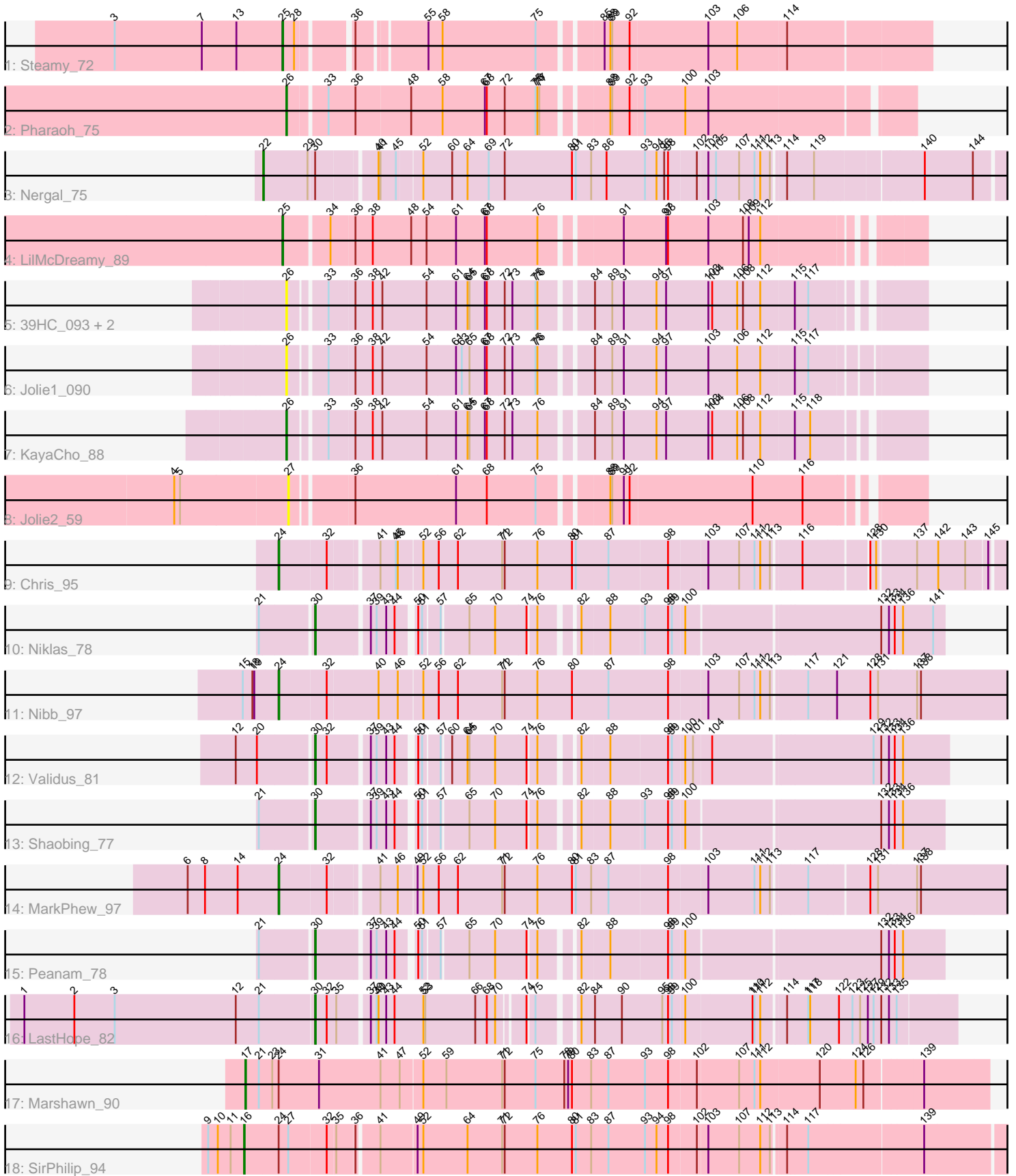


Pham 158189



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 158189 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158189 has 20 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Steamy_72
- Track 2 : Pharaoh_75
- Track 3 : Nergal_75
- Track 4 : LilMcDreamy_89
- Track 5 : 39HC_093, 40BC_093, Hosp_088
- Track 6 : Jolie1_090
- Track 7 : KayaCho_88
- Track 8 : Jolie2_59
- Track 9 : Chris_95
- Track 10 : Niklas_78
- Track 11 : Nibb_97
- Track 12 : Validus_81
- Track 13 : Shaobing_77
- Track 14 : MarkPhew_97
- Track 15 : Peanam_78
- Track 16 : LastHope_82
- Track 17 : Marshawn_90
- Track 18 : SirPhilip_94

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

The start number called the most often in the published annotations is 30, it was called in 5 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- LastHope_82, Niklas_78, Peanam_78, Shaobing_77, Validus_81,

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

- Nergal_75,

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

- 39HC_093, 40BC_093, Chris_95, Hosp_088, Jolie1_090, Jolie2_59, KayaCho_88, LilMcDreamy_89, MarkPhew_97, Marshawn_90, Nibb_97, Pharaoh_75, SirPhilip_94, Steamy_72,

Summary by start number:

Start 16:

- Found in 1 of 20 (5.0%) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SirPhilip_94 (K6),

Start 17:

- Found in 1 of 20 (5.0%) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Marshawn_90 (K6),

Start 22:

- Found in 1 of 20 (5.0%) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nergal_75 (AG),

Start 24:

- Found in 5 of 20 (25.0%) of genes in pham
- Manual Annotations of this start: 3 of 15
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Chris_95 (K1), MarkPhew_97 (K1), Nibb_97 (K1),

