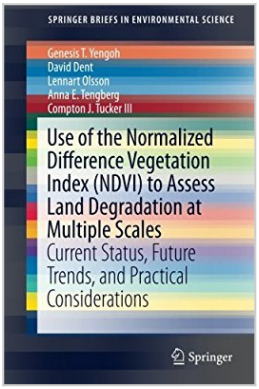

Use of the Normalized Difference Vegetation Index (NDVI) to Assess Land Degradation at Multiple Scales: Current Status, Future Trends, and Practical ... (SpringerBriefs in Environmental Science)

By Genesis T. Yengoh, David Dent, Lennart Olsson, Anna E. Tengberg, Compton J. Tucker III

Use of the Normalized Difference Vegetation Index (NDVI) to Assess Land Degradation at Multiple Scales: Current Status, Future Trends, and Practical ... (SpringerBriefs in Environmental Science) By Genesis T. Yengoh, David Dent, Lennart Olsson, Anna E. Tengberg, Compton J. Tucker III

This report examines the scientific basis for the use of remotely sensed data, particularly Normalized Difference Vegetation Index (NDVI), primarily for the assessment of land degradation at different scales and for a range of applications, including resilience of agro-ecosystems. Evidence is drawn from a wide range of investigations, primarily from the scientific peer-reviewed literature but also non-journal sources. The literature review has been corroborated by interviews with leading specialists in the field.
The report reviews the use of NDVI for a range of themes related to land degradation, including land cover change, drought monitoring and early warning systems, desertification processes, greening trends, soil erosion and salinization, vegetation burning and recovery after fire, biodiversity loss, and soil carbon. This SpringerBrief also discusses the limits of the use of NDVI for land degradation assessment and potential for future directions of use.
A substantial body of peer-reviewed research lends unequivocal support for the use of coarse-resolution time series of NDVI data for studying vegetation dynamics at global, continental and sub-continental levels. There is compelling evidence that these data are highly correlated with biophysically meaningful vegetation characteristics such as photosynthetic capacity and primary production that are closely related to land degradation and to agroecosystem resilience.

Use of the Normalized Difference Vegetation Index (NDVI) to Assess Land Degradation at Multiple Scales: Current Status, Future Trends, and Practical ... (SpringerBriefs in Environmental Science)

By Genesis T. Yengoh, David Dent, Lennart Olsson, Anna E. Tengberg, Compton J. Tucker III

Use of the Normalized Difference Vegetation Index (NDVI) to Assess Land Degradation at Multiple Scales: Current Status, Future Trends, and Practical ... (SpringerBriefs in Environmental Science) By Genesis T. Yengoh, David Dent, Lennart Olsson, Anna E. Tengberg, Compton J. Tucker III

This report examines the scientific basis for the use of remotely sensed data, particularly Normalized Difference Vegetation Index (NDVI), primarily for the assessment of land degradation at different scales and for a range of applications, including resilience of agro-ecosystems. Evidence is drawn from a wide range of investigations, primarily from the scientific peer-reviewed literature but also non-journal sources. The literature review has been corroborated by interviews with leading specialists in the field.
The report reviews the use of NDVI for a range of themes related to land degradation, including land cover change, drought monitoring and early warning systems, desertification processes, greening trends, soil erosion and salinization, vegetation burning and recovery after fire, biodiversity loss, and soil carbon. This SpringerBrief also discusses the limits of the use of NDVI for land degradation assessment and potential for future directions of use.
A substantial body of peer-reviewed research lends unequivocal support for the use of coarse-resolution time series of NDVI data for studying vegetation dynamics at global, continental and sub-continental levels. There is compelling evidence that these data are highly correlated with biophysically meaningful vegetation characteristics such as photosynthetic capacity and primary production that are closely related to land degradation and to agroecosystem resilience.

Use of the Normalized Difference Vegetation Index (NDVI) to Assess Land Degradation at Multiple Scales: Current Status, Future Trends, and Practical ... (SpringerBriefs in Environmental Science) By Genesis T. Yengoh, David Dent, Lennart Olsson, Anna E. Tengberg, Compton J. Tucker III Bibliography

- Rank: #4541393 in Books
- Published on: 2015-11-12
- Released on: 2015-12-03
- Original language: English
- Number of items: 1
- Dimensions: 9.25" h x .30" w x 6.10" l, .0 pounds
- Binding: Paperback
- 110 pages

Editorial Review

About the Author
Genesis Tambang Yengoh is a Post-Doctoral Research Fellow at the Lundy University Centre for Sustainability Studies in Sweden. His research involves uses of remote sensing and GIS to understand the implications of large-scale land use dynamics on the flow of, access to, and use of natural resources at the household and landscape level.

David Dent is an Honorary Fellow of Lund Centre for Sustainability Studies. Previously, he served as Director of ISRIC-World Soil Information. He consults in scientific, practical and policy aspects of use and management of land resources to governments, international organizations, multinationals and private companies, working in every continent.

Lennart Olsson is the Founding Director of LUCSUS – Lund University Centre for Sustainability Studies. He serves as Scientific Director and Examiner of the International Masters Program LUMES. He teaches courses on land use, environmental modeling, water issues, natural resources and land degradation.

Anna Tengberg is an Environment and Development Consultant. She also serves as a Research Associate at the University of Gothenburg, Sweden’s Environmental Economics Unit as well as an Adjunct Professor at the Lund University Centre for Sustainability Studies.

