A

```
10        20        30        40        50        60        70        80
|          CUUAU        C      UGAG      -      UUC           UU-     AUCCUCA    CA
GGUCAUGUGGG     CAAAGGGG GCUUAC    AGUUCU UUGGCA   UGUCCACCUCC   GUCGA       GAGA  G
UCAGUAUACCC     GUUUCCCU CGGAUG    UCGAGG AACCGU   ACGGGUGGAGG   UAGUU       CUCU  A
^          AAAAU        C      UG--      U      CAU           UUC     GUCUAUA    AA
  160       150       140         130       120       110       100        90
```

B

```
                                        UGGCAUUCUGUCCACCUCC 3,1
                                       UUGGCAUUCUGUCCACCUCC 27,28
                                       UUGGCAUUCUGUCCACCUC 3,1
                                      UUUGGCAUUCUGUCCACCUCC 3,2
                    GGGGCGCUUACUGAGAGU 1,0
                   AGGGGCGCUUACUGAGAGUUCU 1,0
                   AGGGGCGCUUACUGAGAGUUC 1,0
                   AGGGGCGCUUACUGAGAGUU 2,0
                   AGGGGCGCUUACUGAGAGU 4,0
                   AGGGGCGCUUACUGAGAG 1,0                                                                                GCUGUGUAGGCCUCCCUUUG 1,0
                  AAGGGGCGCUUACUGAGAGUUCU 15,3                                                                          AGCUGUGUAGGCCUCCCUUUG 5,0
                  AAGGGGCGCUUACUGAGAGUUC 28,0                                                                           AGCUGUGUAGGCCUCCCUUU 9,0
                  AAGGGGCGCUUACUGAGAGUU 101,0                                                          AGGUGGGCAUACUGCCAAUGGA 1,0
                  AAGGGGCGCUUACUGAGAGU 290,0                                                           AGGUGGGCAUACUGCCAAUGG 7,0
                  AAGGGGCGCUUACUGAGAG 86,0                                                             AGGUGGGCAUACUGCCAAUG 25,0
                  AAGGGGCGCUUACUGAGA 4,0                                                               AGGUGGGCAUACUGCCAAU 11,0
GGUCAUGUGGGCUUAUCAAAGGGGCGCUUACUGAGAGUUCUUUGGCAUUCUGUCCACCUCCUUGUCGAAUCCUCAGAGACAGAAAUCUCAUAUCUGUUGAUCUUGGAGGUGGGCAUACUGCCAAUGGAGCUGUGUAGGCCUCCCUUUGUAAAACCCAUAUGACU
(((((((((((.....(((((((.(((((((....(((((((((((...((((((((((..(((((.......((((......))))).......)))))...))))))))))...)))))))).)))))))..)))))))).))))))))).....))))))))))) (-81.80)
```