

Fund Prices/Mvmts

Heritage Fund 99.2 ▲ 29.6 Alpha Fund 66.4 Stdy Beta Fund 52.0 Stdy Chi Fund 63.1 Stdy Line Fund 103.9 Stdy

Rec'd Fund 78.5 ▲ 8.9

MAFL 2008

31st August Round #22.1 2008

Round 22 Results

2 Correct	Fremantle v (Subiaco, 29th			
Sportsbet	\$2.60	\$1.45		
	31% - 38%	62% - 69%		
	Fremantle +15½	pts (\$1.90/\$1.90		
Heritage	Won 9.419	6 (13.52%)		
Alpha	-			
Beta	-			
Chi	-			
Line	·			
Chi	Collingw	ood by 7		
Quila	Freman	tle by 1		
Shadow	Colling	wood		
CTL	Colling	gwood		
MARS	Colling	gwood		
MM	Collingwo	od (42-1)		
	(Dissente	rs: MM6)		
Super MM	Collingwo			
	(Dissente			
Uber MM	Colling			
Simplified	Colling	wood		
Result	Fremantle 1	2.8 (80) def		
Result	Collingwood 8.8 (56)			

1 Correct	(MCG, 30th A	Pt Adelaide gugust 2008)
Sportsbet	\$1.18	\$4.50
	78% - 85%	15% - 22%
	Kangaroos -29½ p	ts (\$1.90/\$1.90)
Heritage	Won 47.889	6 (68.78%)
Alpha	-	
Beta	-	
Chi	-	
Line	-	
Chi	Kangaroo	s by 20
Quila	Kangaroo	s by 21
Shadow	Kanga	roos
CTL	Kanga	roos
MARS	Kanga	roos
MM	Kangaroo	s (42-1)
141141	(Dissenter	
Super MM	Kangaroo	
	(Dissenter	
Uber MM	Kanga	roos
Simplified	Kanga	roos
Result	Port Adelaide 2 Kangaroos	

65 Correct	Geelong V (Kardinia Park, 3)	West Coast Oth August 2008)		
Sportsbet	\$1.01	\$12.00		
	92% - 99%	1% - 8%		
	Geelong -72½ p	ts (\$1.90/\$1.90)		
Heritage	-			
Alpha	-			
Beta	-			
Chi				
Line	-			
Chi	Geelon	g by 32		
Quila	Geelon	g by 29		
Shadow	Gee	long		
CTL	Gee	long		
MARS	Gee	long		
MM	Geelong (43-0)			
IVIIVI	(Dissenters: None)			
Super MM	Geelong (14-0)			
Super will	(Dissente	rs: None)		
Uber MM	Gee	long		
Simplified	Gee	long		
Result	Geelong 24.			
noodit	West Coast 10.5 (65)			

13 Correct	Adelaide v (Football Park, 3)				
Sportsbet	\$1.85	\$1.90			
	47% - 54%	46% - 53%			
	Adelaide -61/2 pt	ts (\$1.90/\$1.90)			
Heritage	-				
Alpha	-				
Beta	-				
Chi	-				
Line	:=:				
Chi	Adelaide by 17				
Quila	Adelaide by 21				
Shadow	Western Bulldogs				
CTL	Western Bulldogs				
MARS	Adelaide				
MM	Western Bulldogs (34-9)				
-	(Dissenters: MM3-7, 26-28, 42)				
Super MM	Western Bulldogs (14-0)				
	(Dissente				
Uber MM	Western				
Simplified	Western				
Result	Adelaide 10 Western Bullo				

65 Correct	Carlton v (Docklands, 30tl	Hawthorn h August 2008)		
Sportsbet	\$3.00	\$1.36		
	26% - 33%	67% - 74%		
,	Carlton +18½ pt	s (\$1.90/\$1.90)		
Heritage	Lost 10.17%	6 (14.60%)		
Alpha	-			
Beta	-			
Chi	-			
Line	=			
Chi	Hawthor	n by 17		
Quila	Hawthor	n by 16		
Shadow	Hawt	horn		
CTL	Hawt	horn		
MARS	Hawt	horn		
MM	Hawthorn (43-0)			
IVIIVI	(Dissenter	s: None)		
Super MM	Hawthor	Hawthorn (14-0)		
Super iviivi	(Dissenter	s: None)		
Uber MM	Hawt	horn		
Simplified	Hawt	horn		
Result	Hawthorn 24.	15 (159) def		
Result	Carlton 1	2.9 (81)		

57 Correct	Sydney v (SCG, 30th A				
Sportsbet	\$1.42	\$2.75			
**	64% - 70%	30% - 36%			
	Sydney -15½ pt	s (\$1.90/\$1.90			
Heritage		2			
Alpha	-				
Beta	-				
Chi	-				
Line	-				
Chi	Sydney by 10				
Quila	Sydney by 9				
Shadow	Sydney				
CTL	Sydi	ney			
MARS	Sydi	ney			
MM	Sydney	(35-8)			
IVIIVI	(Dissenters: MM2-9)				
Super MM	Sydney	(14-0)			
Super iviivi	(Dissenter	s: None)			
Uber MM	Sydi	ney			
Simplified	Sydi	ney			
Result	Sydney 17.12 (114) def				
Result	Brisbane Lions 6.17 (53)				

65 Correct	Melbourne v (MCG, 31st A					
Sportsbet	\$4.50	\$1.18				
	15% - 22%	78% - 85%				
	Melbourne +281/2	ots (\$1.90/\$1.90)				
Heritage	Lost 8.69% (12.49%)					
Alpha	-					
Beta	-					
Chi	-					
Line	-					
Chi	Richmond by 9					
Quila	Richmond by 1					
Shadow	Richmond					
CTL	Richm	ond				
MARS	Richm	iond				
MM	Richmond (43-0)					
IVIIVI	(Dissenter	s: None)				
Super MM	Richmond (14-0)					
Super IVIIVI	(Dissenters: None)					
Uber MM	Richm	ond				
Simplified	Richm	ond				
Result	Richmond 18.13 (121) def					

