Mean Field Correction for WSO based on SOLIS

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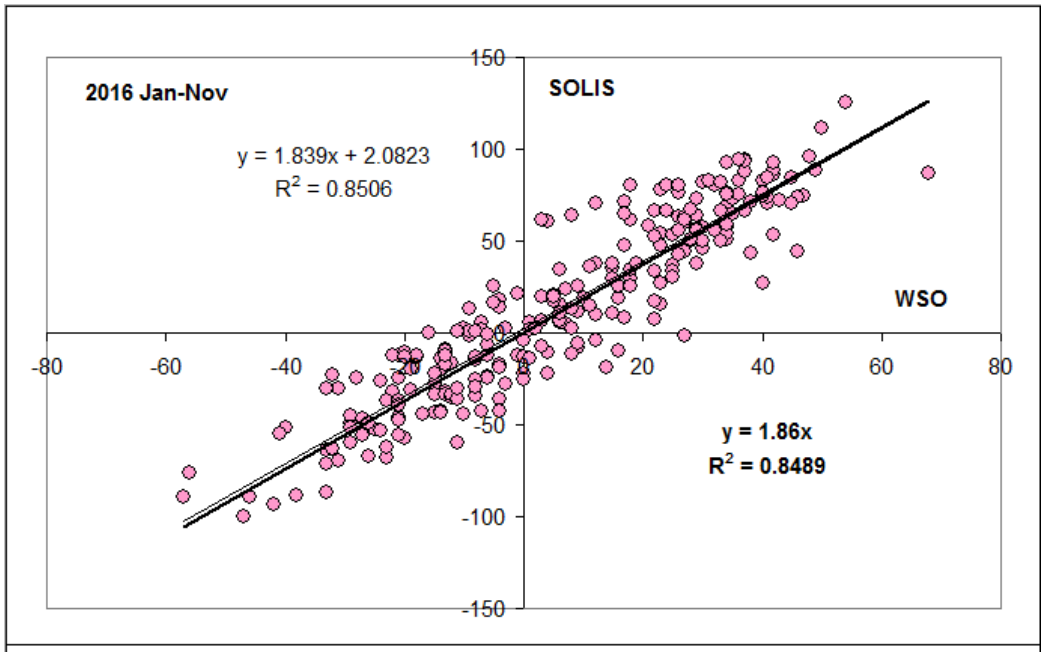
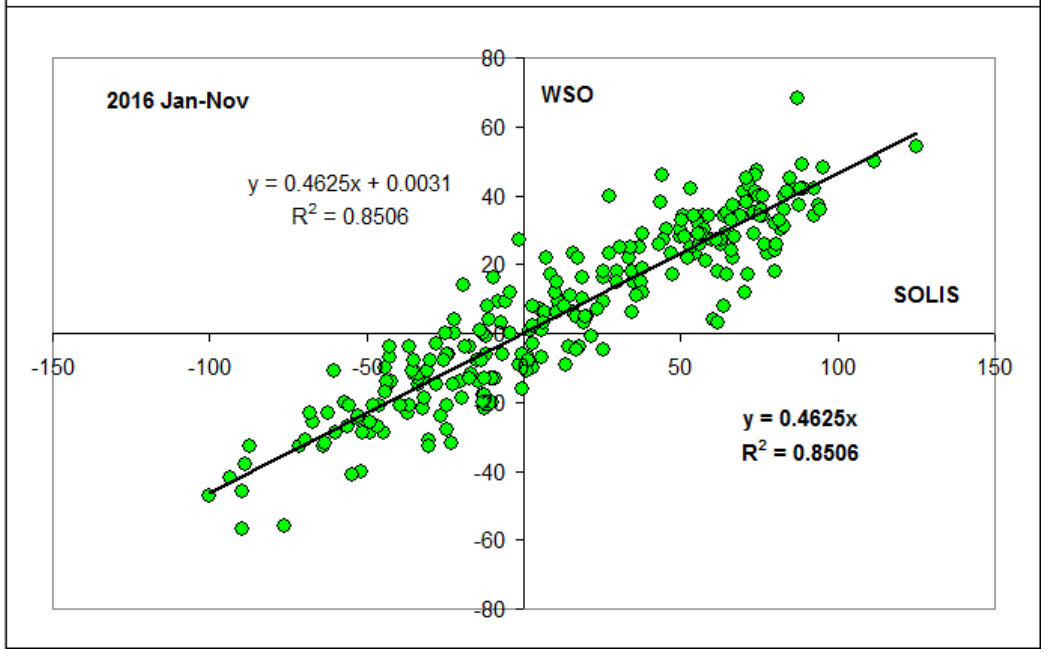




