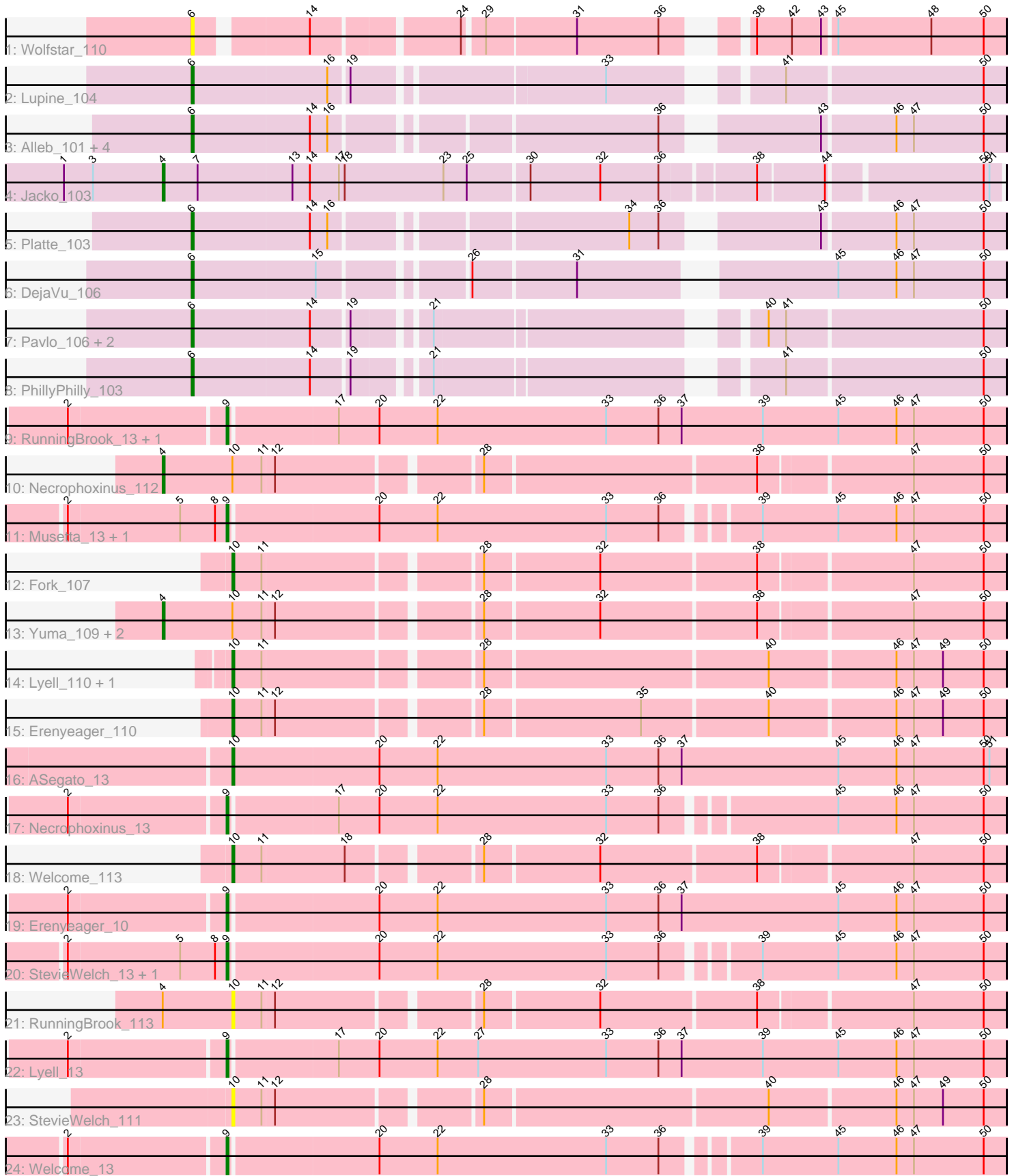


Pham 170160



Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 170160 Report

This analysis was run 07/09/24 on database version 566.

