Example. Two psychiatrists independently rate the severity of depression on a set of 5 subjects monthly for 3 months.

The required parameters (n, g, t, x, y, weight) :

1. n=5 subjects
2. g=3 (1 for no depression; 2 for mild depression; 3 for severe depression)
3. t=3 time points
4. x is a 5 by 3 matrix for the first rater’s ratings, where element x(i,j) represents the rater’s rating on the ith subject at time j;

1. y is a 5 by 3 matrix for the second rater’s ratings, where element y(i,j) represents the rater’s rating on the ith subject at time j;
2. Both unweighted and weighted kappas are available by specifying the ‘weight’ variable.

Weight=1 for unweighted kappa; 2 for Cicchetti-Allison weighted kappa; 3 for Fleiss-Cohen weighted kappa.

By implementing the function kappa.u(n,g, t, x,y,weight) using the specified values above, it gives

> kappa.u(5,3,3,x,y,1)

kappa at t=1 (k1) kappa at t=2 (k2)

0.466666667 0.500000000

kappa at t=3 (k3) standard error of k1

0.466666667 0.286172528

standard error of k2 standard error of k3

0.242383993 0.286172528

test statistic for testing H0:k1=k2=k3 p-value for testing H0:k1=k2=k3

0.009170985 0.995425005