JSON - Profile File

The profile file gives the following information in json format:

- 5' to 3' read distribution along transcripts
- mapping statistics
- read coverage statistics

All the information stored in the profile are derived from single transcript loci only. The read distribution information is given as an array of bins of different lengths. Five bins are reported, with length of respectively 250, 750, 1250, 1750, 2000 bases. Each transcript is assigned to a bin depending on its length and the read distribution counters for that transcript are incremented. The counters are stored for both sense and antisense directions. For each bin, the sum of the counters for both directions is also stored. Mappings statistics are always computed while coverage statistics are performed on demand.

An (not exhaustive) example of how a profile stored in JSON format looks like is showed below (the *sense* and *asen se* arrays are not showed for space restrictions):

```
{
  "masters": [
    {
      "nfactor": NaN,
      "asense": [],
      "sums": 9747920,
      "suma": 9747920,
      "sense": []
    },
    {
      "nfactor": NaN,
      "asense": [],
      "sums": 264780,
      "suma": 264780,
      "sense": []
    },
    {
      "nfactor": NaN,
      "asense": [],
      "sums": 39660,
      "suma": 39660,
      "sense": []
    },
    {
      "nfactor": NaN,
      "asense": [],
      "sums": 73356,
      "suma": 73356,
      "sense": []
    },
    {
      "nfactor": NaN,
      "asense": [],
      "sums": 386060,
      "suma": 386060,
      "sense": []
    }
  ],
  "binMinTranscripts": 100,
  "binMaxLengthDistance": 0.0,
  "mappingStats": {
    "readsLoci": 0,
    "singleTxLoci": 25097,
    "loci": 0,
    "readsTotal": 0,
    "txsExp": 0,
    "mappingsTotal": 0,
    "mappingsMapped": 0,
    "readLenMax": 80,
    "lociUnsolved": 0,
    "pairsWrongOrientation": 8072,
    "mappingPairsNoTx": 0,
    "mappingsWrongStrand": 1325031,
    "mappingsSingleTxLociNoAnn": 577109,
```

```json
    "mappingPairsSingleTxLoci": 21023552,
    "lociExp": 0,
    "events": 0,
    "mappingsSingleTxLoci": 9924127,
    "txs": 0,
    "readsSingleTxLoci": 24584539,
    "eventsExp": 0,
    "readLenMin": 72
  },
  "binMaxExprDistance": 0.0,
  "coverageStats": {
    "coverage": {
      "length": 0,
      "coverage": []
    }
  },
  "binMinReads": 10000
}
```