

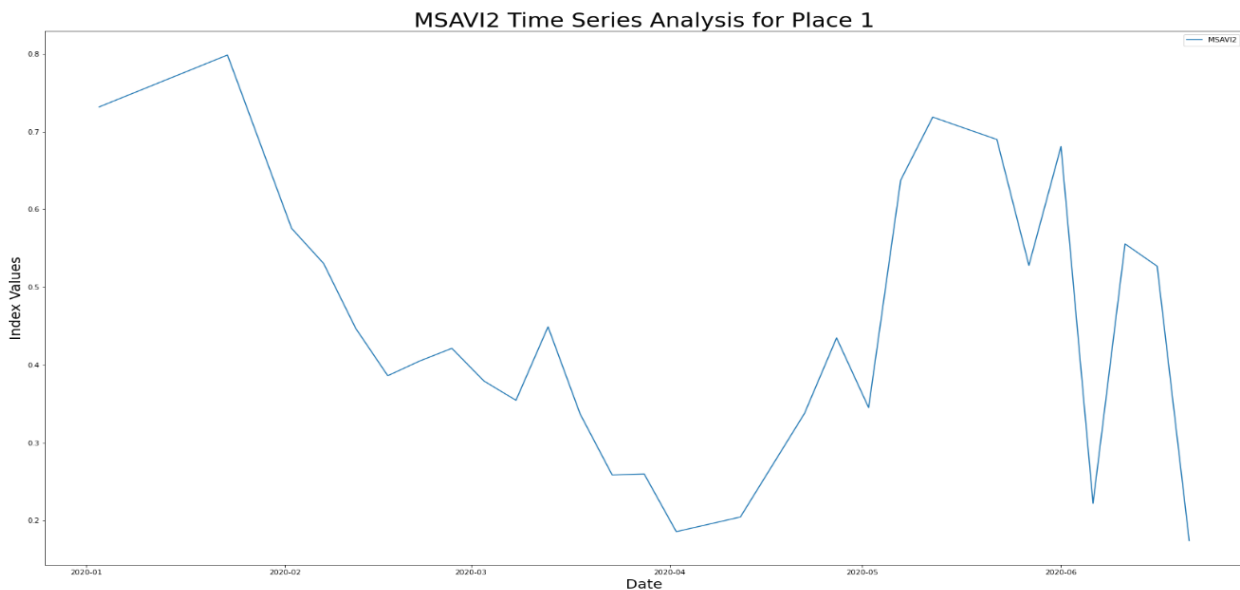
ANALYSIS REPORT

MSAVI2:

MSAVI2 index is the improvised version of MSAVI which tends to reduce the use of soil factor and MSAVI is used to address some of the limitation of NDVI.

$$MSAVI2 = \frac{(2 * NIR + 1 - \sqrt{(2 * NIR + 1)^2 - 8 * (NIR - RED)})}{2}$$

Place 1:



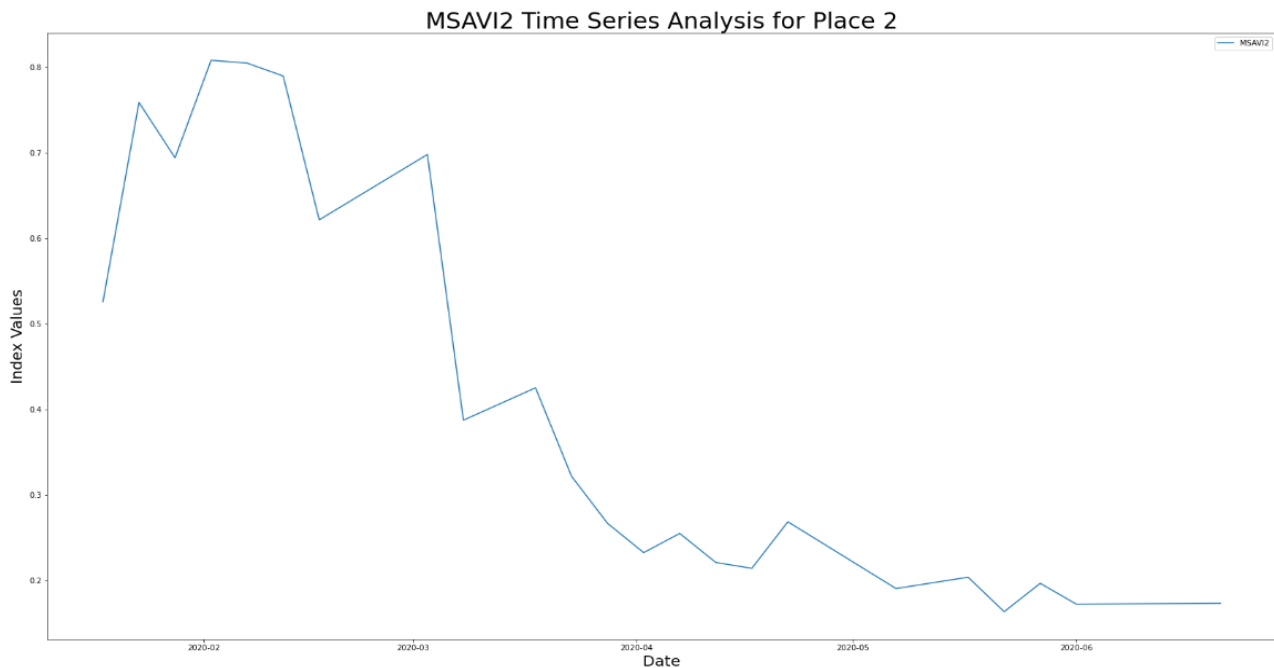
Description on Time Series:

- The above Time Series is starting from 01 Jan 2020 to 30 June 2020.
- The Trend is starting at the index value of 0.72 at Jan 2020 which means there is dense vegetation exist pre time series and peaks at the end of Jan 2020 and from Peak there is a gradual fall by March Last Week.
- And again the vegetation gradually started from first week of April 2020 and peaks at last week of May and post peak there is gradual fall.

Description relating to agriculture activity:

- In this field seasonal crop is grown.
- There is a crop that is sown in Rabi season and harvested in first week March.
- After harvesting, field has been prepared for next crop in Zaid Season.
- In April first week, crop has been sown. For a crop to germinate it will take around 15-20 days. So in mid-April seedling and vegetative stage of crop has been started and by mid may the crop reached its peak vegetative state. Post peak crop is in transit to maturing and then harvesting.
- The sudden drop in index value from peak values is due to cloud and cloud shadows which can be masked using S2 Cloudless Product.

Place 2:



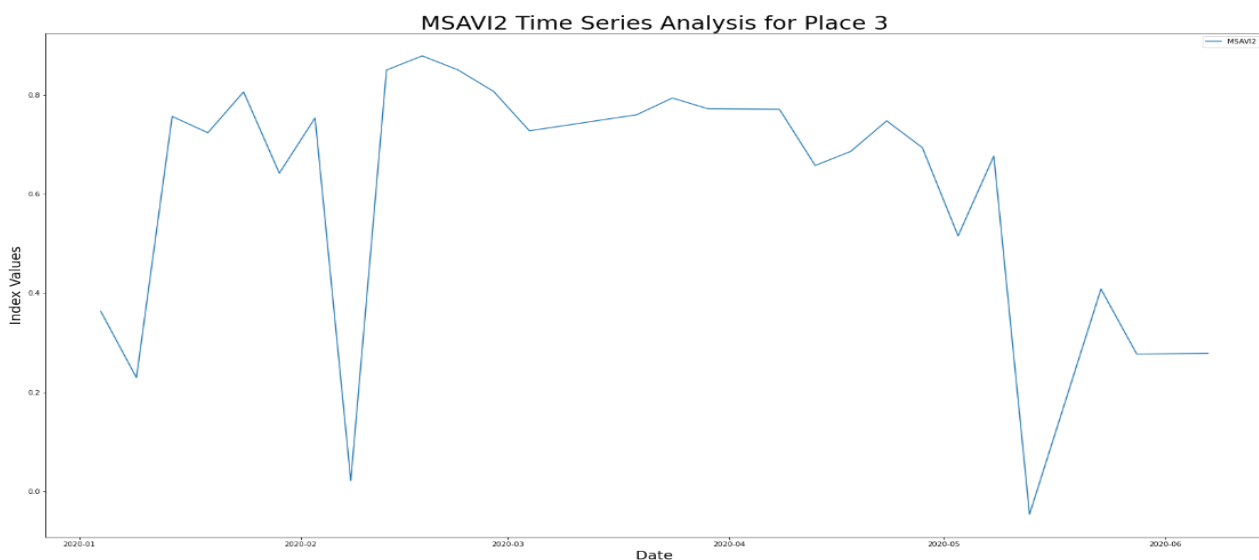
Description on Time Series:

- The above Time Series is starting from 01 Jan 2020 to 30 June 2020.
- The Trend is starting at the index value of 0.52 at Jan 2020 which means there is a vegetation present in pre time series and peaks at the first week of Feb 2020 and from Peak there is a gradual fall by March Last Week.
- Later no rise in trend.

Description relating to agriculture activity:

- In this field seasonal crop is grown.
- Crop has been sown in Rabi Season, looking at the time series crop has been sown in Dec 2019
- Crop has reached its peak vegetative stage in first week of Feb 2020 and post peak crop reached its mature stage and harvested in March last week.
- Later No Crop activity happened.

Place 3:



Description on Time Series:

- The above Time Series is starting from 01 Jan 2020 to 30 June 2020.
- The Trend is starting at the index value of 0.38 at Jan 2020 which means there is a very sparse vegetation present and peak occurred in Jan 2020 and continues its behaviour till mid May 2020.
- Later there is a gradual fall.

Description relating to agriculture activity:

- It might be annual crop.
- Crop has been sown in Rabi Season, looking at the time series crop is in vegetative state and reach peak by mid Jan 2020.
- Crop has reach its peak vegetative stage in first week of Feb 2020 and post peak crop reached its mature stage and harvested in May last week. The crop got matured and lasted in the peak for 4 Months. There is a chlorophyll content and its densely vegetated from Jan 2020 to May 2020.

*The Rise in Index Value is proportionate to chlorophyll content and the canopy density.