```
>> LS_Regression
RMSE for Multi Variate Regression: 0.622037, 1.556891
Goodness of fit for Multi Variate Regression: 80.370176%, 98.780781%
RMSE for Least Squares Regression: 0.622037, 1.556891
Goodness of fit for Least Squares Regression: 80.370176%, 98.780781%
Goodness of fit for Bayesian Least Squares Regression: 79.421044%, 101.376975%
RMSE for Bayesian Least Squares Regression: 0.658785, 1.265203


A =

   1.0e-09 *

    0.3958   -0.0099
   -0.0099    0.0199


B =

   1.4979
```

	Mean	Std	CI95	Positive	Distribution
Intercept	0	70.7107	[-141.273, 141.273]	0.500	$t(0.00, 57.74^2, 6)$
s-EMG1	0	2.2361e+05	[-446742.939, 446742.939]	0.500	$t(0.00, 182574.19^2, 6)$
s-EMG2	0	2.2361e+05	[-446742.939, 446742.939]	0.500	$t(0.00, 182574.19^2, 6)$
s-EMG3	0	2.2361e+05	[-446742.939, 446742.939]	0.500	$t(0.00, 182574.19^2, 6)$
s-EMG4	0	2.2361e+05	[-446742.939, 446742.939]	0.500	$t(0.00, 182574.19^2, 6)$
s-EMG5	0	2.2361e+05	[-446742.939, 446742.939]	0.500	$t(0.00, 182574.19^2, 6)$
s-EMG6	0	2.2361e+05	[-446742.939, 446742.939]	0.500	$t(0.00, 182574.19^2, 6)$
s-EMG7	0	2.2361e+05	[-446742.939, 446742.939]	0.500	$t(0.00, 182574.19^2, 6)$
s-EMG8	0	2.2361e+05	[-446742.939, 446742.939]	0.500	$t(0.00, 182574.19^2, 6)$
s-EMG11	0	2.2361e+05	[-446742.939, 446742.939]	0.500	$t(0.00, 182574.19^2, 6)$
s-EMG12	0	2.2361e+05	[-446742.939, 446742.939]	0.500	$t(0.00, 182574.19^2, 6)$
Sigma2	0.5000	0.5000	[0.138, 1.616]	1.000	IG(3.00, 1)

```
Method: Analytic posterior distributions
```

Number of observations: 1350
Number of predictors: 11
Log marginal likelihood: -1186.12

```
              |      Mean         Std            CI95              Positive↙
Distribution
--------------------------------------------------------------------------------↙
-------------------------
 Intercept |      0.4754        0.1616      [ 0.159,  0.792]        0.998   t (0.48,↙
0.16^2,1.4e+03)
 s-EMG1    |   17012.0297     3023.0381   [11086.066, 22937.994]    1.000   t↙
(17012.03, 3020.81^2,1.4e+03)
 s-EMG2    |  -28273.7211     3143.9405   [-34436.686, -22110.756]  0.000   t↙
(-28273.72, 3141.62^2,1.4e+03)
 s-EMG3    |   -7961.6989     1691.8478   [-11278.174, -4645.224]   0.000   t↙
(-7961.70, 1690.60^2,1.4e+03)
 s-EMG4    |   13005.4060      906.3637   [11228.691, 14782.122]    1.000   t↙
(13005.41, 905.70^2,1.4e+03)
 s-EMG5    |   -4788.8540     1429.3467   [-7590.756, -1986.952]    0.000   t↙
(-4788.85, 1428.29^2,1.4e+03)
 s-EMG6    |  -48691.8348    15106.3658   [-78304.357, -19079.313]  0.001   t↙
(-48691.83, 15095.22^2,1.4e+03)
 s-EMG7    |     -1.2355e+05 11641.1346   [-146368.817, -100729.335] 0.000  t↙
(-123549.08, 11632.55^2,1.4e+03)
 s-EMG8    |  -14774.3727     2437.4971   [-19552.520, -9996.226]   0.000   t↙
(-14774.37, 2435.70^2,1.4e+03)
 s-EMG11   |   44616.5698    57234.1797   [-67577.747, 156810.887]  0.782   t↙
(44616.57, 57191.96^2,1.4e+03)
 s-EMG12   |   84228.6170     4390.2133   [75622.624, 92834.611]    1.000   t↙
(84228.62, 4386.97^2,1.4e+03)
 Sigma2    |      0.3146        0.0121      [ 0.292,  0.339]        1.000   IG↙
(678.00, 0.0047)


              |      Mean         Std            CI95              Positive↙
Distribution
--------------------------------------------------------------------------------↙
-------------------------
 Intercept |      0.4754        0.1616      [ 0.159,  0.792]        0.998   t (0.48,↙
0.16^2,1.4e+03)
 s-EMG1    |   17012.0297     3023.0381   [11086.066, 22937.994]    1.000   t↙
(17012.03, 3020.81^2,1.4e+03)
 s-EMG2    |  -28273.7211     3143.9405   [-34436.686, -22110.756]  0.000   t↙
(-28273.72, 3141.62^2,1.4e+03)
 s-EMG3    |   -7961.6989     1691.8478   [-11278.174, -4645.224]   0.000   t↙
(-7961.70, 1690.60^2,1.4e+03)
 s-EMG4    |   13005.4060      906.3637   [11228.691, 14782.122]    1.000   t↙
(13005.41, 905.70^2,1.4e+03)
 s-EMG5    |   -4788.8540     1429.3467   [-7590.756, -1986.952]    0.000   t↙
(-4788.85, 1428.29^2,1.4e+03)
 s-EMG6    |  -48691.8348    15106.3658   [-78304.357, -19079.313]  0.001   t↙
```

