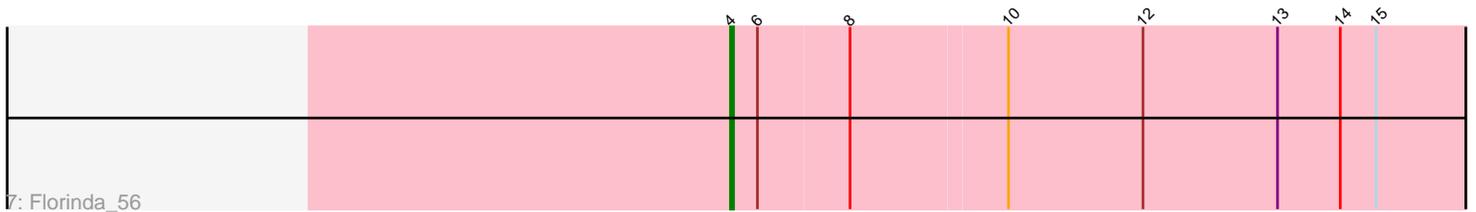
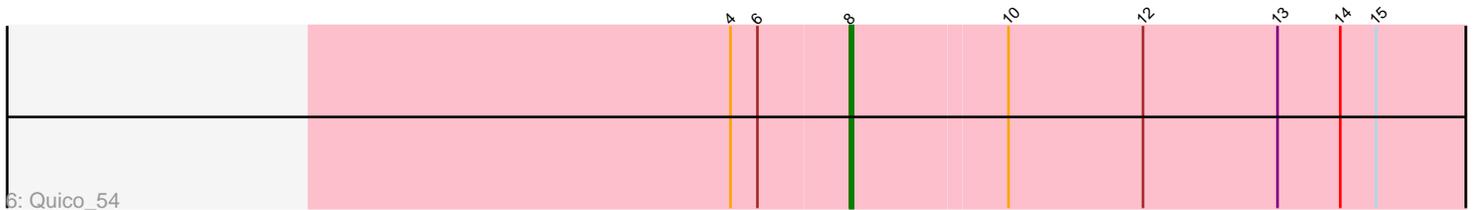
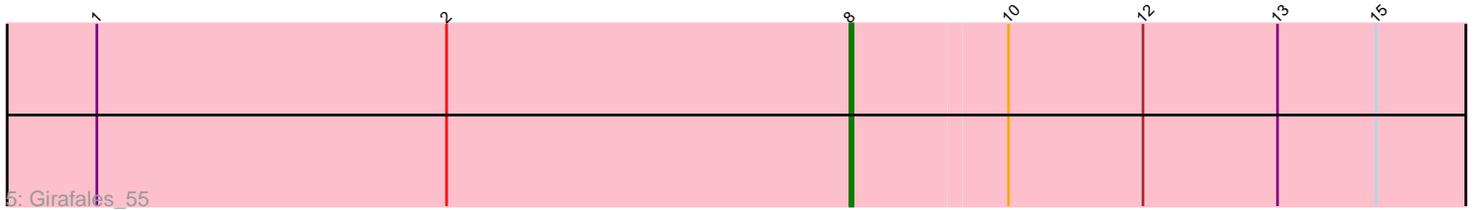
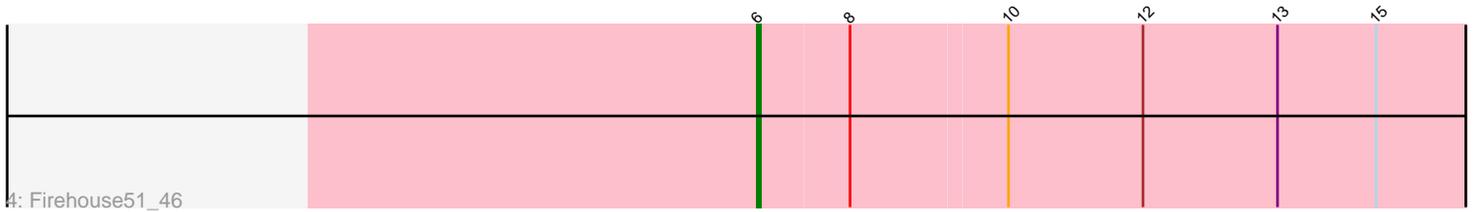
