

ภาคผนวก ข

ผลการพยากรณ์ความต้องการสินค้าเพื่อหาดัชนี

ประจำเดือน กรกฎาคม 2555

อาหารประเภท IMATT โดยวิธี Moving Average (MA)

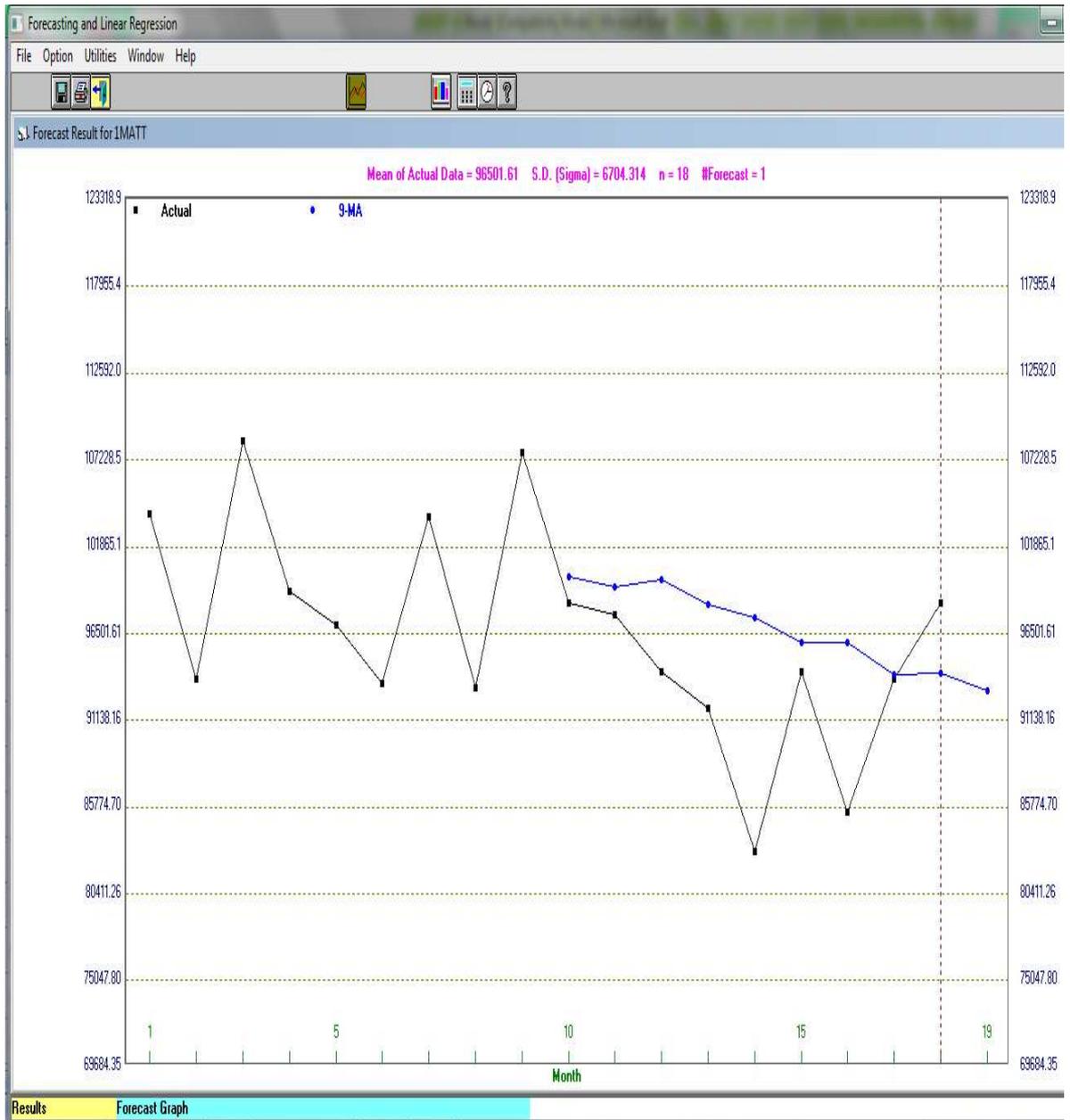
08-19-2013		Forecast by							
Month	Data	3-MA	4-MA	5-MA	6-MA	7-MA	8-MA	9-MA	10-MA
1	103912								
2	93662								
3	108430								
4	99135	102001.3							
5	97009	100409	101284.8						
6	93461	101524.7	99559	100429.6					
7	103712	96535	99508.75	98339.4	99268.16				
8	93112	98060.66	98329.25	100349.4	99234.84	99903			
9	107730	96761.66	96823.5	97285.8	99143.16	98360.14	99054.13		
10	98435	101518	99503.75	99004.8	99026.5	100369.9	99531.38	100018.1	
11	97709	99759	100747.3	99290	98909.84	98942	100128	99409.55	99859.8
12	94161	101291.3	99246.5	100139.6	99026.5	98738.29	98787.88	99859.22	99239.5
13	91894	96768.34	99508.75	98229.4	99143.16	98331.43	98166.13	98273.78	99289.4
14	83035	94588	95549.75	97985.8	97173.5	98107.57	97526.75	97469.22	97635.8
15	94123	89696.66	91699.75	93046.8	95494	95153.71	96223.5	95916.55	96025.8
16	85434	89684	90803.25	92184.4	93226.16	95298.14	95024.88	95990.11	95737.2
17	93690	87530.66	88621.5	89729.4	91059.34	92113	94065.13	93959.22	94934.5
18	98385	91082.34	89070.5	89635.2	90389.5	91435.14	92310.13	94023.45	93932.3
19		92503	92908	90933.4	91093.5	91531.71	92303.88	92985.11	94459.6
MAD		5883.534	5871.304	6151.954	5582.361	5894.338	5572.337	5197.369	5891.087
MSE		4.21E+07	4.41E+07	5.23E+07	4.52E+07	5.25E+07	4.87E+07	4.67E+07	5.37E+07
MAPE		6.208967	6.24306	6.593496	6.021335	6.420459	6.086734	5.856447	6.645233
		m=3	m=4	m=5	m=6	m=7	m=8	m=9	m=10

อาหารประเภท IMATT โดยวิธี Single Exponential Smoothing (SES)

08-19-2013	Actual	Forecast by	Forecast by	Forecast by		Forecast by	Forecast by
Month	Data	SES	SES	SES	SES	SES	SES
1	103912						
2	93662	103912	103912	103912	103912	103912	103912
3	108430	102887	101862	100837	99812	98787	97762
4	99135	103441.3	103175.6	103114.9	103259.2	103608.5	104162.8
5	97009	103010.7	102367.5	101920.9	101609.5	101371.8	101146.1
6	93461	102410.5	101295.8	100447.4	99769.31	99190.38	98663.84
7	103712	101515.5	99728.83	98351.45	97245.98	96325.69	95542.14
8	93112	101735.2	100525.5	99959.61	99832.39	100018.8	100444.1
9	107730	100872.9	99042.77	97905.33	97144.23	96565.42	96044.82
10	98435	101558.6	100780.2	100852.7	101378.5	102147.7	103055.9
11	97709	101246.2	100311.2	100127.4	100201.1	100291.4	100283.4
12	94161	100892.5	99790.73	99401.88	99204.27	99000.18	98738.75
13	91894	100219.4	98664.79	97829.62	97186.96	96580.59	95992.1
14	83035	99386.81	97310.63	96048.93	95069.77	94237.3	93533.24
15	94123	97751.63	94455.51	92144.75	90255.87	88636.15	87234.3
16	85434	97388.77	94389.01	92738.23	91802.72	91379.58	91367.52
17	93690	96193.29	92598.01	90546.96	89255.23	88406.79	87807.41
18	98385	95942.96	92816.41	91489.88	91029.14	91048.39	91336.96
19		96187.16	93930.13	93558.41	93971.48	94716.7	95565.78
MAD		6548.555	5982.787	6123.601	6323.903	6528.926	6740.888
MSE		5.70E+07	4.75E+07	4.60E+07	4.70E+07	4.91E+07	5.23E+07
MAPE		7.035462	6.358548	6.457973	6.632101	6.818228	7.016708
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6

อาหารประเภท IMATT โดยวิธี Double Exponential Smoothing (DES)

08-19-2013	Actual	Forecast by					
Month	Data	DES	DES	DES	DES	DES	DES
1	103912						
2	93662	103912	103912	103912	103912	103912	103912
3	108430	103809.5	103502	102989.5	102272	101349.5	100222
4	99135	103772.7	103436.7	103027.1	102666.9	102479	102586.5
5	97009	103696.5	103222.9	102695.3	102243.9	101925.4	101722.3
6	93461	103567.9	102837.5	102020.9	101254.1	100557.9	99887.21
7	103712	103362.6	102215.7	100920.1	99650.84	98441.78	97280.17
8	93112	103199.9	101877.7	100631.9	99723.46	99230.31	99178.5
9	107730	102967.2	101310.7	99813.95	98691.77	97897.87	97298.29
10	98435	102826.3	101204.6	100125.6	99766.48	100022.8	100752.9
11	97709	102668.3	101025.9	100126.1	99940.34	100157.1	100471.2
12	94161	102490.7	100778.9	99908.85	99645.91	99578.63	99431.72
13	91894	102263.6	100356.1	99285.08	98662.34	98079.61	97367.95
14	83035	101975.9	99746.97	98314.23	97225.31	96158.45	95067.13
15	94123	101553.5	98688.68	96463.39	94437.53	92397.3	90367.43
16	85434	101137	97828.74	95345.84	93383.61	91888.44	90967.48
17	93690	100642.6	96782.59	93906.18	91732.26	90147.61	89071.44
18	98385	100172.7	95989.36	93181.29	91451.01	90598	90430.75
19		99774.12	95577.52	93294.43	92459.2	92657.34	93511.77
MAD		7668.667	6592.846	6014.98	5873	6010.618	6217.511
MSE		7.95E+07	5.87E+07	4.96E+07	4.62E+07	4.52E+07	4.59E+07
MAPE		8.304326	7.102781	6.433619	6.236416	6.339971	6.519848
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6



อาหารประเภท 1FAR โดยวิธี Moving Average (MA)

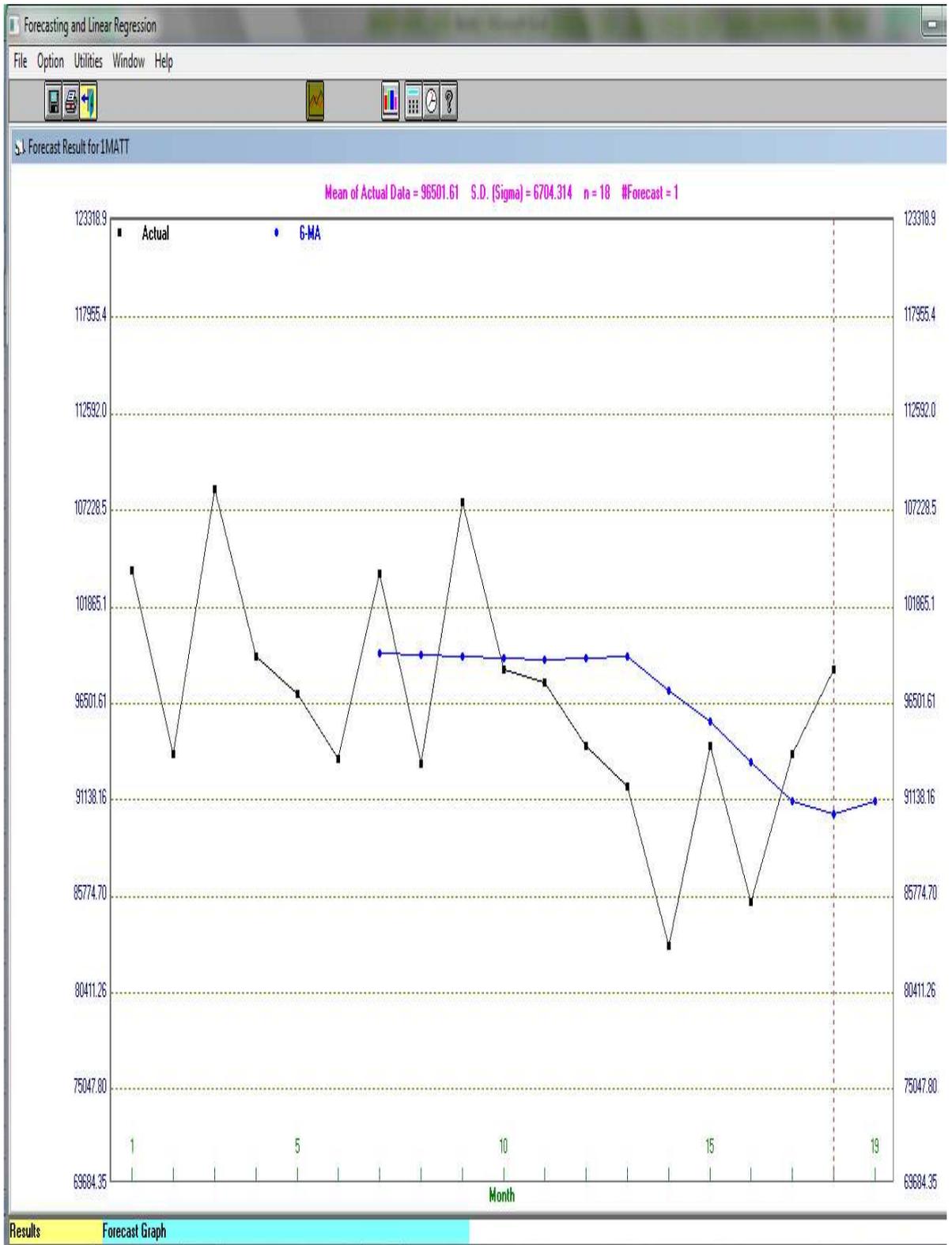
08-17-2013	Actual	Forecast by					
Month	Data	3-MA	4-MA	5-MA	6-MA	7-MA	8-MA
1	38733						
2	35221						
3	39475						
4	33943	37809.67					
5	35047	36213	36843				
6	34468	36155	35921.5	36483.8			
7	35433	34486	35733.25	35630.8	36147.83		
8	32221	34982.67	34722.75	35673.2	35597.83	36045.71	
9	39475	34040.67	34292.25	34222.4	35097.83	35115.43	35567.63
10	33443	35709.67	35399.25	35328.8	35097.83	35723.14	35660.38
11	35347	35046.33	35143	35008	35014.5	34861.43	35438.13
12	34768	36088.33	35121.5	35183.8	35064.5	35062	34922.13
13	35351	34519.33	35758.25	35050.8	35114.5	35022.14	35025.25
14	34120	35155.33	34727.25	35676.8	35100.83	35148.29	35063.25
15	33403	34746.33	34896.5	34605.8	35417.33	34960.71	35019.75
16	32565	34291.33	34410.5	34597.8	34405.33	35129.57	34766
17	37797	33362.67	33859.75	34041.4	34259	34142.43	34809
18	44903	34588.33	34471.25	34647.2	34667.33	34764.43	34599.25
19		38421.67	37167	36557.6	36356.5	36129.57	36031.75
MAD		2629.067	2319.322	2512.539	2466.527	2774.233	2474.85
MSE		1.31E+07	1.24E+07	1.34E+07	1.33E+07	1.50E+07	1.44E+07
MAPE		7.030786	6.088887	6.634762	6.475724	7.334714	6.336674
		m=3	m=4	m=5	m=6	m=7	m=8

อาหารประเภท 1FAR โดยวิธี Single Exponential Smoothing (SES)

08-17-2013	Actual	Forecast by						
Month	Data	SES						
1	38733							
2	35221	38733	38733	38733	38733	38733	38733	38733
3	39475	38381.8	38030.6	37679.4	37328.2	36977	36625.8	36274.6
4	33943	38491.12	38319.48	38218.08	38186.92	38226	38335.32	38514.88
5	35047	38036.31	37444.18	36935.55	36489.35	36084.5	35699.93	35314.56
6	34468	37737.38	36964.75	36368.99	35912.41	35565.75	35308.17	35127.27
7	35433	37410.44	36465.4	35798.69	35334.64	35016.88	34804.07	34665.78
8	32221	37212.7	36258.92	35688.98	35373.99	35224.94	35181.43	35202.84
9	39475	36713.53	35451.34	34648.59	34112.79	33722.97	33405.17	33115.55
10	33443	36989.68	36256.07	36096.51	36257.68	36598.98	37047.07	37567.16
11	35347	36635.01	35693.46	35300.46	35131.8	35020.99	34884.63	34680.25
12	34768	36506.21	35624.16	35314.42	35217.88	35184	35162.05	35146.98
13	35351	36332.39	35452.93	35150.5	35037.93	34976	34925.62	34881.69
14	34120	36234.25	35432.54	35210.65	35163.16	35163.5	35180.85	35210.21
15	33403	36022.82	35170.04	34883.45	34745.89	34641.75	34544.34	34447.06
16	32565	35760.84	34816.63	34439.32	34208.74	34022.38	33859.54	33716.22
17	37797	35441.25	34366.3	33877.02	33551.24	33293.69	33082.81	32910.37
18	44903	35676.83	35052.45	35053.02	35249.55	35545.34	35911.32	36331.01
19		36599.45	37022.55	38008.01	39110.93	40224.17	41306.33	42331.4
MAD		3071.101	2708.875	2570.275	2536.756	2557.29	2587.898	2629.584
MSE		1.30E+07	1.22E+07	1.19E+07	1.19E+07	1.20E+07	1.22E+07	1.25E+07
MAPE		8.522377	7.379636	6.937463	6.819242	6.867305	6.952293	7.074368
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6	Alpha=0.7

อาหารประเภท 1FAR โดยวิธี Double Exponential Smoothing (DES)

08-17-2013	Actual	Forecast by						
Month	Data	DES						
1	38733							
2	35221	38733	38733	38733	38733	38733	38733	38733
3	39475	38697.88	38592.52	38416.92	38171.08	37855	37468.68	37012.12
4	33943	38677.2	38537.91	38357.27	38177.41	38040.5	37988.66	38064.05
5	35047	38613.11	38319.16	37930.75	37502.19	37062.5	36615.42	36139.41
6	34468	38525.54	38048.28	37462.22	36866.28	36314.13	35831.07	35430.91
7	35433	38414.03	37731.7	36963.16	36253.63	35665.5	35214.87	34895.32
8	32221	38293.89	37437.14	36580.91	35901.77	35445.22	35194.8	35110.58
9	39475	38135.86	37039.98	36001.21	35186.18	34584.09	34121.02	33714.06
10	33443	38021.24	36883.2	36029.8	35614.78	35591.54	35876.65	36411.23
11	35347	37882.62	36645.25	35811	35421.59	35306.27	35281.44	35199.54
12	34768	37744.98	36441.04	35662.03	35340.11	35245.13	35209.8	35162.75
13	35351	37603.72	36243.41	35508.57	35219.23	35110.57	35039.29	34966.01
14	34120	37466.77	36081.24	35419.19	35196.8	35137.03	35124.23	35136.95
15	33403	37322.38	35899	35258.47	35016.44	34889.39	34776.29	34654.03
16	32565	37166.22	35682.52	35012.72	34693.36	34455.88	34226.24	33997.56
17	37797	36993.73	35419.28	34672.01	34236.51	33874.79	33540.18	33236.53
18	44903	36862.04	35345.91	34786.31	34641.73	34710.06	34962.87	35402.67
19		36835.78	35681.24	35752.82	36429.41	37467.12	38768.95	40252.78
MAD		3535.012	3094.422	2774.861	2604.978	2520.885	2501.754	2529.189
MSE		1.57E+07	1.35E+07	1.26E+07	1.22E+07	1.20E+07	1.20E+07	1.20E+07
MAPE		9.999423	8.586867	7.58607	7.049078	6.777216	6.70474	6.776857
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6	Alpha=0.7



อาหารประเภท IFATT โดยวิธี Moving Average (MA)

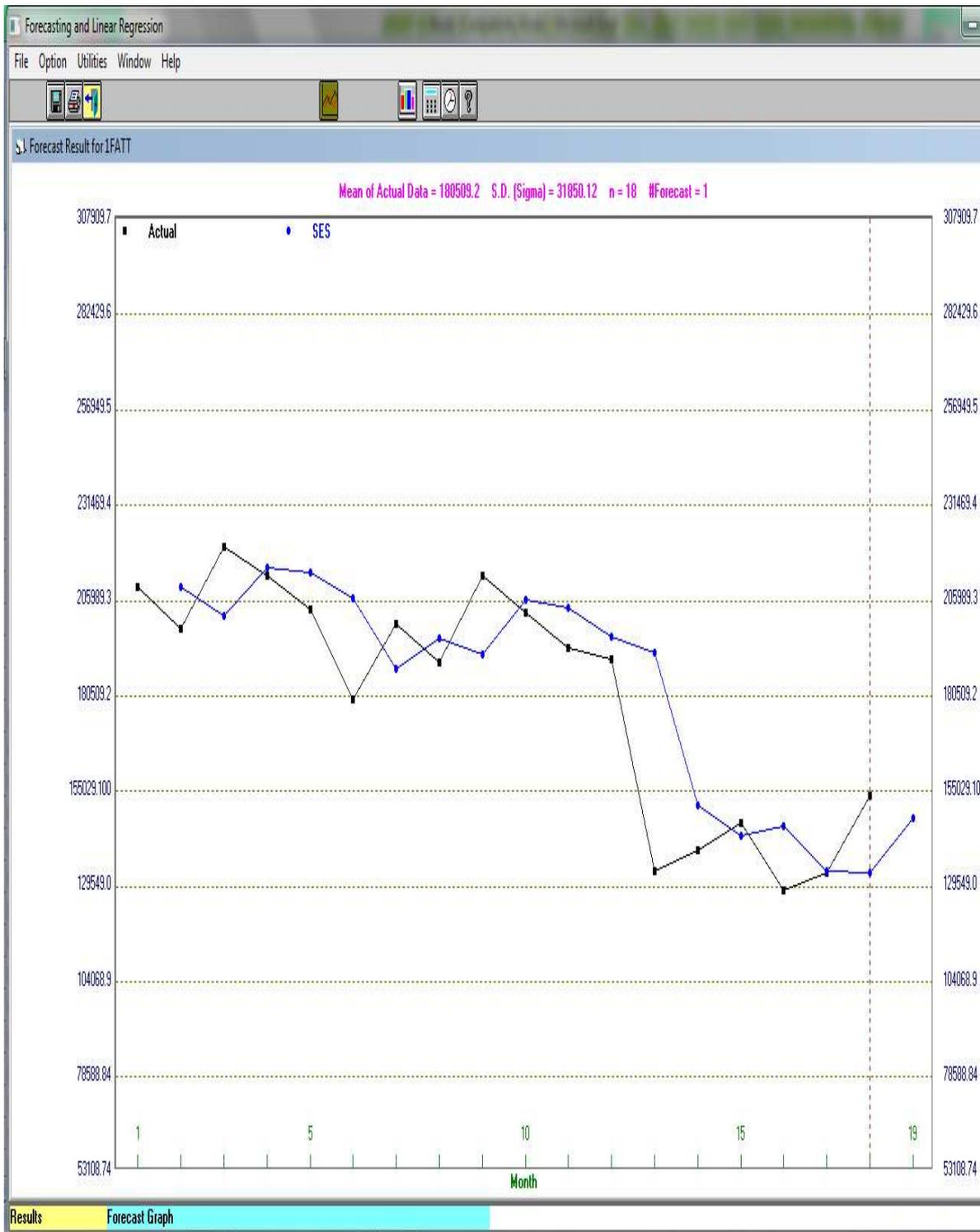
08-18-2013	Actual	Forecast by				
Month	Data	3-MA	4-MA	5-MA	6-MA	7-MA
1	209633					
2	198677					
3	220537					
4	212858	209615.7				
5	203795	210690.7	210426.3			
6	179738	212396.7	208966.8	209100		
7	199633	198797	204232	203121	204206.3	
8	189677	194388.7	199006	203312.2	202539.7	203553
9	212537	189682.7	193210.8	197140.2	201039.7	200702.1
10	202858	200615.7	195396.3	197076	199706.3	202682.1
11	193295	201690.7	201176.3	196888.6	198039.7	200156.6
12	190238	202896.7	199591.8	199600	196289.7	197361.9
13	133861	195463.7	199732	197721	198039.7	195425.1
14	139420	172464.7	180063	186557.8	187077.7	188871.3
15	146604	154506.3	164203.5	171934.4	178701.5	180269.4
16	128697	139961.7	152530.8	160683.6	167712.7	174116.1
17	133244	138240.3	137145.5	147764	155352.5	162139
18	153864	136181.7	136991.3	136365.2	145344	152194.1
19		138601.7	140602.3	140365.8	139281.7	146561.1
MAD		15399.22	18752.32	21611.78	21371.61	23685.18
MSE		4.88E+08	6.25E+08	7.63E+08	8.24E+08	9.73E+08
MAPE		9.862823	12.2344	14.46657	14.84483	16.61379
		m=3	m=4	m=5	m=6	m=7

