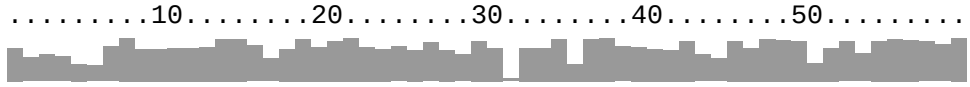```
                                                 (((((((..(((((.....)).))))..((((.(.....).))))).....(((((.....
chr-1.trna210-Val-CAC    GUCUGGGUGGUGUAGUUUGUUAUCAUGCUAG-UCUCACACACU-AAGGUCUCCGGUUUGA 58
chr-6.trna13-Val-AAC     GGUGUCGUGGUGUAGUUGGUUAUCACGUCAG-UCUAACACACUGAAGGUCUCCGGUUCGA 59
chr-1.trna20-Val-AAC     GGUUUCGUGGUGUACUUGGUUAUCACGUCAG-UCUAACACACUGAAGGUCUCCGGUUCGA 59
chr-1.trna33-Val-AAC     GGUGUCGUGGUGUAGUUGGUUAUCACGUCAG-UCUAACACACUGAAGGUCUCCGGUUCGA 59
chr-1.trna200-Val-AAC    GGUGUCGUGGUGUAGUUGGUUAUCACGUCAG-UCUAACACACUGAAGGUCUCCGGUUCGA 59
chr-1.trna213-Val-AAC    GGUUUCGUGGUGUAGUUGGUUAUCACGUCAG-UCUAACACACUGAAGGUCUCCGGUUCGA 59
chr-3.trna141-Val-AAC    GGUGUCGUGGUGUAGUUGGUUAUCACGUCAG-UCUAACACACUGAAGGUCUCCGGUUCGA 59
chr-6.trna74-Val-AAC     GGUGUCGUGGUGUAGUUGGUUAUCACGUCAG-UCUAACACACUGAAGGUCUCCGGUUCGA 59
chr-6.trna79-Val-AAC     GGUUUCGUGGUGUAGUUGGUUAUCACGUCAG-UCUAACACACUGAAGGUCUCCGGUUCGA 59
chr-6.trna80-Val-AAC     GGUUUCGUGGUGUAGUUGGUUAUCACGUCAG-UCUAACACACUGAAGGUCUCCGGUUCGA 59
chr-6.trna81-Val-AAC     GGUUUCGUGGUGUAGUUGGUUAUCACGUCAG-UCUAACACACUGAAGGUCUCCGGUUCGA 59
chr-6.trna83-Val-AAC     GGUUUCGUGGUGUAGUUGGUUAUCACGUCAG-UCUAACACACUGAAGGUCUCCGGUUCGA 59
chr-8.trna47-Val-AAC     GGUGUCGUGGUGUAGUUGGUUAUCACGUCAG-UCUAACACACUGAAGGUCUCCGGUUCGA 59
chr-8.trna81-Val-AAC     GGUUUCGUGGUGUAGUUGGUUAUCACGUCAG-UCUAACACACUGAAGGUCUCCGGUUCGA 59
chr-8.trna51-Val-AAC     GGUGUCGUGGUGUAGUUGGUUAUCACGUCAG-UCUAACACACUGAAGGUCUCCGGUUCGA 59
chr-6.trna93-Val-AAC     GGUUUCGUGGUGUAGUUGGUUAUCACGUCAG-UCUAACACACUGAAGGUCUCCGGUUCAA 59
chr-1.trna209-Val-CAC    GUCUGGGUGGUGUAGUUGGUUAUCACGCUAG-UCUCACACACUAGAGGUCCCCGGUUCGA 59
chr-3.trna144-Val-CAC    GUCUGGGUGGUGUAGUUGGUUAUCACGCUAG-UCUCACACACUAGAGGUCCCCGGUUCGA 59
chr-3.trna145-Val-CAC    GUCUGGGUGGUGUAGUUGGUUAUCACGCUAG-UCUCACACACUAGAGGUCCCCGGUUCGA 59
chr-8.trna91-Val-CAC     GUCUGGGUGGUGUAGUUGGUUAUCACGCUAG-UCUCACACACUAGAGGUCCCCGGUUCGA 59
chr-2.trna69-Val-CAC     GUCUGGGUGGUGUAGUUGGUUAUCACGCUAG-UCUCACACACUAGAGGUCCCCGGUUUGA 59
chr-12.trna121-Val-CAC   GUCUGGGUGGUGUAGUCGGUUAUCACGCUAG-UCUCACACACUAGAGGUCCCCGGUUCGA 59
chr-8.trna48-Val-CAC     GUCUGGGUGGUGUAGUCGGUUAUCACGCUAG-UCUCACACACUAGAGGUCCCCGGUUCGA 59
chr-4.trna31-Val-CAC     GUCUGGGUGGUGUAGUCGGUUAUCACGCUAG-UCUCACACACUAGAGGUCCCCGGUUCGA 59
