Code Guidelines

# Naming

* ALL variable and function names should use camelback naming style. (e.g. FNUM, initCoords, dayLength, runSMC)
* ALL iterator and index variables must begin with the lowercase letter i. Camelback naming for iterator or index variables is not required.
* ALL acronyms shall be capitalized (e.g. FNUM, SMC, PMC)

# Comments

* Comment every line of code in all lowercase.
* Do not cross the vertical gray line.
* If commenting a variable which represents a physical quantity, add the units before the comment. Ex:

dayLength = 86400; % [s] length of day

* If multiple lines are a part of one common process, group them by single spacing between the common lines and double spacing above and below the group. Additionally, add a heading directly above the group of lines, with the first word capitalized and a colon at the end of the heading. Ex:

% Compute trajectory vector components:

vx = (x1-x0); % [m] x comp

vy = (y1-y0); % [m] y comp

vz = (z1-z0); % [m] z comp

* Add a brief description to the beginning of every function and the inputs/outputs of the function.

# Defining multidimensional arrays:

* If the array is 1 dimensional, make it a row vector (i.e. 1 row, n columns)
* If the array is 2 dimensional, the primary index should be in position one. (e.g. an array of coordinates should have (x,y,z) values stored in individual rows, not columns)