|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Data size（Gb） | TOTAL READS | Q20 | Q30 | after filtering | Q20 | Q30 | mapped reads number | GC% | Average mapped length |
| D1\_R1 | 2 | 27383365 | 98.63% | 96.42% | 26926081 | 98.98% | 97.02% | 14968505 | 55.59% | 298.16 |
| D1\_R2 | 2.2 | 27383365 | 96.73% | 92.45% | 26926081 | 97.56% | 93.59% |  |  |  |
| D2\_R1 | 2 | 26006756 | 98.76% | 96.58% | 25677736 | 99.05% | 97.08% | 21103692 | 82.19% | 296.4 |
| D2\_R2 | 2.2 | 26006756 | 97.04% | 92.96% | 25677736 | 97.73% | 93.92% |  |  |  |
| D3\_R1 | 2.1 | 28335271 | 98.78% | 96.63% | 27899337 | 99.05% | 97.15% | 21550813 | 77.24% | 297.88 |
| D3\_R2 | 2.4 | 28335271 | 96.68% | 92.27% | 27899337 | 97.48% | 93.39% |  |  |  |
| N1\_R1 | 2.3 | 30271756 | 98.84% | 96.72% | 29786790 | 99.10% | 97.24% | 21927087 | 73.61% | 297.89 |
| N1\_R2 | 2.6 | 30271756 | 96.55% | 92.01% | 29786790 | 97.41% | 93.20% |  |  |  |
| N2\_R1 | 2.2 | 29599676 | 98.81% | 96.70% | 29131008 | 99.09% | 97.22% | 19212073 | 65.95% | 297.61 |
| N2\_R2 | 2.5 | 29599676 | 96.59% | 92.13% | 29131008 | 97.44% | 93.30% |  |  |  |
| N3\_R1 | 2.2 | 29048708 | 98.87% | 96.80% | 28627817 | 99.11% | 97.27% | 20053905 | 70.05% | 297.95 |
| N3\_R2 | 2.5 | 29048708 | 96.77% | 92.46% | 28627817 | 97.55% | 93.54% |  |  |  |

Table S1 Basic information about the transcriptome

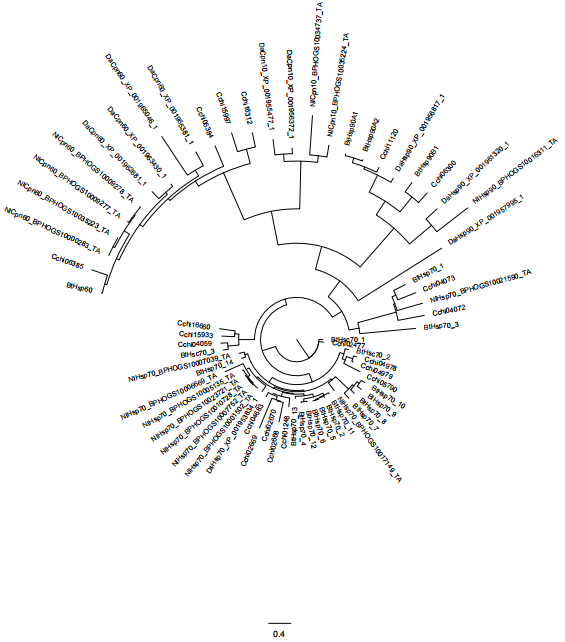


Fig.S1 Phylogenetic relationships analysis of heat shock proteins without sHsp from *A. chinensis*, *N. lugens*, *D. ananassae* and *B. tabaci*. The tree of Hsp proteins was constructed using PhyloSuite v1.2.3 by the Mrbayes method.

sHsp-NJ

Fig.S2 Phylogenetic relationships analysis of sHsp from *A. chinensis*, *N. lugens*, *D. ananassae* and *B. tabaci*. The unrooted tree of Hsp proteins was constructed using PhyloSuite v1.2.3 by the Mrbayes method.

ggplot2_heatmap

Fig.S3 The heatmap of 149 DEGs

Table S2 Primers of 25 sequences of heat shock protein family

|  |  |  |
| --- | --- | --- |
| ID | S/F | A/R |
| Cchi01248 | AGTTATGTTGCTTTTACTGACACAG | GGATCATCATATTTGCGACCGA |
| Cchi01880 | CCCCTAAGAAGGTCTTGCCG | CATTTTCTCTGCTGGTTTTCCC |
| Cchi02477 | CACGCTGTTGTTACTGTGCCTG | CACCCTCCTTCTTGTCTAATCCATA |
| Cchi02668 | GCAAAAAGAGACAAGCGACGA | TGTCCAGTCCATAGGCGAGG |
| Cchi02669 | CCAGTAGACAAGCGACGAAGG | CAGTCCATAGGCGAGGGCA |
| Cchi02670 | TCAGAGACAAGCGACGAAGGA | TGTCCAGTCCATAGGCGAGG |
| Cchi03011 | CGGGGACTCGGGTGTTTCTA | CCCATCAATGACGAGATAGCCA |
| Cchi03013 | GCGTCTCCACCTTTTCTTCCA | AACAACATAGCCATCAGCAACTTT |
| Cchi04059 | GAGTTATCAATGAACCAACGGCT | GACATCAAAGGTACCACCACCC |
| Cchi04072 | TGCCGAATAGAGGGCGTACTC | TTGCTTTTGTAAGTGCGGAATC |
| Cchi04073 | CACCAATGATTACAGCCTTAGAGC | TTATTTTGCGACCAATCAACCTT |
| Cchi04436 | CCAGACAGTTTACCCGTCGTTAC | TGGTGTTGCCTTCATTTTTGC |
| Cchi04683 | CCTGTGTCGGTGTCTGGCA | GCGTTCTGTGTCCGTAAAAGC |
| Cchi04978 | TGAGAACTGCCTGCGAGAGAG | CGGCCTAGTGATCGATGTGTAA |
| Cchi04979 | AAAGCCCCCGCTGTAGGTAT | GGGTGTTGTCCTATTTCCCTGA |
| Cchi05790 | GGGGAGAATAAACGAGCGGT | ATGCCATCCAACAGCGAATC |
| Cchi06300 | GCCTAAAGAGGGGAACTCAGATAA | AGCCCAAAGGTAGATGGGGA |
| Cchi06384 | GATAATCACGAGCCGCCAGC | CGAAGGTCCCTCCGCCTAG |
| Cchi06385 | TGTCACAGTGGCAAAAGGTGTT | GGTCCCGTCACCAGCCTT |
| Cchi08401 | ATGACGAAGTTTAGGTCGGAGC | TCAAGCCCTGGAGCCAATT |
| Cchi11120 | GGCTGGTAGACTCCCCTTGC | CCCATGGTGGATGTATCCCTTA |
| Cchi15933 | AATCAACGAACCAACTGCGG | GATTGAAACGTCGAATGTTCCA |
| Cchi15997 | TCGTAATGAAAAAGGCGAAGTG | CGTGCTTTTGAGCCGTGC |
| Cchi16312 | TCTGGCACAGGCTATCGTCAA | GGCATGGTACAGACAGGGTTTT |
| Cchi16660 | ATCGCACCACACCGTCAATC | CAGGGTGTTCTGCGGGTTG |

Table S3 The result of qPCR

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | POWER | | | Normality  (p) | Homogeneity of  Variance(p) | AVERAGE | STDEV | STDEV/√3 | P |
| AcHsp90A | DP | 0.056958829 | 0.067403181 | 0.005084114 | 0.3001 | 0.5195 | 0.043148708 | 0.033375981 | 0.019269632 | 9.03867E-05 |
| ND | 0.510801505 | 0.61220745 | 0.519683599 | 0.1512 | 0.547564185 | 0.056158585 | 0.032423174 |  |
| AcHsp90B | DP | 0.400687069 | 0.881448653 | 0.642009059 | 0.9957 | 0.08693 | 0.641381594 | 0.240381406 | 0.13878427 | 0.158516097 |
| ND | 2.674731585 | 0.416140445 | 1.159890551 | 0.6283 | 1.41692086 | 1.151024292 | 0.664544185 |  |
| AcHsp70\_1 | DP | 0.008300359 | 0.017421378 | 0.014835666 | 0.5321 | 0.000132 | 0.013519134 | 0.004700871 | 0.002714049 | 0.004332058 |
| ND | 0.000504019 | 0.000471619 | 0.000519491 | 0.6154 | 0.000498376 | 2.44295E-05 | 1.41044E-05 |  |
| AcHsp70\_2 | DP | 0.021722583 | 0.015408206 | 0.049559011 | 0.3335 | 0.7768 | 0.0288966 | 0.01817056 | 0.010490778 | 0.122435005 |
| ND | 0.077470604 | 0.034121015 | 0.043792034 | 0.409 | 0.051794551 | 0.022755811 | 0.013138073 |  |
| AcHsp70\_3 | DP | 0.562975752 | 0.402282378 | 1.199585383 | 0.3662 | 0.002677 | 0.721614504 | 0.421660659 | 0.243445895 | 0.022661229 |
| ND | 0.036396604 | 0.014682496 | 0.014422748 | 0.01967 | 0.021833949 | 0.012612298 | 0.007281714 |  |
| AcHsp70\_4 | DP | 0.49868835 | 0.32411355 | 0.692547852 | 0.9423 | 0.01465 | 0.505116584 | 0.184301249 | 0.106406376 | 0.005311057 |
| ND | 0.038845411 | 0.01362168 | 0.014184743 | 0.03733 | 0.022217278 | 0.014403137 | 0.008315655 |  |
| AcHsp70\_5 | DP | 0.062934722 | 0.113702299 | 0.088592804 | 0.9881 | 0.2476 | 0.088409942 | 0.025384283 | 0.014655622 | 0.014669766 |
| ND | 0.151424092 | 0.13490353 | 0.13490353 | 2.20E-16 | 0.140410384 | 0.009538151 | 0.005506854 |  |
| AcHsp70\_6 | DP | 0.001769677 | 0.001216408 | 0.00099382 | 0.5392 | 0.008642 | 0.001326635 | 0.000399501 | 0.000230652 | 1.96593E-05 |
| ND | 0.086026413 | 0.072335035 | 0.080163515 | 0.8421 | 0.079508321 | 0.006869164 | 0.003965914 |  |
| AcHsp70\_7 | DP | 0.000266644 | 0.000738076 | 0.000623807 | 0.4478 | 0.369 | 0.000542843 | 0.000245924 | 0.000141984 | 0.4985851 |
| ND | 0.001112664 | 0.000110143 | 0.000401987 | 0.548 | 0.000541598 | 0.000515636 | 0.000297703 |  |
| AcHsp70\_8 | DP | 3.564508473 | 3.352617463 | 4.262338018 | 0.4287 | 0.5205 | 3.726487985 | 0.475999888 | 0.274818663 | 0.000608049 |
| ND | 0.803030727 | 1.360970622 | 1.167134229 | 0.6669 | 1.110378526 | 0.283266904 | 0.163544223 |  |
| AcHsp70\_9 | DP | 0.276958131 | 1.327834772 | 0.482732454 | 0.3549 | 0.2139 | 0.695841785 | 0.556908538 | 0.321531294 | 0.440068832 |
| ND | 0.479932127 | 0.58954482 | 0.85407893 | 0.5518 | 0.641185292 | 0.192344772 | 0.111050306 |  |
| AcHsp70\_10 | DP | 0.004661033 | 0.00711228 | 0.042283703 | 0.1113 | 6.34E-05 | 0.018019005 | 0.021049556 | 0.012152967 | 0.107986521 |
| ND | 0.000255609 | 0.000118799 | 0.000154366 | 0.4836 | 0.000176258 | 7.09836E-05 | 4.09824E-05 |  |
| AcHsp70\_11 | DP | 0.351117309 | 0.327067773 | 0.789744307 | 0.0882 | 0.01114 | 0.489309796 | 0.260461641 | 0.150377598 | 0.017732975 |
| ND | 0.038981769 | 0.008808415 | 0.008642930 | 0.009046 | 0.018811038 | 0.017468561 | 0.010085479 |  |
| AcHsc70\_1 | DP | 0.005439346 | 0.009121466 | 0.011399568 | 0.7418 | 0.003681 | 0.00865346 | 0.003007546 | 0.001736407 | 0.004290853 |
| ND | 0.000177463 | 0.000389580 | 0.000317856 | 0.6471 | 0.000294966 | 0.000107895 | 6.22933E-05 |  |
| AcHsc70\_2 | DP | 0.063139014 | 0.129350781 | 0.118370904 | 0.2967 | 0.9161 | 0.103620233 | 0.035485014 | 0.020487283 | 0.006391422 |
| ND | 0.257583038 | 0.192736662 | 0.218531187 | 0.7756 | 0.222950296 | 0.03264827 | 0.018849487 |  |
| AcHsc70\_3 | DP | 2.549649017 | 1.745318249 | 3.694686256 | 0.8079 | 0.7553 | 2.663217841 | 0.979633765 | 0.565591818 | 0.237450402 |
| ND | 3.719256023 | 3.618725137 | 2.347329970 | 0.1256 | 3.228437043 | 0.764714895 | 0.441508351 |  |
| AcHsp60\_1 | DP | 0.029417646 | 0.086338469 | 0.157420942 | 0.8782 | 2.96E-05 | 0.091059019 | 0.06413208 | 0.037026674 | 0.035020731 |
| ND | 0.000298685 | 0.000032223 | 0.000106130 | 0.5194 | 0.000145679 | 0.000137563 | 7.94223E-05 |  |
| AcHsp60\_2 | DP | 0.002217580 | 0.005789734 | 0.006474727 | 0.2872 | 0.072 | 0.004827347 | 0.002285928 | 0.001319781 | 0.106211787 |
| ND | 0.020212490 | 0.001589896 | 0.024396504 | 0.3307 | 0.01539963 | 0.012141172 | 0.007009709 |  |
| AcHsp60\_3 | DP | 0.004083367 | 0.005861225 | 0.020523800 | 0.1885 | 0.002664 | 0.01015613 | 0.009022562 | 0.005209178 | 0.064931375 |
| ND | 0.000544080 | 0.000029482 | 0.000150104 | 0.4317 | 0.000241222 | 0.000269127 | 0.000155381 |  |
| AcHsp60\_4 | DP | 0.000039814 | 0.000115065 | 0.000081300 | 0.887 | 0.0003366 | 7.87263E-05 | 3.76912E-05 | 2.17611E-05 | 0.012988231 |
| ND | 0.000003270 | 0.000003941 | 0.000003517 | 0.7118 | 3.57619E-06 | 3.39356E-07 | 1.95927E-07 |  |
| AcsHsp17.5 | DP | 0.317202756 | 0.151784213 | 1.430164007 | 0.2277 | 0.000454 | 0.633050326 | 0.695257859 | 0.401407312 | 0.108541998 |
| ND | 0.041383045 | 0.040862433 | 0.054026030 | 0.06671 | 0.045423836 | 0.007454265 | 0.004303722 |  |
| AcsHsp19.4 | DP | 0.912602215 | 0.721489736 | 1.021101258 | 0.6985 | 0.01235 | 0.885064403 | 0.15169217 | 0.087579515 | 0.000339788 |
| ND | 0.060299560 | 0.038781320 | 0.048420483 | 0.8854 | 0.049167121 | 0.010778533 | 0.006222989 |  |
| AcsHsp20.8 | DP | 0.029191748 | 0.166887258 | 0.442885915 | 0.6358 | 0.02009 | 0.212988307 | 0.210664891 | 0.121627431 | 0.002471146 |
| ND | 0.921004907 | 0.883394401 | 0.892451852 | 0.4446 | 0.898950387 | 0.019629334 | 0.011333001 |  |
| AcsHsp20.9 | DP | 0.720265715 | 2.100524315 | 0.473338750 | 0.2698 | 0.07831 | 1.098042927 | 0.876909306 | 0.506283824 | 0.121525979 |
| ND | 0.419937551 | 0.206802619 | 0.549202448 | 0.7317 | 0.391980873 | 0.17290342 | 0.099825836 |  |
| AcsHsp21.3 | DP | 0.111897445 | 0.131464981 | 0.541442184 | 0.07706 | 0.01746 | 0.261601537 | 0.242546517 | 0.140034297 | 0.111962454 |
| ND | 0.083435342 | 0.050560346 | 0.044635703 | 0.2716 | 0.059543797 | 0.020901669 | 0.012067584 |  |

|  |
| --- |
| Table S4 Protein sequence of AcHsps |
| >Cchi01248 |
| MLDSAIDMVAVGMDLGTTYSCVGVWQHGKVEIIANDQGNRTTPSYVAFTDTESLIGDPAKNQVAMNPQNTVFDAKSLIGRKYDDPKIQGDLKHWPFKVMNDNSKPKIKVEYKGEVKRFTPEEISSMVLTKMKETAEAYLGTKVSNSVITVPAYFNDSQSQATKDAGAIAGLNVLSIMNEPTAAALAYGLDKNLKGESNVLIFDLGGGTFDVSILTIDEGSLFEVKATAGDTHLGGEDFDSSLVNHLAEEFKRKFKKDLSNNASSLRSLSTAAERAKRTLSSSTEASMEIDALFDGTDFYTKVSSASFEELCSDLFSSTMNPVEKALQDAKLDKASIHDVVLVGGSTRIPKIQNLLQTFFNGKALNLSINPDEAVAYGAAVQAAILSGDTSSKIQDVLLVDVAPLSLGIETAGGVMTKIVESNTRIPCKQTQMFTTYSDNQLAVTVQVFEGESVLTKDNNLLGTFDLSGMPPAPSGIPQMEVTFDMDANGILNVSAKDKSTGKSSNIKIENNKGRLSKFEIDSMVEDAESYKAEDDMQSDSIAASNKFENYLYGVKQAMEEAGNKMSDSKSQKMLSSCQEGMKWLENNTLADKDEYQEKLQELQSECSPFMSKLHGSESYNSKEEDSGPTMEEVD |
