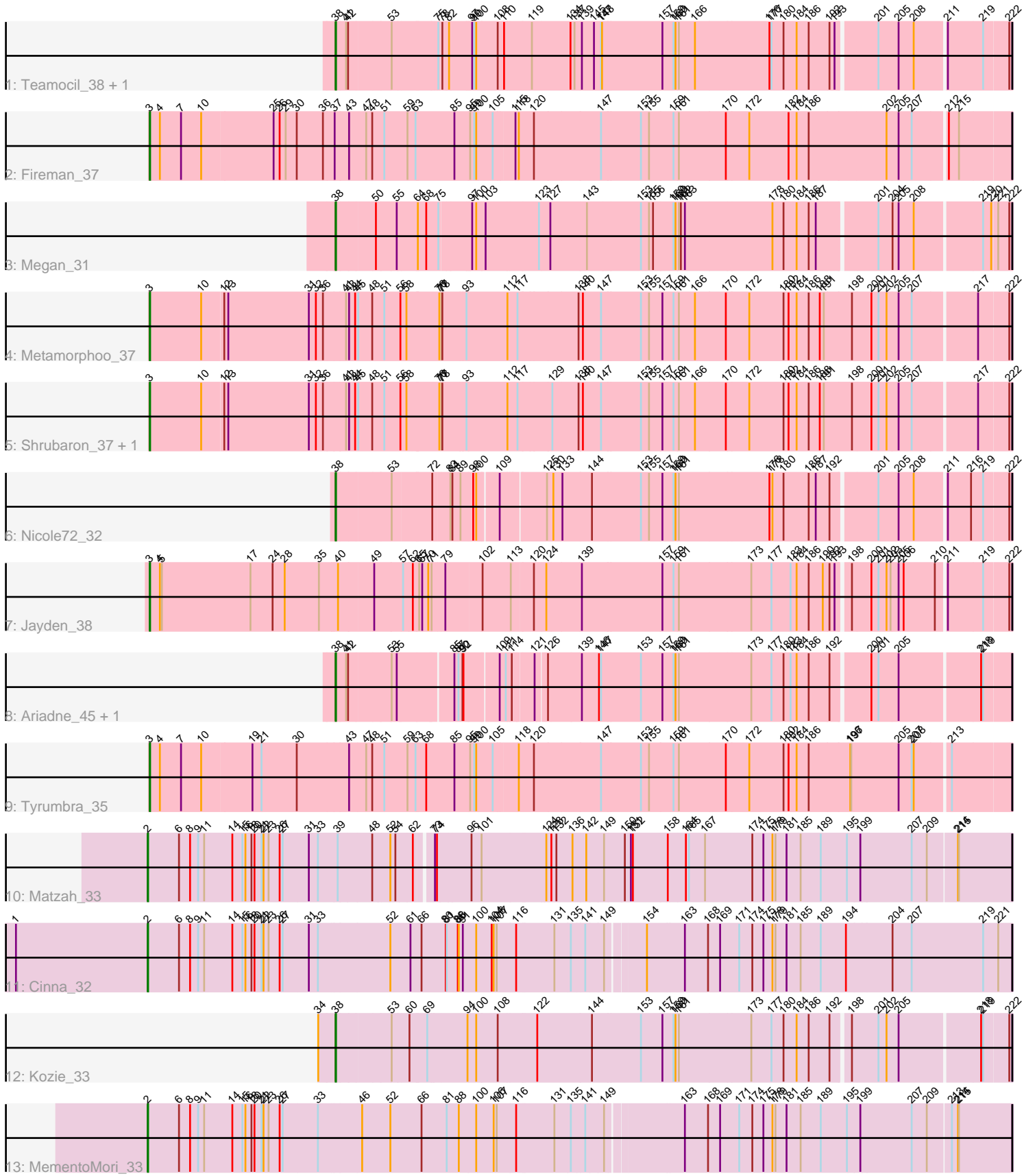# Pham 203406

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 203406 Report

This analysis was run 01/18/25 on database version 583.

Pham number 203406 has 16 members, 1 are drafts.