Compare SOLIS and WSO Mean Fields Before the 2017 Glitch

SOLIS = 1.86 WSO

WSO = 0.538 SOLIS (=1/1.86)

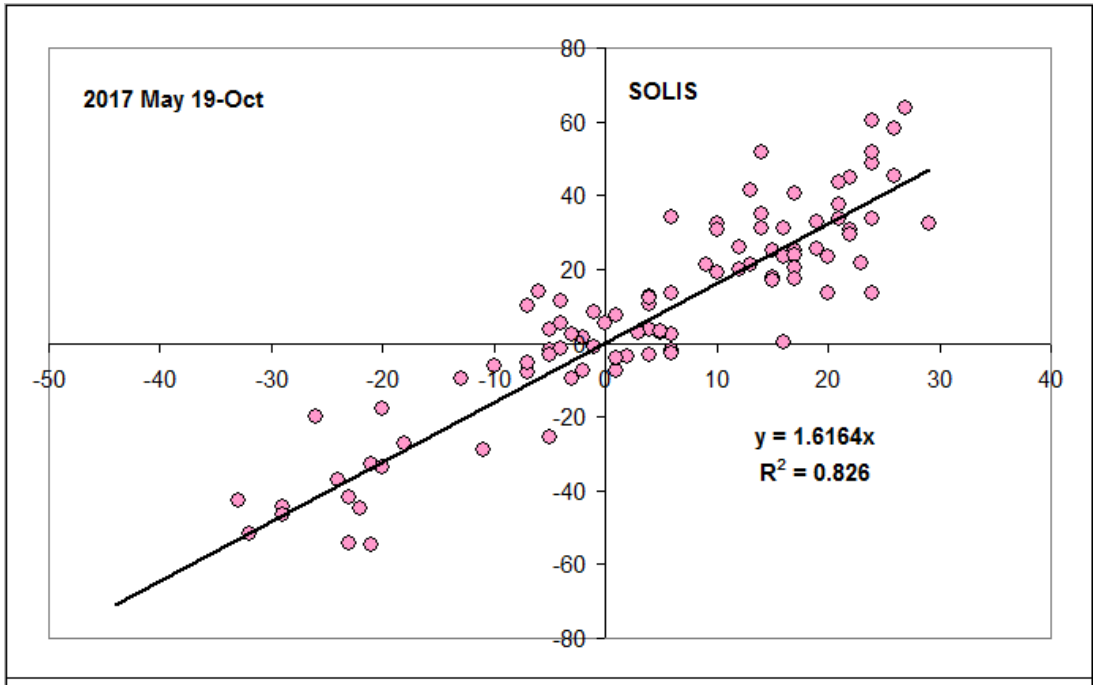
WSO = 0.4625 SOLIS

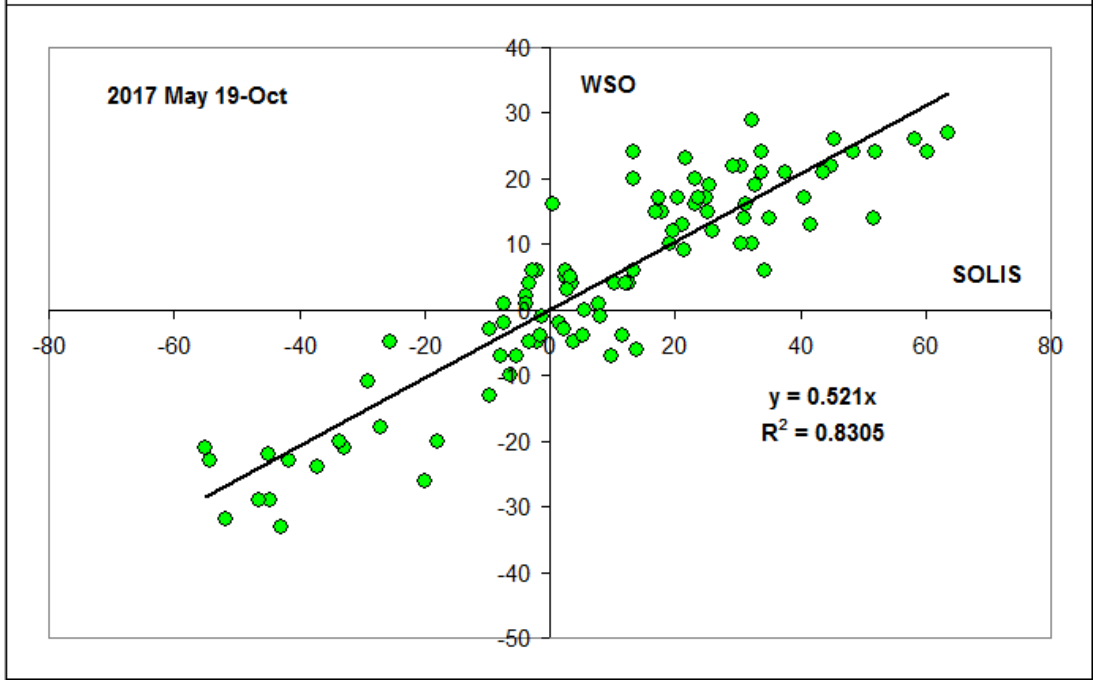
SOLIS = 2.16 WSO (=1/0.4625)