อาหารประเภท 1FAR โดยวิธี Single Exponential Smoothing (SES)

08-18-2013	Actual	Forecast by							
Month	Data		SES	SES		SES	SES	SES	SES
1	209633								
2	198677	209633	209633	209633	209633	209633	209633	209633	209633
3	220537	208537.4	207441.8	206346.2	205250.6	204155	203059.4	201963.8	200868.2
4	212858	209737.4	210060.8	210603.4	211365.2	212346	213546	214965	216603.2
5	203795	210049.4	210620.3	211279.8	211962.3	212602	213133.2	213490.1	213607
6	179738	209424	209255.2	209034.4	208695.4	208198.5	207530.3	206703.5	205757.4
7	199633	206455.4	203351.8	200245.5	197112.4	193968.3	190854.9	187827.7	184941.9
8	189677	205773.2	202608	200061.7	198120.7	196800.6	196121.8	196091.4	196694.8
9	212537	204163.5	200021.8	196946.3	194743.2	193238.8	192254.9	191601.3	191080.6
10	202858	205000.9	202524.9	201623.5	201860.7	202887.9	204424.2	206256.3	208245.7
11	193295	204786.6	202591.5	201993.9	202259.6	202873	203484.5	203877.5	203935.5
12	190238	203637.4	200732.2	199384.2	198673.8	198084	197370.8	196469.8	195423.1
13	133861	202297.5	198633.3	196640.3	195299.5	194161	193091.1	192107.5	191275
14	139420	195453.8	185678.9	177806.5	170724.1	164011	157553	151335	145343.8
15	146604	189850.5	176427.1	166290.6	158202.5	151715.5	146673.2	142994.5	140604.8
16	128697	185525.8	170462.5	160384.6	153563.1	149159.8	146631.7	145521.1	145404.2
17	133244	179842.9	162109.4	150878.3	143616.6	138928.4	135870.9	133744.3	132038.4
18	153864	175183	156336.3	145588	139467.6	136086.2	134294.8	133394.1	133002.9
19		173051.1	155841.8	148070.8	145226.1	144975.1	146036.3	147723	149691.8
MAD		24282.72	19202.18	16958.84	15646.58	14622.67	14012.27	14072.36	14275.95
MSE		1.03E+09	6.80E+08	5.26E+08	4.49E+08	4.07E+08	3.84E+08	3.72E+08	3.69E+08
MAPE		16.21736	12.66055	11.00647	9.978835	9.176365	8.639089	8.560614	8.600039
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6	Alpha=0.7	Alpha=0.8

อาหารประเภท 1FAR โดยวิธี Double Exponential Smoothing (DES)

08-18-2013	Actual	Forecast by								
Month	Data	DES								
1	209633									
2	198677	209633	209633	209633	209633	209633	209633	209633	209633	209633
3	220537	209523.4	209194.8	208647	207880	206894	205688.8	204264.6	202621.2	200758.6
4	212858	209544.8	209368	209233.9	209274.1	209620	210403.1	211754.9	213806.8	216690.4
5	203795	209595.3	209618.4	209847.7	210349.4	211111	212041.2	212969.5	213647	213745.5
6	179738	209578.2	209545.8	209603.7	209687.8	209654.8	209334.6	208583.3	207335.3	205656.1
7	199633	209265.9	208307	206796.2	204657.6	201811.5	198246.8	194054.4	189420.6	184581.6
8	189677	208916.6	207167.2	204775.9	202042.8	199306.1	196971.8	195480.3	195239.9	196562.5
9	212537	208441.3	205738.1	202427	199123	196272.4	194141.7	192765	191912.4	191105
10	202858	208097.3	205095.5	202186	200218.1	199580.2	200311.2	202208.9	204979.1	208410.4
11	193295	207766.2	204594.7	202128.3	201034.7	201226.6	202215.1	203376.9	204144.3	204086
12	190238	207353.3	203822.2	201305.1	200090.3	199655.3	199308.5	198541.9	197167.3	195302
13	133861	206847.7	202784.4	199905.7	198174	196908.1	195578.1	194037.8	192453.5	191112.3
14	139420	205708.3	199363.3	193275.9	187194	180459.6	172763.1	164145.8	154765.7	144696.9
15	146604	204122.5	194776.1	185180.3	175597.4	166087.5	157109.2	149339.9	143437	139958.4
16	128697	202262.9	189913.3	177741.6	166783.7	157623.6	150822.7	146666.8	145010.7	145294
17	133244	200020.9	184352.5	169682.6	157516.9	148276	141851.6	137621	134632.9	131903.8
18	153864	197537.1	178749.3	162454.3	150297.1	142181.1	137317.5	134662.2	133328.9	132855.5
19		195088.5	174167.8	158139.2	148268.7	143578.1	142548.8	143804.8	146419.2	149881.9
MAD		30089.8	25632.52	21640.21	18926.13	17234.13	15680.04	14454.55	14053.68	14313.59
MSE		1.59E+09	1.15E+09	8.44E+08	6.51E+08	5.31E+08	4.54E+08	4.05E+08	3.76E+08	3.69E+08
MAPE		20.26126	17.17836	14.38457	12.40384	11.12483	9.961154	9.017798	8.607568	8.615531
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6	Alpha=0.7	Alpha=0.8	Alpha=0.9



ประจำเดือน สิงหาคม 2555

อาหารประเภท IMATT โดยวิธี Moving Average (MA)

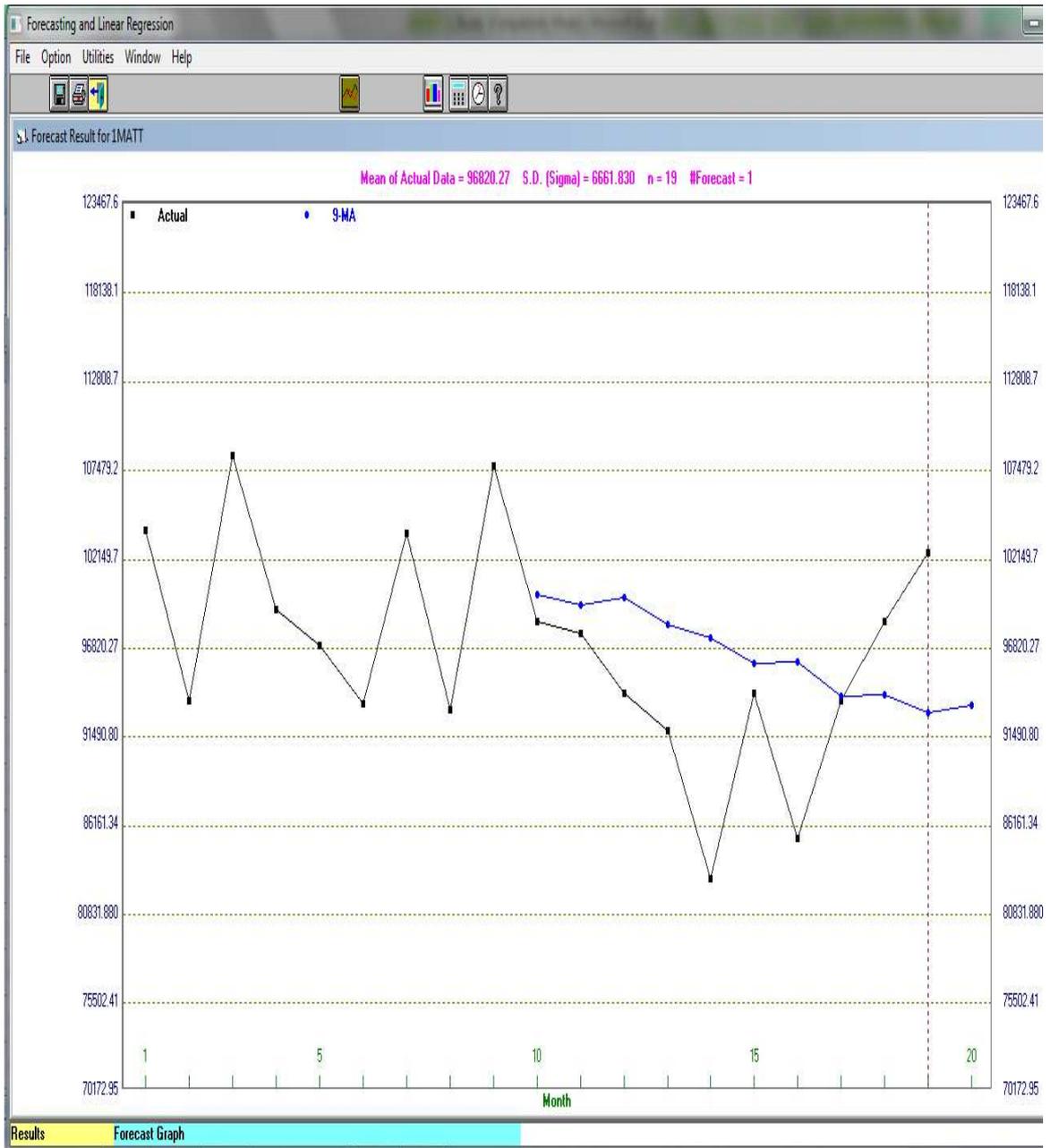
08-19-2013	Actual	Forecast by							
Month	Data	3-MA	4-MA	5-MA	6-MA	7-MA	8-MA	9-MA	10-MA
1	103912								
2	93662								
3	108430								
4	99135	102001.3							
5	97009	100409	101284.8						
6	93461	101524.7	99559	100429.6					
7	103712	96535	99508.75	98339.4	99268.16				
8	93112	98060.66	98329.25	100349.4	99234.84	99903			
9	107730	96761.66	96823.5	97285.8	99143.16	98360.14	99054.13		
10	98435	101518	99503.75	99004.8	99026.5	100369.9	99531.38	100018.1	
11	97709	99759	100747.3	99290	98909.84	98942	100128	99409.55	99859.8
12	94161	101291.3	99246.5	100139.6	99026.5	98738.29	98787.88	99859.22	99239.5
13	91894	96768.34	99508.75	98229.4	99143.16	98331.43	98166.13	98273.78	99289.4
14	83035	94588	95549.75	97985.8	97173.5	98107.57	97526.75	97469.22	97635.8
15	94123	89696.66	91699.75	93046.8	95494	95153.71	96223.5	95916.55	96025.8
16	85434	89684	90803.25	92184.4	93226.16	95298.14	95024.88	95990.11	95737.2
17	93690	87530.66	88621.5	89729.4	91059.34	92113	94065.13	93959.22	94934.5
18	98385	91082.34	89070.5	89635.2	90389.5	91435.14	92310.13	94023.45	93932.3
19	102556	92503	92908	90933.4	91093.5	91531.71	92303.88	92985.11	94459.6
20		98210.34	95016.25	94837.6	92870.5	92731	92909.75	93443	93942.2
CFE		-6132.66	-8718.25	-9145.98	-8212.16	-18020	-15969.8	-28482.3	-30126.9
MAD		6144.125	6123.083	6542.714	6034.68	6321.834	5997.773	5634.721	6136.122
MSE		4.58E+07	4.74E+07	5.82E+07	5.18E+07	5.83E+07	5.38E+07	5.12E+07	5.50E+07
MAPE		6.43356	6.454026	6.932027	6.417911	6.781216	6.442177	6.204038	6.784052
		m=3	m=4	m=5	m=6	m=7	m=8	m=9	m=10

อาหารประเภท IMATT โดยวิธี Single Exponential Smoothing (SES)

08-19-2013	Actual	Forecast by					
Month	Data	SES	SES	SES	SES	SES	SES
1	103912						
2	93662	103912	103912	103912	103912	103912	103912
3	108430	102887	101862	100837	99812	98787	97762
4	99135	103441.3	103175.6	103114.9	103259.2	103608.5	104162.8
5	97009	103010.7	102367.5	101920.9	101609.5	101371.8	101146.1
6	93461	102410.5	101295.8	100447.4	99769.31	99190.38	98663.84
7	103712	101515.5	99728.83	98351.45	97245.98	96325.69	95542.14
8	93112	101735.2	100525.5	99959.61	99832.39	100018.8	100444.1
9	107730	100872.9	99042.77	97905.33	97144.23	96565.42	96044.82
10	98435	101558.6	100780.2	100852.7	101378.5	102147.7	103055.9
11	97709	101246.2	100311.2	100127.4	100201.1	100291.4	100283.4
12	94161	100892.5	99790.73	99401.88	99204.27	99000.18	98738.75
13	91894	100219.4	98664.79	97829.62	97186.96	96580.59	95992.1
14	83035	99386.81	97310.63	96048.93	95069.77	94237.3	93533.24
15	94123	97751.63	94455.51	92144.75	90255.87	88636.15	87234.3
16	85434	97388.77	94389.01	92738.23	91802.72	91379.58	91367.52
17	93690	96193.29	92598.01	90546.96	89255.23	88406.79	87807.41
18	98385	95942.96	92816.41	91489.88	91029.14	91048.39	91336.96
19	102556	96187.16	93930.13	93558.41	93971.48	94716.7	95565.78
20		96824.05	95655.3	96257.69	97405.29	98636.34	99759.91
CFE		-70879.37	-41283.52	-25514.35	-16266.77	-10551.32	-6920.133
MAD		6538.571	6129.625	6283.267	6449.493	6601.725	6754.74
MSE		5.61E+07	4.90E+07	4.79E+07	4.85E+07	4.98E+07	5.21E+07
MAPE		6.989609	6.472567	6.586604	6.728683	6.8641	7.005558
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6

อาหารประเภท IMATT โดยวิธี Double Exponential Smoothing (DES)

08-19-2013	Actual	Forecast by					
Month	Data	DES	DES	DES	DES	DES	DES
1	103912						
2	93662	103912	103912	103912	103912	103912	103912
3	108430	103809.5	103502	102989.5	102272	101349.5	100222
4	99135	103772.7	103436.7	103027.1	102666.9	102479	102586.5
5	97009	103696.5	103222.9	102695.3	102243.9	101925.4	101722.3
6	93461	103567.9	102837.5	102020.9	101254.1	100557.9	99887.21
7	103712	103362.6	102215.7	100920.1	99650.84	98441.78	97280.17
8	93112	103199.9	101877.7	100631.9	99723.46	99230.31	99178.5
9	107730	102967.2	101310.7	99813.95	98691.77	97897.87	97298.29
10	98435	102826.3	101204.6	100125.6	99766.48	100022.8	100752.9
11	97709	102668.3	101025.9	100126.1	99940.34	100157.1	100471.2
12	94161	102490.7	100778.9	99908.85	99645.91	99578.63	99431.72
13	91894	102263.6	100356.1	99285.08	98662.34	98079.61	97367.95
14	83035	101975.9	99746.97	98314.23	97225.31	96158.45	95067.13
15	94123	101553.5	98688.68	96463.39	94437.53	92397.3	90367.43
16	85434	101137	97828.74	95345.84	93383.61	91888.44	90967.48
17	93690	100642.6	96782.59	93906.18	91732.26	90147.61	89071.44
18	98385	100172.7	95989.36	93181.29	91451.01	90598	90430.75
19	102556	99774.12	95577.52	93294.43	92459.2	92657.34	93511.77
20		99479.11	95593.07	94183.41	94437.63	95646.84	97260.66
CFE		-108120.1	-74621.47	-50288.68	-33445.96	-21805.95	-13853.61
MAD		7397.179	6614.27	6195.347	6107.656	6226.62	6374.551
MSE		7.56E+07	5.81E+07	5.16E+07	4.93E+07	4.82E+07	4.79E+07
MAPE		7.993672	7.086213	6.577904	6.436902	6.52397	6.64757
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6



อาหารประเภท IFAR โดยวิธี Moving Average (MA)

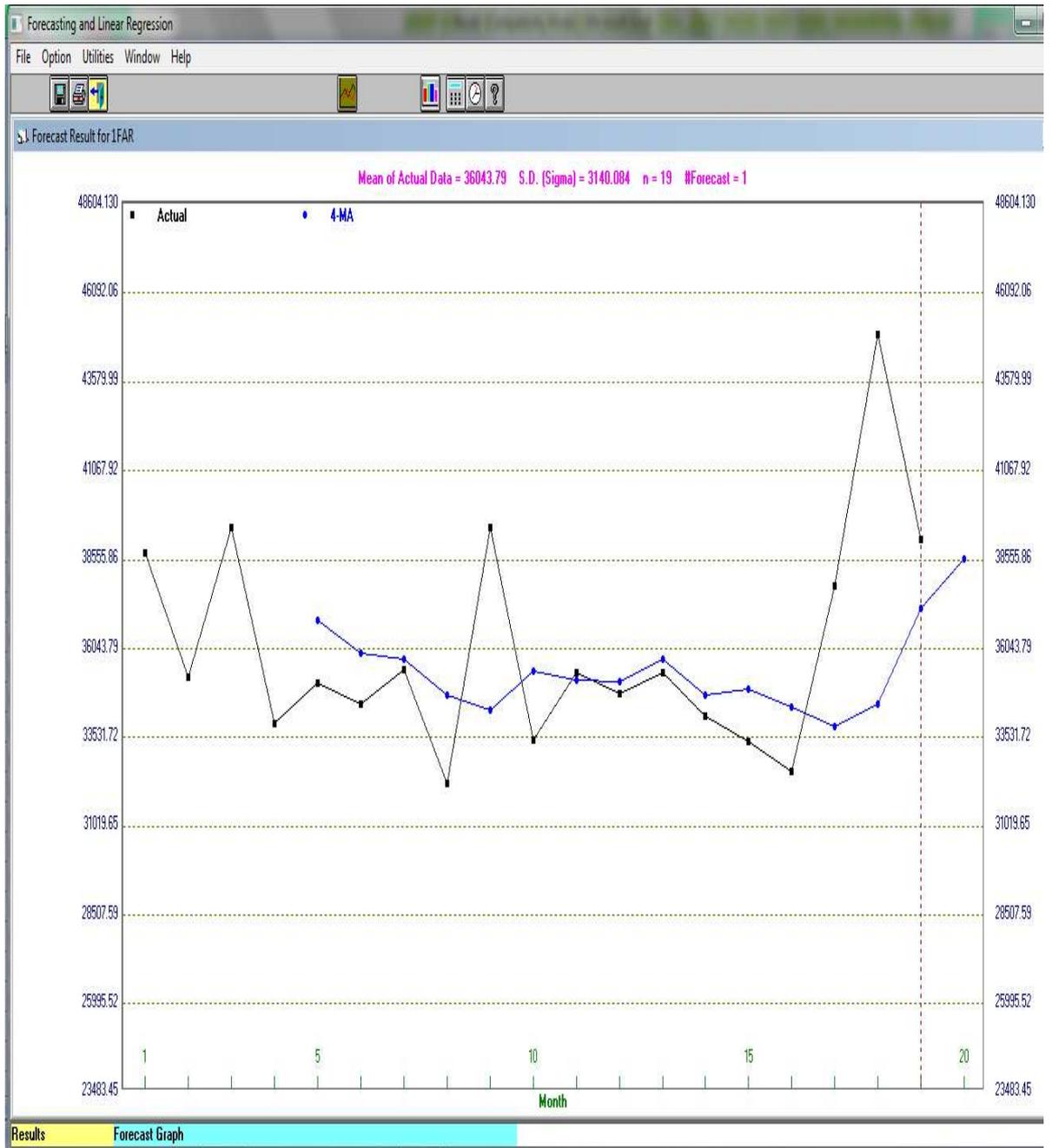
08-17-2013	Actual	Forecast by				
Month	Data	3-MA	4-MA	5-MA	6-MA	7-MA
1	38733					
2	35221					
3	39475					
4	33943	37809.67				
5	35047	36213	36843			
6	34468	36155	35921.5	36483.8		
7	35433	34486	35733.25	35630.8	36147.83	
8	32221	34982.67	34722.75	35673.2	35597.83	36045.71
9	39475	34040.67	34292.25	34222.4	35097.83	35115.43
10	33443	35709.67	35399.25	35328.8	35097.83	35723.14
11	35347	35046.33	35143	35008	35014.5	34861.43
12	34768	36088.33	35121.5	35183.8	35064.5	35062
13	35351	34519.33	35758.25	35050.8	35114.5	35022.14
14	34120	35155.33	34727.25	35676.8	35100.83	35148.29
15	33403	34746.33	34896.5	34605.8	35417.33	34960.71
16	32565	34291.33	34410.5	34597.8	34405.33	35129.57
17	37797	33362.67	33859.75	34041.4	34259	34142.43
18	44903	34588.33	34471.25	34647.2	34667.33	34764.43
19	39119	38421.67	37167	36557.6	36356.5	36129.57
20		40606.33	38596	37557.4	36984.5	36751.14
CFE		5786.668	8993	9704.797	10603.84	10407.14
MAD		2508.333	2294.833	2516.029	2489.294	2792.166
MSE		1.23E+07	1.18E+07	1.30E+07	1.29E+07	1.45E+07
MAPE		6.702774	6.015622	6.628544	6.520805	7.360312
		m=3	m=4	m=5	m=6	m=7

อาหารประเภท 1FAR โดยวิธี Single Exponential Smoothing (SES)

08-17-2013	Actual	Forecast by					
Month	Data	SES	SES	SES	SES	SES	SES
1	38733						
2	35221	38733	38733	38733	38733	38733	38733
3	39475	38381.8	38030.6	37679.4	37328.2	36977	36625.8
4	33943	38491.12	38319.48	38218.08	38186.92	38226	38335.32
5	35047	38036.31	37444.18	36935.55	36489.35	36084.5	35699.93
6	34468	37737.38	36964.75	36368.99	35912.41	35565.75	35308.17
7	35433	37410.44	36465.4	35798.69	35334.64	35016.88	34804.07
8	32221	37212.7	36258.92	35688.98	35373.99	35224.94	35181.43
9	39475	36713.53	35451.34	34648.59	34112.79	33722.97	33405.17
10	33443	36989.68	36256.07	36096.51	36257.68	36598.98	37047.07
11	35347	36635.01	35693.46	35300.46	35131.8	35020.99	34884.63
12	34768	36506.21	35624.16	35314.42	35217.88	35184	35162.05
13	35351	36332.39	35452.93	35150.5	35037.93	34976	34925.62
14	34120	36234.25	35432.54	35210.65	35163.16	35163.5	35180.85
15	33403	36022.82	35170.04	34883.45	34745.89	34641.75	34544.34
16	32565	35760.84	34816.63	34439.32	34208.74	34022.38	33859.54
17	37797	35441.25	34366.3	33877.02	33551.24	33293.69	33082.81
18	44903	35676.83	35052.45	35053.02	35249.55	35545.34	35911.32
19	39119	36599.45	37022.55	38008.01	39110.93	40224.17	41306.33
20		36851.4	37441.84	38341.31	39114.16	39671.59	39993.93
CFE		-18816	-6455.8	-1305.64	952.8945	1877.168	2101.547
MAD		3040.46	2674.851	2489.203	2396.274	2476.616	2565.644
MSE		1.26E+07	1.17E+07	1.14E+07	1.13E+07	1.14E+07	1.18E+07
MAPE		8.406732	7.267387	6.709827	6.441541	6.642741	6.876692
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6

