Nikhil Gopal

1. Each row would be a new bulb, 1 column for bulb id (if applicable), 1 column for bulb run time. The statistical model would be completely unknown. The observation would be bulb run time.
2. Rows are for patients. 1 column to indicate placebo/treatment, 1 column to indicate if cured or not (1/0). The ancillaries are treatment received; observations would be whether the patient is cured. The parameters would be the Bernoulli p values treatment/placebo group.
3. Rows would be subjects; columns would be weight before/weight after and change in weight. Observations would be weights before/after, parameters would be change in weight and ancillaries would be weights. The change in weight should be conditional upon the exercise regime undergone.
4. Rows would be subjects; columns would be weight before/weight after, exercise regime undergone and change in weight. Observations would be weights before/after, parameters would be change in weight and ancillaries would be weights and exercise regime undergone. The change in weight should be conditional upon the exercise regime undergone.
5. Each row would be a new child. Columns would be birth order and outcome of the test. For this study, observations would be birth order and the parameter would be outcome of the test…
6. This study would be like the one above, with columns added for patient and family ID, both of which would be ancillaries.
7. For this experiment, each row would be a different prerecorded time, and there would be columns for estimated error and vehicle position. The ancillaries would be time, and the parameters would be error and vehicle position.
8. This experiment is like the one above, but without columns for error, and obviously error would not be a parameter.
9. For this experiment, there would only be one row, and the columns would be, time of measurement and vehicle position at each time. There would be 20 columns for time and 20 for position (name them position 1-20). The parameters would be time and position, and there would be no ancillaries.
10. Similar to the experiment above, but this experiment would have two rows for 2 different cars, and a car ID column.
11. This one would be exactly like the above experiment. Obviously, velocity would affect the position, but since it is random we cannot account for it in our model and thus we don’t leave a column for it since we can’t measure it.
12. Like the experiment above with 100 rows.
13. I would let each family be a row. I would create columns for the ages of the three children, birth order and the scores of the three children. The parameters would be the age of child and the test score. Birth order would be an ancillary.
14. For this experiment there would be one row for each rock in the experiment. The columns would represent position at each of the fixed times.
15. Instead of having each row be a different rock, I would have separate columns for position of a given rock at each of the fixed time. For example, if there were 4 predetermined times and 3 rocks, there would be 12 columns per row. There would also be an additional column for the time the experiment was done. Each row would then correspond to a different repetition of the experiment. Ancillaries would be time the experiment was done. Parameters would be the position of each rock, and which rock was being thrown.
16. Just add a column for planet ID.