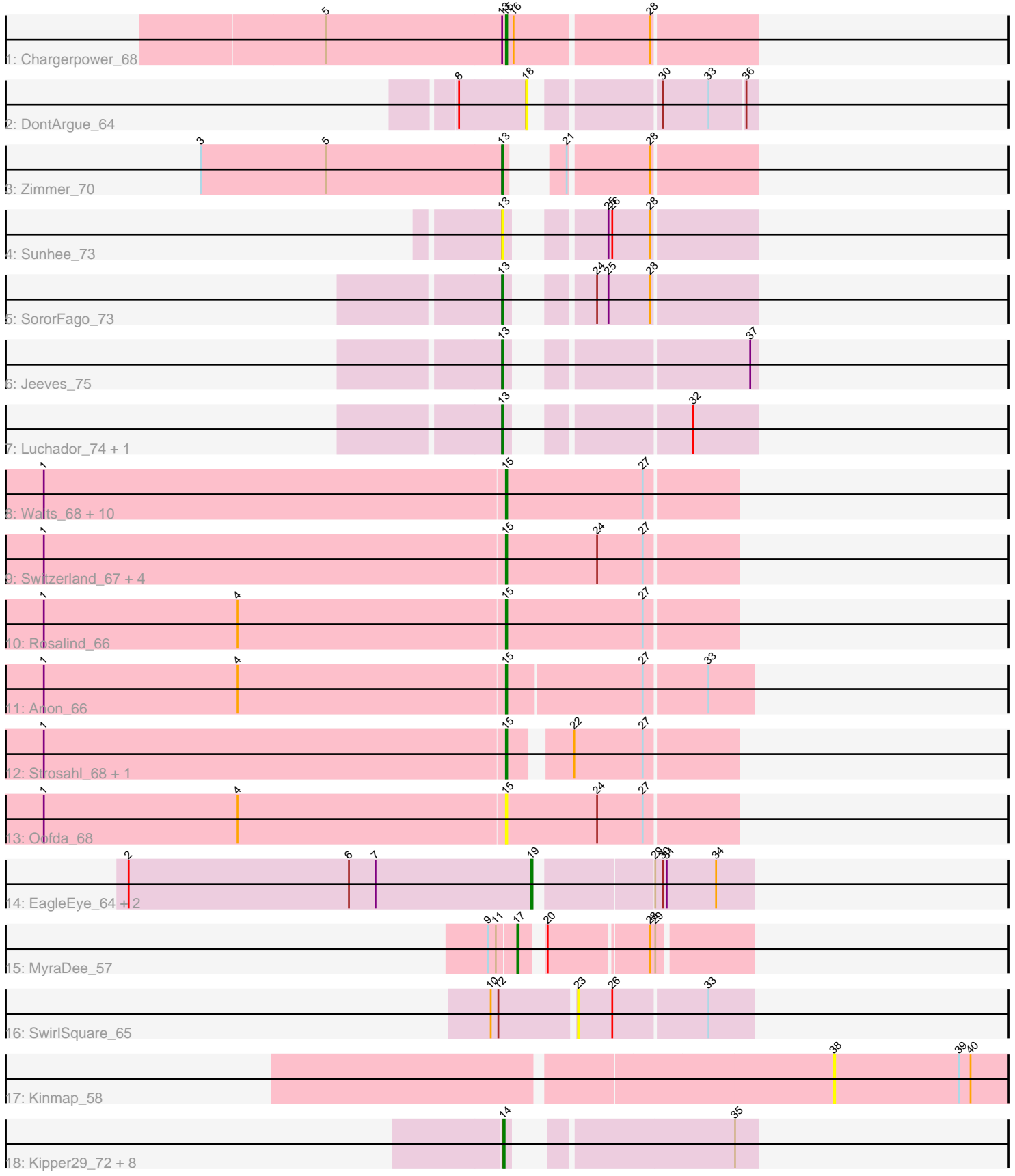


Pham 194123



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 194123 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194123 has 44 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Chargerpower\_68
- Track 2 : DontArgue\_64
- Track 3 : Zimmer\_70
- Track 4 : Sunhee\_73
- Track 5 : SororFago\_73
- Track 6 : Jeeves\_75
- Track 7 : Luchador\_74, Gail\_73
- Track 8 : Waits\_68, Boohoo\_68, Nebulosus\_66, Battleship\_70, Anaysia\_68, MinecraftSteve\_68, LastResort\_66, Epsocamisio\_65, ReMo\_66, JSwag\_67, Looper\_67
- Track 9 : Switzerland\_67, Soups\_68, DekHockey33\_69, KatherineG\_68, ShayRa\_68
- Track 10 : Rosalind\_66
- Track 11 : Anon\_66
- Track 12 : Strosahl\_68, Remus\_68
- Track 13 : Oofda\_68
- Track 14 : EagleEye\_64, Lucyedi\_63, PainterBoy\_63
- Track 15 : MyraDee\_57
- Track 16 : SwirlSquare\_65
- Track 17 : Kinmap\_58
- Track 18 : Kipper29\_72, SmellyB\_72, EricB\_71, Chartreuse\_69, Kazan\_73, Hoot\_67, VohminGhazi\_72, Candra\_70, DaVinci\_70

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

The start number called the most often in the published annotations is 15, it was called in 21 of the 37 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Anaysia\_68, Anon\_66, Battleship\_70, Boohoo\_68, Chargerpower\_68, DekHockey33\_69, Epsocamisio\_65, JSwag\_67, KatherineG\_68, LastResort\_66, Looper\_67, MinecraftSteve\_68, Nebulosus\_66, Oofda\_68, ReMo\_66, Remus\_68, Rosalind\_66, ShayRa\_68, Soups\_68, Strosahl\_68, Switzerland\_67, Waits\_68,