Pham number 170160 has 36 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Wolfstar_110
- Track 2 : Lupine_104
- Track 3 : Alleb_101, OlinDD_104, Tandem_104, Pioneer3_104, Hortus1_104
- Track 4 : Jacko_103
- Track 5 : Platte_103
- Track 6 : DejaVu_106
- Track 7 : Pavlo_106, Roman_107, Hubbs_105
- Track 8 : PhillyPhilly_103
- Track 9 : RunningBrook_13, DustyDino_13
- Track 10 : Necrophoxinus_112
- Track 11 : Musetta_13, Yuma_13
- Track 12 : Fork_107
- Track 13 : Yuma_109, ASegato_109, DustyDino_114
- Track 14 : Lyell_110, Musetta_108
- Track 15 : Erenyeager_110
- Track 16 : ASegato_13
- Track 17 : Necrophoxinus_13
- Track 18 : Welcome_113
- Track 19 : Erenyeager_10
- Track 20 : StevieWelch_13, Fork_10
- Track 21 : RunningBrook_113
- Track 22 : Lyell_13
- Track 23 : StevieWelch_111
- Track 24 : Welcome_13

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 6, it was called in 12 of the 31 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alleb_101, DejaVu_106, Hortus1_104, Hubbs_105, Lupine_104, OlinDD_104, Pavlo_106, PhillyPhilly_103, Pioneer3_104, Platte_103, Roman_107, Tandem_104, Wolfstar_110,

Genes that have the "Most Annotated" start but do not call it:

-

Genes that do not have the "Most Annotated" start:

- ASegato_109, ASegato_13, DustyDino_114, DustyDino_13, Erenyeager_10, Erenyeager_110, Fork_10, Fork_107, Jacko_103, Lyell_110, Lyell_13, Musetta_108, Musetta_13, Necrophoxinus_112, Necrophoxinus_13, RunningBrook_113, RunningBrook_13, StevieWelch_111, StevieWelch_13, Welcome_113, Welcome_13, Yuma_109, Yuma_13,

Summary by start number:

Start 4:

- Found in 6 of 36 (16.7%) of genes in pham
- Manual Annotations of this start: 5 of 31
- Called 83.3% of time when present
- Phage (with cluster) where this start called: ASegato_109 (ED2), DustyDino_114 (ED2), Jacko_103 (ED1), Necrophoxinus_112 (ED2), Yuma_109 (ED2),

Start 6:

- Found in 13 of 36 (36.1%) of genes in pham
- Manual Annotations of this start: 12 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alleb_101 (ED1), DejaVu_106 (ED1), Hortus1_104 (ED1), Hubbs_105 (ED1), Lupine_104 (ED1), OlinDD_104 (ED1), Pavlo_106 (ED1), PhillyPhilly_103 (ED1), Pioneer3_104 (ED1), Platte_103 (ED1), Roman_107 (ED1), Tandem_104 (ED1), Wolfstar_110 (ED),

Start 9:

- Found in 10 of 36 (27.8%) of genes in pham
- Manual Annotations of this start: 8 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DustyDino_13 (ED2), Erenyeager_10 (ED2), Fork_10 (ED2), Lyell_13 (ED2), Musetta_13 (ED2), Necrophoxinus_13 (ED2), RunningBrook_13 (ED2), StevieWelch_13 (ED2), Welcome_13 (ED2), Yuma_13 (ED2),

Start 10:

- Found in 12 of 36 (33.3%) of genes in pham
- Manual Annotations of this start: 6 of 31
- Called 66.7% of time when present
- Phage (with cluster) where this start called: ASegato_13 (ED2), Erenyeager_110 (ED2), Fork_107 (ED2), Lyell_110 (ED2), Musetta_108 (ED2), RunningBrook_113 (ED2), StevieWelch_111 (ED2), Welcome_113 (ED2),

Summary by clusters:

There are 3 clusters represented in this pham: ED2, ED, ED1,

Info for manual annotations of cluster ED1:

- Start number 4 was manually annotated 1 time for cluster ED1.

- Start number 6 was manually annotated 12 times for cluster ED1.

