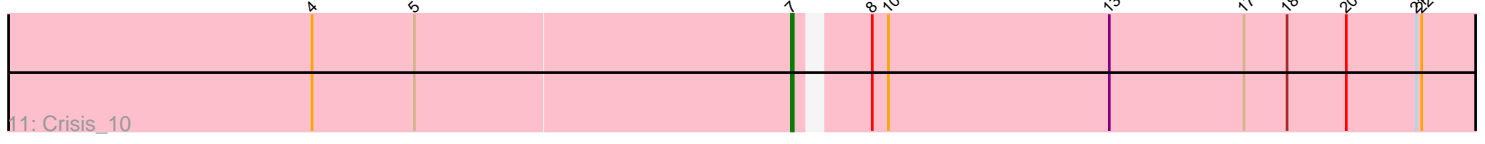
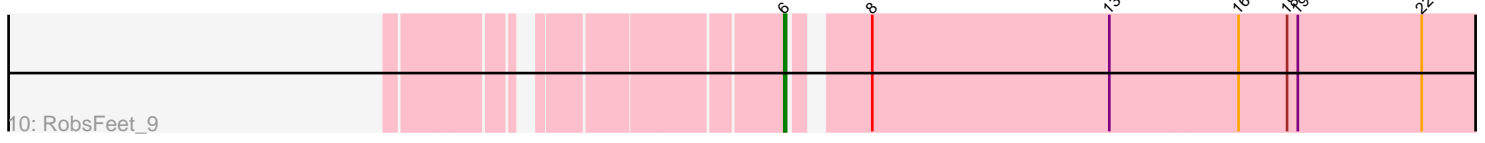
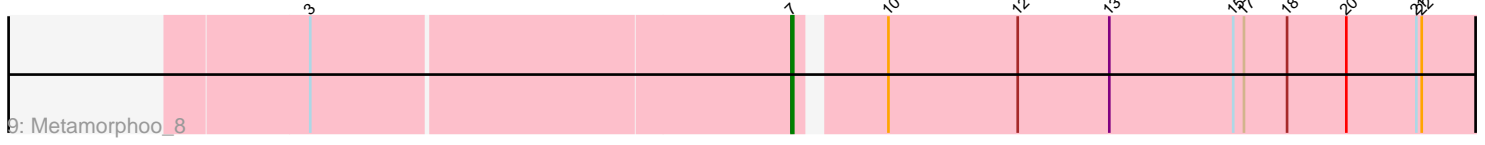
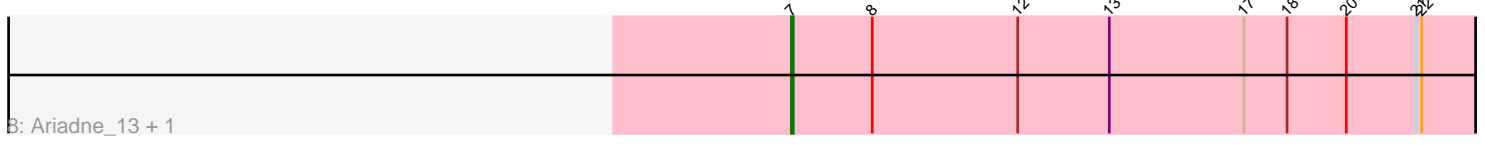
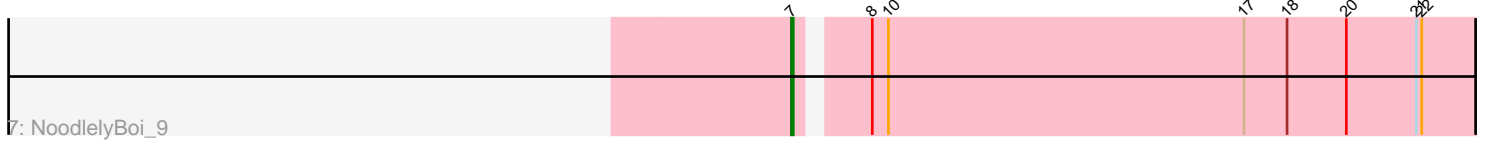
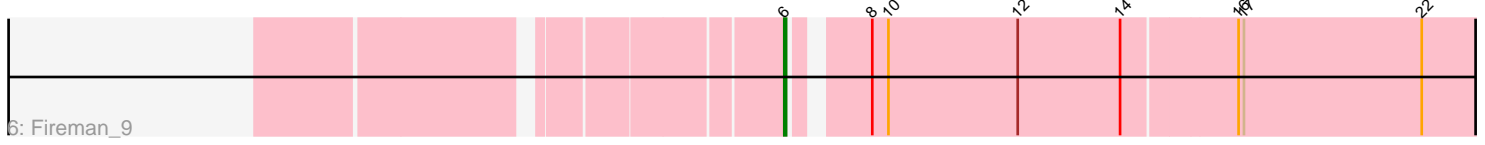