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

- 

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

- Candra\_70, Chartreuse\_69, DaVinci\_70, DontArgue\_64, EagleEye\_64, EricB\_71, Gail\_73, Hoot\_67, Jeeves\_75, Kazan\_73, Kinmap\_58, Kipper29\_72, Luchador\_74, Lucyedi\_63, MyraDee\_57, PainterBoy\_63, SmellyB\_72, SororFago\_73, Sunhee\_73, SwirlSquare\_65, VohminGhazi\_72, Zimmer\_70,

### Summary by start number:

Start 13:

- Found in 7 of 44 ( 15.9% ) of genes in pham
- Manual Annotations of this start: 5 of 37
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Gail\_73 (A14), Jeeves\_75 (A14), Luchador\_74 (A14), SororFago\_73 (A14), Sunhee\_73 (A14), Zimmer\_70 (A12),

Start 14:

- Found in 9 of 44 ( 20.5% ) of genes in pham
- Manual Annotations of this start: 7 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Candra\_70 (A6), Chartreuse\_69 (A6), DaVinci\_70 (A6), EricB\_71 (A6), Hoot\_67 (A6), Kazan\_73 (A6), Kipper29\_72 (A6), SmellyB\_72 (A6), VohminGhazi\_72 (A6),

Start 15:

- Found in 22 of 44 ( 50.0% ) of genes in pham
- Manual Annotations of this start: 21 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anaysia\_68 (A15), Anon\_66 (A15), Battleship\_70 (A15), Boohoo\_68 (A15), Chargerpower\_68 (A), DekHockey33\_69 (A15), Epsocamisio\_65 (A15), JSwag\_67 (A15), KatherineG\_68 (A15), LastResort\_66 (A15), Looper\_67 (A15), MinecraftSteve\_68 (A15), Nebulosus\_66 (A15), Oofda\_68 (A15), ReMo\_66 (A15), Remus\_68 (A15), Rosalind\_66 (A15), ShayRa\_68 (A15), Soups\_68 (A15), Strosahl\_68 (A15), Switzerland\_67 (A15), Waits\_68 (A15),

