**Frequency points: 1024**

**BW: 100 MHz**

**Central Frequency: 800MHz**

**T\_samp : 1 ms**

**Size for test: 40 seconds data**,**40MB**

Time Consume:

2DFFT 1 thread: 12.85s

2DFFT 4 threads: 6.9 s

Heimdall: 5.82

SIgpyproc:  (Brute Force):  0.11 for single DM de-disperse

For 2000 DMs :0.11\*2000 = 220s (3.6)

Sigproc: Dedisperse\_all : 44s.

**Size for test: 100 seconds data**,**99MB**

Time Consume:

2DFFT 1 thread: 26.57s

2DFFT 4 threads: 9.95s

Heimdall: 7.60 s

SIgpyproc:  (Brute Force):  0.198s for single DM de-disperse

For 2000 DMs :0.198\*2000 = 396 s (6.6m)

Sigproc: Dedisperse\_all : 49s  58s (28 –g 100000)

**Size for test: 200 seconds** (**6.6 m**) **data**,**196MB**

Time Consume:

2DFFT 1 thread: 50.18s

2DFFT 4 threads: 16.6s

Heimdall: 16.251 s

SIgpyproc:  (Brute Force):  0.4s for single DM de-disperse

For 2000 DMs :0.4\*2000 = 800 s (13.3m)

Sigproc: Dedisperse\_all : 76s (1m16s)

**Size for test: 300 seconds** (**6.6 m**) **data**,**196MB**

Time Consume:

2DFFT 1 thread: 72s

2DFFT 4 threads: 21.9s

Heimdall: 19.6 s

SIgpyproc:  (Brute Force):  0.63s for single DM de-disperse

For 2000 DMs :0.63\*2000 = 1260 s (21m)

Sigproc: Dedisperse\_all : 131s (2m11s)  (-g 100000)

**Size for test: 400 seconds** (**6.6 m**) **data**,**392MB**

Time Consume:

2DFFT 1 thread: 106s (1m36s)

2DFFT 4 threads: 28.19s

Heimdall: 25.96 s

SIgpyproc:  (Brute Force):  0.8s for single DM de-disperse

For 2000 DMs :0.85\*2000 = 1700 s (28.3m)

Sigproc: Dedisperse\_all : 194.9s (3m14.925s )