Phages represented in each track:
• Track 1 : Teamocil_38, Gina_38
• Track 2 : Fireman_37
• Track 3 : Megan_31
• Track 4 : Metamorphoo_37
• Track 5 : Shrubaron_37, RobsFeet_38
• Track 6 : Nicole72_32
• Track 7 : Jayden_38
• Track 8 : Ariadne_45, Smarties_45
• Track 9 : Tyrumbra_35
• Track 10 : Matzah_33
• Track 11 : Cinna_32
• Track 12 : Kozie_33
• Track 13 : MementoMori_33

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

The start number called the most often in the published annotations is 38, it was called in 7 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Ariadne_45, Gina_38, Kozie_33, Megan_31, Nicole72_32, Smarties_45, Teamocil_38,

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

Genes that do not have the "Most Annotated" start:
• Cinna_32, Fireman_37, Jayden_38, Matzah_33, MementoMori_33, Metamorphoo_37, RobsFeet_38, Shrubaron_37, Tyrumbra_35,

Summary by start number:

Start 2:
• Found in 3 of 16 (18.8%) of genes in pham

• Manual Annotations of this start: 3 of 15
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Cinna_32 (EI), Matzah_33 (EI), MementoMori_33 (EI),

Start 3:
• Found in 6 of 16 (37.5%) of genes in pham
• Manual Annotations of this start: 5 of 15
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Fireman_37 (EC), Jayden_38 (EC), Metamorphoo_37 (EC), RobsFeet_38 (EC), Shrubaron_37 (EC), Tyrumbra_35 (EC),

Start 38:
• Found in 7 of 16 (43.8%) of genes in pham
• Manual Annotations of this start: 7 of 15
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ariadne_45 (EC), Gina_38 (EC), Kozie_33 (EI), Megan_31 (EC), Nicole72_32 (EC), Smarties_45 (EC), Teamocil_38 (EC),

Summary by clusters:

There are 2 clusters represented in this pham: EI, EC,

Info for manual annotations of cluster EC:
•Start number 3 was manually annotated 5 times for cluster EC.
•Start number 38 was manually annotated 6 times for cluster EC.

Info for manual annotations of cluster EI:
•Start number 2 was manually annotated 3 times for cluster EI.
•Start number 38 was manually annotated 1 time for cluster EI.

Gene Information:

Gene: Ariadne_45 Start: 25427, Stop: 27295, Start Num: 38
Candidate Starts for Ariadne_45:
(Start: 38 @25427 has 7 MA's), (41, 25457), (42, 25463), (53, 25580), (55, 25595), (85, 25742), (87, 25754), (90, 25766), (92, 25769), (109, 25865), (111, 25883), (114, 25895), (121, 25949), (126, 25979), (139, 26075), (146, 26126), (147, 26132), (153, 26249), (157, 26312), (159, 26345), (160, 26351), (161, 26360), (173, 26570), (177, 26630), (180, 26666), (183, 26687), (184, 26705), (186, 26741), (192, 26801), (200, 26903), (201, 26924), (205, 26981), (218, 27209), (219, 27215),

Gene: Cinna_32 Start: 22859, Stop: 25375, Start Num: 2
Candidate Starts for Cinna_32:
(1, 22466), (Start: 2 @22859 has 3 MA's), (6, 22952), (8, 22985), (9, 23009), (11, 23027), (14, 23111), (15, 23141), (16, 23150), (18, 23168), (20, 23177), (21, 23198), (22, 23204), (23, 23219), (26, 23252), (27, 23261), (31, 23336), (33, 23363), (52, 23570), (61, 23630), (66, 23663), (80, 23735), (81, 23738), (86, 23771), (88, 23774), (91, 23786), (100, 23825), (104, 23870), (106, 23876), (107, 23885), (116, 23942), (131, 24053), (135, 24101), (141, 24140), (149, 24194), (154, 24296), (163, 24407), (168, 24476), (169, 24512), (171, 24569), (174, 24608), (175, 24641), (178, 24665), (179, 24674), (181, 24707), (185, 24749), (189, 24809), (194, 24884), (204, 25019), (207, 25076), (219, 25289), (221,