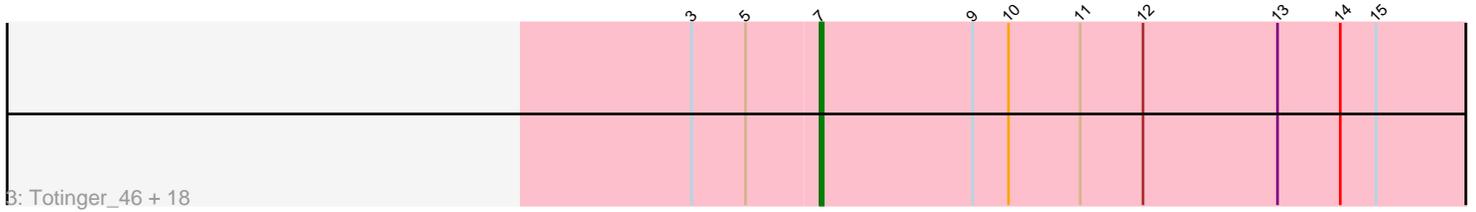
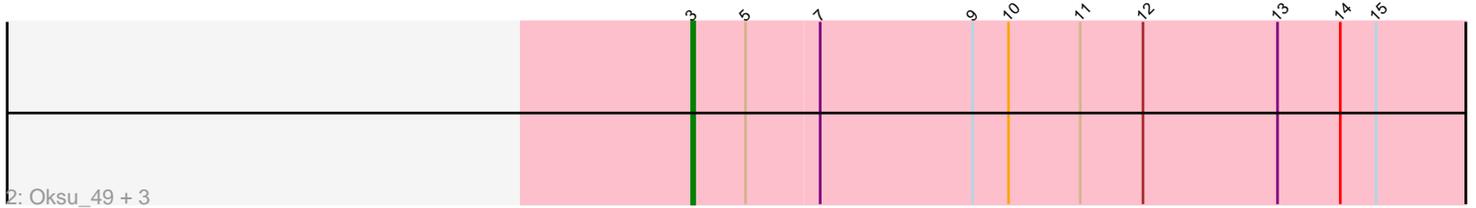
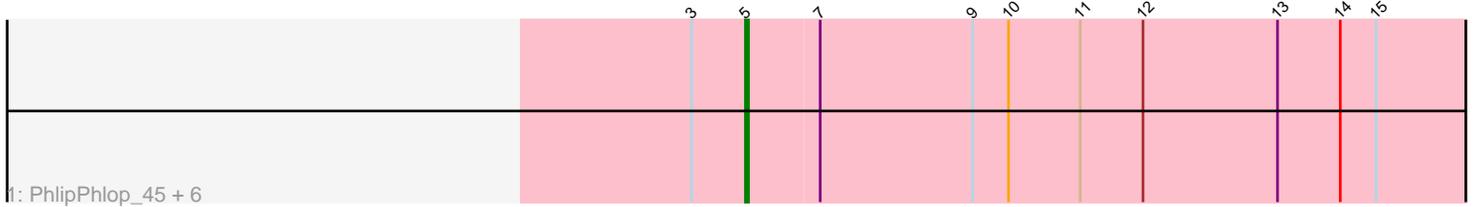