65 Correct	Essendon v St Kilda (Docklands, 31st August 2008)
Sportsbet	\$5.75 \$1.12
	11% - 17% 83% - 89%
	Essendon +36½ pts (\$1.90/\$1.90)
Heritage	Lost 8.86% (12.73%)
Alpha	-
Beta	-
Chi	-
Line	- c
Chi	St Kilda by 10
Quila	St Kilda by 1
Shadow	St Kilda
CTL	St Kilda
MARS	St Kilda
MM	St Kilda (43-0)
IVIIVI	(Dissenters: None)
Super MM	St Kilda (14-0)
Super Iviivi	(Dissenters: None)
Uber MM	St Kilda
Simplified	St Kilda
Result	St Kilda 21.21 (147) def
Kesuit	Essendon 5.9 (39)

	Round 22 S	Statistics
Scoring	Winners	Losers
Goals	149	66
Behinds	115	78
Ave Score	134.1	67.3
Ave Marg	66.	9
Qtrs Won	Winners	Losers
1st	5.5	2.5
2nd	7	1
3rd	8	0
4th	8	0
Qtr Leads	Winners	Losers
End of 1st	5.5	2.5
End of 2nd	7	1
End 3rd	7	1
Tipping	Tipster	Score
1st	ВКВ	127
2nd	CTL, Chi	121
Last	MM40, 41 & 44	100
Ave Score	5.12 (Std De	ev = 0.45)

Results in Review

MAFL Funds

It was a round that promised delight and threatened disaster.

In the end, it delivered a little of each, leaving most Investors up by between 9 and 30%.

Amongst the games in which we had bets only Friday night's Freo v Pies contest was in doubt for a significant proportion of the match. In the end, Freo won by 24 points.

The other relevant contests produced margins of 76 points for Port over the Roos, 78 points for the Hawks over the Blues, 80 points for the Tigers over the Demons, and 108 points for the Saints over the Dons (sufficient, as it turned out, for the Saints to move into 4th, knocking the Crows into 5th and making their earlier comments about taking it up to the Cats look embarrassingly presumptuous).

Here's how each of the portfolios now look:

Investor #	Profit/Loss (%)
001	(19.17%)
002	(0.82%)
003	(21.53%)
004	(21.53%)
005	(11.79%)
006	(21.53%)
007	(21.53%)
008	(21.53%)
009	(21.53%)
012	(21.53%)
013	(21.53%)
014	(21.53%)
015	(40.84%)
016	(21.53%)

Recommended Portfolio

Worst (14.18%)

Best 45.04%

Expect (0.92%)

8.87%

Teams			Favour	ite Wins		Under	log Wins	
		Cover	s Spread	Doesn	't Cover			Expected
Favourite	Underdog	Prob	Return	Prob	Return	Prob	Return	Return
Collingwood	Fremantle	50%	(1.76%)	14%	(1.76%)	36%	2.82%	(0.12%)
Kangaroos	Port Adelaide	50%	(4.10%)	29%	(4.10%)	21%	14.36%	(0.27%)
Geelong	West Coast	50%	0.00%	42%	0.00%	8%	0.00%	0.00%
Adelaide	Western Bulldogs	50%	0.00%	1%	0.00%	49%	0.00%	0.00%
Hawthorn	Carlton	50%	(3.05%)	19%	(3.05%)	31%	6.10%	(0.20%)
Sydney	Brisbane Lions	50%	0.00%	16%	0.00%	34%	0.00%	0.00%
Richmond	Melbourne	50%	(2.61%)	29%	(2.61%)	21%	9.12%	(0.17%)
St Kilda	Essendon	50%	(2.66%)	34%	(2.66%)	16%	12.63%	(0.17%)

MIN #001

11.83%

Worst (18.91%)

Best 60.05%

Expect (1.23%)

Te	Teams		Favour	rite Wins		Under	dog Wins	
		Cover	s Spread	Doesn	't Cover			Expected
Favourite	Underdog	Prob	Return	Prob	Return	Prob	Return	Return
Collingwood	Fremantle	50%	(2.35%)	14%	(2.35%)	36%	3.76%	(0.16%)
Kangaroos	Port Adelaide	50%	(5.47%)	29%	(5.47%)	21%	19.15%	(0.36%)
Geelong	West Coast	50%	0.00%	42%	0.00%	8%	0.00%	0.00%
Adelaide	Western Bulldogs	50%	0.00%	1%	0.00%	49%	0.00%	0.00%
Hawthorn	Carlton	50%	(4.07%)	19%	(4.07%)	31%	8.14%	(0.26%)
Sydney	Brisbane Lions	50%	0.00%	16%	0.00%	34%	0.00%	0.00%
Richmond	Melbourne	50%	(3.48%)	29%	(3.48%)	21%	12.17%	(0.23%)
St Kilda	Essendon	50%	(3.54%)	34%	(3.54%)	16%	16.83%	(0.22%)

MIN #002

29.57%

Worst (47.28%)

Best 150.13%

Expect (3.07%)

Te	ams		Favour	ite Wins		Under	log Wins	
		Cover	s Spread	Doesn	't Cover			Expected
Favourite	Underdog	Prob	Return	Prob	Return	Prob	Return	Return
Collingwood	Fremantle	50%	(5.88%)	14%	(5.88%)	36%	9.41%	(0.41%)
Kangaroos	Port Adelaide	50%	(13.68%)	29%	(13.68%)	21%	47.88%	(0.89%)
Geelong	West Coast	50%	0.00%	42%	0.00%	8%	0.00%	0.00%
Adelaide	Western Bulldogs	50%	0.00%	1%	0.00%	49%	0.00%	0.00%
Hawthorn	Carlton	50%	(10.17%)	19%	(10.17%)	31%	20.34%	(0.65%)
Sydney	Brisbane Lions	50%	0.00%	16%	0.00%	34%	0.00%	0.00%
Richmond	Melbourne	50%	(8.69%)	29%	(8.69%)	21%	30.42%	(0.57%)
St Kilda	Essendon	50%	(8.86%)	34%	(8.86%)	16%	42 09%	(0.55%)

MIN #005

8.87%

Worst (14.18%)

Best 45.04%

1%

Expect (0.92%)

