COVID-19
‘MODIFIED’ Control Chart Analysis

As of Friday 4/24/2020, 5:00PM HST
‘Modified’ Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - The last two points (4/23/20 and 4/24/20) are both above the control line, which suggests a bad ‘out-of-control’ pattern for COVID-19 cases in USA.

- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  - Four points (4/19/20 – 4/22/20) are below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in USA during this period.

![Modified Control Chart of COVID-19 Daily Cases in USA (4/04/20 - 4/24/20)](chart.png)

AVG = 30,238
Spain

'Modified' Control Chart Analysis:
- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - Two points (4/22/20 and 4/23/20) are both below the control line, which suggests a good 'out-of-control' pattern for COVID-19 cases in Spain. However, there has been a sudden rise of daily cases on 4/24/20.
- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  - Four points (4/20/20 – 4/23/20) are all below the control line, which suggests a good 'out-of-control' pattern for COVID-19 cases in Spain during this period.
- Nine successive points are on one side of the centerline.
  - Nine consecutive points (3/27/20 - 4/04/20) are all on one side (above) of the centerline. This was a bad 'out-of-control' pattern.
Italy

‘Modified’ Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - The last three points (4/22/20 - 4/24/20) are below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Italy.

- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  - The last five points (4/20/20 - 4/24/20) are all below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Italy.

- Nine successive points are on one side of the centerline.
  - The nine consecutive points (4/16/20 – 4/24/20) are all on one side (below) of the centerline. This good ‘out-of-control’ pattern indicates that the daily COVID-19 cases in Italy are stabilizing in a positive direction.
France

'Modified' Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - The last three points (4/22/20 - 4/24/20) are below the control line, which suggests a good 'out-of-control' pattern for COVID-19 cases in France.

- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  - The last five points (4/20/20 - 4/24/20) are all below the control line, which suggests a good 'out-of-control' pattern for COVID-19 cases in France.
‘Modified’ Control Chart Analysis:

- **Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.**
  - The last three points (4/22/20 - 4/24/20) are below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Germany.

- **Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.**
  - The last five points (4/20/20 – 4/24/20) are all below the control line, which suggests an ‘out-of-control’ pattern for COVID-19 cases in Germany.
  - A good ‘out-of-control’ sign.

- **Nine successive points are on one side of the centerline.**
  - The nine consecutive points (4/16/20 – 4/24/20) are all on one side (below) of the centerline. This good ‘out-of-control’ pattern indicates that the daily COVID-19 cases in Germany are stabilizing in a positive direction.

- **There are six consecutive points, increasing or decreasing.**
  - There are six consecutive points (4/8/20 - 4/15/20) decreasing which indicates a good ‘out-of-control’ sign.
Brazil

'Modified' Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - The last three points (4/22/20 - 4/24/20) are both above the control line, which suggests a bad 'out-of-control' pattern for COVID-19 cases in Brazil.

- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  - The last four points (4/21/20 - 4/24/20) are all above the control line, which indicates that there is a bad 'out-of-control' pattern for COVID-19 cases in Brazil.
‘Modified’ Control Chart Analysis:
- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - Three points (4/21/20 - 4/23/20) are below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Belgium. Also, the linear trend line has a downward slope.
‘Modified’ Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - The last three points (4/22/20 - 4/24/20) are above the control line, which suggests a bad ‘out-of-control’ pattern for COVID-19 cases in Canada.

- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  - The last five points (4/20/20 – 4/24/20) are all above the control line, which suggests a bad ‘out-of-control’ pattern for COVID-19 cases in Canada.
Switzerland

‘Modified’ Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - The last three points (4/22/20 - 4/24/20) are below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Switzerland.

- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  - The last five points (4/20/20 – 4/24/20) are all below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Switzerland.

- Nine successive points are on one side of the centerline.
  - The nine consecutive points (4/16/20 – 4/24/20) are all on one side (below) of the centerline. This is a good ‘out-of-control’ pattern and indicates that the COVID-19 cases in Switzerland are stabilizing in a positive direction.
‘Modified’ Control Chart Analysis:
- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - The last three points (4/22/20 - 4/24/20) are below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Austria.
- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  - The last five points (4/20/20 - 4/24/20) are all below the control line, which suggests an ‘out-of-control’ pattern for COVID-19 cases in Austria. A good ‘out-of-control’ sign.
- Nine successive points are on one side of the centerline.
  - Nine consecutive points (4/16/20 - 4/24/20) are all on one side (below) of the centerline. This good ‘out-of-control’ pattern suggests that the daily COVID-19 cases in Austria are stabilizing in a positive direction.
'Modified' Control Chart Analysis:
- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - The last two points (4/23/20 and 4/24/20) are both below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Israel.
- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  - Four points (4/20/20 – 4/21/20 and 4/23/20 – 4/24/20) are all below the control line, which suggests an ‘out-of-control’ pattern for COVID-19 cases in Israel. A good ‘out-of-control’ sign.
Australia

'Modified' Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - The last three points (4/22/20 - 4/24/20) are below the control line, which suggests a good ‘out-of-control’ pattern for COVID-19 cases in Australia.

- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  - The last five points (4/20/20 - 4/24/20) are all below the control line, which suggests an ‘out-of-control’ pattern for COVID-19 cases in Australia. A good ‘out-of-control’ sign.
  - Also, a remarkable linear trend line with a downward slope can be observed from 3/22/20.

- Nine successive points are on one side of the centerline.
  - Nine consecutive points (4/16/20 - 4/24/20) are all on one side (below) of the centerline. This good ‘out-of-control’ pattern suggests that the daily COVID-19 cases in Australia are stabilizing in a positive direction.

AVG=165
Cyprus

'Modified' Control Chart Analysis:

- Two points, out of three successive points, are on the same side of the centerline in Zone A or beyond.
  - The last three points (4/22/20 - 4/24/20) are below the control line, which suggests a good 'out-of-control' pattern for COVID-19 cases in Cyprus.

- Four points, out of five successive points, are on the same side of the centerline in Zone B or beyond.
  - The last five points (4/20/20 - 4/24/20) are all below the control line, which suggests an 'out-of-control' pattern for COVID-19 cases in Cyprus. A good 'out-of-control' sign. Also, a linear trend line with a downward slope can be observed from 4/1/20.