chr-10.trna13-Val-CAC    GUUUGGGUGGUGUAGUCGGUUAUCACACUAG-UCUCACACACUAGAGGUCCCCGAUCCGA 59
chr-9.trna99-Val-CAC     GGUGACGUGGUGUAGUUGGUUAUCACGUCAG-UCUCACACACUGAAGGUCUCCGAUUCAA 59
chr-12.trna16-Val-AAC    GGUUUCGUGGCGUAGUUGGUUAUCACGUCAA-UCUAACACACUGAAGGUCUCCGGUAUGA 59
chr-1.trna14-Val-TAC     GUUGCUGUGGUGUAGU-GGUUAUCACGUUAG-UCUUACACACUAAAGGUCCCCAGUUCGA 58
chr-3.trna132-Val-TAC    GUUGCUGUGGUGUAGU-GGUUAUCACGUUAG-UCUUACACACUAAAGGUCCCCAGUUCGA 58
chr-10.trna7-Val-TAC     GUUGCUGUGGUGUAGU-GGUUAUCACGUUAG-UCUUACACACUAAAGGUCCCCAGUUCGA 58
chr-7.trna98-Val-TAC     GUUGCUGUGGUGUAGU-GGUUAUCACGUUAG-UCUUACACACUAAAGGUCCCCAGUUCGA 58
chr-11.trna16-Val-TAC    GUUGGUGUGGUGUAGU-GGUUAUCACGUCAG-UCUUACACACUGAAGGUCCCCAGUUCGA 58
chr-10.trna114-Val-TAC   GUUGCUGUGUUGUAGU-GGUUAUCACGUUAG-UCUUACACACUAAAGGUUCCCAAUUCGA 58
chr-10.trna60-Val-TAC    GUUGGUGUGGUGUAGU-GGUUAUCACGUCAG-UCUUACACACGGAAGGUCUCCAGCUCGA 58
chr-1.trna161-Val-AAC    GGUGUCGUGGUGUAGCUUGUUAUCACAUCAGUUUUAACACAAUGAAGGUCUCCGGUUCAA 60
chr-5.trna17-Val-CAC     GUUUAGGUGGUGAAGUUGGUUAUCACGCUAG-UCUCACACAUUAGAGGUCCCUGGUUUGA 59
chr-1.trna18-Val-GAC     AGGGAUAUAACUCAGC--GGUAGAGUGUCAU-CUUGACGUGGUGGAAGUCAUCAGUUCGA 57
chr-8.trna41-Val-GAC     AGGGAUAUAACUCAGC--GGUAGAGUGUCAC-CUUGACGUGGUGGAAGUCAUCAGUUCAA 57
chr-10.trna124-Val-GAC   AGGGAUAUAACUCAGC--GGUAGAGUGUCAC-CUUGACGUGGUAGAAGUCAUCAGUUCGA 57
chr-1.trna78-Val-GAC     AGGGAUAUAACUCAGC--GGUAGAGUGUUAC-CUUGACGUGGUGGAAGUCAUCAGUUCGA 57
chr-3.trna18-Val-GAC     AGGGAUAUAACUCAGC--GGUAGAGUUUCAC-CUUGACGUGGUGGAAGUCAUCAGUUCAA 57
chr-2.trna64-Val-AAC     AGGGAUAUAACUCAGC--GGUAGAGUGUCAC-CUUAACGUGGUGGAAGUCAUCAGUUCGA 57
chr-10.trna37-Val-GAC    AGGGAUAUAACUCAGU--GGUAGAGUGUCAC-CUUGACGUGGUGGAAGUUAUCAGUUCGA 57
chr-4.trna57-Val-GAC     AGGGAUAUAACUCAGC--GGUAGAGUGUCAC-GUUGACGUGGUAGAAGUCAUCAGUUCGA 57
chr-3.trna1-Val-GAC      AGGGAUAUAACUCAGU--GGUAGAGUGUCAC-CUUGACGUUGUGGAAGUUAUCAGUUCAA 57
chr-10.trna39-Val-GAC    UUUGUUGUAGUAUAGU-GGUGAGUAUUCCCU-CCUGACACGCGGG-UGACCUGGGUUCGA 57
chr-9.trna72-Val-AAC     AUUGUUGUAUUAUAGU-GGUGAUUAUUCCCG-CCUAACAUGUGGG-UGACCCGAGUUCGA 57
chr-9.trna83-Val-GAC     GUUGUGGUUUAGUGGUUCA--AUGAAGUUGGGUUGACCACCAUGC-GAUCUUAGGUUCAA 57
                         .........10........20........30........40........50.........

