```
function Input  = NewMexico()

% initialize counter of marginals
counter = 0;

% define marginals of yaw model
counter = counter+1;
AM11     = 0.445;
AM11_Std = 0.2;  % Standard deviation
% AM11_LB = 0; % Lower bound of truncated Gaussian distribution
% AM11_UB = 1;  % Upper bound of truncated Gaussian distribution
Input.Marginals(counter).Name = 'AM11';
Input.Marginals(counter).Type = 'Gaussian';
Input.Marginals(counter).Parameters = [AM11, AM11_Std*abs(AM11)];
% Input.Marginals(counter).Bounds = [AM11_LB AM11_UB];

counter = counter+1;
AM12     = -1.78;
AM12_Std = 0.2;  % Standard deviation
% AM12_LB = 0; % Lower bound of truncated Gaussian distribution
% AM12_UB = 1;  % Upper bound of truncated Gaussian distribution
Input.Marginals(counter).Name = 'AM12';
Input.Marginals(counter).Type = 'Gaussian';
Input.Marginals(counter).Parameters = [AM12, AM12_Std*abs(AM12)];
% Input.Marginals(counter).Bounds = [AM12_LB AM12_UB];

counter = counter+1;
AM13     = 1.63;
AM13_Std = 0.2;  % Standard deviation
% AM13_LB = 0; % Lower bound of truncated Gaussian distribution
% AM13_UB = 1;  % Upper bound of truncated Gaussian distribution
Input.Marginals(counter).Name = 'AM13';
Input.Marginals(counter).Type = 'Gaussian';
Input.Marginals(counter).Parameters = [AM13, AM13_Std*abs(AM13)];
% Input.Marginals(counter).Bounds = [AM13_LB AM13_UB];

counter = counter+1;
AM14     = -0.0543;
AM14_Std = 0.2;  % Standard deviation
% AM14_LB = 0; % Lower bound of truncated Gaussian distribution
% AM14_UB = 1;  % Upper bound of truncated Gaussian distribution
Input.Marginals(counter).Name = 'AM14';
Input.Marginals(counter).Type = 'Gaussian';
Input.Marginals(counter).Parameters = [AM14, AM14_Std*abs(AM14)];
% Input.Marginals(counter).Bounds = [AM14_LB AM14_UB];

counter = counter+1;
AM15     = 0.367;
AM15_Std = 0.2;  % Standard deviation
% AM14_LB = 0; % Lower bound of truncated Gaussian distribution
% AM14_UB = 1;  % Upper bound of truncated Gaussian distribution
Input.Marginals(counter).Name = 'AM15';
```

```
Input.Marginals(counter).Type = 'Gaussian';
Input.Marginals(counter).Parameters = [AM15, AM15_Std*abs(AM15)];
% Input.Marginals(counter).Bounds = [AM14_LB AM14_UB];


counter = counter+1;
AM21     = 0.0523;
AM21_Std = 0.2;  % Standard deviation
% AM11_LB = 0; % Lower bound of truncated Gaussian distribution
% AM11_UB = 1;  % Upper bound of truncated Gaussian distribution
Input.Marginals(counter).Name = 'AM21';
Input.Marginals(counter).Type = 'Gaussian';
Input.Marginals(counter).Parameters = [AM21, AM21_Std*abs(AM21)];
% Input.Marginals(counter).Bounds = [AM11_LB AM11_UB];

counter = counter+1;
AM22     = -0.284;
AM22_Std = 0.2;  % Standard deviation
% AM12_LB = 0; % Lower bound of truncated Gaussian distribution
% AM12_UB = 1;  % Upper bound of truncated Gaussian distribution
Input.Marginals(counter).Name = 'AM22';
Input.Marginals(counter).Type = 'Gaussian';
Input.Marginals(counter).Parameters = [AM22, AM22_Std*abs(AM22)];
% Input.Marginals(counter).Bounds = [AM12_LB AM12_UB];

counter = counter+1;
AM23     = 0.327;
AM23_Std = 0.2;  % Standard deviation
% AM13_LB = 0; % Lower bound of truncated Gaussian distribution
% AM13_UB = 1;  % Upper bound of truncated Gaussian distribution
Input.Marginals(counter).Name = 'AM23';
Input.Marginals(counter).Type = 'Gaussian';
Input.Marginals(counter).Parameters = [AM23, AM23_Std*abs(AM23)];
% Input.Marginals(counter).Bounds = [AM13_LB AM13_UB];

counter = counter+1;
AM24     = -0.0134;
AM24_Std = 0.2;  % Standard deviation
% AM14_LB = 0; % Lower bound of truncated Gaussian distribution
% AM14_UB = 1;  % Upper bound of truncated Gaussian distribution
Input.Marginals(counter).Name = 'AM24';
Input.Marginals(counter).Type = 'Gaussian';
Input.Marginals(counter).Parameters = [AM24, AM24_Std*abs(AM24)];
% Input.Marginals(counter).Bounds = [AM14_LB AM14_UB];

counter = counter+1;
AM25     = 0.144;
AM25_Std = 0.2;  % Standard deviation
% AM14_LB = 0; % Lower bound of truncated Gaussian distribution
% AM14_UB = 1;  % Upper bound of truncated Gaussian distribution
Input.Marginals(counter).Name = 'AM25';
Input.Marginals(counter).Type = 'Gaussian';
Input.Marginals(counter).Parameters = [AM25, AM25_Std*abs(AM25)];
