

Monitoring Developments from Space: Bringing Remote Sensing to Social Sciences

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Spatiotemporal Aspects of Data

- Data is necessary for evidence-based policy making
- Data: (1) Accuracy, (2) Spatial resolution, (3) Temporal frequency

(2) Spatial resolution

World, region, country, province, district, village, ..., sq. km, ...

(3) Temporal frequency

Last decades, last year, last month, last week, yesterday, ..., last hour, ...

What Socio-Economic Data Lack

Two major problems of socio-economic data

- Low spatial resolution

Misleading, less relevant, ...

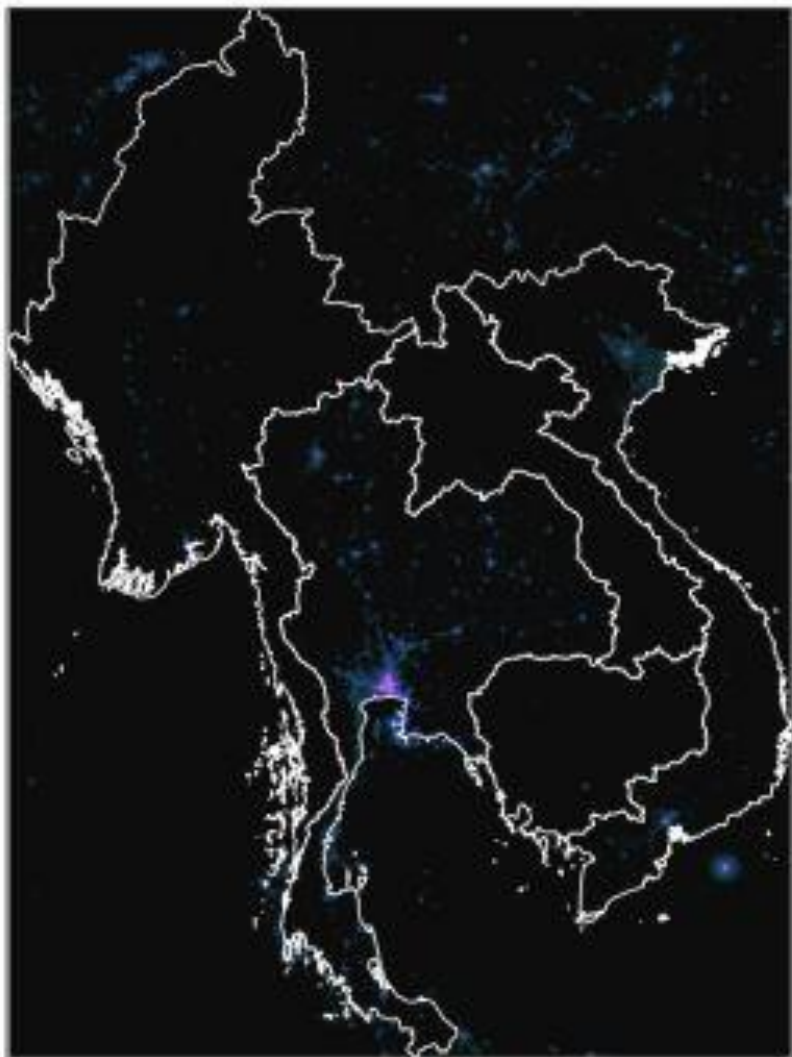
- Low temporal frequency

Less relevant, too late to act, ...

