1

$1,2$

3

th

GILDAS
SOFTWARE

~ 1000

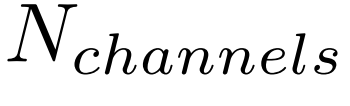
N

$N-1$

N^2

10^5

$N \times \log N$



$N_{channels}$

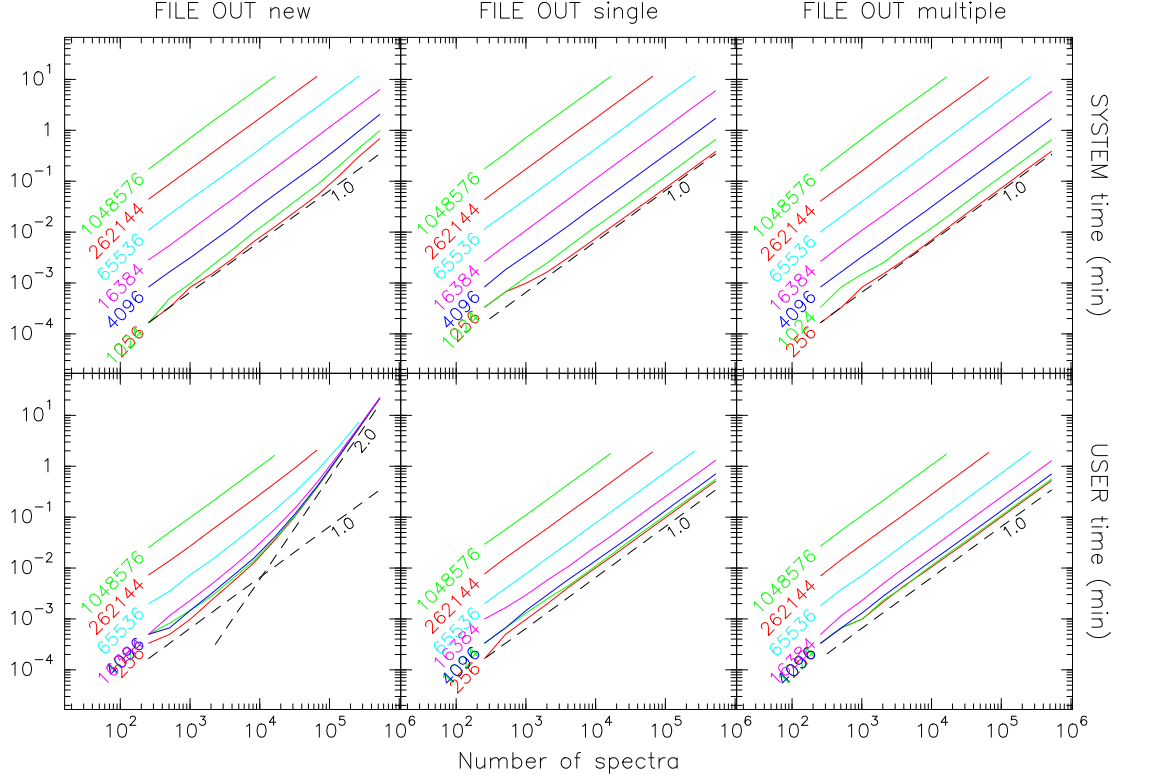
$N_{spectra} \times N_{channels} \sim 130,000$

