Checking the limitations of the correlation coefficient for the Fitness data:

For figures A,B,C,D,E in the above scatterplot matrix – CONDITIONS NOT MET

1. Level of measurement: Both variables are continuous, so this condition is met
2. Related pairs: Each observation have a pair of values, so this condition is met (from printed data set).
3. Absence of outliers: From the plots and data table, this condition is met
4. Linearity: The observations do not form a linear pattern

For figure F in the above scatterplot matrix - CONDITIONS MET

1. Level of measurement: Both variables are continuous, so this condition is met
2. Related pairs: Each observation have a pair of values, so this condition is met (from printed data set).
3. Absence of outliers: From the plots and data table, this condition is met
4. Linearity: The observations DO form a linear pattern. The observations tend to DECREASE with the increase of Age and Maxpulse

For figures G,H,I,J,K in the above scatterplot matrix – CONDITIONS NOT MET

1. Level of measurement: Both variables are continuous, so this condition is met
2. Related pairs: Each observation have a pair of values, so this condition is met (from printed data set).
3. Absence of outliers: From the plots and data table, this condition is met
4. Linearity: The observations do not form a linear pattern

For figures L,M,N in the above scatterplot matrix - CONDITIONS MET

1. Level of measurement: Both variables are continuous, so this condition is met
2. Related pairs: Each observation have a pair of values, so this condition is met (from printed obs).
3. Absence of outliers: From the plots and data table, this condition is met (HOWEVER, I WOULD LIKE TO TRY REMOVING THE POINTS HIGHLIGHTED IN FIG. M AND NAS THEY APPEAR TO BE OUTLIERS – MORE STUDY OF QUARTILES IS NECESSARY TO DEFINE OUTLIERS IN THESE VARIABLES)
4. Linearity: The observations DO form a linear pattern. The observations tend to DECREASE with the increase of Oxy and Runtime, Oxy and RstPulse , Oxy and Runpulse respectively.

For figure O in the above scatterplot matrix – CONDITIONS NOT MET

1. Level of measurement: Both variables are continuous, so this condition is met
2. Related pairs: Each observation have a pair of values, so this condition is met (from printed data set).
3. Absence of outliers: From the plots and data table, this condition is met
4. Linearity: The observations do not form a linear pattern

For figure P in the above scatterplot matrix - CONDITIONS MET

1. Level of measurement: Both variables are continuous, so this condition is met
2. Related pairs: Each observation have a pair of values, so this condition is met (from printed data set).
3. Absence of outliers: From the plots and data table, this condition is met
4. Linearity: The observations DO form a linear pattern. The observations tend to INCREASE with the increase of runtime and rstpulse

For figures Q,R in the above scatterplot matrix – CONDITIONS NOT MET

1. Level of measurement: Both variables are continuous, so this condition is met
2. Related pairs: Each observation have a pair of values, so this condition is met (from printed data set).
3. Absence of outliers: From the plots and data table, this condition is met
4. Linearity: The observations do not form a linear pattern

For figures S,T in the above scatterplot matrix – CONDITIONS NOT MET

1. Level of measurement: Both variables are continuous, so this condition is met
2. Related pairs: Each observation have a pair of values, so this condition is met (from printed data set).
3. Absence of outliers: From the plots and data table, this condition is met
4. Linearity: The observations do not form a linear pattern

For figure U in the above scatterplot matrix - CONDITIONS MET

1. Level of measurement: Both variables are continuous, so this condition is met
2. Related pairs: Each observation have a pair of values, so this condition is met (from printed data set).
3. Absence of outliers: From the plots and data table, this condition is met
4. Linearity: The observations DO form a linear pattern. The observations tend to INCREASE with the increase of runpulse and maxpulse