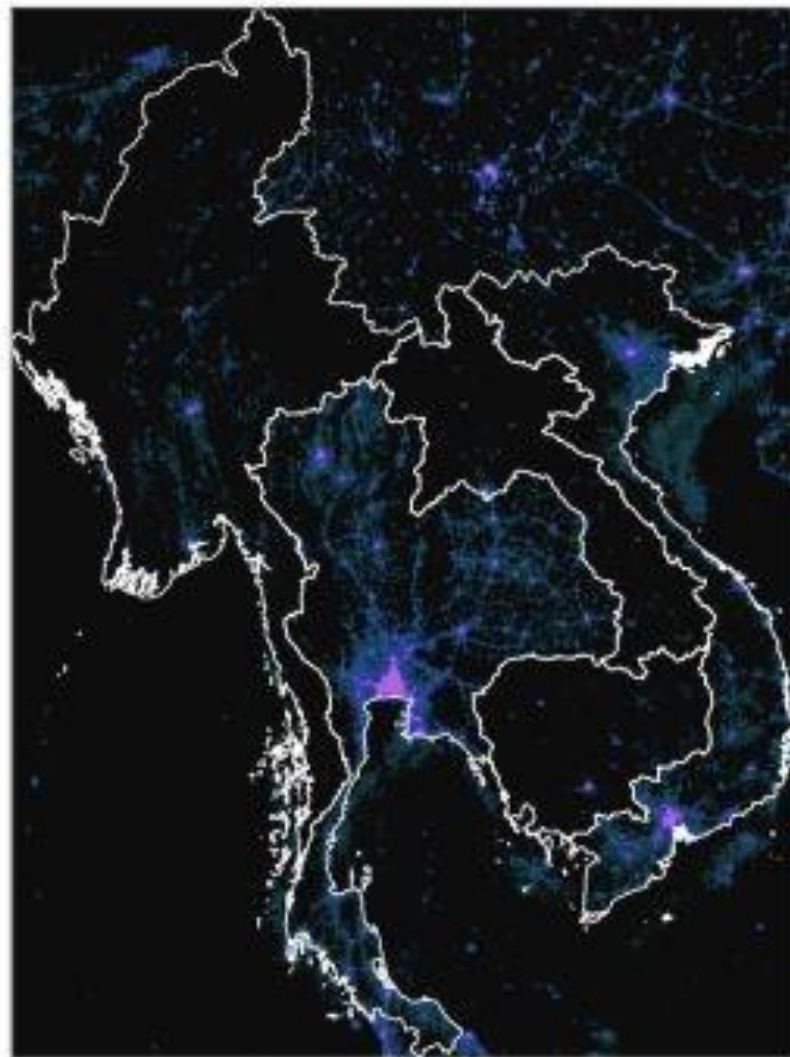
Remote sensing data can be used to address these problems.