$$N_{spectra} \times N_{channels} \sim 2,000,000$$

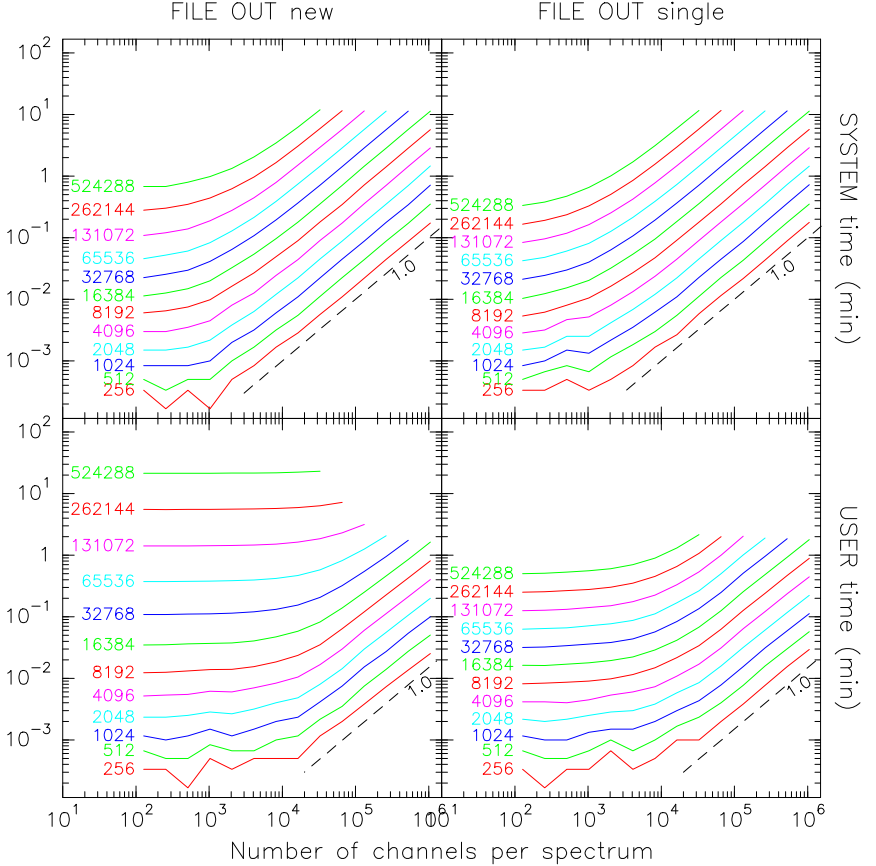
$$N_{spectra} \times N_{channels} \sim 25,000,000$$

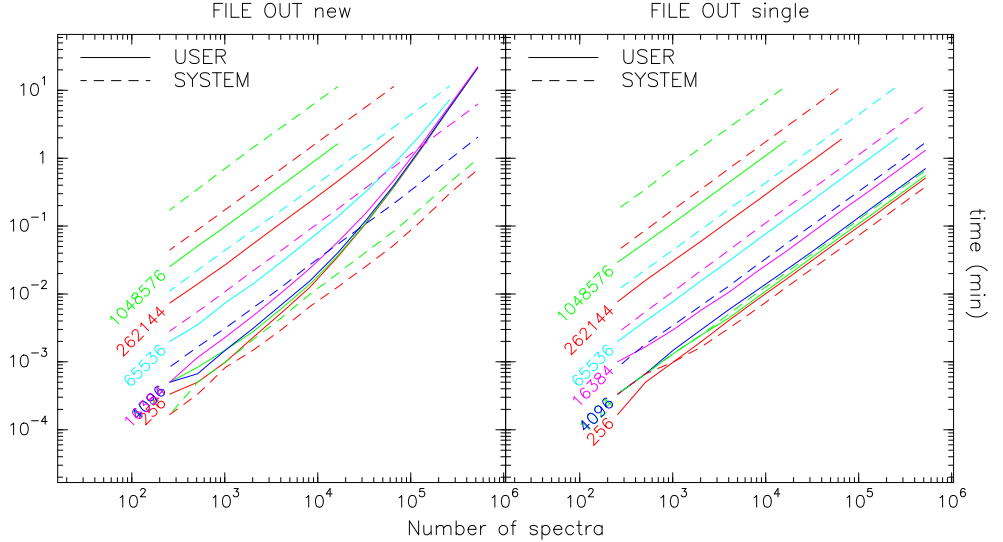
$$N_{spectra} \times N_{channels} \sim 270,000,000$$