อาหารประเภท 1FAR โดยวิธี Double Exponential Smoothing (DES)

08-17-2013	Actual	Forecast by							
Month	Data	DES							
1	38733								
2	35221	38733	38733	38733	38733	38733	38733	38733	38733
3	39475	38697.88	38592.52	38416.92	38171.08	37855	37468.68	37012.12	36485.32
4	33943	38677.2	38537.91	38357.27	38177.41	38040.5	37988.66	38064.05	38308.81
5	35047	38613.11	38319.16	37930.75	37502.19	37062.5	36615.42	36139.41	35587.63
6	34468	38525.54	38048.28	37462.22	36866.28	36314.13	35831.07	35430.91	35132.78
7	35433	38414.03	37731.7	36963.16	36253.63	35665.5	35214.87	34895.32	34689.13
8	32221	38293.89	37437.14	36580.91	35901.77	35445.22	35194.8	35110.58	35147.46
9	39475	38135.86	37039.98	36001.21	35186.18	34584.09	34121.02	33714.06	33292.86
10	33443	38021.24	36883.2	36029.8	35614.78	35591.54	35876.65	36411.23	37175.24
11	35347	37882.62	36645.25	35811	35421.59	35306.27	35281.44	35199.54	34941.9
12	34768	37744.98	36441.04	35662.03	35340.11	35245.13	35209.8	35162.75	35111.83
13	35351	37603.72	36243.41	35508.57	35219.23	35110.57	35039.29	34966.01	34898.57
14	34120	37466.77	36081.24	35419.19	35196.8	35137.03	35124.23	35136.95	35179.6
15	33403	37322.38	35899	35258.47	35016.44	34889.39	34776.29	34654.03	34512.7
16	32565	37166.22	35682.52	35012.72	34693.36	34455.88	34226.24	33997.56	33775.81
17	37797	36993.73	35419.28	34672.01	34236.51	33874.79	33540.18	33236.53	32971.42
18	44903	36862.04	35345.91	34786.31	34641.73	34710.06	34962.87	35402.67	36027.61
19	39119	36835.78	35681.24	35752.82	36429.41	37467.12	38768.95	40252.78	41830.11
20		36837.34	36033.36	36529.37	37503.3	38569.35	39503.94	40133.74	40327.1
CFE		-35891	-18662.8	-8259.38	-2502.49	611.2891	2125.523	2579.508	2297.219
MAD		3465.468	3113.496	2807.712	2609.679	2472.607	2382.215	2451.667	2591.73
MSE		1.51E+07	1.34E+07	1.26E+07	1.19E+07	1.15E+07	1.13E+07	1.14E+07	1.20E+07
MAPE		9.768155	8.598039	7.642675	7.03943	6.635299	6.381968	6.56138	6.939161
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6	Alpha=0.7	Alpha=0.8



อาหารประเภท IFATT โดยวิธี Moving Average (MA)

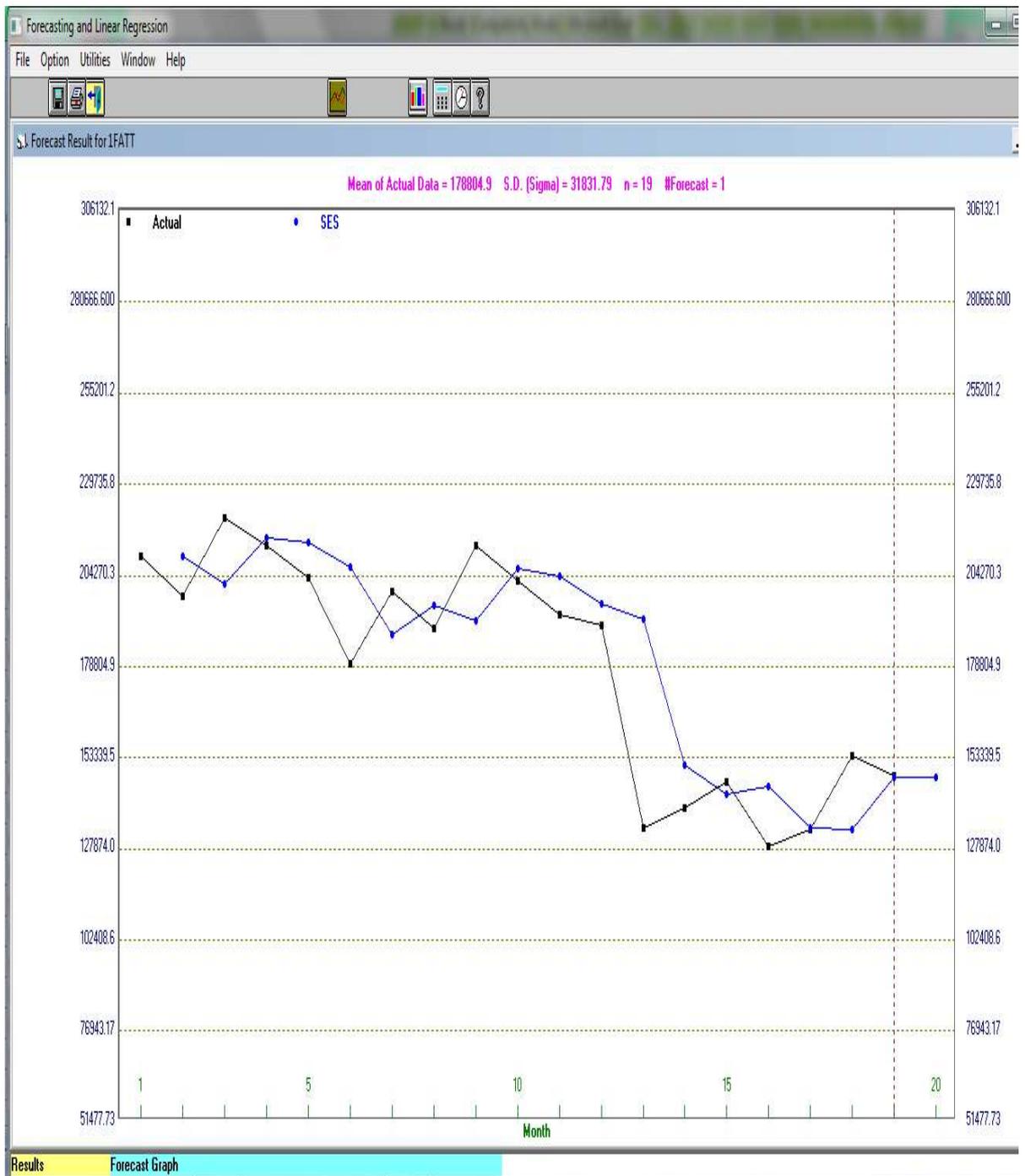
08-18-2013	Actual	Forecast by					
Month	Data	3-MA	4-MA	5-MA	6-MA	7-MA	8-MA
1	209633						
2	198677						
3	220537						
4	212858	209615.7					
5	203795	210690.7	210426.3				
6	179738	212396.7	208966.8	209100			
7	199633	198797	204232	203121	204206.3		
8	189677	194388.7	199006	203312.2	202539.7	203553	
9	212537	189682.7	193210.8	197140.2	201039.7	200702.1	201818.5
10	202858	200615.7	195396.3	197076	199706.3	202682.1	202181.5
11	193295	201690.7	201176.3	196888.6	198039.7	200156.6	202704.1
12	190238	202896.7	199591.8	199600	196289.7	197361.9	199298.9
13	133861	195463.7	199732	197721	198039.7	195425.1	196471.4
14	139420	172464.7	180063	186557.8	187077.7	188871.3	187729.6
15	146604	154506.3	164203.5	171934.4	178701.5	180269.4	182689.9
16	128697	139961.7	152530.8	160683.6	167712.7	174116.1	176061.3
17	133244	138240.3	137145.5	147764	155352.5	162139	168438.8
18	153864	136181.7	136991.3	136365.2	145344	152194.1	158527.1
19	148127	138601.7	140602.3	140365.8	139281.7	146561.1	152402.9
20		145078.3	140983	142107.2	141659.3	140545.3	146756.9
CFE		-127748	-167686	-195837	-201276	-231610	-245579
MAD		15032.1	18003.82	20622.46	20408.05	21841.9	24397.17
MSE		4.63E+08	5.87E+08	7.12E+08	7.67E+08	8.92E+08	1.03E+09
MAPE		9.648304	11.75743	13.80749	14.16227	15.3174	17.28899
		m=3	m=4	m=5	m=6	m=7	m=8

อาหารประเภท IFATT โดยวิธี Single Exponential Smoothing (SES)

08-18-2013	Actual	Forecast by							
Month	Data	SES							
1	209633								
2	198677	209633	209633	209633	209633	209633	209633	209633	209633
3	220537	208537.4	207441.8	206346.2	205250.6	204155	203059.4	201963.8	200868.2
4	212858	209737.4	210060.8	210603.4	211365.2	212346	213546	214965	216603.2
5	203795	210049.4	210620.3	211279.8	211962.3	212602	213133.2	213490.1	213607
6	179738	209424	209255.2	209034.4	208695.4	208198.5	207530.3	206703.5	205757.4
7	199633	206455.4	203351.8	200245.5	197112.4	193968.3	190854.9	187827.7	184941.9
8	189677	205773.2	202608	200061.7	198120.7	196800.6	196121.8	196091.4	196694.8
9	212537	204163.5	200021.8	196946.3	194743.2	193238.8	192254.9	191601.3	191080.6
10	202858	205000.9	202524.9	201623.5	201860.7	202887.9	204424.2	206256.3	208245.7
11	193295	204786.6	202591.5	201993.9	202259.6	202873	203484.5	203877.5	203935.5
12	190238	203637.4	200732.2	199384.2	198673.8	198084	197370.8	196469.8	195423.1
13	133861	202297.5	198633.3	196640.3	195299.5	194161	193091.1	192107.5	191275
14	139420	195453.8	185678.9	177806.5	170724.1	164011	157553	151335	145343.8
15	146604	189850.5	176427.1	166290.6	158202.5	151715.5	146673.2	142994.5	140604.8
16	128697	185525.8	170462.5	160384.6	153563.1	149159.8	146631.7	145521.1	145404.2
17	133244	179842.9	162109.4	150878.3	143616.6	138928.4	135870.9	133744.3	132038.4
18	153864	175183	156336.3	145588	139467.6	136086.2	134294.8	133394.1	133002.9
19	148127	173051.1	155841.8	148070.8	145226.1	144975.1	146036.3	147723	149691.8
20		170558.7	154298.9	148087.7	146386.5	146551	147290.7	148005.8	148440
CFE		-390743	-276671	-205151	-158116	-126164	-103904	-88038.8	-76491.3
MAD		24318.35	18564	16019.81	14938.48	13985.4	13349.96	13313.01	13569.77
MSE		1.00E+09	6.46E+08	4.97E+08	4.24E+08	3.85E+08	3.63E+08	3.51E+08	3.49E+08
MAPE		16.25119	12.24654	10.39711	9.533253	8.78478	8.237552	8.100176	8.180947
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6	Alpha=0.7	Alpha=0.8

อาหารประเภท 1FATT โดยวิธี Double Exponential Smoothing (DES)

08-18-2013	Actual	Forecast by								
Month	Data	DES								
1	209633									
2	198677	209633	209633	209633	209633	209633	209633	209633	209633	209633
3	220537	209523.4	209194.8	208647	207880	206894	205688.8	204264.6	202621.2	200758.6
4	212858	209544.8	209368	209233.9	209274.1	209620	210403.1	211754.9	213806.8	216690.4
5	203795	209595.3	209618.4	209847.7	210349.4	211111	212041.2	212969.5	213647	213745.5
6	179738	209578.2	209545.8	209603.7	209687.8	209654.8	209334.6	208583.3	207335.3	205656.1
7	199633	209265.9	208307	206796.2	204657.6	201811.5	198246.8	194054.4	189420.6	184581.6
8	189677	208916.6	207167.2	204775.9		199306.1	196971.8	195480.3	195239.9	196562.5
9	212537	208441.3	205738.1	202427	199123	196272.4	194141.7	192765	191912.4	191105
10	202858	208097.3	205095.5	202186	200218.1	199580.2	200311.2	202208.9	204979.1	208410.4
11	193295	207766.2	204594.7	202128.3	201034.7	201226.6	202215.1	203376.9	204144.3	204086
12	190238	207353.3	203822.2	201305.1	200090.3	199655.3	199308.5	198541.9	197167.3	195302
13	133861	206847.7	202784.4	199905.7	198174	196908.1	195578.1	194037.8	192453.5	191112.3
14	139420	205708.3	199363.3	193275.9	187194	180459.6	172763.1	164145.8	154765.7	144696.9
15	146604	204122.5	194776.1	185180.3	175597.4	166087.5	157109.2	149339.9	143437	139958.4
16	128697	202262.9	189913.3	177741.6	166783.7	157623.6	150822.7	146666.8	145010.7	145294
17	133244	200020.9	184352.5	169682.6	157516.9	148276	141851.6	137621	134632.9	131903.8
18	153864	197537.1	178749.3	162454.3	150297.1	142181.1	137317.5	134662.2	133328.9	132855.5
19	148127	195088.5	174167.8	158139.2	148268.7	143578.1	142548.8	143804.8	146419.2	149881.9
20		192635.5	170194	155123.8	147515.8	145064.6	145393.9	146745.5	148035.8	148630.7
CFE		-521643	-418531	-325303	-250163	-192219	-148627	-116251	-92294.8	-74573.8
MAD		31027.12	25655.2	20994.21	17882.55	16529.4	15118.83	13891.65	13367.8	13615.89
MSE		1.62E+09	1.12E+09	8.02E+08	6.15E+08	5.03E+08	4.31E+08	3.83E+08	3.56E+08	3.49E+08
MAPE		20.89695	17.20067	13.96094	11.72005	10.6774	9.61697	8.678917	8.193421	8.202708
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6	Alpha=0.7	Alpha=0.8	Alpha=0.9



ประจำเดือน กันยายน 2555

อาหารประเภท IMATT โดยวิธี Moving Average (MA)

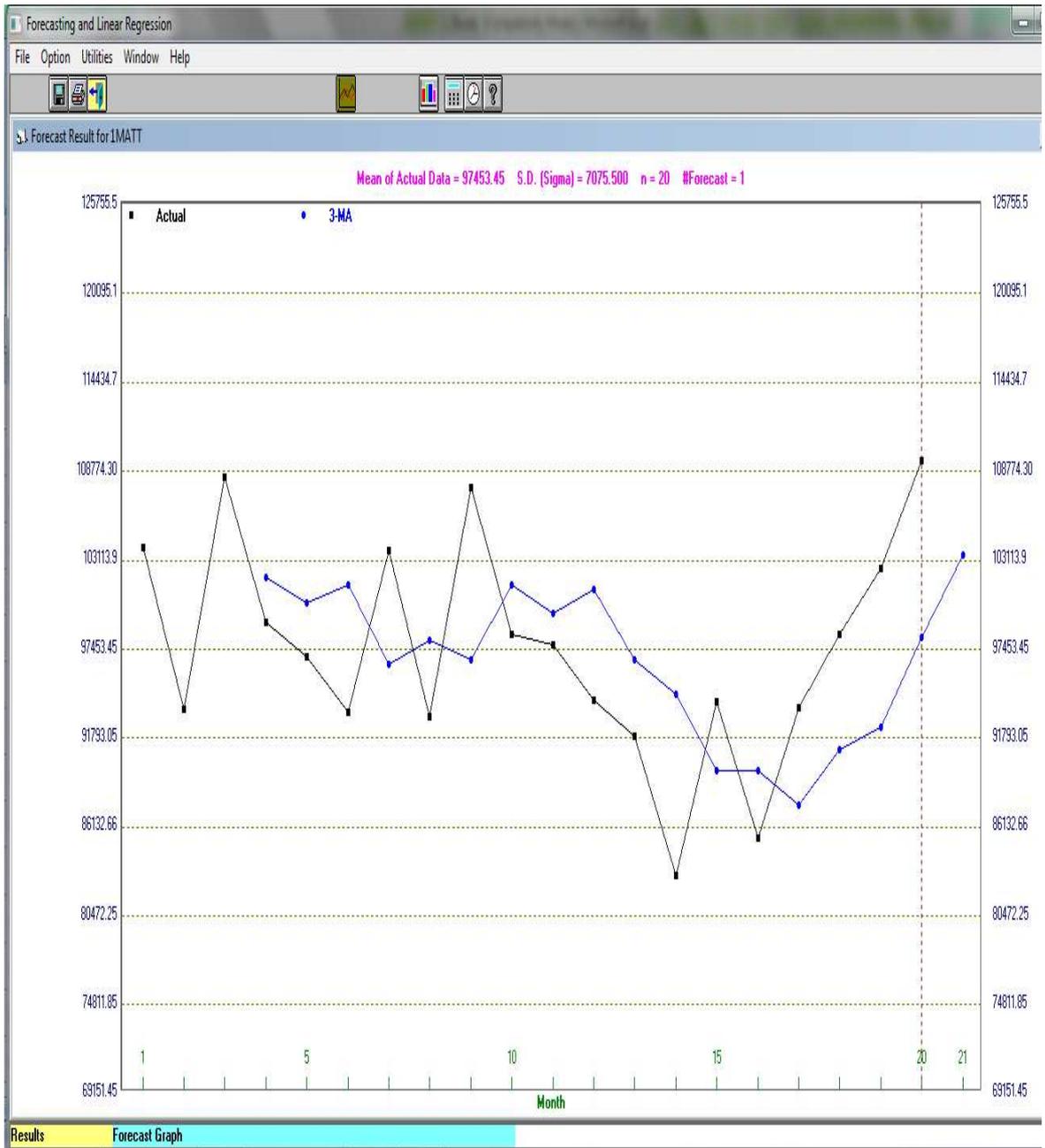
08-19-2013	Actual	Forecast by					
Month	Data	3-MA	4-MA	5-MA	6-MA	7-MA	8-MA
1	103912						
2	93662						
3	108430						
4	99135	102001.3					
5	97009	100409	101284.8				
6	93461	101524.7	99559	100429.6			
7	103712	96535	99508.75	98339.4	99268.16		
8	93112	98060.66	98329.25	100349.4	99234.84	99903	
9	107730	96761.66	96823.5	97285.8	99143.16	98360.14	99054.13
10	98435	101518	99503.75	99004.8	99026.5	100369.9	99531.38
11	97709	99759	100747.3	99290	98909.84	98942	100128
12	94161	101291.3	99246.5	100139.6	99026.5	98738.29	98787.88
13	91894	96768.34	99508.75	98229.4	99143.16	98331.43	98166.13
14	83035	94588	95549.75	97985.8	97173.5	98107.57	97526.75
15	94123	89696.66	91699.75	93046.8	95494	95153.71	96223.5
16	85434	89684	90803.25	92184.4	93226.16	95298.14	95024.88
17	93690	87530.66	88621.5	89729.4	91059.34	92113	94065.13
18	98385	91082.34	89070.5	89635.2	90389.5	91435.14	92310.13
19	102556	92503	92908	90933.4	91093.5	91531.71	92303.88
20	109484	98210.34	95016.25	94837.6	92870.5	92731	92909.75
21		103475	101028.8	97909.8	97278.66	95243.86	94825.13
CFE		5141	5749.5	5500.414	8401.336	-1266.99	604.5
MAD		6445.863	6644.625	7082.96	6790.31	7124.231	6879.146
MSE		5.06E+07	5.75E+07	6.86E+07	6.78E+07	7.54E+07	7.22E+07
MAPE		6.660826	6.876554	7.361737	7.043372	7.436644	7.166872
		m=3	m=4	m=5	m=6	m=7	m=8

อาหารประเภท IMATT โดยวิธี Single Exponential Smoothing (SES)

08-19-2013	Actual	Forecast by				
Month	Data	SES	SES	SES	SES	SES
1	103912					
2	93662	103912	103912	103912	103912	103912
3	108430	102887	101862	100837	99812	98787
4	99135	103441.3	103175.6	103114.9	103259.2	103608.5
5	97009	103010.7	102367.5	101920.9	101609.5	101371.8
6	93461	102410.5	101295.8	100447.4	99769.31	99190.38
7	103712	101515.5	99728.83	98351.45	97245.98	96325.69
8	93112	101735.2	100525.5	99959.61	99832.39	100018.8
9	107730	100872.9	99042.77	97905.33	97144.23	96565.42
10	98435	101558.6	100780.2	100852.7	101378.5	102147.7
11	97709	101246.2	100311.2	100127.4	100201.1	100291.4
12	94161	100892.5	99790.73	99401.88	99204.27	99000.18
13	91894	100219.4	98664.79	97829.62	97186.96	96580.59
14	83035	99386.81	97310.63	96048.93	95069.77	94237.3
15	94123	97751.63	94455.51	92144.75	90255.87	88636.15
16	85434	97388.77	94389.01	92738.23	91802.72	91379.58
17	93690	96193.29	92598.01	90546.96	89255.23	88406.79
18	98385	95942.96	92816.41	91489.88	91029.14	91048.39
19	102556	96187.16	93930.13	93558.41	93971.48	94716.7
20	109484	96824.05	95655.3	96257.69	97405.29	98636.34
21		98090.04	98421.04	100225.6	102236.8	104060.2
CFE		-58219.41	-27454.82	-12288.04	-4188.055	296.3359
MAD		6860.749	6534.84	6648.69	6745.768	6825.195
MSE		6.16E+07	5.65E+07	5.46E+07	5.36E+07	5.34E+07
MAPE		7.230329	6.796685	6.875762	6.955194	7.024305
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5

อาหารประเภท IMATT โดยวิธี Double Exponential Smoothing (DES)

08-19-2013	Actual	Forecast by					
Month	Data	DES	DES	DES	DES	DES	DES
1	103912						
2	93662	103912	103912	103912	103912	103912	103912
3	108430	103809.5	103502	102989.5	102272	101349.5	100222
4	99135	103772.7	103436.7	103027.1	102666.9	102479	102586.5
5	97009	103696.5	103222.9	102695.3	102243.9	101925.4	101722.3
6	93461	103567.9	102837.5	102020.9	101254.1	100557.9	99887.21
7	103712	103362.6	102215.7	100920.1	99650.84	98441.78	97280.17
8	93112	103199.9	101877.7	100631.9	99723.46	99230.31	99178.5
9	107730	102967.2	101310.7	99813.95	98691.77	97897.87	97298.29
10	98435	102826.3	101204.6	100125.6	99766.48	100022.8	100752.9
11	97709	102668.3	101025.9	100126.1	99940.34	100157.1	100471.2
12	94161	102490.7	100778.9	99908.85	99645.91	99578.63	99431.72
13	91894	102263.6	100356.1	99285.08	98662.34	98079.61	97367.95
14	83035	101975.9	99746.97	98314.23	97225.31	96158.45	95067.13
15	94123	101553.5	98688.68	96463.39	94437.53	92397.3	90367.43
16	85434	101137	97828.74	95345.84	93383.61	91888.44	90967.48
17	93690	100642.6	96782.59	93906.18	91732.26	90147.61	89071.44
18	98385	100172.7	95989.36	93181.29	91451.01	90598	90430.75
19	102556	99774.12	95577.52	93294.43	92459.2	92657.34	93511.77
20	109484	99479.11	95593.07	94183.41	94437.63	95646.84	97260.66
21		99340.2	96158.66	95996.05	97557.29	99853.51	102260.9
CFE		-98115.24	-60730.54	-34988.09	-18399.59	-7968.797	-1630.266
MAD		7534.427	6997.251	6674.57	6578.114	6627.174	6682.382
MSE		7.68E+07	6.52E+07	6.12E+07	5.86E+07	5.57E+07	5.32E+07
MAPE		8.053911	7.381025	6.967235	6.821433	6.845788	6.885303
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6



