Influenza Group Sequencing Report

Statens Serum Institut

Marta Maria Ciucani

22/04/2024

Contents

Run NGS_test_reporting **2**

Controls . . . 2

Human samples . . . 3

Swine samples . . . 6

Avian samples . . . 8

Avian Genotypes - Internal segments . . . 9

Pairwise distance plots **10**

Human plots . . . 10

Swine plots . . . 12

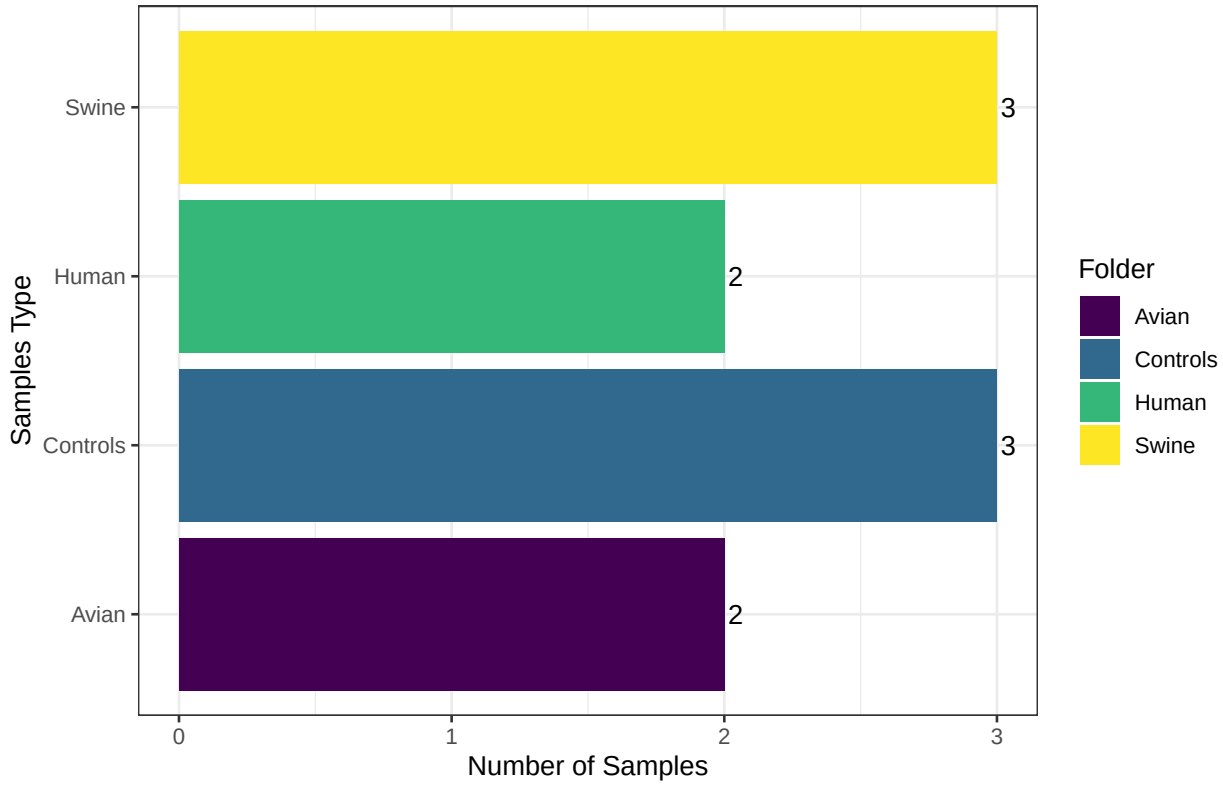
Avian plots . . . 14

Run NGS_test_reporting

Overall run

In this run we sequenced in total 10 samples.

Figure 1: Type and Number of Samples



- **Need to re-run: No**
- **Contamination: No**

Controls

We had 3 controls.

Note:The controls that positive for influenza are: C-Control2, C-Control3

Human samples

There are 2 human samples in this run.

Type	Number
Influenza A	2
Influenza B	0

Human subtypes identified in the run:

Subtype	Number
A/H1N1	1
A/H3N2	1
B/Victoria	0

Figure 2: Human Samples

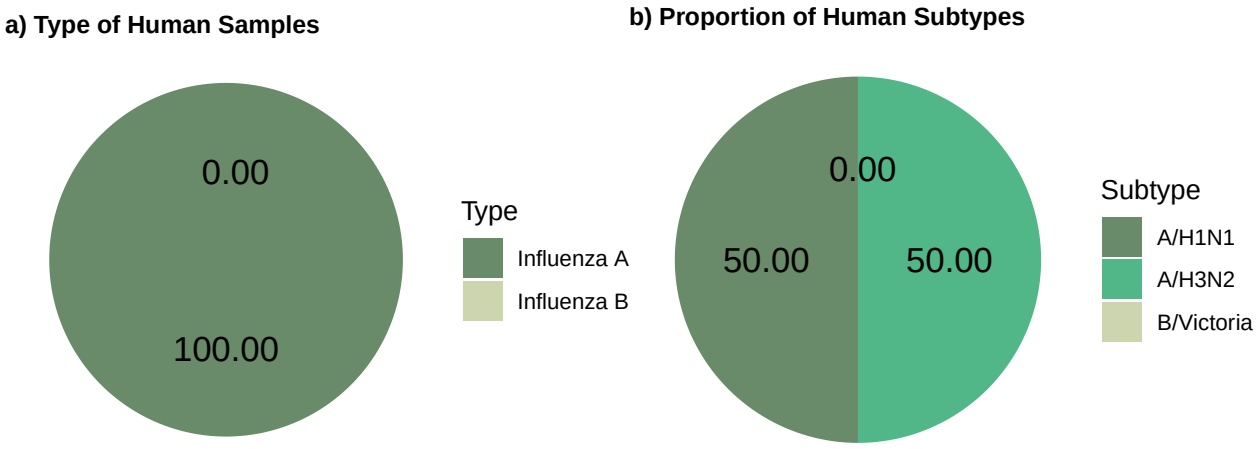
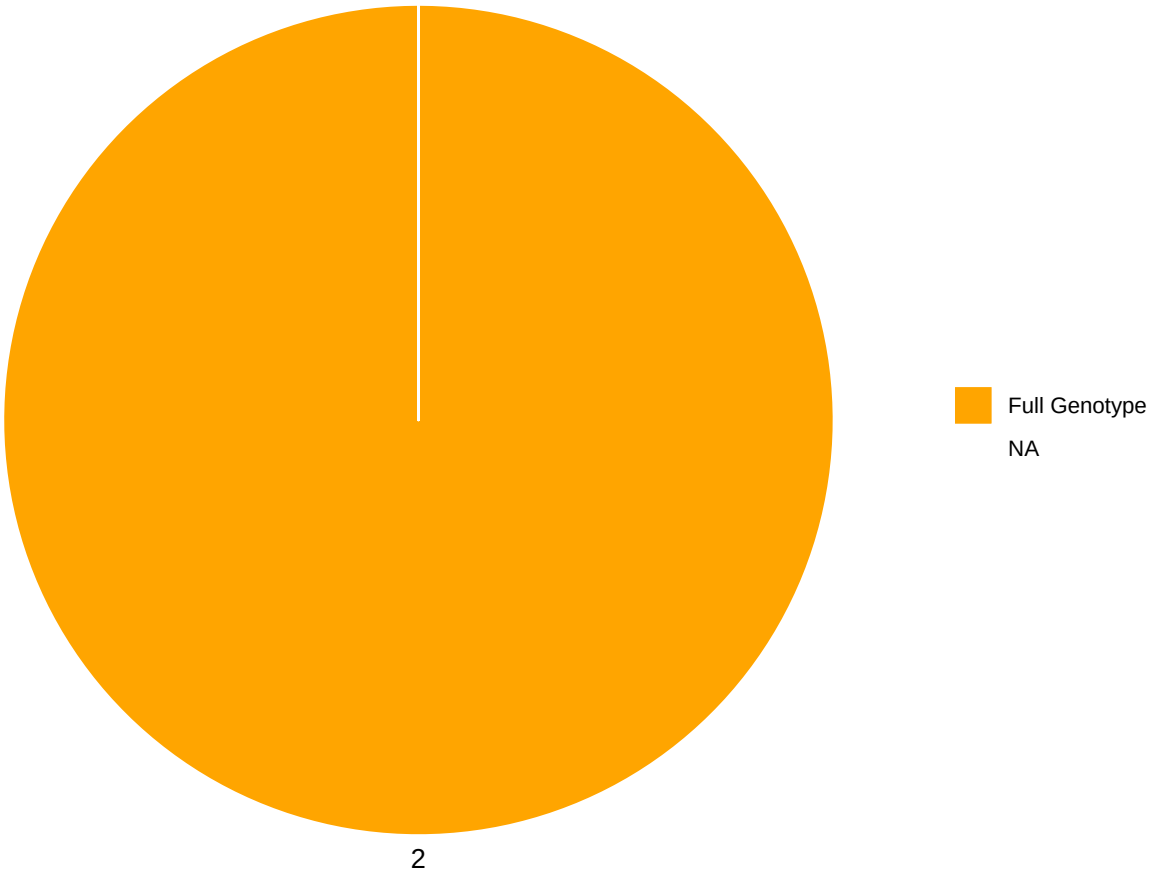


Figure 3: The success rate of the human samples.



List of samples with **complete genotype**:

Sample	Full Genotype
IA-Human1	H3N2
IA-Human2	H1N1

List of samples with **partial genotype**:

```
No partial genotypes
```

List of samples with **partial and indeterminate genotype**:

```
No indeterminate genotypes
```

List of samples with **new genotype**:

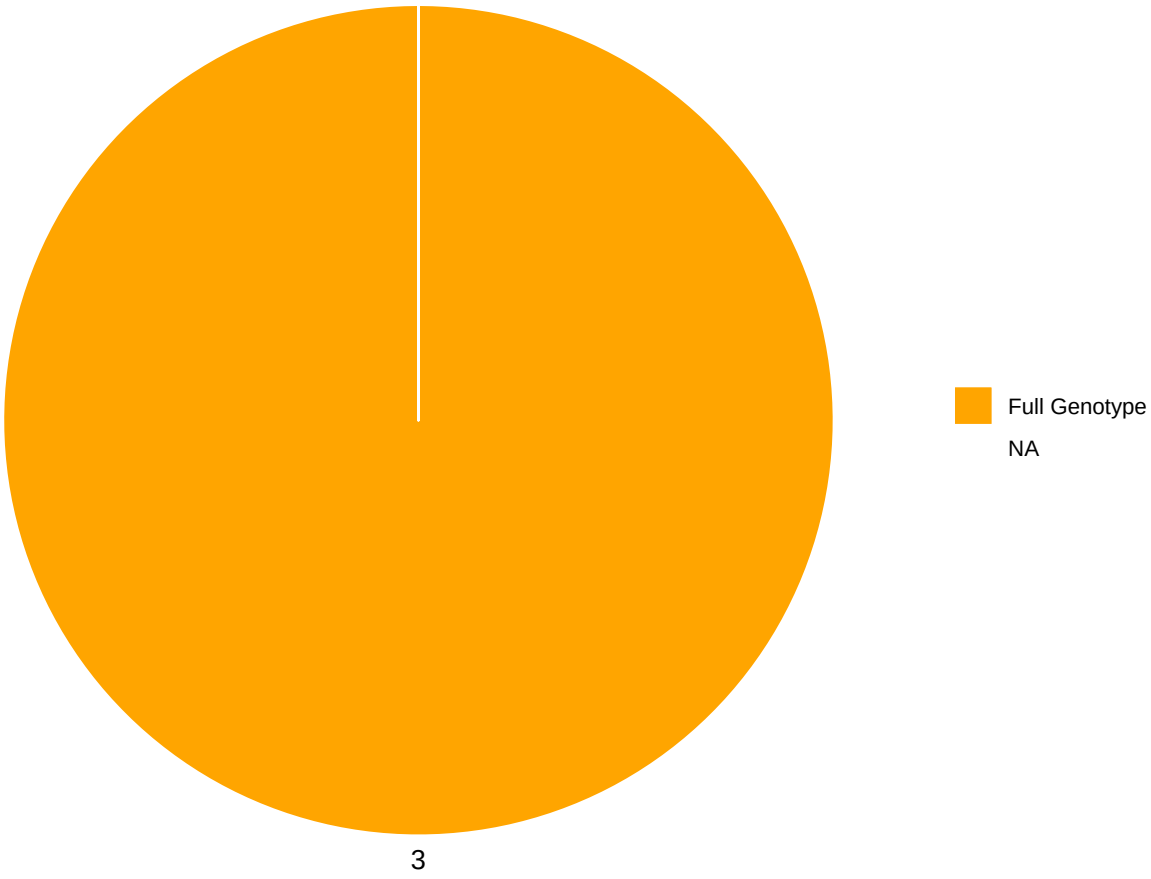
```
No new genotypes
```

There are no failed samples.

Swine samples

There are 3 swine samples in this run.

Figure 4: The success rate of the swine samples.



List of samples with **complete genotypes**:

Sample	Full Genotype
SI-Swine1	H1avN2sw-5
SI-Swine2	H1pdmN1av-2
SI-Swine3	H1pdmN1av-2

List of samples with **partial genotype**:

```
No partial genotypes
```

List of samples with **partial and indeterminate genotype**:

```
No indeterminate genotypes
```

List of samples with **new genotype**:

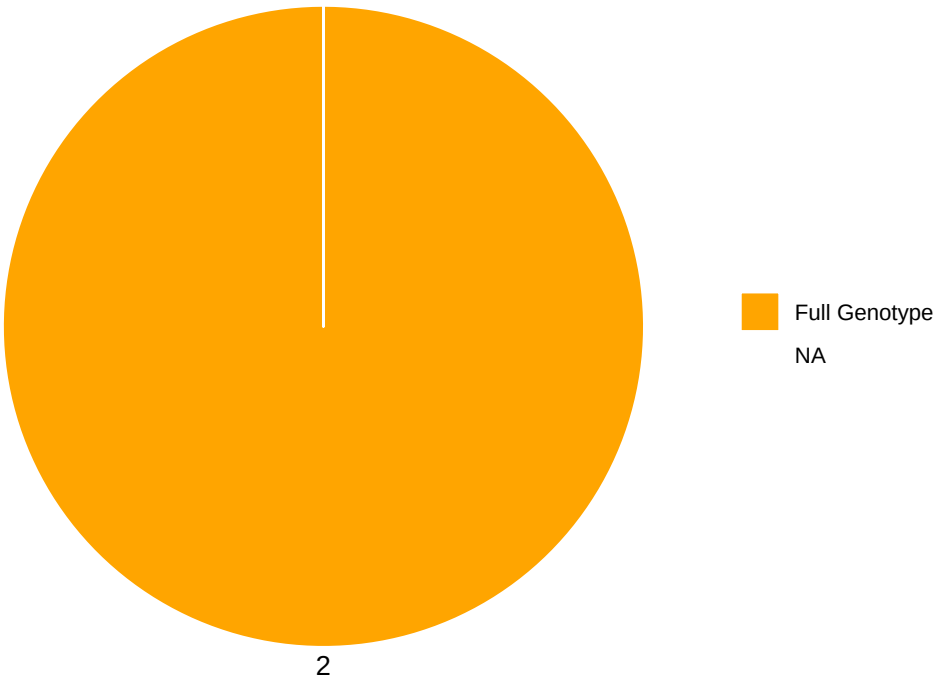
```
No new genotypes
```

There are no failed samples.

Avian samples

There are 2 avian samples in this run.

Figure 5: The success rate of the avian samples.



List of samples with **HA and NA genotyped**:

Sample	Full Genotype
AI-Avian1	H5N1
AI-Avian2	H5N1

List of samples with **partial and indeterminate subtypes**:

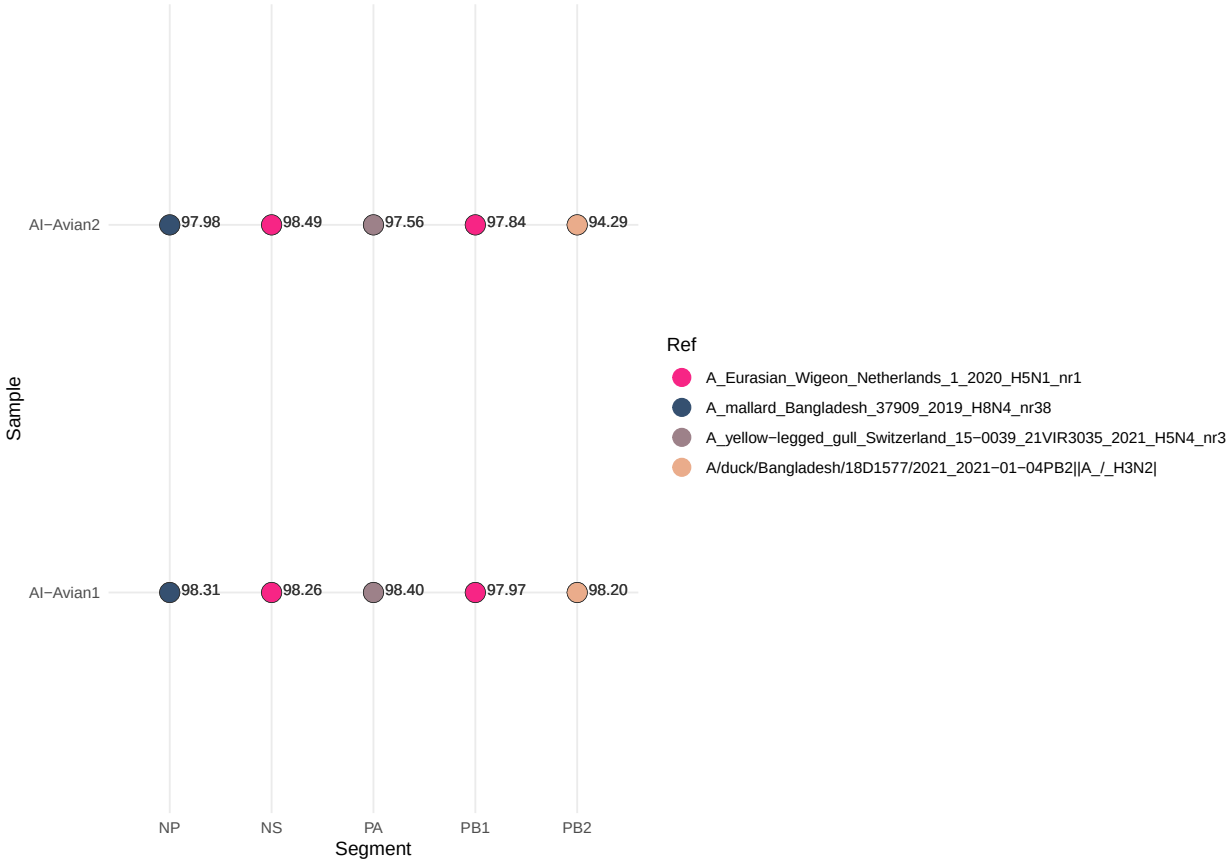
```
No indeterminate subtypes
```

List of samples with **new genotype**:

```
No new genotypes
```

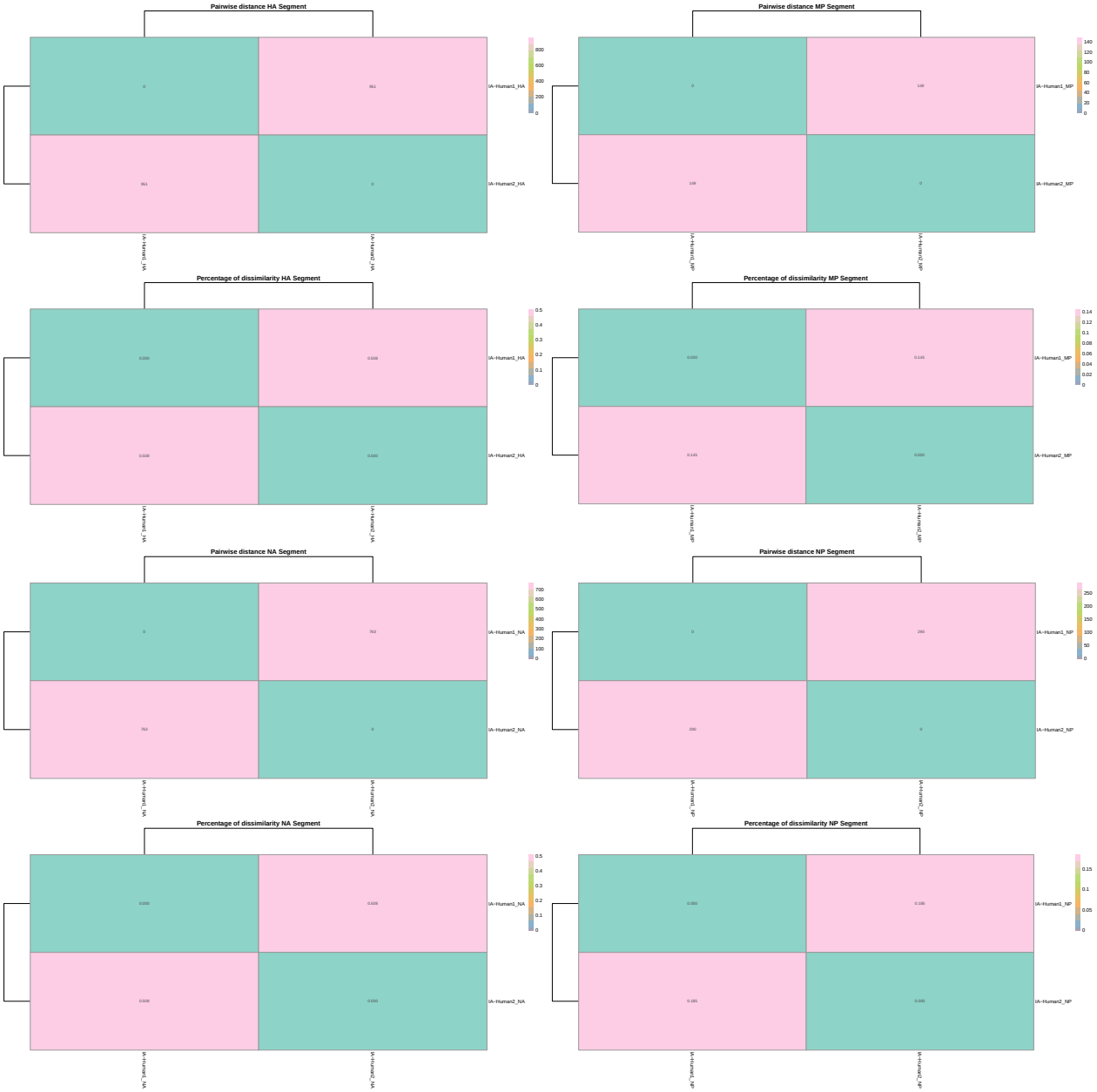
There are no failed samples.

