		R	ound 9 Res	ults			
0 Correct	Collingwood v Gee	elong = 15 Correct	Carlton V	Fremantle	56 Correct	Pt Adelaide v	
Sportsbet	()	S1.18 Sportsbet	\$1.80	\$1.95	Sportsbet	\$1.52	\$2.45
	15% - 22% 78	% - 85%	49% - 56%	44% - 51%		59% - 66%	34% - 41%
	Collingwood +27½ pts (\$1	STATE OF THE PARTY	Carlton -6½ pts	(\$2.02 / \$1.78)		Pt Adelaide -11½	ots (\$1.90 / \$1.90)
Heritage	Won 35.17% (55.4		-		Heritage	-	
Alpha Beta	-	Alpha	-		Alpha Beta	-	
Chi	-	Chi			Chi	Lost 3.70%	6 (4.23%)
Line	-	Line	-		Line	-	<u> </u>
Chi	Geelong by 11	Chi	Freman	tle by 1	Chi	Port Adel	aide by 9
Quila	Geelong by 5	Quila	Carlto		Quila	Port Adela	
Shadow	Geelong	Shadow	Carl		Shadow	Sydi	
MARS	Geelong Geelong	CTL	Carl Frem		MARS	Syd: Syd:	
	Geelong (43-0)		Fremantl		*************	Sydney	
MM	(Dissenters: None,	IVIIVI	(Dissenters		MM	(Dissenters: MN	-
Super MM	Geelong (14-0)	Super IVIIVI	Fremant		Super MM	Sydney	
	(Dissenters: None,		(Dissente			(Dissenter	
Uber MM Simplified	Geelong Geelong	Uber MM Simplified	Frem		Uber MM Simplified	Syd: Syd:	
•	Collingwood 20.14 (1	34) def	Carlton 14.			Sydney 16.9	
Result	Geelong 7.6 (48	Result	Fremantle		Result	Port Adelaid	
36 Correct	Essendon v Richi (MCG, 24th May 200		West Coast V (Subiaco, 24)	Adelaide	15 Correct	Bris Lions v (Gabba, 25th	The state of the s
Sportsbet	\$3.05	Sportsbet	\$3.60	\$1.26	Sportsbet	\$1.20	\$4.20
		% - 74%	21% - 28%	72% - 79%		76% - 83%	17% - 24%
	Essendon +19½ pts (\$1.90	100 A	West Coast +22½			Bris Lions -28½ pt	ts (\$1.90 / \$1.90)
Heritage	Lost 7.10% (11.19		Won 19.82		Heritage	-	
Alpha Beta	-	Alpha			Alpha Beta	-	
Chi	-	Chi	-		Chi	-	
Line	-	Line	-		Line	-	
Chi	Richmond by 1	3 Chi	Adelaid	e by 12	Chi	Brisbane Li	ons by 11
Quila	Richmond by 1		Adelaid		Quila	Brisbane Li	
Shadow	Essendon Richmond	Shadow	Adel		Shadow	St Ki	
MARS	Richmond	MARS	Adel Adel		MARS	Brisban Brisban	
	Essendon (26-1	7)	Adelaid			St Kilda	
MM	(Dissenters: MM2-17	MIM	(Dissenter		MM	(Dissenters:	
Super MM	Richmond (12-2	Super MM	Adelaid	e (14-0)	Super MM	St Kilda	(14-0)
	(Dissenters: SM21, SN	123)	(Dissente			(Dissenter	
Uber MM	Richmond	Uber MM	Adel		Uber MM	Brisban	
Simplified	Richmond Richmond 16.14 (11)	Simplified	West Coast 1		Simplified	Brisbane Lions 2	
Result	Essendon 10.12 (Result	Adelaide	The state of the s	Result	St Kilda 14	
65 Correct	Melbourne v Haw	3U Correct	W Bulldogs \			Round 9 S	Statistics
Sportsbet	(MCG, 25th May 200 \$11.00	8) S1.03 Sportsbet	(Docklands, 2) \$1.40	\$2.80	Scoring	Winners	Losers
oportsuet	Control of the Contro	% - 97%	64% - 71%	29% - 36%	Goals	131	92
	Melbourne +48½ pts (\$1.9		W Bulldogs -171/2		Behinds	108	80
Heritage	Lost 11.95% (18.8				Ave Score	119.8	87.0
Alpha	-	Alpha	-		Ave Marg	32	
Beta	-	Beta	-		Qtrs Won	Winners	Losers
Chi Line	-	Chi			1st 2nd	6.5 4	1.5 4
Chi	Hawthorn by 1		Western Bu	Illdogs by 9	3rd	5.5	2.5
Quila	Hawthorn by 1		Western Bu		4th	6	2
Shadow	Hawthorn	Shadow	Western	Bulldogs	Qtr Leads	Winners	Losers
CTL	Hawthorn	CTL	Western		End of 1st	6.5	1.5
MARS	Hawthorn (42 (MARS	Western		End of 2nd	6	2
MM	Hawthorn (43-0 (Dissenters: None,	MIM	(Dissenters: MM2-		End 3rd Tipping	6 Tipster	2 Score
	Hawthorn (14-0))	Kangaro		1st	BKB	54
Super MM	(Dissenters: None,	Super MIM	(Dissenters: SM4	the state of the s	2nd	CTM, MARS	52
Uber MM	Hawthorn	Uber MM	Western		Last	MM35	40
Simplified	Hawthorn	Simplified	Western				
Result	Hawthorn 14.13 (97	Result	Kangaroos 16		Ave Score	3.35 (Std D	ev = 0.87)
	Melbourne 12.6 (78)	W Bulldogs	16.14 (110)			

