Chart函式

目的：將json data轉為圖表形式呈現

所需參數：json資料、division id(html)、字體大小

可進行操作：

- 下載PNG/JPG檔

html

```
<script src="https://d3js.org/d3.v6.min.js"></script>
<script src="chart_example.js"></script>


<body>
    <div class="Chart" style="width: 1500px;"></div>
</body>
```

javascript

```
function chart(data, divisionID, fontSize)
```

Json data input

Json data 的第一筆資料格式

```
{
    Xname:"x-coordinate", //X軸名稱
    Xticks:20, //X軸座標數量
    areaSpace:20, //areatypedata的圖間隔
    fontSize:{
        Xfontsize:"20", Yfontsize:"15", XnameFontsize:"20",
barFontsize:"20", dnaFontsize:"1",
    } //各部分的字體大小設定

}
```

Json data input

Bar type input data

```
{
    type: "bar",
    color: "#000000",
    data:[
        { name: 'IRES 1', start: 81, end: 83, direction: false, interaction: "IRES 2" },
        { name: 'IRES 2', start: 86, end: 84, direction: true, interaction: "IRES 1" },
        { name: 'IRES 3', start: 87, end: 90, direction: true }
    ] ,
    dataname: "IRES1"
},
```

highlight type input data
(重點強調某區段)

```
{
    type: "highlight",
    start:105,
    end:505
}
```

Json data input

Area type input data

```json
{
    type: "area",
    color: "#a9b4a4",
    data:[
        { x: 80, y: 0.01 },
        { x: 81, y: 0.019308455 },
        { x: 82, y: 0.019308455 },
        { x: 83, y: 0.015 },
        { x: 84, y: 0.019308400 },
        { x: 85, y: 0.012 },
        { x: 86, y: 0.019308455 },
        { x: 87, y: 0.018 },
        { x: 88, y: 0.019308455 },
        { x: 89, y: 0.003 },
        { x: 90, y: 0.009 }
    ] ,
    dataname: "conversation1",
    numberofYdigit:5
},
```

Dna type input data

```json
{
    type: "dna",
    data:[
        { x: 81, y: "C" },
        { x: 82, y: "T" },
        { x: 83, y: "A" },
        { x: 84, y: "G" },
        { x: 85, y: "C" },
        { x: 86, y: "T" },
        { x: 87, y: "A" },
        { x: 88, y: "G" },
        { x: 89, y: "C" },
        { x: 90, y: "T" }
    ] ,
    dictionary: {
        "A": "#0294A5",
        "T": "#921AFF",
        "C": "#AE8F00",
        "U": "#000000",
        "G": "#D72F01"
    },
    dataname: "CTAG1"
}
```
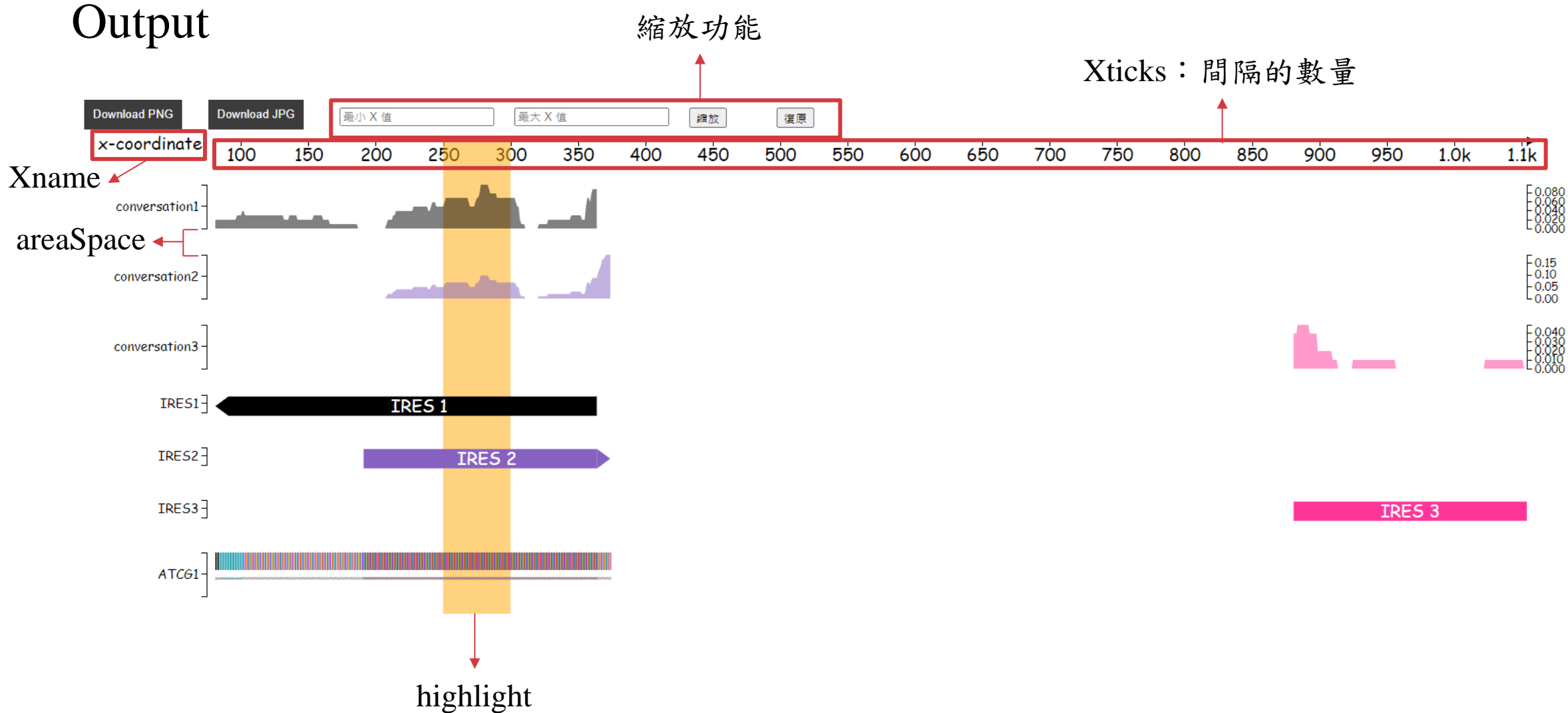
Output