อาหารประเภท IFAR โดยวิธี Moving Average (MA)

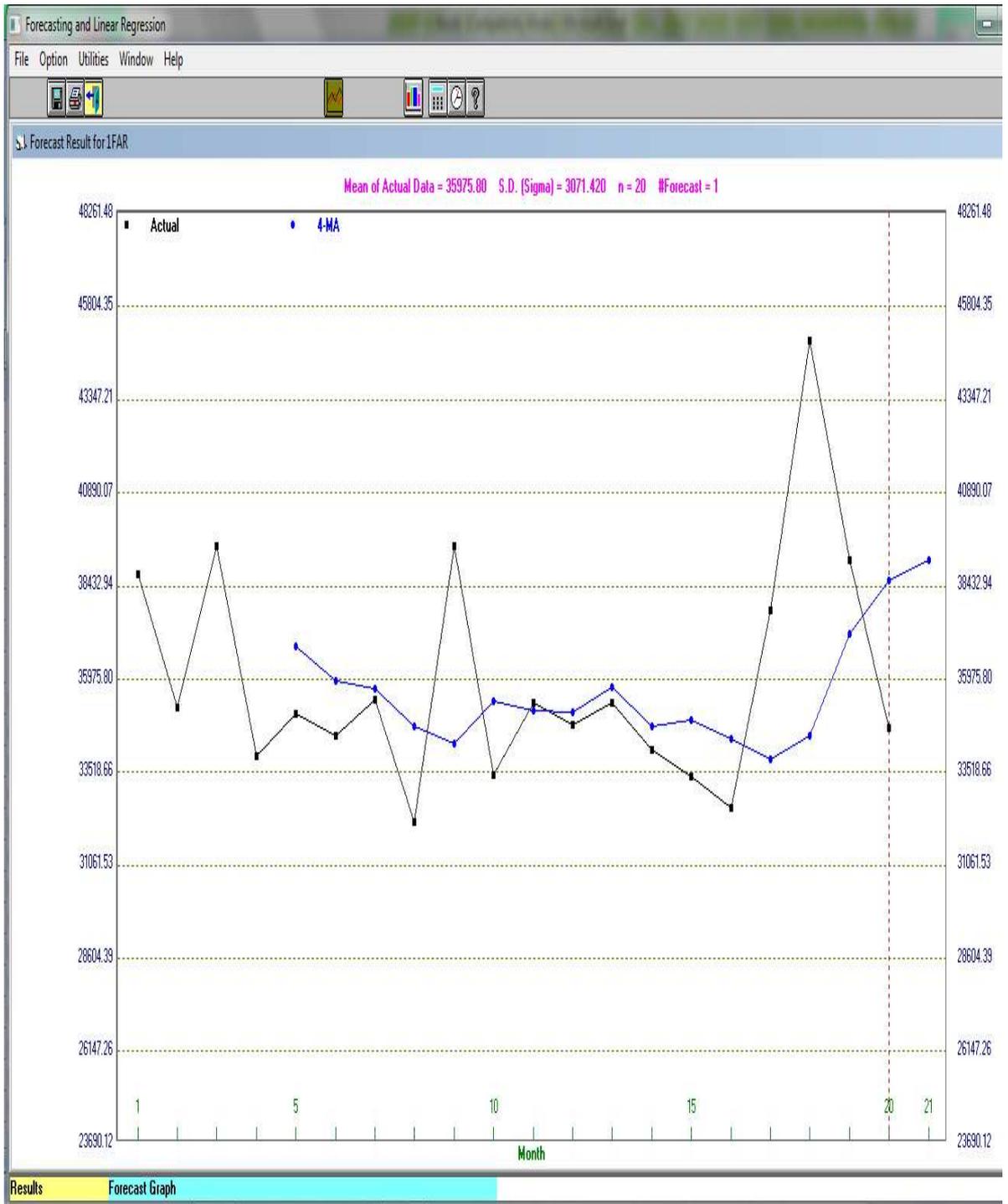
08-17-2013	Actual	Forecast by						
Month	Data	3-MA	4-MA	5-MA	6-MA	7-MA	8-MA	9-MA
1	38733							
2	35221							
3	39475							
4	33943	37809.67						
5	35047	36213	36843					
6	34468	36155	35921.5	36483.8				
7	35433	34486	35733.25	35630.8	36147.83			
8	32221	34982.67	34722.75	35673.2	35597.83	36045.71		
9	39475	34040.67	34292.25	34222.4	35097.83	35115.43	35567.63	
10	33443	35709.67	35399.25	35328.8	35097.83	35723.14	35660.38	36001.78
11	35347	35046.33	35143	35008	35014.5	34861.43	35438.13	35414
12	34768	36088.33	35121.5	35183.8	35064.5	35062	34922.13	35428
13	35351	34519.33	35758.25	35050.8	35114.5	35022.14	35025.25	34905
14	34120	35155.33	34727.25	35676.8	35100.83	35148.29	35063.25	35061.45
15	33403	34746.33	34896.5	34605.8	35417.33	34960.71	35019.75	34958.45
16	32565	34291.33	34410.5	34597.8	34405.33	35129.57	34766	34840.11
17	37797	33362.67	33859.75	34041.4	34259	34142.43	34809	34521.45
18	44903	34588.33	34471.25	34647.2	34667.33	34764.43	34599.25	35141
19	39119	38421.67	37167	36557.6	36356.5	36129.57	36031.75	35744.11
20	34684	40606.33	38596	37557.4	36984.5	36751.14	36503.25	36374.78
21		39568.67	39125.75	37813.6	37078.5	36655.86	36492.75	36301.11
CFE		-135.664	5081	6831.398	8303.344	8339.992	11569.25	7109.891
MAD		2709.157	2395.906	2539.854	2475.809	2736.396	2471.25	2418.818
MSE		1.37E+07	1.20E+07	1.26E+07	1.23E+07	1.37E+07	1.31E+07	1.24E+07
MAPE		7.312912	6.344582	6.738942	6.528801	7.252591	6.375326	6.301022
		m=3	m=4	m=5	m=6	m=7	m=8	m=9

อาหารประเภท 1FAR โดยวิธี Single Exponential Smoothing (SES)

08-17-2013	Actual	Forecast by					
Month	Data	SES	SES	SES	SES	SES	SES
1	38733						
2	35221	38733	38733	38733	38733	38733	38733
3	39475	38381.8	38030.6	37679.4	37328.2	36977	36625.8
4	33943	38491.12	38319.48	38218.08	38186.92	38226	38335.32
5	35047	38036.31	37444.18	36935.55	36489.35	36084.5	35699.93
6	34468	37737.38	36964.75	36368.99	35912.41	35565.75	35308.17
7	35433	37410.44	36465.4	35798.69	35334.64	35016.88	34804.07
8	32221	37212.7	36258.92	35688.98	35373.99	35224.94	35181.43
9	39475	36713.53	35451.34	34648.59	34112.79	33722.97	33405.17
10	33443	36989.68	36256.07	36096.51	36257.68	36598.98	37047.07
11	35347	36635.01	35693.46	35300.46	35131.8	35020.99	34884.63
12	34768	36506.21	35624.16	35314.42	35217.88	35184	35162.05
13	35351	36332.39	35452.93	35150.5	35037.93	34976	34925.62
14	34120	36234.25	35432.54	35210.65	35163.16	35163.5	35180.85
15	33403	36022.82	35170.04	34883.45	34745.89	34641.75	34544.34
16	32565	35760.84	34816.63	34439.32	34208.74	34022.38	33859.54
17	37797	35441.25	34366.3	33877.02	33551.24	33293.69	33082.81
18	44903	35676.83	35052.45	35053.02	35249.55	35545.34	35911.32
19	39119	36599.45	37022.55	38008.01	39110.93	40224.17	41306.33
20	34684	36851.4	37441.84	38341.31	39114.16	39671.59	39993.93
21		36634.66	36890.27	37244.12	37342.09	37177.79	36807.97
CFE		-20983.4	-9213.64	-4962.95	-3477.26	-3110.42	-3208.383
MAD		2994.509	2679.219	2550.683	2503.32	2608.773	2710.08
MSE		1.22E+07	1.15E+07	1.15E+07	1.17E+07	1.21E+07	1.27E+07
MAPE		8.293166	7.303385	6.911661	6.774771	7.049969	7.320521
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6

อาหารประเภท 1FAR โดยวิธี Double Exponential Smoothing (DES)

08-17-2013	Actual	Forecast by						
Month	Data	DES						
1	38733							
2	35221	38733	38733	38733	38733	38733	38733	38733
3	39475	38697.88	38592.52	38416.92	38171.08	37855	37468.68	37012.12
4	33943	38677.2	38537.91	38357.27	38177.41	38040.5	37988.66	38064.05
5	35047	38613.11	38319.16	37930.75	37502.19	37062.5	36615.42	36139.41
6	34468	38525.54	38048.28	37462.22	36866.28	36314.13	35831.07	35430.91
7	35433	38414.03	37731.7	36963.16	36253.63	35665.5	35214.87	34895.32
8	32221	38293.89	37437.14	36580.91	35901.77	35445.22	35194.8	35110.58
9	39475	38135.86	37039.98	36001.21	35186.18	34584.09	34121.02	33714.06
10	33443	38021.24	36883.2	36029.8	35614.78	35591.54	35876.65	36411.23
11	35347	37882.62	36645.25	35811	35421.59	35306.27	35281.44	35199.54
12	34768	37744.98	36441.04	35662.03	35340.11	35245.13	35209.8	35162.75
13	35351	37603.72	36243.41	35508.57	35219.23	35110.57	35039.29	34966.01
14	34120	37466.77	36081.24	35419.19	35196.8	35137.03	35124.23	35136.95
15	33403	37322.38	35899	35258.47	35016.44	34889.39	34776.29	34654.03
16	32565	37166.22	35682.52	35012.72	34693.36	34455.88	34226.24	33997.56
17	37797	36993.73	35419.28	34672.01	34236.51	33874.79	33540.18	33236.53
18	44903	36862.04	35345.91	34786.31	34641.73	34710.06	34962.87	35402.67
19	39119	36835.78	35681.24	35752.82	36429.41	37467.12	38768.95	40252.78
20	34684	36837.34	36033.36	36529.37	37503.3	38569.35	39503.94	40133.74
21		36817.07	36204.75	36743.8	37438.82	37873.57	37886.36	37452.66
CFE		-38044.3	-20012.2	-10104.8	-5321.79	-3274.06	-2694.414	-2870.23
MAD		3396.408	3020.647	2757.063	2620.712	2546.962	2510.516	2609.46
MSE		1.45E+07	1.28E+07	1.21E+07	1.17E+07	1.17E+07	1.19E+07	1.24E+07
MAPE		9.580803	8.35027	7.520456	7.096752	6.875659	6.777481	7.043021
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6	Alpha=0.7



อาหารประเภท 1FATT โดยวิธี Moving Average (MA)

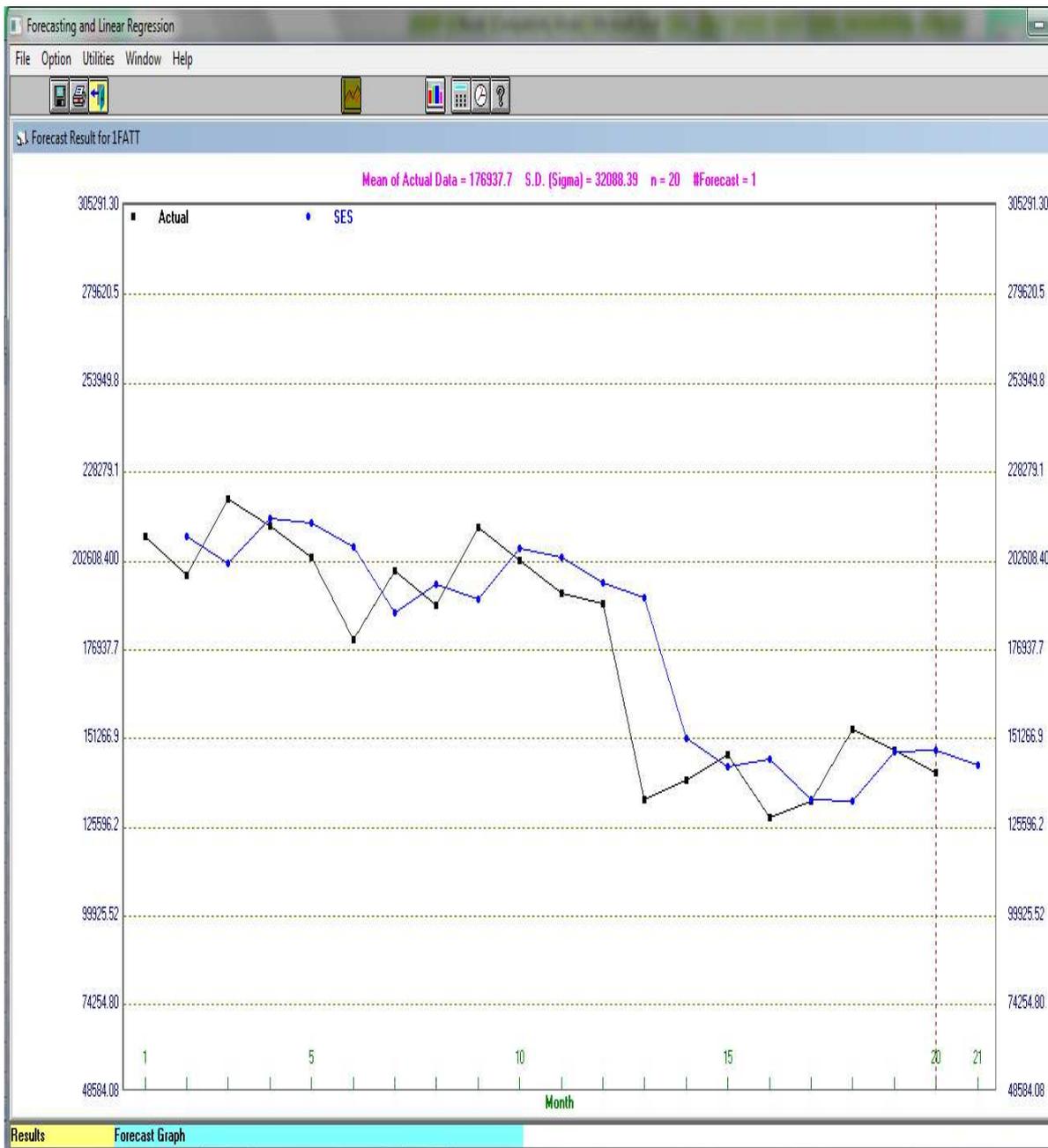
08-18-2013	Actual	Forecast by				
Month	Data	3-MA	4-MA	5-MA	6-MA	7-MA
1	209633					
2	198677					
3	220537					
4	212858	209615.7				
5	203795	210690.7	210426.3			
6	179738	212396.7	208966.8	209100		
7	199633	198797	204232	203121	204206.3	
8	189677	194388.7	199006	203312.2	202539.7	203553
9	212537	189682.7	193210.8	197140.2	201039.7	200702.1
10	202858	200615.7	195396.3	197076	199706.3	202682.1
11	193295	201690.7	201176.3	196888.6	198039.7	200156.6
12	190238	202896.7	199591.8	199600	196289.7	197361.9
13	133861	195463.7	199732	197721	198039.7	195425.1
14	139420	172464.7	180063	186557.8	187077.7	188871.3
15	146604	154506.3	164203.5	171934.4	178701.5	180269.4
16	128697	139961.7	152530.8	160683.6	167712.7	174116.1
17	133244	138240.3	137145.5	147764	155352.5	162139
18	153864	136181.7	136991.3	136365.2	145344	152194.1
19	148127	138601.7	140602.3	140365.8	139281.7	146561.1
20	141460	145078.3	140983	142107.2	141659.3	140545.3
21		147817	144173.8	141078.4	141999.3	141630.9
CFE		-131367	-167209.3	-196484	-201475.4	-230695.3
MAD		14360.71	16908.39	19290.77	18964.57	20232.12
MSE		4.37E+08	5.51E+08	6.65E+08	7.12E+08	8.23E+08
MAPE		9.231218	11.04367	12.9175	13.16074	14.18887
		m=3	m=4	m=5	m=6	m=7

อาหารประเภท IFATT โดยวิธี Single Exponential Smoothing (SES)

08-18-2013	Actual	Forecast by							
Month	Data	SES							
1	209633								
2	198677	209633	209633	209633	209633	209633	209633	209633	209633
3	220537	208537.4	207441.8	206346.2	205250.6	204155	203059.4	201963.8	200868.2
4	212858	209737.4	210060.8	210603.4	211365.2	212346	213546	214965	216603.2
5	203795	210049.4	210620.3	211279.8	211962.3	212602	213133.2	213490.1	213607
6	179738	209424	209255.2	209034.4	208695.4	208198.5	207530.3	206703.5	205757.4
7	199633	206455.4	203351.8	200245.5	197112.4	193968.3	190854.9	187827.7	184941.9
8	189677	205773.2	202608	200061.7	198120.7	196800.6	196121.8	196091.4	196694.8
9	212537	204163.5	200021.8	196946.3	194743.2	193238.8	192254.9	191601.3	191080.6
10	202858	205000.9	202524.9	201623.5	201860.7		204424.2	206256.3	208245.7
11	193295	204786.6	202591.5	201993.9	202259.6	202873	203484.5	203877.5	203935.5
12	190238	203637.4	200732.2	199384.2	198673.8	198084	197370.8	196469.8	195423.1
13	133861	202297.5	198633.3	196640.3	195299.5	194161	193091.1	192107.5	191275
14	139420	195453.8	185678.9	177806.5	170724.1	164011	157553	151335	145343.8
15	146604	189850.5	176427.1	166290.6	158202.5	151715.5	146673.2	142994.5	140604.8
16	128697	185525.8	170462.5	160384.6	153563.1	149159.8	146631.7	145521.1	145404.2
17	133244	179842.9	162109.4	150878.3	143616.6	138928.4	135870.9	133744.3	132038.4
18	153864	175183	156336.3	145588	139467.6	136086.2	134294.8	133394.1	133002.9
19	148127	173051.1	155841.8	148070.8	145226.1	144975.1	146036.3	147723	149691.8
20	141460	170558.7	154298.9	148087.7	146386.5	146551	147290.7	148005.8	148440
21		167648.8	151731.1	146099.4	144415.9	144005.5	143792.3	143423.7	142856
CFE		-419842	289509.5	211778.9	163042.7	-131255	109734.5	94584.61	83471.28
MAD		24569.95	18262.68	15525.48	14411.54	13517.28	12954.21	12956.84	13222.94
MSE		9.95E+08	6.20E+08	4.73E+08	4.03E+08	3.66E+08	3.45E+08	3.35E+08	3.33E+08
MAPE		16.47851	12.07967	10.09648	9.214798	8.51184	8.020933	7.917394	8.010067
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6	Alpha=0.7	Alpha=0.8

อาหารประเภท 1FATT โดยวิธี Double Exponential Smoothing (DES)

08-18-2013	Actual	Forecast by							
Month	Data	DES							
1	209633								
2	198677	209633	209633	209633	209633	209633	209633	209633	209633
3	220537	209523.4	209194.8	208647	207880	206894	205688.8	204264.6	202621.2
4	212858	209544.8	209368	209233.9	209274.1	209620	210403.1	211754.9	213806.8
5	203795	209595.3	209618.4	209847.7	210349.4	211111	212041.2	212969.5	213647
6	179738	209578.2	209545.8	209603.7	209687.8	209654.8	209334.6	208583.3	207335.3
7	199633	209265.9	208307	206796.2	204657.6	201811.5	198246.8	194054.4	189420.6
8	189677	208916.6	207167.2	204775.9	202042.8	199306.1	196971.8	195480.3	195239.9
9	212537	208441.3	205738.1	202427	199123	196272.4	194141.7	192765	191912.4
10	202858	208097.3	205095.5	202186	200218.1	199580.2	200311.2	202208.9	204979.1
11	193295	207766.2	204594.7	202128.3	201034.7	201226.6	202215.1	203376.9	204144.3
12	190238	207353.3	203822.2	201305.1	200090.3	199655.3	199308.5	198541.9	197167.3
13	133861	206847.7	202784.4	199905.7	198174	196908.1	195578.1	194037.8	192453.5
14	139420	205708.3	199363.3	193275.9	187194	180459.6	172763.1	164145.8	154765.7
15	146604	204122.5	194776.1	185180.3	175597.4	166087.5	157109.2	149339.9	143437
16	128697	202262.9	189913.3	177741.6	166783.7	157623.6	150822.7	146666.8	145010.7
17	133244	200020.9	184352.5	169682.6	157516.9	148276	141851.6	137621	134632.9
18	153864	197537.1	178749.3	162454.3	150297.1	142181.1	137317.5	134662.2	133328.9
19	148127	195088.5	174167.8	158139.2	148268.7	143578.1	142548.8	143804.8	146419.2
20	141460	192635.5	170194	155123.8	147515.8	145064.6	145393.9	146745.5	148035.8
21		190136.8	166501.4	152416.5	146275.9	144535	144432.9	144420.3	143892
CFE		-572819	-447265.5	-338967.1	-256218.4	-195823.4	-152560.6	-121536.4	98870.56
MAD		32087.56	25817.24	20608.39	17260.1	15849.14	14530.15	13438.69	13010.32
MSE		1.67E+09	1.11E+09	7.70E+08	5.84E+08	4.77E+08	4.09E+08	3.65E+08	3.39E+08
MAPE		21.70114	17.36445	13.73452	11.32852	10.24954	9.257179	8.418783	8.006847
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6	Alpha=0.7	Alpha=0.8



ประจำเดือน ตุลาคม 2555

อาหารประเภท IMATT โดยวิธี Moving Average (MA)