25334),

Gene: Fireman_37 Start: 24038, Stop: 26530, Start Num: 3
Candidate Starts for Fireman_37:
(Start: 3 @24038 has 5 MA's), (4, 24068), (7, 24131), (10, 24191), (25, 24401), (26, 24419), (29, 24437), (30, 24470), (36, 24548), (37, 24578), (43, 24620), (47, 24671), (48, 24689), (51, 24725), (59, 24794), (63, 24818), (85, 24932), (95, 24977), (99, 24989), (100, 24995), (105, 25043), (115, 25103), (118, 25112), (120, 25157), (147, 25352), (153, 25469), (155, 25493), (159, 25565), (161, 25580), (170, 25718), (172, 25784), (182, 25901), (184, 25925), (186, 25961), (202, 26186), (205, 26219), (207, 26258), (212, 26351), (215, 26381),

Gene: Gina_38 Start: 23314, Stop: 25212, Start Num: 38
Candidate Starts for Gina_38:
(Start: 38 @23314 has 7 MA's), (41, 23344), (42, 23350), (53, 23467), (75, 23590), (78, 23596), (82, 23614), (97, 23677), (99, 23683), (100, 23689), (108, 23752), (110, 23770), (119, 23848), (134, 23959), (137, 23971), (139, 23992), (145, 24028), (147, 24049), (148, 24052), (157, 24229), (159, 24262), (160, 24268), (161, 24277), (166, 24325), (176, 24541), (177, 24547), (180, 24583), (184, 24622), (186, 24658), (192, 24718), (193, 24733), (201, 24841), (205, 24898), (208, 24943), (211, 25030), (219, 25132), (222, 25204),

Gene: Jayden_38 Start: 23468, Stop: 25918, Start Num: 3
Candidate Starts for Jayden_38:
(Start: 3 @23468 has 5 MA's), (4, 23498), (5, 23504), (17, 23768), (24, 23834), (28, 23870), (35, 23972), (40, 24026), (49, 24125), (57, 24206), (62, 24233), (65, 24251), (67, 24260), (70, 24278), (71, 24287), (79, 24320), (102, 24425), (113, 24506), (120, 24569), (124, 24602), (139, 24698), (157, 24935), (159, 24968), (161, 24983), (173, 25193), (177, 25253), (183, 25310), (184, 25328), (186, 25364), (190, 25406), (192, 25424), (193, 25439), (198, 25472), (200, 25526), (201, 25547), (202, 25571), (203, 25583), (205, 25604), (206, 25619), (210, 25712), (211, 25736), (219, 25838), (222, 25910),

Gene: Kozie_33 Start: 23180, Stop: 25093, Start Num: 38
Candidate Starts for Kozie_33:
(34, 23129), (Start: 38 @23180 has 7 MA's), (53, 23333), (60, 23381), (69, 23432), (94, 23546), (100, 23570), (108, 23633), (122, 23741), (144, 23903), (153, 24047), (157, 24110), (159, 24143), (160, 24149), (161, 24158), (173, 24368), (177, 24428), (180, 24464), (184, 24503), (186, 24539), (192, 24599), (198, 24647), (201, 24722), (202, 24746), (205, 24779), (218, 25007), (219, 25013), (222, 25085),

Gene: Matzah_33 Start: 22835, Stop: 25315, Start Num: 2
Candidate Starts for Matzah_33:
(Start: 2 @22835 has 3 MA's), (6, 22928), (8, 22961), (9, 22985), (11, 23003), (14, 23087), (15, 23117), (16, 23126), (18, 23144), (20, 23153), (21, 23174), (22, 23180), (23, 23195), (26, 23228), (27, 23237), (31, 23312), (33, 23339), (39, 23396), (48, 23495), (52, 23543), (54, 23558), (62, 23600), (73, 23645), (74, 23651), (96, 23747), (101, 23777), (124, 23963), (128, 23978), (132, 23993), (136, 24041), (142, 24080), (149, 24131), (150, 24188), (151, 24206), (152, 24212), (158, 24314), (164, 24362), (165, 24371), (167, 24419), (174, 24560), (175, 24593), (178, 24617), (179, 24626), (181, 24659), (185, 24701), (189, 24761), (195, 24839), (199, 24875), (207, 25025), (209, 25070), (214, 25154), (215, 25157),