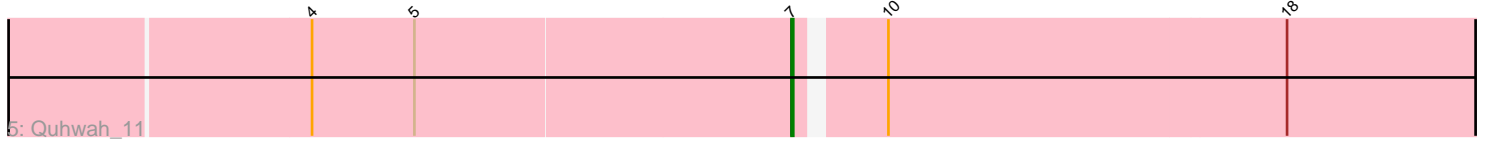
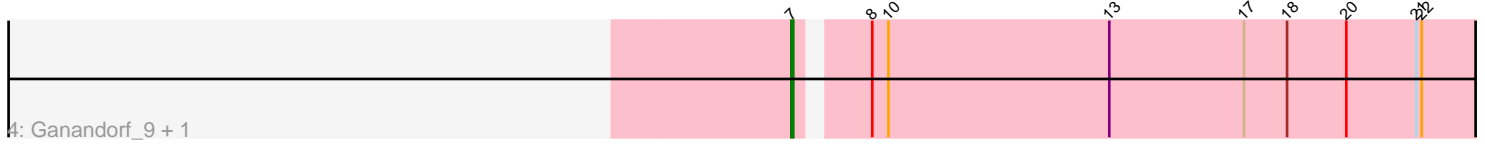
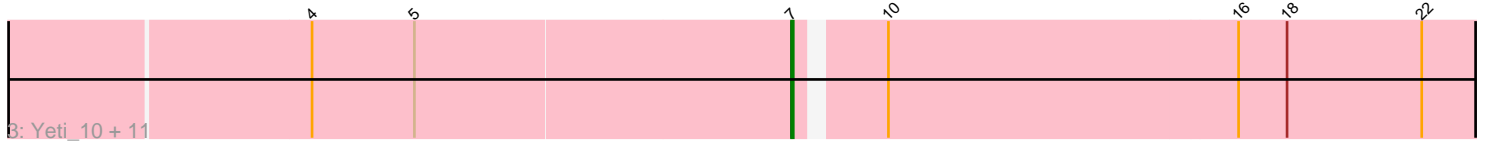
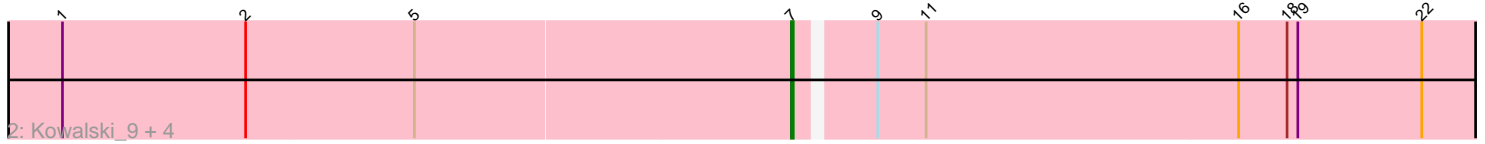
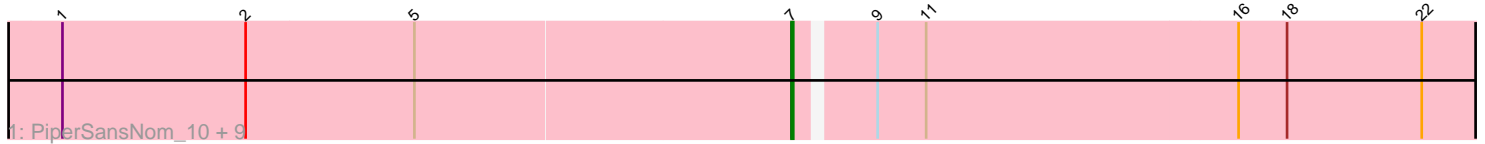