Te	ams		Favou	rite Wins		Under	dog Wins	
		Cover	s Spread	Doesn	t Cover			Expected
Favourite	Underdog	Prob	Return	Prob	Return	Prob	Return	Return
Collingwood	Fremantle	50%	(1.76%)	14%	(1.76%)	36%	2.82%	(0.12%)
Kangaroos	Port Adelaide	50%	(4.10%)	29%	(4.10%)	21%	14.36%	(0.27%)
Geelong	West Coast	50%	0.00%	42%	0.00%	8%	0.00%	0.00%
Adelaide	Western Bulldogs	50%	0.00%	1%	0.00%	49%	0.00%	0.00%
Hawthorn	Carlton	50%	(3.05%)	19%	(3.05%)	31%	6.10%	(0.20%)
Sydney	Brisbane Lions	50%	0.00%	16%	0.00%	34%	0.00%	0.00%
Richmond	Melbourne	50%	(2.61%)	29%	(2.61%)	21%	9.12%	(0.17%)
St Kilda	Essendon	50%	(2.66%)	34%	(2.66%)	16%	12.63%	(0.17%)

MIN #015

0.00%

Worst 0.00%

Best 0.00%

Expect 0.00%

Te	ams		Favour	rite Wins		Under	log Wins	
		Covers	s Spread	Doesn	t Cover			Expected
Favourite	Underdog	Prob	Return	Prob	Return	Prob	Return	Return
Collingwood	Fremantle	50%	0.00%	14%	0.00%	36%	0.00%	0.00%
Kangaroos	Port Adelaide	50%	0.00%	29%	0.00%	21%	0.00%	0.00%
Geelong	West Coast	50%	0.00%	42%	0.00%	8%	0.00%	0.00%
Adelaide	Western Bulldogs	50%	0.00%	1%	0.00%	49%	0.00%	0.00%
Hawthorn	Carlton	50%	0.00%	19%	0.00%	31%	0.00%	0.00%
Sydney	Brisbane Lions	50%	0.00%	16%	0.00%	34%	0.00%	0.00%
Richmond	Melbourne	50%	0.00%	29%	0.00%	21%	0.00%	0.00%
St Kilda	Essendon	50%	0.00%	34%	0.00%	16%	0.00%	0.00%

Surprisal

The fact that Investors made a profit probably tipped you off to the fact that this week was, in surprisal terms, officially "Unpredictable".

There have been 7 such rounds this year and all but 2 of them have been profitable for Investors with the Recommended Portfolio.

Such late-season unpredictability has gone some way towards moving the average surprisal per game for season 2008 closer to that for recent seasons.

Excluding draws, the average surprisals per game for season 2008 is 0.871. For the 2007 home-and-away season it was 0.922, for 2006 it was 0.880, and for 2005 it was 0.924.

Round	Average Surprisal per Winner (bits)	Number of Games included in Average	Number of Victorious Favourites	Ave MAFL Tipster Performance (SD in brackets)	Return for Rec. Portfolio
1	0.84 (Predictable)	8	5	4.54 (0.59)	1.57%
2	0.75 (Very Predictable)	8	7	5.06 (0.77)	(5.93%)
3	0.83 (Predictable)	8	6	5.49 (0.77)	(0.91%)
4	1.10 (Unpredictable)	8	5	4.37 (0.86)	4.54%
5	0.73 (Very Predictable)	7	6	5.58 (1.00)	(5.31%)
6	0.49 (Very Predictable)	7	7	6.05 (0.61)	(4.42%)
7	0.88 (Somewhat Predictable)	8	6	4.77 (0.93)	(0.22%)
8	0.55 (Very Predictable)	8	7	7.09 (0.72)	(9.22%)
9	1.16 (Unpredictable)	8	4	3.35 (0.87)	10.23%
10	0.57 (Very Predictable)	8	7	5.95 (0.51)	(3.01%)
11	0.67 (Very Predictable)	8	7	6.58 (0.86)	(20.68%)
12	0.81 (Predictable)	8	7	4.88 (0.72)	(6.16%)
13	1.09 (Unpredictable)	8	5	4.25 (0.66)	(1.83%)
14	1.07 (Unpredictable)	8	3	4.03 (0.85)	(1.10%)
15	0.72 (Very Predictable)	8	7	6.15 (0.78)	(0.93%)
16	0.94 (Somewhat Predictable)	8	5	4.22 (0.76)	10.85%
17	1.38 (Unpredictable)	8	3	2.37 (0.78)	10.06%
18	0.62 (Very Predictable)	8	7	6.72 (0.88)	(12.99%)
19	0.78 (Predictable)	8	5	5.23 (1.11)	4.66%
20	1.05 (Unpredictable)	8	4	4.69 (0.56)	2.42%
21	0.67 (Very Predictable)	8	7	5.32 (0.95)	(2.00%)
22	1.41 (Unpredictable)	8	4	5.12 (0.45)	8.87%

So, you might well ask, which teams have been responsible for producing surprise this season?

The table below is an update of the one we looked at after Round 14.

		W	/ins			Loss	ses		Dr	aws	Sur	prisals	Surprisals/Ga	ame
Team	# Games	Surprisals	Ave Surp/Win	Rank	# Games	Surprisals	Ave Surp/Loss	Rank	# Games	Surprisals	Total	Ex-Draws	Ave (ex Draws)	Rank
Carlton	10	13.9	1.39	3	12	11.4	0.95	9			25.2	25.2	1.15	1
Collingwood	12	10.4	0.87	10	10	12.0	1.20	4			22.4	22.4	1.02	2
Kangaroos	12	13.4	1.12	6	9	7.8	0.87	12	1	6.6	27.9	21.2	1.01	3
Port Adelaide	7	7.2	1.03	7	15	14.9	0.99	5			22.1	22.1	1.01	4
Richmond	11	14.6	1.32	4	10	6.1	0.61	14	1	6.6	27.3	20.7	0.98	5
St Kilda	1 3	12.6	0.97	8	9	8.7	0.97	7			21.3	21.3	0.97	6
Fremantle	6	5.4	0.89	9	16	15.2	0.95	8			20.6	20.6	0.94	7
Western Bulldogs	15	11.5	0.77	11	6	7.5	1.25	3	1	6.6	25.7	19.1	0.91	8
Essendon	8	9.7	1.21	5	14	10.2	0.73	13			19.9	19.9	0.90	9
Hawthorn	17	10.1	0.60	15	5	8.6	1.73	2			18.8	18.8	0.85	10
Brisbane Lions	10	6.6	0.66	13	12	11.9	0.99	6			18.5	18.5	0.84	11
Adelaide	1 3	9.9	0.76	12	9	8.1	0.90	10			18.0	18.0	0.82	12
West Coast	4	6.4	1.60	2	18	10.3	0.57	15			16.7	16.7	0.76	13
Sydney	12	7.3	0.61	14	9	7.9	0.88	11	1	6.6	21.8	15.2	0.72	14
Melbourne	3	5.3	1.78	1	19	8.7	0.46	16			14.0	14.0	0.64	15
Geelong	21	7.2	0.34	16	1	2.3	2.28	1			9.5	9.5	0.43	16
Total	174	151.6	0.87		174	151.6	0.87		4	26.6	329.7	303.1	0.87	

Carlton, it turns out, is the team whose results have been most surprising this year. On average each of the games in which they participated generated 1.15 bits of surprisal, an average that was 0.13 bits higher than the 2nd-placed Collingwood.

