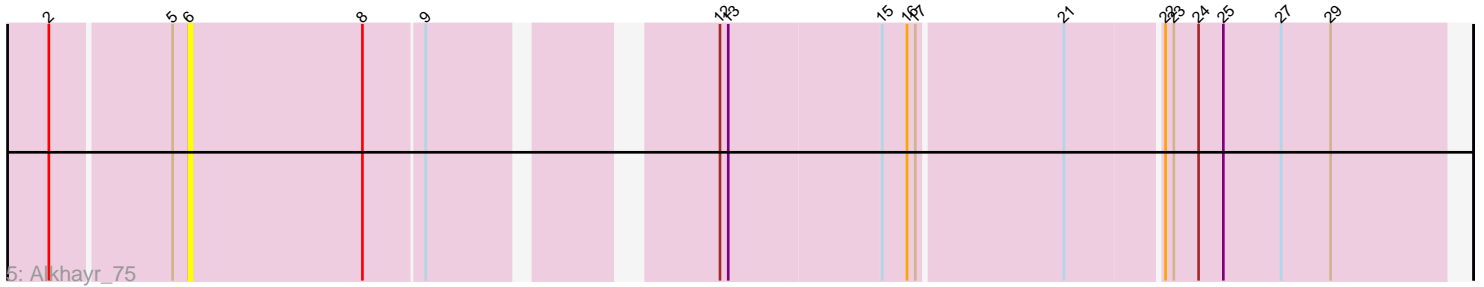
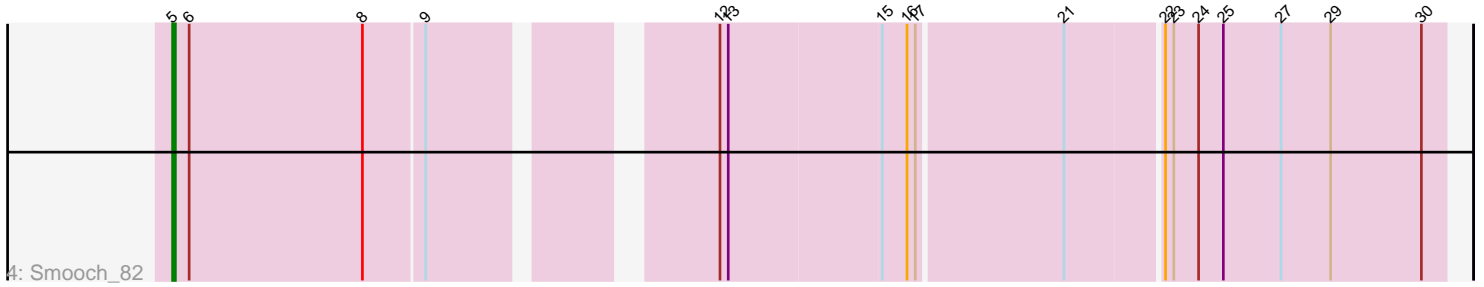
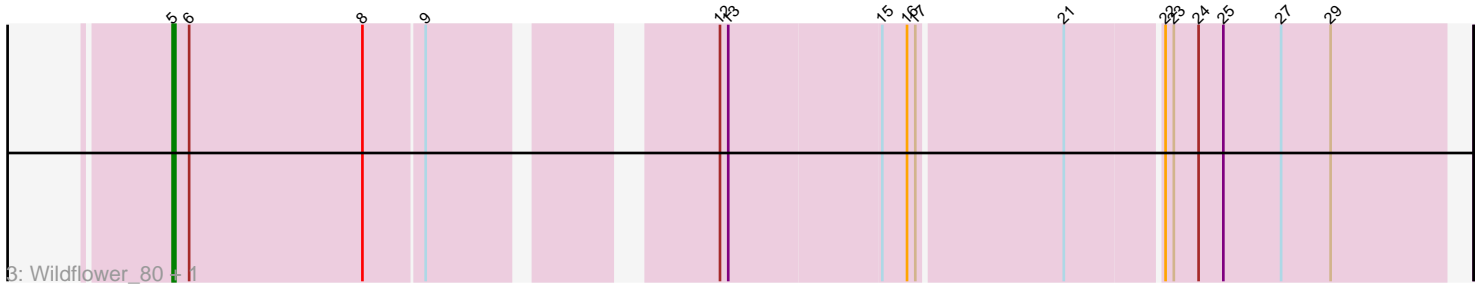