| >Cchi01880| |
| MDDLMNDLSRPNLADLYDQHFGLGLLNDEVLSPMNSYMPMPLSCGYLRPWSNLKAADSGISTIQTDKNELKINLDVQQFKPEELKVKIADGYIVVEGKHEERSDEHGFISSQFTSSYKIPEDVDESALMSSLSSDGILVMKAPKKVLPQAEGSDIPITQTNQPAVKGKPAEKMEQ |
| >Cchi02477 |
| MKLLGVAVCLCLVFLFAKAEEKNKDVGTVVGMDLGTTYSCVGVYKNGRVEMMANDQGNRITPSYVAFTGEGESLIGDAAKNQLTTNPENTVFDAKSLIGSEWTDSTVQDDIKFFPFKVIEKSSKPHIQVSTSQGNKVFAPEEISAMVLGKMKETAEAYLGKKVTHAVVTVPAYFNDAQRQATKDAGTISGLNVMSIINEPTAAAIAYGLDKKEGEKNVLVFDLGGGTFDVSLLTIDNGVFEVVSTNGDTHLGGEDFDQRVMDHFIKLHKKKKGKDIRKDNSAVQKLSREVEKAKSALSSSHQVSIEMESFFDGEDFSESLTSAKFEELNMDLFSSTMKPVQKVLEDADMNKKDVDEIVLVGGSTSIPKVQLLVKEFFNGKEPSRGINPDEAVAYGAAVQAGVLSGEQDTDSIVLLDVNPLTLGIETVGGVMTKLIPSNTVMPTKKSQIFSTASDNQHTVTIQVYEGESPMTKDNHLLGKFDLTGMPPAPRGMPQIEVTFEIDANGILQVSAEDKGTGNSEKIVITNDQNSLTPEDIERMIKDAEKFADDDKKLKESVEASNELESYAYSLKNQLSDKDKLGAKVTDEDKVKMEAAIDEKIKWLEENLDADSESFQQQKKELEEVVKPIITKLYQGGAPPPGGADEDLKDEL |
| >Cchi02668 |
| MPAIGIDLGTTYSCVGVWQHGKVEIIANDQGNSTTPSYVAFTDTERLIGDARKNKVAMTLKTQFLMQKETSDEGRGCYSWSECIEDNHEPPAAALAYGLDKNLKGESNVLIFDLGGGTFDVSVLTIDEGSLFEVNIAPVEKALQDAKLDKGSIHDVVFVGWINPHPKDPNSSSTSSMVIAQFVNHPDEAVAYGAAVQAAILSGDQSSQIQDVLLVDVAPLSLGIETGWSSHDQDNSEDSSIPCKQTQTFPPIQTTSPLW |
| >Cchi02669 |
| MTKDNNLLGTFDLTGSHLRHVVFPKIEVTFDLDANGILNVSAKTAALASQEHKDSNNKGSLSSEEIESMSESMAASNQLEGFIFSVKQAVDEAGDKLSEDDKSSVKASSQATKDAGAMAGLNVLSMINEPTAAALAYGLDKNLKVHCSSHSPSRSSLDNSLVNHLAEEFKSKYKSDLKSNPSALSSLSTAAESAKSTLSSSTEASIEMDALYEGLAGCQLDKGSIHDVVLVGGSTRIPKIQNLLQNFFNGKSLNLSINPDEASHTGLPSSCDPQRSSELSDPSRTPVDVAPLSLGIETAGGVMTS |
| >Cchi02670 |
| MPAIGIDLGTTYSCVGVWQHGKVEIIANDQGNSTTPSYVAFTDTERLIGDAAKNQVAMNPQNTVFDAKSLIGSKFDDPKMQEDLKLWPFKVVNEFSKPKIQVEYKGETKRFAPEEMSSMVLTKMKETAESYLGVKVKDAVVTVPAYFNDSQSQATKDAGAMAGLNVLSMINEPTAAALAYGLDKNLKGESNVLIFDLGGGTFDVSVLTIDEGSLFEVKSTAGDTHLGGEDFDNSLVNHLAEEFKSKYKSDLKSNPSALSSLSTAAESAKSTLSSSTEASIEMDALYEGIDFYTKVTSASFEELCADLFSSTLHPVEKALQDAKLDKGSIHDVVLVGGSTRIPKIQNLLQNFFNGKSLNLSINPDEAVAYGAAVQAAILSGDQSSQIQDVLLVDVAPLSLGIETAGGVMTKMMESNSSIPCKQTQTFTTYSDNQPAVTIQVFEGESAMTKDNNLLGTFDLTGIPPAPRGVPKIEVTFDLDANGILNVSAKDSSTGKSKNMSMENNKGSLSSEEIESMVNEAEKYKEEDDAQSESMAASNQLEGFIFSVKQAVDEAGDKLSEDDKSSVKASCDETMSWLDNNTLADKEEYQHKLQELQKECTSYMTKMHNSGSASSCGQQAGSNFARGPTVEEVD |
| >Cchi03011 |
| MSLLSHLMNAMLDDYRQPTLSDLHDQHFGLGLLNDDILPLGHGPALSMPMSSGYLRPWSSMAAGDSGVSTFTGNKNEFKVNLDVQQFKPDELKVSLADGYLVIDGKHEESSDQHGLVSRQFTSSYKVPEDVDLTKLASNLSSDGVLSIAAPKIVKPEVQGREIPMIQTNKPAIKQQGAGQQQKENQKQEEKMES |
| >Cchi03013 |
| MLNTLLEDYSRRYWLNDLHDQPLALGLTPVEVLQLNQSQNRSGSQLRPWSVMSGGDLGVSTFSSNSNEFKVNLDVQQFKPEELKIKVADGYVVVDGKHEESSDGHGFISSQFTSRYKMPEDVDQEKLSSNLSSDGVLSITAPKVVSILLINKMYIN |
| >Cchi04059 |
| MLNMTKVSPVTSHLINPHKAFSKPSVMHMLRYVQKNHKSEGVRGTVIGMDLGTTNSCVAVMEGKQAKVIENAEGSSTTPSVVAFSKDGERLVGMPAKRQAVTNSANTFYATKRLIGRSFEDAEVKKDMKTVSYKIVKASNGDAWVQGSDGKMYSPSQIGAFVLAKMKETAEGYLNTSVKNAVITVPAYFNDSQSQATKDAGQISGLNVLSVINEPTAAALAYGMDKSEDKIIAVYDLGGGTFDVSILEIQKGVFEVKSTNGDTFLGGEDFDNTLVNFLVQEFKSDQGIDVTKDQMAMQSLKEAAEKAKIELSSSLQTDMNLPYLTMDQSGPKHMNLKLTSSKLESLVGDLMKKTVSPCQKALTDAEVKKSDMGEVLLVGGMTSMPKVQTTVQEMFGKSPSKAVNPDEAVAVGAAVQGGVLAGDVTDVLLLDVTPLSLGIETLGGVFTSLISRNTTIPTKKSQVFSTAADGQTQVEIKVHQGESEMAGDNKLLGQFTLIGIPPAPSGVPQIEVTFDIDANGMVHVSASDKGTGKEQQIVIQSSGGLSKDEIENMVRNAEQYAQQDKVKKERVEAFNQAENIIHETESKMNEFKDQLPQVEVSIMTMMTIKE |
| >Cchi04072 |
| MYILIVSLTSLANPTTYGTCYRTYDLLSPSGMTWHFNPPSAPHFGGSWGSAIKSCKSILHKVLRETPLQYEQLATLFCRMEGVLNLRPLTPLEAEPNGLECLTPGHFLIGSPLTALPDSALTKATCLQNSWQLLKQWTQHLWQSWRMVNYLDEEHTFTPEQITAMLLTKLKETSEQALKTKVNDVVISMPSYFTNAESKALLDAAQIAGLNVLRLMNETTATTLAYGMYKQDLPGPEEKPRNVIFVDCGHSSLQVSACAFNSGKLKMLACAYDNKLGGSDFDTILADHFCNEFETKYSIRPKQSPRAYIRLLTEVEKLKKQMSANSTTLPLNIECFMEDKDVHGEMKSTDMEGLCAHLFHSVELCLRKCFEDSKLKPEEMHSVEMVGGSTRIPAMKQLMEAVFSKGASTTLNQDEAVARGCALQCAMLSPAVRVSEFSVADVYPFPVSLCWDSATKEDGEMEVFPQFHPMPFSKVLTFYSKENFDIKAYYNCDTPYPDSFMGQFTIKDVKPTPEGESSKIKVKARMNLHGMVSIVGASLVEKREADAGEEESTMDVDSNNHNKEEQQLQENGQVDQAEENEKGNEKQEKKEVKKKKQVTKTMDLPIDAITHGFSQAVLNEYQELECKLIANDKQESESSEASNALEEYVYDLRGKLSSDDELGPFVVAGDKDKYVKVLDSMEDWLYEEGSDCTSQVYVDRLSELKVFGEPIKNSSMEFESRTAALEELAHCMQLSQKVVGQYSAGDEKFNHLVPDDVVKVEEAICSAAKWLEEKRAALSSCLKTQDPPVTTLQISSEKKSLESTVNSVMNKPKPKVDPPPEPAGDNEKNNTSQQDTQTSKDDHHHGEQNQRKQENMDIDN |
| >Cchi04073 |
| MAAMSVMGIDFGNEACYVAVARAGGIETITNDYSLSATPSCVAFSGRNRLLGIAAKNQLVTNMKNTIYGFKSLIGRKMNDPQVEEELYNAPFSVTPYNGNGIGFKVFIFMLFILCNISLILKL |
| >Cchi04436 |
| MSMLPFVSDLIEDQLHSSLYDQHFGLGLLNDEALRPLNSLLMSPMRCGYLSPWSSMAIGDSGVSSMTSNKSEFKVNLDVQQFKPEELKVKVVDGYLVVDGKHEESSDEHGYVSSQFTRRYKIPEDVNQEAIESSLSSDGVLTLKAKMKATPEMEGRSIPIIETKLPAVTKEKEKKTEKQEEKMEQ |
| >Cchi04683 |
| MPAVGIDLGTTYSCVGVWQHGKVEIIANDQGNSTTPSYVAFTDTERLIGDAAKNQVAMNPMNTMFDAKSLMGSKHDDPKIQEDLKHWPFKVVNDCSKPKIQVEYKDEVKSFSPEEISSMVLVKMKETAEAYLGSTVKDAVITVPAYFNDSQSQATKDAGAIAGLNVLRIINEPTAAALAYGLDKSLKGESNVLIFDLGGGTFDVSILTMDEGSLFEVSSTAGDTHLGGEDFDNSLVNHLTEEFKSKYKKDMKGNPSALSSLSTAAESAKSTLSSSTEASMEIDALSEGMDFYTKVTSARFEELCSDLFSSTLIPVEKALQDAKLDKGSIHDVVLVGGSTSMPKMQNLLQNFFNGKSLNMSMNPDEAVAYGAAVQAAILSGDQSSQIQDVLLVDVTPLSLGIETAGGVMTKIIESNTSMPCKQTQTFTTYSDNQPAVTIQVFEGESAMTKDNNLLGTFDLTGIPPAPSGIPKIDVTFDLDANGILNVSAKENGTGKSKNMKIENNKGRLSKEEIDSMVNEADKYKAEDDAQSESMVASNQLESYMFSVKQAVEEAGSKLSESDKSSIQSKFNEVMKWLDNNALADKEEYEHKLHELQQECVSYMSKLHGAAGQPGSNHTATAGGPTIEEVDW |
| >Cchi04978 |
| YQSCRDISGMNVLRIINEPTPLPLLMVSTSSYVYQGSGESNVLIFDLGGGTFDVSILTIEDGIFEVKSTAGDTHLGGEDFDNSMVNHFVQEFKSKYKKDLTQNKSALSSLSTACESAKSTLSSSTQASIEIDSLFEGTDFYTSITSPIW |
| >Cchi04979 |
| MAKAPAVGIDLGTTYSCVGVFQHGKVEIIANDQGNSTTPSYVAFTDTERLIGDAAKNQVAMNPNNTIFDAKSLMGSSFEDHTVQSDMKHWPFEVVSDGGKPKISVQYKGENKTFFPEEGSGESNVLIFDLGGGTFDVSILTIEDGILKVKSTAGDTHLGGEDFDNSMVNHFVQEFKSKYKKDLTQNKSALSSSTMEPVEKSLSDAKMDKAQIHDIVLVGGSTRIPKVQKLLQDCFNGKELNKSINPDEAVAYGAAVQAAILHGDKSSSSPSPSPVGCYSIVHLVSKQLEVYEGESAMTKDNNLLGKFELTGIPPAPRGVPQIEVTFDIDANGILNVTAIEKSTAKNALESYCFNMKSTVEDEKLKDKISDADKTTILEKCNEVIRWLDANQLAEKEEFEHKQKELEAVCNPIVTKLYSVEECQVGCHGGMPGGFPGGAPPNAGGAAGPTIEEVD |
| >Cchi05790 |
| MAKARTKGPAVGMDLGTTYSCVGYFQNGRVEIMTNDQGNSVTPSYVAFTESESLVGDAAKNQAAMNPSNTVYDAKRLMGSSFDDPSVQSDKKLWPFTISSKEGKPMIVVQYKGEQKEFFPEEMSSMVLMKMSETAEAYVGKKVNNAVVTVPAYFNDSQSQATKDAGAIAGLNVLSIINEPTAAAVAYGLDKSKSGEINVLIFDLGGGTFDVSVLTIDDGVFEVKATAGDTHLGGEDFDNSMLQFFIEEFSSKHKSDVGENKRAVSSLKTACESAKRTLSSATQASIEIDSLLDGMDLFTNMTSAKFEELNTDLFSSTMSPVEKSLRDSKIPKDSVDEVMLVGGSTSMPKMQSMLTDFFGGKALNKTINPDEAVAYGAAVQAAIMIGDTSDEVKDVLLLDVTPLSLGMETAGGVMTNLIGSNSTMPTKHSQIFSTYSDNQPGVLMQVFEGESAMTSDNNLLGMFELSGFPPAPRGVPQIEVTFDVDANGMLNVTAVEKSTGKSNAMTMTNDKGSLLKTDMDRMIREAEKYKNEDDQISESMTASNSLESYCYAMKNSLEEAAKNGLVGEEDLKTVSSKCNETMMWLEANKSATKEDYDSKMKDAEMVCRPMVTKLMSSGSAPSAGADSYPPGVTRHSASAATDEGPTVEEVD |
| >Cchi06300 |
| SDDQAVESEENAVKLDGLNVAQLKELREKAEKFAFQAEVNRMMKLIINSLYRNKEMFLRELMSNASDALDKISLLSLTDPTALSAIEELSIKIKLSKGKVLHMTDTGIGMTKKDLINNLGTIAKSGTAEFLNKLQEEGTSAQDTMDMIGQFGVGFYSSFLIADRVIVTTKHNDDVQLIWESDAASFSITEDPSGNSLKSGTQMSLFLKNEATDYLEIGTLSNLVKKYSQFINFPIYLWADKTVTVEEPLDEGEEETKKEDAEEDVGVEEEKEEKSKTKSVQKTVWEWERLNDHKPIWTSKPSDVKEEEYDEFYKALTKDKSKPFAHVHFVAEGEVSFKSLLYVPETQPADSFNSYGTASDNIKLYVSSVFMTDEFTDLLPKYLSFLQGIVDSDDLPLNVSSETLQQHKLLKVMKKKLISKALDMFKKLSPEDAKKFWKEFSTNIKLGMIEDPANSSRLAKLLRFGSSADPKEMTTLTDYVSRMKSKQDHIYYMAGSSSNEVESSPFVESLLKKGYEILYLVEAVDEYTIAALPEFEGKKFQNLAKEGFTLPGESKFLEEAKEKLEPLLKWLSENALKDKMSKAVISESLTDSPCALIAPMFGWSGNMESLAISNAHQKADGVESSYYLNQKKALEVNPRHPMMSHLLASIVDDPEDAKAKDIAMLLFSTATLSSGYMLQETAEFAKDVELMLSQSLGMSVAEPMVEEDEEDDTADGIQDENETLAEDDAGKDDEEHDEL |
| >Cchi06384 |
| MMMTGAKVEYEDLMVLVTEKKLSLIPHVLPVLELVNKKKKPLLIIAEDLDGEALSLIVVNSLKMGLNVVAIRAPGFGEQRKAILKDIALATGATVFGDELGISIEDCQECHLGGLGEVMITKEESLLLSGKGKKEEMGSSVAEIKHALNTTNSDFEKDKLQDSLGRLTAGVAVLKVGGCSEVEVNEKKDRVTDALNATRAAIEEGIVPGGGIALLSCISAIEELKPANQDQKTGMEIVASALRVPCMVIAKNAGADESVVVNKVLESSEDTGFDAKEGDYVNMMEKGIMDPTKVVKTALIDAAGVASLLTTAEAVLAHIPTKDKGPGLAGLGGGGSGMPPDMGDM |
| >Cchi06385 |
| MLEGVDMLADAVAVTMGPKGSNVIIDQPWGAPKMTKDGVTVAKGVELKEKFQNMGAKMVQAVANNTNKKAGDGTTTATVLASAMAKEGFESMSSGANPMEISKGVMIAVEEAKLYLKNLSKQVTTPEEMAQVATMSANGAEEIGKLISSAVEKVLLVTFFKYLSL |
| >Cchi08401 |
| MADSGVKSNIPIKLRDFSVIDSEFSNMRERFDAEMSKMEEEMTKFSSELMNSESNFFSTTTSSSTNSVSSSTGGLGADKGQNWLQGLNSPLIQEEGDNKMLKLSFDVSQYQPEEIVVKTVDNKLLVHAKHEEKSESKSVYREYNSEFLLPKGTNPESIKSSLSKDGVLTVEAPLPALAGPDHLMPMTQH |
| >Cchi11120 |
| MSFHFQMPEDVEMADVETFAFQAEIAQLMSLIINTFYSNKEMFLSELISNSSDALDKISYESLTDPSSLESGKELYIKIIPNKNDRTLTVIDTGIGMTKADLVNNLGTIAKSGTKAFMEALQAGADMSMIGQFGVGFYSAYLVADSVTVSSKHNDDEQYLWESSAGGSFTVSPDPGEPLGSGTKIVLFIKEDQAEFLEESKIKEMVKKHSQFIGYPIKLLVEKESDKEMSDDEAEEEKGEGDKKEEESDQPKIEDVGEDEEEDKKDEDKKKKKKTIKEKYTEDEELNKTKPIWTSNPDDITPEEYGEFYKSLTNDWEDHLSVKHFSVEGQLEFSALLFVPSSAPFDLFENKKSKNNIKLYVSSVFIMDNCEDLIPEYLNFIKGVVDSEDLPLNISREMLQQNKILKVISKNLVKKCLELFEELTEDKDTYKKFYEQFSKNLKLGIHEDSTNSKKLSELLSYHTSASGDEACSLKDYVASMKESQKHIYYITGENKDQVSNSAFVESVKSRGFEVVYMTEPIDEYVVQQMKEYDGKQLVSVTKEGLELPEDEEEKKKSEEDKAKYENLCKVMKDILDKKVEKVVVSNSLVDSPCCIVTSQYGWTANMESIMKAQALSDTSTMGYMAAKKHLEINPDHPIVDTLSQKAEADKNDKAVKDLVMLLFETSLLSSGFTLEEPQVHASSIYSMMKLGLGIDEDDTMVTEEETAPAEMPPLEGSAEDASSMEEVD |
| >Cchi15933 |
| MEGKEPKVMENSEGESTTPSIMAFANGEKLVGQSAKSQAVTNPRNTVYAVKSLIGSNFTDPMVKKDQEMVPYNMVKADNGNAWVEVEGKKHSPSQISAFILQKMKETAENYLGEKVTQAVITVPAYFNDAQRQATKDAGKIAGLEVLRMINEPTAAALAYGFDKSASKTIAVYDLGGGTFDVSILEIGDGVFEVKSTNGDTFLGGEDFDTSVLEHLMNTFKKESGIDLRNDPLALQRLKEAAEKAKKELSSALTTDINLPYITADSSGPKHLNIKFTSAELEKLVNDLIEKTMEPCRKALKDAGLKAADIQEVVLVGGMTSMPKVQEAVEKFFGRAPHKGVNPDEVVALGAAIQGGVLNKEVTDMLLLDVTPLSLGIETLGSVFTSLIDRNTTIPSKKSQVFSTADDNQHAVTISVFQGEREMAKDNKMLGQFNLEGIPPAPRGVPQMEVTFDIDANGMVHVSAKDKASGKEQSVTMQASGGLSDAEIEQMVKDAEKNADEDKKRKELIEAKNAADSLIYSTEKTLTDYSDKLSSEDKGAVEDALSALKAVLDSEDAALIKEKTESLTAASMKIGEAMYKAQSDAGAAGSASEENTASNEKVVDADFEDVEKK |
| >Cchi15997 |
| MSFKPLYDSIAMKPIEHEEKTKGGIIIPDTAKEKPMQGEVVAVGKGVRNEKGEVHPLELKVGDKVLYGKWAGTEIKENLNMATKLIKHGSKAREQMLEGIDILADAVKVTLGPKGSNVLIEQSFGAPKITKDGVTVAKSIELKDKISNAGAQLLKSAATKAAEVAGDGTTTATVLASALAREGNKLVAAGYNPMDLKRGMDLAVNTVLEEVKKASKKIDSQEEIAQVGTMSSNGDKEIGEKIAKAMEEVGKEGVMTVEEAKNFSFDVEVVKGMMFDSGYLSPYFVTNSEKMVAELENPYILLFEKKLSNLQPMLPILEAVVQSQRPLLIIAEDVEGEALATLVVNSLRGGLKVAAVKAPGFGDSSKAMMEDIAILTNGELMTEDLGMKLENVSLKSLGHAKSVTISKENTVIVDGSGDKKNIEESVLQIKSHIAETTSDYDKEKLQERLAKLSGGVAVLKVGGATEVEVKERKDRVEDALAATRAAVEEGVVAGGGVTLLHASQALKNLKVDNKDQQAGIELVIEALKDPMKQIVENAGENGGVVVGKLLEHKDKNFGFNAQDMQYVDMIKAGIIDPAKVVRTALQDAASVASLIITTETLIVDEPEDKENPMPMRGGMGGMGGMGGMDF |
| >Cchi16312 |