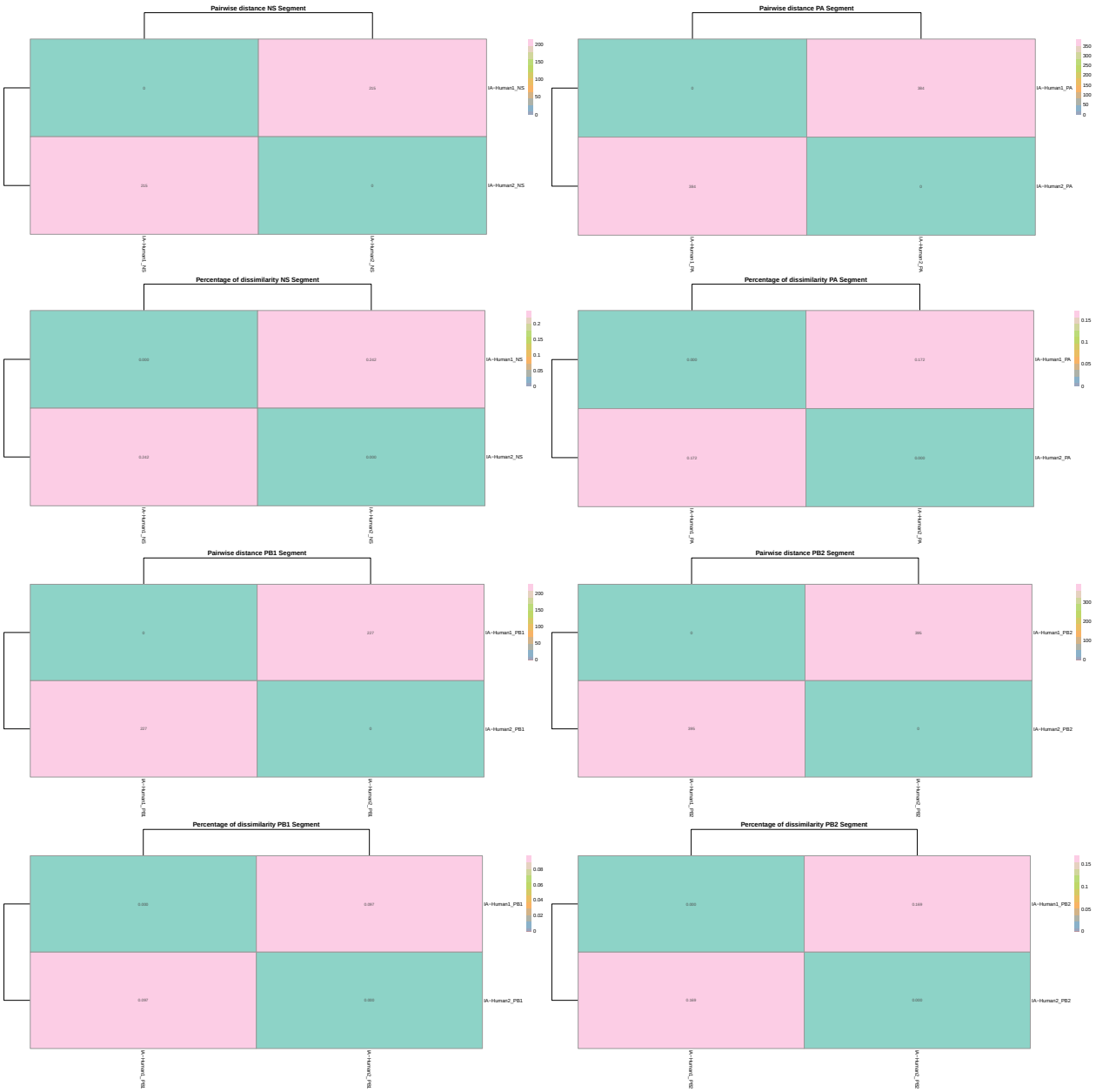
Avian Genotypes - Internal segments



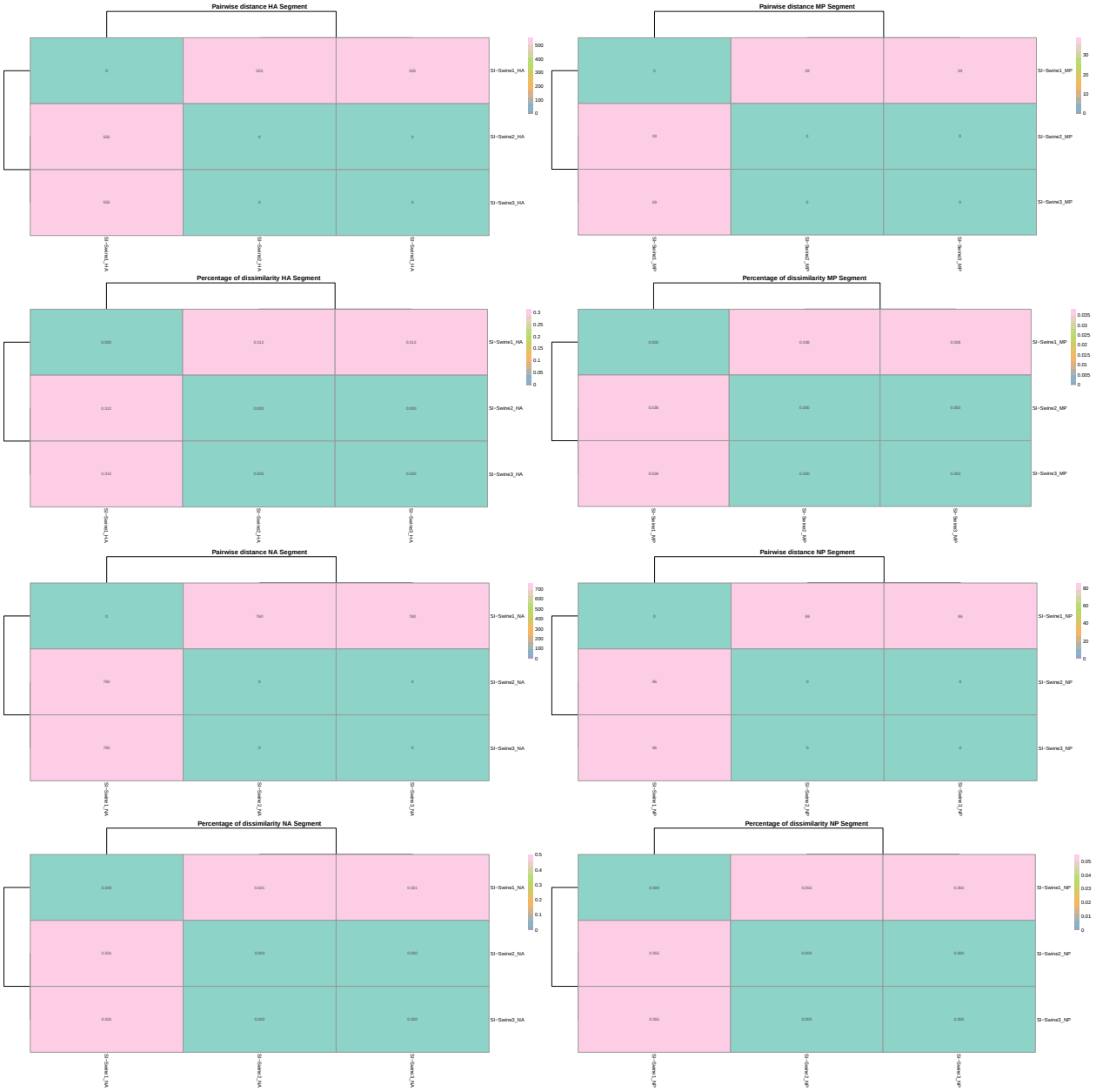
Pairwise distance plots

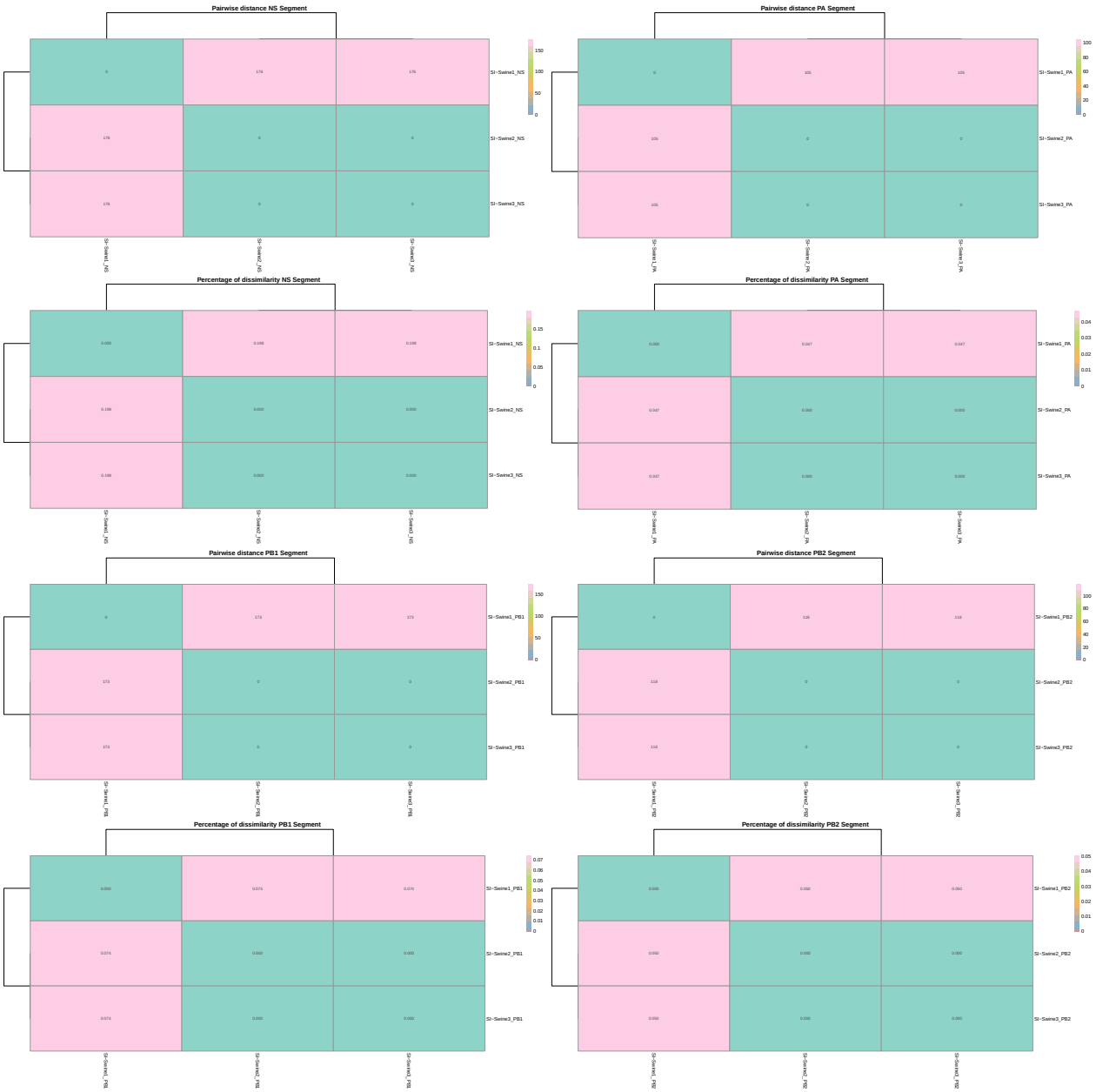