# Pham 2738



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 2738 Report

This analysis was run 04/28/24 on database version 559.

Pham number 2738 has 37 members, 4 are drafts.

Phages represented in each track:

- Track 1 : PiperSansNom\_10, Shotgun\_9, Antares\_10, Jollipop\_9, Paschalis\_9, LittleFortune\_10, Phorgeous\_9, Jefe\_10, Hermeonysus\_9, Onika\_9
- Track 2 : Kowalski\_9, Ramiel05\_9, BrazzalePHS\_9, CrazyRich\_9, Savannah\_9
- Track 3 : Yeti\_10, Piperis\_10, Selwyn23\_11, Pulchra\_11, Cranjis\_10, Honeyfin\_11, Phrancesco\_11, Scumberland\_11, EarickHC\_10, PierreOrion\_10, ClearAsMud\_10, KaiHaiDragon\_10
- Track 4 : Ganandorf\_9, Busephilis\_10
- Track 5 : Quhwah\_11
- Track 6 : Fireman\_9
- Track 7 : NoodlelyBoi\_9
- Track 8 : Ariadne\_13, Smarties\_13
- Track 9 : Metamorphoo\_8
- Track 10 : RobsFeet\_9
- Track 11 : Crisis\_10

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

The start number called the most often in the published annotations is 7, it was called in 31 of the 33 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Antares\_10, Ariadne\_13, BrazzalePHS\_9, Busephilis\_10, ClearAsMud\_10, Cranjis\_10, CrazyRich\_9, Crisis\_10, EarickHC\_10, Ganandorf\_9, Hermeonysus\_9, Honeyfin\_11, Jefe\_10, Jollipop\_9, KaiHaiDragon\_10, Kowalski\_9, LittleFortune\_10, Metamorphoo\_8, NoodlelyBoi\_9, Onika\_9, Paschalis\_9, Phorgeous\_9, Phrancesco\_11, PierreOrion\_10, PiperSansNom\_10, Piperis\_10, Pulchra\_11, Quhwah\_11, Ramiel05\_9, Savannah\_9, Scumberland\_11, Selwyn23\_11, Shotgun\_9, Smarties\_13, Yeti\_10,

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

- 

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

- Fireman\_9, RobsFeet\_9,

## Summary by start number:

### Start 6:

- Found in 2 of 37 ( 5.4% ) of genes in pham
- Manual Annotations of this start: 2 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fireman\_9 (EC), RobsFeet\_9 (EC),

### Start 7:

- Found in 35 of 37 ( 94.6% ) of genes in pham
- Manual Annotations of this start: 31 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antares\_10 (EC), Ariadne\_13 (EC), BrazzalePHS\_9 (EC), Busephilis\_10 (EC), ClearAsMud\_10 (EC), Cranjīs\_10 (EC), CrazyRich\_9 (EC), Crisis\_10 (EC), EarickHC\_10 (EC), Ganandorf\_9 (EC), Hermeonysus\_9 (EC), Honeyfin\_11 (EC), Jefe\_10 (EC), Jollipop\_9 (EC), KaiHaiDragon\_10 (EC), Kowalski\_9 (EC), LittleFortune\_10 (EC), Metamorphoo\_8 (EC), NoodlelyBoi\_9 (EC), Onika\_9 (EC), Paschalis\_9 (EC), Phorgeous\_9 (EC), Phrancesco\_11 (EC), PierreOrion\_10 (EC), PiperSansNom\_10 (EC), Piperis\_10 (EC), Pulchra\_11 (EC), Quhwah\_11 (EC), Ramiel05\_9 (EC), Savannah\_9 (EC), Scumberland\_11 (EC), Selwyn23\_11 (EC), Shotgun\_9 (EC), Smarties\_13 (EC), Yeti\_10 (EC),

## Summary by clusters:

There is one cluster represented in this pham: EC

Info for manual annotations of cluster EC:

- Start number 6 was manually annotated 2 times for cluster EC.
- Start number 7 was manually annotated 31 times for cluster EC.