| MAAKDVKFGNDARVKMLRGVNVLADAVKVTLGPKGRNVVLDKSFGAPTITKDGVSVAREIELEDKFENMGAQMVKEVASKANDAAGDGTTTATVLAQAIVNEGLKAVAAGMNPMDLKRGIDKAVAAAVEELKTLSVPCQDSRAIAQVGTISANSDESVGTLIAQAMDKVGKEGVITVEEGTGLQDELDVVEGMQFDRGYLSPYFINKPETGAVELESPFILLADKKISNIREMLPVLEAVAKAGKPLLIIAEDVEGEALATLVVNTMRGIVKVAAVKAPGFGDRRKAMLQDIAILTGGTVISEEIGMELEKATLEDLGQAKRVVINKDTTTIIDGVGDQGAISGRVTQIRQQIEEATSDYDKEKLQERVAKLAGGVAVLKVGAATEVEMKEKKARVEDALHATRAAVEEGVVAGGGVALVRVAAKIAASGLKGQNEDQNVGIKVALRAMEAPLRQIVSNAGEEPSVVANNVKAGDGNYGYNAQTEEYGNMIDFGILDPTKVTRSALQYASSVAGLMITTEAMVTDLPKGDAPDLGAGAGGMGGMGGMGGMM |
| >Cchi16660 |
| MGKIIGIDLGTTNSCVAIMDGGKARVLENAEGDRTTPSIIAYTGDGETLVGQPAKRQAVTNPQNTLFAIKRLIGRRFQDEEVQRDIKIMPYKIIGSDNGDAWLDVKGQKMAPPQISAEVLKKMKKTAEDFLGEPVTEAVITVPAYFNDAQRQATKDAGRIAGLDVKRIINEPTAAALAYGLDKGQGNRTIAVYDLGGGTFDISIIEIDEVDGEKTFEVLATNGDTHLGGEDFDSRLINYLVAEFKKDQGIDLHNDPLAMQRLKEAAEKAKIELSSAQQTDVNLPYITADATGPKHLNIKVTRAKLESLVEDLVTRSIEPLKVALNDAGLSVSDINDVILVGGQTRMPMVQAKVAEFFGKEPRKDVNPDEAVAVGAAVQGGVLAGEVKDVLLLDVTPLSLGIETMGGVMTSLISKNTTIPTKHSQVFSTAEDNQSAVTIHVLQGERKRSADNKSLGQFNLDGIQPAPRGMPQIEVTFDIDADGILHVSAKDKNSGKEQKITIKASSGLNEEEIEKMVRDAEANAESDRKFEELVQTRNQGDQIAHSTRKQLDEAGDKLSAEDKAPIESALNELNTALKGEDKAEIEAKMQALMEVSSKLMELAQQQAQAGAADAGDASAKKDDDVVDAEFEEVKDKK |

Table S5 Differential expression matrix for transcriptome analysis

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **id** | **log2FoldChange** | **pvalue** | **padj** | **direction** | **D1\_star** | **D2\_star** | **D3\_star** | **N1\_star** | **N2\_star** | **N3\_star** |
| Cchi02711 | 12.93630822 | 3.20810629429454e-36 | 1.5046E-33 | up | 10767.121 | 19242.315 | 3245.268 | 3.864 | 0.912 | 0.509 |
| Cchi00263 | -9.570201748 | 8.34526392027339e-35 | 1.95696E-32 | down | 5.457 | 7.333 | 2.521 | 2928.041 | 3963.917 | 3015.997 |
| Cchi13884 | -9.42845085 | 1.32909453377881e-30 | 2.07782E-28 | down | 251.84 | 412.621 | 86.883 | 306484.738 | 78400.57 | 237837.819 |
| Cchi02910 | 14.43956148 | 1.85045060937034e-22 | 2.16965E-20 | up | 6591.4 | 5992.445 | 1163.508 | 0.729 | 0 | 0 |
| Cchi12963 | -4.684269346 | 1.56112138314553e-14 | 1.46433E-12 | down | 137.745 | 178.836 | 532.918 | 6677.126 | 7272.654 | 8880.567 |
| Cchi03760 | -3.545412389 | 1.34324188817366e-11 | 1.04997E-09 | down | 2096.883 | 1965.719 | 1117.309 | 18366.453 | 19892.693 | 28977.299 |
| Cchi12344 | 11.87594527 | 2.88868906738002e-11 | 1.93542E-09 | up | 346.266 | 1689.496 | 62.347 | 0 | 0 | 0 |
| Cchi12420 | 3.313606491 | 1.43644509090915e-10 | 8.27464E-09 | up | 2429.011 | 2278.432 | 1797.084 | 378.778 | 161.927 | 201.967 |
| Cchi12010 | 9.489227714 | 1.58788367279394e-10 | 8.27464E-09 | up | 1974.516 | 3881.263 | 685.767 | 0 | 10.411 | 0 |
| Cchi01263 | 6.399248666 | 7.50269788463348e-10 | 3.51877E-08 | up | 17978.901 | 48387.284 | 13681.36 | 109.421 | 103.143 | 946.894 |
| Cchi01272 | -5.753857695 | 3.13342221018185e-09 | 1.33598E-07 | down | 847.293 | 6562.231 | 1168.254 | 332679.44 | 116506.172 | 154326.84 |
| Cchi15402 | 2.371384693 | 1.2741933258562e-08 | 4.97997E-07 | up | 282.509 | 212.517 | 333.1 | 54.02 | 70.318 | 46.785 |
| Cchi05632 | 4.148308618 | 1.54030253004741e-08 | 5.55694E-07 | up | 23357.097 | 24802.354 | 5553.648 | 1155.231 | 1463.012 | 892.914 |
| Cchi08884 | -5.247005957 | 4.11603052606429e-08 | 1.37887E-06 | down | 11.608 | 46.441 | 260.543 | 4173.463 | 2763.076 | 5880.103 |
| Cchi04569 | 7.441492727 | 6.83225476662178e-08 | 2.13622E-06 | up | 42.662 | 40.475 | 27.795 | 0 | 0 | 0.654 |
| Cchi12637 | 2.321892296 | 7.6800525369409e-08 | 2.25122E-06 | up | 4014.785 | 4544.085 | 4486.033 | 1277.178 | 711.582 | 942.824 |
| Cchi13491 | 5.349459375 | 8.4121811232396e-08 | 2.32077E-06 | up | 1770.905 | 3340.731 | 5476.943 | 11.49 | 50.313 | 221.238 |
| Cchi08523 | -5.191652057 | 1.66834560607044e-07 | 4.34697E-06 | down | 3.001 | 1.636 | 28.925 | 208.504 | 449.18 | 577.026 |
| Cchi02598 | -2.674666478 | 2.87930371044714e-07 | 7.10733E-06 | down | 56.961 | 22.249 | 22.437 | 234.67 | 212.246 | 232.441 |
| Cchi11090 | 4.880019499 | 4.08611041657013e-07 | 9.58193E-06 | up | 2967.28 | 10713.422 | 959.097 | 178.513 | 157.538 | 312.461 |
| Cchi05175 | 1.87610183 | 9.49562192424302e-07 | 2.12069E-05 | up | 491.155 | 464.393 | 428.733 | 148.151 | 125.802 | 142.224 |
| Cchi06287 | 2.87320139 | 2.01813733734567e-06 | 4.3023E-05 | up | 21960.25 | 46438.521 | 22651.489 | 4191.823 | 5144.739 | 5276.393 |
| Cchi07535 | 5.194586257 | 2.9826862376591e-06 | 6.08209E-05 | up | 2827.116 | 6019.293 | 709.219 | 247.477 | 12.813 | 74.113 |
| Cchi11312 | -3.190536473 | 4.54797126488363e-06 | 8.88749E-05 | down | 14.708 | 7.448 | 50.866 | 229.104 | 266.696 | 223.117 |
| Cchi01887 | -2.905112776 | 5.09611546863705e-06 | 9.56031E-05 | down | 59.912 | 47.942 | 191.392 | 540.696 | 775.626 | 986.93 |
| Cchi06179 | -2.083291014 | 5.67531626386535e-06 | 0.000102374 | down | 45.911 | 34.316 | 43.761 | 134.512 | 173.971 | 251.711 |
| Cchi14538 | -4.716451333 | 7.36327491478428e-06 | 0.000127903 | down | 0 | 0 | 56.113 | 482.07 | 633.385 | 892.363 |
| Cchi05569 | 6.666311271 | 1.04401399165896e-05 | 0.000174872 | up | 17.524 | 1492.357 | 1338.007 | 19.832 | 0 | 14.505 |
| Cchi00508 | 2.399931783 | 1.18490908707064e-05 | 0.000191628 | up | 625.613 | 855.632 | 433.359 | 140.794 | 109.26 | 166.208 |
| Cchi02718 | 3.751153529 | 1.43223995148997e-05 | 0.000223907 | up | 3641.88 | 4945.043 | 538.971 | 298.375 | 315.199 | 189.186 |
| Cchi02613 | 3.518193361 | 1.54163814296352e-05 | 0.000233235 | up | 476.98 | 1156.509 | 188.38 | 67.467 | 60.587 | 68.464 |
| Cchi02125 | 3.439660504 | 1.9239050075919e-05 | 0.000281972 | up | 4026.07 | 3075.536 | 829.908 | 456.007 | 378.324 | 161.536 |
| Cchi14554 | 2.086787383 | 2.04006334655488e-05 | 0.000289936 | up | 122.615 | 71.577 | 140.934 | 21.367 | 33.118 | 29.601 |
| Cchi01396 | 4.953130428 | 2.12993016479171e-05 | 0.000293805 | up | 157.712 | 84.722 | 12.213 | 1.676 | 2.776 | 4.652 |
| Cchi01212 | -2.166051913 | 2.25353795018599e-05 | 0.000301974 | down | 97.328 | 61.877 | 162.791 | 358.14 | 646.341 | 488.191 |
| Cchi01531 | 3.374402778 | 2.42585052017449e-05 | 0.000316034 | up | 11202.927 | 25684.738 | 4394.029 | 2142.67 | 1275.248 | 1492.045 |
| Cchi05506 | 1.757569488 | 2.67868807995086e-05 | 0.000337312 | up | 1494.994 | 870.971 | 910.557 | 421.231 | 281.972 | 364.687 |
| Cchi13641 | 3.232856694 | 2.73301468853506e-05 | 0.000337312 | up | 2667.643 | 5433.629 | 1013.681 | 495.236 | 320.323 | 362.153 |
| Cchi15003 | 3.236406979 | 2.94866984363836e-05 | 0.000354596 | up | 11394.148 | 17396.135 | 3496.481 | 833.352 | 1441.823 | 1757.742 |
| Cchi03358 | 3.161005068 | 3.32503763848519e-05 | 0.000389861 | up | 1175.366 | 2331.687 | 555.341 | 204.96 | 231.156 | 139.493 |
| Cchi00932 | 6.153312198 | 5.64587004918297e-05 | 0.000645832 | up | 45.526 | 130.143 | 7.712 | 3.442 | 0 | 0 |
| Cchi07312 | 1.658111572 | 6.38327748025245e-05 | 0.000712799 | up | 520.423 | 451.883 | 378.386 | 152.245 | 159.042 | 161.484 |
| Cchi05093 | 1.888677099 | 7.15471952422627e-05 | 0.00077336 | up | 613.869 | 742.464 | 487.808 | 217.729 | 156.987 | 190.359 |
| Cchi06253 | -4.149107206 | 7.55756166392653e-05 | 0.00077336 | down | 0 | 0 | 2.67 | 19.154 | 30.164 | 25.376 |
| Cchi03174 | 1.962045082 | 7.60291461707279e-05 | 0.00077336 | up | 2078.429 | 1903.553 | 1118.806 | 449.482 | 461.169 | 557.652 |
| Cchi11970 | 2.248938917 | 7.61631181254484e-05 | 0.00077336 | up | 479.596 | 530.312 | 228.275 | 116.305 | 82.484 | 98.149 |
| Cchi14499 | 2.097650746 | 7.76874730251803e-05 | 0.00077336 | up | 358.532 | 585.183 | 356.505 | 134.717 | 116.623 | 95.823 |
| Cchi05575 | 3.398399943 | 7.91498299047988e-05 | 0.00077336 | up | 501.2 | 2423.087 | 463.642 | 152.501 | 136.424 | 115.551 |
| Cchi15053 | 3.480820048 | 8.37292241453605e-05 | 0.000801408 | up | 5595.647 | 12223.697 | 1193.143 | 808.658 | 696.497 | 589.185 |
| Cchi01438 | 2.994736606 | 0.00010122513452569 | 0.000949492 | up | 7381.93 | 11408.906 | 1896.407 | 1176.547 | 950.489 | 946.198 |
| Cchi10331 | 2.940050496 | 0.00010421462761697 | 0.000958366 | up | 8964.393 | 9927.77 | 7497.849 | 925.026 | 2429.022 | 410.486 |
| Cchi13024 | 3.430544074 | 0.0001207496369002 | 0.001089069 | up | 165.488 | 361.253 | 42.056 | 21.649 | 15.092 | 28.117 |
| Cchi14567 | -4.000047914 | 0.00012312406924764 | 0.001089532 | down | 0 | 0 | 19.647 | 135.292 | 124.863 | 156.916 |
| Cchi04499 | 2.096214204 | 0.00012799557387557 | 0.001111665 | up | 1722.973 | 1093.092 | 929.699 | 326.728 | 435.904 | 187.763 |
| Cchi02816 | -2.439073188 | 0.00013675130087296 | 0.001166116 | down | 11.422 | 20.324 | 26.437 | 82.258 | 140.506 | 127.958 |
| Cchi12774 | 2.578287578 | 0.00014302638777654 | 0.001197846 | up | 3419.233 | 3945.218 | 1199.02 | 758.694 | 345.05 | 571.015 |
| Cchi13371 | 2.918485262 | 0.00014705139428195 | 0.001209949 | up | 153250.105 | 256008.934 | 47286.884 | 30109.774 | 24962.691 | 20438.39 |
| Cchi14824 | -2.022936769 | 0.00016072694794338 | 0.001299671 | down | 1293.851 | 462.43 | 2085.273 | 5311.011 | 4983.533 | 6328.423 |
| Cchi02927 | 6.289382854 | 0.0001753118573032 | 0.001393581 | up | 6.995 | 1.886 | 5.798 | 0 | 0 | 0 |
| Cchi14267 | 2.538433643 | 0.00024883399089488 | 0.001945052 | up | 615.68 | 1912.137 | 791.62 | 289.598 | 201.25 | 202.548 |
| Cchi06527 | -3.180310671 | 0.00025331836168788 | 0.001947644 | down | 2.766 | 0 | 11.485 | 43.528 | 49.448 | 61.03 |
| Cchi01293 | -1.416226175 | 0.00027077418706328 | 0.002048276 | down | 50.872 | 41.206 | 55.089 | 139.118 | 147.25 | 135.122 |
| Cchi15216 | -2.068073641 | 0.00034391162776474 | 0.002560231 | down | 32.418 | 10.797 | 50.644 | 151.043 | 141.098 | 155.462 |
| Cchi02573 | -2.404416688 | 0.00039399141856772 | 0.002887218 | down | 4.762 | 3.233 | 16.968 | 57.858 | 45.461 | 39.787 |
| Cchi00982 | 2.396730104 | 0.00040962272860014 | 0.002955586 | up | 1697.066 | 2199.85 | 605.415 | 367.864 | 248.44 | 390.073 |
| Cchi14862 | 1.651729902 | 0.00048369666333412 | 0.003437178 | up | 796.186 | 419.319 | 368.574 | 184.296 | 195.079 | 160.633 |
| Cchi14495 | 2.065264383 | 0.00059788888604911 | 0.004177775 | up | 3692.987 | 1954.036 | 1022.167 | 633.446 | 629.921 | 485.315 |
| Cchi07021 | 1.165288299 | 0.00060573283285095 | 0.004177775 | up | 673.447 | 385.869 | 722.841 | 304.056 | 249.318 | 287.034 |
| Cchi11717 | -1.45252526 | 0.00067121587691733 | 0.004562322 | down | 809.232 | 361.946 | 873.878 | 2369.676 | 1845.868 | 2619.351 |