Pham 291371



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 291371 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291371 has 34 members, 3 are drafts.

Phages represented in each track:

- Track 1 : PhlipPhlop_45, DotProduct_43, Violac_48, Slim_47, Veteran_44, Emmaloid_47, Hades_46
- Track 2 : Oksu_49, Royals2015_47, Wee_49, GUmbie_44
- Track 3 : Totinger_46, Karhdo_45, Clank_48, DeadP_50, Alexphander_51, Spikelee_52, Bipolar_42, Harley_49, OwlsT2W_44, SiSi_46, BuzzLyseyear_51, Gandalph_46, Sandalphon_48, IbOuu_46, Starcevich_46, Nichirin_50, Phanphagia_40, GigiOuiOui_43, Hamulus_47
- Track 4 : Firehouse51_46
- Track 5 : Girafales_55
- Track 6 : Quico_54
- Track 7 : Florinda_56

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

The start number called the most often in the published annotations is 7, it was called in 17 of the 31 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alexphander_51, Bipolar_42, BuzzLyseyear_51, Clank_48, DeadP_50, Gandalph_46, GigiOuiOui_43, Hamulus_47, Harley_49, IbOuu_46, Karhdo_45, Nichirin_50, OwlsT2W_44, Phanphagia_40, Sandalphon_48, SiSi_46, Spikelee_52, Starcevich_46, Totinger_46,

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

- DotProduct_43, Emmaloid_47, GUmbie_44, Hades_46, Oksu_49, PhlipPhlop_45, Royals2015_47, Slim_47, Veteran_44, Violac_48, Wee_49,

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

- Firehouse51_46, Florinda_56, Girafales_55, Quico_54,

Summary by start number:

Start 3:

- Found in 30 of 34 (88.2%) of genes in pham

- Manual Annotations of this start: 3 of 31
- Called 13.3% of time when present
- Phage (with cluster) where this start called: GUmbie_44 (F1), Okusu_49 (F1), Royals2015_47 (F1), Wee_49 (F1),

Start 4:

- Found in 2 of 34 (5.9%) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Florinda_56 (F1),

Start 5:

- Found in 30 of 34 (88.2%) of genes in pham
- Manual Annotations of this start: 7 of 31
- Called 23.3% of time when present
- Phage (with cluster) where this start called: DotProduct_43 (F1), Emmaloid_47 (F1), Hades_46 (F1), PhlipPhlop_45 (F1), Slim_47 (F1), Veteran_44 (F1), Violac_48 (F1),

Start 6:

- Found in 3 of 34 (8.8%) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Firehouse51_46 (F1),

Start 7:

- Found in 30 of 34 (88.2%) of genes in pham
- Manual Annotations of this start: 17 of 31
- Called 63.3% of time when present
- Phage (with cluster) where this start called: Alexphander_51 (F1), Bipolar_42 (F1), BuzzLyseyear_51 (F1), Clank_48 (F), DeadP_50 (F1), Gandalph_46 (F1), GigiOuiOui_43 (F1), Hamulus_47 (F1), Harley_49 (F1), IbOuu_46 (F1), Karhdo_45 (F1), Nichirin_50 (F1), OwlsT2W_44 (F1), Phanphagia_40 (F1), Sandalphon_48 (F1), SiSi_46 (F1), Spikelee_52 (F1), Starcevich_46 (F1), Totinger_46 (F1),

Start 8:

- Found in 4 of 34 (11.8%) of genes in pham
- Manual Annotations of this start: 2 of 31
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Girafales_55 (F1), Quico_54 (F1),

Summary by clusters:

There are 2 clusters represented in this pham: F1, F,

Info for manual annotations of cluster F1:

- Start number 3 was manually annotated 3 times for cluster F1.
- Start number 4 was manually annotated 1 time for cluster F1.
- Start number 5 was manually annotated 7 times for cluster F1.
- Start number 6 was manually annotated 1 time for cluster F1.
- Start number 7 was manually annotated 17 times for cluster F1.
- Start number 8 was manually annotated 2 times for cluster F1.

Gene Information:

Gene: Alexphander_51 Start: 35631, Stop: 35936, Start Num: 7

Candidate Starts for Alexphander_51:

(Start: 3 @35589 has 3 MA's), (Start: 5 @35607 has 7 MA's), (Start: 7 @35631 has 17 MA's), (9, 35682), (10, 35694), (11, 35718), (12, 35739), (13, 35784), (14, 35805), (15, 35817),

Gene: Bipolar_42 Start: 33964, Stop: 34269, Start Num: 7

Candidate Starts for Bipolar_42:

(Start: 3 @33922 has 3 MA's), (Start: 5 @33940 has 7 MA's), (Start: 7 @33964 has 17 MA's), (9, 34015), (10, 34027), (11, 34051), (12, 34072), (13, 34117), (14, 34138), (15, 34150),