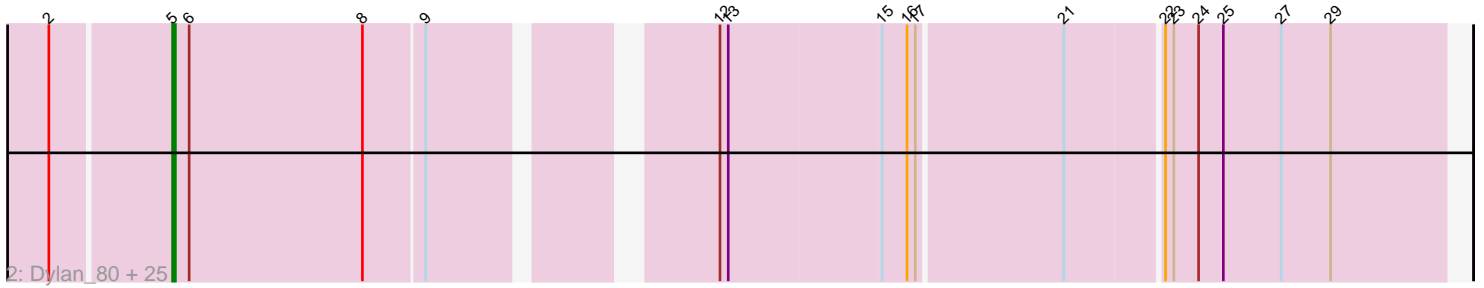
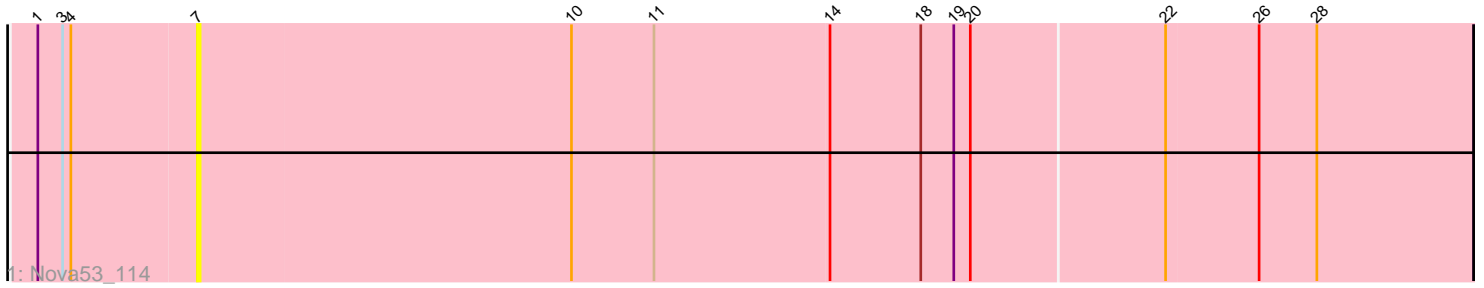


