Subject: Re: Request for guidance/advice related to time series analysis and forecasting using MODIS imagery
Posted by David Fanning on Mon, 04 Feb 2013 14:02:47 GMT

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Mattijn van Hoek writes:

>
> Hello folks,
> I have read in my recently aqcuired IDL books (from Fanning, Bowman and Gumley) that this Google group is they number one place to be on the internet. By far. I've followed this group for a month and a half and today, I'm going to change my position from being an observor to a participant (yeah!).
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> With the use of Harmonic Analysis, I have computed 6 time-series with different, but related, anomalies based on the MODIS imagery from the last 10 years.
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> I would like your opinion/guidance/advice on the following:
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> 1. What type of spatio-temporal analysis on 6 time-series are possible? And what would you sugest? Cross-dimensional wavelet analysis, multi-dimensional Fourier transform or something else?
> 2. Based on these anomalies I would like to do some short-term spatio-temporal forecasting (1 week). And again, my question what type of time-series forecasting method would you suggest? Wavelet aided time series forecasting, Artificial Neural Networks, Autoregressive models, Wavelet Neural Network or something else?
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> Hopefully I have been able to make myself clear. If not, please punch me in the face, and I will try to do it again.

Well, welcome! It is always nice when someone comes out of the shadows
to join our discussion. It is stimulating.

I don't wish to discourage anyone who still appears to read (and
purchase!) books, but I suspect these questions may not elicit a lot of
answers, and I want you to know it is not because we are unwelcoming of
new folks. Rather, these appear to be science questions, not IDL
questions. And, while I may be alone in this regard, I find them
confounding. (I wouldn't recognize cross-dimensional wavelet analysis if
it came up to me and bit me in the butt.)

On the other hand, all kinds of people with all kinds of expertise have
been known to hang out here, so there is always a chance someone will
know exactly what you are talking about. But, I've been doing this for a
long, long time, and this is just the kind of question that often
appears on a Monday morning and serves to start the week off on a very
dismal note for me. Reminding me, I suppose, of how little I really know
about so many, many things. :-)

Cheers,

David

P.S. Let's just say the only ray of hope for me in your question is that
it didn't start off with the usual "I'm a novice IDL programmer and I
have a very simple question...".

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Subject: Re: Request for guidance/advice related to time series analysis and forecasting using MODIS imagery
Posted by leg410 on Mon, 04 Feb 2013 14:57:25 GMT
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On Monday, February 4, 2013 6:05:51 AM UTC-6, Mattijn van Hoek wrote:
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Some good references on this type of work are available here:

 http://researchspace.csir.co.za/dspace/browse?type=author&am p;value=Kleynhans%2C+W

Cheers,
Liam.
Practical IDL Programming
http://www.gumley.com/

Subject: Re: Request for guidance/advice related to time series analysis and forecasting using MODIS imagery
Posted by Mattijn van Hoek on Tue, 05 Feb 2013 01:20:38 GMT
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On Monday, 4 February 2013 22:02:47 UTC+8, David Fanning wrote:
> Mattijn van Hoek writes:
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> David Fanning, Ph.D.
>
> Fanning Software Consulting, Inc.
>
> Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
>
> Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Thanks mister Fanning. Normally I would use the first name for people, but I don't dare to use it for you.
I found it quite amazing that at the moment when I decided to start to learn about IDL that I discover some great people out there who know so much more than I do. And the great thing is that they are willing to share their knowledge. In normal life you will never recognize them, but on internet they just come together, from anywhere in the world.
By having said that, I have to correct myself, not everywhere in the world. Cause currently I'm living in Beijing, China, but here it is not possible to access this Google IDL groups nor your website idlcoyote.com. Not accessible.

OK, I can access, cause I pay for a VPN, but that doesn't mean that normal people who work here with IDL don't know about you. People copy your website from the world wide web, translate it into Chinese and they put it on the Chinese internet. For me this was new.

About those cross-dimensional wavelet analysis, don't worry, they don't bite. But they can be very nasty.

Thanks for your reply and again thanks for the work what you have done (on behalf of humanity),

so people like me can build upon these fundaments. I will stick to this forum, to vent my feelings of working with IDL in a Chinese research institute and to discover some great ideas from great people.

On Monday, 4 February 2013 22:57:25 UTC+8, leg...@gmail.com wrote:
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> http://researchspace.csir.co.za/dspace/browse?type=author&am p;value=Kleynhans%2C+W
>
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>
> Cheers,
>
> Liam.
>
> Practical IDL Programming
>
> http://www.gumley.com/

Wauw, I've two books next to me, IDL Prgramming Techniques and Practical IDL Programming, and know I have received a reply from both of the authors. Very much appreciated.
Thanks for the reference you have provided me, this is really helpfull.

Mattijn

P.s By the way your website, unline David's, is reachable from within the people's republic of china.

Subject: Re: Request for guidance/advice related to time series analysis and forecasting using MODIS imagery

Mattijn van Hoek writes:

> P.s By the way your website, unline David's, is reachable from within the people's republic of china.

Liam doesn't publish short book reviews of books he has read concerning
the Dalai Lama on his web page. Big difference. :-)

Cheers,

David

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David Fanning, Ph.D.
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Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thue. ("Perhaps thou speakest truth.")