Gene: Megan_31 Start: 24332, Stop: 26239, Start Num: 38
Candidate Starts for Megan_31:
(Start: 38 @24332 has 7 MA's), (50, 24440), (55, 24500), (64, 24557), (68, 24581), (75, 24617), (97, 24704), (100, 24716), (103, 24743), (123, 24896), (127, 24926), (143, 25034), (153, 25193), (155,

25217), (156, 25229), (159, 25289), (160, 25295), (161, 25304), (162, 25310), (163, 25322), (178, 25577), (180, 25610), (184, 25649), (186, 25685), (187, 25706), (201, 25868), (204, 25907), (205, 25925), (208, 25970), (219, 26159), (220, 26183), (221, 26198), (222, 26231),

Gene: MementoMori_33 Start: 22559, Stop: 25063, Start Num: 2
Candidate Starts for MementoMori_33:
(Start: 2 @22559 has 3 MA's), (6, 22652), (8, 22685), (9, 22709), (11, 22727), (14, 22811), (15, 22841), (16, 22850), (18, 22868), (20, 22877), (21, 22898), (22, 22904), (23, 22919), (26, 22952), (27, 22961), (33, 23063), (46, 23186), (52, 23270), (66, 23363), (81, 23438), (88, 23474), (100, 23525), (106, 23576), (107, 23585), (116, 23642), (131, 23753), (135, 23801), (141, 23840), (149, 23894), (163, 24107), (168, 24176), (169, 24212), (171, 24269), (174, 24308), (175, 24341), (178, 24365), (179, 24374), (181, 24407), (185, 24449), (189, 24509), (195, 24587), (199, 24623), (207, 24773), (209, 24818), (213, 24884), (214, 24902), (215, 24905),

Gene: Metamorphoo_37 Start: 23324, Stop: 25813, Start Num: 3
Candidate Starts for Metamorphoo_37:
(Start: 3 @23324 has 5 MA's), (10, 23477), (12, 23540), (13, 23552), (31, 23792), (32, 23813), (36, 23834), (41, 23897), (43, 23906), (44, 23924), (45, 23933), (48, 23975), (51, 24011), (56, 24059), (58, 24077), (76, 24167), (77, 24173), (78, 24176), (93, 24245), (112, 24365), (117, 24395), (138, 24569), (140, 24581), (147, 24635), (153, 24752), (155, 24776), (157, 24815), (159, 24848), (161, 24863), (166, 24911), (170, 25001), (172, 25067), (180, 25169), (182, 25184), (184, 25208), (186, 25244), (188, 25277), (191, 25289), (198, 25370), (200, 25424), (201, 25445), (202, 25469), (205, 25502), (207, 25541), (217, 25718), (222, 25805),

Gene: Nicole72_32 Start: 25270, Stop: 27153, Start Num: 38
Candidate Starts for Nicole72_32:
(Start: 38 @25270 has 7 MA's), (53, 25423), (72, 25537), (83, 25582), (84, 25588), (89, 25612), (98, 25648), (100, 25657), (109, 25711), (125, 25834), (130, 25852), (133, 25876), (144, 25963), (153, 26107), (155, 26131), (157, 26170), (159, 26203), (160, 26209), (161, 26218), (176, 26482), (178, 26491), (180, 26524), (186, 26599), (187, 26620), (192, 26659), (201, 26782), (205, 26839), (208, 26884), (211, 26971), (216, 27040), (219, 27073), (222, 27145),