$$N_{spectra} \times N_{channels} \sim 2,700,000,000$$

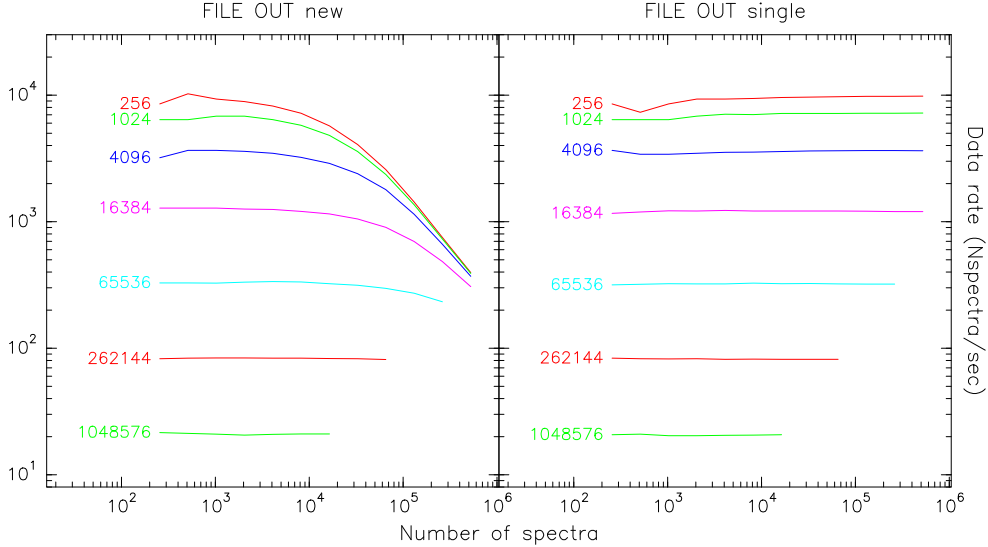

FILE OUT new
FILE OUT single
FILE OUT multiple
SYSTEM time (min)
USER time (min)
Number of spectra
1048576
262144
65536
16384
4096
1024
256
1.0
2.0

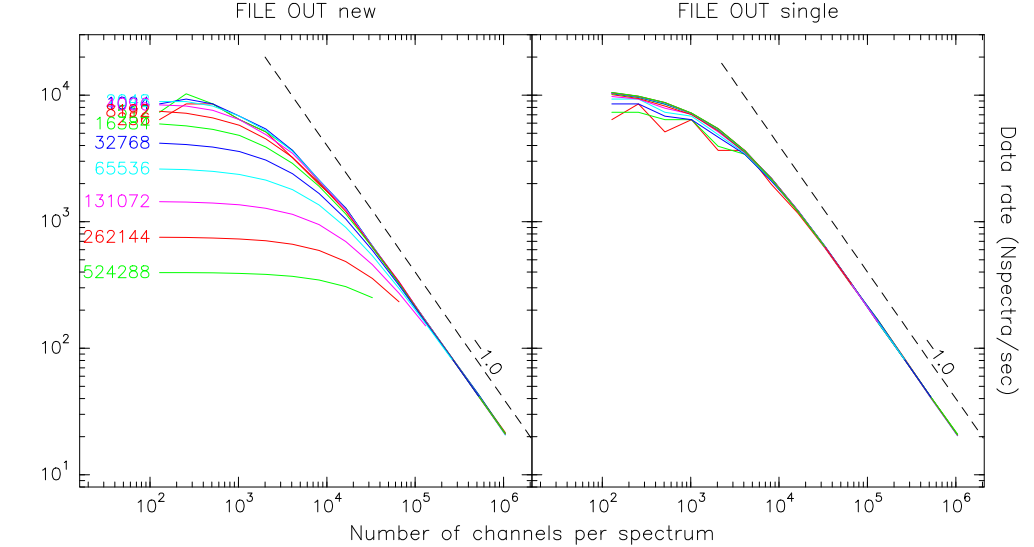
$\sim 10^4$


FILE OUT new
FILE OUT single
SYSTEM time (min)
USER time (min)
Number of channels per spectrum
524288
262144
131072
65536
32768
16384
8192
4096
2048
1024
512
256
1.0


FILE OUT new
FILE OUT single
USER
SYSTEM
1048576
262144
65536
16384
4096
256
time (min)
Number of spectra

~ 1


FILE OUT new
FILE OUT single
256
1024
4096
16384
65536
262144
1048576
10^4
10^3
10^2
10^1
10^2
10^3
10^4
10^5
10^6
Number of spectra
Data rate (Nspectra/sec)


FILE OUT new
FILE OUT single
2048
4096
8192
16384
32768
65536
131072
262144
524288
-1.0
-1.0
Data rate (Nspectra/sec)
Number of channels per spectrum

$< 10,000$