Results in Review

MAFL Funds

I should be happier.

This weekend's results have dragged the Heritage Fund up almost 36c to \$0.9940 vindicating its broad strategy and proving its continued ability to sniff out value.

But there are buts.

Port Adelaide could so easily have toppled the Swans. Instead the Chi Fund dropped another 3.7c to be at \$0.8385, and what once was a mighty 5 and 1 record is now a paltry 5 and 4.

And Melbourne – yes Melbourne – led the Hawks part way through the final term, teasing us with the prospect of a \$2 Heritage Fund share price, only for them to wonder and stumble and come up 19 points short.

At the end of it all there's still far too much red in that table on the right.

Next week ...

Investor #	Profit/Loss (%)
001	(9.23%)
002	(0.60%)
003	(9.68%)
004	(9.68%)
005	(14.29%)
006	(9.68%)
007	(9.68%)
008	(9.68%)
009	(9.68%)
010	-
011	-
012	(9.68%)
013	(9.68%)
014	(9.68%)
015	(8.64%)
016	(9.68%)

Tipping

It had to come: a round in which the favourites struggled and, in more than a few cases, lost.

All of which is reflected in the average tipster performance, which this week stands at a meagre 3.35 from 8, comfortably the lowest average of the season by over 1 whole tip. The Sydney and Hawthorn wins were the only results foreseen by a majority of MAFL tipsters; the Cats', Crows', Dockers' and Saints' losses were all particularly under-predicted.

Tipsters
7
19
29
10

The Round's best tipsters were MM2, MM6, MM7, MM8, MM17, CTL, and SUM, each of whom scored 5. The worst tipsters comprised a ragtag of longer-memoried MM models and one SM model – SM21. They each scored just 2 from 8.

Overall, BKB is now on 54 from 72 (75%), two tips clear of Chi and MARS, each on 52 from 72 (72%), followed by MM2, CTL and SUM, each on 51 from 72 (71%). In last place, on 40 from 72, is MM35.

Running totals for all tipsters appear in pictorial form in Appendix 1.

Surprisal

This was only the second time we've seen a round proclaimed "Unpredictable" based on the average surprisal of each game's result. Indeed, based on surprisal, this was the season's most surprising round.

Round	Average Surprisal per Winner (bits)	Number of Games included in Average	Number of Victorious Favourites	Ave MAFL Tipster Performance (SD in brackets)
1	0.84 (Predictable)	8	5	4.54 (0.59)
2	0.75 (Very Predictable)	8	7	5.06 (0.77)
3	0.83 (Predictable)	8	6	5.49 (0.77)
4	1.10 (Unpredictable)	8	5	4.37 (0.86)
5	0.73 (Very Predictable)	7	6	5.58 (1.00)
6	0.49 (Very Predictable)	7	7	6.05 (0.61)
7	0.88 (Somewhat Predictable)	8	6	4.77 (0.93)
8	0.55 (Very Predictable)	8	7	7.09 (0.72)
9	1.16 (Unpredictable)	8	4	3.35 (0.87)

Team Quarter-by-Quarter Analysis

Yet again the tables below show how each team is performing on a quarter-by-quarter basis.