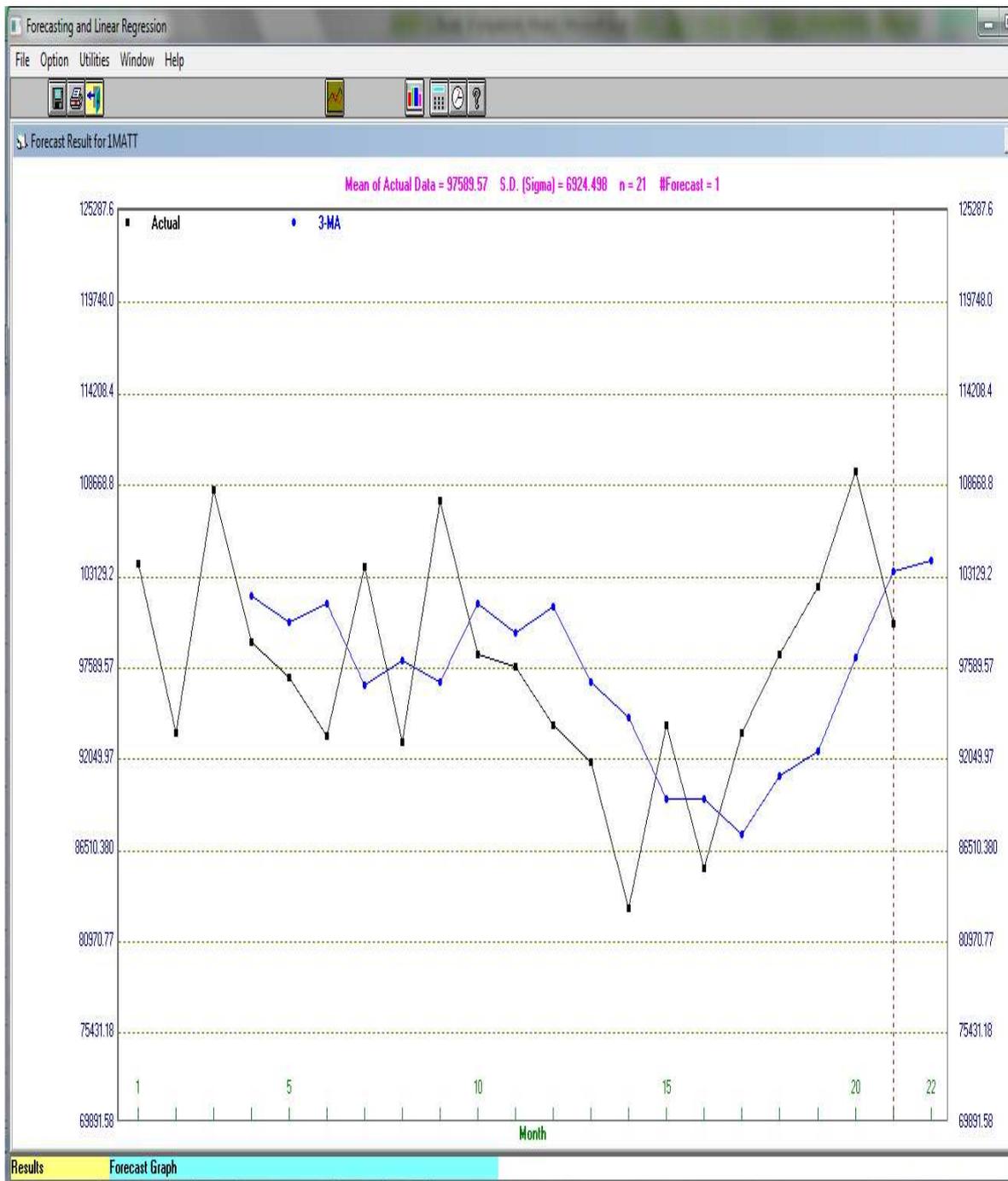
08-19-2013	Actual	Forecast by					
Month	Data	3-MA	4-MA	5-MA	6-MA	7-MA	8-MA
1	103912						
2	93662						
3	108430						
4	99135	102001.3					
5	97009	100409	101284.8				
6	93461	101524.7	99559	100429.6			
7	103712	96535	99508.75	98339.4	99268.16		
8	93112	98060.66	98329.25	100349.4	99234.84	99903	
9	107730	96761.66	96823.5	97285.8	99143.16	98360.14	99054.13
10	98435	101518	99503.75	99004.8	99026.5	100369.9	99531.38
11	97709	99759	100747.3	99290	98909.84	98942	100128
12	94161	101291.3	99246.5	100139.6	99026.5	98738.29	98787.88
13	91894	96768.34	99508.75	98229.4	99143.16	98331.43	98166.13
14	83035	94588	95549.75	97985.8	97173.5	98107.57	97526.75
15	94123	89696.66	91699.75	93046.8	95494	95153.71	96223.5
16	85434	89684	90803.25	92184.4	93226.16	95298.14	95024.88
17	93690	87530.66	88621.5	89729.4	91059.34	92113	94065.13
18	98385	91082.34	89070.5	89635.2	90389.5	91435.14	92310.13
19	102556	92503	92908	90933.4	91093.5	91531.71	92303.88
20	109484	98210.34	95016.25	94837.6	92870.5	92731	92909.75
21	100312	103475	101028.8	97909.8	97278.66	95243.86	94825.13
22		104117.3	102684.3	100885.4	98310.16	97712	95877.38
CFE		1978	5032.75	7902.617	11434.67	3801.148	6091.375
MAD		6263.482	6295.926	6790.413	6539.845	6977.368	6772.048
MSE		4.83E+07	5.41E+07	6.47E+07	6.39E+07	7.18E+07	6.90E+07
MAPE		6.465956	6.514082	7.051299	6.775407	7.266339	7.036329
		m=3	m=4	m=5	m=6	m=7	m=8

อาหารประเภท IMATT โดยวิธี Single Exponential Smoothing (SES)

08-19-2013	Actual	Forecast by					
Month	Data	SES	SES	SES	SES	SES	SES
1	103912						
2	93662	103912	103912	103912	103912	103912	103912
3	108430	102887	101862	100837	99812	98787	97762
4	99135	103441.3	103175.6	103114.9	103259.2	103608.5	104162.8
5	97009	103010.7	102367.5	101920.9	101609.5	101371.8	101146.1
6	93461	102410.5	101295.8	100447.4	99769.31	99190.38	98663.84
7	103712	101515.5	99728.83	98351.45	97245.98	96325.69	95542.14
8	93112	101735.2	100525.5	99959.61	99832.39	100018.8	100444.1
9	107730	100872.9	99042.77	97905.33	97144.23	96565.42	96044.82
10	98435	101558.6	100780.2	100852.7	101378.5	102147.7	103055.9
11	97709	101246.2	100311.2	100127.4	100201.1	100291.4	100283.4
12	94161	100892.5	99790.73	99401.88	99204.27	99000.18	98738.75
13	91894	100219.4	98664.79	97829.62	97186.96	96580.59	95992.1
14	83035	99386.81	97310.63	96048.93	95069.77	94237.3	93533.24
15	94123	97751.63	94455.51	92144.75	90255.87	88636.15	87234.3
16	85434	97388.77	94389.01	92738.23	91802.72	91379.58	91367.52
17	93690	96193.29	92598.01	90546.96	89255.23	88406.79	87807.41
18	98385	95942.96	92816.41	91489.88	91029.14	91048.39	91336.96
19	102556	96187.16	93930.13	93558.41	93971.48	94716.7	95565.78
20	109484	96824.05	95655.3	96257.69	97405.29	98636.34	99759.91
21	100312	98090.04	98421.04	100225.6	102236.8	104060.2	105594.4
22		98312.23	98799.23	100251.5	101466.9	102186.1	102424.9
CFE		-55997.45	-25563.86	-12201.62	-6112.828	-3451.836	-2478.414
MAD		6628.81	6302.646	6320.577	6504.718	6671.344	6829.589
MSE		5.88E+07	5.38E+07	5.19E+07	5.11E+07	5.14E+07	5.30E+07
MAPE		6.979566	6.551105	6.536281	6.703374	6.859915	7.012385
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6

อาหารประเภท IMATT โดยวิธี Double Exponential Smoothing (DES)

08-19-2013	Actual	Forecast by					
Month	Data	DES	DES	DES	DES	DES	DES
1	103912						
2	93662	103912	103912	103912	103912	103912	103912
3	108430	103809.5	103502	102989.5	102272	101349.5	100222
4	99135	103772.7	103436.7	103027.1	102666.9	102479	102586.5
5	97009	103696.5	103222.9	102695.3	102243.9	101925.4	101722.3
6	93461	103567.9	102837.5	102020.9	101254.1	100557.9	99887.21
7	103712	103362.6	102215.7	100920.1	99650.84	98441.78	97280.17
8	93112	103199.9	101877.7	100631.9	99723.46	99230.31	99178.5
9	107730	102967.2	101310.7	99813.95	98691.77	97897.87	97298.29
10	98435	102826.3	101204.6	100125.6	99766.48	100022.8	100752.9
11	97709	102668.3	101025.9	100126.1	99940.34	100157.1	100471.2
12	94161	102490.7	100778.9	99908.85	99645.91	99578.63	99431.72
13	91894	102263.6	100356.1	99285.08	98662.34	98079.61	97367.95
14	83035	101975.9	99746.97	98314.23	97225.31	96158.45	95067.13
15	94123	101553.5	98688.68	96463.39	94437.53	92397.3	90367.43
16	85434	101137	97828.74	95345.84	93383.61	91888.44	90967.48
17	93690	100642.6	96782.59	93906.18	91732.26	90147.61	89071.44
18	98385	100172.7	95989.36	93181.29	91451.01	90598	90430.75
19	102556	99774.12	95577.52	93294.43	92459.2	92657.34	93511.77
20	109484	99479.11	95593.07	94183.41	94437.63	95646.84	97260.66
21	100312	99340.2	96158.66	95996.05	97557.29	99853.51	102260.9
22		99237.41	96686.78	97272.69	99121.12	101019.8	102359.3
CFE		-97143.45	-56577.2	-30672.14	-15644.88	-7510.305	-3579.148
MAD		7206.295	6855.056	6556.639	6386.944	6318.74	6445.708
MSE		7.31E+07	6.28E+07	5.91E+07	5.60E+07	5.29E+07	5.07E+07
MAPE		7.699655	7.218994	6.833999	6.617668	6.526352	6.638179
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6



อาหารประเภท IFAR โดยวิธี Moving Average (MA)

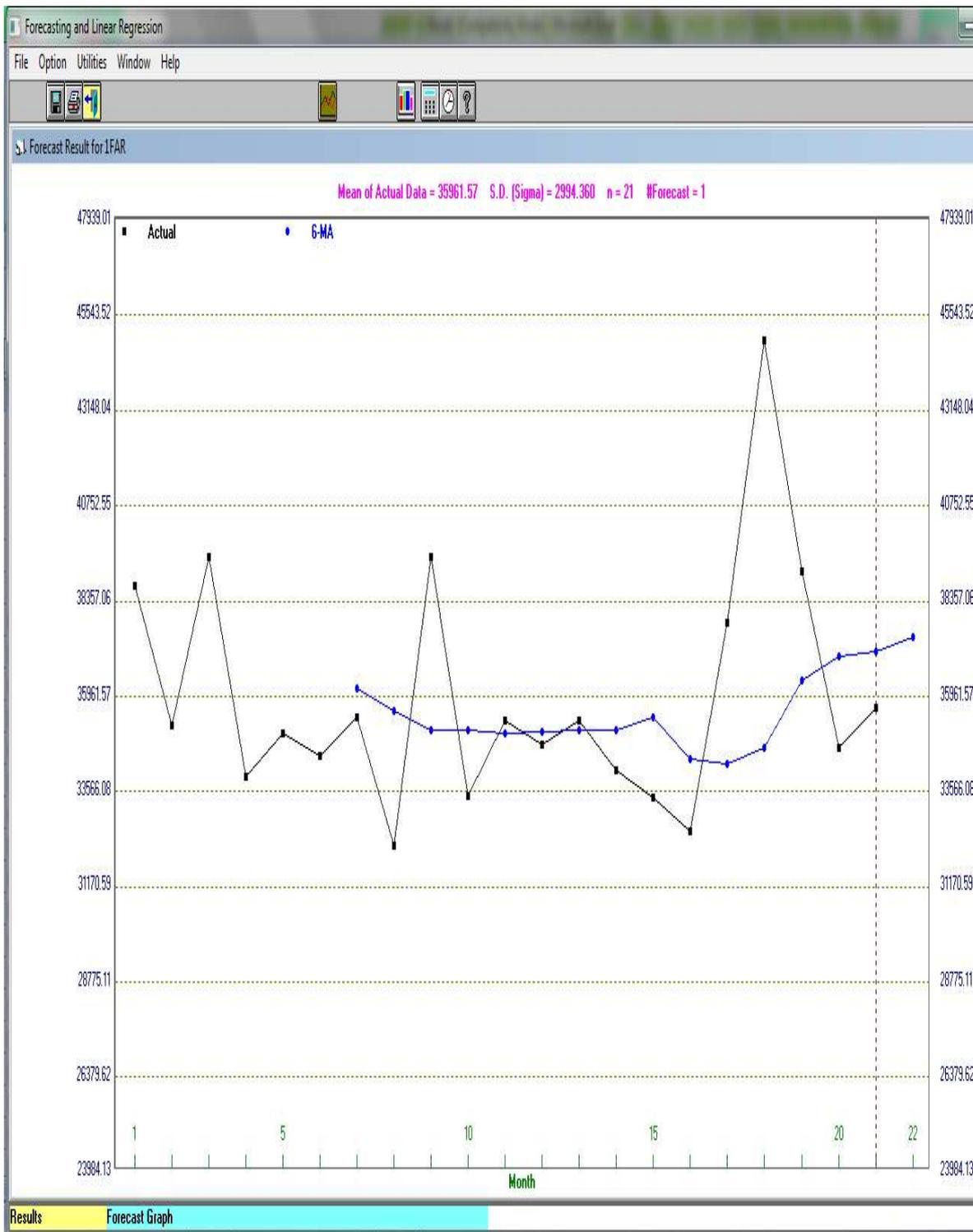
08-17-2013	Actual	Forecast by				
Month	Data	3-MA	4-MA	5-MA	6-MA	7-MA
1	38733					
2	35221					
3	39475					
4	33943	37809.67				
5	35047	36213	36843			
6	34468	36155	35921.5	36483.8		
7	35433	34486	35733.25	35630.8	36147.83	
8	32221	34982.67	34722.75	35673.2	35597.83	36045.71
9	39475	34040.67	34292.25	34222.4	35097.83	35115.43
10	33443	35709.67	35399.25	35328.8	35097.83	35723.14
11	35347	35046.33	35143	35008	35014.5	34861.43
12	34768	36088.33	35121.5	35183.8	35064.5	35062
13	35351	34519.33	35758.25	35050.8	35114.5	35022.14
14	34120	35155.33	34727.25	35676.8	35100.83	35148.29
15	33403	34746.33	34896.5	34605.8	35417.33	34960.71
16	32565	34291.33	34410.5	34597.8	34405.33	35129.57
17	37797	33362.67	33859.75	34041.4	34259	34142.43
18	44903	34588.33	34471.25	34647.2	34667.33	34764.43
19	39119	38421.67	37167	36557.6	36356.5	36129.57
20	34684	40606.33	38596	37557.4	36984.5	36751.14
21	35677	39568.67	39125.75	37813.6	37078.5	36655.86
22		36493.33	38595.75	38436	37457.5	36878.29
CFE		-4027.332	1632.25	4694.797	6901.844	7361.137
MAD		2774.852	2457.838	2514.65	2404.188	2610.857
MSE		1.37E+07	1.20E+07	1.21E+07	1.16E+07	1.28E+07
MAPE		7.512642	6.539994	6.692054	6.355434	6.930524
		m=3	m=4	m=5	m=6	m=7

อาหารประเภท 1FAR โดยวิธี Single Exponential Smoothing (SES)

08-17-2013	Actual	Forecast by					
Month	Data	SES	SES	SES	SES	SES	SES
1	38733						
2	35221	38733	38733	38733	38733	38733	38733
3	39475	38381.8	38030.6	37679.4	37328.2	36977	36625.8
4	33943	38491.12	38319.48	38218.08	38186.92	38226	38335.32
5	35047	38036.31	37444.18	36935.55	36489.35	36084.5	35699.93
6	34468	37737.38	36964.75	36368.99	35912.41	35565.75	35308.17
7	35433	37410.44	36465.4	35798.69	35334.64	35016.88	34804.07
8	32221	37212.7	36258.92	35688.98	35373.99	35224.94	35181.43
9	39475	36713.53	35451.34	34648.59	34112.79	33722.97	33405.17
10	33443	36989.68	36256.07	36096.51	36257.68	36598.98	37047.07
11	35347	36635.01	35693.46	35300.46	35131.8	35020.99	34884.63
12	34768	36506.21	35624.16	35314.42	35217.88	35184	35162.05
13	35351	36332.39	35452.93	35150.5	35037.93	34976	34925.62
14	34120	36234.25	35432.54	35210.65	35163.16	35163.5	35180.85
15	33403	36022.82	35170.04	34883.45	34745.89	34641.75	34544.34
16	32565	35760.84	34816.63	34439.32	34208.74	34022.38	33859.54
17	37797	35441.25	34366.3	33877.02	33551.24	33293.69	33082.81
18	44903	35676.83	35052.45	35053.02	35249.55	35545.34	35911.32
19	39119	36599.45	37022.55	38008.01	39110.93	40224.17	41306.33
20	34684	36851.4	37441.84	38341.31	39114.16	39671.59	39993.93
21	35677	36634.66	36890.27	37244.12	37342.09	37177.79	36807.97
22		36538.89	36647.62	36773.98	36676.05	36427.4	36129.39
CFE		-21941.05	-10426.91	-6530.06	-5142.36	-4611.21	-4339.36
MAD		2892.667	2605.921	2501.504	2461.409	2553.374	2631.125
MSE		1.16E+07	1.10E+07	1.10E+07	1.13E+07	1.16E+07	1.21E+07
MAPE		8.01272	7.108251	6.785703	6.669389	6.907802	7.112997
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6

อาหารประเภท 1FAR โดยวิธี Double Exponential Smoothing (DES)

08-17-2013	Actual	Forecast by						
Month	Data	DES						
1	38733							
2	35221	38733	38733	38733	38733	38733	38733	38733
3	39475	38697.88	38592.52	38416.92	38171.08	37855	37468.68	37012.12
4	33943	38677.2	38537.91	38357.27	38177.41	38040.5	37988.66	38064.05
5	35047	38613.11	38319.16	37930.75	37502.19	37062.5	36615.42	36139.41
6	34468	38525.54	38048.28	37462.22	36866.28	36314.13	35831.07	35430.91
7	35433	38414.03	37731.7	36963.16	36253.63	35665.5	35214.87	34895.32
8	32221	38293.89	37437.14	36580.91	35901.77	35445.22	35194.8	35110.58
9	39475	38135.86	37039.98	36001.21	35186.18	34584.09	34121.02	33714.06
10	33443	38021.24	36883.2	36029.8	35614.78	35591.54	35876.65	36411.23
11	35347	37882.62	36645.25	35811	35421.59	35306.27	35281.44	35199.54
12	34768	37744.98	36441.04	35662.03	35340.11	35245.13	35209.8	35162.75
13	35351	37603.72	36243.41	35508.57	35219.23	35110.57	35039.29	34966.01
14	34120	37466.77	36081.24	35419.19	35196.8	35137.03	35124.23	35136.95
15	33403	37322.38	35899	35258.47	35016.44	34889.39	34776.29	34654.03
16	32565	37166.22	35682.52	35012.72	34693.36	34455.88	34226.24	33997.56
17	37797	36993.73	35419.28	34672.01	34236.51	33874.79	33540.18	33236.53
18	44903	36862.04	35345.91	34786.31	34641.73	34710.06	34962.87	35402.67
19	39119	36835.78	35681.24	35752.82	36429.41	37467.12	38768.95	40252.78
20	34684	36837.34	36033.36	36529.37	37503.3	38569.35	39503.94	40133.74
21	35677	36817.07	36204.75	36743.8	37438.82	37873.57	37886.36	37452.66
22		36789.25	36293.32	36752.85	37133.71	37150.48	36832.18	36341.29
CFE		-39184.39	-20539.92	-11171.6	-7083.61	-5470.63	-4903.77	-4645.89
MAD		3283.591	2896.002	2672.549	2577.767	2529.443	2495.458	2567.77
MSE		1.39E+07	1.22E+07	1.15E+07	1.13E+07	1.14E+07	1.16E+07	1.19E+07
MAPE		9.261539	8.006719	7.293941	6.988827	6.839718	6.74824	6.939722
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6	Alpha=0.7



อาหารประเภท IFATT โดยวิธี Moving Average (MA)

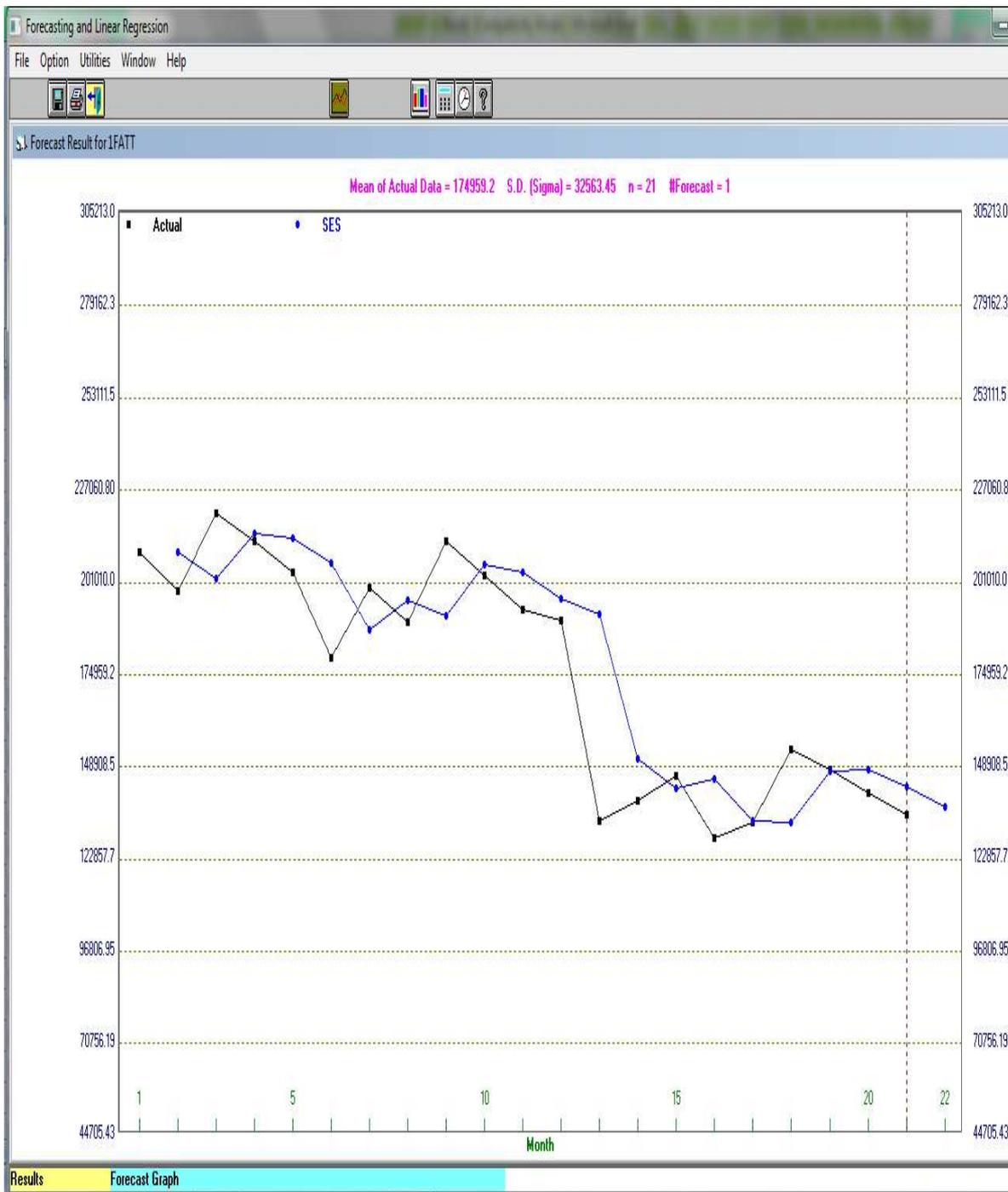
08-18-2013	Actual	Forecast by					
Month	Data	3-MA	4-MA	5-MA	6-MA	7-MA	8-MA
1	209633						
2	198677						
3	220537						
4	212858	209615.7					
5	203795	210690.7	210426.3				
6	179738	212396.7	208966.8	209100			
7	199633	198797	204232	203121	204206.3		
8	189677	194388.7	199006	203312.2	202539.7	203553	
9	212537	189682.7	193210.8	197140.2	201039.7	200702.1	201818.5
10	202858	200615.7	195396.3	197076	199706.3	202682.1	202181.5
11	193295	201690.7	201176.3	196888.6	198039.7	200156.6	202704.1
12	190238	202896.7	199591.8	199600	196289.7	197361.9	199298.9
13	133861	195463.7	199732	197721	198039.7	195425.1	196471.4
14	139420	172464.7	180063	186557.8	187077.7	188871.3	187729.6
15	146604	154506.3	164203.5	171934.4	178701.5	180269.4	182689.9
16	128697	139961.7	152530.8	160683.6	167712.7	174116.1	176061.3
17	133244	138240.3	137145.5	147764	155352.5	162139	168438.8
18	153864	136181.7	136991.3	136365.2	145344	152194.1	158527.1
19	148127	138601.7	140602.3	140365.8	139281.7	146561.1	152402.9
20	141460	145078.3	140983	142107.2	141659.3	140545.3	146756.9
21	135391	147817	144173.8	141078.4	141999.3	141630.9	140659.6
22		141659.3	144710.5	142417.2	140130.5	141055.3	140850.9
CFE		-143793	-175992	-202171	-208084	-236935	-256144
MAD		14253.22	16430.41	18440.56	18140.82	19232.67	21456.49
MSE		4.21E+08	5.23E+08	6.25E+08	6.68E+08	7.67E+08	8.78E+08
MAPE		9.228253	10.77563	12.3727	12.60875	13.50458	15.21652
		m=3	m=4	m=5	m=6	m=7	m=8