Start 25:

- Found in 2 of 20 (10.0%) of genes in pham
- Manual Annotations of this start: 2 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LilMcDreamy_89 (B12), Steamy_72 (A12),

Start 26:

- Found in 6 of 20 (30.0%) of genes in pham
- Manual Annotations of this start: 2 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 39HC_093 (B6), 40BC_093 (B6), Hosp_088 (B6), Jolie1_090 (B6), KayaCho_88 (B6), Pharaoh_75 (A12),

Start 27:

- Found in 2 of 20 (10.0%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Jolie2_59 (G4),

Start 30:

- Found in 6 of 20 (30.0%) of genes in pham
- Manual Annotations of this start: 5 of 15
- Called 83.3% of time when present

- Phage (with cluster) where this start called: LastHope_82 (K1), Niklas_78 (K1), Peanam_78 (K1), Shaobing_77 (K1), Validus_81 (K1),

Summary by clusters:

There are 7 clusters represented in this pham: G4, AG, A12, B6, K1, B12, K6,

Info for manual annotations of cluster A12:

- Start number 25 was manually annotated 1 time for cluster A12.
- Start number 26 was manually annotated 1 time for cluster A12.

Info for manual annotations of cluster AG:

- Start number 22 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster B12:

- Start number 25 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B6:

- Start number 26 was manually annotated 1 time for cluster B6.

Info for manual annotations of cluster K1:

- Start number 24 was manually annotated 3 times for cluster K1.
- Start number 30 was manually annotated 5 times for cluster K1.

Info for manual annotations of cluster K6:

- Start number 16 was manually annotated 1 time for cluster K6.
- Start number 17 was manually annotated 1 time for cluster K6.