RESULT AT END OF EACH QUARTER BY TEAM

				1	Quar	ter 1			Quarter 2								Quarter 3								Quarter 4								
	R	W	D	L	Pts	PF	PA	%	R	W	D	L	Pts	PF	PA	%	1	R	W	D	L	Pts	PF	PA	%	R	W	D	L	Pts	PF	PA	%
Adelaide	9	3	2	4	16	191	180	106.1	5	6	0	3	24	405	342	118.4	-	4	6	0	3	24	663	547	121.2	4	6	0	3	24	914	773	118.2
Brisbane Lions	6	6	0	3	24	221	216	102.3	9	4	0	5	16	466	410	113.7	1	2	3	0	6	12	734	648	113.3	8	5	0	4	20	966	885	109.2
Carlton	4	6	1	2	26	238	219	108.7	7	6	0	3	24	489	432	113.2	1	1	4	0	5	16	681	677	100.6	9	4	0	5	16	891	938	95.0
Collingwood	11	4	0	5	16	228	226	100.9	3	6	0	3	24	505	408	123.8		2	7	0	2	28	738	601	122.8	7	5	0	4	20	1000	859	116.4
Essendon	16	1	0	8	4	138	289	47.8	15	2	0	7	8	374	605	61.8	1	4	2	0	7	8	641	866	74.0	14	2	0	7	8	807	1167	69.2
Fremantle	14	2	0	7	8	204	207	98.6	11	4	0	5	16	417	440	94.8		7	5	0	4	20	647	631	102.5	15	1	0	8	4	813	940	86.5
Geelong	10	4	0	5	16	217	213	101.9	6	6	0	3	24	467	400	116.8	· G	3	7	0	2	28	710	586	121.2	2	8	0	1	32	958	764	125.4
Hawthorn	7	5	0	4	20	217	214	101.4	2	6	0	3	24	464	366	126.8		1	8	0	1	32	770	608	126.6	1	9	0	0	36	1086	784	138.5
Kangaroos	1	6	2	1	28	244	159	153.5	13	3	0	6	12	405	431	94.0	14	8	5	0	4	20	647	638	101.4	6	5	1	3	22	859	858	100.1
Melbourne	15	1	0	8	4	137	263	52.1	16	1	0	8	4	283	557	50.8	1	16	0	0	9	0	436	866	50.3	16	1	0	8	4	701	1152	60.9
Port Adelaide	8	4	1	4	18	265	206	128.6	8	5	0	4	20	513	425	120.7	1	0	4	0	5	16	727	684	106.3	12	3	0	6	12	921	941	97.9
Richmond	13	3	1	5	14	219	237	92.4	10	4	0	5	16	453	452	100.2	- 12	9	5	0	4	20	678	722	93.9	11	3	1	5	14	920	918	100.2
St Kilda	5	6	0	3	24	238	185	128.6	12	3	1	5	14	428	443	96.6	1	13	3	0	6	12	616	694	88.8	10	4	0	5	16	840	915	91.8
Sydney	2	7	0	2	28	235	172	136.6	1	6	1	2	26	427	349	122.3	-	6	5	0	4	20	639	496	128.8	5	5	1	3	22	868	681	127.5
West Coast	12	4	0	5	16	178	209	85.2	14	3	0	6	12	339	467	72.6	1	5	2	0	7	8	512	707	72.4	13	2	0	7	8	699	912	76.6
Western Bulldogs	3	6	1	2	26	263	238	110.5	4	6	0	3	24	546	454	120.3	- 72	5	6	0	3	24	833	701	118.8	3	7	1	1	30	1140	896	127.2

QUARTERS WON, DRAWN & LOST BY TEAM

PA % 26 111.1 37 97.9 61 80.5
37 97.9 61 80.5
61 80.5
58 101.6
01 55.1
09 53.7
78 139.3
76 179.5
20 96.4
86 92.7
57 75.5
96 123.5
21 101.4
85 123.8
05 91.2
95 157.4
30 11 22 28 29 19 20 18 20

In breaking Heritage Fund Investor hearts, the Hawks preserved their perfect 4th-quarter record this weekend, winning their 9th straight final term in toppling the Dees at the G. Fremantle continue to struggle in final terms and now have a 1 and 8 record and a 53.7 percentage.