| Cchi07413 | 2.377474008 | 0.00069555371850592 | 0.00466021 | up | 244.114 | 250.144 | 68.047 | 33.535 | 39.146 | 50.647 |
| Cchi06810 | -2.437846105 | 0.00084111897737863 | 0.005556124 | down | 98.184 | 24.039 | 102.91 | 310.287 | 403.562 | 762.391 |
| Cchi14771 | 1.81101947 | 0.00091392024952562 | 0.005925807 | up | 1531.678 | 1339.426 | 811.462 | 572.274 | 344.451 | 286.452 |
| Cchi14082 | 3.453530155 | 0.0009223537915063 | 0.005925807 | up | 826.979 | 1839.213 | 240.618 | 240.798 | 21.489 | 75.826 |
| Cchi12574 | -1.14197716 | 0.00098783959171328 | 0.006260767 | down | 337.238 | 226.452 | 378.483 | 700.772 | 661.916 | 857.456 |
| Cchi13959 | 2.942291265 | 0.00100226808358912 | 0.006267516 | up | 199.778 | 548.769 | 58.231 | 50.373 | 40.446 | 39.455 |
| Cchi01240 | -1.760054047 | 0.00104599106393832 | 0.006454866 | down | 642.294 | 219.196 | 352.218 | 1076.555 | 1900.699 | 1295.041 |
| Cchi07531 | 4.372315735 | 0.00117543434826111 | 0.007137416 | up | 2993.596 | 2485.926 | 160.066 | 307.549 | 12.582 | 12.003 |
| Cchi02146 | -1.291253972 | 0.00118703292737632 | 0.007137416 | down | 987.196 | 571.595 | 1414.448 | 2553 | 2558.682 | 2546.464 |
| Cchi04497 | 1.820610117 | 0.00144290116871253 | 0.008566084 | up | 1948.807 | 672.773 | 880.339 | 379.635 | 441.865 | 215.475 |
| Cchi13874 | 2.427186928 | 0.00147212044764058 | 0.008630306 | up | 1918.597 | 3130.311 | 667.59 | 635.07 | 360.639 | 331.244 |
| Cchi01738 | 2.282552575 | 0.00153243264418261 | 0.00884187 | up | 3745.607 | 2220.636 | 722.22 | 761.01 | 415.899 | 356.079 |
| Cchi06628 | -1.539821982 | 0.00154591331126119 | 0.00884187 | down | 1748.905 | 1018.629 | 982.364 | 3453.972 | 2781.945 | 5484.973 |
| Cchi15255 | -1.838275428 | 0.00167092439412904 | 0.009441729 | down | 66.299 | 14.916 | 77.252 | 198.857 | 224.692 | 163.623 |
| Cchi03496 | 2.966140853 | 0.0016957286033808 | 0.009467818 | up | 30816.984 | 63020.307 | 4385.955 | 6559.529 | 3956.711 | 5676.9 |
| Cchi06991 | 2.348584034 | 0.00184889213329136 | 0.010201534 | up | 64307.9 | 96921.975 | 19064.176 | 17030.994 | 15256.53 | 11766.695 |
| Cchi12290 | -2.307748539 | 0.0021014154890957 | 0.01135625 | down | 57.953 | 32.295 | 256.997 | 549.819 | 598.757 | 747.793 |
| Cchi00084 | -3.37447413 | 0.00210659644912761 | 0.01135625 | down | 0 | 0 | 7.925 | 37.796 | 48.387 | 46.162 |
| Cchi05968 | -2.989777821 | 0.00222389788099084 | 0.011852365 | down | 9.735 | 0 | 55.001 | 177.707 | 184.879 | 180.63 |
| Cchi15502 | -1.75200897 | 0.00235764274962188 | 0.012423983 | down | 48.304 | 54.044 | 151.797 | 294.908 | 342.778 | 284.313 |
| Cchi05855 | -2.090545111 | 0.00240760078362966 | 0.012546275 | down | 8.706 | 11.798 | 43.581 | 87.772 | 107.532 | 96.581 |
| Cchi14552 | 2.678962457 | 0.00243824305682087 | 0.01256633 | up | 111007.349 | 137560.129 | 12387.643 | 14787.885 | 16426.635 | 17282.765 |
| Cchi02101 | 5.300230529 | 0.00250166389688467 | 0.012753047 | up | 25.188 | 33.123 | 4.389 | 1.817 | 0 | 0 |
| Cchi02270 | -1.442574963 | 0.00253775991232397 | 0.012797951 | down | 34.948 | 36.087 | 71.695 | 129.919 | 162.866 | 119.32 |
| Cchi08588 | -2.944365165 | 0.00259362110253969 | 0.012940514 | down | 0.806 | 0 | 5.909 | 14.816 | 26.715 | 20.122 |
| Cchi03521 | -2.210649828 | 0.00290583018163763 | 0.014345625 | down | 94.451 | 183.282 | 649.593 | 1189.291 | 1694.44 | 1545.34 |
| Cchi14494 | 2.187436581 | 0.00298397074254376 | 0.01457794 | up | 11791.559 | 12444.914 | 2502.651 | 2252.706 | 2049.432 | 2576.886 |
| Cchi10923 | 3.415578611 | 0.00316345764253099 | 0.015295481 | up | 267.417 | 941.74 | 140.581 | 149.418 | 24.775 | 41.23 |
| Cchi08728 | -2.591037283 | 0.00328742220937877 | 0.015732663 | down | 1.265 | 6.871 | 26.311 | 79.737 | 86.771 | 61.176 |
| Cchi01088 | 1.521434775 | 0.0033609700143402 | 0.015922171 | up | 424.074 | 725.681 | 480.049 | 254.374 | 185.893 | 211.955 |
| Cchi02317 | -3.427164419 | 0.00347352051374369 | 0.016290811 | down | 7.342 | 0 | 0.422 | 14.983 | 18.78 | 41.511 |
| Cchi06131 | -2.148434474 | 0.00370462591197481 | 0.017202669 | down | 115.038 | 12.375 | 226.551 | 565.377 | 649.688 | 500.899 |
| Cchi01795 | -2.375491215 | 0.0041662021238735 | 0.019080854 | down | 0 | 26.56 | 32.541 | 103.216 | 123.305 | 129.723 |
| Cchi00814 | 3.27497146 | 0.00419046474783975 | 0.019080854 | up | 1760.972 | 12215.229 | 915.378 | 1486.143 | 249.528 | 338.449 |
| Cchi07528 | 1.334323712 | 0.00461254458424964 | 0.020800802 | up | 84.368 | 70.576 | 76.274 | 27.637 | 40.371 | 30.276 |
| Cchi15568 | -2.32291331 | 0.00479427158948409 | 0.021286226 | down | 21.864 | 32.161 | 186.09 | 318.348 | 400.888 | 521.499 |
| Cchi14109 | 2.710730527 | 0.00481095947657664 | 0.021286226 | up | 10858.732 | 36004.612 | 3126.966 | 5055.947 | 2716.193 | 2285.252 |
| Cchi03486 | 1.530695595 | 0.00486096778897669 | 0.021306485 | up | 329.462 | 571.441 | 327.371 | 152.86 | 166.643 | 168.347 |
| Cchi07912 | -2.436921526 | 0.00492143951875235 | 0.021371807 | down | 3.311 | 0 | 4.194 | 11.63 | 18.828 | 18.907 |
| Cchi13365 | -1.534913475 | 0.00517509965713329 | 0.022267172 | down | 257.756 | 531.505 | 653.704 | 1874.222 | 1517.809 | 1240.915 |
| Cchi04779 | -1.824265202 | 0.0053911381715688 | 0.022985853 | down | 34.997 | 16.398 | 100.417 | 171.758 | 182.164 | 201.925 |
| Cchi13873 | 1.788597087 | 0.00573151392420104 | 0.024216937 | up | 3458.162 | 3449.491 | 1151.699 | 1213.37 | 786.643 | 729.747 |
| Cchi13221 | 1.617245427 | 0.00584536389492016 | 0.024477461 | up | 3965.525 | 1223.525 | 1373.398 | 579.375 | 851.885 | 792.709 |
| Cchi00946 | -1.912006437 | 0.00597078264539697 | 0.02478139 | down | 180.518 | 100.196 | 522.865 | 729.266 | 1530.002 | 820.753 |
| Cchi07263 | 2.740870649 | 0.0060334866707498 | 0.024821976 | up | 131.495 | 390.392 | 56.85 | 34.277 | 8.472 | 65.412 |
| Cchi05078 | 1.576630438 | 0.00625892836938275 | 0.025525543 | up | 53.029 | 106.393 | 83.305 | 23.466 | 29.838 | 37.949 |
| Cchi04404 | 1.354359151 | 0.00634492915964494 | 0.025653205 | up | 2122.058 | 2023.13 | 1140.562 | 886.808 | 696.667 | 739.217 |
| Cchi01787 | -2.316354392 | 0.00653284728359391 | 0.026092601 | down | 2.53 | 0 | 6.391 | 14.855 | 19.583 | 20.267 |
| Cchi05369 | 1.885911618 | 0.00656487625632423 | 0.026092601 | up | 4450.206 | 1458.983 | 1061.896 | 601.087 | 953.129 | 437.045 |
| Cchi03659 | 2.001022837 | 0.00662348176355221 | 0.02610431 | up | 3464.71 | 5528.013 | 1202.144 | 858.391 | 1244.764 | 880.558 |
| Cchi11185 | 1.334952419 | 0.00699810387741407 | 0.027350923 | up | 378.039 | 126.121 | 432.149 | 146.385 | 113.282 | 124.096 |
| Cchi09979 | -3.025149589 | 0.00729980647444172 | 0.028294291 | down | 167.112 | 542.11 | 7295.194 | 16815.146 | 19276.754 | 28568.246 |
| Cchi04255 | -1.491345995 | 0.00745353774776969 | 0.028515636 | down | 23.514 | 35.586 | 73.025 | 124.993 | 116.031 | 159.439 |
| Cchi04354 | -2.652619792 | 0.00747851437023063 | 0.028515636 | down | 0 | 8.757 | 4.709 | 15.379 | 44.359 | 32.882 |
| Cchi01939 | -1.741636455 | 0.0076074086861628 | 0.028741576 | down | 171.378 | 54.351 | 379.331 | 709.946 | 710.555 | 628.058 |
| Cchi03514 | -2.709750848 | 0.00766033480095298 | 0.028741576 | down | 10.851 | 0 | 2.512 | 21.572 | 38.214 | 22.77 |
| Cchi12983 | 3.521238191 | 0.00815308771640657 | 0.030214369 | up | 16.234 | 6.755 | 1.149 | 0 | 1.157 | 0.966 |
| Cchi03681 | 1.516200798 | 0.0081817160194673 | 0.030214369 | up | 679.771 | 1258.033 | 620.978 | 384.702 | 311.143 | 349.819 |
| Cchi03668 | -1.807375522 | 0.00848395609849701 | 0.031085745 | down | 9.14 | 1.136 | 3.439 | 15.111 | 15.555 | 18.045 |
| Cchi04828 | 3.205347887 | 0.0089277692209043 | 0.032235243 | up | 979.246 | 554.466 | 717.321 | 222.31 | 0.871 | 52.548 |
| Cchi08473 | -2.346482075 | 0.00900250386908265 | 0.032235243 | down | 0 | 3.426 | 9.39 | 26.562 | 26.109 | 31.169 |
| Cchi14549 | 1.205559322 | 0.00911183069635053 | 0.032235243 | up | 434.479 | 282.401 | 220.554 | 151.145 | 150.815 | 140.874 |
| Cchi03511 | -1.904898728 | 0.00913705560051502 | 0.032235243 | down | 75.563 | 114.92 | 463.633 | 758.771 | 691.904 | 1080.355 |
| Cchi04915 | 2.237028773 | 0.00914133747618351 | 0.032235243 | up | 6.362 | 19.362 | 10.998 | 2.239 | 1.844 | 4.537 |
| Cchi00672 | 1.70590659 | 0.0105414831118207 | 0.036895191 | up | 214.102 | 388.602 | 121.834 | 101.412 | 86.023 | 74.196 |
| Cchi02308 | -1.438387469 | 0.0106455461122996 | 0.036983416 | down | 229.778 | 52.889 | 207.299 | 377.537 | 456.005 | 519.007 |
| Cchi11168 | 1.242899902 | 0.0108339914346584 | 0.037361338 | up | 1757.264 | 2718.152 | 2201.897 | 1171.045 | 789.766 | 1237.551 |
| Cchi06565 | 1.760306302 | 0.0110620866773991 | 0.037869479 | up | 295.01 | 533.699 | 163.18 | 111.596 | 115.799 | 127.47 |
| Cchi10352 | 1.359900379 | 0.0114273600904621 | 0.038609006 | up | 2416.907 | 3473.376 | 1810.826 | 1375.046 | 974.196 | 1142.185 |
| Cchi00579 | -1.006955464 | 0.0115468368193281 | 0.038609006 | down | 194.086 | 100.1 | 151.76 | 278.863 | 350.78 | 317.445 |
| Cchi04059 | -1.090644089 | 0.0115737160972415 | 0.038609006 | down | 1199.313 | 1098.173 | 2400.987 | 3495.76 | 3420.91 | 3743.013 |
| Cchi00574 | 2.097753022 | 0.0116073984290353 | 0.038609006 | up | 2190.019 | 3008.867 | 403.97 | 396.498 | 476.881 | 689.774 |
| Cchi06654 | -2.857988069 | 0.0119825466437108 | 0.039576158 | down | 0 | 0 | 27.591 | 68.759 | 86.547 | 85.305 |
| Cchi15108 | -1.61774711 | 0.0125846268237308 | 0.041134165 | down | 6.015 | 16.225 | 26.817 | 53.623 | 51.313 | 64.654 |
| Cchi14805 | -2.39854215 | 0.0126296795693128 | 0.041134165 | down | 6.771 | 0 | 50.426 | 119.312 | 127.836 | 126.39 |
| Cchi14901 | -2.337590405 | 0.0128720429882019 | 0.041557079 | down | 4.353 | 0 | 12.041 | 51.486 | 16.208 | 33.973 |
| Cchi00144 | -2.824708156 | 0.0129367452712722 | 0.041557079 | down | 0 | 0 | 31.72 | 128.038 | 78.021 | 74.673 |
| Cchi08141 | -1.327878104 | 0.0133162400721287 | 0.042485147 | down | 32.703 | 27.214 | 64.349 | 122.165 | 121.222 | 108.532 |
| Cchi08019 | -1.494528757 | 0.0135926071328322 | 0.04307387 | down | 34.501 | 46.788 | 103.415 | 283.495 | 120.556 | 160.083 |
| Cchi14913 | -2.702102449 | 0.0149557457905195 | 0.047075468 | down | 0 | 4.946 | 2.341 | 14.842 | 16.623 | 17.599 |
| Cchi14835 | 0.866128432 | 0.015664110820008 | 0.048976453 | ns | 1953.334 | 1636.935 | 2017.387 | 1405.356 | 903.878 | 1103.26 |
