```matlab
function [sim_avg_cdf sim_avg_pdf sim_avg_pdf_u_im,X,Y,sigma_val]...
    = sim_avg_vals(mu_val,ln_sigma_val)

    global data V
    % Number of Observations
    [N, ~] = size(data);

    %X and Y Values
    Y = data(:,1);
    X = data(:,2);

    % Number of simulations
    [~, M] = size(V);

    % Sigma Value
    sigma_val = exp(ln_sigma_val);

    % Value of Simulated Maximum Likelihood
    logistic_input = mu_val*ones(N,M) + sigma_val*V;
    logistic_input = bsxfun(@times,logistic_input,X);

    % Calculate the value of logistic cdf and pdf
    logist_cdf = cdf('Logistic',logistic_input,0,1);
    logist_pdf = pdf('Logistic',logistic_input,0,1);

    % Calculate the average value of the cdf and pdf across simulations.
    % This is used in the numerators and denominators of the SML and gradient
    sim_avg_cdf = mean(logist_cdf,2);
    sim_avg_pdf = mean(logist_pdf,2);
    sim_avg_pdf_u_im = mean(logist_pdf.*V,2);
end
```