HALO002

OCTOBER 9, 2010

1. Results

$$l(\theta) := \log L(\theta) = \sum_{i=1}^{n} \log \Big(\sum_{j=1}^{m} \pi_j f_{a_j,b_j}(x_i, y_i) \Big)$$

	True	EM 10k	EM 30k	EM 50k
Observed 1 $l(\theta)$	1	1	1	1
Observed 2 $l(\theta)$	1	1	1	1

plot of L better zoomed
2x2 grid
init w true values
init many
generate with true values and see if it extracts

T	M	π_j:	10k	30k	50k
0-2	8-9		18.7%	18.09%	17.77%
2-8	8-9		17.5%	19.21%	18.70%
8-10	8-9		0.22%	0.015%	0 %
2-8	7-8		48.9%	47.97%	48.64%
8-10	7-8		1.74%	0.000%	0 %
10-12	7-8		1.33%	3.393%	0 %
2-8	6-7		5.98%	5.863%	5.349%
8-10	6-7		2.83%	3.007%	3.278%
12-14	6-7		4.94%	2.750%	0 %
0-2	5-6		0.00%	0.143%	0.201%
2-8	5-6		0.78%	0.457%	0.514%
8-10	5-6		2.15%	2.351%	2.391%
10-12	5-6		0.96%	1.292%	1.413%
12-14	5-6		0 %	1.069%	0 %
10-12	1-5		0.32%	0.079%	0.214%
12-14	1-5		1.43%	1.500%	1.512%