Documented Changes:

8/12/19

Extra notes in the * and ** section

LODCSH2.f90

- On **line 123** a "**1 continue**" statement is added at the first and only read. This makes it possible to read all the lines of the input file with just a single read statement by using go to statements that redirect back to the "**1 continue**".

- After the read, the program breaks down into 3 if blocks:

    - The first block (**line 146**) is the case where we've just read the 1st line of a CSF. After running the 1st line procedures we go to **1 continue** and read again.

    - The next if block (**line 155**) is the case where we've read the 3rd line. After executing the procedures in the 3rd line, "go to 2" jumps to "**2 continue**" on **line 182**.

    - The third and final if block (**line 169**) deals with the case that we've read the 2nd line. After executing the procedures in the block, "**go to 1**" jumps back to the read statement (**line 123**) to begin reading the next line again.

* Whereas in the initial program, the read format was a fixed format of a 1st line followed by a 2nd and 3rd line, this newly adapted code is able to read CSFs of various formats such as the case when there are multiple 2nd or 3rd lines for each block.

SETCSLL.f90

The only changes made to the SETCSLL.F90 file are inside the Do While loop on **line 73**. The first thing that needed to be changed was the initial read (**line 74**) which is a general read as opposed to the original read which was specifically checking if we've reach a *.

The read is then followed by two if blocks and one else block: either we've the read first line of CSF (1st if block **line 75**) or we've read a * or EOF (2nd if block **line 78**). In the third and last case (else block **line 92**), we must've read a 2nd or 3rd line of a CSF block if it was none of the above cases so check if the line read was a 3rd line, if so then increase the NCSF counter. Continue reading in the do loop until the EOF.

** By having a general read, we no longer have the 2 hardcoded read statements that would usually accompany the first read statement which would correspond to reading 3 lines in total. With the new general read statement, the program is able to function even if a CSF has blocks with more than 3 lines per block.