

## The Configuration of Visualization

### Configuring Genome View

HicP uses JBrowse to render genomic feature data, so the configuration of genome view is the same as JBrowse. You can check [http://gmod.org/wiki/JBrowse\\_Configuration\\_Guide](http://gmod.org/wiki/JBrowse_Configuration_Guide) to learn the detail configuration document about JBrowse.

HicP has added one glyph called “arc” to render interaction data as an arc line. Besides this, HicP also integrates a TAD triangle images to show matrix Heat Map data.

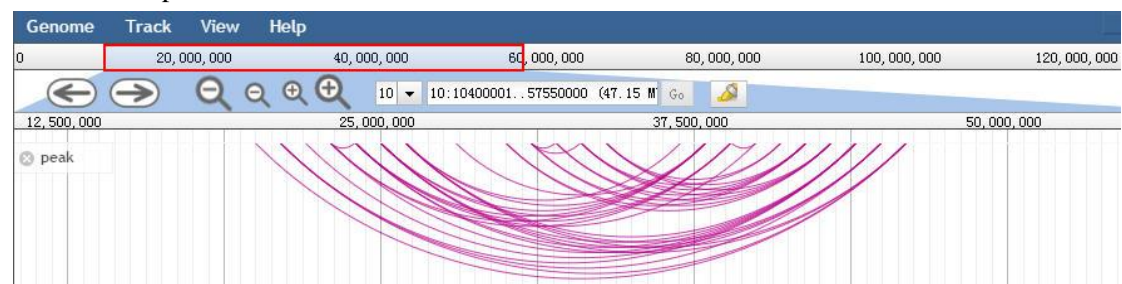
The following part will describe these two glyphs.

#### 1. ARC glyph

An example configuration of ARC glyph is shown like this:

```
{
  "key": "peak",
  "feature": [
    "arc"
  ],
  "storeClass": "JBrowse/Store/SeqFeature/GFF3",
  "category": "My track",
  "autocomplete": "all",
  "track": "ARC",
  "style": {
    "className": "feature",
    "showLabels": false,
    "showTooltips": false
  },
  "chunkSizeLimit": "10000000",
  "maxFeatureScreenDensity": "20",
  "trackType": "src/JBrowse/View/Track/CanvasFeatures",
  "urlTemplate": "tracks/arc/{refseq}/arc.gff3",
  "compress": 0,
  "label": "peak",
  "type": "src/JBrowse/View/Track/CanvasFeatures"
}
```

And an example rendered result will be shown like this:



For “ARC” glyph, two data formats are available, GFF3 format and Tabix format. The GFF3

format is used for feature data file with a small size while Tabix format is used for feature data file which is a large compressed GFF3 file.

For GFF3 format, you need to configure “storeClass” as “JBrowse/Store/SeqFeature/GFF3”, while for Tabix format you need to configure “storeClass” as “JBrowse/Store/SeqFeature/HICTabix”

An example GFF3 format for ARC is like this:

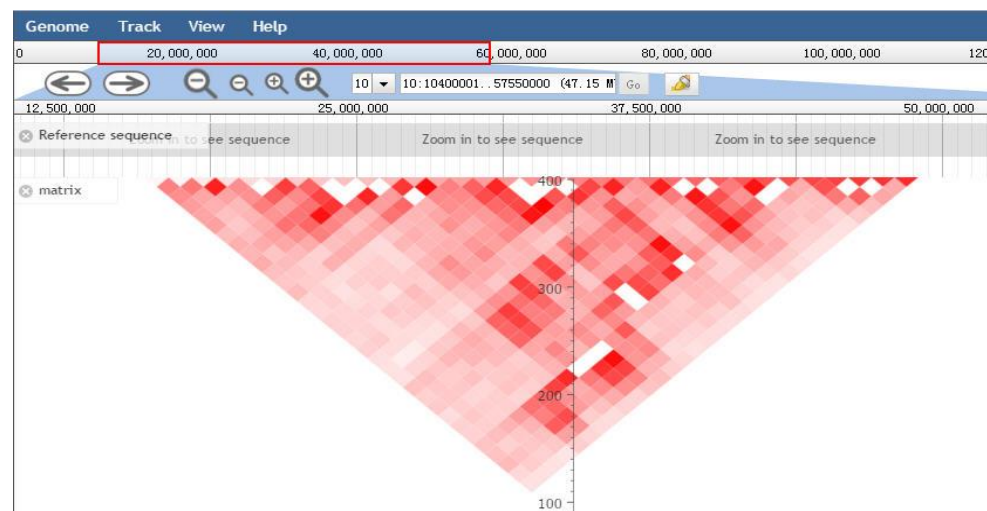
10	hic	arc	20000000	46000000	.	.	.	ID=148;Name=148
10	hic	arc	21000000	44000000	.	.	.	ID=173;Name=173
10	hic	arc	21000000	45000000	.	.	.	ID=174;Name=174
10	hic	arc	21000000	46000000	.	.	.	ID=175;Name=175

## 2. Matrix glyph

An example configured track of matrix is shown like this:

```
{
  "urlTemplate" : "tracks/tadstatic/{refseq}/trackData.json",
  "compress" : 0,
  "style" : {
    "className" : "image"
  },
  "category" : "My track",
  "type" : "ImageTrack.Wiggle",
  "label" : "matrix",
  "key" : "matrix"
}
```

And an example rendered result will be shown like this:



To render the same result, you can check “Fixed-Resolution Tiled Image Store” ([http://gmod.org/wiki/JBrowse\\_Configuration\\_Guide#Data\\_Format\\_Specification:\\_Fixed-Resolution\\_Tiled\\_Image\\_Store](http://gmod.org/wiki/JBrowse_Configuration_Guide#Data_Format_Specification:_Fixed-Resolution_Tiled_Image_Store)) to see detailed configuration.

HicP uses a Java program to generate static image, you can download it from the download page to render your own heatmap image.