Gene: RobsFeet_38 Start: 23605, Stop: 26094, Start Num: 3
Candidate Starts for RobsFeet_38:
(Start: 3 @23605 has 5 MA's), (10, 23758), (12, 23821), (13, 23833), (31, 24073), (32, 24094), (36, 24115), (41, 24178), (43, 24187), (44, 24205), (45, 24214), (48, 24256), (51, 24292), (56, 24340), (58, 24358), (76, 24448), (77, 24454), (78, 24457), (93, 24526), (112, 24646), (117, 24676), (129, 24775), (138, 24850), (140, 24862), (147, 24916), (153, 25033), (155, 25057), (157, 25096), (159, 25129), (161, 25144), (166, 25192), (170, 25282), (172, 25348), (180, 25450), (182, 25465), (184, 25489), (186, 25525), (188, 25558), (191, 25570), (198, 25651), (200, 25705), (201, 25726), (202, 25750), (205, 25783), (207, 25822), (217, 25999), (222, 26086),

Gene: Shrubaron_37 Start: 23239, Stop: 25728, Start Num: 3
Candidate Starts for Shrubaron_37:
(Start: 3 @23239 has 5 MA's), (10, 23392), (12, 23455), (13, 23467), (31, 23707), (32, 23728), (36, 23749), (41, 23812), (43, 23821), (44, 23839), (45, 23848), (48, 23890), (51, 23926), (56, 23974), (58, 23992), (76, 24082), (77, 24088), (78, 24091), (93, 24160), (112, 24280), (117, 24310), (129, 24409), (138, 24484), (140, 24496), (147, 24550), (153, 24667), (155, 24691), (157, 24730), (159, 24763), (161, 24778), (166, 24826), (170, 24916), (172, 24982), (180, 25084), (182, 25099), (184, 25123), (186, 25159), (188, 25192), (191, 25204), (198, 25285), (200, 25339), (201, 25360), (202, 25384), (205, 25417), (207, 25456), (217, 25633), (222, 25720),

Gene: Smarties_45 Start: 25427, Stop: 27295, Start Num: 38

Candidate Starts for Smarties_45:
(Start: 38 @25427 has 7 MA's), (41, 25457), (42, 25463), (53, 25580), (55, 25595), (85, 25742), (87, 25754), (90, 25766), (92, 25769), (109, 25865), (111, 25883), (114, 25895), (121, 25949), (126, 25979), (139, 26075), (146, 26126), (147, 26132), (153, 26249), (157, 26312), (159, 26345), (160, 26351), (161, 26360), (173, 26570), (177, 26630), (180, 26666), (183, 26687), (184, 26705), (186, 26741), (192, 26801), (200, 26903), (201, 26924), (205, 26981), (218, 27209), (219, 27215),

Gene: Teamocil_38 Start: 23413, Stop: 25311, Start Num: 38
Candidate Starts for Teamocil_38:
(Start: 38 @23413 has 7 MA's), (41, 23443), (42, 23449), (53, 23566), (75, 23689), (78, 23695), (82, 23713), (97, 23776), (99, 23782), (100, 23788), (108, 23851), (110, 23869), (119, 23947), (134, 24058), (137, 24070), (139, 24091), (145, 24127), (147, 24148), (148, 24151), (157, 24328), (159, 24361), (160, 24367), (161, 24376), (166, 24424), (176, 24640), (177, 24646), (180, 24682), (184, 24721), (186, 24757), (192, 24817), (193, 24832), (201, 24940), (205, 24997), (208, 25042), (211, 25129), (219, 25231), (222, 25303),

Gene: Tyrumbra_35 Start: 23381, Stop: 25870, Start Num: 3
Candidate Starts for Tyrumbra_35:
(Start: 3 @23381 has 5 MA's), (4, 23411), (7, 23474), (10, 23534), (19, 23681), (21, 23708), (30, 23813), (43, 23963), (47, 24011), (48, 24029), (51, 24065), (59, 24134), (63, 24158), (68, 24188), (85, 24272), (95, 24317), (99, 24329), (100, 24335), (105, 24383), (118, 24452), (120, 24497), (147, 24692), (153, 24809), (155, 24833), (159, 24905), (161, 24920), (170, 25058), (172, 25124), (180, 25226), (182, 25241), (184, 25265), (186, 25301), (196, 25418), (197, 25421), (205, 25559), (207, 25598), (208, 25604), (213, 25700),