John Cremona prepared three files with BSD data about elliptic curves. I typed

```
awk '$5==1' allbsd.1-8000 allbsd.8001-12000 allbsd.12001-20000 > rank1
```

to make the subset of his files that is about curves of rank 1. Then, using Python I ran the following commands:

```
f=open(``rank1'').read().split(``\n''); x=[[eval(y.split()[9]),y] for y in f if len(y)>10]; x.sort()
for z in x[:50]:
    print z[0], z[1]
```

This resulted in the following output, which says that, assuming correctness of Cremona's allbsd files, for rank 1 optimal curves of conductor up to 20000, the four smallest regulators (hence heights) are approximately 0.00891432445569, 0.00903868188983, 0.00973986614291, and 0.00996410799991, which correspond to the optimal curves **3990V**, **3630Y**, **1430K**, and **1470L**. This is the same thing I send in my computation from 2001, except then I only looked at the data for conductors up to 12000.

```
0.00891432445569 3990 V  1 [1,1,1,-125615,61201397]     1       1       2310    0.23109953490992895008  4.7588223045716933859   0.89143244556863533937e-2       1
0.00903868188983 3630 Y  1 [1,0,0,-141875,18393057]     1       1       1785    0.35400557724617146994  5.7115426829199770947   0.90386818898339096889e-2       1
0.00973986614291 1430 K  1 [1,-1,1,-3057,133281]        1       1       390     0.67776978196517417482  2.5745409112997787816   0.97398661429109179437e-2       1
0.00996410799991 1470 L  1 [1,1,1,-2990,71147]  1       1       390     0.88588471246845036567  3.4425498706977942997   0.99641079999126058232e-2       1
0.0112775268756  280 B  1 [0,0,0,-412,3316]     1       1       60      1.7288713939579846572   1.1698436165891036927   0.11277526875600686835e-1       1
0.0114310356128 3822 GG  1 [1,0,0,-4923717,4228856001]  1       1       2380    0.19231700741971843384  5.2321504946237686737   0.11431035612822702644e-1       1
0.0115555824173 6510 CC  1 [1,0,0,-13465,839225]        1       1       1155    0.5375938166941290872   7.175102152486185893    0.11555582417285710934e-1       1
0.0118509962179 1518 T  1 [1,0,0,-21736,875072] 1       1       660     0.50457068313817547454  3.9465790699851132558   0.11850996217938577451e-1       1
0.0120687789943 1890 P  1 [1,-1,1,-1517,26709]  1       1       330     1.0434357482304609482   4.1556884952389850943   0.12068778994273784838e-1       1
0.0122529773131 1830 L  1 [1,0,0,-8755,350177]  1       1       520     0.70022594790177803388  4.4615233799061430289   0.12252977313073195616e-1       1
0.0128468084018  350 F  1 [1,-1,1,-180,1047]    1       1       66      1.9197624983313408116   1.627746185543306066    0.12846808401829569 97e-1       1
0.0132435005474 6090 BB  1 [1,0,0,-10280,409152]        1       1       660     0.79760412804705836914  6.971626666200441605    0.13243500547355602358e-1       1
0.0134167723091  735 F  1 [0,1,1,-310,3364]     1       1       84      1.2882643756245456697   1.4518853833407302663   0.13416772309096860 08e-1       1
0.0136447943354 1806 N  1 [1,0,0,-25757,320049] 1       1       715     0.42637776663439978253  4.1597534084501729382   0.13644794335357280 82e-1       1
0.0138351336607 7854 S  1 [1,0,0,-350636,80632464]      1       1       1440    0.35695937328060200041  7.1115561227216595615   0.13835133660705875539e-1       1
0.0154251315385 11730 O  1 [1,0,0,59419,1024262145]     1       1       3780    0.13169790914427038313  7.6789096217637222523   0.15425131538495231387e-1       1.00000000000000000000
0.0157652128495  14910 KK  1 [1,0,0,-28335,999225]     1       1       1320    0.44704006769389497424  9.3029400016647826053   0.15765212849486297078e-1       1
0.0157980969745  14430 QQ  1 [1,0,0,-273635,55620225]  1       1       1456    0.37761112381432780485  8.6858220942849528185   0.15798096974498834336e-1       1.00000000000000000000
0.0158333892356  600 E  1 [0,1,0,-233,1563]     1       1       84      1.6232936554871205389   2.1589881844395931626   0.15833389235563030986e-1       1
0.0162515410815 4620 M  1 [0,1,0,-1964205,1059396975]   1       1       945     0.29330985958943427296  4.504566684936822906    0.16251541081536449256e-1       1.00000000000000000000
0.0163345405553  17490 BB  1 [1,0,0,-1588010,774750372]  1       1       2310    0.25409190072255763 85  9.5875959959639696061   0.16334540555305432857e-1   1.00000000000000000012
0.0166374352509 7098 FF  1 [1,0,0,-46381,4157009]       1       1       858     0.47825509653854030254  6.8270529773819283998   0.16637435250908252138e-1       1