Melbourne, meantime, in scaring the Hawks on Sunday, have collected their first 1st and 2nd quarter victories this season, leaving Essendon now with the worst 1st quarter record of all teams.

Geelong are building a reputation for being slow starters. They're now 4 and 5 in 1st quarters.

The table at right shows the number of total quarters won, drawn and lost for every. The top 8 once again comprises only those teams who have a better than 50% win-loss quarters record. It also comprises the same teams that make up the top 8 of the competition ladder.

Furthermore, a strong correspondence remains between these quarter-by-quarter results and competition performance. The correlation between the points shown here and competition ladder points is +0.931.

	Tot	al Q	uar	ters	Won
	R	W	D	L	Pts
Adelaide	5	19	4	13	84
Brisbane Lions	7	19	1	16	78
Carlton	10	17	1	18	70
Collingwood	5	21	0	15	84
Essendon	15	11	0	25	44
Fremantle	14	12	0	24	48
Geelong	2	23	0	13	92
Hawthorn	1	26	0	10	104
Kangaroos	8	18	2	16	76
Melbourne	16	7	0	29	28
Port Adelaide	10	17	1	18	70
Richmond	9	17	2	17	72
St Kilda	12	16	0	20	64
Sydney	4	22	1	13	90
West Coast	13	13	2	21	56
Western Bulldogs	2	22	2	12	92

Team Ratings Update

Collingwood's shock and thumping win over the Cats earned it a $7\frac{1}{2}$ ratings point increase, propelling it into 5th spot on MARS Ratings. West Coast's surprising and similarly comprehensive victory dropped the Crows rating by $5\frac{1}{2}$ points, but Port's loss allowed the Crows to retain 4th spot.

In other sizeable ratings points shifts the Lions gained 3.6 points at the expense of the Saints, and the Tigers grabbed 3 points from the Dons.

The Hawks, again, though winning, did so by an insufficiently large margin to preserve their ratings points position. They dropped 0.2 of a point this week.

The table below has the current Ratings details.

Team	Initial	Δ R1	End R1	Δ R2	End R2	Δ R3	End R3	Δ R4	End R4	Δ R5	End R5	∆ R6	End R6	Δ R7	End R7	Δ R8	End R8	ΔR9	End R9
Geelong	1,027.4	+0.3	1,027.7	+5.4	1,033.1	+0.3	1,033.4	+2.7	1,036.1	+3.0	1,039.1	-1.4	1,037.7	+0.9	1,038.6	+1.1	1,039.7	-7.5	1,032.2
Sydney	1,010.7	-0.3	1,010.4	+5.4	1,015.7	+1.2	1,017.0	+4.4	1,021.4	-3.0	1,018.4	-0.4	1,018.0	-2.5	1,015.5	+4.6	1,020.1	+0.9	1,021.0
Hawthorn	1,002.9	+5.5	1,008.5	+1.4	1,009.9	+1.4	1,011.2	+3.8	1,015.0	+0.8	1,015.8	-0.1	1,015.7	+5.0	1,020.8	-0.2	1,020.6	-0.2	1,020.4
Adelaide	1,008.4	-0.8	1,007.6	+6.0	1,013.6	-0.1	1,013.5	-3.8	1,009.7	+0.8	1,010.6	+1.7	1,012.2	+2.4	1,014.7	+4.2	1,018.8	-5.5	1,013.3
Collingwood	1,004.0	+2.2	1,006.2	-0.3	1,006.0	+3.4	1,009.3	-3.5	1,005.8	-1.1	1,004.7	+5.1	1,009.8	-5.0	1,004.7	+0.9	1,005.6	+7.5	1,013.1
Port Adelaide	1,007.4	-0.3	1,007.0	-5.4	1,001.7	+0.1	1,001.8	-2.3	999.5	+2.4	1,001.8	+1.7	1,003.5	+4.8	1,008.3	+0.2	1,008.5	-0.9	1,007.7
Brisbane Lions	999.6	-1.0	998.6	+0.3	998.9	-1.2	997.7	+2.3	1,000.0	-0.8	999.2	+3.1	1,002.3	-0.9	1,001.4	+2.4	1,003.8	+3.6	1,007.4
Western Bulldogs	988.4	+0.8	989.3	+6.3	995.6	+3.5	999.2	+2.7	1,001.9	-0.8	1,001.1	+4.6	1,005.7	+2.5	1,008.1	+0.0	1,008.1	-0.8	1,007.3
Kangaroos	1,000.7	-5.4	995.3	+3.7	999.0	-1.4	997.6	+3.6	1,001.2	+1.1	1,002.3	+0.4	1,002.7	-2.4	1,000.3	-0.0	1,000.3	+0.8	1,001.1
St Kilda	1,001.0	+0.3	1,001.4	+2.3	1,003.7	-3.5	1,000.1	-2.7	997.4	+2.7	1,000.1	-1.7	998.4	-0.3	998.1	-0.9	997.2	-3.6	993.6
Fremantle	1,004.0	-2.2	1,001.7	-1.4	1,000.3	+1.6	1,002.0	-6.5	995.5	-0.8	994.7	+1.4	996.1	-1.6	994.5	+0.0	994.5	-1.4	993.1
Richmond	986.3	+2.6	988.9	-3.7	985.2	-3.4	981.9	+6.5	988.3	+0.8	989.1	+0.1	989.2	+0.3	989.5	-1.1	988.4	+3.0	991.4
West Coast	1,006.6	+1.0	1,007.6	-6.0	1,001.6	-1.6	999.9	-4.4	995.5	-2.4	993.2	-4.6	988.6	-4.2	984.4	+0.0	984.5	+5.5	990.0
Carlton	975.2	-2.6	972.6	-2.3	970.4	-0.5	969.8	+3.5	973.3	+3.2	976.5	-1.7	974.8	+4.2	979.0	-2.4	976.6	+1.4	977.9
Essendon	990.0	+5.4	995.4	-5.4	990.1	+0.5	990.6	-2.7	987.9	-2.7	985.2	-5.1	980.2	-4.8	975.4	-4.6	970.8	-3.0	967.8
Melbourne	987.2	-5.5	981.7	-6.3	975.3	-0.3	975.0	-3.6	971.4	-3.2	968.2	-3.1	965.1	+1.6	966.7	-4.2	962.5	+0.2	962.7

