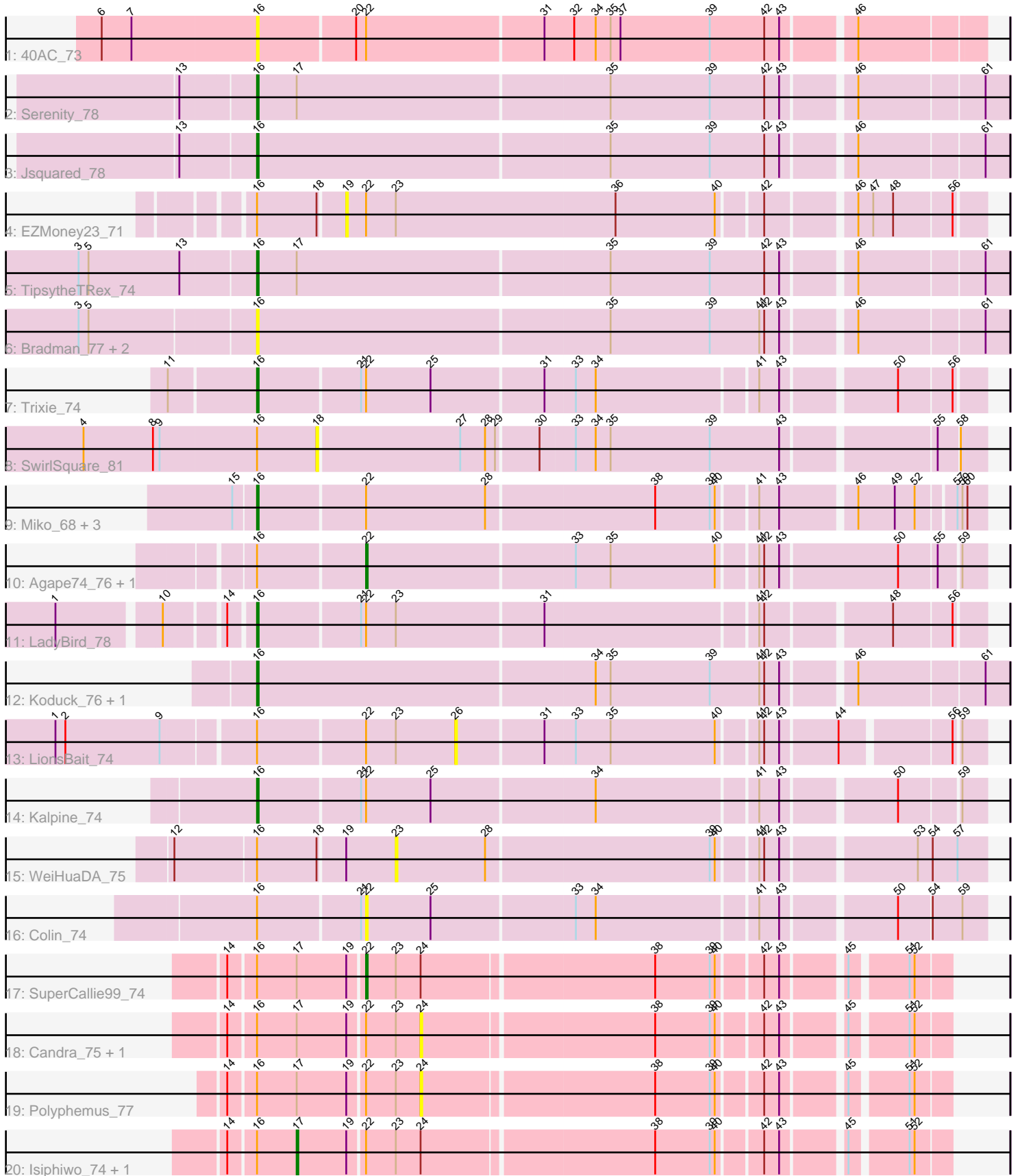


Pham 216439



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 216439 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216439 has 29 members, 13 are drafts.

