Subject: Questions about DO CONCURRENT
From: Van Snyder

The provisions of the enumerated list in **8.1.7.5.4 Loop termination** explicitly do not apply to a DO CONCURRENT construct. Rather, a separate paragraph specifies that a DO CONCURRENT construct terminates when all the iterations complete execution. There is no constraint against a RETURN statement appearing within a DO CONCURRENT construct, and no prohibition (that I could find) against one being executed within an iteration. Thus it appears that execution of a RETURN statement does return from the procedure in which it is executed, but if it's within the range of a DO CONCURRENT construct, the construct nonetheless continues to be active. Even more absurdly, if execution of the program is terminated by execution of a STOP statement or for another reason while a DO CONCURRENT construct is active, execution of the program terminates but the DO CONCURRENT construct remains active.

Should there be a constraint against a RETURN statement appearing within the range of a DO CONCURRENT construct? If not, does execution of such a RETURN statement terminate execution of the loop?

Does execution of a STOP statement or termination of the program for another reason terminate execution of the loop?