There is now over 6 ratings points between the 8th-placed Bulldogs and the 9th-placed Roos, and a further 7½ points back to the 10th-placed Saints. It appears that the MARS final 8 is sorting itself out and still the only difference between the MARS top 8 and the competition top 8 is that the MARS has Port Adelaide in at the Roos' expense.

leam	Initial	K1	K2	K3	K4	K5	K6	K/	K8	K9
Geelong	1	1	1	1	1	1	1	1	1	1
Sydney	2	2	2	2	2	2	2	3	3	2
Hawthorn	8	3	4	4	3	3	3	2	2	3
Adelaide	3	5	3	3	4	4	4	4	4	4
Collingwood	6	7	5	5	5	5	5	7	7	5
Port Adelaide	4	6	7	7	9	7	7	5	5	6
Brisbane Lions	11	10	11	11	8	10	9	8	8	7
Western Bulldogs	13	13	12	10	6	8	6	6	6	8
Kangaroos	10	12	10	12	7	6	8	9	9	9
St Kilda	9	9	6	8	10	9	10	10	10	10
Fremantle	7	8	9	6	12	11	11	11	11	11
Richmond	15	14	14	14	13	13	12	12	12	12
West Coast	5	4	8	9	11	12	13	13	13	13
Carlton	16	16	16	16	15	15	15	14	14	14
Essendon	12	11	13	13	14	14	14	15	15	15
Melbourne	14	15	15	15	16	16	16	16	16	16

The MARS Top 8 is now:

- 1. Geelong (no change)
- 2. Sydney (up 1)
- 3. Hawthorn (down 1)
- 4. Adelaide (no change)
- 5. Collingwood (up 2)
- 6. Port Adelaide (down 1)
- 7. Brisbane Lions (up 1)
- 8. Bulldogs (down 2)

A comparison of MARS Ratings with the competition ladder yields four teams whose rankings differ by more than 4 places:

- The Bulldogs, who are 3rd on the ladder but 8th on MARS
- Carlton, who are 9th on the ladder but 14th on MARS
- Fremantle, who are 15th on the ladder but 11th on MARS
- Port Adelaide, who are 12th on the ladder but 6th on MARS

Some of this discrepancy is undoubtedly a consequence of the fact that, on the MARS System, teams carry across some of their previous-season form and so do not all start equal. Some of it too, though, is because of the varying strength of the teams that each has met and the margins of victory and of defeat.

It's on this latter point that I want to expound in the next section.