## Gene Information:

Gene: Antares\_10 Start: 4745, Stop: 5122, Start Num: 7

Candidate Starts for Antares\_10:

(1, 4343), (2, 4445), (5, 4538), (Start: 7 @4745 has 31 MA's), (9, 4784), (11, 4811), (16, 4982), (18, 5009), (22, 5084),

Gene: Ariadne\_13 Start: 5415, Stop: 5804, Start Num: 7

Candidate Starts for Ariadne\_13:

(Start: 7 @5415 has 31 MA's), (8, 5460), (12, 5541), (13, 5592), (17, 5667), (18, 5691), (20, 5724), (21, 5763), (22, 5766),

Gene: BrazzalePHS\_9 Start: 4533, Stop: 4910, Start Num: 7

Candidate Starts for BrazzalePHS\_9:

(1, 4131), (2, 4233), (5, 4326), (Start: 7 @4533 has 31 MA's), (9, 4572), (11, 4599), (16, 4770), (18, 4797), (19, 4803), (22, 4872),

Gene: Busephilis\_10 Start: 4754, Stop: 5128, Start Num: 7

Candidate Starts for Busephilis\_10:

(Start: 7 @4754 has 31 MA's), (8, 4787), (10, 4796), (13, 4919), (17, 4994), (18, 5018), (20, 5051), (21, 5090), (22, 5093),

Gene: ClearAsMud\_10 Start: 4969, Stop: 5343, Start Num: 7

Candidate Starts for ClearAsMud\_10:

(4, 4705), (5, 4762), (Start: 7 @4969 has 31 MA's), (10, 5011), (16, 5203), (18, 5230), (22, 5305),

Gene: Cranjis\_10 Start: 4700, Stop: 5074, Start Num: 7

Candidate Starts for Cranjis\_10:

(4, 4436), (5, 4493), (Start: 7 @4700 has 31 MA's), (10, 4742), (16, 4934), (18, 4961), (22, 5036),

Gene: CrazyRich\_9 Start: 4533, Stop: 4910, Start Num: 7

Candidate Starts for CrazyRich\_9:

(1, 4131), (2, 4233), (5, 4326), (Start: 7 @4533 has 31 MA's), (9, 4572), (11, 4599), (16, 4770), (18, 4797), (19, 4803), (22, 4872),

Gene: Crisis\_10 Start: 4700, Stop: 5074, Start Num: 7

Candidate Starts for Crisis\_10:

(4, 4436), (5, 4493), (Start: 7 @4700 has 31 MA's), (8, 4733), (10, 4742), (13, 4865), (17, 4940), (18, 4964), (20, 4997), (21, 5036), (22, 5039),

Gene: EarickHC\_10 Start: 4700, Stop: 5074, Start Num: 7

Candidate Starts for EarickHC\_10:

(4, 4436), (5, 4493), (Start: 7 @4700 has 31 MA's), (10, 4742), (16, 4934), (18, 4961), (22, 5036),

Gene: Fireman\_9 Start: 4274, Stop: 4645, Start Num: 6

Candidate Starts for Fireman\_9:

(Start: 6 @4274 has 2 MA's), (8, 4307), (10, 4316), (12, 4388), (14, 4445), (16, 4505), (17, 4508), (22, 4607),

Gene: Ganandorf\_9 Start: 4761, Stop: 5135, Start Num: 7

Candidate Starts for Ganandorf\_9:

(Start: 7 @4761 has 31 MA's), (8, 4794), (10, 4803), (13, 4926), (17, 5001), (18, 5025), (20, 5058), (21, 5097), (22, 5100),