Phages represented in each track:

- Track 1 : 40AC_73
- Track 2 : Serenity_78
- Track 3 : Jsquared_78
- Track 4 : EZMoney23_71
- Track 5 : TipsytheTRex_74
- Track 6 : Bradman_77, Quokka_76, MajorMajor_76
- Track 7 : Trixie_74
- Track 8 : SwirlSquare_81
- Track 9 : Miko_68, Rachaly_70, LOKK_68, BobSwaget_67
- Track 10 : Agape74_76, AbbyPaige_76
- Track 11 : LadyBird_78
- Track 12 : Koduck_76, L5_70
- Track 13 : LionsBait_74
- Track 14 : Kalpine_74
- Track 15 : WeiHuaDA_75
- Track 16 : Colin_74
- Track 17 : SuperCallie99_74
- Track 18 : Candra_75, Chartreuse_74
- Track 19 : Polyphemus_77
- Track 20 : Isiphiwo_74, SmellyB_77

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

The start number called the most often in the published annotations is 16, it was called in 11 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 40AC_73, BobSwaget_67, Bradman_77, Jsquared_78, Kalpine_74, Koduck_76, L5_70, LadyBird_78, LOKK_68, MajorMajor_76, Miko_68, Quokka_76, Rachaly_70, Serenity_78, TipsytheTRex_74, Trixie_74,

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

- AbbyPaige_76, Agape74_76, Candra_75, Chartreuse_74, Colin_74, EZMoney23_71, Isiphiwo_74, LionsBait_74, Polyphemus_77, SmellyB_77,

SuperCallie99_74, SwirlSquare_81, WeiHuaDA_75,

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

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Summary by start number:

Start 16:

- Found in 29 of 29 (100.0%) of genes in pham
- Manual Annotations of this start: 11 of 16
- Called 55.2% of time when present
- Phage (with cluster) where this start called: 40AC_73 (A17), BobSwaget_67 (A2), Bradman_77 (A2), Jsquared_78 (A2), Kalpine_74 (A2), Koduck_76 (A2), L5_70 (A2), LadyBird_78 (A2), Lökk_68 (A2), MajorMajor_76 (A2), Miko_68 (A2), Quokka_76 (A2), Rachaly_70 (A2), Serenity_78 (A2), TopsytheTRex_74 (A2), Trixie_74 (A2),

Start 17:

- Found in 8 of 29 (27.6%) of genes in pham
- Manual Annotations of this start: 2 of 16
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Isiphiwo_74 (A6), SmellyB_77 (A6),

Start 18:

- Found in 3 of 29 (10.3%) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: SwirlSquare_81 (A2),

Start 19:

- Found in 8 of 29 (27.6%) of genes in pham
- No Manual Annotations of this start.
- Called 12.5% of time when present
- Phage (with cluster) where this start called: EZMoney23_71 (A2),

Start 22:

- Found in 19 of 29 (65.5%) of genes in pham
- Manual Annotations of this start: 3 of 16
- Called 21.1% of time when present
- Phage (with cluster) where this start called: AbbyPaige_76 (A2), Agape74_76 (A2), Colin_74 (A2), SuperCallie99_74 (A6),

Start 23:

- Found in 10 of 29 (34.5%) of genes in pham
- No Manual Annotations of this start.
- Called 10.0% of time when present
- Phage (with cluster) where this start called: WeiHuaDA_75 (A2),

Start 24:

- Found in 6 of 29 (20.7%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Candra_75 (A6), Chartreuse_74 (A6), Polyphemos_77 (A6),

Start 26:

- Found in 1 of 29 (3.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LionsBait_74 (A2),

Summary by clusters:

There are 3 clusters represented in this pham: A17, A2, A6,

Info for manual annotations of cluster A2:

- Start number 16 was manually annotated 11 times for cluster A2.
- Start number 22 was manually annotated 2 times for cluster A2.

Info for manual annotations of cluster A6:

- Start number 17 was manually annotated 2 times for cluster A6.
- Start number 22 was manually annotated 1 time for cluster A6.