Pham 214508



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 214508 Report

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

Pham number 214508 has 31 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Nova53\_114
- Track 2 : Dylan\_80, Bora\_75, Schuy\_79, Catdawg\_77, KingPhillip3\_76, Krili\_77, Murai\_78, Firecracker\_81, Wogge42\_77, Familton\_78, Vorrps\_78, NiebruSaylor\_77, Blessica\_78, JangDynasty\_77, TelAviv\_74, Winget\_78, Mori\_78, Ryadel\_81, Zakhe101\_79, FoulBall\_78, Idergollasper\_77, Vagabond\_78, SchoolBus\_77, Zebo\_76, MadKillah\_79, Shida\_77
- Track 3 : Wildflower\_80, Ashwin\_81
- Track 4 : Smooch\_82
- Track 5 : Alkhayr\_75

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

The start number called the most often in the published annotations is 5, it was called in 26 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ashwin\_81, Blessica\_78, Bora\_75, Catdawg\_77, Dylan\_80, Familton\_78, Firecracker\_81, FoulBall\_78, Idergollasper\_77, JangDynasty\_77, KingPhillip3\_76, Krili\_77, MadKillah\_79, Mori\_78, Murai\_78, NiebruSaylor\_77, Ryadel\_81, SchoolBus\_77, Schuy\_79, Shida\_77, Smooch\_82, TelAviv\_74, Vagabond\_78, Vorrps\_78, Wildflower\_80, Winget\_78, Wogge42\_77, Zakhe101\_79, Zebo\_76,

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

- Alkhayr\_75,

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

- Nova53\_114,

### **Summary by start number:**

Start 5:

- Found in 30 of 31 ( 96.8% ) of genes in pham
- Manual Annotations of this start: 26 of 26
- Called 96.7% of time when present

- Phage (with cluster) where this start called: Ashwin\_81 (O), Blessica\_78 (O), Bora\_75 (O), Catdawg\_77 (O), Dylan\_80 (O), Familton\_78 (O), Firecracker\_81 (O), FoulBall\_78 (O), Idergollasper\_77 (O), JangDynasty\_77 (O), KingPhillip3\_76 (O), Kriili\_77 (O), MadKillah\_79 (O), Mori\_78 (O), Murai\_78 (O), NiebruSaylor\_77 (O), Ryadel\_81 (O), SchoolBus\_77 (O), Schuy\_79 (O), Shida\_77 (O), Smooch\_82 (O), TelAviv\_74 (O), Vagabond\_78 (O), Vorrps\_78 (O), Wildflower\_80 (O), Winget\_78 (O), Wogge42\_77 (O), Zakhe101\_79 (O), Zebo\_76 (O),

Start 6:

- Found in 30 of 31 ( 96.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 3.3% of time when present
- Phage (with cluster) where this start called: Alkhayr\_75 (O),

Start 7:

- Found in 1 of 31 ( 3.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nova53\_114 (CG),

### Summary by clusters:

There are 2 clusters represented in this pham: CG, O,

Info for manual annotations of cluster O:

- Start number 5 was manually annotated 26 times for cluster O.

### Gene Information:

Gene: Alkhayr\_75 Start: 48252, Stop: 47827, Start Num: 6

Candidate Starts for Alkhayr\_75:

(2, 48300), (Start: 5 @48258 has 26 MA's), (6, 48252), (8, 48189), (9, 48168), (12, 48081), (13, 48078), (15, 48024), (16, 48015), (17, 48012), (21, 47961), (22, 47928), (23, 47925), (24, 47916), (25, 47907), (27, 47886), (29, 47868),

Gene: Ashwin\_81 Start: 50017, Stop: 49586, Start Num: 5

Candidate Starts for Ashwin\_81:

(Start: 5 @50017 has 26 MA's), (6, 50011), (8, 49948), (9, 49927), (12, 49840), (13, 49837), (15, 49783), (16, 49774), (17, 49771), (21, 49720), (22, 49687), (23, 49684), (24, 49675), (25, 49666), (27, 49645), (29, 49627),

Gene: Blessica\_78 Start: 48808, Stop: 48377, Start Num: 5

Candidate Starts for Blessica\_78:

(2, 48850), (Start: 5 @48808 has 26 MA's), (6, 48802), (8, 48739), (9, 48718), (12, 48631), (13, 48628), (15, 48574), (16, 48565), (17, 48562), (21, 48511), (22, 48478), (23, 48475), (24, 48466), (25, 48457), (27, 48436), (29, 48418),

Gene: Bora\_75 Start: 48189, Stop: 47758, Start Num: 5

Candidate Starts for Bora\_75:

(2, 48231), (Start: 5 @48189 has 26 MA's), (6, 48183), (8, 48120), (9, 48099), (12, 48012), (13, 48009), (15, 47955), (16, 47946), (17, 47943), (21, 47892), (22, 47859), (23, 47856), (24, 47847), (25, 47838), (27, 47817), (29, 47799),

Gene: Catdawg\_77 Start: 48544, Stop: 48113, Start Num: 5

Candidate Starts for Catdawg\_77:

(2, 48586), (Start: 5 @48544 has 26 MA's), (6, 48538), (8, 48475), (9, 48454), (12, 48367), (13, 48364), (15, 48310), (16, 48301), (17, 48298), (21, 48247), (22, 48214), (23, 48211), (24, 48202), (25, 48193), (27, 48172), (29, 48154),

Gene: Dylan\_80 Start: 49733, Stop: 49302, Start Num: 5

Candidate Starts for Dylan\_80:

(2, 49775), (Start: 5 @49733 has 26 MA's), (6, 49727), (8, 49664), (9, 49643), (12, 49556), (13, 49553), (15, 49499), (16, 49490), (17, 49487), (21, 49436), (22, 49403), (23, 49400), (24, 49391), (25, 49382), (27, 49361), (29, 49343),

Gene: Familton\_78 Start: 48501, Stop: 48070, Start Num: 5

Candidate Starts for Familton\_78:

(2, 48543), (Start: 5 @48501 has 26 MA's), (6, 48495), (8, 48432), (9, 48411), (12, 48324), (13, 48321), (15, 48267), (16, 48258), (17, 48255), (21, 48204), (22, 48171), (23, 48168), (24, 48159), (25, 48150), (27, 48129), (29, 48111),

Gene: Firecracker\_81 Start: 49891, Stop: 49460, Start Num: 5

Candidate Starts for Firecracker\_81:

(2, 49933), (Start: 5 @49891 has 26 MA's), (6, 49885), (8, 49822), (9, 49801), (12, 49714), (13, 49711), (15, 49657), (16, 49648), (17, 49645), (21, 49594), (22, 49561), (23, 49558), (24, 49549), (25, 49540), (27, 49519), (29, 49501),

Gene: FoulBall\_78 Start: 48541, Stop: 48110, Start Num: 5

Candidate Starts for FoulBall\_78:

(2, 48583), (Start: 5 @48541 has 26 MA's), (6, 48535), (8, 48472), (9, 48451), (12, 48364), (13, 48361), (15, 48307), (16, 48298), (17, 48295), (21, 48244), (22, 48211), (23, 48208), (24, 48199), (25, 48190), (27, 48169), (29, 48151),

Gene: Idergollasper\_77 Start: 48495, Stop: 48064, Start Num: 5

Candidate Starts for Idergollasper\_77:

(2, 48537), (Start: 5 @48495 has 26 MA's), (6, 48489), (8, 48426), (9, 48405), (12, 48318), (13, 48315), (15, 48261), (16, 48252), (17, 48249), (21, 48198), (22, 48165), (23, 48162), (24, 48153), (25, 48144), (27, 48123), (29, 48105),

Gene: JangDynasty\_77 Start: 48562, Stop: 48131, Start Num: 5

Candidate Starts for JangDynasty\_77:

(2, 48604), (Start: 5 @48562 has 26 MA's), (6, 48556), (8, 48493), (9, 48472), (12, 48385), (13, 48382), (15, 48328), (16, 48319), (17, 48316), (21, 48265), (22, 48232), (23, 48229), (24, 48220), (25, 48211), (27, 48190), (29, 48172),

Gene: KingPhillip3\_76 Start: 48510, Stop: 48079, Start Num: 5

Candidate Starts for KingPhillip3\_76:

(2, 48552), (Start: 5 @48510 has 26 MA's), (6, 48504), (8, 48441), (9, 48420), (12, 48333), (13, 48330), (15, 48276), (16, 48267), (17, 48264), (21, 48213), (22, 48180), (23, 48177), (24, 48168), (25, 48159), (27, 48138), (29, 48120),

Gene: Krili\_77 Start: 48054, Stop: 47623, Start Num: 5

Candidate Starts for Krili\_77:

(2, 48096), (Start: 5 @48054 has 26 MA's), (6, 48048), (8, 47985), (9, 47964), (12, 47877), (13, 47874), (15, 47820), (16, 47811), (17, 47808), (21, 47757), (22, 47724), (23, 47721), (24, 47712), (25, 47703), (27, 47682), (29, 47664),