อาหารประเภท 1FATT โดยวิธี Single Exponential Smoothing (SES)

08-18-2013	Actual	Forecast by								
Month	Data	SES								
1	209633									
2	198677	209633	209633	209633	209633	209633	209633	209633	209633	209633
3	220537	208537.4	207441.8	206346.2	205250.6	204155	203059.4	201963.8	200868.2	199772.6
4	212858	209737.4	210060.8	210603.4	211365.2	212346	213546	214965	216603.2	218460.6
5	203795	210049.4	210620.3	211279.8	211962.3	212602	213133.2	213490.1	213607	213418.3
6	179738	209424	209255.2	209034.4	208695.4	208198.5	207530.3	206703.5	205757.4	204757.3
7	199633	206455.4	203351.8	200245.5	197112.4	193968.3	190854.9	187827.7	184941.9	182239.9
8	189677	205773.2	202608	200061.7	198120.7	196800.6	196121.8	196091.4	196694.8	197893.7
9	212537	204163.5	200021.8	196946.3	194743.2	193238.8	192254.9	191601.3	191080.6	190498.7
10	202858	205000.9	202524.9	201623.5	201860.7	202887.9	204424.2	206256.3	208245.7	210333.2
11	193295	204786.6	202591.5	201993.9	202259.6	202873	203484.5	203877.5	203935.5	203605.5
12	190238	203637.4	200732.2	199384.2	198673.8	198084	197370.8	196469.8	195423.1	194326
13	133861	202297.5	198633.3	196640.3	195299.5	194161	193091.1	192107.5	191275	190646.8
14	139420	195453.8	185678.9	177806.5	170724.1	164011	157553	151335	145343.8	139539.6
15	146604	189850.5	176427.1	166290.6	158202.5	151715.5	146673.2	142994.5	140604.8	139432
16	128697	185525.8	170462.5	160384.6	153563.1	149159.8	146631.7	145521.1	145404.2	145886.8
17	133244	179842.9	162109.4	150878.3	143616.6	138928.4	135870.9	133744.3	132038.4	130416
18	153864	175183	156336.3	145588	139467.6	136086.2	134294.8	133394.1	133002.9	132961.2
19	148127	173051.1	155841.8	148070.8	145226.1	144975.1	146036.3	147723	149691.8	151773.7
20	141460	170558.7	154298.9	148087.7	146386.5	146551	147290.7	148005.8	148440	148491.7
21	135391	167648.8	151731.1	146099.4	144415.9	144005.5	143792.3	143423.7	142856	142163.2
22		164423.1	148463.1	142886.9	140805.9	139698.3	138751.5	137800.8	136884	136068.2
CFE		-452100	-305850	-222487	-172068	-139870	-118136	-102617	-90936.3	-81738.7
MAD		24954.34	18166.55	15284.63	14142.2	13272.14	12726.56	12710.63	12935.04	13196.8
MSE		9.97E+08	6.03E+08	4.55E+08	3.87E+08	3.51E+08	3.32E+08	3.21E+08	3.19E+08	3.23E+08
MAPE		16.84587	12.07912	9.987117	9.087348	8.404383	7.930147	7.818173	7.885245	7.984192
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6	Alpha=0.7	Alpha=0.8	Alpha=0.9

อาหารประเภท 1FATT โดยวิธี Double Exponential Smoothing (DES)

08-18-2013	Actual	Forecast by								
Month	Data	DES								
1	209633									
2	198677	209633	209633	209633	209633	209633	209633	209633	209633	209633
3	220537	209523.4	209194.8	208647	207880	206894	205688.8	204264.6	202621.2	200758.6
4	212858	209544.8	209368	209233.9	209274.1	209620	210403.1	211754.9	213806.8	216690.4
5	203795	209595.3	209618.4	209847.7	210349.4	211111	212041.2	212969.5	213647	213745.5
6	179738	209578.2	209545.8	209603.7	209687.8	209654.8	209334.6	208583.3	207335.3	205656.1
7	199633	209265.9	208307	206796.2	204657.6	201811.5	198246.8	194054.4	189420.6	184581.6
8	189677	208916.6	207167.2	204775.9	202042.8	199306.1	196971.8	195480.3	195239.9	196562.5
9	212537	208441.3	205738.1	202427	199123	196272.4	194141.7	192765	191912.4	191105
10	202858	208097.3	205095.5	202186	200218.1	199580.2	200311.2	202208.9	204979.1	208410.4
11	193295	207766.2	204594.7	202128.3	201034.7	201226.6	202215.1	203376.9	204144.3	204086
12	190238	207353.3	203822.2	201305.1	200090.3	199655.3	199308.5	198541.9	197167.3	195302
13	133861	206847.7	202784.4	199905.7	198174	196908.1	195578.1	194037.8	192453.5	191112.3
14	139420	205708.3	199363.3	193275.9	187194	180459.6	172763.1	164145.8	154765.7	144696.9
15	146604	204122.5	194776.1	185180.3	175597.4	166087.5	157109.2	149339.9	143437	139958.4
16	128697	202262.9	189913.3	177741.6	166783.7	157623.6	150822.7	146666.8	145010.7	145294
17	133244	200020.9	184352.5	169682.6	157516.9	148276	141851.6	137621	134632.9	131903.8
18	153864	197537.1	178749.3	162454.3	150297.1	142181.1	137317.5	134662.2	133328.9	132855.5
19	148127	195088.5	174167.8	158139.2	148268.7	143578.1	142548.8	143804.8	146419.2	149881.9
20	141460	192635.5	170194	155123.8	147515.8	145064.6	145393.9	146745.5	148035.8	148630.7
21	135391	190136.8	166501.4	152416.5	146275.9	144535	144432.9	144420.3	143892	142809.9
22		187565.5	162893.8	149557.6	144087.9	142116.7	141024.1	139786.7	138285.6	136742.4
CFE		-627565	-478376	-355993	-267103	-204967	-161603	-130566	-107372	-89163.4
MAD		33220.48	26081.9	20429.25	16941.33	15513.89	14255.74	13218.22	12784.86	12983.78
MSE		1.74E+09	1.10E+09	7.46E+08	5.61E+08	4.57E+08	3.92E+08	3.50E+08	3.26E+08	3.19E+08
MAPE		22.63785	17.64514	13.67655	11.16407	10.07475	9.128241	8.331296	7.920446	7.909872
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6	Alpha=0.7	Alpha=0.8	Alpha=0.9



ประจำเดือน พฤศจิกายน 2555

อาหารประเภท IMATT โดยวิธี Moving Average (MA)

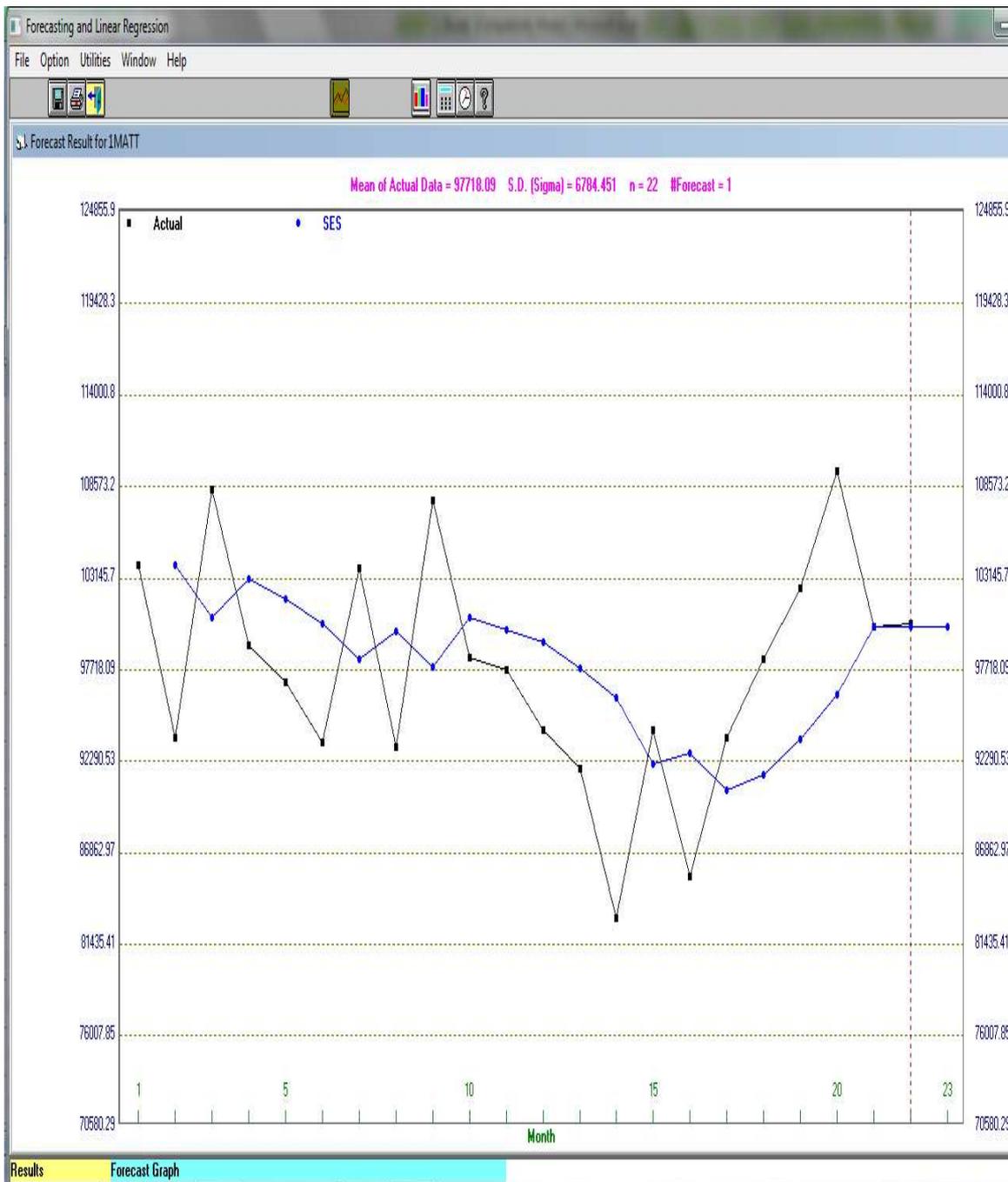
08-19-2013	Actual	Forecast by					
Month	Data	3-MA	4-MA	5-MA	6-MA	7-MA	8-MA
1	103912						
2	93662						
3	108430						
4	99135	102001.3					
5	97009	100409	101284.8				
6	93461	101524.7	99559	100429.6			
7	103712	96535	99508.75	98339.4	99268.16		
8	93112	98060.66	98329.25	100349.4	99234.84	99903	
9	107730	96761.66	96823.5	97285.8	99143.16	98360.14	99054.13
10	98435	101518	99503.75	99004.8	99026.5	100369.9	99531.38
11	97709	99759	100747.3	99290	98909.84	98942	100128
12	94161	101291.3	99246.5	100139.6	99026.5	98738.29	98787.88
13	91894	96768.34	99508.75	98229.4	99143.16	98331.43	98166.13
14	83035	94588	95549.75	97985.8	97173.5	98107.57	97526.75
15	94123	89696.66	91699.75	93046.8	95494	95153.71	96223.5
16	85434	89684	90803.25	92184.4	93226.16	95298.14	95024.88
17	93690	87530.66	88621.5	89729.4	91059.34	92113	94065.13
18	98385	91082.34	89070.5	89635.2	90389.5	91435.14	92310.13
19	102556	92503	92908	90933.4	91093.5	91531.71	92303.88
20	109484	98210.34	95016.25	94837.6	92870.5	92731	92909.75
21	100312	103475	101028.8	97909.8	97278.66	95243.86	94825.13
22	100417	104117.3	102684.3	100885.4	98310.16	97712	95877.38
23		103404.3	103192.3	102230.8	100807.3	98611.14	98050.13
CFE		-1722.34	2765.5	7434.219	13541.51	6506.148	10631
MAD		6128.58	6072.111	6418.529	6262.782	6692.543	6612.589
MSE		4.65E+07	5.14E+07	6.09E+07	6.02E+07	6.75E+07	6.55E+07
MAPE		6.319588	6.277624	6.663955	6.483074	6.961501	6.856647
		m=3	m=4	m=5	m=6	m=7	m=8

อาหารประเภท IMATT โดยวิธี Single Exponential Smoothing (SES)

08-19-2013	Actual	Forecast by					
Month	Data	SES	SES	SES	SES	SES	SES
1	103912						
2	93662	103912	103912	103912	103912	103912	103912
3	108430	102887	101862	100837	99812	98787	97762
4	99135	103441.3	103175.6	103114.9	103259.2	103608.5	104162.8
5	97009	103010.7	102367.5	101920.9	101609.5	101371.8	101146.1
6	93461	102410.5	101295.8	100447.4	99769.31	99190.38	98663.84
7	103712	101515.5	99728.83	98351.45	97245.98	96325.69	95542.14
8	93112	101735.2	100525.5	99959.61	99832.39	100018.8	100444.1
9	107730	100872.9	99042.77	97905.33	97144.23	96565.42	96044.82
10	98435	101558.6	100780.2	100852.7	101378.5	102147.7	103055.9
11	97709	101246.2	100311.2	100127.4	100201.1	100291.4	100283.4
12	94161	100892.5	99790.73	99401.88	99204.27	99000.18	98738.75
13	91894	100219.4	98664.79	97829.62	97186.96	96580.59	95992.1
14	83035	99386.81	97310.63	96048.93	95069.77	94237.3	93533.24
15	94123	97751.63	94455.51	92144.75	90255.87	88636.15	87234.3
16	85434	97388.77	94389.01	92738.23	91802.72	91379.58	91367.52
17	93690	96193.29	92598.01	90546.96	89255.23	88406.79	87807.41
18	98385	95942.96	92816.41	91489.88	91029.14	91048.39	91336.96
19	102556	96187.16	93930.13	93558.41	93971.48	94716.7	95565.78
20	109484	96824.05	95655.3	96257.69	97405.29	98636.34	99759.91
21	100312	98090.04	98421.04	100225.6	102236.8	104060.2	105594.4
22	100417	98312.23	98799.23	100251.5	101466.9	102186.1	102424.9
23		98522.71	99122.79	100301.2	101046.9	101301.5	101220.2
CFE		-53892.69	-23946.09	-12036.13	-7162.695	-5220.922	-4486.359
MAD		6413.379	6079.557	6027.478	6244.963	6437.903	6599.987
MSE		5.62E+07	5.14E+07	4.94E+07	4.87E+07	4.91E+07	5.06E+07
MAPE		6.747016	6.315864	6.232877	6.433951	6.617145	6.773682
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6

อาหารประเภท 1FAR โดยวิธี Double Exponential Smoothing (DES)

08-19-2013	Actual	Forecast by					
Month	Data	DES	DES	DES	DES	DES	DES
1	103912						
2	93662	103912	103912	103912	103912	103912	103912
3	108430	103809.5	103502	102989.5	102272	101349.5	100222
4	99135	103772.7	103436.7	103027.1	102666.9	102479	102586.5
5	97009	103696.5	103222.9	102695.3	102243.9	101925.4	101722.3
6	93461	103567.9	102837.5	102020.9	101254.1	100557.9	99887.21
7	103712	103362.6	102215.7	100920.1	99650.84	98441.78	97280.17
8	93112	103199.9	101877.7	100631.9	99723.46	99230.31	99178.5
9	107730	102967.2	101310.7	99813.95	98691.77	97897.87	97298.29
10	98435	102826.3	101204.6	100125.6	99766.48	100022.8	100752.9
11	97709	102668.3	101025.9	100126.1	99940.34	100157.1	100471.2
12	94161	102490.7	100778.9	99908.85	99645.91	99578.63	99431.72
13	91894	102263.6	100356.1	99285.08	98662.34	98079.61	97367.95
14	83035	101975.9	99746.97	98314.23	97225.31	96158.45	95067.13
15	94123	101553.5	98688.68	96463.39	94437.53	92397.3	90367.43
16	85434	101137	97828.74	95345.84	93383.61	91888.44	90967.48
17	93690	100642.6	96782.59	93906.18	91732.26	90147.61	89071.44
18	98385	100172.7	95989.36	93181.29	91451.01	90598	90430.75
19	102556	99774.12	95577.52	93294.43	92459.2	92657.34	93511.77
20	109484	99479.11	95593.07	94183.41	94437.63	95646.84	97260.66
21	100312	99340.2	96158.66	95996.05	97557.29	99853.51	102260.9
22	100417	99237.41	96686.78	97272.69	99121.12	101019.8	102359.3
23		99165.94	97173.98	98181.23	99891.44	101160.7	101675.8
CFE		-95963.85	-52846.98	-27527.83	-14349	-8113.102	-5521.469
MAD		6919.31	6706.254	6394.147	6144.513	6046.552	6231.26
MSE		6.96E+07	6.05E+07	5.67E+07	5.34E+07	5.04E+07	4.85E+07
MAPE		7.388942	7.052124	6.657678	6.363993	6.244159	6.414182
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6



อาหารประเภท IFAR โดยวิธี Moving Average (MA)

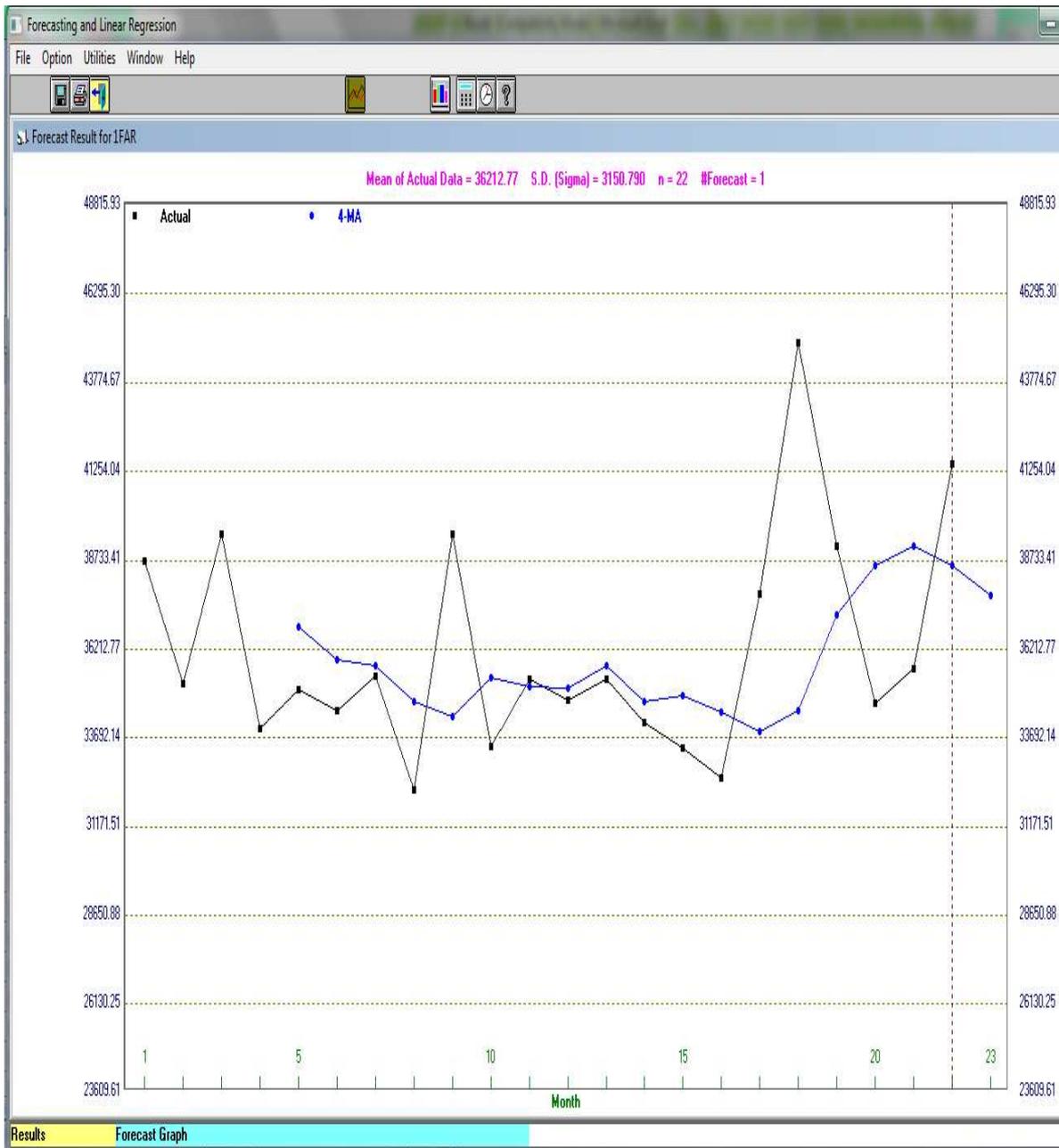
08-17-2013	Actual	Forecast by				
Month	Data	3-MA	4-MA	5-MA	6-MA	7-MA
1	38733					
2	35221					
3	39475					
4	33943	37809.67				
5	35047	36213	36843			
6	34468	36155	35921.5	36483.8		
7	35433	34486	35733.25	35630.8	36147.83	
8	32221	34982.67	34722.75	35673.2	35597.83	36045.71
9	39475	34040.67	34292.25	34222.4	35097.83	35115.43
10	33443	35709.67	35399.25	35328.8	35097.83	35723.14
11	35347	35046.33	35143	35008	35014.5	34861.43
12	34768	36088.33	35121.5	35183.8	35064.5	35062
13	35351	34519.33	35758.25	35050.8	35114.5	35022.14
14	34120	35155.33	34727.25	35676.8	35100.83	35148.29
15	33403	34746.33	34896.5	34605.8	35417.33	34960.71
16	32565	34291.33	34410.5	34597.8	34405.33	35129.57
17	37797	33362.67	33859.75	34041.4	34259	34142.43
18	44903	34588.33	34471.25	34647.2	34667.33	34764.43
19	39119	38421.67	37167	36557.6	36356.5	36129.57
20	34684	40606.33	38596	37557.4	36984.5	36751.14
21	35677	39568.67	39125.75	37813.6	37078.5	36655.86
22	41488	36493.33	38595.75	38436	37457.5	36878.29
23		37283	37742	39174.2	38944.67	38033.29
CFE		967.3359	4524.5	7746.797	10932.34	11970.85
MAD		2891.684	2481.972	2546.259	2505.833	2744.114
MSE		1.43E+07	1.18E+07	1.20E+07	1.19E+07	1.34E+07
MAPE		7.750862	6.563955	6.73113	6.565398	7.20922
		m=3	m=4	m=5	m=6	m=7

อาหารประเภท 1FAR โดยวิธี Single Exponential Smoothing (SES)