(-48691.83, 15095.22^2,1.4e+03)
```
 s-EMG7    |    -1.2355e+05   11641.1346   [-146368.817, -100729.335]    0.000   t↙
(-123549.08, 11632.55^2,1.4e+03)
 s-EMG8    | -14774.3727      2437.4971    [-19552.520, -9996.226]       0.000   t↙
(-14774.37, 2435.70^2,1.4e+03)
 s-EMG11   |  44616.5698     57234.1797    [-67577.747, 156810.887]      0.782   t↙
(44616.57, 57191.96^2,1.4e+03)
 s-EMG12   |  84228.6170      4390.2133    [75622.624, 92834.611]        1.000   t↙
(84228.62, 4386.97^2,1.4e+03)
 Sigma2    |     0.3146         0.0121      [ 0.292,  0.339]             1.000   IG↙
(678.00, 0.0047)
```

Method: Analytic posterior distributions
Number of observations: 1350
Number of predictors: 11
Log marginal likelihood: -2361.96

	Mean	Std	CI95	Positive↙ Distribution
```
------------------------------------------------------------------------------↙
------------------------------
 Intercept |    -2.6966        0.3847       [-3.451, -1.942]             0.000   t↙
(-2.70, 0.38^2,1.4e+03)
 s-EMG1    |  -4474.8901      7195.0966     [-18579.206, 9629.426]       0.267   t↙
(-4474.89, 7189.79^2,1.4e+03)
 s-EMG2    | -25703.7738      7482.8551     [-40372.173, -11035.374]     0.000   t↙
(-25703.77, 7477.33^2,1.4e+03)
 s-EMG3    |  72982.7653      4026.7466     [65089.264, 80876.267]       1.000   t↙
(72982.77, 4023.78^2,1.4e+03)
 s-EMG4    |  35355.9874      2157.2253     [31127.248, 39584.727]       1.000   t↙
(35355.99, 2155.63^2,1.4e+03)
 s-EMG5    |  99616.8720      3401.9710     [92948.098, 106285.646]      1.000   t↙
(99616.87, 3399.46^2,1.4e+03)
 s-EMG6    |    -5.6543e+05   35954.4796    [-635906.821, -494946.006]   0.000   t↙
(-565426.41, 35927.95^2,1.4e+03)
 s-EMG7    |     2.6353e+05   27706.9244    [209213.009, 317838.990]     1.000   t↙
(263526.00, 27686.48^2,1.4e+03)
 s-EMG8    |  19657.8719      5801.4575     [8285.462, 31030.282]        1.000   t↙
(19657.87, 5797.18^2,1.4e+03)
 s-EMG11   |     4.9405e+05    1.3622e+05   [227021.671, 761086.362]     1.000   t↙
(494054.02, 136121.89^2,1.4e+03)
 s-EMG12   |  76242.4050     10449.0938     [55759.383, 96725.427]       1.000   t↙
(76242.41, 10441.39^2,1.4e+03)
 Sigma2    |     1.7819         0.0685       [ 1.653,  1.921]            1.000   IG↙
(678.00, 0.00083)
```

	Mean	Std	CI95	Positive↙ Distribution
```
------------------------------------------------------------------------------↙
```

```
-------------------------------
 Intercept |     -2.6966          0.3847         [-3.451, -1.942]         0.000   t↙
(-2.70, 0.38^2,1.4e+03)
 s-EMG1    |  -4474.8901        7195.0966    [-18579.206, 9629.426]       0.267   t↙
(-4474.89, 7189.79^2,1.4e+03)
 s-EMG2    | -25703.7738        7482.8551   [-40372.173, -11035.374]      0.000   t↙
(-25703.77, 7477.33^2,1.4e+03)
 s-EMG3    |  72982.7653        4026.7466    [65089.264, 80876.267]       1.000   t↙
(72982.77, 4023.78^2,1.4e+03)
 s-EMG4    |  35355.9874        2157.2253    [31127.248, 39584.727]       1.000   t↙
(35355.99, 2155.63^2,1.4e+03)
 s-EMG5    |  99616.8720        3401.9710    [92948.098, 106285.646]      1.000   t↙
(99616.87, 3399.46^2,1.4e+03)
 s-EMG6    |     -5.6543e+05   35954.4796   [-635906.821, -494946.006]    0.000   t↙
(-565426.41, 35927.95^2,1.4e+03)
 s-EMG7    |      2.6353e+05   27706.9244   [209213.009, 317838.990]      1.000   t↙
(263526.00, 27686.48^2,1.4e+03)
 s-EMG8    |  19657.8719        5801.4575    [8285.462, 31030.282]        1.000   t↙
(19657.87, 5797.18^2,1.4e+03)
 s-EMG11   |      4.9405e+05       1.3622e+05 [227021.671, 761086.362]    1.000   t↙
(494054.02, 136121.89^2,1.4e+03)
 s-EMG12   |  76242.4050       10449.0938    [55759.383, 96725.427]       1.000   t↙
(76242.41, 10441.39^2,1.4e+03)
 Sigma2    |      1.7819          0.0685        [ 1.653,  1.921]          1.000   IG↙
(678.00, 0.00083)

>>
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