

CUTEst Unconstrained Problems Status

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1 Introduction

Below is compiled the status of all the unconstrained CUTEst test problems. All the functions have been sorted into correct, incorrect, and not-yet-tested categories.

Function	Status
VAREIGVL	errors in SIF file
STRATEC	errors in SIF file
BA-L49LS	errors in SIF file
VANDANMSLS	errors in SIF file
JIMACK	errors in SIF file
BA-L73LS	errors in SIF file
MNISTS0LS	SIF file too long to hand-parse
BA-L21LS	errors in SIF file
AKIVA	errors in SIF file
BA-L16LS	errors in SIF file
PARKCH	errors in SIF file
HIELOW	errors in SIF file
BA-L1LS	errors in SIF file
BA-L52LS	errors in SIF file
TESTQUAD	errors in SIF file
OSCIGRAD	correct
BOX3	correct
OSCIPTH	correct
BOX	correct
BOXBODLS	correct
BOXPOWER	correct
ENGVAL2	correct
ENGVAL1	correct
ROSENBR	correct
SROSENBR	correct
ROSENBRTU	correct
GENROSE	correct
POWER	correct
FLETCHCR	correct
EXTROSNB	correct
ROSZMAN1LS	correct
DIXMAANI	correct
LIARWHD	correct
SCHMVETT	correct
LUKSAN13LS	correct

JUDGE	correct
NONDIA	correct
DIXMAANJ	correct
DIXMAANC	correct
DIXMAANL	correct
DIXMAANK	correct
DIXMAANG	correct
DIXMAANF	correct
DIXMAANE	correct
DIXMAANP	correct
DIXMAANH	correct
DIXMAANB	correct
DIXMAANN	correct
DIXMAANA	correct
DIXMAANO	correct
DIXMAANM	correct
DIXMAAND	correct
SINVALNE	doesn't match CUTEst twin
COSINE	correct
SSCOSINE	correct
SINEVAL	correct
MUONSINELS	correct
SCOSINE	doesn't match CUTEst twin
SINQUAD	doesn't match CUTEst twin
CLIFF	correct
EG2	correct
EXP2	correct
CUBE	correct
GAUSSIAN	correct
HUMPS	correct
DIXMAAND	correct
DIXON3DQ	correct
CHAINWOO	correct
KIRBY2LS	correct
COATING	doesn't match CUTEst twin
ERRINRSM	correct
DEVGLA2	correct
WATSON	correct

HILBERTA	correct
HILBERTB	correct
YATP1LS	correct
YATP2LS	correct
YATP1CLS	correct
COATINGNE	doesn't match CUTEst twin
YFITU	correct
NELSONLS	correct
NONCVXU2	correct
BROYDN7D	correct
BROYDN3DLS	correct
BROYDNBDLS	correct
NONMSQRT	correct
MANCINO	correct
BRYBND	errors
SSBRYBND	correct
CERI651ELS	correct
VAREIGVL	some undefined variables in SIF file
COOLHANSLS	issues w/ non-homogeneous input vectors
FMINSRF2	somewhat close in homogeneous cases only
FMINSURF	correct
PENALTY2	errors
CERI651BLS	correct
HEART6LS	doesn't match CUTEst twin
HEART8LS	doesn't match CUTEst twin
SPINLS	somewhat close in homogeneous cases only
HYDCAR6LS	varies w/ non-homogeneous vectors
SPMSRTL	correct
BENNETT5LS	correct
LANCZOS2LS	correct
MSQRTBLS	correct
EIGENBLS	correct
EIGENALS	correct
CERI651DLS	correct
DEVGLA2NE	doesn't match CUTEst twin
CERI651ALS	correct
VIBRBEAM	correct
CERI651CLS	correct
EIGENCLS	correct
DJTL	correct
PENALTY3	correct
STREG	correct
FLETGBV2	correct
SPARSINE	correct
FLETGBV3	correct

