad pixels,
assigning stokes I for
widow pixels, etc.

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Write out int file with
Stokes parameters and
their errors