Leveraging Space Data for Impact Assessments and Policy Making during Emergencies

Space4Health Webinar

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14 May 2020
Agenda & Concept Definition

Agenda

1. Space for Crisis Management 03
2. Space for Economic Impact Assessment 04
3. Space for Crisis Recovery & Policy Making 05

Insights from Space: The Concept

Data from Satellites + Other Sources of Data = Fresh Insights
Space for Crisis Management
Leveraging on data from satellites combined with other sources of data is particularly relevant for managing the COVID-19 crisis in developing countries.

- Data from High Resolution satellites can support in understanding where people live, especially in countries where this information is not documented in detail.
- Population Density plays a key role in the spread of epidemics such as COVID-19.
Space for Economic Impact Assessment
Satellite data is currently playing and is expected to continue to play a key role in understanding and quantifying the economic impacts of the COVID-19 crisis.

Using this data in tandem with the global aviation market data such as pricing trends as well as official data from airports (such as the figure below) can support in identifying the level of impact to the global aviation industry.

Change in Flight Movements of Europe between February and March, 2020 based on data from navigation satellites in the form of Automatic Dependent Surveillance-Broadcast (ADS-B) collected by FlightRadar24.

Credit: FlightRadar24
Space for Crisis Recovery & Policy Making

Leveraging data from navigation and earth observation satellites, lockdown easing measures can be planned and continuously monitored.

<table>
<thead>
<tr>
<th>People Mobility Data: Navigation Data</th>
<th>Changing Activity Patterns: Earth Observation Data</th>
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<tbody>
<tr>
<td><strong>Retail &amp; recreation</strong></td>
<td>![Image of retail &amp; recreation data](Credit: Google)</td>
</tr>
<tr>
<td>-69%</td>
<td>![Image of changing activity patterns](Credit: Blacksky)</td>
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<td>compared to baseline</td>
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<tr>
<td><strong>Parks</strong></td>
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<td>-48%</td>
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<td><strong>Transit stations</strong></td>
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<td>-70%</td>
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<td>compared to baseline</td>
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Credit: Google

Credit: Blacksky
Thank you!