Info for manual annotations of cluster ED2:

- Start number 4 was manually annotated 4 times for cluster ED2.
- Start number 9 was manually annotated 8 times for cluster ED2.
- Start number 10 was manually annotated 6 times for cluster ED2.

Gene Information:

Gene: ASegato_109 Start: 57290, Stop: 56880, Start Num: 4

Candidate Starts for ASegato_109:

(Start: 4 @57290 has 5 MA's), (Start: 10 @57254 has 6 MA's), (11, 57239), (12, 57233), (28, 57137), (32, 57080), (38, 57002), (47, 56927), (50, 56891),

Gene: ASegato_13 Start: 4659, Stop: 5057, Start Num: 10

Candidate Starts for ASegato_13:

(Start: 10 @4659 has 6 MA's), (20, 4734), (22, 4764), (33, 4851), (36, 4878), (37, 4890), (45, 4971), (46, 5001), (47, 5010), (50, 5046), (51, 5049),

Gene: Alleb_101 Start: 56509, Stop: 56129, Start Num: 6

Candidate Starts for Alleb_101:

(Start: 6 @56509 has 12 MA's), (14, 56449), (16, 56440), (36, 56287), (43, 56221), (46, 56185), (47, 56176), (50, 56140),

Gene: DejaVu_106 Start: 56615, Stop: 56235, Start Num: 6

Candidate Starts for DejaVu_106:

(Start: 6 @56615 has 12 MA's), (15, 56552), (26, 56486), (31, 56435), (45, 56321), (46, 56291), (47, 56282), (50, 56246),

Gene: DustyDino_13 Start: 4681, Stop: 5079, Start Num: 9

Candidate Starts for DustyDino_13:

(2, 4603), (Start: 9 @4681 has 8 MA's), (17, 4735), (20, 4756), (22, 4786), (33, 4873), (36, 4900), (37, 4912), (39, 4954), (45, 4993), (46, 5023), (47, 5032), (50, 5068),

Gene: DustyDino_114 Start: 58143, Stop: 57733, Start Num: 4

Candidate Starts for DustyDino_114:

(Start: 4 @58143 has 5 MA's), (Start: 10 @58107 has 6 MA's), (11, 58092), (12, 58086), (28, 57990), (32, 57933), (38, 57855), (47, 57780), (50, 57744),

Gene: Erenyeager_110 Start: 57108, Stop: 56731, Start Num: 10

Candidate Starts for Erenyeager_110:

(Start: 10 @57108 has 6 MA's), (11, 57093), (12, 57087), (28, 56991), (35, 56913), (40, 56850), (46, 56787), (47, 56778), (49, 56763), (50, 56742),

Gene: Erenyeager_10 Start: 4052, Stop: 4450, Start Num: 9

Candidate Starts for Erenyeager_10:

(2, 3974), (Start: 9 @4052 has 8 MA's), (20, 4127), (22, 4157), (33, 4244), (36, 4271), (37, 4283), (45, 4364), (46, 4394), (47, 4403), (50, 4439),

Gene: Fork_107 Start: 57132, Stop: 56758, Start Num: 10

Candidate Starts for Fork_107:

(Start: 10 @57132 has 6 MA's), (11, 57117), (28, 57015), (32, 56958), (38, 56880), (47, 56805), (50, 56769),

Gene: Fork_10 Start: 3946, Stop: 4332, Start Num: 9

Candidate Starts for Fork_10:

(2, 3865), (5, 3922), (8, 3940), (Start: 9 @3946 has 8 MA's), (20, 4021), (22, 4051), (33, 4138), (36, 4165), (39, 4207), (45, 4246), (46, 4276), (47, 4285), (50, 4321),

Gene: Hortus1_104 Start: 57265, Stop: 56885, Start Num: 6

Candidate Starts for Hortus1_104:

(Start: 6 @57265 has 12 MA's), (14, 57205), (16, 57196), (36, 57043), (43, 56977), (46, 56941), (47, 56932), (50, 56896),

Gene: Hubbs_105 Start: 56879, Stop: 56505, Start Num: 6

Candidate Starts for Hubbs_105:

(Start: 6 @56879 has 12 MA's), (14, 56819), (19, 56801), (21, 56768), (40, 56624), (41, 56615), (50, 56516),