| Cchi02864 | 1.50578126 | 0.0161132261639235 | 0.05004704 | ns | 351.091 | 399.822 | 137.337 | 122.984 | 102.612 | 134.26 |
| Cchi04435 | 1.175167395 | 0.0167760107656202 | 0.051762823 | ns | 206.711 | 220.12 | 147.241 | 101.156 | 71.965 | 111.782 |
| Cchi05653 | 1.160797393 | 0.0177628096198623 | 0.054449397 | ns | 1668.951 | 1336.789 | 1077.775 | 826.007 | 426.215 | 825.716 |
| Cchi02580 | -1.394836459 | 0.0186557697174937 | 0.056718093 | ns | 9.19 | 7.448 | 16.523 | 31.015 | 37.166 | 29.612 |
| Cchi06530 | -2.291317794 | 0.0187447854349734 | 0.056718093 | ns | 0 | 2.29 | 2.739 | 9.545 | 11.438 | 8.379 |
| Cchi00230 | -1.457022769 | 0.0196546240126459 | 0.059089863 | ns | 10.554 | 19.054 | 43.998 | 72.291 | 78.463 | 68.911 |
| Cchi15538 | 0.939500395 | 0.020014927088061 | 0.059789814 | ns | 1941.688 | 1593.053 | 1383.112 | 1108.159 | 777.389 | 977.627 |
| Cchi03534 | -1.462469657 | 0.0206915845532369 | 0.061165518 | ns | 12.761 | 25.617 | 34.649 | 65.97 | 96.366 | 60.926 |
| Cchi02431 | -1.427793029 | 0.020849006672788 | 0.061165518 | ns | 127.935 | 275.318 | 536.644 | 1097.398 | 811.697 | 815.935 |
| Cchi07455 | 1.609342303 | 0.0208757616381752 | 0.061165518 | ns | 29.789 | 11.836 | 15.346 | 10.338 | 4.069 | 5.461 |
| Cchi12528 | -2.121907382 | 0.0209971182580196 | 0.061165518 | ns | 15.415 | 13.261 | 159.681 | 292.771 | 262.389 | 270.483 |
| Cchi04061 | -2.880172461 | 0.0220521476003191 | 0.063826881 | ns | 1.91 | 0 | 66.416 | 157.798 | 163.24 | 186.434 |
| Cchi05502 | -1.531728175 | 0.0221829031623901 | 0.063826881 | ns | 6.709 | 11.144 | 33.63 | 50.053 | 54.28 | 55.309 |
| Cchi14236 | 2.429690311 | 0.022897796320248 | 0.065482113 | ns | 1.786 | 36.125 | 30.427 | 7.024 | 5.804 | 1.859 |
| Cchi10773 | -1.153171093 | 0.0231196197941144 | 0.065715768 | ns | 96.944 | 29.081 | 110.465 | 196.823 | 172.665 | 179.499 |
| Cchi02615 | 1.45052545 | 0.0236074771685292 | 0.066698234 | ns | 240.852 | 135.917 | 68.826 | 85.188 | 44.066 | 50.326 |
| Cchi00083 | 1.068498097 | 0.0238013628377099 | 0.066843348 | ns | 721.23 | 225.605 | 513.498 | 279.682 | 211.865 | 237.487 |
| Cchi04437 | -1.28974215 | 0.024527822167704 | 0.068473504 | ns | 25.237 | 8.873 | 43.233 | 60.43 | 70.032 | 67.198 |
| Cchi00234 | 0.802645874 | 0.0258697218328645 | 0.071792305 | ns | 3378.022 | 2579.155 | 2602.266 | 2037.868 | 1504.207 | 1827.276 |
| Cchi12748 | -0.996126764 | 0.0260332927379641 | 0.071821261 | ns | 170.535 | 89.437 | 105.014 | 257.316 | 275.25 | 248.264 |
| Cchi11726 | 1.74712436 | 0.0270520653320393 | 0.073630922 | ns | 411.35 | 870.394 | 154.272 | 157.837 | 143.262 | 218.465 |
| Cchi01065 | 0.752210447 | 0.0271931387599394 | 0.073630922 | ns | 329.09 | 208.379 | 354.73 | 178.744 | 194.453 | 188.002 |
| Cchi07017 | 1.187966019 | 0.0273004126254388 | 0.073630922 | ns | 28089.119 | 10890.507 | 10200.651 | 6966.033 | 7066.3 | 9053.835 |
| Cchi02183 | -2.075001164 | 0.0273172289141204 | 0.073630922 | ns | 11.546 | 0 | 35.878 | 74.479 | 78.599 | 53.472 |
| Cchi13142 | -2.093626169 | 0.02772400853696 | 0.074300343 | ns | 9.45 | 0 | 42.023 | 85.93 | 107.858 | 97.194 |
| Cchi14795 | -2.165817515 | 0.0283754637961809 | 0.075472737 | ns | 3.522 | 0 | 30.084 | 60.865 | 56.096 | 63.585 |
| Cchi15275 | -1.951985519 | 0.028591801567311 | 0.075472737 | ns | 17.35 | 7.756 | 119.502 | 170.03 | 191.234 | 220.48 |
| Cchi07358 | 1.043867195 | 0.0286442368978921 | 0.075472737 | ns | 840.683 | 321.625 | 538.35 | 386.826 | 260.484 | 216.378 |
| Cchi14914 | -2.49738862 | 0.0290211674451173 | 0.076038701 | ns | 0 | 0 | 13.696 | 25.718 | 30.375 | 38.479 |
| Cchi14957 | -1.361222385 | 0.029831863124309 | 0.077334027 | ns | 50.698 | 120.982 | 223.803 | 366.047 | 365.675 | 366.213 |
| Cchi02322 | -1.321059252 | 0.0298453282137964 | 0.077334027 | ns | 68.755 | 37.088 | 183.865 | 275.268 | 232.068 | 247.662 |
| Cchi00581 | 1.133511771 | 0.0307048398412937 | 0.07912401 | ns | 54.84 | 91.266 | 126.376 | 41.634 | 50.115 | 44.158 |
| Cchi08572 | -3.100929025 | 0.0319243431473765 | 0.081817032 | ns | 0 | 0 | 1.409 | 6.039 | 12.847 | 7.175 |
| Cchi06345 | -0.887397109 | 0.0331192103680649 | 0.084417987 | ns | 309.954 | 248.931 | 553.223 | 812.445 | 695.013 | 679.619 |
| Cchi00865 | -1.610213217 | 0.0339064621312093 | 0.085957463 | ns | 58.821 | 41.226 | 299.261 | 478.628 | 414.708 | 360.098 |
| Cchi03566 | -1.763458791 | 0.0346904351064592 | 0.086992794 | ns | 20.81 | 0 | 25.287 | 39.907 | 73.863 | 49.152 |
| Cchi06454 | -1.421271925 | 0.0348631337272742 | 0.086992794 | ns | 32.802 | 35.144 | 150.458 | 206.662 | 198.651 | 204.739 |
| Cchi02961 | 1.209746615 | 0.0348815389085382 | 0.086992794 | ns | 95.195 | 27.541 | 47.39 | 26.741 | 29.6 | 19.852 |
| Cchi02595 | 1.320653966 | 0.0352891562761287 | 0.086992794 | ns | 579.082 | 866.66 | 294.784 | 278.364 | 284.558 | 245.336 |
| Cchi04993 | 0.814857085 | 0.035471729819244 | 0.086992794 | ns | 271.224 | 229.724 | 334.462 | 218.139 | 157.368 | 140.604 |
| Cchi00370 | 1.252110092 | 0.0355764567775587 | 0.086992794 | ns | 881.831 | 517.09 | 296.513 | 201.109 | 290.396 | 303.812 |
| Cchi02596 | 1.453856602 | 0.0356132545500356 | 0.086992794 | ns | 319.33 | 760.44 | 238.731 | 173.152 | 183.273 | 218.849 |
| Cchi05667 | -2.010836928 | 0.0364114342668759 | 0.088481672 | ns | 10.492 | 0 | 3.388 | 33.087 | 12.697 | 12.013 |
| Cchi11560 | -1.601102323 | 0.0369343030025107 | 0.089289629 | ns | 46.643 | 47.789 | 290.766 | 362.528 | 382.768 | 442.34 |
| Cchi08706 | -1.170043525 | 0.0374022432460538 | 0.08995719 | ns | 204.59 | 366.911 | 653.769 | 1218.386 | 782.989 | 1011.122 |
| Cchi10801 | -5.432407571 | 0.0379648575369552 | 0.090581145 | ns | 0 | 203.395 | 0 | 259.735 | 9202.858 | 4063.698 |
| Cchi10102 | -2.629056049 | 0.038137182044436 | 0.090581145 | ns | 0 | 0 | 3.045 | 9.686 | 9.86 | 12.397 |
| Cchi12398 | 1.553708774 | 0.0382410804718708 | 0.090581145 | ns | 27433.444 | 4976.337 | 5109.398 | 4150.957 | 3432.362 | 5570.954 |
| Cchi13696 | -1.453581127 | 0.0384634982790246 | 0.090650154 | ns | 62.107 | 86.32 | 330.12 | 405.992 | 548.56 | 405.377 |
| Cchi02599 | 1.121082697 | 0.0390428844273166 | 0.091555564 | ns | 1618.253 | 1531.503 | 740.054 | 704.674 | 597.641 | 748.572 |
| Cchi01669 | 2.051068116 | 0.0405236677347511 | 0.094555225 | ns | 32.244 | 217.464 | 22.298 | 33.612 | 23.809 | 26.611 |
| Cchi05858 | 2.556314618 | 0.0407307450433325 | 0.094567918 | ns | 35.58 | 197.852 | 25.357 | 27.317 | 27.17 | 5.036 |
| Cchi02139 | -1.925578539 | 0.0412550747762864 | 0.095313449 | ns | 1.463 | 3.945 | 26.937 | 47.584 | 54.579 | 32.218 |
| Cchi00029 | 1.324732262 | 0.042104571427573 | 0.096799235 | ns | 6233.625 | 9235.655 | 2786.057 | 2672.491 | 2827.556 | 3062.418 |
| Cchi06277 | 1.688746738 | 0.0432312198432171 | 0.098904596 | ns | 450.081 | 207.533 | 80.306 | 57.858 | 110.322 | 101.295 |
| Cchi12566 | 1.136521735 | 0.0444457990594239 | 0.101189708 | ns | 245.54 | 495.168 | 288.402 | 197.437 | 177.503 | 168.295 |
| Cchi06904 | -1.058347485 | 0.0464930591971432 | 0.105339347 | ns | 189.398 | 71.019 | 290.057 | 413.285 | 435.972 | 342.478 |
| Cchi06344 | -1.186733333 | 0.0477153823121598 | 0.107390912 | ns | 40.082 | 40.648 | 136.151 | 159.052 | 170.923 | 190.359 |
| Cchi01122 | 2.456991421 | 0.047856504479938 | 0.107390912 | ns | 336.295 | 210.824 | 294.543 | 149.443 | 0 | 31.221 |
| Cchi04690 | -1.813306186 | 0.0482763479093132 | 0.107817177 | ns | 8.222 | 10.932 | 15.216 | 12.859 | 57.049 | 62.64 |
| Cchi13616 | -0.938968656 | 0.0487541437579336 | 0.108368215 | ns | 85.869 | 35.721 | 71.134 | 170.9 | 101.102 | 126.12 |
| Cchi09840 | -1.772706181 | 0.0500908069218238 | 0.110814096 | ns | 8.991 | 0 | 19.776 | 32.038 | 52.994 | 35.509 |
| Cchi12006 | -1.295168374 | 0.0534434121980444 | 0.11767587 | ns | 31.773 | 32.853 | 131.956 | 142.022 | 173.229 | 198.053 |
| Cchi07527 | 7.536233769 | 0.0543568978869609 | 0.119127968 | ns | 38.693 | 46.441 | 0 | 0 | 0 | 0 |
| Cchi03967 | -1.125980614 | 0.0551809673381185 | 0.120371505 | ns | 36.56 | 32.661 | 98.535 | 152.617 | 97.652 | 153.708 |
| Cchi00409 | 1.729631119 | 0.0582203564172231 | 0.126413644 | ns | 3559.371 | 4411.055 | 345.284 | 1177.532 | 1025.148 | 846.025 |
| Cchi08757 | -2.283050213 | 0.0594311569259893 | 0.128447984 | ns | 7.057 | 0 | 1.085 | 12.59 | 19.175 | 4.901 |
| Cchi15050 | 4.824239641 | 0.0596736240263619 | 1 | ns | 1.439 | 0 | 3.986 | 0 | 0 | 0 |
| Cchi08165 | 1.078542669 | 0.0607655984455733 | 0.130729659 | ns | 35.332 | 13.877 | 19.466 | 16.915 | 8.601 | 8.898 |
| Cchi05841 | -1.198335953 | 0.0615270716968315 | 0.131763455 | ns | 31.165 | 53.177 | 144.363 | 186.6 | 173.624 | 201.77 |
| Cchi01556 | 3.317048471 | 0.0635141801732377 | 0.135400684 | ns | 7.974 | 0 | 6.03 | 0 | 1.32 | 0 |
| Cchi10993 | -2.412427088 | 0.063966559664219 | 0.135748038 | ns | 30.595 | 139.747 | 49.93 | 557.393 | 7.349 | 936.605 |
| Cchi00158 | 1.513396173 | 0.0643535044486805 | 0.135954025 | ns | 32.889 | 181.319 | 90.266 | 56.937 | 37.683 | 35.042 |
| Cchi11740 | -1.386974386 | 0.064795002643009 | 0.136272898 | ns | 40.243 | 0 | 37.259 | 65.266 | 77.633 | 76.137 |
| Cchi04665 | -0.83896949 | 0.0679760928971837 | 0.142324945 | ns | 339.383 | 129.643 | 275.434 | 548.206 | 494.879 | 484.837 |
| Cchi10828 | -2.387195219 | 0.0717170448780244 | 0.149490196 | ns | 0 | 0 | 2.299 | 2.482 | 8.472 | 6.032 |
| Cchi00212 | -1.220978762 | 0.073123683926246 | 0.151747822 | ns | 34.117 | 14.358 | 100.296 | 135.689 | 106.688 | 123.691 |
| Cchi04320 | -0.838137602 | 0.0748222891818555 | 0.154588782 | ns | 69.92 | 28.889 | 54.009 | 116.228 | 93.555 | 82.097 |
| Cchi00643 | 0.986022135 | 0.0765570862465543 | 0.156990505 | ns | 32.257 | 43.554 | 32.466 | 16.697 | 16.555 | 26.445 |
| Cchi00931 | 1.602218095 | 0.0766542123720495 | 0.156990505 | ns | 361365.684 | 580259.998 | 54983.336 | 108680.561 | 113662.795 | 198496.028 |
| Cchi05381 | 1.108560853 | 0.078173154697574 | 0.159405259 | ns | 5358.85 | 5724.383 | 2023.084 | 2655.653 | 1603.818 | 2758.212 |
| Cchi02490 | 0.896259689 | 0.0793728886989799 | 0.161151016 | ns | 1123.081 | 1083.854 | 624.102 | 582.919 | 554.466 | 639.033 |
| Cchi02791 | 1.303228955 | 0.0812001030611696 | 0.163189492 | ns | 5527.922 | 14373.795 | 4352.075 | 5106.627 | 3555.592 | 5429.664 |
