

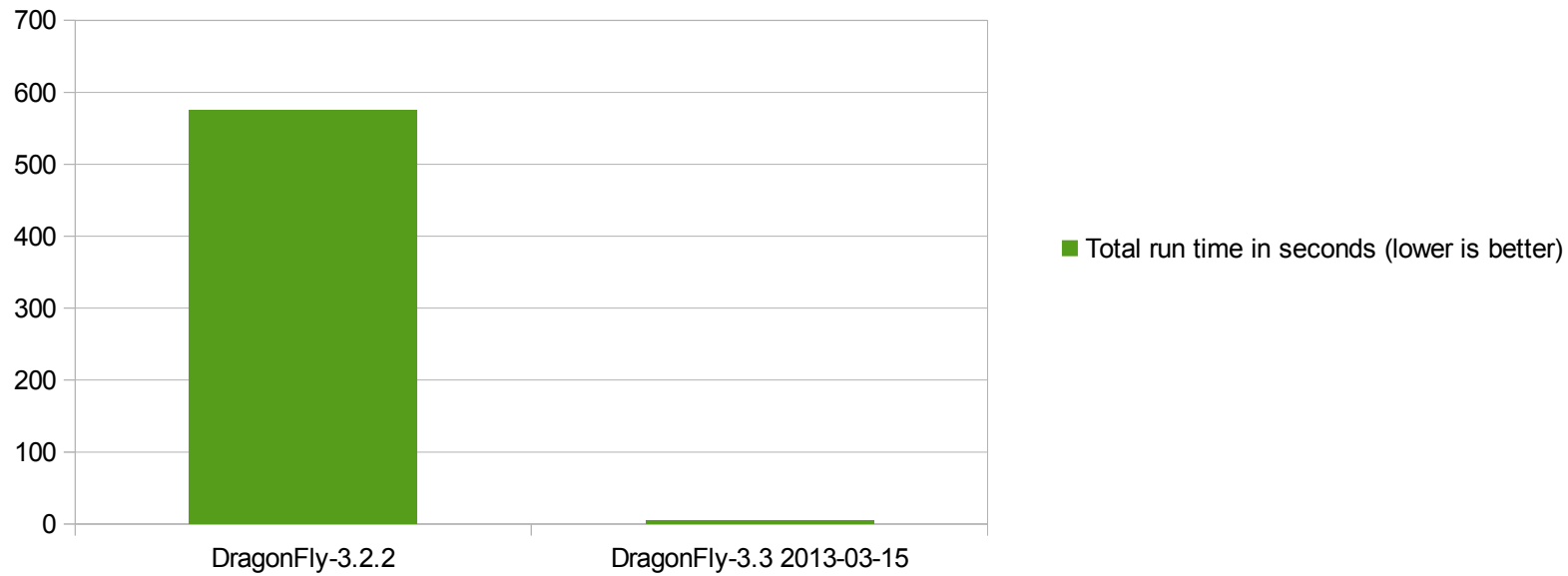
## Tmpfs performance

### Sysbench File IO on tmpfs

System	Total run time in seconds (lower is better)
DragonFly-3.2.2	574.8513
DragonFly-3.3 2013-03-15	4.6842

Work size: 6GB  
16 concurrent threads

### Sysbench File IO on tmpfs



### Improvements from DragonFly 3.2.2 to March 2013

#### **More than 99%**

The DragonFly 3.2.2 system was swapping and waiting for the MP lock

Tmpfs performance was effectively limited by disk speed on the DragonFly 3.2.2 system, whereas DragonFly 3.3 is able to keep all operations in RAM

## Setup details

### **Test system:**

- Core i5-3570K/8GB: 4 Ivy-Bridge cores @3.4 GHz, no HTT, no turbo-boost
- 8GB RAM
- 16GB swap on a WD RE4 HDD
- 16GB tmpfs filesystem mounted on /tmp
- sysbench-0.4.12

DragonFly versions:

- DragonFly 3.2.2
- DragonFly 3.3 from March 15, 2013 as of commit 8a2db35a8aae8fe1dd9a37bd5e7e316c9aaf8a7d

### **Benchmark script:**

```
mkdir -p /tmp/sb && cd /tmp/sb
```

```
for command in prepare run
```

```
do
```

```
sysbench      --num-threads=16 --test=fileio \  
              --file-total-size=6G --file-num=1024 \  
              --max-requests=500000 --file-test-mode=rndrw ${command}
```

```
done
```