0.0167027901704 2370 O  1 [1,0,0,-2255,44025]   1       1       280     1.0323246014331322338   4.8279563375336662811   0.16702790170398024602e-1       1
0.0170027905533 7770 DD  1 [1,0,0,-1750,318500] 1       1       840     0.52889471446323561133  7.5538562860081489464   0.17002790553310971099e-1       1
0.0173714666597 2970 DD  1 [1,-1,1,-372332,-54226961]   1       1       1365    0.19894832580841187947  4.7174730449846813211   0.17371466659680026481e-1       1
0.0174159649173 3930 F  1 [1,0,0,-28565,1872225]        1       1       504     0.6715221347130090995   5.8943837934379816897   0.17415964917313259132e-1       1.00000000000000000000
0.0174682919263 1302 M  1 [1,0,0,-1252,18704]   1       1       182     1.1506026777155425792   3.6580295507205063479   0.17468291926282369467e-1       1
0.0184736827364  975 I  1 [0,1,1,-4758,128144]  1       1       84      0.94863094452940498496  1.4720753966665882494   0.18473682736406298279e-1       1
0.0185237308473  430 D  1 [1,0,0,-1415,20617]   1       1       75      1.3842895617477883861   1.92316554424202073     0.18523730847312548364e-1       1.00000000000000000000
0.0188330248451 7350 ZZZ  1 [1,0,0,-2213,146817]        1       1       594     0.63050602855225368344  7.0533554062309328487   0.18833024845124666 81e-1       1
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0.0188535339486 2550 FF  1 [1,0,0,-1938,25092]  1       1       273     0.94803369856612801525  4.8795434470426984544   0.188535339485679453e-1 1
0.0191397373282 1110 M  1 [1,0,0,-281,2361]     1       1       126     1.4588941518522167657   3.5182792078765042199   0.191397373282243991884e-1       1
0.0192477773539 1020 H  1 [0,1,0,-170,6225]     1       1       135     1.0311221246729365197   2.6793192258473869176   0.192477773538670400001e-1       1
0.0196779110608 4998 II  1 [1,0,0,4409,496649]  1       1       702     0.43742902444997005139  6.0425979858481171829   0.196779110607795673061e-1       1
0.0197560590057  19950 ZZZ   1 [1,0,0,2031662,8219116292]       1       1       5460    0.88751305713947095572e-1       9.5734331375622476079   0.197560590057326732081e-1    0.99999999999999999687
0.0198380094718 2090 O  1 [1,1,1,-3345,74095]   1       1       168     1.1032029171452321554   3.6767387864969967468   0.198380094717823010991e-1       1.0000000000000000000
0.0202709581589  17850 III   1 [1,0,0,-7438,421892]     1       1       780     0.57437229854195597274  9.0815999284612533364   0.202709581588745325361e-1       1.0000000000000000006
0.0204000948681 7350 HHH  1 [1,0,0,-15338,1952292]      1       1       840     0.41988649354083560695  7.1952084137398485011   0.204000948681103455401e-1       1
0.0205680114567  190 A  1 [1,-1,1,-48,147]      1       1       22      2.7276120737371510762   1.2342342404077727975   0.20568011456741253035e-1       1
0.0207213852547 2040 Q  1 [0,1,0,-2840,81813]   1       1       210     0.78718172805606131971  3.4254141290275838654   0.207213852547027564 1e-1        1
0.0209484131629 1770 G  1 [1,0,0,-721,15401]    1       1       208     0.96722218201890535126  4.2144481369547531342   0.20948413162850215531e-1       1
0.0209841213184  494 D  1 [1,1,1,-1001,12375]   1       1       78      1.3176510859323960851   2.1566805189122614028   0.20984121318352936515e-1       1
0.0213990182956 6222 E  1 [1,0,0,-265965,212681169]     1       1       1680    0.18638522143347250274  6.7006140826661770692   0.213990182956398997346e-1       1
0.0214001480068  550 I  1 [1,1,1,-2213,39531]   1       1       84      1.2639033911075527953   2.2720084494268717103   0.214001480068285862281e-1       1.0000000000000000000
0.021448892363  345 F  1 [0,1,1,-100,406]       1       1       24      2.0934610738452118798   1.0776581097354627117   0.214488923629719454331e-1       1
0.0215541166685 3450 BB  1 [1,0,0,-2163,24417]  1       1       288     0.87366006584511654692  5.4233196444982932959   0.215541166685071676191e-1       1
0.0218747424901 6468 T  1 [0,1,0,-22682,1438569]        1       1       330     0.55969098415113782598  4.0402217302774912191   0.218747424901344006171e-1       1
0.022332352336 1590 S  1 [1,0,0,-406,3620]      1       1       126     1.4482385313657895336   4.0751642167822866284   0.223323523360233164151e-1       1
0.0224686032667  618 F  1 [1,0,0,-185,1401]     1       1       77      1.5379775186464285799   2.660827915863161338    0.224686032666683158341e-1       1
0.0227175485369 7770 CC  1 [1,0,0,-281490,80204292]     1       1       1300    0.25155767343026346342  7.4292057527615540394   0.227175485368553837371e-1       1
```