% Input.Marginals(counter).Bounds = [AM14_LB AM14_UB];
```

```
counter = counter+1;
PH11     = -51.2;
PH11_Std = 10;  % Standard deviation
% PH11_LB = 0; % Lower bound of truncated Gaussian distribution
% PH11_UB = 1;  % Upper bound of truncated Gaussian distribution
Input.Marginals(counter).Name = 'PH11';
Input.Marginals(counter).Type = 'Gaussian';
Input.Marginals(counter).Parameters = [PH11, PH11_Std];
% Input.Marginals(counter).Bounds = [PH11_LB PH11_UB];

counter = counter+1;
PH12     = 1009;
PH12_Std = 10;  % Standard deviation
% PH12_LB = 0; % Lower bound of truncated Gaussian distribution
% PH12_UB = 1;  % Upper bound of truncated Gaussian distribution
Input.Marginals(counter).Name = 'PH12';
Input.Marginals(counter).Type = 'Gaussian';
Input.Marginals(counter).Parameters = [PH12, PH12_Std];
%Input.Marginals(counter).Bounds = [PH12_LB PH12_UB];

counter = counter+1;
PH13     = -1383;
PH13_Std = 10;  % Standard deviation
% PH13_LB = 0; % Lower bound of truncated Gaussian distribution
% PH13_UB = 1;  % Upper bound of truncated Gaussian distribution
Input.Marginals(counter).Name = 'PH13';
Input.Marginals(counter).Type = 'Gaussian';
Input.Marginals(counter).Parameters = [PH13, PH13_Std];
%Input.Marginals(counter).Bounds = [PH13_LB PH13_UB];

counter = counter+1;
PH14     = 387;
PH14_Std = 10;  % Standard deviation
% PH14_LB = 0; % Lower bound of truncated Gaussian distribution
% PH14_UB = 1;  % Upper bound of truncated Gaussian distribution
Input.Marginals(counter).Name = 'PH14';
Input.Marginals(counter).Type = 'Gaussian';
Input.Marginals(counter).Parameters = [PH14, PH14_Std];
%Input.Marginals(counter).Bounds = [PH14_LB PH14_UB];

counter = counter+1;
PH15     = -260;
PH15_Std = 10;  % Standard deviation
% PH14_LB = 0; % Lower bound of truncated Gaussian distribution
% PH14_UB = 1;  % Upper bound of truncated Gaussian distribution
Input.Marginals(counter).Name = 'PH15';
Input.Marginals(counter).Type = 'Gaussian';
Input.Marginals(counter).Parameters = [PH15, PH15_Std];
%Input.Marginals(counter).Bounds = [PH14_LB PH14_UB];
```

```
counter = counter+1;
PH21     = 296;
PH21_Std = 10;  % Standard deviation
% PH11_LB = 0; % Lower bound of truncated Gaussian distribution
% PH11_UB = 1;  % Upper bound of truncated Gaussian distribution
Input.Marginals(counter).Name = 'PH21';
Input.Marginals(counter).Type = 'Gaussian';
Input.Marginals(counter).Parameters = [PH21, PH21_Std];
% Input.Marginals(counter).Bounds = [PH11_LB PH11_UB];

counter = counter+1;
PH22     = 60.9;
PH22_Std = 10;  % Standard deviation
% PH12_LB = 0; % Lower bound of truncated Gaussian distribution
% PH12_UB = 1;  % Upper bound of truncated Gaussian distribution
Input.Marginals(counter).Name = 'PH22';
Input.Marginals(counter).Type = 'Gaussian';
Input.Marginals(counter).Parameters = [PH22, PH22_Std];
% Input.Marginals(counter).Bounds = [PH12_LB PH12_UB];

counter = counter+1;
PH23     = -71.3;
PH23_Std = 10;  % Standard deviation
% PH13_LB = 0; % Lower bound of truncated Gaussian distribution
% PH13_UB = 1;  % Upper bound of truncated Gaussian distribution
Input.Marginals(counter).Name = 'PH23';
Input.Marginals(counter).Type = 'Gaussian';
Input.Marginals(counter).Parameters = [PH23, PH23_Std];
% Input.Marginals(counter).Bounds = [PH13_LB PH13_UB];

counter = counter+1;
PH24     = -335;
PH24_Std = 10;  % Standard deviation
% PH14_LB = 0; % Lower bound of truncated Gaussian distribution
% PH14_UB = 1;  % Upper bound of truncated Gaussian distribution
Input.Marginals(counter).Name = 'PH24';
Input.Marginals(counter).Type = 'Gaussian';
Input.Marginals(counter).Parameters = [PH24, PH24_Std];
% Input.Marginals(counter).Bounds = [PH14_LB PH14_UB];

counter = counter+1;
PH25     = 243;
PH25_Std = 10;  % Standard deviation
% PH14_LB = 0; % Lower bound of truncated Gaussian distribution
% PH14_UB = 1;  % Upper bound of truncated Gaussian distribution
Input.Marginals(counter).Name = 'PH25';
Input.Marginals(counter).Type = 'Gaussian';
Input.Marginals(counter).Parameters = [PH25, PH25_Std];
% Input.Marginals(counter).Bounds = [PH14_LB PH14_UB];
end


ans =
```

```
  struct with fields:

    Marginals: [1×20 struct]
```

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