Indochinese Peninsula at Night in 1992 and 2010

1992



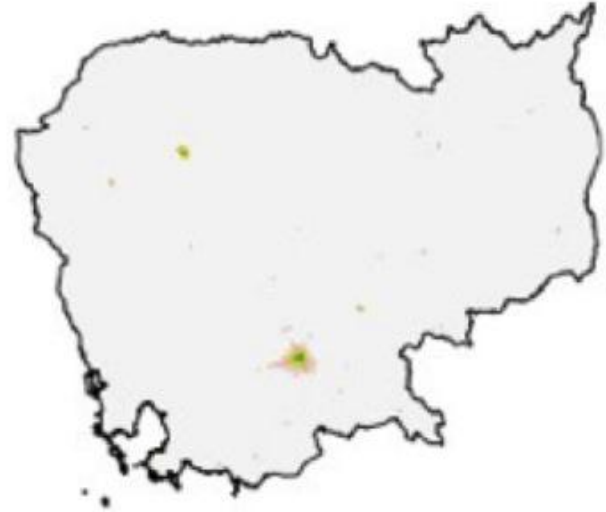
2010



Cambodia

2002

2008

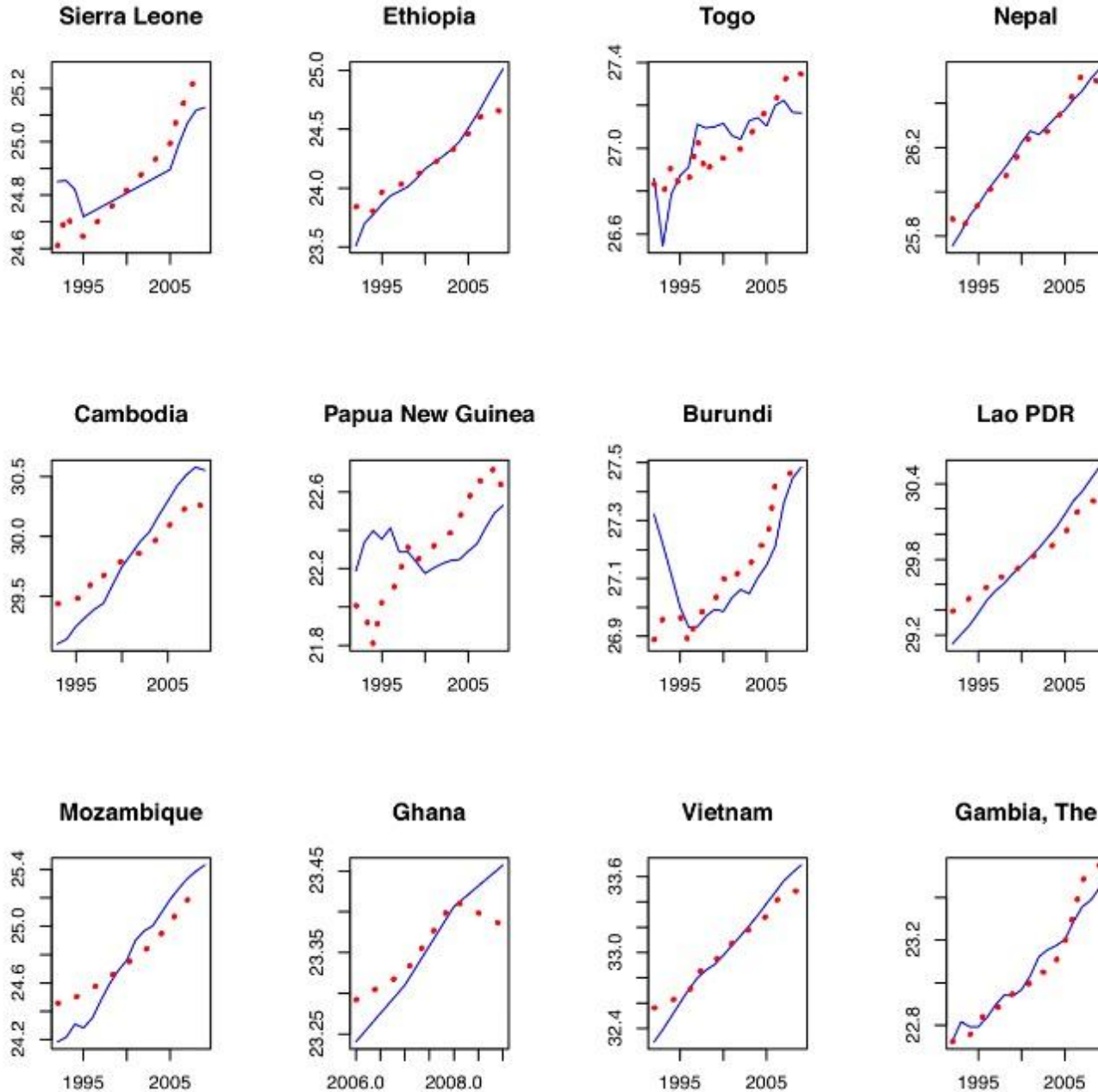


Nighttime
Light



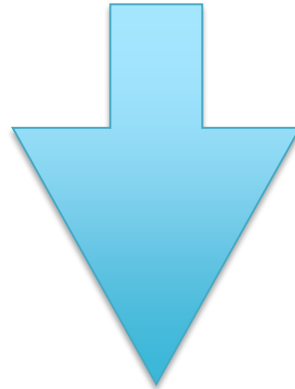
Land
Cover

An Example of What It Can Do



A Way Forward

Relate remote sensing data to socio-economic data



Spatiotemporal interpolation of socio-economic data

Recommendations

- Surveys should pay more attention to and preserve geographical information.
- More openness of administrative/survey data.
- More openness of remote-sensing data.