Carlton's 1.15 average came from a combination of the average 1.39 bits of surprisal associated with their 10 wins and the average 0.95 bits of surprisal associated with their 12 losses.

In contrast, Geelong is the team whose results were least surprising. On average their games generated just 0.43 bits of surprisal, this coming from an average 0.34 bits of surprisal for their 21 wins and 2.28 bits of surprisal for their solitary loss.

The award for "Team Whose Victories Were Most Surprising" goes to Melbourne. Their 3 wins yielded an average of 1.78 bits of surprisal. The Eagles were runners-up for this award, managing an average of 1.60 bits across their 4 victories.

Finally, the award for "Team Whose Losses Were Most Surprising" goes to the Cats. As noted earlier, their one loss generated 2.28 bits of surprisal. The runner-up for this award was Hawthorn who averaged 1.73 bits of surprisal across their 5 losses.

Tipping

Despite only 4 favourites winning this week, MAFL Tipsters averaged 5.12 correct tips this weekend, the eleventh highest average of the season. The victories of Fremantle, Port Adelaide and Adelaide did most to reduce the average.

The standard deviation, however, was just 0.45 tips, which is the smallest we've seen all season. This is reflected in the table at right showing the distribution of tipping performances this week and showing a huge concentration at 5 tips out of 8.

 Score
 # Tipsters

 7
 1

 6
 8

 5
 54

 4
 2

Quila recorded the week's best result of 7 from 8 while MM8 and MM9 recorded the week's worst result of just 4 from 8.

This year, as for the previous two, BKB has won our tipping competition. Its score of 127 from 176 (72.2%) is testimony to the predictability that we've already noted has prevailed this year.

Chi, along with CTL, has finished 2nd, scoring 121 from 176 (68.8%), a performance that would have been good enough for 1st in just about any other year.

Third position has gone to Shadow on 120 from 176 (68.2%), which you'd surely agree is a great performance for a dog, especially one that doesn't exist.

Last position is filled jointly by MM40, MM41 and MM44 all on a neat 100 from 176 (56.8%).

As ever running totals for all tipsters appear in pictorial form in the Appendix.

In looking at the MM, SMM, UM and SUM results, a couple of things are worthy of note:

- Across the 43 MM models, MM15 and MM16 were once again amongst the best. This year they scored 115 and 116 respectively; last year they each scored 113½. (Nonetheless, a 1 unit bet on all of MM16's tips would have produced a loss of \$10.87 this year.)
- Most of the SMM models outperformed the MM models, with both the simplest (ie those combining relatively few underlying MM models, such as SMM3) and the most complex (ie those combining many MM models, such as SMM33) performing particularly well.
- As predicted at the start of the season, the Simplified Über Model has outperformed the Über Model, almost certainly because the Über Model has been 'overfitted' to previous seasons' results and so generalised poorly to this season's results.

Team Quarter-by-Quarter Analysis

Here are the final team quarter-by-quarter results.

RESULT AT END OF EACH QUARTER BY TEAM

				Qu	arter	1					Q	uar	ter 2						Qua	arter 3						Q	uai	rter 4		
	R	W	D	L	PF	PA	%	R	W) [L	PF	PA	%	R	W	D	L	PF	PA	%	I	V	/ [)	L	PF	PA	%
Adelaide	11	9	2	11	434	448	96.9	5	13	3 0		9	956	865	110.5	5	14	1	7	1505	1294	116.3	- (1	3 () !) 2	2017	1838	109.7
Brisbane Lions	10	11	0	11	487	538	90.5	13	8	0	1	4 1	1058	1017	104.0	12	9	0	13	1656	1559	106.2	1	1) () 1	2 2	2156	2200	98.0
Carlton	3	13	1	8	527	504	104.6	10	10	0	1	2 1	1063	1117	95.2	14	6	1	15	1545	1792	86.2	1	1 1) () 1	2 2	2217	2354	94.2
Collingwood	9	11	0	11	495	497	99.6	4	14	. 0	1	3 1	1123	928	121.0	3	15	1	6	1718	1419	121.1	4	1	3 () !	9 2	2277	2028	112.3
Essendon	13	9	0	13	469	574	81.7	14	8	0	1	4	970	1272	76.3	13	9	0	13	1577	1905	82.8	1	2 8	- 1) 1	4	2130	2608	81.7
Fremantle	8	11	0	11	533	442	120.6	7	12	1		9 1	1021	1000	102.1	6	12	0	10	1564	1501	104.2	1	4 E	- 1) 1	6	1988	2121	93.7
Geelong	1	14	2	6	627	420	149.3	1	18	3 1	. :	3 1	1286	827	155.5	1	20	0	2	2010	1212	165.8	1	2	1 () :		2672	1651	161.8
Hawthorn	4	13	0	9	529	435	121.6	3	14	0	1	3 1	1097	878	124.9	4	15	0	7	1740	1408	123.6	1	1	7 (5 2	2434	1846	131.9
Kangaroos	2	14	2	6	574	457	125.6	12	9	0	1	3 1	1053	1093	96.3	7	11	0	11	1585	1634	97.0	2	1	2 :	L !	9 2	2121	2187	97.0
Melbourne	16	5	0	17	345	612	56.4	10	3	1	1	8	680	1293	52.6	16	2	0	20	1072	1927	55.6	1	5 3	- 3) 1	9 :	1629	2602	62.6
Port Adelaide	15	7	2	13	553	556	99.5	9	10	0	1	2 1	1104	1062	104.0	11	10	0	12	1622	1647	98.5	1	3 7) 1	5 2	2118	2208	95.9
Richmond	12	9	1	12	508	555	91.5	6	13	0	9	9 1	1148	1097	104.6	8	11	0	11	1651	1763	93.6	6	1	1	1 1	0 2	2228	2288	97.4
St Kilda	7	11	1	10	511	460	111.1	1:	9	1	_ 1	2	978	976	100.2	10	10	0	12	1507	1491	101.1		1	3 () !	9 2	2126	1923	110.6
Sydney	6	12	0	10	509	483	105.4	8	10	1	. 1	1	980	985	99.5	9	10	0	12	1495	1403	106.6	7	1	2 :	1 !	9 2	2095	1863	112.5
West Coast	14	8	1	13	433	567	76.4	15	5	0	1	7	845	1237	68.3	15	5	0	17	1246	1912	65.2	1	5 4) 1	8 :	1670	2535	65.9
Western Bulldogs	5	12	2	8	517	503	102.8	2	17	1		4 1	1237	952	129.9	2	15	1	6	1899	1525	124.5	.3	1	1 :	1	7 2	2496	2122	117.6
																							_							

