9.3. University of Canterbury Data Sets Comparison

The files in each of the data sets below have been concatenated into one file and their compression ratios measured.

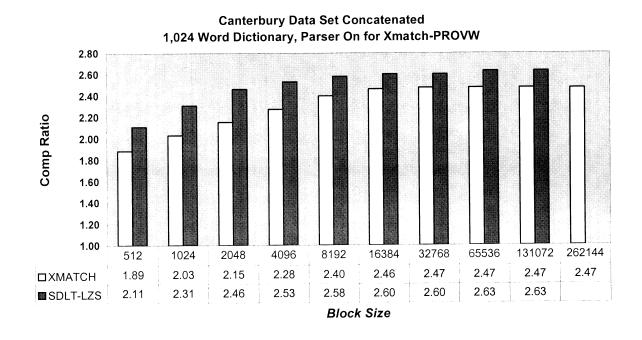
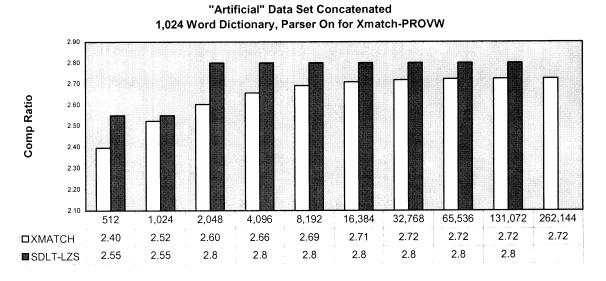


Table 25 - University of Canterbury - Canterbury Data Set Concatenated

Calgary Data Set Concatenated 1,024 Word Dictionary, Parser On for Xmatch-PROVW 2.50 2.00 Comp Ratio 1.50 1.00 0.50 0.00 4096 8192 16384 32768 65536 131072 262144 512 1024 2048 □XMATCH 1.47 1.58 1.70 1.81 1.91 1.97 2.00 2.02 2.02 2.03 1.57 1.74 1.88 1.95 1.99 2.01 2.03 2.03 2.03 ■SDLT-LZS

Table 26 - University of Canterbury - Calgary Data Set Concatenated

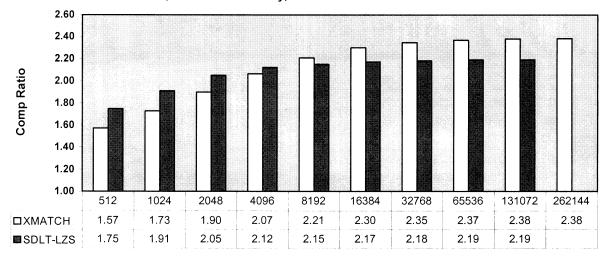


Block Size

Block Size

Table 27 - University of Canterbury - Artificial Data Set Concatenated

"Large" Data Set Concatenated 1,024 Word Dictionary, Parser On for Xmatch-PROVW



Block Size

Table 28 - University of Canterbury - "Large" Data Set Concatenated

10. Appendix A – University of Canterbury Data Sets

10.1. Calgary Data Set

File Name	File Description	No. of Files	Size (Kbytes)
Bib	Bibliographic files (refer format)	1	108.65
book1	Hardy: Far from the madding crowd	1	750.75
book2	Witten: Principles of computer speech	1	596.53
Geo	Geophysical data	1	100
News	News batch file	1	368.27
obj1	Compiled code for Vax: compilation of progp	1	21
obj2	Compiled code for Apple Macintosh: Knowledge support system	1	241.02
paper1	Witten, Neal and Cleary: Arithmetic coding for data compression	1	51.91
paper2	Witten: Computer (in)security	1	80.27
paper3 "	Witten: In search of "autonomy	1	45.43
paper4	Cleary: Programming by example revisited	1	12.97
paper5	Cleary: A logical implementation of arithmetic	1	11.67
paper6	Cleary: Compact hash tables using bidirectional linear probing	1	37.21
Pic	Picture number 5 from the CCITT Facsimile test files (text + drawings)	1	501.18
Progc	C source code: compress version 4.0	1	38.68
Progl	Lisp source code: system software	1	69.96
Progp	Pascal source code: prediction by partial matching evaluation program	1	48.22
Trans	Transcript of a session on a terminal	1	91.49
Total		18	3175.21

Table 29 - Calgary Data Set

10.2. Artificial Data Set

File Name	File Description	No. of Files	Size (Kbytes)
a.txt	The letter 'a'	1	0.001
aaa.txt	The letter 'a', repeated 100,000 times.	1	100
alphabet.txt	Enough repetitions of the alphabet to fill 100,000 characters	1	100
random.txt	100,000 characters, randomly selected from [a-z A-Z 0-9 !] (alphabet size 64)	1	100
Total		4	300.001

Table 30 - Artificial Data Set

10.3. Large Data Set

File Name	File Description	No. of Files	Size (Kbytes)
E.coli	Complete genome of the E. Coli bacterium	1	4639
bible.txt	The King James version of the bible	1	4047
world192.txt	The CIA world fact book	1	2473
Total		3	11,159

Table 31 - Large Data Set