Margins of Victory and Defeat

Most seasons, the difference for many teams between making the finals and missing out depends on how they perform in those close games that are won by just a couple of kicks.

			Losing I	Margin			Draw			Winning	, Margi	in	
	36+	24-35	18-23	12-17	6-11	1-5	0	1-5	6-11	12-17	18-23	24-35	36+
Adelaide	2	0	0	0	0	1	0	0	1	1	0	2	2
Brisbane Lions	0	1	0	3	0	0	0	1	0	0	1	1	2
Carlton	1	3	0	1	0	0	0	0	1	0	1	1	1
Collingwood	1	0	1	0	1	1	0	0	1	0	0	1	3
Essendon	6	1	0	0	0	0	0	0	0	1	0	0	1
Fremantle	1	1	0	2	2	2	0	0	0	1	0	0	0
Geelong	1	0	0	0	0	0	0	1	1	0	0	3	3
Hawthorn	0	0	0	0	0	0	0	0	0	5	1	0	3
Kangaroos	1	1	0	1	0	0	1	1	2	0	0	0	2
Melbourne	5	2	1	0	0	0	0	0	1	0	0	0	0
Port Adelaide	1	0	1	1	3	0	0	0	0	0	1	1	1
Richmond	2	1	0	1	0	1	1	0	0	0	0	1	2
St Kilda	3	0	1	0	1	0	0	2	0	0	0	0	2
Sydney	1	0	1	0	0	1	1	0	1	1	0	0	3
West Coast	4	1	0	1	1	0	0	0	0	1	0	0	1
Western Bulldogs	0	0	0	0	0	1	1	2	0	0	1	1	3
120	29	11	5	10	8	7	4	7	8	10	5	11	29

This season, so far, Adelaide, Geelong, the Roos, St Kilda and the Bulldogs have generally had the better of close games, while Collingwood, Fremantle and Port Adelaide have had the worst of it.

Fremantle, in particular, are worth a moment's reflection. They're 1 and 6 in games decided by less than 3 goals, a factor which explains why MARS still has them ranked 11th.

Port Adelaide are 0 and 4 in such games, which also explains why they're ranked as highly as 6th by MARS.

The Bulldogs are $2\frac{1}{2}$ and $1\frac{1}{2}$ in these games and they've also recorded 2 other victory margins less than 6 goals. This is partly why MARS has them ranked 8^{th} .

Carlton, despite having won 4 games, have lost 4 of the 5 they've lost by 4 goals or more. This, coupled with their abysmal form carried across from last season, is why MARS has them ranked 14th.

Some other notable features of this table are the following:

- Essendon have lost 6 of the 7 games they've lost by 6 goals or more
- Melbourne have lost 5 of the 8 games they've lost by 6 goals or more
- No team has won more than 3 games by 6 goals or more.
- Hawthorn, although undefeated, have won 5 of their games by 12 to 17 points, and one more by 18 to 23 points; only 3 of their wins have been blowouts.

Over the course of the next week or two I'll take a look at the relative strengths of the schedule that each team has so far faced to see if that will shed more light on the MARS ratings.



One thing I haven't mentioned for a few weeks is Chi's Mean Absolute Prediction Error. As you'll recall, I'm targetting a sub-30 result. Currently, he's at 29.6 point per game (BKB is at 27.8 points per game and Quila's at 30.0 points per game).

I also haven't updated the situation on the various Monash Competitions. I'll try to get to this next week.

"Perhaps all pleasure is only relief"
William S Burroughs

Tony

25 May 2008

Appendix 1 : Cumulative Tipping Performance – All Tipsters

	41											52	53	54
					MM4		ММЗ	ммб	MM5	MM7	MM2			
				MM12	MM10		MM11		MM8	IVIIVI				
				MM19	MM14		MM15	MM16	MM17					
			MM22		MM23 MM24	MM21								
				ммзо	MM27 MM28		MM26							
MM35	ммзз		MM34 MM34		MM36									
	MM42 MM43 MM44	MM41	MM39 MM40											
							SM4		SM3					
							3		SM5 SM6					
							SM7		JIVIO					
							SM8 SM9							
								SM11 SM13						
							SM16	SM19						
							SM21		SM23					
							UM	SM33						
											SUM			вкв
											CTL	СТМ		
								STM		QTM				
40	41	42	43	44	45	46	47	48	49	50	51	52	53	54