08-17-2013	Actual	Forecast by					
Month	Data	SES	SES	SES	SES	SES	SES
1	38733						
2	35221	38733	38733	38733	38733	38733	38733
3	39475	38381.8	38030.6	37679.4	37328.2	36977	36625.8
4	33943	38491.12	38319.48	38218.08	38186.92	38226	38335.32
5	35047	38036.31	37444.18	36935.55	36489.35	36084.5	35699.93
6	34468	37737.38	36964.75	36368.99	35912.41	35565.75	35308.17
7	35433	37410.44	36465.4	35798.69	35334.64	35016.88	34804.07
8	32221	37212.7	36258.92	35688.98	35373.99	35224.94	35181.43
9	39475	36713.53	35451.34	34648.59	34112.79	33722.97	33405.17
10	33443	36989.68	36256.07	36096.51	36257.68	36598.98	37047.07
11	35347	36635.01	35693.46	35300.46	35131.8	35020.99	34884.63
12	34768	36506.21	35624.16	35314.42	35217.88	35184	35162.05
13	35351	36332.39	35452.93	35150.5	35037.93	34976	34925.62
14	34120	36234.25	35432.54	35210.65	35163.16	35163.5	35180.85
15	33403	36022.82	35170.04	34883.45	34745.89	34641.75	34544.34
16	32565	35760.84	34816.63	34439.32	34208.74	34022.38	33859.54
17	37797	35441.25	34366.3	33877.02	33551.24	33293.69	33082.81
18	44903	35676.83	35052.45	35053.02	35249.55	35545.34	35911.32
19	39119	36599.45	37022.55	38008.01	39110.93	40224.17	41306.33
20	34684	36851.4	37441.84	38341.31	39114.16	39671.59	39993.93
21	35677	36634.66	36890.27	37244.12	37342.09	37177.79	36807.97
22	41488	36538.89	36647.62	36773.98	36676.05	36427.4	36129.39
23		37033.8	37615.7	38188.19	38600.83	38957.7	39344.55
CFE		-16991.94	-5586.531	-1816.04	-330.41	449.3906	1019.254
MAD		2990.593	2712.324	2606.862	2573.339	2672.766	2761.005
MSE		1.22E+07	1.16E+07	1.15E+07	1.18E+07	1.23E+07	1.29E+07
MAPE		8.19921	7.325332	7.00364	6.904104	7.159704	7.389332
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6

อาหารประเภท 1FATT โดยวิธี Double Exponential Smoothing (DES)

08-17-2013	Actual	Forecast by						
Month	Data	DES						
1	38733							
2	35221	38733	38733	38733	38733	38733	38733	38733
3	39475	38697.88	38592.52	38416.92	38171.08	37855	37468.68	37012.12
4	33943	38677.2	38537.91	38357.27	38177.41	38040.5	37988.66	38064.05
5	35047	38613.11	38319.16	37930.75	37502.19	37062.5	36615.42	36139.41
6	34468	38525.54	38048.28	37462.22	36866.28	36314.13	35831.07	35430.91
7	35433	38414.03	37731.7	36963.16	36253.63	35665.5	35214.87	34895.32
8	32221	38293.89	37437.14	36580.91	35901.77	35445.22	35194.8	35110.58
9	39475	38135.86	37039.98	36001.21	35186.18	34584.09	34121.02	33714.06
10	33443	38021.24	36883.2	36029.8	35614.78	35591.54	35876.65	36411.23
11	35347	37882.62	36645.25	35811	35421.59	35306.27	35281.44	35199.54
12	34768	37744.98	36441.04	35662.03	35340.11	35245.13	35209.8	35162.75
13	35351	37603.72	36243.41	35508.57	35219.23	35110.57	35039.29	34966.01
14	34120	37466.77	36081.24	35419.19	35196.8	35137.03	35124.23	35136.95
15	33403	37322.38	35899	35258.47	35016.44	34889.39	34776.29	34654.03
16	32565	37166.22	35682.52	35012.72	34693.36	34455.88	34226.24	33997.56
17	37797	36993.73	35419.28	34672.01	34236.51	33874.79	33540.18	33236.53
18	44903	36862.04	35345.91	34786.31	34641.73	34710.06	34962.87	35402.67
19	39119	36835.78	35681.24	35752.82	36429.41	37467.12	38768.95	40252.78
20	34684	36837.34	36033.36	36529.37	37503.3	38569.35	39503.94	40133.74
21	35677	36817.07	36204.75	36743.8	37438.82	37873.57	37886.36	37452.66
22	41488	36789.25	36293.32	36752.85	37133.71	37150.48	36832.18	36341.29
23		36813.71	36557.8	37183.45	37720.56	38054.09	38339.61	38763.15
CFE		-34485.64	-15345.24	-6436.4	-2729.33	-1133.12	-247.953	500.8242
MAD		3350.98	3005.463	2770.768	2662.363	2615.541	2598.333	2690.577
MSE		1.43E+07	1.29E+07	1.20E+07	1.17E+07	1.17E+07	1.21E+07	1.26E+07
MAPE		9.359825	8.221681	7.490101	7.155801	7.011868	6.961281	7.199987
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6	Alpha=0.7



อาหารประเภท IFATT โดยวิธี Moving Average (MA)

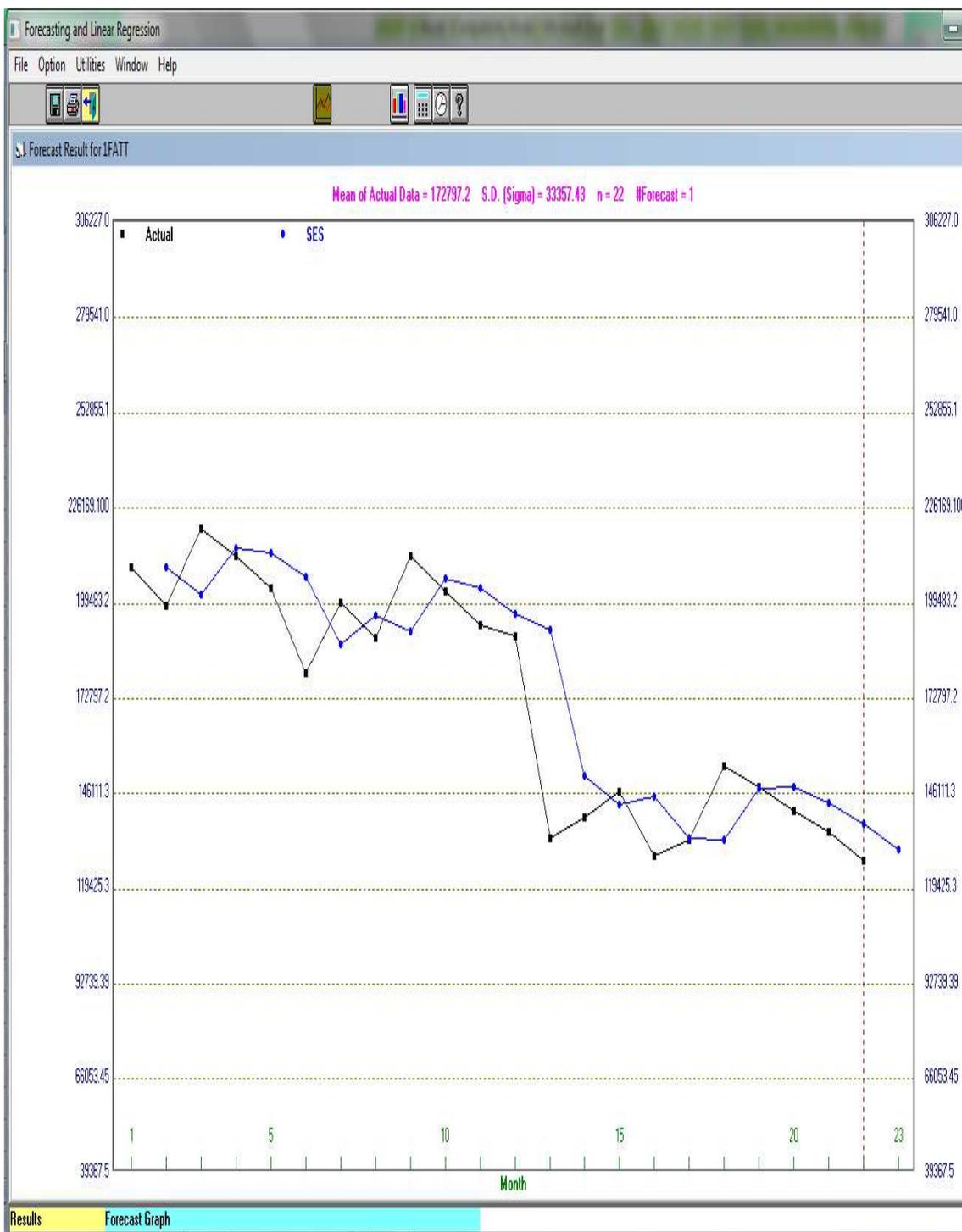
08-18-2013	Actual	Forecast by					
Month	Data	3-MA	4-MA	5-MA	6-MA	7-MA	8-MA
1	209633						
2	198677						
3	220537						
4	212858	209615.7					
5	203795	210690.7	210426.3				
6	179738	212396.7	208966.8	209100			
7	199633	198797	204232	203121	204206.3		
8	189677	194388.7	199006	203312.2	202539.7	203553	
9	212537	189682.7	193210.8	197140.2	201039.7	200702.1	201818.5
10	202858	200615.7	195396.3	197076	199706.3	202682.1	202181.5
11	193295	201690.7	201176.3	196888.6	198039.7	200156.6	202704.1
12	190238	202896.7	199591.8	199600	196289.7	197361.9	199298.9
13	133861	195463.7	199732	197721	198039.7	195425.1	196471.4
14	139420	172464.7	180063	186557.8	187077.7	188871.3	187729.6
15	146604	154506.3	164203.5	171934.4	178701.5	180269.4	182689.9
16	128697	139961.7	152530.8	160683.6	167712.7	174116.1	176061.3
17	133244	138240.3	137145.5	147764	155352.5	162139	168438.8
18	153864	136181.7	136991.3	136365.2	145344	152194.1	158527.1
19	148127	138601.7	140602.3	140365.8	139281.7	146561.1	152402.9
20	141460	145078.3	140983	142107.2	141659.3	140545.3	146756.9
21	135391	147817	144173.8	141078.4	141999.3	141630.9	140659.6
22	127395	141659.3	144710.5	142417.2	140130.5	141055.3	140850.9
23		134748.7	138093.3	141247.4	139913.5	138311.1	139347.8
CFE		-158057	-193308	-217194	-220819	-250595	-269600
MAD		14253.81	16479.58	18239.48	17802.99	18861.18	20885.02
MSE		4.10E+08	5.10E+08	6.02E+08	6.36E+08	7.29E+08	8.29E+08
MAPE		9.331868	10.93209	12.33853	12.44551	13.31913	14.88408
		m=3	m=4	m=5	m=6	m=7	m=8

อาหารประเภท 1FATT โดยวิธี Single Exponential Smoothing (SES)

08-18-2013	Actual	Forecast by							
Month	Data	SES							
1	209633								
2	198677	209633	209633	209633	209633	209633	209633	209633	209633
3	220537	208537.4	207441.8	206346.2	205250.6	204155	203059.4	201963.8	200868.2
4	212858	209737.4	210060.8	210603.4	211365.2	212346	213546	214965	216603.2
5	203795	210049.4	210620.3	211279.8	211962.3	212602	213133.2	213490.1	213607
6	179738	209424	209255.2	209034.4	208695.4	208198.5	207530.3	206703.5	205757.4
7	199633	206455.4	203351.8	200245.5	197112.4	193968.3	190854.9	187827.7	184941.9
8	189677	205773.2	202608	200061.7	198120.7	196800.6	196121.8	196091.4	196694.8
9	212537	204163.5	200021.8	196946.3	194743.2	193238.8	192254.9	191601.3	191080.6
10	202858	205000.9	202524.9	201623.5	201860.7	202887.9	204424.2	206256.3	208245.7
11	193295	204786.6	202591.5	201993.9	202259.6	202873	203484.5	203877.5	203935.5
12	190238	203637.4	200732.2	199384.2	198673.8	198084	197370.8	196469.8	195423.1
13	133861	202297.5	198633.3	196640.3	195299.5	194161	193091.1	192107.5	191275
14	139420	195453.8	185678.9	177806.5	170724.1	164011	157553	151335	145343.8
15	146604	189850.5	176427.1	166290.6	158202.5	151715.5	146673.2	142994.5	140604.8
16	128697	185525.8	170462.5	160384.6	153563.1	149159.8	146631.7	145521.1	145404.2
17	133244	179842.9	162109.4	150878.3	143616.6	138928.4	135870.9	133744.3	132038.4
18	153864	175183	156336.3	145588	139467.6	136086.2	134294.8	133394.1	133002.9
19	148127	173051.1	155841.8	148070.8	145226.1	144975.1	146036.3	147723	149691.8
20	141460	170558.7	154298.9	148087.7	146386.5	146551	147290.7	148005.8	148440
21	135391	167648.8	151731.1	146099.4	144415.9	144005.5	143792.3	143423.7	142856
22	127395	164423.1	148463.1	142886.9	140805.9	139698.3	138751.5	137800.8	136884
23		160720.3	144249.5	138239.3	135441.6	133546.6	131937.6	130516.8	129292.8
CFE		-489128	-326918	-237979	-185479	-152173	-129492	-113023	-100425
MAD		25529.28	18304.71	15294.5	14107.38	13226	12661.32	12600.88	12770.94
MSE		1.01E+09	5.95E+08	4.45E+08	3.77E+08	3.42E+08	3.22E+08	3.11E+08	3.08E+08
MAPE		17.42776	12.29143	10.09061	9.155906	8.464059	7.977016	7.83484	7.864448
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6	Alpha=0.7	Alpha=0.8

อาหารประเภท 1FATT โดยวิธี Double Exponential Smoothing (DES)

08-18-2013	Actual	Forecast by								
Month	Data	DES								
1	209633									
2	198677	209633	209633	209633	209633	209633	209633	209633	209633	209633
3	220537	209523.4	209194.8	208647	207880	206894	205688.8	204264.6	202621.2	200758.6
4	212858	209544.8	209368	209233.9	209274.1	209620	210403.1	211754.9	213806.8	216690.4
5	203795	209595.3	209618.4	209847.7	210349.4	211111	212041.2	212969.5	213647	213745.5
6	179738	209578.2	209545.8	209603.7	209687.8	209654.8	209334.6	208583.3	207335.3	205656.1
7	199633	209265.9	208307	206796.2	204657.6	201811.5	198246.8	194054.4	189420.6	184581.6
8	189677	208916.6	207167.2	204775.9	202042.8	199306.1	196971.8	195480.3	195239.9	196562.5
9	212537	208441.3	205738.1	202427	199123	196272.4	194141.7	192765	191912.4	191105
10	202858	208097.3	205095.5	202186	200218.1	199580.2	200311.2	202208.9	204979.1	208410.4
11	193295	207766.2	204594.7	202128.3	201034.7	201226.6	202215.1	203376.9	204144.3	204086
12	190238	207353.3	203822.2	201305.1	200090.3	199655.3	199308.5	198541.9	197167.3	195302
13	133861	206847.7	202784.4	199905.7	198174	196908.1	195578.1	194037.8	192453.5	191112.3
14	139420	205708.3	199363.3	193275.9	187194	180459.6	172763.1	164145.8	154765.7	144696.9
15	146604	204122.5	194776.1	185180.3	175597.4	166087.5	157109.2	149339.9	143437	139958.4
16	128697	202262.9	189913.3	177741.6	166783.7	157623.6	150822.7	146666.8	145010.7	145294
17	133244	200020.9	184352.5	169682.6	157516.9	148276	141851.6	137621	134632.9	131903.8
18	153864	197537.1	178749.3	162454.3	150297.1	142181.1	137317.5	134662.2	133328.9	132855.5
19	148127	195088.5	174167.8	158139.2	148268.7	143578.1	142548.8	143804.8	146419.2	149881.9
20	141460	192635.5	170194	155123.8	147515.8	145064.6	145393.9	146745.5	148035.8	148630.7
21	135391	190136.8	166501.4	152416.5	146275.9	144535	144432.9	144420.3	143892	142809.9
22	127395	187565.5	162893.8	149557.6	144087.9	142116.7	141024.1	139786.7	138285.6	136742.4
23		184881	159164.9	146162.1	140629.4	137831.6	135572.2	133297.7	131091.4	129110.3
CFE		-687735	-513875	-378155	-283796	-219689	-175232	-142957	-118262	-98510.8
MAD		34503.81	26530.33	20511.79	16929.5	15476.17	14225.9	13178.86	12694.65	12810.62
MSE		1.83E+09	1.11E+09	7.34E+08	5.48E+08	4.46E+08	3.83E+08	3.41E+08	3.16E+08	3.08E+08
MAPE		23.80898	18.1318	13.8537	11.25642	10.14528	9.203005	8.397756	7.950362	7.882607
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6	Alpha=0.7	Alpha=0.8	Alpha=0.9



ประจำเดือน ธันวาคม 2555

อาหารประเภท IMATT โดยวิธี Moving Average (MA)

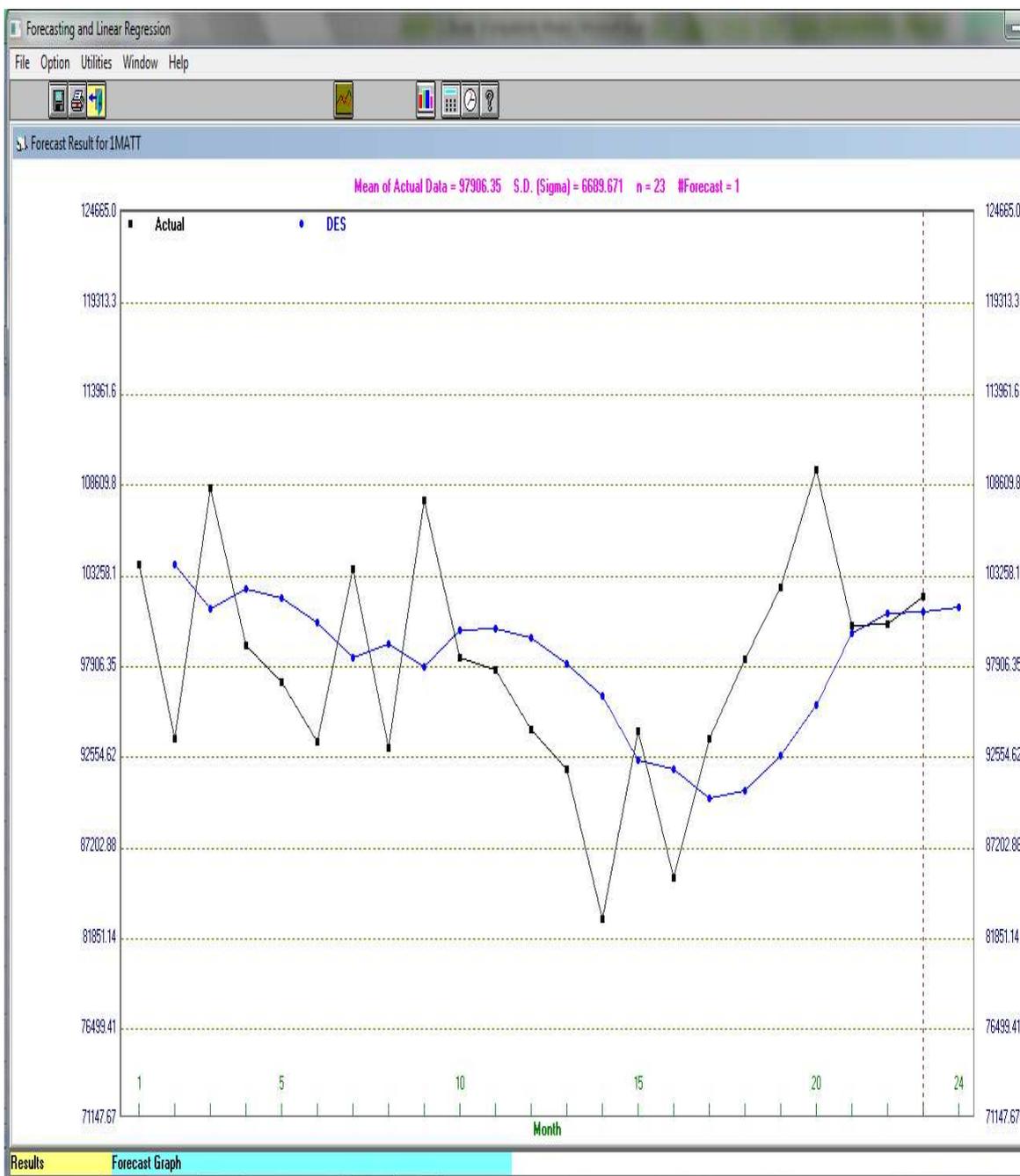
08-19-2013	Actual	Forecast by					
Month	Data	3-MA	4-MA	5-MA	6-MA	7-MA	8-MA
1	103912						
2	93662						
3	108430						
4	99135	102001.3					
5	97009	100409	101284.8				
6	93461	101524.7	99559	100429.6			
7	103712	96535	99508.75	98339.4	99268.16		
8	93112	98060.66	98329.25	100349.4	99234.84	99903	
9	107730	96761.66	96823.5	97285.8	99143.16	98360.14	99054.13
10	98435	101518	99503.75	99004.8	99026.5	100369.9	99531.38
11	97709	99759	100747.3	99290	98909.84	98942	100128
12	94161	101291.3	99246.5	100139.6	99026.5	98738.29	98787.88
13	91894	96768.34	99508.75	98229.4	99143.16	98331.43	98166.13
14	83035	94588	95549.75	97985.8	97173.5	98107.57	97526.75
15	94123	89696.66	91699.75	93046.8	95494	95153.71	96223.5
16	85434	89684	90803.25	92184.4	93226.16	95298.14	95024.88
17	93690	87530.66	88621.5	89729.4	91059.34	92113	94065.13
18	98385	91082.34	89070.5	89635.2	90389.5	91435.14	92310.13
19	102556	92503	92908	90933.4	91093.5	91531.71	92303.88
20	109484	98210.34	95016.25	94837.6	92870.5	92731	92909.75
21	100312	103475	101028.8	97909.8	97278.66	95243.86	94825.13
22	100417	104117.3	102684.3	100885.4	98310.16	97712	95877.38
23	102048	103404.3	103192.3	102230.8	100807.3	98611.14	98050.13
24		100925.7	103065.3	102963.4	102200.3	100984.6	99040.75
CFE		-3078.67	1621.25	7251.422	14782.17	9943.008	14628.88
MAD		5889.967	5812.75	6072.1	5967.363	6489.063	6438.275
MSE		4.43E+07	4.88E+07	5.75E+07	5.68E+07	6.41E+07	6.22E+07
MAPE		6.070065	6.006238	6.303687	6.173233	6.736899	6.660713
		m=3	m=4	m=5	m=6	m=7	m=8

อาหารประเภท IMATT โดยวิธี Single Exponential Smoothing (SES)