Gene Information:

Gene: 40AC_73 Start: 45297, Stop: 44878, Start Num: 16

Candidate Starts for 40AC_73:

(6, 45390), (7, 45372), (Start: 16 @45297 has 11 MA's), (20, 45240), (Start: 22 @45234 has 3 MA's), (31, 45129), (32, 45111), (34, 45099), (35, 45090), (37, 45084), (39, 45030), (42, 44997), (43, 44988), (46, 44949),

Gene: AbbyPaige_76 Start: 45068, Stop: 44712, Start Num: 22

Candidate Starts for AbbyPaige_76:

(Start: 16 @45131 has 11 MA's), (Start: 22 @45068 has 3 MA's), (33, 44945), (35, 44924), (40, 44861), (41, 44840), (42, 44837), (43, 44828), (50, 44759), (55, 44738), (59, 44726),

Gene: Agape74_76 Start: 45063, Stop: 44707, Start Num: 22

Candidate Starts for Agape74_76:

(Start: 16 @45126 has 11 MA's), (Start: 22 @45063 has 3 MA's), (33, 44940), (35, 44919), (40, 44856), (41, 44835), (42, 44832), (43, 44823), (50, 44754), (55, 44733), (59, 44721),

Gene: BobSwaget_67 Start: 42656, Stop: 42240, Start Num: 16

Candidate Starts for BobSwaget_67:

(15, 42668), (Start: 16 @42656 has 11 MA's), (Start: 22 @42593 has 3 MA's), (28, 42521), (38, 42422), (39, 42389), (40, 42386), (41, 42365), (43, 42353), (46, 42311), (49, 42290), (52, 42278), (57, 42257), (59, 42254), (60, 42251),

Gene: Bradman_77 Start: 44213, Stop: 43776, Start Num: 16

Candidate Starts for Bradman_77:

(3, 44315), (5, 44309), (Start: 16 @44213 has 11 MA's), (35, 44003), (39, 43943), (41, 43913), (42, 43910), (43, 43901), (46, 43862), (61, 43790),

Gene: Candra_75 Start: 43553, Stop: 43263, Start Num: 24

Candidate Starts for Candra_75:

(14, 43664), (Start: 16 @43649 has 11 MA's), (Start: 17 @43625 has 2 MA's), (19, 43595), (Start: 22 @43586 has 3 MA's), (23, 43568), (24, 43553), (38, 43418), (39, 43385), (40, 43382), (42, 43358), (43, 43349), (45, 43316), (51, 43286), (52, 43283),

Gene: Chartreuse_74 Start: 42864, Stop: 42574, Start Num: 24

Candidate Starts for Chartreuse_74:

(14, 42975), (Start: 16 @42960 has 11 MA's), (Start: 17 @42936 has 2 MA's), (19, 42906), (Start: 22 @42897 has 3 MA's), (23, 42879), (24, 42864), (38, 42729), (39, 42696), (40, 42693), (42, 42669), (43, 42660), (45, 42627), (51, 42597), (52, 42594),

Gene: Colin_74 Start: 45728, Stop: 45375, Start Num: 22

Candidate Starts for Colin_74:

(Start: 16 @45791 has 11 MA's), (21, 45731), (Start: 22 @45728 has 3 MA's), (25, 45689), (33, 45605), (34, 45593), (41, 45500), (43, 45488), (50, 45425), (54, 45407), (59, 45389),

Gene: EZMoney23_71 Start: 44532, Stop: 44167, Start Num: 19

Candidate Starts for EZMoney23_71:

(Start: 16 @44583 has 11 MA's), (18, 44547), (19, 44532), (Start: 22 @44520 has 3 MA's), (23, 44502), (36, 44370), (40, 44310), (42, 44286), (46, 44238), (47, 44229), (48, 44217), (56, 44184),

Gene: Isiphiwo_74 Start: 43606, Stop: 43244, Start Num: 17

Candidate Starts for Isiphiwo_74:

(14, 43645), (Start: 16 @43630 has 11 MA's), (Start: 17 @43606 has 2 MA's), (19, 43576), (Start: 22 @43567 has 3 MA's), (23, 43549), (24, 43534), (38, 43399), (39, 43366), (40, 43363), (42, 43339), (43, 43330), (45, 43297), (51, 43267), (52, 43264),

Gene: Jsquared_78 Start: 44346, Stop: 43909, Start Num: 16

Candidate Starts for Jsquared_78:

(13, 44388), (Start: 16 @44346 has 11 MA's), (35, 44136), (39, 44076), (42, 44043), (43, 44034), (46, 43995), (61, 43923),

Gene: Kalpine_74 Start: 45137, Stop: 44724, Start Num: 16

Candidate Starts for Kalpine_74:

(Start: 16 @45137 has 11 MA's), (21, 45077), (Start: 22 @45074 has 3 MA's), (25, 45035), (34, 44939), (41, 44846), (43, 44834), (50, 44771), (59, 44738),

Gene: Koduck_76 Start: 44123, Stop: 43686, Start Num: 16

Candidate Starts for Koduck_76:

(Start: 16 @44123 has 11 MA's), (34, 43922), (35, 43913), (39, 43853), (41, 43823), (42, 43820), (43, 43811), (46, 43772), (61, 43700),

Gene: L5_70 Start: 44276, Stop: 43839, Start Num: 16

Candidate Starts for L5_70:

(Start: 16 @44276 has 11 MA's), (34, 44075), (35, 44066), (39, 44006), (41, 43976), (42, 43973), (43, 43964), (46, 43925), (61, 43853),

Gene: LadyBird_78 Start: 45434, Stop: 45021, Start Num: 16

Candidate Starts for LadyBird_78:

(1, 45533), (10, 45476), (14, 45446), (Start: 16 @45434 has 11 MA's), (21, 45374), (Start: 22 @45371 has 3 MA's), (23, 45353), (31, 45266), (41, 45143), (42, 45140), (48, 45071), (56, 45038),

Gene: LionsBait_74 Start: 45777, Stop: 45481, Start Num: 26

Candidate Starts for LionsBait_74:

(1, 46008), (2, 46002), (9, 45945), (Start: 16 @45894 has 11 MA's), (Start: 22 @45831 has 3 MA's), (23, 45813), (26, 45777), (31, 45726), (33, 45708), (35, 45687), (40, 45624), (41, 45603), (42, 45600), (43, 45591), (44, 45558), (56, 45498), (59, 45495),

Gene: Lokk_68 Start: 43280, Stop: 42864, Start Num: 16

Candidate Starts for Lokk_68:

(15, 43292), (Start: 16 @43280 has 11 MA's), (Start: 22 @43217 has 3 MA's), (28, 43145), (38, 43046), (39, 43013), (40, 43010), (41, 42989), (43, 42977), (46, 42935), (49, 42914), (52, 42902), (57, 42881), (59, 42878), (60, 42875),

Gene: MajorMajor_76 Start: 44213, Stop: 43776, Start Num: 16

Candidate Starts for MajorMajor_76:

(3, 44315), (5, 44309), (Start: 16 @44213 has 11 MA's), (35, 44003), (39, 43943), (41, 43913), (42, 43910), (43, 43901), (46, 43862), (61, 43790),

Gene: Miko_68 Start: 44058, Stop: 43642, Start Num: 16

Candidate Starts for Miko_68:

(15, 44070), (Start: 16 @44058 has 11 MA's), (Start: 22 @43995 has 3 MA's), (28, 43923), (38, 43824), (39, 43791), (40, 43788), (41, 43767), (43, 43755), (46, 43713), (49, 43692), (52, 43680), (57, 43659), (59, 43656), (60, 43653),

Gene: Polyphemus_77 Start: 44340, Stop: 44050, Start Num: 24

Candidate Starts for Polyphemus_77:

(14, 44451), (Start: 16 @44436 has 11 MA's), (Start: 17 @44412 has 2 MA's), (19, 44382), (Start: 22 @44373 has 3 MA's), (23, 44355), (24, 44340), (38, 44205), (39, 44172), (40, 44169), (42, 44145), (43, 44136), (45, 44103), (51, 44073), (52, 44070),

Gene: Quokka_76 Start: 44213, Stop: 43776, Start Num: 16

Candidate Starts for Quokka_76:

(3, 44315), (5, 44309), (Start: 16 @44213 has 11 MA's), (35, 44003), (39, 43943), (41, 43913), (42, 43910), (43, 43901), (46, 43862), (61, 43790),

Gene: Rachaly_70 Start: 44203, Stop: 43787, Start Num: 16

Candidate Starts for Rachaly_70:

(15, 44215), (Start: 16 @44203 has 11 MA's), (Start: 22 @44140 has 3 MA's), (28, 44068), (38, 43969), (39, 43936), (40, 43933), (41, 43912), (43, 43900), (46, 43858), (49, 43837), (52, 43825), (57, 43804), (59, 43801), (60, 43798),

Gene: Serenity_78 Start: 44410, Stop: 43973, Start Num: 16

Candidate Starts for Serenity_78:

(13, 44452), (Start: 16 @44410 has 11 MA's), (Start: 17 @44386 has 2 MA's), (35, 44200), (39, 44140), (42, 44107), (43, 44098), (46, 44059), (61, 43987),

Gene: SmellyB_77 Start: 43589, Stop: 43227, Start Num: 17

Candidate Starts for SmellyB_77:

(14, 43628), (Start: 16 @43613 has 11 MA's), (Start: 17 @43589 has 2 MA's), (19, 43559), (Start: 22 @43550 has 3 MA's), (23, 43532), (24, 43517), (38, 43382), (39, 43349), (40, 43346), (42, 43322), (43, 43313), (45, 43280), (51, 43250), (52, 43247),

Gene: SuperCallie99_74 Start: 44072, Stop: 43749, Start Num: 22

Candidate Starts for SuperCallie99_74:

(14, 44150), (Start: 16 @44135 has 11 MA's), (Start: 17 @44111 has 2 MA's), (19, 44081), (Start: 22 @44072 has 3 MA's), (23, 44054), (24, 44039), (38, 43904), (39, 43871), (40, 43868), (42, 43844), (43,

43835), (45, 43802), (51, 43772), (52, 43769),

Gene: SwirlSquare_81 Start: 44189, Stop: 43806, Start Num: 18

Candidate Starts for SwirlSquare_81:

(4, 44327), (8, 44285), (9, 44282), (Start: 16 @44225 has 11 MA's), (18, 44189), (27, 44105), (28, 44090), (29, 44084), (30, 44060), (33, 44039), (34, 44027), (35, 44018), (39, 43958), (43, 43916), (55, 43832), (58, 43820),

Gene: TopsytheTRex_74 Start: 44412, Stop: 43975, Start Num: 16

Candidate Starts for TopsytheTRex_74:

(3, 44514), (5, 44508), (13, 44454), (Start: 16 @44412 has 11 MA's), (Start: 17 @44388 has 2 MA's), (35, 44202), (39, 44142), (42, 44109), (43, 44100), (46, 44061), (61, 43989),

Gene: Trixie_74 Start: 45538, Stop: 45125, Start Num: 16

Candidate Starts for Trixie_74:

(11, 45586), (Start: 16 @45538 has 11 MA's), (21, 45478), (Start: 22 @45475 has 3 MA's), (25, 45436), (31, 45370), (33, 45352), (34, 45340), (41, 45247), (43, 45235), (50, 45172), (56, 45142),

Gene: WeiHuaDA_75 Start: 45500, Stop: 45162, Start Num: 23

Candidate Starts for WeiHuaDA_75:

(12, 45629), (Start: 16 @45581 has 11 MA's), (18, 45545), (19, 45530), (23, 45500), (28, 45446), (39, 45314), (40, 45311), (41, 45290), (42, 45287), (43, 45278), (53, 45203), (54, 45194), (57, 45179),