LATEST WORLDWIDE CORONA VIRUS DEATHS AND A THIRTY DAY PROJECTION

In several recent articles appearing on this Web Page (Ric's Tech Blog) I have tried to graphically record the number of cumulative worldwide deaths due to the Corona Virus (official name COVID-19) using data published daily at-

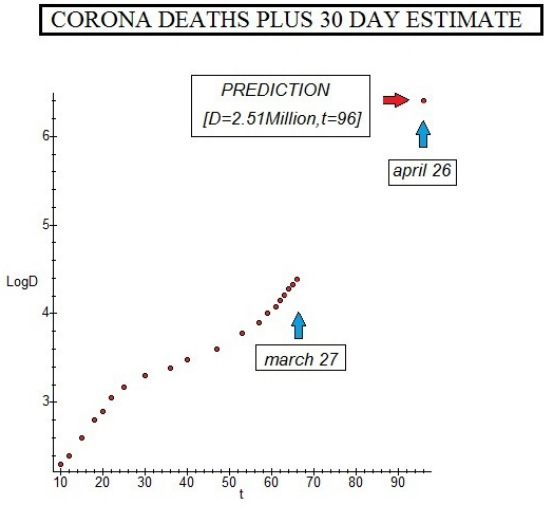
https://www.worldometer.info/coronavirus/

by converting this data to exponential form which is more suitable when discussing viral growth. It was found that often an exponential model of the form-

$$D(t)=a\exp(bt)$$

produced good results over a month time span or so. Here D(t) represents the cumulative number of worldwide deaths and t the time in days from Jan.22,2020, when the infections started increasing rapidly. The constants a and b are derived from using two points of existing data from worldometer. The constants were found to vary slightly when using data with maxima of t=43 and t=60, but the important thing noticed was that over limited t ranges the values of the log D(t) versus t produces a straight line consistent with the early stages of exponential viral growth.

With these observations we wish now to recast all available data on Corona Viral Deaths on a Briggs logarithm of D(t) versus t graph plus an update for one month into the futureupdated at weekly intervals or so. Also by a straight line extrapolation we will give an estimated number of cumulative deaths expected 30 days in the future. Using the latest data good through t=66 (March 27) we get the following-



The estimated point on April 26 is gotten by drawing a straight line taking the last ten days (March 17-27) data into account. Eventually the log(D(t)) curve will reach a plateau with the final approach being signaled if the April 26 estimate turns out to have been too high to that actually found. I estimate the plateau to be reached by the fall. Hopefully earlier. At the moment there are some 3000 new deaths occurring per day and rising.

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