Gene: Jacko_103 Start: 55408, Stop: 54995, Start Num: 4

Candidate Starts for Jacko_103:

(1, 55459), (3, 55444), (Start: 4 @55408 has 5 MA's), (7, 55390), (13, 55342), (14, 55333), (17, 55318), (18, 55315), (23, 55264), (25, 55252), (30, 55222), (32, 55186), (36, 55156), (38, 55111), (44, 55078), (50, 55003), (51, 55000),

Gene: Lupine_104 Start: 56423, Stop: 56046, Start Num: 6

Candidate Starts for Lupine_104:

(Start: 6 @56423 has 12 MA's), (16, 56354), (19, 56345), (33, 56225), (41, 56156), (50, 56057),

Gene: Lyell_110 Start: 57057, Stop: 56680, Start Num: 10

Candidate Starts for Lyell_110:

(Start: 10 @57057 has 6 MA's), (11, 57042), (28, 56940), (40, 56799), (46, 56736), (47, 56727), (49, 56712), (50, 56691),

Gene: Lyell_13 Start: 4396, Stop: 4794, Start Num: 9

Candidate Starts for Lyell_13:

(2, 4318), (Start: 9 @4396 has 8 MA's), (17, 4450), (20, 4471), (22, 4501), (27, 4522), (33, 4588), (36, 4615), (37, 4627), (39, 4669), (45, 4708), (46, 4738), (47, 4747), (50, 4783),

Gene: Musetta_13 Start: 4656, Stop: 5042, Start Num: 9

Candidate Starts for Musetta_13:

(2, 4575), (5, 4632), (8, 4650), (Start: 9 @4656 has 8 MA's), (20, 4731), (22, 4761), (33, 4848), (36, 4875), (39, 4917), (45, 4956), (46, 4986), (47, 4995), (50, 5031),

Gene: Musetta_108 Start: 57298, Stop: 56921, Start Num: 10

Candidate Starts for Musetta_108:

(Start: 10 @57298 has 6 MA's), (11, 57283), (28, 57181), (40, 57040), (46, 56977), (47, 56968), (49, 56953), (50, 56932),

Gene: Necrophoxinus_112 Start: 57987, Stop: 57577, Start Num: 4

Candidate Starts for Necrophoxinus_112:

(Start: 4 @57987 has 5 MA's), (Start: 10 @57951 has 6 MA's), (11, 57936), (12, 57930), (28, 57834), (38, 57699), (47, 57624), (50, 57588),

Gene: Necrophoxinus_13 Start: 4772, Stop: 5158, Start Num: 9
Candidate Starts for Necrophoxinus_13:
(2, 4694), (Start: 9 @4772 has 8 MA's), (17, 4826), (20, 4847), (22, 4877), (33, 4964), (36, 4991), (45, 5072), (46, 5102), (47, 5111), (50, 5147),

Gene: OlinDD_104 Start: 57270, Stop: 56890, Start Num: 6
Candidate Starts for OlinDD_104:
(Start: 6 @57270 has 12 MA's), (14, 57210), (16, 57201), (36, 57048), (43, 56982), (46, 56946), (47, 56937), (50, 56901),

Gene: Pavlo_106 Start: 57274, Stop: 56900, Start Num: 6
Candidate Starts for Pavlo_106:
(Start: 6 @57274 has 12 MA's), (14, 57214), (19, 57196), (21, 57163), (40, 57019), (41, 57010), (50, 56911),

Gene: PhillyPhilly_103 Start: 56263, Stop: 55889, Start Num: 6
Candidate Starts for PhillyPhilly_103:
(Start: 6 @56263 has 12 MA's), (14, 56203), (19, 56185), (21, 56152), (41, 55999), (50, 55900),

Gene: Pioneer3_104 Start: 57068, Stop: 56688, Start Num: 6
Candidate Starts for Pioneer3_104:
(Start: 6 @57068 has 12 MA's), (14, 57008), (16, 56999), (36, 56846), (43, 56780), (46, 56744), (47, 56735), (50, 56699),