                         ..)))))))))))).
chr-1.trna210-Val-CAC    ACCCGGGUUCAGACA 73
chr-6.trna13-Val-AAC     GUCCAGGUGACGUCA 74
chr-1.trna20-Val-AAC     GUCCGGGCGAAGCCA 74
chr-1.trna33-Val-AAC     GUCCGGGCGACGCCA 74
chr-1.trna200-Val-AAC    GUCCGGGCGACGCCA 74
chr-1.trna213-Val-AAC    GUCCGGGCGAAGCCA 74
chr-3.trna141-Val-AAC    GUCCGGGCGACGCCA 74
chr-6.trna74-Val-AAC     GUCCGGGCGACGCCA 74
chr-6.trna79-Val-AAC     GUCCGGGCGAAGCCA 74
chr-6.trna80-Val-AAC     GUCCGGGCGAAGCCA 74
chr-6.trna81-Val-AAC     GUCCGGGCGAAGCCA 74
chr-6.trna83-Val-AAC     GUCCGGGCGAAGCCA 74
chr-8.trna47-Val-AAC     GUCCGGGCGACGCCA 74
chr-8.trna81-Val-AAC     GUCCGGGCGAAGCCA 74
chr-8.trna51-Val-AAC     GUCCGGUCGACGCCA 74
chr-6.trna93-Val-AAC     GUCCGGGUGAAGCCA 74
chr-1.trna209-Val-CAC    ACCCGGGCUCAGACA 74
chr-3.trna144-Val-CAC    ACCCGGGCUCAGACA 74
chr-3.trna145-Val-CAC    ACCCGGGCUCAGACA 74
chr-8.trna91-Val-CAC     ACCCGGGCUCAGACA 74
chr-2.trna69-Val-CAC     ACCCGGGCUCAGACA 74
chr-12.trna121-Val-CAC   ACCCGGGCUCAGACA 74
chr-8.trna48-Val-CAC     ACCCGGGCUCAGACA 74
chr-4.trna31-Val-CAC     ACCCGGGCUCAGACA 74
chr-10.trna13-Val-CAC    AUCUGGGCUCAGACA 74
chr-9.trna99-Val-CAC     GUCCGGGCGCCACCA 74
chr-12.trna16-Val-AAC    AUCCGGGGGAAACCA 74
chr-1.trna14-Val-TAC     UCCUGGGCAGCAACA 73
chr-3.trna132-Val-TAC    UCCUGGGCAGUAACA 73
chr-10.trna7-Val-TAC     UCCUGGGCAGCAACA 73
chr-7.trna98-Val-TAC     UCCUGGGCAGCAACA 73
chr-11.trna16-Val-TAC    UCCUGGGCAUCAACA 73
chr-10.trna114-Val-TAC   UCCUGGGCAGCAACA 73
chr-10.trna60-Val-TAC    UCCUGGGCAUCAACA 73
chr-1.trna161-Val-AAC    GUCCGGGCGACACCC 75
chr-5.trna17-Val-CAC     ACCCGUGCCCAGACU 74
chr-1.trna18-Val-GAC     GCCUGAUUAUCCCUA 72
chr-8.trna41-Val-GAC     GCCUGAUUAUCCCUA 72
chr-10.trna124-Val-GAC   GCCUGAUUAUCCCUA 72
chr-1.trna78-Val-GAC     GCCUGAUUAUCCCUA 72
chr-3.trna18-Val-GAC     GCCUGAUUAUCCCUA 72
chr-2.trna64-Val-AAC     GCCUGAUUAUCCCUA 72
chr-10.trna37-Val-GAC    GCCUGAUUAUCCCUA 72
chr-4.trna57-Val-GAC     GCCUGAUUAUCCCUA 72
chr-3.trna1-Val-GAC      GCCUGAUUAUCCCUA 72
chr-10.trna39-Val-GAC    UCCCCAGCAACAACG 72
chr-9.trna72-Val-AAC     UCCCCAAUAAUGAUG 72
chr-9.trna83-Val-GAC     UUCCUAACAGAUACA 72
                         .........70....
```