| Cchi03165 | 3.431948145 | 0.0812203400230287 | 0.163189492 | ns | 0 | 67.554 | 22.53 | 0 | 9.962 | 0 |
| Cchi02459 | 2.735579912 | 0.0814207698065027 | 0.163189492 | ns | 0 | 15.513 | 5.284 | 2.009 | 0 | 1.859 |
| Cchi02141 | 1.384003588 | 0.0844218884048639 | 0.168484535 | ns | 16.345 | 43.189 | 64.493 | 23.427 | 20.672 | 10.092 |
| Cchi06874 | -1.393500545 | 0.0872301732970684 | 0.173351488 | ns | 17.139 | 0 | 23.697 | 33.714 | 45.774 | 33.817 |
| Cchi00410 | 1.374808236 | 0.0882319173880641 | 0.174602402 | ns | 4862.722 | 7385.106 | 1711.522 | 3219.443 | 2372.47 | 877.506 |
| Cchi02590 | -0.804953432 | 0.0894441480751817 | 0.176257586 | ns | 26.428 | 28.619 | 38.64 | 77.076 | 42.868 | 59.224 |
| Cchi11204 | -1.725863491 | 0.0905080057602999 | 0.17760776 | ns | 0 | 2.483 | 7.198 | 11.362 | 18.78 | 9.064 |
| Cchi15075 | 0.762488148 | 0.092020093467798 | 0.179822599 | ns | 2721.901 | 2227.333 | 1528.991 | 1404.819 | 1350.322 | 1498.067 |
| Cchi04493 | 2.459606751 | 0.0951493289341926 | 0.185166121 | ns | 795.677 | 10622.849 | 2071.503 | 2818.032 | 9.513 | 495.376 |
| Cchi07267 | 0.794439679 | 0.0973146624476849 | 0.188555803 | ns | 45.278 | 24.982 | 58.254 | 18.783 | 29.083 | 29.415 |
| Cchi03691 | 0.621961218 | 0.0976952244126163 | 0.188555803 | ns | 704.699 | 434.658 | 965.201 | 507.621 | 471.39 | 467.695 |
| Cchi05507 | -1.464745972 | 0.0993723797850378 | 0.191006746 | ns | 94.959 | 124.658 | 1047.834 | 1211.925 | 1193.805 | 1111.078 |
| Cchi02342 | -1.040035604 | 0.101885627733415 | 0.195038202 | ns | 30.582 | 3.734 | 25.672 | 49.49 | 37.663 | 47.169 |
| Cchi10858 | -1.293590858 | 0.102525502141958 | 0.195465287 | ns | 48.267 | 0 | 70.624 | 101.655 | 126.986 | 97.516 |
| Cchi15167 | 0.771670585 | 0.105587731749596 | 0.20040522 | ns | 3728.183 | 2446.645 | 1775.43 | 1541.903 | 1564.923 | 1995.197 |
| Cchi11486 | 1.657218549 | 0.105971203649471 | 0.20040522 | ns | 3.621 | 2.444 | 10.414 | 1.523 | 2.518 | 1.879 |
| Cchi04013 | -1.127115102 | 0.108500878297338 | 0.203996232 | ns | 21.269 | 7.179 | 58.421 | 63.283 | 70.835 | 66.751 |
| Cchi10950 | 1.482102585 | 0.108931786986892 | 0.203996232 | ns | 16756.532 | 1445.819 | 1920.637 | 2573.382 | 1554.478 | 3227.017 |
| Cchi12351 | 0.669823318 | 0.109174955464914 | 0.203996232 | ns | 309.793 | 128.527 | 203.123 | 155.419 | 133.416 | 135.631 |
| Cchi14089 | 0.948885677 | 0.110231123327687 | 0.205152368 | ns | 55.311 | 39.031 | 31.6 | 22.225 | 29.266 | 17.495 |
| Cchi06515 | -0.898549637 | 0.112209048887918 | 0.20798589 | ns | 891.914 | 190.615 | 478.107 | 1002.499 | 982.572 | 990.637 |
| Cchi02809 | -1.164203995 | 0.112640546165287 | 0.20798589 | ns | 8.904 | 6.89 | 7.026 | 10.338 | 29.157 | 13.176 |
| Cchi06903 | 1.652762256 | 0.116552772377495 | 0.214365687 | ns | 17.424 | 260.614 | 336.928 | 144.006 | 23.612 | 64.207 |
| Cchi04137 | -1.162846866 | 0.117877564412737 | 0.215955382 | ns | 13.022 | 52.465 | 50.496 | 55.146 | 106.967 | 129.048 |
| Cchi00717 | -1.003536904 | 0.120726192303848 | 0.220313557 | ns | 999.114 | 146.099 | 851.381 | 1599.838 | 1089.512 | 1492.668 |
| Cchi02872 | -0.887145728 | 0.123063756598556 | 0.223708922 | ns | 337.226 | 112.187 | 524.487 | 809.86 | 516.408 | 515.757 |
| Cchi03567 | -1.600708189 | 0.123805139819072 | 0.224187686 | ns | 20.301 | 0 | 68.066 | 59.688 | 120.964 | 85.835 |
| Cchi06643 | -1.420374923 | 0.124607724368102 | 0.224773164 | ns | 6.35 | 25.655 | 19.035 | 111.468 | 28.082 | 18.72 |
| Cchi14891 | 1.465451454 | 0.13340404211217 | 0.239718375 | ns | 44.745 | 205.743 | 42.301 | 54.109 | 44.835 | 37.409 |
| Cchi14839 | -1.98072834 | 0.14300907528679 | 0.255997161 | ns | 2.431 | 0 | 123.813 | 159.577 | 176.053 | 156.905 |
| Cchi01137 | 1.002880939 | 0.144541050613719 | 0.257755714 | ns | 339.52 | 212.056 | 76.371 | 81.848 | 131.94 | 128.809 |
| Cchi12001 | -1.191576568 | 0.146248249214078 | 0.259812231 | ns | 10.182 | 2.752 | 40.397 | 41.865 | 44.549 | 46.089 |
| Cchi00023 | -0.926178354 | 0.151806050188926 | 0.268668066 | ns | 75.824 | 30.756 | 65.039 | 181.034 | 115.085 | 61.902 |
| Cchi07196 | 0.807820093 | 0.15304094293328 | 0.269835347 | ns | 683.455 | 234.939 | 260.529 | 207.685 | 292.655 | 203.171 |
| Cchi00992 | 1.225337657 | 0.154963517099336 | 0.271860098 | ns | 2466.65 | 8179.688 | 1563.01 | 2506.401 | 3234.418 | 2031.091 |
| Cchi06157 | -0.962619208 | 0.155954863849053 | 0.271860098 | ns | 102.797 | 20.44 | 167.481 | 224.472 | 190.404 | 157.985 |
| Cchi15226 | -1.610355423 | 0.156441696704422 | 0.271860098 | ns | 1.327 | 7.16 | 87.351 | 83.026 | 110.267 | 101.025 |
| Cchi02646 | -1.035561563 | 0.15650794582412 | 0.271860098 | ns | 31.624 | 19.612 | 135.006 | 117.866 | 134.641 | 137.562 |
| Cchi01014 | 1.451839218 | 0.15790014126637 | 0.273266296 | ns | 6.374 | 17.052 | 8.097 | 1.804 | 3.729 | 6.666 |
| Cchi01668 | -0.708493904 | 0.160817382893775 | 0.277291737 | ns | 113.748 | 205.82 | 209.565 | 307.267 | 292.445 | 373.149 |
| Cchi14684 | -0.977897653 | 0.162964887709671 | 0.27996532 | ns | 19.074 | 40.225 | 111.341 | 114.705 | 134.9 | 115.904 |
| Cchi02127 | -1.10065778 | 0.17082656744971 | 0.292400219 | ns | 20.202 | 0 | 25.245 | 47.136 | 36.118 | 28.667 |
| Cchi10969 | 4.049404954 | 0.17085052326346 | 1 | ns | 13.158 | 0 | 15.503 | 0 | 0 | 0 |
| Cchi00177 | -1.316336324 | 0.172797847038099 | 0.294698874 | ns | 38.507 | 0 | 58.736 | 74.76 | 104.81 | 61.435 |
| Cchi02438 | 0.877976436 | 0.173506264521382 | 0.294834921 | ns | 59.218 | 42.707 | 33.736 | 21.61 | 28.082 | 28.501 |
| Cchi01332 | -1.110534313 | 0.178074122225559 | 0.301425772 | ns | 9.425 | 18.284 | 91.638 | 89.73 | 97.91 | 76.823 |
| Cchi05272 | -0.901432972 | 0.178670287160754 | 0.301425772 | ns | 74.298 | 38.82 | 225.05 | 217.537 | 247.739 | 232.607 |
| Cchi11422 | -0.607670774 | 0.184471121141139 | 0.309520223 | ns | 194.842 | 69.845 | 135.302 | 223.692 | 231.741 | 179.104 |
| Cchi04847 | 0.57673278 | 0.185305642290876 | 0.309520223 | ns | 1548.358 | 644.654 | 907.044 | 683.998 | 779.927 | 738.656 |
| Cchi11957 | -0.862635833 | 0.185448150677445 | 0.309520223 | ns | 76.568 | 90.284 | 325.054 | 396.345 | 236.654 | 301.632 |
| Cchi08064 | -1.710400717 | 0.189520895146383 | 0.315196099 | ns | 20.438 | 23.981 | 157.855 | 601.676 | 6.315 | 92.885 |
| Cchi13478 | -1.196610783 | 0.195419832910019 | 0.322718471 | ns | 35.283 | 0 | 125.681 | 167.766 | 143.555 | 159.595 |
| Cchi15428 | 1.025508767 | 0.195907447674493 | 0.322718471 | ns | 7.032 | 33.373 | 65.267 | 21.137 | 15.229 | 20.433 |
| Cchi00888 | -0.902010978 | 0.196108239148665 | 0.322718471 | ns | 54.208 | 4.869 | 29.57 | 66.047 | 44.923 | 59.608 |
| Cchi13373 | -0.805936718 | 0.196838255071021 | 0.322787208 | ns | 75.228 | 24.905 | 154.898 | 153.448 | 142.827 | 160.872 |
| Cchi03757 | 0.962606894 | 0.199485649949113 | 0.325988745 | ns | 82.26 | 132.53 | 28.68 | 59.854 | 46.672 | 39.652 |
| Cchi01850 | -0.464877128 | 0.200518707005325 | 0.325996788 | ns | 363.839 | 203.221 | 349.697 | 389.794 | 459.121 | 483.352 |
| Cchi03538 | 0.689239678 | 0.20088074969209 | 0.325996788 | ns | 389.759 | 292.62 | 168.654 | 187.099 | 194.684 | 208.986 |
| Cchi01798 | -0.943711034 | 0.201642507280165 | 0.326104607 | ns | 8.322 | 32.738 | 59.302 | 64.192 | 81.287 | 64.041 |
| Cchi03102 | -0.660050459 | 0.205605714504519 | 0.331371409 | ns | 50.202 | 32.719 | 100.129 | 87.568 | 102.925 | 116.859 |
| Cchi06552 | -1.322188942 | 0.207497659524259 | 0.33327535 | ns | 16.903 | 0 | 111.197 | 79.238 | 139.118 | 122.445 |
| Cchi01923 | 0.734753097 | 0.209567978744542 | 0.335451816 | ns | 568.615 | 121.232 | 272.13 | 194.673 | 215.608 | 196.485 |
| Cchi04850 | -0.427637113 | 0.212806779186836 | 0.339477481 | ns | 1027.972 | 863.619 | 1042.49 | 1634.524 | 1178.066 | 1535.155 |
| Cchi04395 | -1.166380545 | 0.218154372118112 | 0.346828476 | ns | 97.105 | 0 | 217.588 | 231.765 | 195.371 | 311.89 |
| Cchi04382 | -0.77837709 | 0.225341196240094 | 0.35704399 | ns | 151.585 | 20.747 | 140.679 | 197.616 | 208.021 | 158.972 |
| Cchi00722 | -0.622125295 | 0.226261397100616 | 0.357294933 | ns | 259.12 | 69.633 | 245.169 | 300.819 | 329.475 | 326.654 |
| Cchi14798 | -1.494878634 | 0.228632499110626 | 0.359827658 | ns | 0 | 0 | 70.805 | 60.929 | 106.872 | 82.647 |
| Cchi00897 | -1.316771277 | 0.229820380059977 | 0.360487486 | ns | 0 | 3.965 | 32.1 | 33.458 | 42.875 | 25.5 |
| Cchi08287 | -1.224560939 | 0.233427488467661 | 0.364924974 | ns | 3.758 | 0 | 18.646 | 11.643 | 27.109 | 19.551 |
| Cchi14638 | -0.581041171 | 0.234515134753716 | 0.365407303 | ns | 164.384 | 92.709 | 234.157 | 184.655 | 306.782 | 278.125 |
| Cchi01564 | -0.64352107 | 0.23622460634982 | 0.36685212 | ns | 723.636 | 612.802 | 1836.804 | 1329.726 | 1811.015 | 2010.668 |
| Cchi15521 | 0.888851477 | 0.240751622973891 | 0.372648552 | ns | 14.597 | 49.059 | 107.197 | 34.303 | 36.86 | 29.788 |
| Cchi04014 | -0.701076604 | 0.246990348440945 | 0.380482819 | ns | 77.25 | 45.671 | 204.754 | 184.668 | 196.188 | 191.999 |
| Cchi01331 | -0.729448378 | 0.247435521954423 | 0.380482819 | ns | 20.562 | 27.387 | 33.319 | 50.335 | 62.915 | 34.596 |
| Cchi02205 | -0.857035357 | 0.250622146431586 | 0.384123486 | ns | 12.873 | 8.699 | 52.266 | 37.502 | 59.002 | 45.082 |
| Cchi04967 | 0.726093613 | 0.252114337504001 | 0.385151871 | ns | 83.848 | 239.058 | 272.853 | 150.211 | 152.428 | 100.423 |
| Cchi04495 | 0.835984897 | 0.253786181658806 | 0.38644714 | ns | 750.783 | 771.583 | 3815.917 | 759.718 | 899.639 | 1405.722 |
| Cchi00777 | -0.996588759 | 0.256911534408378 | 0.389940161 | ns | 49.123 | 58.778 | 176.668 | 435.599 | 103.238 | 207.792 |
| Cchi02135 | -1.267393739 | 0.264995386158521 | 0.400878332 | ns | 14.51 | 11.663 | 361.784 | 324.873 | 351.957 | 244.755 |
| Cchi01773 | -0.632413466 | 0.265827636148709 | 0.400878332 | ns | 66.77 | 60.799 | 192.004 | 157.786 | 201.039 | 154.87 |
| Cchi02102 | -0.880557997 | 0.267153678785452 | 0.40158678 | ns | 26.614 | 35.991 | 195.985 | 132.721 | 178.156 | 179.82 |
| Cchi01944 | -1.972405566 | 0.2693639220007 | 1 | ns | 9.177 | 0 | 0 | 16.121 | 13.35 | 4.963 |
| Cchi12680 | 0.58140945 | 0.269667894730565 | 0.404071063 | ns | 2357.342 | 816.735 | 904.746 | 955.273 | 928.095 | 975.374 |
| Cchi02510 | -0.741668315 | 0.273364840654753 | 0.408306084 | ns | 107.46 | 18.149 | 144.688 | 127.372 | 162.56 | 165.17 |