QUARTERS WON, DRAWN & LOST BY TEAM

				Qu	arter	1						Qua	rter 2	2					Qua	rter 3	į.					Qua	arter 4		
	R	W	D	L	PF	PA	%		R	W	D	L	PF	PA	%	R	W	D	L	PF	PA	%	R	W	D	L	PF	PA	%
Adelaide	11	9	2	11	434	448	96.9	Ī	4	16	0	6	522	417	125.2	5	11	2	9	549	429	128.0	9	10	0	12	512	544	94.1
Brisbane Lions	10	11	0	11	487	538	90.5		6	13	0	9	571	479	119.2	11	10	0	12	598	542	110.3	16	6	1	15	500	641	78.0
Carlton	3	13	1	8	527	504	104.6		13	6	0	16	536	613	87.4	14	8	0	14	482	675	71.4	6	11	1	10	672	562	119.6
Collingwood	9	11	0	11	495	497	99.6		1	19	0	3	628	431	145.7	3	13	0	9	595	491	121.2	10	9	0	13	559	609	91.8
Essendon	13	9	0	13	469	574	81.7		14	6	0	16	501	698	71.8	8	11	0	11	607	633	95.9	13	9	0	13	553	703	78.7
Fremantle	8	11	0	11	533	442	120.6		9	10	2	10	488	558	87.5	7	12	0	10	543	501	108.4	14	8	0	14	424	620	68.4
Geelong	1	14	2	6	627	420	149.3		2	17	1	4	659	407	161.9	1	18	0	4	724	385	188.1	2	16	1	5	662	439	150.8
Hawthorn	4	13	0	9	529	435	121.6		5	14	1	7	568	443	128.2	6	12	0	10	643	530	121.3	1	17	0	5	694	438	158.4
Kangaroos	2	14	2	6	574	457	125.6		11	8	0	14	479	636	75.3	4	12	1	9	532	541	98.3	8	10	0	12	536	553	96.9
Melbourne	16	5	0	17	345	612	56.4		16	2	0	20	335	681	49.2	15	7	0	15	392	634	61.8	12	9	0	13	557	675	82.5
Port Adelaide	15	7	2	13	553	556	99.5		8	12	0	10	551	506	108.9	12	10	0	12	518	585	88.5	11	9	0	13	496	561	88.4
Richmond	12	9	1	12	508	555	91.5		7	12	2	8	640	542	118.1	13	9	0	13	503	666	75.5	5	13	0	9	577	525	109.9
St Kilda	7	11	1	10	511	460	111.1		12	7	1	14	467	516	90.5	9	10	1	11	529	515	102.7	4	14	0	8	619	432	143.3
Sydney	6	12	0	10	509	483	105.4		10	9	0	13	471	502	93.8	2	15	0	7	515	418	123.2	3	15	1	6	600	460	130.4
West Coast	14	8	1	13	433	567	76.4		15	5	1	16	412	670	61.5	16	5	2	15	401	675	59.4	15	7	0	15	424	623	68.1
Western Bulldogs	5	12	2	8	517	503	102.8		3	15	2	5	720	449	160.4	10	10	0	12	662	573	115.5	7	11	0	11	597	597	100.0

Accordingly, let me proclaim the following Premiers, Runners-Up and Wooden Spooners for the 8 Alternative Premierships.

Alternative Premiership	Premiers	Runners-Up	Wooden Spooners
During the 1st Quarter	Geelong	Kangaroos	Melbourne
During the 2nd Quarter	Collingwood	Geelong	Melbourne
During the 3rd Quarter	Geelong	Sydney	West Coast
During the 4th Quarter	Hawthorn	Geelong	Brisbane Lions
End of the 1st Quarter	Geelong	Kangaroos	Melbourne
End of the 2nd Quarter	Geelong	Western Bulldogs	Melbourne
End of the 3rd Quarter	Geelong	Western Bulldogs	Melbourne
End of the 4th Quarter	Geelong	Hawthorn	Melbourne

Before we leave the Alternative Premierships for another year, a couple of other things worthy of mention are:

- Carlton's inconsistency: 3rd best in Q1 performance, 6th best in Q4 performance, yet only 13th best in Q2 and 4th best in Q3 performances.
- Richmond would have made the 8 if all matches finished at three-quarter time.
- Sydney and the Roos both need to learn how to play 2nd quarters. They finished 10th and 11th respectively in the During the 2nd Quarter Premiership.
- Geelong almost outscored their opponents 2:1 in 3rd quarters this year (they managed 1.88:1).

Finally, let's take a look at the Overall Competition.

Geelong wins handily having lost fewer than one quarter per match so far this season putting them $10\frac{1}{2}$ quarters ahead of the 2^{nd} -placed Hawks. The Pies finished 3^{rd} , another $4\frac{1}{2}$ quarters further back.

The Dees collect the Spoon having averaged just over one winning quarter per game across the season. West Coast finish 2nd-last, 4 quarters ahead of the Dees.

The various correlations are as follows:

- Competition points with overall quarters won +0.935.
- Competition points with 1st quarters won +0.784.
- Competition points with 2nd quarters won +0.680.
- Competition points with 3rd quarters won +0.723.
- Competition points with 4th quarters won +0.754

	Tot	al Q	uar	ters	Won
	R	W	D	L	Pts
Adelaide	6	46	4	38	192
Brisbane Lions	11	40	1	47	162
Carlton	12	38	2	48	156
Collingwood	3	52	0	36	208
Essendon	14	35	0	53	140
Fremantle	10	41	2	45	168
Geelong	1	65	4	19	268
Hawthorn	2	56	1	31	226
Kangaroos	7	44	3	41	182
Melbourne	16	23	0	65	92
Port Adelaide	12	38	2	48	156
Richmond	8	43	3	42	178
St Kilda	9	42	3	43	174
Sydney	4	51	1	36	206
West Coast	15	25	4	59	108
Western Bulldogs	5	48	4	36	200

Whilst we're talking quarters, the table at right shows the position of the eventual winning team at the end of quarters 1, 2 and 3 (obviously they were all in the lead at the end of the 4^{th} quarter).