Gene: MadKillah\_79 Start: 48323, Stop: 47892, Start Num: 5

Candidate Starts for MadKillah\_79:

(2, 48365), (Start: 5 @48323 has 26 MA's), (6, 48317), (8, 48254), (9, 48233), (12, 48146), (13, 48143), (15, 48089), (16, 48080), (17, 48077), (21, 48026), (22, 47993), (23, 47990), (24, 47981), (25, 47972), (27, 47951), (29, 47933),

Gene: Mori\_78 Start: 48582, Stop: 48151, Start Num: 5

Candidate Starts for Mori\_78:

(2, 48624), (Start: 5 @48582 has 26 MA's), (6, 48576), (8, 48513), (9, 48492), (12, 48405), (13, 48402), (15, 48348), (16, 48339), (17, 48336), (21, 48285), (22, 48252), (23, 48249), (24, 48240), (25, 48231), (27, 48210), (29, 48192),

Gene: Murai\_78 Start: 48717, Stop: 48286, Start Num: 5

Candidate Starts for Murai\_78:

(2, 48759), (Start: 5 @48717 has 26 MA's), (6, 48711), (8, 48648), (9, 48627), (12, 48540), (13, 48537), (15, 48483), (16, 48474), (17, 48471), (21, 48420), (22, 48387), (23, 48384), (24, 48375), (25, 48366), (27, 48345), (29, 48327),

Gene: NiebruSaylor\_77 Start: 47973, Stop: 47542, Start Num: 5

Candidate Starts for NiebruSaylor\_77:

(2, 48015), (Start: 5 @47973 has 26 MA's), (6, 47967), (8, 47904), (9, 47883), (12, 47796), (13, 47793), (15, 47739), (16, 47730), (17, 47727), (21, 47676), (22, 47643), (23, 47640), (24, 47631), (25, 47622), (27, 47601), (29, 47583),

Gene: Nova53\_114 Start: 76750, Stop: 77208, Start Num: 7

Candidate Starts for Nova53\_114:

(1, 76693), (3, 76702), (4, 76705), (7, 76750), (10, 76885), (11, 76915), (14, 76978), (18, 77011), (19, 77023), (20, 77029), (22, 77098), (26, 77131), (28, 77152),

Gene: Ryadel\_81 Start: 49329, Stop: 48898, Start Num: 5

Candidate Starts for Ryadel\_81:

(2, 49371), (Start: 5 @49329 has 26 MA's), (6, 49323), (8, 49260), (9, 49239), (12, 49152), (13, 49149), (15, 49095), (16, 49086), (17, 49083), (21, 49032), (22, 48999), (23, 48996), (24, 48987), (25, 48978), (27, 48957), (29, 48939),

Gene: SchoolBus\_77 Start: 48477, Stop: 48046, Start Num: 5

Candidate Starts for SchoolBus\_77:

(2, 48519), (Start: 5 @48477 has 26 MA's), (6, 48471), (8, 48408), (9, 48387), (12, 48300), (13, 48297), (15, 48243), (16, 48234), (17, 48231), (21, 48180), (22, 48147), (23, 48144), (24, 48135), (25, 48126), (27, 48105), (29, 48087),

Gene: Schuy\_79 Start: 48326, Stop: 47895, Start Num: 5

Candidate Starts for Schuy\_79:

(2, 48368), (Start: 5 @48326 has 26 MA's), (6, 48320), (8, 48257), (9, 48236), (12, 48149), (13, 48146), (15, 48092), (16, 48083), (17, 48080), (21, 48029), (22, 47996), (23, 47993), (24, 47984), (25, 47975), (27, 47954), (29, 47936),

Gene: Shida\_77 Start: 48168, Stop: 47737, Start Num: 5

Candidate Starts for Shida\_77:

(2, 48210), (Start: 5 @48168 has 26 MA's), (6, 48162), (8, 48099), (9, 48078), (12, 47991), (13, 47988), (15, 47934), (16, 47925), (17, 47922), (21, 47871), (22, 47838), (23, 47835), (24, 47826), (25, 47817), (27, 47796), (29, 47778),

