

**Subject:** Re: SOI index amongst other things  
**Date:** Monday, September 14, 2020 at 3:02:26 PM Pacific Daylight Time  
**From:** Durack, Paul J.  
**To:** Adam Phillips, Kevin Trenberth  
**CC:** fasullo@ucar.edu, Dennis Shea, David Schneider

Perfect thanks for closing the loop Adam, I can confirm that this file is consistent with old index (at least for 1951)

1951    2.7    1.0    -1.3    -1.1    -1.7    -0.5    -2.3    -1.2    -2.1    -2.3    -1.6    -1.6  
<https://climatedataguide.ucar.edu/sites/default/files/SOI.signal.txt>

I'll move to this version going forward.

Thanks gents.

P

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**From:** Adam Phillips <asphilli@ucar.edu>  
**Date:** Monday, September 14, 2020 at 3:00 PM  
**To:** Kevin Trenberth <trenbert@ucar.edu>  
**Cc:** "Durack, Paul J." <durack1@llnl.gov>, "fasullo@ucar.edu" <fasullo@ucar.edu>, Dennis Shea <dennishea4@gmail.com>, David Schneider <dschneid@ucar.edu>  
**Subject:** Re: SOI index amongst other things

Hi Paul/Kevin,  
That dataset has been moved to the Climate Data Guide, and I believe Dave Schneider (cc'd) is now updating it:

<https://climatedataguide.ucar.edu/climate-data/southern-oscillation-indices-signal-noise-and-tahitidarwin-slp-soi>

If you click on the Get Data (on CDG) tab at the top, and select "Monthly signal SOI based on monthly standardization", then click on the link beneath Download Data, you will see that the data has been updated to Jan. 2020.

Here's the direct link:

<https://climatedataguide.ucar.edu/sites/default/files/SOI.signal.txt>

Best,  
Adam

On Mon, Sep 14, 2020 at 3:57 PM Kevin Trenberth <[trenbert@ucar.edu](mailto:trenbert@ucar.edu)> wrote:

Yes I recall some of this and that is why I stated that the CPC version is not correct.  
It relates to the base period used to define means and s.d. and thus the standardized versions of Tahiti and Darwin, separately, and then take their difference, and then we further normalize the result.

<https://www.cpc.ncep.noaa.gov/data/indices/Readme.index.shtml#SOICALC>

That seems OK except for final normalization. So some differences may exist in basic data too?  
Kevin

On 9/15/20 9:49 AM, Durack, Paul J. wrote:

Thanks Kevin, lucky you, certainly jealous from where we're at over here.

One of the reasons for my questions was due to the differences in the indices, so for e.g.

```
1951  2.7  1.0 -1.3 -1.1 -1.7 -0.5 -2.3 -1.2 -2.1 -2.3 -1.6
-1.6
```

<http://www.cgd.ucar.edu/cas/catalog/climind/SOI.signal.ascii>

```
(STAND TAHITI - STAND DARWIN)  SEA LEVEL PRESS ANOMALY
1951  2.5  1.5 -0.2 -0.5 -1.1  0.3 -1.7 -0.4 -1.8 -1.6 -1.3
-1.2
```

```
(STAND TAHITI - STAND DARWIN)  SEA LEVEL STANDARDIZED  DATA
1951  1.5  0.9 -0.1 -0.3 -0.7  0.2 -1.0 -0.2 -1.1 -1.0 -0.8
-0.7
```

<https://www.cpc.ncep.noaa.gov/data/indices/soi>

I was hoping to keep my baseline the same moving forward, but it seems there is some magic between the CGD and the NCEP versions that isn't clear to me at the moment.

Cheers,

P

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**From:** Kevin Trenberth <[trenbert@ucar.edu](mailto:trenbert@ucar.edu)>

**Date:** Monday, September 14, 2020 at 2:42 PM

**To:** "Durack, Paul J." <[durack1@llnl.gov](mailto:durack1@llnl.gov)>, "[fasullo@ucar.edu](mailto:fasullo@ucar.edu)" <[fasullo@ucar.edu](mailto:fasullo@ucar.edu)>, Dennis Shea <[dennisshea4@gmail.com](mailto:dennisshea4@gmail.com)>, Adam Phillips <[asphilli@ucar.edu](mailto:asphilli@ucar.edu)>

**Subject:** Re: SOI index amongst other things

Hi Paul

Yes NZ is a bit of a haven.

I have been busy writing a book and I have a couple of SLOI figures more current.

The person most likely to do this now is Adam Phillips. Dennis Shea used to do it but he is retired, but may take it on.

You can get some here:

<https://www.cpc.ncep.noaa.gov/data/indices/soi>

but NOAA does not compute it correctly.

Kevin

On 9/15/20 9:22 AM, Durack, Paul J. wrote:

Hi gents, I do hope all is well in your respective locales.

Kevin it seems that NZ has done a phenomenal job of COVID response over the last 6 months, might be nice to be living in a place where science and science-guided policy matters.

I have been a happy user of some of the CGD climate indices, with a particular focus on <http://www.cgd.ucar.edu/cas/catalog/climind/SOI.signal.ascii>.

It seems the last update of this file was ~2015, and just wondering whether these are continuing to be updated? If not, is there some documentation about where this index is calculated from that you could point me to?

Cheers from a smokey SF/Livermore.

P

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