Gene: BuzzLyseyear_51 Start: 36319, Stop: 36624, Start Num: 7

Candidate Starts for BuzzLyseyear_51:

(Start: 3 @36277 has 3 MA's), (Start: 5 @36295 has 7 MA's), (Start: 7 @36319 has 17 MA's), (9, 36370), (10, 36382), (11, 36406), (12, 36427), (13, 36472), (14, 36493), (15, 36505),

Gene: Clank_48 Start: 34786, Stop: 35091, Start Num: 7

Candidate Starts for Clank_48:

(Start: 3 @34744 has 3 MA's), (Start: 5 @34762 has 7 MA's), (Start: 7 @34786 has 17 MA's), (9, 34837), (10, 34849), (11, 34873), (12, 34894), (13, 34939), (14, 34960), (15, 34972),

Gene: DeadP_50 Start: 35168, Stop: 35473, Start Num: 7

Candidate Starts for DeadP_50:

(Start: 3 @35126 has 3 MA's), (Start: 5 @35144 has 7 MA's), (Start: 7 @35168 has 17 MA's), (9, 35219), (10, 35231), (11, 35255), (12, 35276), (13, 35321), (14, 35342), (15, 35354),

Gene: DotProduct_43 Start: 34143, Stop: 34472, Start Num: 5

Candidate Starts for DotProduct_43:

(Start: 3 @34125 has 3 MA's), (Start: 5 @34143 has 7 MA's), (Start: 7 @34167 has 17 MA's), (9, 34218), (10, 34230), (11, 34254), (12, 34275), (13, 34320), (14, 34341), (15, 34353),

Gene: Emmaloid_47 Start: 35873, Stop: 36202, Start Num: 5

Candidate Starts for Emmaloid_47:

(Start: 3 @35855 has 3 MA's), (Start: 5 @35873 has 7 MA's), (Start: 7 @35897 has 17 MA's), (9, 35948), (10, 35960), (11, 35984), (12, 36005), (13, 36050), (14, 36071), (15, 36083),

Gene: Firehouse51_46 Start: 36101, Stop: 36424, Start Num: 6

Candidate Starts for Firehouse51_46:

(Start: 6 @36101 has 1 MA's), (Start: 8 @36131 has 2 MA's), (10, 36182), (12, 36227), (13, 36272), (15, 36305),

Gene: Florinda_56 Start: 35758, Stop: 36090, Start Num: 4

Candidate Starts for Florinda_56:

(Start: 4 @35758 has 1 MA's), (Start: 6 @35767 has 1 MA's), (Start: 8 @35797 has 2 MA's), (10, 35848), (12, 35893), (13, 35938), (14, 35959), (15, 35971),

Gene: GUmbie_44 Start: 34354, Stop: 34701, Start Num: 3

Candidate Starts for GUmbie_44:

(Start: 3 @34354 has 3 MA's), (Start: 5 @34372 has 7 MA's), (Start: 7 @34396 has 17 MA's), (9, 34447), (10, 34459), (11, 34483), (12, 34504), (13, 34549), (14, 34570), (15, 34582),

Gene: Gandalph_46 Start: 34476, Stop: 34781, Start Num: 7

Candidate Starts for Gandalph_46:

(Start: 3 @34434 has 3 MA's), (Start: 5 @34452 has 7 MA's), (Start: 7 @34476 has 17 MA's), (9, 34527), (10, 34539), (11, 34563), (12, 34584), (13, 34629), (14, 34650), (15, 34662),

Gene: GigiOuiOui_43 Start: 34309, Stop: 34614, Start Num: 7

Candidate Starts for GigiOuiOui_43:

(Start: 3 @34267 has 3 MA's), (Start: 5 @34285 has 7 MA's), (Start: 7 @34309 has 17 MA's), (9, 34360), (10, 34372), (11, 34396), (12, 34417), (13, 34462), (14, 34483), (15, 34495),

Gene: Girafales_55 Start: 35606, Stop: 35899, Start Num: 8

Candidate Starts for Girafales_55:

(1, 35354), (2, 35471), (Start: 8 @35606 has 2 MA's), (10, 35657), (12, 35702), (13, 35747), (15, 35780),