Gene Information:

Gene: 39HC_093 Start: 67833, Stop: 66919, Start Num: 26

Candidate Starts for 39HC_093:

(Start: 26 @67833 has 2 MA's), (33, 67782), (36, 67743), (38, 67716), (42, 67701), (54, 67632), (61, 67587), (64, 67569), (65, 67566), (67, 67542), (68, 67539), (72, 67512), (73, 67500), (75, 67464), (76, 67461), (84, 67395), (89, 67368), (91, 67350), (94, 67299), (97, 67284), (103, 67218), (104, 67212), (106, 67173), (108, 67164), (112, 67137), (115, 67086), (117, 67065),

Gene: 40BC_093 Start: 67833, Stop: 66919, Start Num: 26

Candidate Starts for 40BC_093:

(Start: 26 @67833 has 2 MA's), (33, 67782), (36, 67743), (38, 67716), (42, 67701), (54, 67632), (61, 67587), (64, 67569), (65, 67566), (67, 67542), (68, 67539), (72, 67512), (73, 67500), (75, 67464), (76, 67461), (84, 67395), (89, 67368), (91, 67350), (94, 67299), (97, 67284), (103, 67218), (104, 67212), (106, 67173), (108, 67164), (112, 67137), (115, 67086), (117, 67065),

Gene: Chris_95 Start: 58806, Stop: 59939, Start Num: 24

Candidate Starts for Chris_95:

(Start: 24 @58806 has 3 MA's), (32, 58878), (41, 58947), (45, 58971), (46, 58974), (52, 59010), (56, 59034), (62, 59064), (71, 59133), (72, 59136), (76, 59187), (80, 59241), (81, 59247), (87, 59298), (98, 59388), (103, 59445), (107, 59493), (111, 59517), (112, 59526), (113, 59541), (116, 59577), (128, 59667), (130, 59676), (137, 59730), (142, 59763), (143, 59805), (145, 59835),

Gene: Hosp_088 Start: 65138, Stop: 64224, Start Num: 26

Candidate Starts for Hosp_088:

(Start: 26 @65138 has 2 MA's), (33, 65087), (36, 65048), (38, 65021), (42, 65006), (54, 64937), (61, 64892), (64, 64874), (65, 64871), (67, 64847), (68, 64844), (72, 64817), (73, 64805), (75, 64769), (76, 64766), (84, 64700), (89, 64673), (91, 64655), (94, 64604), (97, 64589), (103, 64523), (104, 64517), (106, 64478), (108, 64469), (112, 64442), (115, 64391), (117, 64370),

Gene: Jolie1_090 Start: 67206, Stop: 66277, Start Num: 26

Candidate Starts for Jolie1_090:

(Start: 26 @67206 has 2 MA's), (33, 67155), (36, 67116), (38, 67089), (42, 67074), (54, 67005), (61, 66960), (63, 66951), (65, 66939), (67, 66915), (68, 66912), (72, 66885), (73, 66873), (75, 66837), (76, 66834), (84, 66768), (89, 66741), (91, 66723), (94, 66672), (97, 66657), (103, 66591), (106, 66546), (112, 66510), (115, 66459), (117, 66438),

Gene: Jolie2_59 Start: 41491, Stop: 42402, Start Num: 27

Candidate Starts for Jolie2_59:

(4, 41317), (5, 41326), (27, 41491), (36, 41578), (61, 41734), (68, 41782), (75, 41857), (88, 41950), (89, 41953), (91, 41971), (92, 41980), (110, 42169), (116, 42247),

Gene: KayaCho_88 Start: 67067, Stop: 66147, Start Num: 26

Candidate Starts for KayaCho_88:

(Start: 26 @67067 has 2 MA's), (33, 67016), (36, 66977), (38, 66950), (42, 66935), (54, 66866), (61, 66821), (64, 66803), (65, 66800), (67, 66776), (68, 66773), (72, 66746), (73, 66734), (76, 66695), (84, 66629), (89, 66602), (91, 66584), (94, 66533), (97, 66518), (103, 66452), (104, 66446), (106, 66407), (108, 66398), (112, 66371), (115, 66320), (118, 66296),

Gene: LastHope_82 Start: 50083, Stop: 51000, Start Num: 30

Candidate Starts for LastHope_82:

(1, 49636), (2, 49714), (3, 49777), (12, 49966), (21, 50002), (Start: 30 @50083 has 5 MA's), (32, 50101), (35, 50116), (37, 50158), (39, 50167), (40, 50170), (43, 50182), (44, 50194), (52, 50239), (53, 50242), (66, 50320), (68, 50338), (70, 50350), (74, 50386), (75, 50395), (82, 50446), (84, 50464), (90, 50506), (95, 50569), (98, 50578), (99, 50584), (100, 50602), (110, 50701), (111, 50704), (112, 50713), (114, 50743), (117, 50773), (118, 50776), (122, 50821), (123, 50842), (125, 50854), (127, 50866), (129, 50875), (132, 50887), (133, 50899), (135, 50911),

Gene: LilMcDreamy_89 Start: 67041, Stop: 66121, Start Num: 25

Candidate Starts for LilMcDreamy_89:

(Start: 25 @67041 has 2 MA's), (34, 66975), (36, 66939), (38, 66912), (48, 66852), (54, 66828), (61, 66783), (67, 66738), (68, 66735), (76, 66657), (91, 66546), (97, 66480), (98, 66477), (103, 66414), (108, 66360), (109, 66351), (112, 66333),

Gene: MarkPhew_97 Start: 58854, Stop: 60011, Start Num: 24

Candidate Starts for MarkPhew_97:

(6, 58713), (8, 58740), (14, 58791), (Start: 24 @58854 has 3 MA's), (32, 58926), (41, 58995), (46, 59022), (49, 59049), (52, 59058), (56, 59082), (62, 59112), (71, 59181), (72, 59184), (76, 59235), (80, 59289), (81, 59295), (83, 59319), (87, 59346), (98, 59436), (103, 59493), (111, 59565), (112, 59574), (113, 59589), (117, 59634), (128, 59721), (131, 59733), (137, 59790), (138, 59796),

Gene: Marshawn_90 Start: 58111, Stop: 59241, Start Num: 17

Candidate Starts for Marshawn_90:

(Start: 17 @58111 has 1 MA's), (21, 58132), (23, 58153), (Start: 24 @58162 has 3 MA's), (31, 58225), (41, 58321), (47, 58351), (52, 58384), (59, 58420), (71, 58507), (72, 58510), (75, 58558), (78, 58603),

(79, 58609), (80, 58615), (83, 58645), (87, 58672), (93, 58729), (98, 58765), (102, 58807), (107, 58870), (111, 58894), (112, 58903), (120, 58993), (124, 59047), (126, 59059), (139, 59143),

Gene: Nergal_75 Start: 50377, Stop: 51474, Start Num: 22

Candidate Starts for Nergal_75:

(Start: 22 @50377 has 1 MA's), (29, 50446), (Start: 30 @50455 has 5 MA's), (40, 50539), (41, 50542), (45, 50566), (52, 50602), (60, 50647), (64, 50671), (69, 50704), (72, 50728), (80, 50833), (81, 50839), (83, 50863), (86, 50887), (93, 50947), (94, 50965), (96, 50977), (98, 50983), (102, 51025), (103, 51040), (105, 51052), (107, 51088), (111, 51112), (112, 51121), (113, 51136), (114, 51151), (119, 51190), (140, 51343), (144, 51418),

Gene: Nibb_97 Start: 58597, Stop: 59775, Start Num: 24

Candidate Starts for Nibb_97:

(15, 58543), (18, 58558), (19, 58561), (Start: 24 @58597 has 3 MA's), (32, 58669), (40, 58747), (46, 58777), (52, 58813), (56, 58837), (62, 58867), (71, 58936), (72, 58939), (76, 58990), (80, 59044), (87, 59101), (98, 59194), (103, 59251), (107, 59299), (111, 59323), (112, 59332), (113, 59347), (117, 59392), (121, 59434), (128, 59485), (131, 59497), (137, 59554), (138, 59560),

Gene: Niklas_78 Start: 50623, Stop: 51501, Start Num: 30

Candidate Starts for Niklas_78:

(21, 50548), (Start: 30 @50623 has 5 MA's), (37, 50698), (39, 50707), (43, 50722), (44, 50734), (50, 50755), (51, 50761), (57, 50785), (65, 50824), (70, 50863), (74, 50911), (76, 50923), (82, 50971), (88, 51013), (93, 51064), (98, 51100), (99, 51106), (100, 51124), (132, 51406), (133, 51418), (134, 51427), (136, 51439), (141, 51484),

Gene: Peanam_78 Start: 50581, Stop: 51459, Start Num: 30

Candidate Starts for Peanam_78:

(21, 50506), (Start: 30 @50581 has 5 MA's), (37, 50656), (39, 50665), (43, 50680), (44, 50692), (50, 50713), (51, 50719), (57, 50743), (65, 50782), (70, 50821), (74, 50869), (76, 50881), (82, 50929), (88, 50971), (98, 51058), (99, 51064), (100, 51082), (132, 51364), (133, 51376), (134, 51385), (136, 51397),

Gene: Pharaoh_75 Start: 46704, Stop: 45793, Start Num: 26

Candidate Starts for Pharaoh_75:

(Start: 26 @46704 has 2 MA's), (33, 46650), (36, 46608), (48, 46524), (58, 46476), (67, 46410), (68, 46407), (72, 46380), (75, 46332), (76, 46329), (77, 46326), (88, 46239), (89, 46236), (92, 46209), (93, 46188), (100, 46125), (103, 46089),

Gene: Shaobing_77 Start: 50598, Stop: 51476, Start Num: 30

Candidate Starts for Shaobing_77:

(21, 50523), (Start: 30 @50598 has 5 MA's), (37, 50673), (39, 50682), (43, 50697), (44, 50709), (50, 50730), (51, 50736), (57, 50760), (65, 50799), (70, 50838), (74, 50886), (76, 50898), (82, 50946), (88, 50988), (93, 51039), (98, 51075), (99, 51081), (100, 51099), (132, 51381), (133, 51393), (134, 51402), (136, 51414),

Gene: SirPhilip_94 Start: 58988, Stop: 60181, Start Num: 16

Candidate Starts for SirPhilip_94:

(9, 58934), (10, 58949), (11, 58967), (Start: 16 @58988 has 1 MA's), (Start: 24 @59039 has 3 MA's), (27, 59054), (32, 59111), (35, 59123), (36, 59150), (41, 59180), (49, 59234), (52, 59243), (64, 59312), (71, 59366), (72, 59369), (76, 59420), (80, 59474), (81, 59480), (83, 59504), (87, 59531), (93, 59588), (94, 59606), (98, 59624), (102, 59666), (103, 59681), (107, 59729), (112, 59762), (113, 59777), (114, 59792), (117, 59822), (139, 59993),

Gene: Steamy_72 Start: 45654, Stop: 44725, Start Num: 25

Candidate Starts for Steamy_72:

(3, 45909), (7, 45774), (13, 45723), (Start: 25 @45654 has 2 MA's), (28, 45636), (36, 45564), (55, 45468), (58, 45447), (75, 45303), (85, 45219), (88, 45210), (89, 45207), (92, 45180), (103, 45060), (106, 45015), (114, 44940),

Gene: Validus_81 Start: 51145, Stop: 52035, Start Num: 30

Candidate Starts for Validus_81:

(12, 51034), (20, 51067), (Start: 30 @51145 has 5 MA's), (32, 51163), (37, 51220), (39, 51229), (43, 51244), (44, 51256), (50, 51277), (51, 51283), (57, 51307), (60, 51319), (64, 51343), (65, 51346), (70, 51385), (74, 51433), (76, 51445), (82, 51493), (88, 51535), (98, 51622), (99, 51628), (100, 51646), (101, 51658), (104, 51682), (129, 51919), (132, 51931), (133, 51943), (134, 51952), (136, 51964),