Bar type output

IRES1

IRES 1 IRES 2 IRES 3

dataname

data.interaction

data.direction:true

Area type output

conversation1

0.01500
0.01000
0.00500
0.00000

dataname

numberofYdigit

小數點後顯示幾位

Output

Dna type output

Dictionary，自定義字母和對應顏色

ATCG1

dataname

Output

縮放功能

Xticks：間隔的數量

Xname

areaSpace

highlight
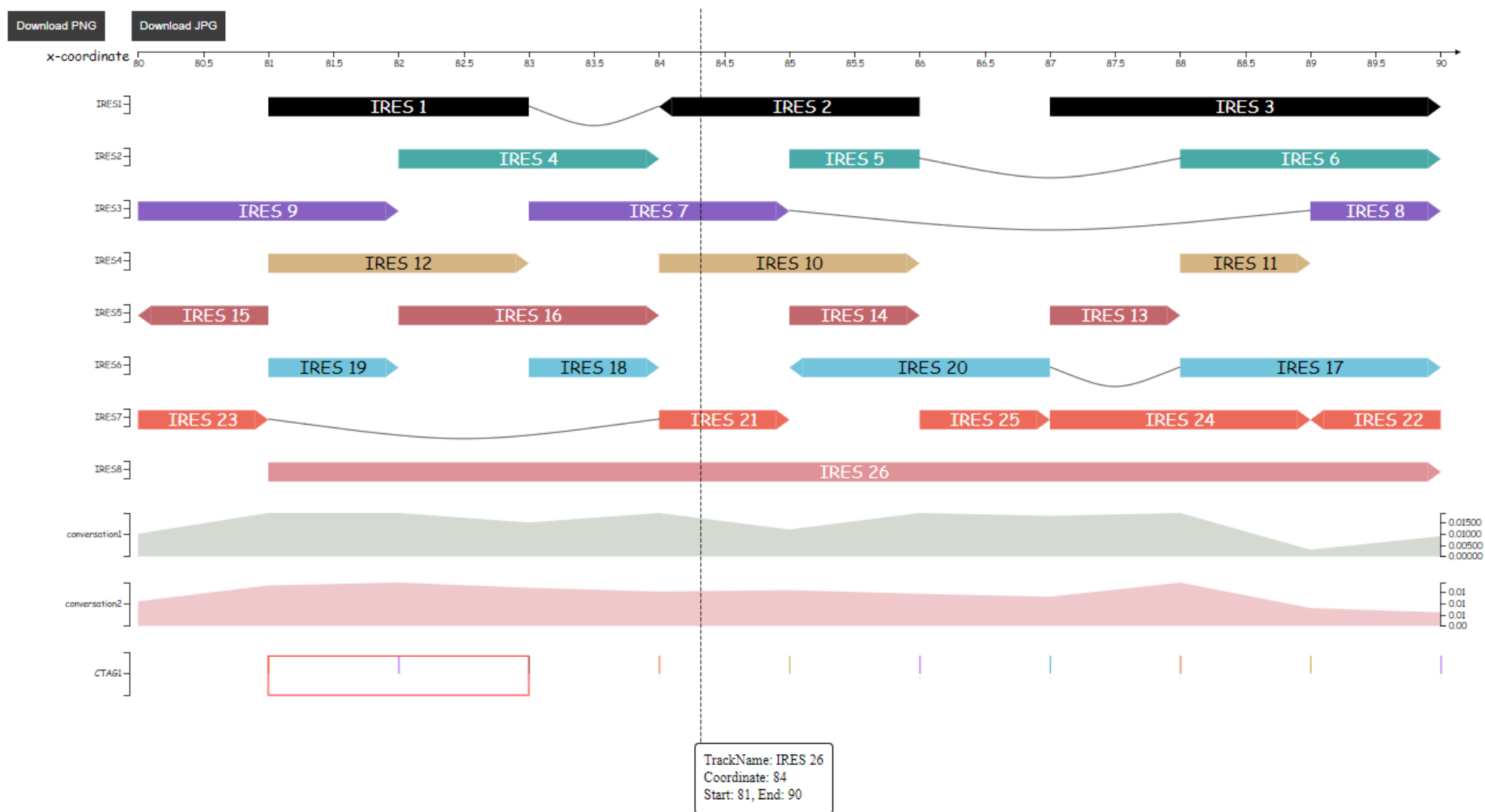
常用色碼

#000000

#48A6A9

#8661C1

#D4B483

#C1666B

#ED6A5A

#DF9298

#A9B4A4

#72C4DC