Gene: Smooch\_82 Start: 51232, Stop: 50801, Start Num: 5

Candidate Starts for Smooch\_82:

(Start: 5 @51232 has 26 MA's), (6, 51226), (8, 51163), (9, 51142), (12, 51055), (13, 51052), (15, 50998), (16, 50989), (17, 50986), (21, 50935), (22, 50902), (23, 50899), (24, 50890), (25, 50881), (27, 50860), (29, 50842), (30, 50809),

Gene: TelAviv\_74 Start: 48462, Stop: 48031, Start Num: 5

Candidate Starts for TelAviv\_74:

(2, 48504), (Start: 5 @48462 has 26 MA's), (6, 48456), (8, 48393), (9, 48372), (12, 48285), (13, 48282), (15, 48228), (16, 48219), (17, 48216), (21, 48165), (22, 48132), (23, 48129), (24, 48120), (25, 48111), (27, 48090), (29, 48072),

Gene: Vagabond\_78 Start: 48374, Stop: 47943, Start Num: 5

Candidate Starts for Vagabond\_78:

(2, 48416), (Start: 5 @48374 has 26 MA's), (6, 48368), (8, 48305), (9, 48284), (12, 48197), (13, 48194), (15, 48140), (16, 48131), (17, 48128), (21, 48077), (22, 48044), (23, 48041), (24, 48032), (25, 48023), (27, 48002), (29, 47984),

Gene: Vorrps\_78 Start: 48583, Stop: 48152, Start Num: 5

Candidate Starts for Vorrps\_78:

(2, 48625), (Start: 5 @48583 has 26 MA's), (6, 48577), (8, 48514), (9, 48493), (12, 48406), (13, 48403), (15, 48349), (16, 48340), (17, 48337), (21, 48286), (22, 48253), (23, 48250), (24, 48241), (25, 48232), (27, 48211), (29, 48193),

Gene: Wildflower\_80 Start: 49323, Stop: 48892, Start Num: 5

Candidate Starts for Wildflower\_80:

(Start: 5 @49323 has 26 MA's), (6, 49317), (8, 49254), (9, 49233), (12, 49146), (13, 49143), (15, 49089), (16, 49080), (17, 49077), (21, 49026), (22, 48993), (23, 48990), (24, 48981), (25, 48972), (27, 48951), (29, 48933),

Gene: Winget\_78 Start: 48755, Stop: 48324, Start Num: 5

Candidate Starts for Winget\_78:

(2, 48797), (Start: 5 @48755 has 26 MA's), (6, 48749), (8, 48686), (9, 48665), (12, 48578), (13, 48575), (15, 48521), (16, 48512), (17, 48509), (21, 48458), (22, 48425), (23, 48422), (24, 48413), (25, 48404), (27, 48383), (29, 48365),

Gene: Wogge42\_77 Start: 48245, Stop: 47814, Start Num: 5

Candidate Starts for Wogge42\_77:

(2, 48287), (Start: 5 @48245 has 26 MA's), (6, 48239), (8, 48176), (9, 48155), (12, 48068), (13, 48065), (15, 48011), (16, 48002), (17, 47999), (21, 47948), (22, 47915), (23, 47912), (24, 47903), (25, 47894), (27, 47873), (29, 47855),

Gene: Zakhe101\_79 Start: 49737, Stop: 49306, Start Num: 5

Candidate Starts for Zakhe101\_79:

(2, 49779), (Start: 5 @49737 has 26 MA's), (6, 49731), (8, 49668), (9, 49647), (12, 49560), (13, 49557), (15, 49503), (16, 49494), (17, 49491), (21, 49440), (22, 49407), (23, 49404), (24, 49395), (25, 49386), (27, 49365), (29, 49347),

Gene: Zebo\_76 Start: 48486, Stop: 48055, Start Num: 5

Candidate Starts for Zebo\_76:

(2, 48528), (Start: 5 @48486 has 26 MA's), (6, 48480), (8, 48417), (9, 48396), (12, 48309), (13, 48306),  
(15, 48252), (16, 48243), (17, 48240), (21, 48189), (22, 48156), (23, 48153), (24, 48144), (25, 48135),  
(27, 48114), (29, 48096),