Gene: Platte_103 Start: 56852, Stop: 56472, Start Num: 6
Candidate Starts for Platte_103:
(Start: 6 @56852 has 12 MA's), (14, 56792), (16, 56783), (34, 56645), (36, 56630), (43, 56564), (46, 56528), (47, 56519), (50, 56483),

Gene: Roman_107 Start: 57323, Stop: 56949, Start Num: 6
Candidate Starts for Roman_107:
(Start: 6 @57323 has 12 MA's), (14, 57263), (19, 57245), (21, 57212), (40, 57068), (41, 57059), (50, 56960),

Gene: RunningBrook_13 Start: 4681, Stop: 5079, Start Num: 9
Candidate Starts for RunningBrook_13:
(2, 4603), (Start: 9 @4681 has 8 MA's), (17, 4735), (20, 4756), (22, 4786), (33, 4873), (36, 4900), (37, 4912), (39, 4954), (45, 4993), (46, 5023), (47, 5032), (50, 5068),

Gene: RunningBrook_113 Start: 58107, Stop: 57733, Start Num: 10
Candidate Starts for RunningBrook_113:
(Start: 4 @58143 has 5 MA's), (Start: 10 @58107 has 6 MA's), (11, 58092), (12, 58086), (28, 57990), (32, 57933), (38, 57855), (47, 57780), (50, 57744),

Gene: StevieWelch_13 Start: 4573, Stop: 4959, Start Num: 9
Candidate Starts for StevieWelch_13:
(2, 4492), (5, 4549), (8, 4567), (Start: 9 @4573 has 8 MA's), (20, 4648), (22, 4678), (33, 4765), (36, 4792), (39, 4834), (45, 4873), (46, 4903), (47, 4912), (50, 4948),

Gene: StevieWelch_111 Start: 57350, Stop: 56973, Start Num: 10
Candidate Starts for StevieWelch_111:
(Start: 10 @57350 has 6 MA's), (11, 57335), (12, 57329), (28, 57233), (40, 57092), (46, 57029), (47, 57020), (49, 57005), (50, 56984),

Gene: Tandem_104 Start: 57148, Stop: 56768, Start Num: 6

Candidate Starts for Tandem_104:

(Start: 6 @57148 has 12 MA's), (14, 57088), (16, 57079), (36, 56926), (43, 56860), (46, 56824), (47, 56815), (50, 56779),

Gene: Welcome_113 Start: 57947, Stop: 57573, Start Num: 10

Candidate Starts for Welcome_113:

(Start: 10 @57947 has 6 MA's), (11, 57932), (18, 57890), (28, 57830), (32, 57773), (38, 57695), (47, 57620), (50, 57584),

Gene: Welcome_13 Start: 4652, Stop: 5038, Start Num: 9

Candidate Starts for Welcome_13:

(2, 4574), (Start: 9 @4652 has 8 MA's), (20, 4727), (22, 4757), (33, 4844), (36, 4871), (39, 4913), (45, 4952), (46, 4982), (47, 4991), (50, 5027),

Gene: Wolfstar_110 Start: 58799, Stop: 58431, Start Num: 6

Candidate Starts for Wolfstar_110:

(Start: 6 @58799 has 12 MA's), (14, 58748), (24, 58679), (29, 58670), (31, 58625), (36, 58583), (38, 58556), (42, 58538), (43, 58523), (45, 58517), (48, 58469), (50, 58442),

Gene: Yuma_109 Start: 57104, Stop: 56694, Start Num: 4

Candidate Starts for Yuma_109:

(Start: 4 @57104 has 5 MA's), (Start: 10 @57068 has 6 MA's), (11, 57053), (12, 57047), (28, 56951), (32, 56894), (38, 56816), (47, 56741), (50, 56705),

Gene: Yuma_13 Start: 4555, Stop: 4941, Start Num: 9

Candidate Starts for Yuma_13:

(2, 4474), (5, 4531), (8, 4549), (Start: 9 @4555 has 8 MA's), (20, 4630), (22, 4660), (33, 4747), (36, 4774), (39, 4816), (45, 4855), (46, 4885), (47, 4894), (50, 4930),