As you can see, in 65% of the games where there was a result the eventual winner was in the lead at the end of the 1st quarter. This percentage increases to 74% at half time and 82% at the end of the 3rd quarter.

Position of Winning			
Team As At The End Of	Led	Trailed	Was Tied
Quarter 1	113	54	7
Quarter 2	129	42	3
Quarter 3	143	29	2

Team In	Won	Lost	Drew
Quarter 1	113	54	7
Quarter 2	121	49	4
Quarter 3	126	45	3
Quarter 4	128	44	2

Another way to analyse the quarters is to look at how the eventual winning team performed in each quarter. This analysis appears in the table at left.

Here you can see that the eventual winner won about 65% of 1st quarters, about 70% of 2nd quarters, 72% of 3rd quarters, and just under 75% of 4th quarters.

Team Ratings Update

This week's round of huge margins saw 5 teams pick up more than 4½ ratings points: Port Adelaide (6.87), St Kilda (5.41), Richmond (5.18), Hawthorn (5.04) and Sydney (4.53). All recorded victories of 60 points or more.

The three other gainers were Fremantle (2.89), Geelong (2.22) and Adelaide (0.80).

Combined, these movements, along with the corresponding ratings point reductions for their respective opponents, have produced the ratings table as shown at right. (Also shown there is each team's ratings point increase or decrease across the entire season. Remember that teams start the season with a rating of 530 + 47% of their end-of-previous season rating).

Team	End R22	Initial	Δ
Geelong	1,065.8	1,027.4	+38.4
Hawthorn	1,033.6	1,002.9	+30.7
Western Bulldogs	1,014.6	988.4	+26.1
Sydney	1,013.4	1,010.7	+2.7
St Kilda	1,013.3	1,001.0	+12.2
Adelaide	1,012.3	1,008.4	+3.9
Collingwood	1,011.1	1,004.0	+7.0
Kangaroos	1,000.0	1,000.7	-0.7
Port Adelaide	998.3	1,007.4	-9.1
Fremantle	995.1	1,004.0	-8.9
Brisbane Lions	992.7	999.6	-7.0
Richmond	992.1	986.3	+5.8
Carlton	982.8	975.2	+7.5
Essendon	971.3	990.0	-18.7
West Coast	959.2	1,006.6	-47.4
Melbourne	944.7	987.2	-42.5

So, the teams that comprise the MARS Final 8 are the same teams that make up the competition top 8. Indeed, the top three MARS-rated teams are in the same order as the competition top 3. Of the remaining 5 teams, none have the same position on the MARS table as they do on the competition ladder.

Here's the round-by-round detail of each team's ratings:

Team	Initial	Δ R1	Δ R2	Δ R3	Δ R4	Δ R5	Δ R6	Δ R7	Δ R8	Δ R9	ΔR10	Λ R11	Δ R12	Λ R13	Δ R14	Δ R15	A R16	Δ R17	Δ R18	ΔR19	Δ R20	Δ R21	Δ R22	End R22
Geelong	1.027.4	+0.3	+5.4	+0.3	+2.7	+3.0	-1.4	+0.9	+1.1	-7.5	+3.0	+0.1	+3.7	+4.4	+4.8	+3.7	+3.9	-0.1	+2.8	+2.6	+2.0	+0.6	+2.2	1,065.8
Hawthorn	1,002.9	+5.5	+1.4	+1.4	+3.8	+0.8	-0.1	+5.0	+0.7	-0.3	-3.7	+2.8	+0.4	-3.8	+3.2	+2.8	-3.5	+0.1	+4.6	+4.7	-4.3	+3.9	+5.0	1,033.6
Western Bulldogs	988.4	+0.8	+6.3	+3.5	+2.7	-0.8	+4.6	+2.5	+0.0	-0.8	+3.7	+2.3	+5.3	+0.6	+4.0	+0.1	-3.9	-4.4	+1.6	-2.3	-1.5	+2.6	-0.8	1,014.6
Sydney	1,010.7	-0.3	+5.4	+1.2	+4.4	-3.0	-0.4	-2.5	+4.6	+0.8	+5.0	-0.9	+1.9	+0.9	-3.5	-2.8	-1.2	-3.1	-1.6	-0.6	-2.0	-4.2	+4.5	1,013.4
St Kilda	1,001.0	+0.3	+2.3	-3.5	-2.7	+2.7	-1.7	-0.3	-0.9	-3.6	+5.0	-2.3	-1.9	+0.6	+1.6	+2.6	+3.5	-2.8	+0.4	-0.9	+4.0	+4.5	+5.4	1,013.3
Adelaide	1,008.4	-0.8	+6.0	-0.1	-3.8	+0.8	+1.7	+2.4	+4.2	-5.5	-1.5	+3.7	-0.4	-1.4	-4.8	-2.4	-1.3	+3.1	-0.4	+4.3	+4.0	-4.5	+0.8	1,012.3
Collingwood	1,004.0	+2.2	-0.3	+3.4	-3.5	-1.1	+5.1	-5.0	+0.9	+7.5	+5.3	-0.1	-4.6	-0.6	+3.5	+2.4	-2.4	-5.5	-4.6	+0.9	+2.4	+4.2	-2.9	1,011.1
Kangaroos	1,000.7	-5.4	+3.7	-1.4	+3.6	+1.1	+0.4	-2.4	-0.0	+0.8	-2.4	-0.1	-4.8	+3.8	-1.6	+0.5	+2.4	+1.1	+0.9	+2.3	+4.2	-0.6	-6.9	1,000.0
Port Adelaide	1,007.4	-0.3	-5.4	+0.1	-2.3	+2.4	+1.7	+4.8	-0.7	-0.8	+2.3	-2.7	-3.7	-1.4	-4.0	-0.5	+1.3	-3.1	-0.4	-5.7	-2.4	+4.9	+6.9	998.3
Fremantle	1,004.0	-2.2	-1.4	+1.6	-6.5	-0.8	+1.4	-1.6	+0.0	-1.4	-2.3	-1.1	+4.8	-0.6	-1.5	-3.7	+2.7	+3.1	+1.8	+0.6	-4.0	-0.7	+2.9	995.1
Brisbane Lions	999.6	-1.0	+0.3	-1.2	+2.3	-0.8	+3.1	-0.9	+2.4	+3.6	+2.4	+1.1	-5.3	+1.4	-1.9	-4.3	+2.6	-0.9	-0.9	-4.7	+1.5	-1.3	-4.5	992.7
Richmond	986.3	+2.6	-3.7	-3.4	+6.5	+0.8	+0.1	+0.3	-1.1	+3.0	-5.0	-3.7	+1.1	+1.4	-3.3	+6.3	-0.2	+0.9	-2.8	-4.3	+4.3	+0.7	+5.2	992.1
Carlton	975.2	-2.6	-2.3	-0.5	+3.5	+3.2	-1.7	+4.2	-2.4	+1.4	-3.0	+2.7	+4.6	-4.0	+3.3	-2.6	+1.2	+4.4	+0.4	+5.7	-4.2	+1.3	-5.0	982.8
Essendon	990.0	+5.4	-5.4	+0.5	-2.7	-2.7	-5.1	-4.8	-4.6	-3.0	+1.5	-2.8	+2.6	+4.0	+1.5	+4.3	+0.2	+5.5	+0.1	-1.4	-4.0	-2.6	-5.4	971.3
West Coast	1,006.6	+1.0	-6.0	-1.6	-4.4	-2.4	-4.6	-4.2	+0.0	+5.5	-5.3	+0.9	-2.6	-4.4	-3.2	-6.3	-2.6	+2.8	-1.8	+1.4	-3.6	-3.9	-2.2	959.2
Melbourne	987.2	-5.5	-6.3	-0.3	-3.6	-3.2	-3.1	+1.6	-4.2	+0.3	-5.0	+0.1	-1.1	-0.9	+1.9	-0.1	-2.7	-1.1	-0.1	-2.6	+3.6	-4.9	-5.2	944.7