| Cchi02907 | -0.708253959 | 0.278702155892852 | 0.414956543 | ns | 1388.327 | 3023.687 | 1713.811 | 4961.354 | 4635.325 | 2109.814 |
| Cchi14266 | -0.687253984 | 0.284848180994285 | 0.420759114 | ns | 98.345 | 64.244 | 320.285 | 310.031 | 266.193 | 233.676 |
| Cchi15096 | 0.767032483 | 0.28489054919383 | 0.420759114 | ns | 24.853 | 88.648 | 52.363 | 52.894 | 23.503 | 37.804 |
| Cchi14570 | -0.691299558 | 0.285674746515927 | 0.420759114 | ns | 710.354 | 103.064 | 440.107 | 690.344 | 666.482 | 675.809 |
| Cchi06700 | -0.372537473 | 0.286187968855881 | 0.420759114 | ns | 2163.479 | 1981.635 | 2229.219 | 2905.727 | 2736.954 | 3431.186 |
| Cchi05903 | 0.474586056 | 0.290380639543656 | 0.425589125 | ns | 537.128 | 218.33 | 473.686 | 247.081 | 351.685 | 322.159 |
| Cchi03284 | -1.083095603 | 0.293994936862663 | 0.429544004 | ns | 1.017 | 1.386 | 18.34 | 12.59 | 21.033 | 13.477 |
| Cchi02321 | -0.916501591 | 0.296362775865272 | 0.431658826 | ns | 68.705 | 24.847 | 327.909 | 157.363 | 337.558 | 279.901 |
| Cchi05495 | -0.700752259 | 0.298526804308876 | 0.433464617 | ns | 5720.643 | 15968.33 | 7958.775 | 15126.077 | 14903.246 | 26819.786 |
| Cchi15388 | -0.932678928 | 0.306330274742194 | 0.443422527 | ns | 54.071 | 0 | 73.493 | 104.495 | 87.125 | 58.237 |
| Cchi03173 | -1.042556979 | 0.310654153434298 | 0.44829784 | ns | 15.341 | 76.696 | 501.735 | 372.79 | 512.659 | 351.781 |
| Cchi13249 | -0.584761685 | 0.315102748288242 | 0.453322665 | ns | 3106.054 | 944.376 | 3080.646 | 2212.965 | 4215.854 | 5277.088 |
| Cchi01561 | -0.55069042 | 0.323422003306295 | 0.463868256 | ns | 93.05 | 72.174 | 193.682 | 253.529 | 176.026 | 178.595 |
| Cchi06606 | -0.765847717 | 0.338456379350314 | 0.482500793 | ns | 16.854 | 104.623 | 163.89 | 272.901 | 162.179 | 175.584 |
| Cchi14911 | -0.781692811 | 0.338470705616816 | 0.482500793 | ns | 9.983 | 13.472 | 79.338 | 56.54 | 57.927 | 71.662 |
| Cchi13307 | 0.384428548 | 0.344042121089003 | 0.48791935 | ns | 773.429 | 382.231 | 451.36 | 452.258 | 412.381 | 446.369 |
| Cchi01867 | 0.538743468 | 0.344352462491383 | 0.48791935 | ns | 124.426 | 45.056 | 179.977 | 110.675 | 55.777 | 87.278 |
| Cchi01893 | -1.302463568 | 0.349449311804588 | 0.493649781 | ns | 0 | 0 | 3.522 | 3.57 | 5.906 | 1.983 |
| Cchi02271 | -0.542060634 | 0.354234166250956 | 0.498906378 | ns | 139.878 | 24.982 | 112.041 | 138.171 | 137.506 | 143.065 |
| Cchi00510 | 3.40021118 | 0.358064196126722 | 0.502790742 | ns | 154.76 | 0 | 212.017 | 35.467 | 0 | 0 |
| Cchi11083 | -0.417511501 | 0.364016525327384 | 0.509623135 | ns | 77.684 | 49.27 | 128.197 | 138.018 | 121.78 | 102.416 |
| Cchi03533 | -0.649655881 | 0.367424080203615 | 0.512862779 | ns | 14.894 | 60.183 | 28.457 | 56.323 | 70.815 | 58.113 |
| Cchi15389 | -0.765243522 | 0.370275898309288 | 0.515309781 | ns | 30.744 | 5.177 | 49.165 | 40.534 | 85.322 | 20.973 |
| Cchi14522 | 0.76736301 | 0.3770566916758 | 0.522565309 | ns | 2240.828 | 189.441 | 393.824 | 530.46 | 694.401 | 433.276 |
| Cchi04920 | 0.537517061 | 0.378518881662298 | 0.522565309 | ns | 43.654 | 11.336 | 53.388 | 24.054 | 31.968 | 21.794 |
| Cchi04321 | -0.559781632 | 0.378831993446397 | 0.522565309 | ns | 22.373 | 75.561 | 68.831 | 95.129 | 85.281 | 97.827 |
| Cchi03821 | -0.415937908 | 0.383183991788565 | 0.527018452 | ns | 65.927 | 76.812 | 96.347 | 113.784 | 133.852 | 102.915 |
| Cchi02874 | 0.416630703 | 0.384957396339244 | 0.527909412 | ns | 1291.991 | 1156.682 | 1789.798 | 908.879 | 1601.566 | 859.533 |
| Cchi01565 | 0.445987459 | 0.387531495182945 | 0.529890004 | ns | 84.505 | 31.083 | 51.798 | 34.034 | 47.775 | 46.422 |
| Cchi05172 | -0.359153227 | 0.397001360603794 | 0.541260576 | ns | 1066.393 | 987.661 | 1916.109 | 1544.347 | 1928.652 | 1932.9 |
| Cchi02604 | -1.343988703 | 0.400278207452099 | 0.541800854 | ns | 25.039 | 0 | 0 | 24.323 | 24.156 | 11.224 |
| Cchi08385 | -0.352270566 | 0.400542193922134 | 0.541800854 | ns | 75.749 | 78.563 | 119.994 | 132.785 | 106.13 | 142.857 |
| Cchi08488 | 0.414473094 | 0.400863318168895 | 0.541800854 | ns | 50.611 | 59.298 | 65.053 | 60.02 | 43.692 | 40.545 |
| Cchi06886 | 0.575378987 | 0.40863063173956 | 0.548151023 | ns | 909.375 | 982.446 | 300.031 | 356.067 | 562.237 | 770.126 |
| Cchi01241 | -0.322691866 | 0.4090591868891 | 0.548151023 | ns | 3809.947 | 1787.364 | 3692.98 | 3637.962 | 4385.688 | 4019.02 |
| Cchi06691 | 0.584342844 | 0.409982982517931 | 0.548151023 | ns | 2562.899 | 6073.26 | 2280.095 | 4344.133 | 1730.205 | 3010.099 |
| Cchi11420 | -0.691925733 | 0.410236692753089 | 0.548151023 | ns | 33.844 | 0 | 21.297 | 35.928 | 20.57 | 40.836 |
| Cchi05184 | 0.279148421 | 0.415256489129909 | 0.553282084 | ns | 436.153 | 361.272 | 483.618 | 342.364 | 372.146 | 422.53 |
| Cchi10849 | -0.367941938 | 0.426895937002105 | 0.567179021 | ns | 565.304 | 217.483 | 345.247 | 656.207 | 460.312 | 416.373 |
| Cchi00458 | 0.368141477 | 0.430734434043034 | 0.570662287 | ns | 1299.444 | 655.798 | 636.004 | 603.109 | 787.711 | 735.271 |
| Cchi06783 | 0.376830556 | 0.432029319493087 | 0.570765495 | ns | 146.501 | 47.404 | 135.085 | 84.088 | 90.84 | 88.846 |
| Cchi02203 | -0.482594481 | 0.433798505764318 | 0.57141593 | ns | 15.8 | 29.293 | 56.933 | 47.814 | 58.811 | 49.817 |
| Cchi03810 | 0.441985011 | 0.434958394270574 | 0.57141593 | ns | 19239.503 | 24528.498 | 13579.97 | 18010.783 | 9742.769 | 21035.569 |
| Cchi06343 | -0.390969975 | 0.439817156745175 | 0.576185046 | ns | 301.881 | 258.728 | 214.946 | 346.458 | 286.722 | 520.149 |
| Cchi13092 | -0.719576023 | 0.447112477532173 | 0.58411073 | ns | 5.965 | 39.262 | 12.463 | 51.41 | 24.102 | 28.48 |
| Cchi05974 | -0.397525641 | 0.451779716230883 | 0.588568575 | ns | 15351.004 | 10247.432 | 6544.077 | 11860.15 | 17353.526 | 17051.892 |
| Cchi15307 | 0.935599588 | 0.46935292257227 | 0.608113097 | ns | 3161.179 | 20931.33 | 9202.775 | 19080.378 | 204.945 | 2801.155 |
| Cchi01173 | 0.394424527 | 0.469375141158729 | 0.608113097 | ns | 597.71 | 262.846 | 212.981 | 262.895 | 332.469 | 270.494 |
| Cchi01127 | -0.473683431 | 0.470809379845369 | 0.608290907 | ns | 26.788 | 26.868 | 96.741 | 69.284 | 82.389 | 77.144 |
| Cchi05310 | 0.316307322 | 0.476779805691915 | 0.614312442 | ns | 397.845 | 157.646 | 356.714 | 275.856 | 285.429 | 209.827 |
| Cchi02069 | -0.578466573 | 0.48705530699916 | 0.62583271 | ns | 24.431 | 163.632 | 56.428 | 133.949 | 149.305 | 159.647 |
| Cchi02700 | -0.270676419 | 0.49118976300768 | 0.629420762 | ns | 98.097 | 64.225 | 112.036 | 124.225 | 102.68 | 131.146 |
| Cchi01865 | -0.307835133 | 0.504134282416135 | 0.644119626 | ns | 364.832 | 289.483 | 236.864 | 333.522 | 344.907 | 527.78 |
| Cchi01979 | 0.830805809 | 0.50540729676855 | 0.644119626 | ns | 146.997 | 3324.16 | 390.427 | 1420.634 | 158.62 | 1509.883 |
| Cchi02356 | -0.364150624 | 0.512823229347175 | 0.650676903 | ns | 23.588 | 7.987 | 23.29 | 23.658 | 17.501 | 33.807 |
| Cchi04979 | -0.295244603 | 0.513327194080527 | 0.650676903 | ns | 3731.543 | 1409.116 | 3577.501 | 3378.342 | 4296.617 | 3415.154 |
| Cchi03698 | -0.425401597 | 0.515305578443362 | 0.651424033 | ns | 86.241 | 29.736 | 201.13 | 137.723 | 146.944 | 151.216 |
| Cchi08006 | -0.451437516 | 0.517952247716859 | 0.653009689 | ns | 184.251 | 40.263 | 323.084 | 225.393 | 190.336 | 338.989 |
| Cchi06902 | 0.599842966 | 0.525267500676843 | 0.660456991 | ns | 91.648 | 411.235 | 550.349 | 603.288 | 92.8 | 126.484 |
| Cchi00181 | 0.32724217 | 0.527602513498472 | 0.660838042 | ns | 437.654 | 138.592 | 196.5 | 222.131 | 188.437 | 234.87 |
| Cchi08444 | -0.588339148 | 0.528388626337586 | 0.660838042 | ns | 5.184 | 0 | 5.576 | 7.779 | 6.423 | 4.485 |
| Cchi06246 | 0.315070497 | 0.530295141093541 | 0.661458567 | ns | 1009.196 | 293.698 | 596.942 | 478.807 | 553.677 | 572.115 |
| Cchi00539 | 0.24422181 | 0.535067421739321 | 0.665640904 | ns | 186.657 | 101.12 | 229.244 | 178.513 | 131.613 | 150.281 |
| Cchi05388 | 0.298094981 | 0.540479803990896 | 0.670595312 | ns | 163.044 | 55.121 | 112.981 | 76.385 | 92.494 | 110.577 |
| Cchi12162 | -0.30954734 | 0.542170397891705 | 0.670917986 | ns | 122.417 | 63.647 | 91.193 | 158.144 | 74.142 | 140.719 |
| Cchi14147 | 0.357972823 | 0.546851834954268 | 0.673205985 | ns | 144.318 | 87.994 | 165.841 | 200.507 | 67.474 | 66.689 |
| Cchi02435 | 0.288353497 | 0.546890149700276 | 0.673205985 | ns | 204.776 | 75.06 | 147.946 | 145.362 | 121.59 | 111.595 |
| Cchi15138 | -0.360358512 | 0.54957976554943 | 0.674745838 | ns | 103.281 | 195.35 | 397.175 | 287.986 | 338.266 | 344.606 |
| Cchi01097 | 0.374013847 | 0.551799296564336 | 0.675702011 | ns | 84.505 | 29.755 | 37.935 | 45.281 | 40.133 | 38.821 |
| Cchi14661 | -0.476538399 | 0.558242304500156 | 0.681811565 | ns | 31.066 | 26.618 | 155.311 | 85.444 | 133.92 | 123.878 |
| Cchi03378 | -0.535068112 | 0.563683297502158 | 0.686668744 | ns | 86.886 | 0 | 23.327 | 67.531 | 47.89 | 49.879 |
| Cchi00151 | 0.317484263 | 0.568552709881122 | 0.690806272 | ns | 106.989 | 211.074 | 136.591 | 130.75 | 123.032 | 163.519 |
| Cchi03118 | 0.395659243 | 0.578601454227732 | 0.701199178 | ns | 35.804 | 25.424 | 147.696 | 53.009 | 57.382 | 54.354 |
| Cchi15319 | -0.343208916 | 0.58456188162846 | 0.706596707 | ns | 9.066 | 3.503 | 7.453 | 9.801 | 8.397 | 9.054 |
| Cchi05946 | 0.423518819 | 0.59162490629176 | 0.713295838 | ns | 11.298 | 1.694 | 20.527 | 6.692 | 10.765 | 9.106 |
| Cchi00252 | 0.247390841 | 0.599758033152047 | 0.720511437 | ns | 437.939 | 175.083 | 229.443 | 238.969 | 262.198 | 255.21 |
| Cchi07314 | -0.295163734 | 0.600682243084336 | 0.720511437 | ns | 79.705 | 19.227 | 36.489 | 65.586 | 53.157 | 52.33 |
| Cchi04826 | 0.41631099 | 0.608255829604785 | 0.727734653 | ns | 11.819 | 38.935 | 26.08 | 18.68 | 16.862 | 28.231 |
| Cchi04978 | 0.18536206 | 0.613296062684724 | 0.731897846 | ns | 1832.752 | 1439.141 | 2004.906 | 1450.996 | 1959.851 | 1573.623 |
| Cchi09599 | 0.693498397 | 0.615773645303106 | 1 | ns | 24.506 | 0 | 5.696 | 3.531 | 11.67 | 3.26 |
| Cchi05277 | -0.262643437 | 0.617817279047643 | 0.735422091 | ns | 23.464 | 33.816 | 51.515 | 43.464 | 55.518 | 42.995 |
| Cchi03710 | -0.76749232 | 0.618770647455762 | 1 | ns | 0 | 0 | 2.948 | 1.203 | 2.967 | 2.585 |
| Cchi04760 | -0.755408956 | 0.624752090725182 | 0.74090633 | ns | 1225.965 | 4902.162 | 295.85 | 14229.532 | 75.503 | 451.882 |