Gene: Hermeonysus\_9 Start: 4533, Stop: 4910, Start Num: 7

Candidate Starts for Hermeonysus\_9:

(1, 4131), (2, 4233), (5, 4326), (Start: 7 @4533 has 31 MA's), (9, 4572), (11, 4599), (16, 4770), (18, 4797), (22, 4872),

Gene: Honeyfin\_11 Start: 4909, Stop: 5283, Start Num: 7

Candidate Starts for Honeyfin\_11:

(4, 4645), (5, 4702), (Start: 7 @4909 has 31 MA's), (10, 4951), (16, 5143), (18, 5170), (22, 5245),

Gene: Jefe\_10 Start: 4745, Stop: 5122, Start Num: 7

Candidate Starts for Jefe\_10:

(1, 4343), (2, 4445), (5, 4538), (Start: 7 @4745 has 31 MA's), (9, 4784), (11, 4811), (16, 4982), (18, 5009), (22, 5084),

Gene: Jollipop\_9 Start: 4533, Stop: 4910, Start Num: 7

Candidate Starts for Jollipop\_9:

(1, 4131), (2, 4233), (5, 4326), (Start: 7 @4533 has 31 MA's), (9, 4572), (11, 4599), (16, 4770), (18, 4797), (22, 4872),

Gene: KaiHaiDragon\_10 Start: 4700, Stop: 5074, Start Num: 7

Candidate Starts for KaiHaiDragon\_10:

(4, 4436), (5, 4493), (Start: 7 @4700 has 31 MA's), (10, 4742), (16, 4934), (18, 4961), (22, 5036),

Gene: Kowalski\_9 Start: 4533, Stop: 4910, Start Num: 7

Candidate Starts for Kowalski\_9:

(1, 4131), (2, 4233), (5, 4326), (Start: 7 @4533 has 31 MA's), (9, 4572), (11, 4599), (16, 4770), (18, 4797), (19, 4803), (22, 4872),

Gene: LittleFortune\_10 Start: 4751, Stop: 5128, Start Num: 7

Candidate Starts for LittleFortune\_10:

(1, 4349), (2, 4451), (5, 4544), (Start: 7 @4751 has 31 MA's), (9, 4790), (11, 4817), (16, 4988), (18, 5015), (22, 5090),

Gene: Metamorphoo\_8 Start: 3943, Stop: 4317, Start Num: 7

Candidate Starts for Metamorphoo\_8:

(3, 3682), (Start: 7 @3943 has 31 MA's), (10, 3985), (12, 4057), (13, 4108), (15, 4177), (17, 4183), (18, 4207), (20, 4240), (21, 4279), (22, 4282),

Gene: NoodlelyBoi\_9 Start: 4545, Stop: 4919, Start Num: 7

Candidate Starts for NoodlelyBoi\_9:

(Start: 7 @4545 has 31 MA's), (8, 4578), (10, 4587), (17, 4785), (18, 4809), (20, 4842), (21, 4881), (22, 4884),

Gene: Onika\_9 Start: 4533, Stop: 4910, Start Num: 7

Candidate Starts for Onika\_9:

(1, 4131), (2, 4233), (5, 4326), (Start: 7 @4533 has 31 MA's), (9, 4572), (11, 4599), (16, 4770), (18, 4797), (22, 4872),

Gene: Paschalis\_9 Start: 4542, Stop: 4919, Start Num: 7

Candidate Starts for Paschalis\_9:

(1, 4140), (2, 4242), (5, 4335), (Start: 7 @4542 has 31 MA's), (9, 4581), (11, 4608), (16, 4779), (18, 4806), (22, 4881),

Gene: Phorgeous\_9 Start: 4542, Stop: 4919, Start Num: 7

Candidate Starts for Phorgeous\_9:

(1, 4140), (2, 4242), (5, 4335), (Start: 7 @4542 has 31 MA's), (9, 4581), (11, 4608), (16, 4779), (18, 4806), (22, 4881),

Gene: Phrancesco\_11 Start: 4918, Stop: 5292, Start Num: 7

Candidate Starts for Phrancesco\_11:

(4, 4654), (5, 4711), (Start: 7 @4918 has 31 MA's), (10, 4960), (16, 5152), (18, 5179), (22, 5254),

Gene: PierreOrion\_10 Start: 4700, Stop: 5074, Start Num: 7

Candidate Starts for PierreOrion\_10:

(4, 4436), (5, 4493), (Start: 7 @4700 has 31 MA's), (10, 4742), (16, 4934), (18, 4961), (22, 5036),

Gene: PiperSansNom\_10 Start: 4846, Stop: 5223, Start Num: 7

Candidate Starts for PiperSansNom\_10:

(1, 4444), (2, 4546), (5, 4639), (Start: 7 @4846 has 31 MA's), (9, 4885), (11, 4912), (16, 5083), (18, 5110), (22, 5185),

Gene: Piperis\_10 Start: 4700, Stop: 5074, Start Num: 7

Candidate Starts for Piperis\_10:

(4, 4436), (5, 4493), (Start: 7 @4700 has 31 MA's), (10, 4742), (16, 4934), (18, 4961), (22, 5036),

Gene: Pulchra\_11 Start: 4930, Stop: 5304, Start Num: 7

Candidate Starts for Pulchra\_11:

(4, 4666), (5, 4723), (Start: 7 @4930 has 31 MA's), (10, 4972), (16, 5164), (18, 5191), (22, 5266),

Gene: Quhwah\_11 Start: 4912, Stop: 5286, Start Num: 7

Candidate Starts for Quhwah\_11:

(4, 4648), (5, 4705), (Start: 7 @4912 has 31 MA's), (10, 4954), (18, 5173),

Gene: Ramiel05\_9 Start: 4533, Stop: 4910, Start Num: 7

Candidate Starts for Ramiel05\_9:

(1, 4131), (2, 4233), (5, 4326), (Start: 7 @4533 has 31 MA's), (9, 4572), (11, 4599), (16, 4770), (18, 4797), (19, 4803), (22, 4872),

Gene: RobsFeet\_9 Start: 4272, Stop: 4646, Start Num: 6

Candidate Starts for RobsFeet\_9:

(Start: 6 @4272 has 2 MA's), (8, 4305), (13, 4437), (16, 4506), (18, 4533), (19, 4539), (22, 4608),

Gene: Savannah\_9 Start: 4557, Stop: 4934, Start Num: 7

Candidate Starts for Savannah\_9:

(1, 4155), (2, 4257), (5, 4350), (Start: 7 @4557 has 31 MA's), (9, 4596), (11, 4623), (16, 4794), (18, 4821), (19, 4827), (22, 4896),

Gene: Scumberland\_11 Start: 4918, Stop: 5292, Start Num: 7

Candidate Starts for Scumberland\_11:

(4, 4654), (5, 4711), (Start: 7 @4918 has 31 MA's), (10, 4960), (16, 5152), (18, 5179), (22, 5254),

Gene: Selwyn23\_11 Start: 4930, Stop: 5304, Start Num: 7

Candidate Starts for Selwyn23\_11:

(4, 4666), (5, 4723), (Start: 7 @4930 has 31 MA's), (10, 4972), (16, 5164), (18, 5191), (22, 5266),

Gene: Shotgun\_9 Start: 4533, Stop: 4910, Start Num: 7

Candidate Starts for Shotgun\_9:

(1, 4131), (2, 4233), (5, 4326), (Start: 7 @4533 has 31 MA's), (9, 4572), (11, 4599), (16, 4770), (18, 4797), (22, 4872),

Gene: Smarties\_13 Start: 5415, Stop: 5804, Start Num: 7

Candidate Starts for Smarties\_13:

(Start: 7 @5415 has 31 MA's), (8, 5460), (12, 5541), (13, 5592), (17, 5667), (18, 5691), (20, 5724), (21, 5763), (22, 5766),

Gene: Yeti\_10 Start: 4700, Stop: 5074, Start Num: 7

Candidate Starts for Yeti\_10:

(4, 4436), (5, 4493), (Start: 7 @4700 has 31 MA's), (10, 4742), (16, 4934), (18, 4961), (22, 5036),