Compton James Tucker III is a Physical Scientist at the Hydrospheric and Biospheric Sciences Laboratory at the NASA/Goddard Space Flight Center in Maryland, USA. He was among the first researchers to employ coarse-resolution satellite data to exploit the time domain for studying global photosynthesis on land, determining land cover, monitoring droughts, providing famine early warning, and predicting ecologically-coupled disease outbreaks.

Users Review

From reader reviews:

Kathy Hunnicutt:

Do you have favorite book? In case you have, what is your favorite's book? Guide is very important thing for us to find out everything in the world. Each publication has different aim as well as goal; it means that publication has different type. Some people truly feel enjoy to spend their the perfect time to read a book. These are reading whatever they get because their hobby is reading a book. What about the person who don't like reading a book? Sometime, particular person feel need book if they found difficult problem or even exercise. Well, probably you will want this Use of the Normalized Difference Vegetation Index (NDVI) to Assess Land Degradation at Multiple Scales: Current Status, Future Trends, and Practical ... (SpringerBriefs in Environmental Science).

John Harrison:

Have you spare time to get a day? What do you do when you have much more or little spare time? Yep, you can choose the suitable activity intended for spend your time. Any person spent their own spare time to take a go walking, shopping, or went to the particular Mall. How about open or maybe read a book allowed Use of the Normalized Difference Vegetation Index (NDVI) to Assess Land Degradation at Multiple Scales: Current Status, Future Trends, and Practical ... (SpringerBriefs in Environmental Science)? Maybe it is to be best activity for you. You already know beside you can spend your time with your favorite's book, you can more intelligent than before. Do you agree with it has the opinion or you have different opinion?

Blake Nixon:

The book Use of the Normalized Difference Vegetation Index (NDVI) to Assess Land Degradation at Multiple Scales: Current Status, Future Trends, and Practical ... (SpringerBriefs in Environmental Science) can give more knowledge and also the precise product information about everything you want. Exactly why must we leave a very important thing like a book Use of the Normalized Difference Vegetation Index (NDVI) to Assess Land Degradation at Multiple Scales: Current Status, Future Trends, and Practical ... (SpringerBriefs in Environmental Science)? Several of you have a different opinion about guide. But one aim this book can give many facts for us. It is absolutely suitable. Right now, try to closer with the book. Knowledge or data that you take for that, you may give for each other; you may share all of these. Book Use of the Normalized Difference Vegetation Index (NDVI) to Assess Land Degradation at Multiple Scales: Current Status, Future Trends, and Practical ... (SpringerBriefs in Environmental Science) has simple shape nevertheless, you know: it has great and big function for you. You can appearance the enormous world by start and read a book. So it is very wonderful.

Pearl Miller:

Is it anyone who having spare time in that case spend it whole day by means of watching television programs or just lying down on the bed? Do you need something new? This Use of the Normalized Difference Vegetation Index (NDVI) to Assess Land Degradation at Multiple Scales: Current Status, Future Trends, and Practical ... (SpringerBriefs in Environmental Science) can be the solution, oh how comes? A book you know. You are and so out of date, spending your extra time by reading in this completely new era is common not a geek activity. So what these books have than the others?

Read Use of the Normalized Difference Vegetation Index (NDVI) to Assess Land Degradation at Multiple Scales: Current Status, Future Trends, and Practical ... (SpringerBriefs in Environmental Science) By Genesis T. Yengoh, David Dent, Lennart Olsson, Anna E. Tengberg, Compton J. Tucker III for online ebook

Use of the Normalized Difference Vegetation Index (NDVI) to Assess Land Degradation at Multiple Scales: Current Status, Future Trends, and Practical ... (SpringerBriefs in Environmental Science) By Genesis T. Yengoh, David Dent, Lennart Olsson, Anna E. Tengberg, Compton J. Tucker III Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Use of the Normalized Difference Vegetation Index (NDVI) to Assess Land Degradation at Multiple Scales: Current Status, Future Trends, and Practical ... (SpringerBriefs in Environmental Science) By Genesis T. Yengoh, David Dent, Lennart Olsson, Anna E. Tengberg, Compton J. Tucker III books to read online.

Online Use of the Normalized Difference Vegetation Index (NDVI) to Assess Land Degradation at Multiple Scales: Current Status, Future Trends, and Practical ... (SpringerBriefs in Environmental Science) By Genesis T. Yengoh, David Dent, Lennart Olsson, Anna E. Tengberg, Compton J. Tucker III ebook PDF download

Use of the Normalized Difference Vegetation Index (NDVI) to Assess Land Degradation at Multiple Scales: Current Status, Future Trends, and Practical ... (SpringerBriefs in Environmental Science) By Genesis T. Yengoh, David Dent, Lennart Olsson, Anna E. Tengberg, Compton J. Tucker III Doc

Use of the Normalized Difference Vegetation Index (NDVI) to Assess Land Degradation at Multiple Scales: Current Status, Future Trends, and Practical ... (SpringerBriefs in Environmental Science) By Genesis T. Yengoh, David Dent, Lennart Olsson, Anna E. Tengberg, Compton J. Tucker III Mobipocket

Use of the Normalized Difference Vegetation Index (NDVI) to Assess Land Degradation at Multiple Scales: Current Status, Future Trends, and Practical ... (SpringerBriefs in Environmental Science) By Genesis T. Yengoh, David Dent, Lennart Olsson, Anna E. Tengberg, Compton J. Tucker III EPub