Start 17:

- Found in 1 of 44 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MyraDee\_57 (A18),

Start 18:

- Found in 1 of 44 ( 2.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DontArgue\_64 (A10),

Start 19:

- Found in 3 of 44 ( 6.8% ) of genes in pham
- Manual Annotations of this start: 3 of 37

- Called 100.0% of time when present
- Phage (with cluster) where this start called: EagleEye\_64 (A16), Lucyedi\_63 (A16), PainterBoy\_63 (A16),

Start 23:

- Found in 1 of 44 ( 2.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SwirlSquare\_65 (A2),

Start 38:

- Found in 1 of 44 ( 2.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kinmap\_58 (A21),

### **Summary by clusters:**

There are 10 clusters represented in this pham: A15, A14, A16, A10, A12, A18, A21, A2, A, A6,

Info for manual annotations of cluster A:

- Start number 15 was manually annotated 1 time for cluster A.

Info for manual annotations of cluster A12:

- Start number 13 was manually annotated 1 time for cluster A12.

Info for manual annotations of cluster A14:

- Start number 13 was manually annotated 4 times for cluster A14.

Info for manual annotations of cluster A15:

- Start number 15 was manually annotated 20 times for cluster A15.

Info for manual annotations of cluster A16:

- Start number 19 was manually annotated 3 times for cluster A16.

Info for manual annotations of cluster A18:

- Start number 17 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A6:

- Start number 14 was manually annotated 7 times for cluster A6.

### **Gene Information:**

Gene: Anaysia\_68 Start: 38921, Stop: 38742, Start Num: 15

Candidate Starts for Anaysia\_68:

(1, 39284), (Start: 15 @38921 has 21 MA's), (27, 38813),

Gene: Anon\_66 Start: 38696, Stop: 38508, Start Num: 15  
Candidate Starts for Anon\_66:  
(1, 39059), (4, 38906), (Start: 15 @38696 has 21 MA's), (27, 38591), (33, 38543),

Gene: Battleship\_70 Start: 39127, Stop: 38948, Start Num: 15  
Candidate Starts for Battleship\_70:  
(1, 39490), (Start: 15 @39127 has 21 MA's), (27, 39019),

Gene: Boohoo\_68 Start: 38921, Stop: 38742, Start Num: 15  
Candidate Starts for Boohoo\_68:  
(1, 39284), (Start: 15 @38921 has 21 MA's), (27, 38813),

Gene: Candra\_70 Start: 41523, Stop: 41359, Start Num: 14  
Candidate Starts for Candra\_70:  
(Start: 14 @41523 has 7 MA's), (35, 41376),

Gene: Chargerpower\_68 Start: 40890, Stop: 40702, Start Num: 15  
Candidate Starts for Chargerpower\_68:  
(5, 41031), (Start: 13 @40893 has 5 MA's), (Start: 15 @40890 has 21 MA's), (16, 40884), (28, 40782),

Gene: Chartreuse\_69 Start: 40834, Stop: 40670, Start Num: 14  
Candidate Starts for Chartreuse\_69:  
(Start: 14 @40834 has 7 MA's), (35, 40687),

Gene: DaVinci\_70 Start: 40888, Stop: 40724, Start Num: 14  
Candidate Starts for DaVinci\_70:  
(Start: 14 @40888 has 7 MA's), (35, 40741),

Gene: DekHockey33\_69 Start: 39213, Stop: 39034, Start Num: 15  
Candidate Starts for DekHockey33\_69:  
(1, 39576), (Start: 15 @39213 has 21 MA's), (24, 39141), (27, 39105),

Gene: DontArgue\_64 Start: 40985, Stop: 40830, Start Num: 18  
Candidate Starts for DontArgue\_64:  
(8, 41036), (18, 40985), (30, 40901), (33, 40865), (36, 40838),

