

# BLAST Results Analysis

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Read the results TSV (Tab separated format) file from BLAST.

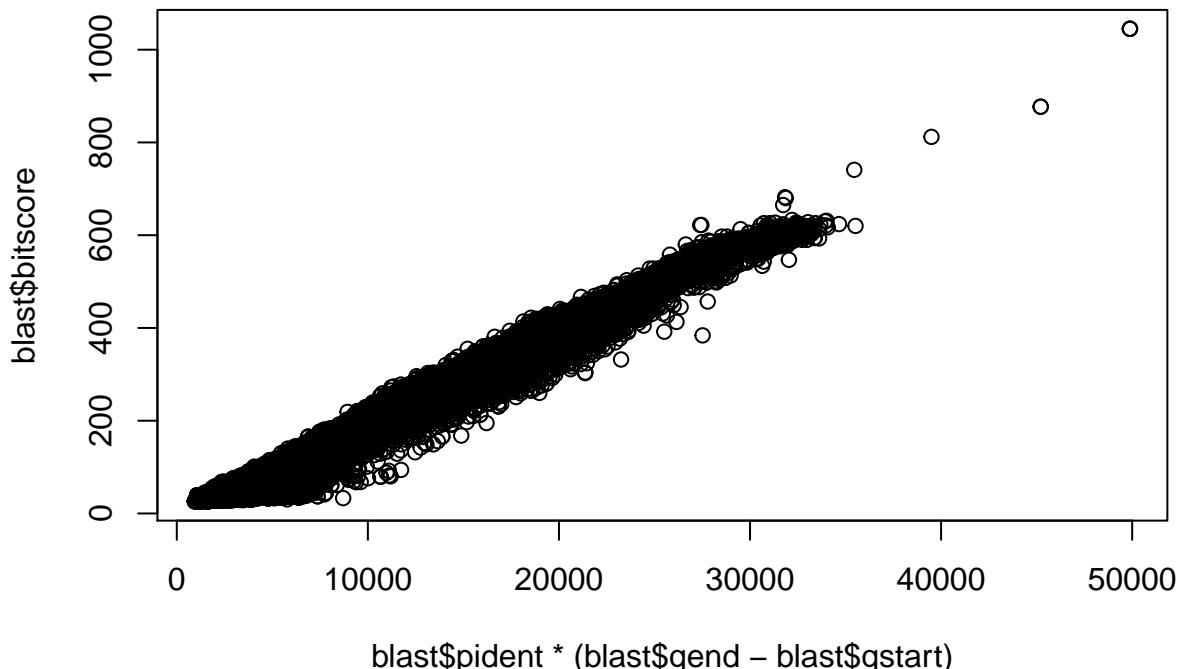
```
blast <- read.table("~/work/mm-second.x.zebrafish.tsv")
```

Set the column names.

```
colnames(blast) <- c("qseqid", "sseqid", "pident", "length", "mismatch", "gapopen", "qstart", "qend", "bitscore")
```

Plot aspects of the results.

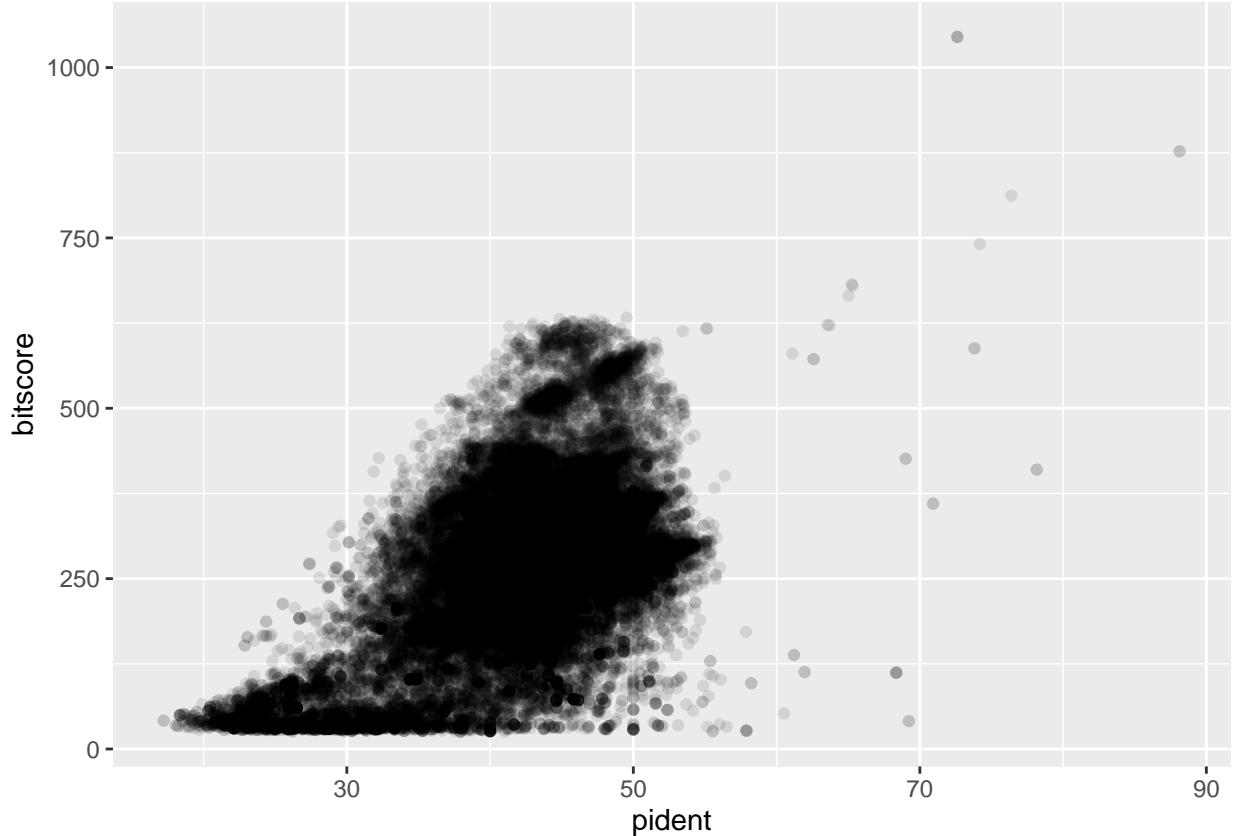
```
## Assuming your blast results are stored in an object called 'b'  
plot(blast$pident * (blast$qend - blast$qstart), blast$bitscore)
```



ggplot2

```
library(ggplot2)

ggplot(blast, aes(pident, bitscore)) + geom_point(alpha=0.1)
```



```
ggplot(blast, aes((blast$pident * (blast$qend - blast$qstart)), bitscore)) + geom_point(alpha=0.1) + geom_smooth(method = "gam", formula = y ~ s(x, bs = "cs"))

## Warning: Use of 'blast$pident' is discouraged. Use 'pident' instead.

## Warning: Use of 'blast$qend' is discouraged. Use 'qend' instead.

## Warning: Use of 'blast$qstart' is discouraged. Use 'qstart' instead.

## Warning: Use of 'blast$pident' is discouraged. Use 'pident' instead.

## Warning: Use of 'blast$qend' is discouraged. Use 'qend' instead.

## Warning: Use of 'blast$qstart' is discouraged. Use 'qstart' instead.

## 'geom_smooth()' using method = 'gam' and formula 'y ~ s(x, bs = "cs")'
```