Human plots



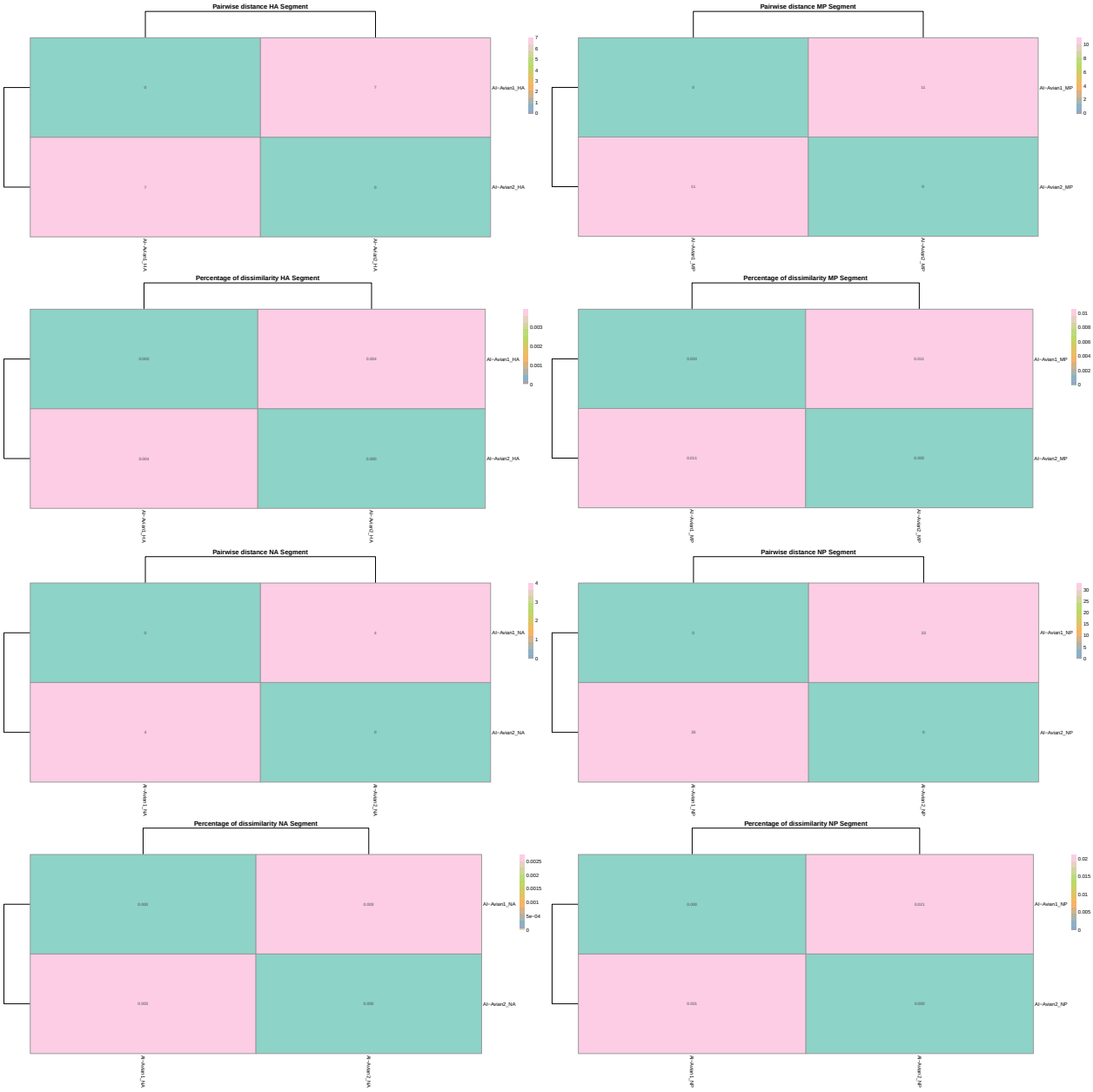

Pairwise distance NS Segment
Pairwise distance PA Segment
Percentage of dissimilarity NS Segment
Percentage of dissimilarity PA Segment
Pairwise distance PB1 Segment
Pairwise distance PB2 Segment
Percentage of dissimilarity PB1 Segment
Percentage of dissimilarity PB2 Segment