Gene: EagleEye\_64 Start: 39391, Stop: 39230, Start Num: 19  
Candidate Starts for EagleEye\_64:  
(2, 39709), (6, 39535), (7, 39514), (Start: 19 @39391 has 3 MA's), (29, 39307), (30, 39301), (31, 39298), (34, 39259),

Gene: Epsocamisio\_65 Start: 38456, Stop: 38277, Start Num: 15  
Candidate Starts for Epsocamisio\_65:  
(1, 38819), (Start: 15 @38456 has 21 MA's), (27, 38348),

Gene: EricB\_71 Start: 41480, Stop: 41316, Start Num: 14  
Candidate Starts for EricB\_71:  
(Start: 14 @41480 has 7 MA's), (35, 41333),

Gene: Gail\_73 Start: 43622, Stop: 43458, Start Num: 13  
Candidate Starts for Gail\_73:  
(Start: 13 @43622 has 5 MA's), (32, 43508),

Gene: Hoot\_67 Start: 39338, Stop: 39174, Start Num: 14  
Candidate Starts for Hoot\_67:  
(Start: 14 @39338 has 7 MA's), (35, 39191),

Gene: JSwag\_67 Start: 38645, Stop: 38466, Start Num: 15  
Candidate Starts for JSwag\_67:  
(1, 39008), (Start: 15 @38645 has 21 MA's), (27, 38537),

Gene: Jeeves\_75 Start: 42607, Stop: 42443, Start Num: 13  
Candidate Starts for Jeeves\_75:  
(Start: 13 @42607 has 5 MA's), (37, 42448),

Gene: KatherineG\_68 Start: 39118, Stop: 38939, Start Num: 15  
Candidate Starts for KatherineG\_68:  
(1, 39481), (Start: 15 @39118 has 21 MA's), (24, 39046), (27, 39010),

Gene: Kazan\_73 Start: 41493, Stop: 41329, Start Num: 14  
Candidate Starts for Kazan\_73:  
(Start: 14 @41493 has 7 MA's), (35, 41346),

Gene: Kinmap\_58 Start: 37671, Stop: 37513, Start Num: 38  
Candidate Starts for Kinmap\_58:  
(38, 37671), (39, 37572), (40, 37563),

Gene: Kipper29\_72 Start: 41506, Stop: 41342, Start Num: 14  
Candidate Starts for Kipper29\_72:  
(Start: 14 @41506 has 7 MA's), (35, 41359),

Gene: LastResort\_66 Start: 38697, Stop: 38518, Start Num: 15  
Candidate Starts for LastResort\_66:  
(1, 39060), (Start: 15 @38697 has 21 MA's), (27, 38589),

Gene: Looper\_67 Start: 38609, Stop: 38430, Start Num: 15  
Candidate Starts for Looper\_67:  
(1, 38972), (Start: 15 @38609 has 21 MA's), (27, 38501),

Gene: Luchador\_74 Start: 44089, Stop: 43925, Start Num: 13  
Candidate Starts for Luchador\_74:  
(Start: 13 @44089 has 5 MA's), (32, 43975),

Gene: Lucyedi\_63 Start: 39587, Stop: 39426, Start Num: 19  
Candidate Starts for Lucyedi\_63:  
(2, 39905), (6, 39731), (7, 39710), (Start: 19 @39587 has 3 MA's), (29, 39503), (30, 39497), (31, 39494), (34, 39455),

Gene: MinecraftSteve\_68 Start: 38933, Stop: 38754, Start Num: 15  
Candidate Starts for MinecraftSteve\_68:  
(1, 39296), (Start: 15 @38933 has 21 MA's), (27, 38825),

Gene: MyraDee\_57 Start: 36199, Stop: 36038, Start Num: 17  
Candidate Starts for MyraDee\_57:  
(9, 36220), (11, 36214), (Start: 17 @36199 has 1 MA's), (20, 36187), (28, 36112), (29, 36109),

Gene: Nebulosus\_66 Start: 38693, Stop: 38514, Start Num: 15

Candidate Starts for Nebulosus\_66:

(1, 39056), (Start: 15 @38693 has 21 MA's), (27, 38585),

Gene: Oofda\_68 Start: 38896, Stop: 38717, Start Num: 15

Candidate Starts for Oofda\_68:

(1, 39259), (4, 39106), (Start: 15 @38896 has 21 MA's), (24, 38824), (27, 38788),

Gene: PainterBoy\_63 Start: 39546, Stop: 39385, Start Num: 19

Candidate Starts for PainterBoy\_63:

(2, 39864), (6, 39690), (7, 39669), (Start: 19 @39546 has 3 MA's), (29, 39462), (30, 39456), (31, 39453), (34, 39414),

Gene: ReMo\_66 Start: 38694, Stop: 38515, Start Num: 15

Candidate Starts for ReMo\_66:

(1, 39057), (Start: 15 @38694 has 21 MA's), (27, 38586),

Gene: Remus\_68 Start: 38685, Stop: 38521, Start Num: 15

Candidate Starts for Remus\_68:

(1, 39048), (Start: 15 @38685 has 21 MA's), (22, 38646), (27, 38592),

Gene: Rosalind\_66 Start: 38852, Stop: 38673, Start Num: 15

Candidate Starts for Rosalind\_66:

(1, 39215), (4, 39062), (Start: 15 @38852 has 21 MA's), (27, 38744),

Gene: ShayRa\_68 Start: 38881, Stop: 38702, Start Num: 15

Candidate Starts for ShayRa\_68:

(1, 39244), (Start: 15 @38881 has 21 MA's), (24, 38809), (27, 38773),

Gene: SmellyB\_72 Start: 41487, Stop: 41323, Start Num: 14

Candidate Starts for SmellyB\_72:

(Start: 14 @41487 has 7 MA's), (35, 41340),

Gene: SororFago\_73 Start: 43809, Stop: 43645, Start Num: 13

Candidate Starts for SororFago\_73:

(Start: 13 @43809 has 5 MA's), (24, 43767), (25, 43758), (28, 43725),

Gene: Soups\_68 Start: 39144, Stop: 38965, Start Num: 15

Candidate Starts for Soups\_68:

(1, 39507), (Start: 15 @39144 has 21 MA's), (24, 39072), (27, 39036),

Gene: Strosahl\_68 Start: 38685, Stop: 38521, Start Num: 15

Candidate Starts for Strosahl\_68:

(1, 39048), (Start: 15 @38685 has 21 MA's), (22, 38646), (27, 38592),

Gene: Sunhee\_73 Start: 41861, Stop: 41697, Start Num: 13

Candidate Starts for Sunhee\_73:

(Start: 13 @41861 has 5 MA's), (25, 41810), (26, 41807), (28, 41777),

Gene: SwirlSquare\_65 Start: 38842, Stop: 38708, Start Num: 23

Candidate Starts for SwirlSquare\_65:

(10, 38905), (12, 38899), (23, 38842), (26, 38815), (33, 38743),

Gene: Switzerland\_67 Start: 39020, Stop: 38841, Start Num: 15  
Candidate Starts for Switzerland\_67:  
(1, 39383), (Start: 15 @39020 has 21 MA's), (24, 38948), (27, 38912),

Gene: VohminGhazi\_72 Start: 41488, Stop: 41324, Start Num: 14  
Candidate Starts for VohminGhazi\_72:  
(Start: 14 @41488 has 7 MA's), (35, 41341),

Gene: Waits\_68 Start: 38917, Stop: 38738, Start Num: 15  
Candidate Starts for Waits\_68:  
(1, 39280), (Start: 15 @38917 has 21 MA's), (27, 38809),

Gene: Zimmer\_70 Start: 43710, Stop: 43552, Start Num: 13  
Candidate Starts for Zimmer\_70:  
(3, 43947), (5, 43848), (Start: 13 @43710 has 5 MA's), (21, 43692), (28, 43632),