Sydney picked up ratings points this week for the first time in 9 weeks to grab 4th place from St Kilda, who'd collected almost 14 ratings points in the last 3 rounds.

Looking next at the MARS Rankings, we have the following:

n I	Initial	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15	R16	R17	R18	R19	R20	R21	R22
ong	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
horn	8	3	4	4	3	3	3	2	2	2	4	3	3	4	4	3	3	2	2	2	2	2	2
tern Bulldogs	13	13	12	10	6	8	6	6	5	7	6	6	4	3	3	2	4	4	3	4	5	3	3
ey	2	2	2	2	2	2	2	3	3	3	2	2	2	2	2	4	2	3	4	3	4	6	4
lda	9	9	6	8	10	9	10	10	10	10	10	10	10	10	9	8	8	9	9	8	8	7	5
aide	3	5	3	3	4	4	4	4	4	4	5	5	5	5	6	6	6	6	5	5	3	5	6
ngwood	6	7	5	5	5	5	5	7	7	5	3	4	6	6	5	5	5	5	6	6	6	4	7
aroos	10	12	10	12	7	6	8	9	9	9	9	9	11	9	10	10	9	8	8	7	7	8	8
Adelaide	4	6	7	7	9	7	7	5	6	8	8	8	8	8	8	9	10	10	11	12	12	11	9
antle	7	8	9	6	12	11	11	11	11	11	11	11	9	11	11	11	11	11	10	10	10	10	10
ane Lions	11	10	11	11	8	10	9	8	8	6	7	7	7	7	7	7	7	7	7	9	9	9	11
mond	15	14	14	14	13	13	12	12	12	12	12	13	12	12	12	12	12	12	12	14	13	13	12
on	16	16	16	16	15	15	15	14	14	14	14	14	14	14	13	13	13	13	13	11	11	12	13
ndon	12	11	13	13	14	14	14	15	15	15	15	15	15	15	15	14	14	14	14	13	14	14	14
t Coast	5	4	8	9	11	12	13	13	13	13	13	12	13	13	14	15	15	15	15	15	15	15	15
ourne	14	15	15	15	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
t Coast	5	4	8	9	11	12	13	13	13	13	13	12	13	13	14	15	15	15		15	15	_	15

As we noted last week, MARS did quite a good job this year in identifying the quality teams early on. The only team to move more than a few spots between Round 4 and Round 22 was St Kilda and they did this only in the last few rounds.

Here's the final competition ladder:

Team	Pts	%	GF	BF	PF	Rushed	Acc %	Rank	GA	BA	PA	1	2	3 4	1 5	6	7	8 :	9 1	11	12	13	14	15	16	17	18	19	20	21 2	2
Geelong	84	161.8	392	320	2,672	88	62.8%	3	237	229	1,651	w	w	w v	v w	w	w	w	L V	/ W	w	W	W	w	w	w	w	w	w	w١	N
Hawthorn	68	132.3	354	310	2,434	56	58.2%	12	265	250	1,840	w	W	w v	v w	w	w	w١	V L	W	w	L	w	W	L	L	w	W	L	w v	N
Western Bulldogs	62	118.7	371	280	2,506	67	63.5%	2	308	264	2,112	w	W	w v	V D	W	W	W	L V	/ W	W	W	W	W	L	L	w	L	L	W	L
St Kilda	52	110.6	309	272	2,126	56	58.9%	10	278	255	1,923	w	w	L I	W	L	w	L	L V	L	L	W	w	w	w	L	w	L	w	w١	N
Adelaide	52	109.7	287	295	2,017	68	55.8%	15	260	278	1,838	L	W	w I	W	w	w	W	L V	/ W	L	L	L	L	L	w	w	w	w	L \	N
Sydney	50	112.5	302	283	2,095	51	56.6%	13	266	267	1,863	L	w	w v	V L	D	L	w١	v v	/ W	w	W	L	L	w	L	L	w	L	L \	N
Kangaroos	50	97.0	310	261	2,121	66	61.4%	8	318	279	2,187	L	w	L V	v w	D	L	w v	V L	L	L	w	L	w	w	w	w	w	w	L	L
Collingwood	48	111.2	331	281	2,267	77	61.9%	6	296	262	2,038	w	L	w i	L	w	L	w١	v v	/ w	L	L	w	w	L	L	L	w	w	w	L
Richmond	46	97.4	331	242	2,228	43	62.5%	4	335	278	2,288	w	L	L V	V D	L	L	L V	V L	L	W	W	L	W	w	w	L	L	w	w v	N
Brisbane Lions	40	98.0	306	320	2,156	82	56.3%	14	322	268	2,200	L	w	L V	V L	w	L	w١	v v	/ W	L	W	L	L	w	L	L	L	w	L I	L
Carlton	40	94.2	323	279	2,217	82	62.1%	5	345	284	2,354	L	L	L V	v w	L	w	L V	V L	w	w	L	w	L	L	w	L	w	L	w	L
Essendon	32	81.7	315	240	2,130	66	64.4%	1	384	304	2,608	w	L	w	L	L	L	L	L L	L	w	W	w	W	L	w	W	L	L	L	L
Port Adelaide	28	95.9	309	264	2,118	70	61.4%	7	321	282	2,208	L	L	L I	W	w	w	L	L V	L	L	L	L	L	w	L	L	L	L	w١	N
Fremantle	24	93.7	287	266	1,988	69	59.3%	9	310	261	2,121	L	L	w	L	L	L	L	L L	L	w	L	L	L	w	w	w	L	L	L \	N
West Coast	16	65.9	236	254	1,670	63	55.3%	16	375	285	2,535	w	L	L I	L	L	L	L V	V L	L	L	L	L	L	L	w	L	w	L	L	L
Melbourne	12	62.6	234	225	1,629	60	58.6%	11	376	346	2,602	L	L	L I	L	L	W	L I	L L	L	L	L	W	L	L	L	L	L	w	L	L