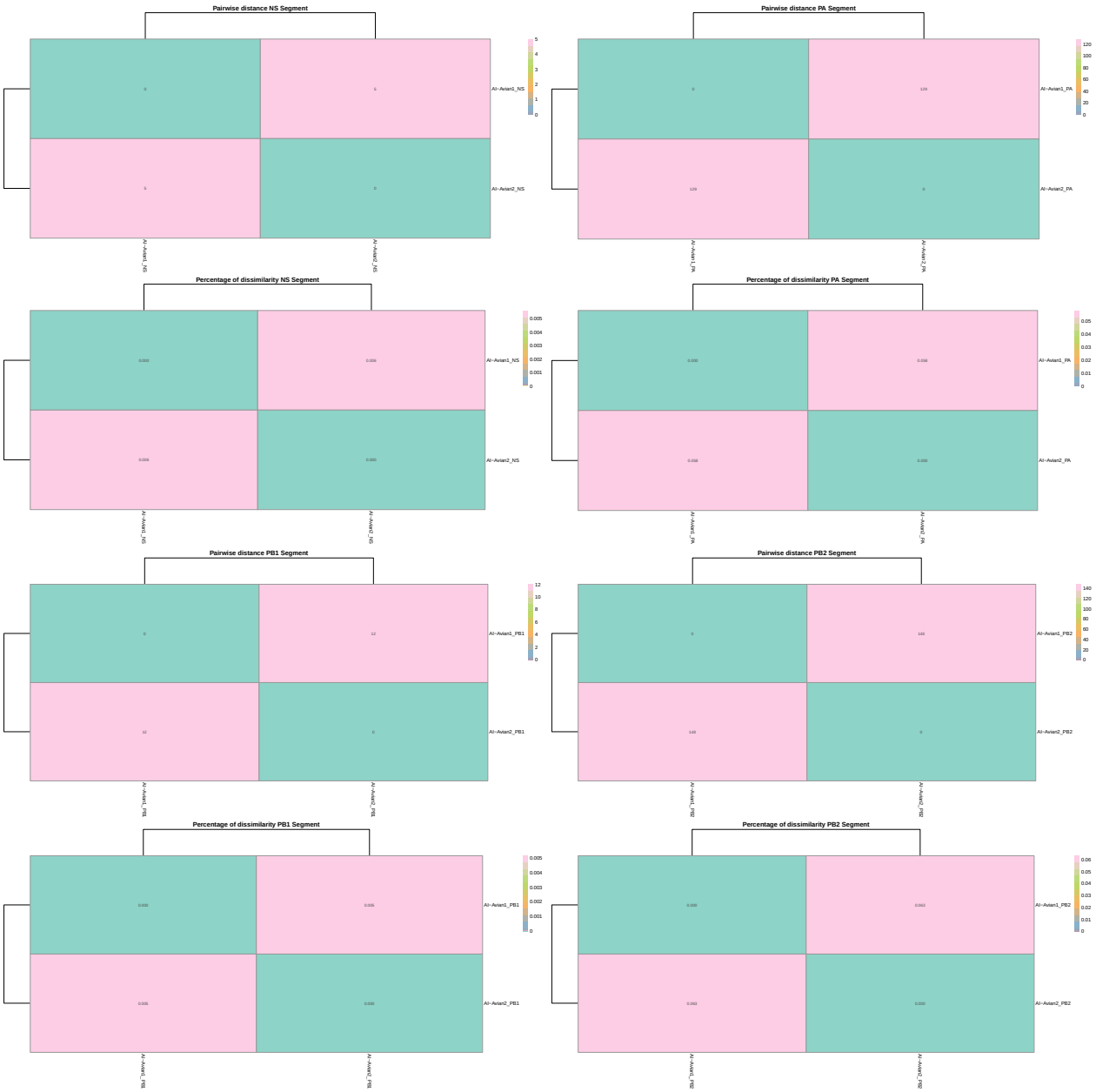
Swine plots


Pairwise distance HA Segment
Pairwise distance MP Segment
Percentage of dissimilarity HA Segment
Percentage of dissimilarity MP Segment
Pairwise distance NA Segment
Pairwise distance NP Segment
Percentage of dissimilarity NA Segment
Percentage of dissimilarity NP Segment


Pairwise distance NS Segment
Pairwise distance PA Segment
Percentage of dissimilarity NS Segment
Percentage of dissimilarity PA Segment
Pairwise distance PB1 Segment
Pairwise distance PB2 Segment
Percentage of dissimilarity PB1 Segment
Percentage of dissimilarity PB2 Segment

Avian plots


Pairwise distance HA Segment
Percentage of dissimilarity HA Segment
Pairwise distance NA Segment
Percentage of dissimilarity NA Segment
Pairwise distance MP Segment
Percentage of dissimilarity MP Segment
Pairwise distance NP Segment
Percentage of dissimilarity NP Segment
Al-Avian1_HA
Al-Avian2_HA
Al-Avian1_NA
Al-Avian2_NA
Al-Avian1_MP
Al-Avian2_MP
Al-Avian1_NP
Al-Avian2_NP


Pairwise distance NS Segment
Pairwise distance PA Segment
Percentage of dissimilarity NS Segment
Percentage of dissimilarity PA Segment
Pairwise distance PB1 Segment
Pairwise distance PB2 Segment
Percentage of dissimilarity PB1 Segment
Percentage of dissimilarity PB2 Segment