LUKSAN15LS	correct
LUKSAN17LS	correct
LUKSAN11LS	correct
LUKSAN16LS	correct
FLETCHBV	correct
METHANB8LS	doesn't match CUTEst twin
METHANL8LS	doesn't match CUTEst twin
HYDC20LS	doesn't match CUTEst twin
FBRAIN3LS	varies in the hundreths place
VESUVIOLS	correct
VESUVIOULS	correct
VESUVIALS	correct
DMN15332LS	varies in the hundreths place
DMN15102LS	varies in the hundreths place
DMN15333LS	varies in the hundreths place
DMN15103LS	varies in the hundreths place
DMN37142LS	varies in the hundreths place
DMN37143LS	varies in the hundreths place
GULF	correct
TOINTPSP	varies in the hundreths place
TOINTQOR	varies in the hundreths place
TOINTGOR	varies in the hundreths place
ENSOLS	varies in the hundreths place
HAHN1LS	does not match CUTEst twin
LOGHAIRY	correct
CYCLOOCFLS	does not match CUTEst twin
SPIN2LS	correct
SISSER	does not match CUTEst twin
MGH10SLS	does not match CUTEst twin
ARGLINA	does not match CUTEst twin
LUKSAN14LS	correct
S308NE	does not match CUTEst twin
BA-L1LS	errors in SIF file
QUARTC	correct
TQUARTIC	correct
NONDQUAR	correct
QING	correct
SSI	correct
KSSLS	correct
POWELLSG	correct
POWELLBSLS	correct
POWELLSQLS	correct
MGH17LS	correct
LUKSAN22LS	doesn't match CUTEst twin
DENSCHND	correct
BA-L1SPLS	too long to hand-parse

MNISTS5LS	too long to hand-parse
YATP2CLS	correct
DENSCHNE	correct
INDEFM	correct
OSBORNEB	doesn't match CUTEst twin
INTEQNELS	doesn't match CUTEst twin
GBRAINLS	too long to hand-parse
DIAMON3DLS	too long to hand-parse
DIAMON2DLS	too long to hand-parse
MSQRTALS	doesn't match CUTEst twin
WAYSEA2	correct
WAYSEA1	correct
PENALTY1	correct
DQRTIC	correct
BDQRTIC	correct
DQDRTIC	correct
WOODS	correct
DANWOODLS	correct
DANIWOODLS	correct
ARGTRIGLS	correct
CURLY10	correct
CURLY20	correct
CURLY30	correct
SCURLY30	correct
SCURLY20	correct
SCURLY10	correct
BROWNAL	correct
BROWNBS	correct
BROWNDEN	correct
HELIX	correct
MEXHAT	correct
POWERSUM	correct
SPARSQUR	correct
ELATVIDU	correct
LANCZOS3LS	correct
TRIGON2	correct
MISRA1CLS	correct
PALMER4C	correct
CRAGGLVY	correct
PALMER3C	correct
LANCZOS1LS	correct
CHNROSNB	correct
EDENSCH	correct
RECIPELS	correct
EGGCRATE	correct
CHWIRUT1LS	correct

MGH10LS	correct
HATFLDGLS	correct
BARD	correct
ERRINROS	correct
HATFLDFLS	correct
MOREBV	correct
ARGLINB	doesn't match CUTEst twin
HATFLDFL	correct
DEVGLA1	correct
ARGLINC	correct
TOINTGSS	correct
SNAIL	correct
BEALE	correct
ECKERLE4LS	correct
NCB20B	correct
JENSMP	correct
CHWIRUT2LS	correct
THURBERLS	correct
NCB20	correct
ARWHEAD	correct
CHNRSNBM	correct
BRKMCC	correct
BIGGS6	correct
FLETBV3M	correct
EXPFIT	correct
VARDIM	correct
ALLINITU	correct
KOWOSB	correct
MEYER3	correct
TRIDIA	correct
SENSORS	correct
INDEF	correct
RAT43LS	correct
CLUSTERLS	correct
OSBORNEA	correct
STRTCHDV	correct
HATFLDD	correct
HATFLDE	correct

RAT42LS	correct
NONCVXUN	correct
GROWTHLS	correct
MODBEALE	correct
SPINLS	correct
SBRYBND	correct
GAUSS1LS	correct
GAUSS2LS	correct
GAUSS3LS	correct
PALMER5D	correct
PALMER1C	correct
PALMER2C	correct
PALMER8C	correct
PALMER1D	correct
PALMER6C	correct
PALMER5C	correct
PALMER7C	correct
GENHUMPS	correct
TRIGON1	correct
HAIRY	correct
MGH09LS	correct
LUKSAN12LS	correct
LUKSAN21LS	correct
PRICE3	correct
PRICE4	correct
S308	correct
MISRA1ALS	correct
MISRA1DLS	correct
MISRA1BLS	correct
DENSCHNF	correct
DENSCHNA	correct
DENSCHNC	correct
DENSCHNB	correct
LSC2LS	correct
LSC1LS	correct
HIMMELBH	correct
HIMMELBF	correct
HIMMELBB	correct
HIMMELBCLS	correct
HIMMELBG	correct
MARATOSB	correct
ZANGWIL2	correct
FREUROTH	correct