| Cchi02729 | 0.351962014 | 0.625584023076754 | 0.74090633 | ns | 3.026 | 13.184 | 14.91 | 7.613 | 8.948 | 10.476 |
| Cchi07773 | 0.648858027 | 0.628507186867803 | 0.742068499 | ns | 7.119 | 0 | 26.534 | 8.24 | 13.643 | 3.8 |
| Cchi03068 | -0.278456064 | 0.63109149854815 | 0.742068499 | ns | 23.712 | 9.835 | 26.9 | 27.688 | 32.206 | 18.949 |
| Cchi12838 | 0.159383017 | 0.632794028678268 | 0.742068499 | ns | 1515.816 | 1109.086 | 1389.346 | 1219.934 | 1319.335 | 1394.218 |
| Cchi11212 | 0.198227321 | 0.632894241857783 | 0.742068499 | ns | 45.663 | 31.93 | 46.477 | 31.718 | 34.261 | 49.069 |
| Cchi04227 | -0.642477215 | 0.634742256741806 | 1 | ns | 53.091 | 0 | 25.514 | 16.94 | 84.342 | 39.019 |
| Cchi04029 | 0.276197502 | 0.636522123139639 | 0.743816754 | ns | 171.998 | 59.702 | 66.981 | 68.567 | 98.448 | 91.66 |
| Cchi03471 | 0.167382895 | 0.63755721776343 | 0.743816754 | ns | 992.144 | 896.838 | 947.311 | 894.575 | 941.963 | 946.448 |
| Cchi05447 | -0.29209986 | 0.640204336086296 | 0.745051696 | ns | 162.896 | 62.858 | 289.895 | 143.353 | 289.791 | 204.469 |
| Cchi12927 | 0.20571726 | 0.643621215514075 | 0.747174134 | ns | 1514.129 | 963.854 | 810.549 | 932.383 | 1054.435 | 1133.318 |
| Cchi02098 | -0.209482371 | 0.64660177962738 | 0.74804011 | ns | 203.288 | 83.336 | 251.667 | 226.673 | 220.357 | 208.633 |
| Cchi12347 | 0.253036261 | 0.647557109931354 | 0.74804011 | ns | 79.482 | 62.012 | 179.884 | 104.943 | 66.398 | 118.998 |
| Cchi11676 | 0.219633004 | 0.650953291874752 | 0.75011571 | ns | 59.205 | 33.489 | 62.073 | 44.053 | 34.635 | 64.021 |
| Cchi13911 | 0.241667408 | 0.661145845714633 | 0.758604967 | ns | 134.694 | 58.643 | 78.476 | 73.788 | 86.2 | 88.14 |
| Cchi04878 | -0.523358571 | 0.661555290852832 | 0.758604967 | ns | 70.181 | 0 | 14.743 | 9.033 | 59.016 | 50.907 |
| Cchi03543 | 0.221063174 | 0.66950165421431 | 0.765844575 | ns | 148.076 | 221.024 | 136.637 | 197.629 | 137.465 | 159.065 |
| Cchi06721 | 1.183424855 | 0.688058985073477 | 1 | ns | 17.499 | 0 | 0 | 0 | 0 | 7.735 |
| Cchi15231 | -0.228896707 | 0.694474820280396 | 0.792478566 | ns | 199.009 | 68.69 | 347.583 | 219.29 | 262.396 | 261.658 |
| Cchi05577 | 0.207619718 | 0.698436568524248 | 0.795064929 | ns | 302.563 | 85.088 | 156.771 | 200.444 | 159.362 | 132.257 |
| Cchi10843 | 0.169401674 | 0.708665715586262 | 0.802998533 | ns | 221.568 | 75.946 | 153.142 | 145.848 | 140.105 | 131.737 |
| Cchi02799 | 0.267011178 | 0.708830261322756 | 0.802998533 | ns | 1356.368 | 203.125 | 574.913 | 677.281 | 329.611 | 849.316 |
| Cchi06672 | -0.315027526 | 0.728618030904387 | 0.821849521 | ns | 12.786 | 36.722 | 190.442 | 119.452 | 116.521 | 72.181 |
| Cchi13322 | -0.357152709 | 0.730026892758943 | 0.821849521 | ns | 1.439 | 7.795 | 52.711 | 26.652 | 33.043 | 23.133 |
| Cchi01300 | 0.136859065 | 0.73072761244442 | 0.821849521 | ns | 387.837 | 182.666 | 333.934 | 325.615 | 302.672 | 238.556 |
| Cchi12049 | -0.216801697 | 0.732832640757845 | 0.822245236 | ns | 5251.526 | 7901.041 | 2999.051 | 5520.027 | 6359.617 | 9861.776 |
| Cchi05920 | -0.174479579 | 0.736003089529068 | 0.82383162 | ns | 57.296 | 25.829 | 88.654 | 68.03 | 77 | 58.279 |
| Cchi01958 | 0.248170833 | 0.740355968271762 | 0.826730831 | ns | 661.826 | 58.547 | 577.119 | 410.829 | 300.433 | 409.759 |
| Cchi07891 | -0.170321754 | 0.743710553319641 | 0.827169779 | ns | 146.835 | 57.431 | 73.016 | 102.154 | 115.01 | 113.661 |
| Cchi11037 | 0.573550062 | 0.744424514246544 | 0.827169779 | ns | 292.902 | 113204.79 | 2586.456 | 101991.549 | 1140.457 | 11659.305 |
| Cchi00232 | 0.239781072 | 0.746040120510955 | 0.827169779 | ns | 248.293 | 425.381 | 1659.659 | 893.692 | 615.305 | 576.507 |
| Cchi02577 | -0.29246295 | 0.755734416017672 | 0.834940089 | ns | 14.398 | 65.668 | 8.648 | 37.476 | 40.398 | 51.167 |
| Cchi06785 | 0.145895806 | 0.756608822606219 | 0.834940089 | ns | 635.87 | 609.145 | 406.616 | 662.63 | 545.552 | 464.237 |
| Cchi15188 | -0.341090884 | 0.759506373433691 | 0.836170162 | ns | 8.607 | 0 | 44.216 | 25.692 | 24.986 | 15.823 |
| Cchi02286 | -0.832737585 | 0.759852275506337 | 1 | ns | 0 | 0 | 0.315 | 0 | 0.633 | 1.059 |
| Cchi00174 | 0.215196024 | 0.765781156421329 | 0.840281977 | ns | 788.658 | 1163.091 | 319.284 | 468.392 | 746.728 | 1064.251 |
| Cchi03295 | -0.224452967 | 0.766824490637052 | 0.840281977 | ns | 32.368 | 87.166 | 22.39 | 57.129 | 71.828 | 64 |
| Cchi02742 | -0.270281689 | 0.77075065163712 | 0.842615514 | ns | 3.882 | 20.709 | 22.469 | 39.753 | 13.697 | 12.241 |
| Cchi06731 | -0.126913808 | 0.7755666903367 | 0.845908786 | ns | 444.041 | 198.814 | 592.266 | 481.737 | 475.792 | 470.716 |
| Cchi11223 | -0.135440896 | 0.780181512278557 | 0.848967817 | ns | 342.757 | 400.072 | 277.103 | 519.086 | 309.558 | 444.718 |
| Cchi00583 | 0.175954768 | 0.784307089255313 | 0.851481539 | ns | 73.79 | 19.708 | 108.384 | 53.444 | 51.116 | 86.126 |
| Cchi04545 | -0.177259443 | 0.801138984990332 | 0.867746383 | ns | 118.361 | 23.962 | 233.086 | 141.523 | 143.099 | 152.337 |
| Cchi00519 | 0.091960585 | 0.804344319975038 | 0.869210797 | ns | 117.394 | 80.449 | 118.534 | 125.76 | 97.869 | 95.854 |
| Cchi01287 | -0.128516001 | 0.810132801219508 | 0.873453526 | ns | 649.735 | 159.417 | 368.449 | 487.623 | 380.951 | 456.461 |
| Cchi06210 | 0.128777781 | 0.815590929262031 | 0.875231883 | ns | 100.677 | 32.238 | 138.815 | 94.643 | 91.636 | 73.687 |
| Cchi03905 | 0.103436673 | 0.81676839023294 | 0.875231883 | ns | 171.589 | 229.666 | 180.871 | 234.311 | 176.23 | 195.27 |
| Cchi14104 | 0.108276021 | 0.817380734640292 | 0.875231883 | ns | 2420.069 | 1056.409 | 1804.388 | 1181.422 | 1788.254 | 2140.692 |
| Cchi00933 | -0.092902881 | 0.829018413382764 | 0.885671152 | ns | 136.852 | 60.857 | 135.451 | 137.212 | 119.691 | 126.712 |
| Cchi02352 | 0.195533066 | 0.832897967865269 | 0.887793516 | ns | 3964.657 | 6535.902 | 1285.514 | 2203.881 | 1513.78 | 8686.792 |
| Cchi15532 | 0.100430288 | 0.839263006031285 | 0.89070141 | ns | 318.536 | 508.544 | 508.377 | 491.474 | 531.861 | 430.691 |
| Cchi00715 | 0.088301123 | 0.840302900544422 | 0.89070141 | ns | 1789.892 | 665.536 | 1360.819 | 1532.486 | 1008.933 | 1250.831 |
| Cchi07260 | -0.278104216 | 0.844854403701498 | 0.89070141 | ns | 9.81 | 0 | 14.78 | 7.012 | 1.157 | 25.895 |
| Cchi14138 | -0.194220248 | 0.844891879478682 | 0.89070141 | ns | 15.887 | 21.383 | 39.256 | 76.104 | 16.916 | 5.316 |
| Cchi03529 | -0.219287698 | 0.845121807322477 | 0.89070141 | ns | 23.948 | 20.517 | 32.633 | 9.814 | 3.042 | 84.973 |
| Cchi01030 | 0.107979941 | 0.847709726477607 | 0.891425699 | ns | 202.655 | 128.892 | 82.485 | 166.448 | 93.378 | 162.793 |
| Cchi08545 | 0.118489856 | 0.853790655820618 | 0.895811672 | ns | 36.138 | 30.775 | 118.372 | 74.363 | 61.901 | 44.978 |
| Cchi03286 | 0.059488941 | 0.855830092180351 | 0.895947128 | ns | 1103.3 | 644.058 | 983.638 | 938.576 | 935.791 | 933.864 |
| Cchi11080 | -0.061160247 | 0.860331997318176 | 0.898654135 | ns | 70.379 | 60.51 | 82.554 | 80.019 | 73.523 | 85.658 |
| Cchi03759 | 0.098932815 | 0.865024298361985 | 0.901157301 | ns | 3843.443 | 1602.195 | 1287.173 | 1767.091 | 1991.349 | 3029.131 |
| Cchi14180 | -0.132027374 | 0.866571306206239 | 0.901157301 | ns | 24.592 | 46.922 | 43.391 | 54.967 | 36.418 | 54.063 |
| Cchi14270 | 0.092501523 | 0.874726608754309 | 0.907625618 | ns | 223.192 | 97.482 | 473.676 | 306.884 | 242.996 | 221.019 |
| Cchi05802 | -0.121155638 | 0.878973573962216 | 0.908943606 | ns | 47.598 | 109.165 | 408.878 | 167.97 | 265.642 | 200.399 |
| Cchi06245 | 0.087665536 | 0.879872915131846 | 0.908943606 | ns | 206.14 | 114.515 | 344.84 | 221.696 | 113.901 | 320.85 |
| Cchi03171 | 0.059901697 | 0.892669802161374 | 0.920136565 | ns | 1804.241 | 1502.134 | 1412.13 | 1677.592 | 2072.785 | 1230.917 |
| Cchi02140 | 0.049787095 | 0.900309333599589 | 0.925976047 | ns | 4229.395 | 2562.046 | 2670.966 | 3932.78 | 3208.153 | 2900.944 |
| Cchi15635 | 0.121358694 | 0.908787196479798 | 0.929956717 | ns | 0 | 73.213 | 46.329 | 57.257 | 31.573 | 44.054 |
| Cchi11299 | -0.094733398 | 0.909488063205663 | 0.929956717 | ns | 58.027 | 227.876 | 45.384 | 127.027 | 166.241 | 138.808 |
| Cchi14093 | -0.076810945 | 0.910384237578139 | 0.929956717 | ns | 124.004 | 265.329 | 347.801 | 517.832 | 181.51 | 181.544 |
| Cchi11513 | 0.063098175 | 0.912111065269848 | 0.929956717 | ns | 56.514 | 61.935 | 173.799 | 90.894 | 109.839 | 94.671 |
| Cchi06488 | -0.064787379 | 0.918822345649011 | 0.934767202 | ns | 244.399 | 53.928 | 318.871 | 195.262 | 177.162 | 302.753 |
| Cchi00214 | -0.034763566 | 0.929436210628876 | 0.943518577 | ns | 302.054 | 195.946 | 441.567 | 325.628 | 348.364 | 336.051 |
| Cchi04015 | 0.063311472 | 0.945317897356951 | 0.957568237 | ns | 4.192 | 44.671 | 97.154 | 59.752 | 35.574 | 62.899 |
| Cchi00610 | -0.028961295 | 0.953403513056486 | 0.963677258 | ns | 1193.299 | 475.248 | 535.629 | 925.82 | 801.885 | 659.57 |
| Cchi09994 | 0.020736847 | 0.9630532197174 | 0.970313416 | ns | 534.35 | 198.044 | 529.85 | 400.49 | 455.011 | 435.539 |
| Cchi14939 | -0.02725878 | 0.964106720450828 | 0.970313416 | ns | 73.195 | 120.251 | 280.18 | 171.77 | 179.571 | 177.879 |
| Cchi13857 | 0.036529497 | 0.969164893385023 | 0.973315493 | ns | 300.442 | 15.589 | 44.396 | 102.397 | 116.418 | 130.637 |
| Cchi07875 | -0.052782144 | 0.977087962736017 | 1 | ns | 0 | 0 | 7.272 | 1.279 | 3.171 | 5.908 |
| Cchi08794 | 0.011706803 | 0.984645661608677 | 0.986749605 | ns | 30.558 | 55.795 | 31.071 | 58.626 | 30.069 | 42.487 |
| Cchi00172 | -0.054659991 | 0.989000600226754 | 1 | ns | 0 | 0 | 2.086 | 0 | 6.478 | 0 |
| Cchi02895 | 9.4993E-05 | 0.999865052754912 | 0.999865053 | ns | 1215.138 | 1821.314 | 1753.865 | 2923.755 | 1149.004 | 1394.093 |
| Cchi04117 | -4.938994776 | NA | 1 | ns | 6.957 | 14.088 | 6.813 | 1021.077 | 1.211 | 5.42 |
| Cchi06130 | -1.569404842 | NA | 1 | ns | 0 | 8.083 | 104.62 | 95.193 | 134.464 | 103.839 |
| Cchi00350 | 2.976668398 | NA | 1 | ns | 682.574 | 4266.034 | 675.265 | 626.92 | 105.661 | 208.145 |
| Cchi04758 | 2.446857638 | NA | 1 | ns | 135.215 | 11534.7 | 718.099 | 2688.139 | 72.359 | 415.241 |
| Cchi07159 | -1.914178194 | NA | 1 | ns | 14.783 | 49.867 | 460.073 | 522.86 | 699.273 | 752.87 |
| Cchi05491 | -6.291137663 | NA | 1 | ns | 7.54 | 16.898 | 42.376 | 5857.823 | 24.646 | 63.605 |