Generic Checklist for Code Reviews

Structure

☑ Does the code completely and correctly implement the design?
   Agreed
☑ Does the code conform to any pertinent coding standards?
   Discussed -- found some consistent coding standards in the code
☑ Is the code well-structured, consistent in style, and consistently formatted?
   Agreed
☒ Are there any uncalled or unneeded procedures or any unreachable code?
   Agreed
☒ Are there any leftover stubs or test routines in the code?

   Agreed
☒ Can any code be replaced by calls to external reusable components or library functions?
   Agreed
☑ Are there any blocks of repeated code that could be condensed into a single procedure?
   Discussed -- found a block of code that could be condensed
☑ Is storage use efficient?
   Agreed
☒ Are symbolics used rather than "magic number" constants or string constants?
   Agreed
☑ Are any modules excessively complex and should be restructured or split into multiple routines?
   Agreed

Documentation

☒ Is the code clearly and adequately documented with an easy-to-maintain commenting style?

   Agreed
☒ Are all comments consistent with the code?
   Discussed -- found inconsistency in the comments thoughout the code

Variables

☒ Are all variables properly defined with meaningful, consistent, and clear names?
   Discussed -- temp could be dealth with in an array and the team could be changed to type
☑ Do all assigned variables have proper type consistency or casting?
   Agreed
☒ Are there any redundant or unused variables?
   Agreed

Arithmetic Operations

☑ Does the code avoid comparing floating-point numbers for equality?
   Agreed

☒ Does the code systematically prevent rounding errors?
   Discussed -- not applicable to code

☑ Does the code avoid additions and subtractions on numbers with greatly different magnitudes?

   Agreed

☒ Are divisors tested for zero or noise?
   Agreed

Loops and Branches

☑ Are all loops, branches, and logic constructs complete, correct, and properly nested?
   Agreed

☒ Are the most common cases tested first in IF- -ELSEIF chains?
   Discussed -- found that it wasn't possible as this code would be used to parse variuos csvs

☑ Are all cases covered in an IF- -ELSEIF or CASE block, including ELSE or DEFAULT clauses?
   Agreed

☒ Does every case statement have a default?

   Discussed -- NOT APPLICABLE

☑ Are loop termination conditions obvious and invariably achievable?
   Agreed

☒ Are indexes or subscripts properly initialized, just prior to the loop?
   Discussed -- found cases of uninitalized values

☒ Can any statements that are enclosed within loops be placed outside the loops?
   Agreed

☑ Does the code in the loop avoid manipulating the index variable or using it upon exit from the loop?

   Discussed -- found no disagreeing cases upon futher review