St Kilda's huge victory over Essendon was only just large enough to lift their percentage above Adelaide's. Given Essendon's score of 39 the Saints needed at least 132 points to hurdle the Crows; alternatively, given the Saints score of 147, they needed to keep the Dons below 53 points. So, either way you look at it, the Saints made 4th by a bit over 2 goals.

I'd like to draw your attention to a few things in the final table:

- Geelong kicked the most goals of any team (392). They also, equal with Brisbane, scored the most behinds (320). Of their 320 behinds, 88 were rushed, the highest number for any team in the competition
- Melbourne kicked the fewest goals (234) and registered the fewest behinds (225).
- Richmond registered the fewest rushed behinds
- Only two teams scored fewer goals than behinds: Brisbane and West Coast
- Melbourne conceded the most goals (376) and the most behinds (346)
- Geelong conceded the fewest goals (237) and the fewest behinds (229)
- Only two teams conceded fewer goals than behinds: Adelaide and Sydney
- The correlation between competition points and:
 - o Percentage was +0.95
 - o Goals For was +0.87
 - o Behinds For was +0.71
 - o Points For was +0.89
 - o Goals Against was -0.81

- o Behinds Against was -0.77
- o Points Against was -0.82
- o Rushed Behinds was +0.16
- o Kicking Accuracy was +0.25

Entering the finals then only two teams have a winning streak of 3 games or more: St Kilda whose streak is exactly 3 games and Geelong whose streak is now 13 games.

The Roos have the longest losing streak of any of the teams participating in the finals. Their losing streak stands at 2 games.

Speaking of streaks, Richmond certainly finished the season with some momentum, winning their last 3 games, 6 of their last 8 games, and 8 games in the second half of the season. What killed their finals chances was losing 5 of the last 6 games in the first half of the season.

To finish off this week let's have a look at the margins of victory and defeat that each team has produced this season (see table below right).

			Losing I	Margin			Draw	Winning Margin									
	36+	24-35	18-23	12-17	6-11	1-5	0	1-5	6-11	12-17	18-23	24-35	36+				
Adelaide	4	1	0	2	0	2	0	1	3	1	0	3	5				
Brisbane Lions	4	1	0	3	2	2	0	1	1	1	2	2	3				
Carlton	4	5	0	1	1	1	0	0	2	1	1	4	2				
Collingwood	3	2	2	0	2	1	0	0	1	1	1	4	5				
Essendon	9	1	0	0	1	2	0	1	0	2	1	1	3				
Fremantle	3	2	1	2	4	4	0	0	0	1	0	3	2				
Geelong	1	0	0	0	0	0	0	1	2	1	0	4	13				
Hawthorn	0	4	0	0	1	0	0	1	0	5	1	1	9				
Kangaroos	3	3	0	3	0	0	1	2	3	0	2	2	3				
Melbourne	10	4	3	1	0	0	0	1	1	0	0	1	0				
Port Adelaide	4	2	1	2	4	2	0	0	0	1	1	2	3				
Richmond	6	2	0	1	0	1	1	3	1	0	1	2	3				
St Kilda	3	2	1	2	1	0	0	2	2	1	0	2	5				
Sydney	3	3	1	1	0	1	1	3	1	1	0	1	6				
West Coast	11	3	1	1	1	1	0	0	1	2	0	0	1				
Western Bulldogs	1	1	1	0	2	1	1	2	1	1	1	4	6				
	69	36	11	19	19	18	4	18	19	19	11	36	69				

Note in particular the records of certain teams in games decided by less than 2 goals:

Fremantle: 0 and 8Port Adelaide: 0 and 6

• The Roos: 5 and 0 (and a draw)

• Geelong: 3 and 0

• Sydney: 4 and 1 (and a draw)

• St Kilda: 4 and 1

• Richmond: 4 and 1 (and a draw)

'til Thursday Tony 31 August 2008

Appendix 1 : Cumulative Tipping Performance – All Tipsters

100	101	102	103	104	105	106	107	108	109	110	111	112		114	115	116	117	118	119	120	121	122	123	124	125	126	127
								MM10	ммэ		MM8	MM3 MM4	MM2	MM6 MM7	мм5												
									MM18 MM19					MM11 MM12 MM14	MM15 MM17	MM13											
						MM23	MM22	MM20 MM21 MM24 MM25			MM26 MM27																
					MM35		ммзз	MM30 MM32 MM34	MM29		MM31	MM28															
MM40 MM41 MM44	MM43	3	MM42	MM38	MM37												SM3										
											SM16		SM9	SM4 SM7 SM8			SM5 SM6	SM11 SM13									
													UM		SM21	SM19	SM23	SM33	SUM								ВКВ
100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	MARS 115	116	117	118	QТМ 119	stm 120	сть стм 121	122	123	124	125	126	127