

## dmvgt (224 calls, 1.541 sec)

Generated 04-Nov-2015 13:12:36 using cpu time.

function in file <C:\Users\aba228\Dropbox\MPHIL\VU\MitISEM\MyMit\include\dmvg>  
[Copy to new window for comparing multiple runs](#)

Refresh

- ☒ Show parent functions    ☒ Show busy lines    ☒ Show child functions  
☒ Show Code Analyzer results    ☒ Show file coverage    ☒ Show function listing


### Parents (calling functions)

Function Name	Function Type	Calls
<a href="#">MitISEM_new</a>	function	62
<a href="#">fn_ISEM</a>	function	100
<a href="#">fn_optimt</a>	function	52
<a href="#">Mit_MH</a>	function	10

### Lines where the most time was spent

Line Number	Code	Calls	Total Time	% Time
<a href="#">25</a>	dens = dmvgt_mex(theta, mit.mu...	224	1.539 s	99.9%
<a href="#">36</a>	end	224	0 s	0%
<a href="#">24</a>	L = double(L);	224	0 s	0%
All other lines			0.002 s	0.1%
Totals			1.541 s	100%

### Children (called functions)

Function Name	Function Type	Calls	Total Time	% Time	Time Plot
<a href="#">dmvgt_mex</a>	MEX-file	224	1.536 s	99.7%	
Self time (built-ins, overhead, etc.)			0.005 s	0.3%	
Totals			1.541 s	100%	

### Code Analyzer results

[t.m](#)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Time Plot
<div></div>

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\_\_\_\_\_

No Code Analyzer messages.

### Coverage results

[Show coverage for parent directory](#)

Total lines in function	36
Non-code lines (comments, blank lines)	33
Code lines (lines that can run)	3
Code lines that did run	3
Code lines that did not run	0
Coverage (did run/can run)	100.00 %

### Function listing

Color highlight code according to

time	calls	line
		1 function dens = dmvgd(theta, mit, L, GamMat)
		2 % density of a mixture of multivariate t dist
		3 % L (log) - return log-density values if L=true
		4 % % MATLAB
		5 % [H,d] = size(mit.mu); % number of components
		6 % [N,~] = size(theta);
		7 % dcoms = zeros(N,H);
		8 % for h = 1:H
		9 % mu_h = mit.mu(h,:);
		10 % Sigma_h = mit.Sigma(h,:);
		11 % Sigma_h = reshape(Sigma_h,d,d);
		12 % df_h = mit.df(h);
		13 % for ii = 1:N
		14 % dcoms(ii,h) = dmvt(theta(ii,:),mu_h,Sigma_h,df_h);
		15 % end
		16 % end
		17 % tmp = log(repmat(mit.p,N,1)) + log(dcoms);
		18 % dens = sum(exp(tmp),2);
		19 % if (L == true)
		20 % dens = log(dens);
		21 % end
		22
		23 % % C-MEX
	224	<u>24</u> L = double(L);
1.54	224	<u>25</u> dens = <u>dmvgd_mex</u> (theta, mit.mu, mit.Sigma, L);
		26
		27 % % comparison of the MATLAB and C-MEX kernel
		28 % lnd_mex = dmvgd_mex(theta, mit.mu, mit.Sigma, L);
		29 % fprintf('\n *** sum(abs(lnd_mex-lnd))> 0.001\n');

```
contributions
```

```
true
```

```
ponents, dimension of t distribution
```

```
), mu_h, Sigma_h, df_h, GamMat);
```

```
ns);
```

```
a, mit.df, mit.p, GamMat, L);
```

```
l evaluation functions
```

```
.Sigma, mit.df, mit.p, GamMat, 1);
```

```
eps) = %6.4f ***\n', sum(abs(lnd_mex-dens)>eps) );
```

```
30 %      fprintf(' *** sum(abs(lnd_mex-lnd)) = %
31 %      if (sum(abs(lnd_mex-dens)) > 1e-4 )
32 %          keyboard
33 %          [val, MM] = max(abs(lnd_mex-dens));
34 %      end
35
224 36 end
```

```
%16.14f ***\n\n', sum(abs(lnd_mex-dens)));
```

```
; % lnd_mex(MM)-dens(MM)
```