Gene: Hades_46 Start: 34544, Stop: 34873, Start Num: 5

Candidate Starts for Hades_46:

(Start: 3 @34526 has 3 MA's), (Start: 5 @34544 has 7 MA's), (Start: 7 @34568 has 17 MA's), (9, 34619), (10, 34631), (11, 34655), (12, 34676), (13, 34721), (14, 34742), (15, 34754),

Gene: Hamulus_47 Start: 35751, Stop: 36056, Start Num: 7

Candidate Starts for Hamulus_47:

(Start: 3 @35709 has 3 MA's), (Start: 5 @35727 has 7 MA's), (Start: 7 @35751 has 17 MA's), (9, 35802), (10, 35814), (11, 35838), (12, 35859), (13, 35904), (14, 35925), (15, 35937),

Gene: Harley_49 Start: 35104, Stop: 35409, Start Num: 7

Candidate Starts for Harley_49:

(Start: 3 @35062 has 3 MA's), (Start: 5 @35080 has 7 MA's), (Start: 7 @35104 has 17 MA's), (9, 35155), (10, 35167), (11, 35191), (12, 35212), (13, 35257), (14, 35278), (15, 35290),

Gene: lbOuu_46 Start: 34945, Stop: 35250, Start Num: 7

Candidate Starts for lbOuu_46:

(Start: 3 @34903 has 3 MA's), (Start: 5 @34921 has 7 MA's), (Start: 7 @34945 has 17 MA's), (9, 34996), (10, 35008), (11, 35032), (12, 35053), (13, 35098), (14, 35119), (15, 35131),

Gene: Karhdo_45 Start: 35191, Stop: 35496, Start Num: 7

Candidate Starts for Karhdo_45:

(Start: 3 @35149 has 3 MA's), (Start: 5 @35167 has 7 MA's), (Start: 7 @35191 has 17 MA's), (9, 35242), (10, 35254), (11, 35278), (12, 35299), (13, 35344), (14, 35365), (15, 35377),

Gene: Nichirin_50 Start: 35947, Stop: 36252, Start Num: 7

Candidate Starts for Nichirin_50:

(Start: 3 @35905 has 3 MA's), (Start: 5 @35923 has 7 MA's), (Start: 7 @35947 has 17 MA's), (9, 35998), (10, 36010), (11, 36034), (12, 36055), (13, 36100), (14, 36121), (15, 36133),

Gene: Oksu_49 Start: 35728, Stop: 36075, Start Num: 3

Candidate Starts for Oksu_49:

(Start: 3 @35728 has 3 MA's), (Start: 5 @35746 has 7 MA's), (Start: 7 @35770 has 17 MA's), (9, 35821), (10, 35833), (11, 35857), (12, 35878), (13, 35923), (14, 35944), (15, 35956),

Gene: OwlsT2W_44 Start: 34806, Stop: 35111, Start Num: 7

Candidate Starts for OwlsT2W_44:

(Start: 3 @34764 has 3 MA's), (Start: 5 @34782 has 7 MA's), (Start: 7 @34806 has 17 MA's), (9, 34857), (10, 34869), (11, 34893), (12, 34914), (13, 34959), (14, 34980), (15, 34992),

Gene: Phanphagia_40 Start: 33623, Stop: 33928, Start Num: 7

Candidate Starts for Phanphagia_40:

(Start: 3 @33581 has 3 MA's), (Start: 5 @33599 has 7 MA's), (Start: 7 @33623 has 17 MA's), (9, 33674), (10, 33686), (11, 33710), (12, 33731), (13, 33776), (14, 33797), (15, 33809),

Gene: PhlipPhlop_45 Start: 35797, Stop: 36126, Start Num: 5

Candidate Starts for PhlipPhlop_45:

(Start: 3 @35779 has 3 MA's), (Start: 5 @35797 has 7 MA's), (Start: 7 @35821 has 17 MA's), (9, 35872), (10, 35884), (11, 35908), (12, 35929), (13, 35974), (14, 35995), (15, 36007),

Gene: Quico_54 Start: 35617, Stop: 35910, Start Num: 8

Candidate Starts for Quico_54:

(Start: 4 @35578 has 1 MA's), (Start: 6 @35587 has 1 MA's), (Start: 8 @35617 has 2 MA's), (10, 35668), (12, 35713), (13, 35758), (14, 35779), (15, 35791),

Gene: Royals2015_47 Start: 34784, Stop: 35131, Start Num: 3

Candidate Starts for Royals2015_47:

(Start: 3 @34784 has 3 MA's), (Start: 5 @34802 has 7 MA's), (Start: 7 @34826 has 17 MA's), (9, 34877), (10, 34889), (11, 34913), (12, 34934), (13, 34979), (14, 35000), (15, 35012),

Gene: Sandalphon_48 Start: 35740, Stop: 36045, Start Num: 7

Candidate Starts for Sandalphon_48:

(Start: 3 @35698 has 3 MA's), (Start: 5 @35716 has 7 MA's), (Start: 7 @35740 has 17 MA's), (9, 35791), (10, 35803), (11, 35827), (12, 35848), (13, 35893), (14, 35914), (15, 35926),

Gene: SiSi_46 Start: 34739, Stop: 35044, Start Num: 7

Candidate Starts for SiSi_46:

(Start: 3 @34697 has 3 MA's), (Start: 5 @34715 has 7 MA's), (Start: 7 @34739 has 17 MA's), (9, 34790), (10, 34802), (11, 34826), (12, 34847), (13, 34892), (14, 34913), (15, 34925),

Gene: Slim_47 Start: 35864, Stop: 36193, Start Num: 5

Candidate Starts for Slim_47:

(Start: 3 @35846 has 3 MA's), (Start: 5 @35864 has 7 MA's), (Start: 7 @35888 has 17 MA's), (9, 35939), (10, 35951), (11, 35975), (12, 35996), (13, 36041), (14, 36062), (15, 36074),

Gene: Spikelee_52 Start: 35736, Stop: 36041, Start Num: 7

Candidate Starts for Spikelee_52:

(Start: 3 @35694 has 3 MA's), (Start: 5 @35712 has 7 MA's), (Start: 7 @35736 has 17 MA's), (9, 35787), (10, 35799), (11, 35823), (12, 35844), (13, 35889), (14, 35910), (15, 35922),

Gene: Starcevich_46 Start: 35373, Stop: 35678, Start Num: 7

Candidate Starts for Starcevich_46:

(Start: 3 @35331 has 3 MA's), (Start: 5 @35349 has 7 MA's), (Start: 7 @35373 has 17 MA's), (9, 35424), (10, 35436), (11, 35460), (12, 35481), (13, 35526), (14, 35547), (15, 35559),

Gene: Totinger_46 Start: 34515, Stop: 34820, Start Num: 7

Candidate Starts for Totinger_46:

(Start: 3 @34473 has 3 MA's), (Start: 5 @34491 has 7 MA's), (Start: 7 @34515 has 17 MA's), (9, 34566), (10, 34578), (11, 34602), (12, 34623), (13, 34668), (14, 34689), (15, 34701),

Gene: Veteran_44 Start: 34359, Stop: 34688, Start Num: 5

Candidate Starts for Veteran_44:

(Start: 3 @34341 has 3 MA's), (Start: 5 @34359 has 7 MA's), (Start: 7 @34383 has 17 MA's), (9, 34434), (10, 34446), (11, 34470), (12, 34491), (13, 34536), (14, 34557), (15, 34569),

Gene: Violac_48 Start: 35789, Stop: 36118, Start Num: 5

Candidate Starts for Violac_48:

(Start: 3 @35771 has 3 MA's), (Start: 5 @35789 has 7 MA's), (Start: 7 @35813 has 17 MA's), (9, 35864), (10, 35876), (11, 35900), (12, 35921), (13, 35966), (14, 35987), (15, 35999),

Gene: Wee_49 Start: 35708, Stop: 36055, Start Num: 3

Candidate Starts for Wee_49:

(Start: 3 @35708 has 3 MA's), (Start: 5 @35726 has 7 MA's), (Start: 7 @35750 has 17 MA's), (9, 35801), (10, 35813), (11, 35837), (12, 35858), (13, 35903), (14, 35924), (15, 35936),