08-19-2013	Actual	Forecast by					
Month	Data	SES	SES	SES	SES	SES	SES
1	103912						
2	93662	103912	103912	103912	103912	103912	103912
3	108430	102887	101862	100837	99812	98787	97762
4	99135	103441.3	103175.6	103114.9	103259.2	103608.5	104162.8
5	97009	103010.7	102367.5	101920.9	101609.5	101371.8	101146.1
6	93461	102410.5	101295.8	100447.4	99769.31	99190.38	98663.84
7	103712	101515.5	99728.83	98351.45	97245.98	96325.69	95542.14
8	93112	101735.2	100525.5	99959.61	99832.39	100018.8	100444.1
9	107730	100872.9	99042.77	97905.33	97144.23	96565.42	96044.82
10	98435	101558.6	100780.2	100852.7	101378.5	102147.7	103055.9
11	97709	101246.2	100311.2	100127.4	100201.1	100291.4	100283.4
12	94161	100892.5	99790.73	99401.88	99204.27	99000.18	98738.75
13	91894	100219.4	98664.79	97829.62	97186.96	96580.59	95992.1
14	83035	99386.81	97310.63	96048.93	95069.77	94237.3	93533.24
15	94123	97751.63	94455.51	92144.75	90255.87	88636.15	87234.3
16	85434	97388.77	94389.01	92738.23	91802.72	91379.58	91367.52
17	93690	96193.29	92598.01	90546.96	89255.23	88406.79	87807.41
18	98385	95942.96	92816.41	91489.88	91029.14	91048.39	91336.96
19	102556	96187.16	93930.13	93558.41	93971.48	94716.7	95565.78
20	109484	96824.05	95655.3	96257.69	97405.29	98636.34	99759.91
21	100312	98090.04	98421.04	100225.6	102236.8	104060.2	105594.4
22	100417	98312.23	98799.23	100251.5	101466.9	102186.1	102424.9
23	102048	98522.71	99122.79	100301.2	101046.9	101301.5	101220.2
24		98875.24	99707.83	100825.2	101447.4	101674.8	101716.9
CFE		-50367.4	-21020.88	-10289.28	-6161.617	-4474.469	-3658.539
MAD		6282.102	5936.177	5832.903	6006.604	6179.201	6337.615
MSE		5.42E+07	4.94E+07	4.73E+07	4.66E+07	4.69E+07	4.84E+07
MAPE		6.597358	6.159075	6.027374	6.186089	6.349614	6.50266
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6

อาหารประเภท 1FAR โดยวิธี Double Exponential Smoothing (DES)

08-19-2013	Actual	Forecast by					
Month	Data	DES	DES	DES	DES	DES	DES
1	103912						
2	93662	103912	103912	103912	103912	103912	103912
3	108430	103809.5	103502	102989.5	102272	101349.5	100222
4	99135	103772.7	103436.7	103027.1	102666.9	102479	102586.5
5	97009	103696.5	103222.9	102695.3	102243.9	101925.4	101722.3
6	93461	103567.9	102837.5	102020.9	101254.1	100557.9	99887.21
7	103712	103362.6	102215.7	100920.1	99650.84	98441.78	97280.17
8	93112	103199.9	101877.7	100631.9	99723.46	99230.31	99178.5
9	107730	102967.2	101310.7	99813.95	98691.77	97897.87	97298.29
10	98435	102826.3	101204.6	100125.6	99766.48	100022.8	100752.9
11	97709	102668.3	101025.9	100126.1	99940.34	100157.1	100471.2
12	94161	102490.7	100778.9	99908.85	99645.91	99578.63	99431.72
13	91894	102263.6	100356.1	99285.08	98662.34	98079.61	97367.95
14	83035	101975.9	99746.97	98314.23	97225.31	96158.45	95067.13
15	94123	101553.5	98688.68	96463.39	94437.53	92397.3	90367.43
16	85434	101137	97828.74	95345.84	93383.61	91888.44	90967.48
17	93690	100642.6	96782.59	93906.18	91732.26	90147.61	89071.44
18	98385	100172.7	95989.36	93181.29	91451.01	90598	90430.75
19	102556	99774.12	95577.52	93294.43	92459.2	92657.34	93511.77
20	109484	99479.11	95593.07	94183.41	94437.63	95646.84	97260.66
21	100312	99340.2	96158.66	95996.05	97557.29	99853.51	102260.9
22	100417	99237.41	96686.78	97272.69	99121.12	101019.8	102359.3
23	102048	99165.94	97173.98	98181.23	99891.44	101160.7	101675.8
24		99136.87	97680.75	98974.42	100513.8	101417.7	101700.5
CFE		-93081.79	-47972.97	-23661.05	-12192.44	-7225.773	-5149.305
MAD		6735.798	6622.971	6279.267	5963.242	5812.042	5964.938
MSE		6.69E+07	5.88E+07	5.48E+07	5.12E+07	4.82E+07	4.63E+07
MAPE		7.181455	6.948673	6.527291	6.170779	5.999857	6.139206
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6



อาหารประเภท IFAR โดยวิธี Moving Average (MA)

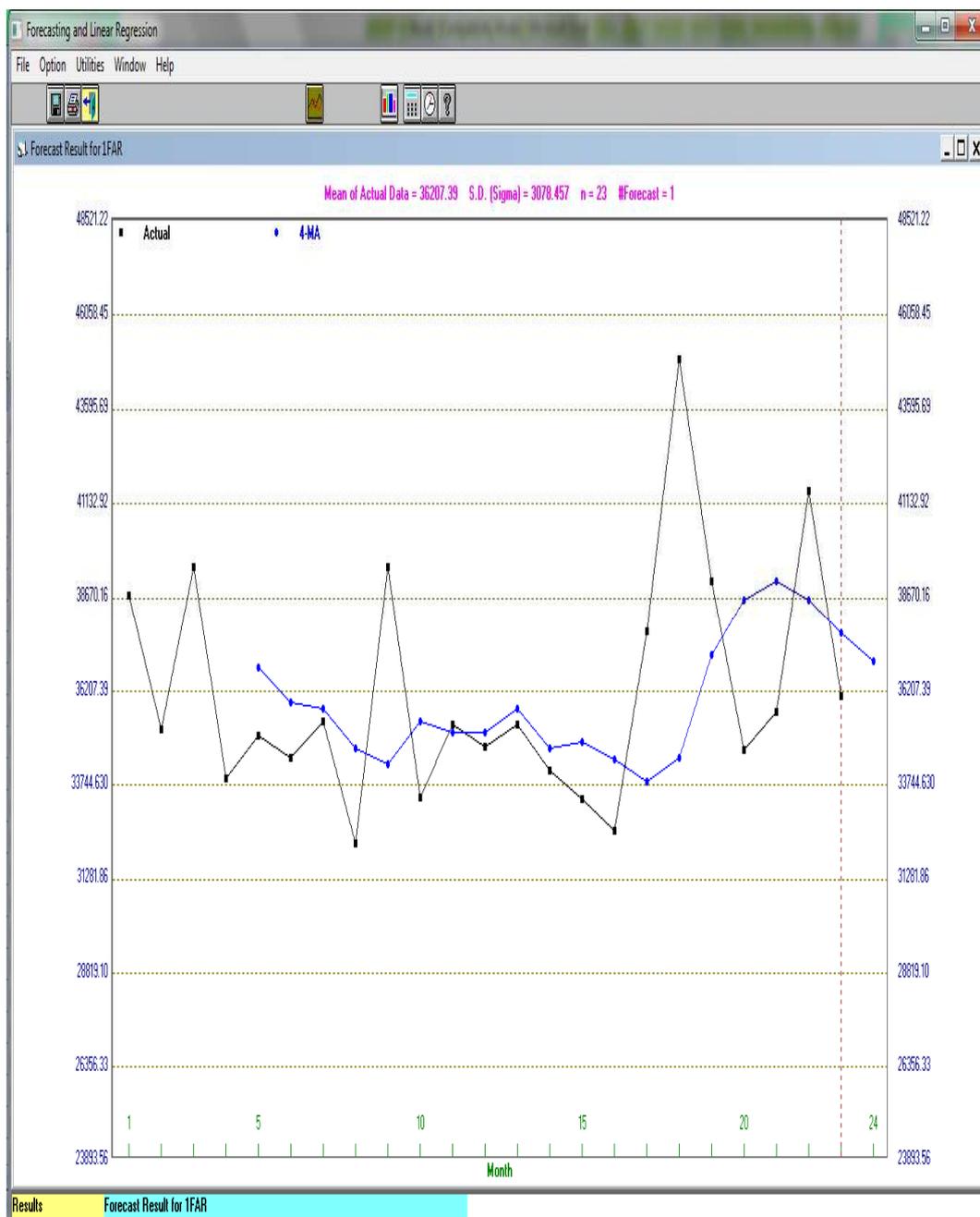
08-17-2013	Actual	Forecast by				
Month	Data	3-MA	4-MA	5-MA	6-MA	7-MA
1	38733					
2	35221					
3	39475					
4	33943	37809.67				
5	35047	36213	36843			
6	34468	36155	35921.5	36483.8		
7	35433	34486	35733.25	35630.8	36147.83	
8	32221	34982.67	34722.75	35673.2	35597.83	36045.71
9	39475	34040.67	34292.25	34222.4	35097.83	35115.43
10	33443	35709.67	35399.25	35328.8	35097.83	35723.14
11	35347	35046.33	35143	35008	35014.5	34861.43
12	34768	36088.33	35121.5	35183.8	35064.5	35062
13	35351	34519.33	35758.25	35050.8	35114.5	35022.14
14	34120	35155.33	34727.25	35676.8	35100.83	35148.29
15	33403	34746.33	34896.5	34605.8	35417.33	34960.71
16	32565	34291.33	34410.5	34597.8	34405.33	35129.57
17	37797	33362.67	33859.75	34041.4	34259	34142.43
18	44903	34588.33	34471.25	34647.2	34667.33	34764.43
19	39119	38421.67	37167	36557.6	36356.5	36129.57
20	34684	40606.33	38596	37557.4	36984.5	36751.14
21	35677	39568.67	39125.75	37813.6	37078.5	36655.86
22	41488	36493.33	38595.75	38436	37457.5	36878.29
23	36089	37283	37742	39174.2	38944.67	38033.29
24		37751.33	36984.5	37411.4	38660	38536.71
CFE		-226.664	2871.5	4661.598	8076.676	10026.57
MAD		2806.8	2438.342	2576.2	2526.412	2694.125
MSE		1.37E+07	1.13E+07	1.18E+07	1.17E+07	1.28E+07
MAPE		7.528743	6.459555	6.832115	6.64466	7.095361
		m=3	m=4	m=5	m=6	m=7

อาหารประเภท 1FAR โดยวิธี Single Exponential Smoothing (SES)

08-17-2013	Actual	Forecast by					
Month	Data	SES	SES	SES	SES	SES	SES
1	38733						
2	35221	38733	38733	38733	38733	38733	38733
3	39475	38381.8	38030.6	37679.4	37328.2	36977	36625.8
4	33943	38491.12	38319.48	38218.08	38186.92	38226	38335.32
5	35047	38036.31	37444.18	36935.55	36489.35	36084.5	35699.93
6	34468	37737.38	36964.75	36368.99	35912.41	35565.75	35308.17
7	35433	37410.44	36465.4	35798.69	35334.64	35016.88	34804.07
8	32221	37212.7	36258.92	35688.98	35373.99	35224.94	35181.43
9	39475	36713.53	35451.34	34648.59	34112.79	33722.97	33405.17
10	33443	36989.68	36256.07	36096.51	36257.68	36598.98	37047.07
11	35347	36635.01	35693.46	35300.46	35131.8	35020.99	34884.63
12	34768	36506.21	35624.16	35314.42	35217.88	35184	35162.05
13	35351	36332.39	35452.93	35150.5	35037.93	34976	34925.62
14	34120	36234.25	35432.54	35210.65	35163.16	35163.5	35180.85
15	33403	36022.82	35170.04	34883.45	34745.89	34641.75	34544.34
16	32565	35760.84	34816.63	34439.32	34208.74	34022.38	33859.54
17	37797	35441.25	34366.3	33877.02	33551.24	33293.69	33082.81
18	44903	35676.83	35052.45	35053.02	35249.55	35545.34	35911.32
19	39119	36599.45	37022.55	38008.01	39110.93	40224.17	41306.33
20	34684	36851.4	37441.84	38341.31	39114.16	39671.59	39993.93
21	35677	36634.66	36890.27	37244.12	37342.09	37177.79	36807.97
22	41488	36538.89	36647.62	36773.98	36676.05	36427.4	36129.39
23	36089	37033.8	37615.7	38188.19	38600.83	38957.7	39344.55
24		36939.32	37310.36	37558.43	37596.1	37523.35	37391.22
CFE		-17936.8	-7113.23	-3915.23	-2842.24	-2419.31	-2236.3
MAD		2897.602	2658.432	2583.786	2570.543	2681.672	2783.485
MSE		1.17E+07	1.12E+07	1.12E+07	1.16E+07	1.21E+07	1.28E+07
MAPE		7.945518	7.184651	6.949687	6.906649	7.19558	7.463495
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6

อาหารประเภท 1FATT โดยวิธี Double Exponential Smoothing (DES)

08-17-2013	Actual	Forecast by						
Month	Data	DES						
1	38733							
2	35221	38733	38733	38733	38733	38733	38733	38733
3	39475	38697.88	38592.52	38416.92	38171.08	37855	37468.68	37012.12
4	33943	38677.2	38537.91	38357.27	38177.41	38040.5	37988.66	38064.05
5	35047	38613.11	38319.16	37930.75	37502.19	37062.5	36615.42	36139.41
6	34468	38525.54	38048.28	37462.22	36866.28	36314.13	35831.07	35430.91
7	35433	38414.03	37731.7	36963.16	36253.63	35665.5	35214.87	34895.32
8	32221	38293.89	37437.14	36580.91	35901.77	35445.22	35194.8	35110.58
9	39475	38135.86	37039.98	36001.21	35186.18	34584.09	34121.02	33714.06
10	33443	38021.24	36883.2	36029.8	35614.78	35591.54	35876.65	36411.23
11	35347	37882.62	36645.25	35811	35421.59	35306.27	35281.44	35199.54
12	34768	37744.98	36441.04	35662.03	35340.11	35245.13	35209.8	35162.75
13	35351	37603.72	36243.41	35508.57	35219.23	35110.57	35039.29	34966.01
14	34120	37466.77	36081.24	35419.19	35196.8	35137.03	35124.23	35136.95
15	33403	37322.38	35899	35258.47	35016.44	34889.39	34776.29	34654.03
16	32565	37166.22	35682.52	35012.72	34693.36	34455.88	34226.24	33997.56
17	37797	36993.73	35419.28	34672.01	34236.51	33874.79	33540.18	33236.53
18	44903	36862.04	35345.91	34786.31	34641.73	34710.06	34962.87	35402.67
19	39119	36835.78	35681.24	35752.82	36429.41	37467.12	38768.95	40252.78
20	34684	36837.34	36033.36	36529.37	37503.3	38569.35	39503.94	40133.74
21	35677	36817.07	36204.75	36743.8	37438.82	37873.57	37886.36	37452.66
22	41488	36789.25	36293.32	36752.85	37133.71	37150.48	36832.18	36341.29
23	36089	36813.71	36557.8	37183.45	37720.56	38054.09	38339.61	38763.15
24		36826.27	36708.31	37295.95	37670.78	37788.72	37770.57	37670.79
CFE		-35210.4	-15814	-7530.85	-4360.89	-3098.21	-2498.56	-2173.33
MAD		3231.604	2890.16	2694.572	2615.509	2585.976	2582.527	2689.83
MSE		1.36E+07	1.23E+07	1.15E+07	1.13E+07	1.14E+07	1.17E+07	1.24E+07
MAPE		9.025657	7.907013	7.28749	7.036034	6.940652	6.928326	7.209528
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6	Alpha=0.7



อาหารประเภท 1FATT โดยวิธี Moving Average (MA)

08-18-2013	Actual	Forecast by					
Month	Data	3-MA	4-MA	5-MA	6-MA	7-MA	8-MA
1	209633						
2	198677						
3	220537						
4	212858	209615.7					
5	203795	210690.7	210426.3				
6	179738	212396.7	208966.8	209100			
7	199633	198797	204232	203121	204206.3		
8	189677	194388.7	199006	203312.2	202539.7	203553	
9	212537	189682.7	193210.8	197140.2	201039.7	200702.1	201818.5
10	202858	200615.7	195396.3	197076	199706.3	202682.1	202181.5
11	193295	201690.7	201176.3	196888.6	198039.7	200156.6	202704.1
12	190238	202896.7	199591.8	199600	196289.7	197361.9	199298.9
13	133861	195463.7	199732	197721	198039.7	195425.1	196471.4
14	139420	172464.7	180063	186557.8	187077.7	188871.3	187729.6
15	146604	154506.3	164203.5	171934.4	178701.5	180269.4	182689.9
16	128697	139961.7	152530.8	160683.6	167712.7	174116.1	176061.3
17	133244	138240.3	137145.5	147764	155352.5	162139	168438.8
18	153864	136181.7	136991.3	136365.2	145344	152194.1	158527.1
19	148127	138601.7	140602.3	140365.8	139281.7	146561.1	152402.9
20	141460	145078.3	140983	142107.2	141659.3	140545.3	146756.9
21	135391	147817	144173.8	141078.4	141999.3	141630.9	140659.6
22	127395	141659.3	144710.5	142417.2	140130.5	141055.3	140850.9
23	167516	134748.7	138093.3	141247.4	139913.5	138311.1	139347.8
24		143434	142940.5	143977.8	145625.5	143856.7	141961.8
CFE		-125290	-163885	-190925	-193217	-221391	-241432
MAD		15179.48	17160.8	18685.54	18379.43	19507.66	21370.57
MSE		4.43E+08	5.29E+08	6.07E+08	6.43E+08	7.36E+08	8.26E+08
MAPE		9.84331	11.28115	12.52423	12.68269	13.57631	15.01282
		m=3	m=4	m=5	m=6	m=7	m=8

อาหารประเภท IFATT โดยวิธี Single Exponential Smoothing (SES)

08-18-2013	Actual	Forecast by							
Month	Data	SES							
1	209633								
2	198677	209633	209633	209633	209633	209633	209633	209633	209633
3	220537	208537.4	207441.8	206346.2	205250.6	204155	203059.4	201963.8	200868.2
4	212858	209737.4	210060.8	210603.4	211365.2	212346	213546	214965	216603.2
5	203795	210049.4	210620.3	211279.8	211962.3	212602	213133.2	213490.1	213607
6	179738	209424	209255.2	209034.4	208695.4	208198.5	207530.3	206703.5	205757.4
7	199633	206455.4	203351.8	200245.5	197112.4	193968.3	190854.9	187827.7	184941.9
8	189677	205773.2	202608	200061.7	198120.7	196800.6	196121.8	196091.4	196694.8
9	212537	204163.5	200021.8	196946.3	194743.2	193238.8	192254.9	191601.3	191080.6
10	202858	205000.9	202524.9	201623.5	201860.7	202887.9	204424.2	206256.3	208245.7
11	193295	204786.6	202591.5	201993.9	202259.6	202873	203484.5	203877.5	203935.5
12	190238	203637.4	200732.2	199384.2	198673.8	198084	197370.8	196469.8	195423.1
13	133861	202297.5	198633.3	196640.3	195299.5	194161	193091.1	192107.5	191275
14	139420	195453.8	185678.9	177806.5	170724.1	164011	157553	151335	145343.8
15	146604	189850.5	176427.1	166290.6	158202.5	151715.5	146673.2	142994.5	140604.8
16	128697	185525.8	170462.5	160384.6	153563.1	149159.8	146631.7	145521.1	145404.2
17	133244	179842.9	162109.4	150878.3	143616.6	138928.4	135870.9	133744.3	132038.4
18	153864	175183	156336.3	145588	139467.6	136086.2	134294.8	133394.1	133002.9
19	148127	173051.1	155841.8	148070.8	145226.1	144975.1	146036.3	147723	149691.8
20	141460	170558.7	154298.9	148087.7	146386.5	146551	147290.7	148005.8	148440
21	135391	167648.8	151731.1	146099.4	144415.9	144005.5	143792.3	143423.7	142856
22	127395	164423.1	148463.1	142886.9	140805.9	139698.3	138751.5	137800.8	136884
23	167516	160720.3	144249.5	138239.3	135441.6	133546.6	131937.6	130516.8	129292.8
24		161399.8	148902.8	147022.3	148271.3	150531.3	153284.6	156416.2	159871.4
CFE		-482332	-303651	-208702	-153404	-118203	-93913.9	-76023.9	-62202.1
MAD		24677.76	18530.25	15930.05	14924.07	14168.88	13703.01	13709.9	13927.86
MSE		9.71E+08	5.93E+08	4.63E+08	4.07E+08	3.79E+08	3.65E+08	3.59E+08	3.60E+08
MAPE		16.81998	12.36406	10.42635	9.61005	9.001069	8.579825	8.482665	8.544138
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6	Alpha=0.7	Alpha=0.8

อาหารประเภท 1FATT โดยวิธี Double Exponential Smoothing (DES)

08-18-2013	Actual	Forecast by								
Month	Data	DES								
1	209633									
2	198677	209633	209633	209633	209633	209633	209633	209633	209633	209633
3	220537	209523.4	209194.8	208647	207880	206894	205688.8	204264.6	202621.2	200758.6
4	212858	209544.8	209368	209233.9	209274.1	209620	210403.1	211754.9	213806.8	216690.4
5	203795	209595.3	209618.4	209847.7	210349.4	211111	212041.2	212969.5	213647	213745.5
6	179738	209578.2	209545.8	209603.7	209687.8	209654.8	209334.6	208583.3	207335.3	205656.1
7	199633	209265.9	208307	206796.2	204657.6	201811.5	198246.8	194054.4	189420.6	184581.6
8	189677	208916.6	207167.2	204775.9	202042.8	199306.1	196971.8	195480.3	195239.9	196562.5
9	212537	208441.3	205738.1	202427	199123	196272.4	194141.7	192765	191912.4	191105
10	202858	208097.3	205095.5	202186	200218.1	199580.2	200311.2	202208.9	204979.1	208410.4
11	193295	207766.2	204594.7	202128.3	201034.7	201226.6	202215.1	203376.9	204144.3	204086
12	190238	207353.3	203822.2	201305.1	200090.3	199655.3	199308.5	198541.9	197167.3	195302
13	133861	206847.7	202784.4	199905.7	198174	196908.1	195578.1	194037.8	192453.5	191112.3
14	139420	205708.3	199363.3	193275.9	187194	180459.6	172763.1	164145.8	154765.7	144696.9
15	146604	204122.5	194776.1	185180.3	175597.4	166087.5	157109.2	149339.9	143437	139958.4
16	128697	202262.9	189913.3	177741.6	166783.7	157623.6	150822.7	146666.8	145010.7	145294
17	133244	200020.9	184352.5	169682.6	157516.9	148276	141851.6	137621	134632.9	131903.8
18	153864	197537.1	178749.3	162454.3	150297.1	142181.1	137317.5	134662.2	133328.9	132855.5
19	148127	195088.5	174167.8	158139.2	148268.7	143578.1	142548.8	143804.8	146419.2	149881.9
20	141460	192635.5	170194	155123.8	147515.8	145064.6	145393.9	146745.5	148035.8	148630.7
21	135391	190136.8	166501.4	152416.5	146275.9	144535	144432.9	144420.3	143892	142809.9
22	127395	187565.5	162893.8	149557.6	144087.9	142116.7	141024.1	139786.7	138285.6	136742.4
23	167516	184881	159164.9	146162.1	140629.4	137831.6	135572.2	133297.7	131091.4	129110.3
24		182532.8	157112.5	146420.2	143686.2	144181.5	146199.7	149480.7	154115.4	160142.6
CFE		-705100	-505524	-356801	-256910	-190005	-143288	-108739	-81837.5	-60105.2
MAD		33724.77	25704	20550.06	17382.1	16121.99	15031.26	14135.2	13773.29	13974.03
MSE		1.76E+09	1.06E+09	7.21E+08	5.56E+08	4.66E+08	4.12E+08	3.79E+08	3.62E+08	3.61E+08
MAPE		23.19794	17.53423	13.80341	11.47432	10.4896	9.651464	8.944534	8.577344	8.566424
		Alpha=0.1	Alpha=0.2	Alpha=0.3	Alpha=0.4	Alpha=0.5	Alpha=0.6	Alpha=0.7	Alpha=0.8	Alpha=0.9