Average

WSO = 0.50 SOLIS

SOLIS = 2.00 WSO (=1/0.50)





Compare SOLIS and WSO Mean Fields After the 2017 Glitch

SOLIS = 1.6164 WSO

WSO = 0.619 SOLIS (=1/1.6164)

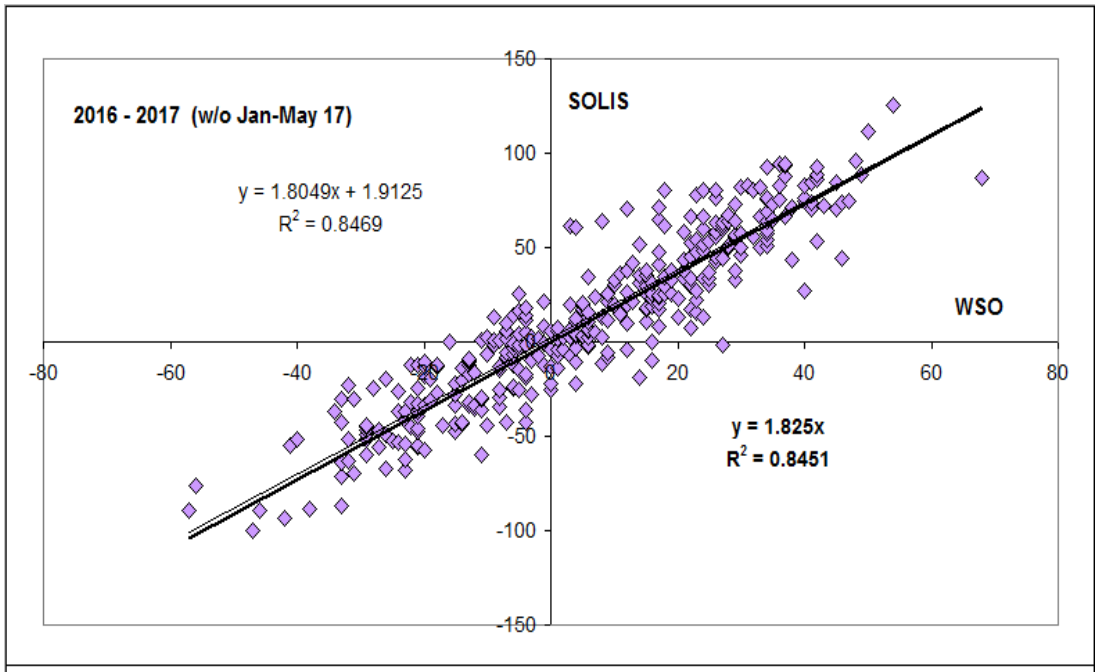
WSO = 0.521 SOLIS

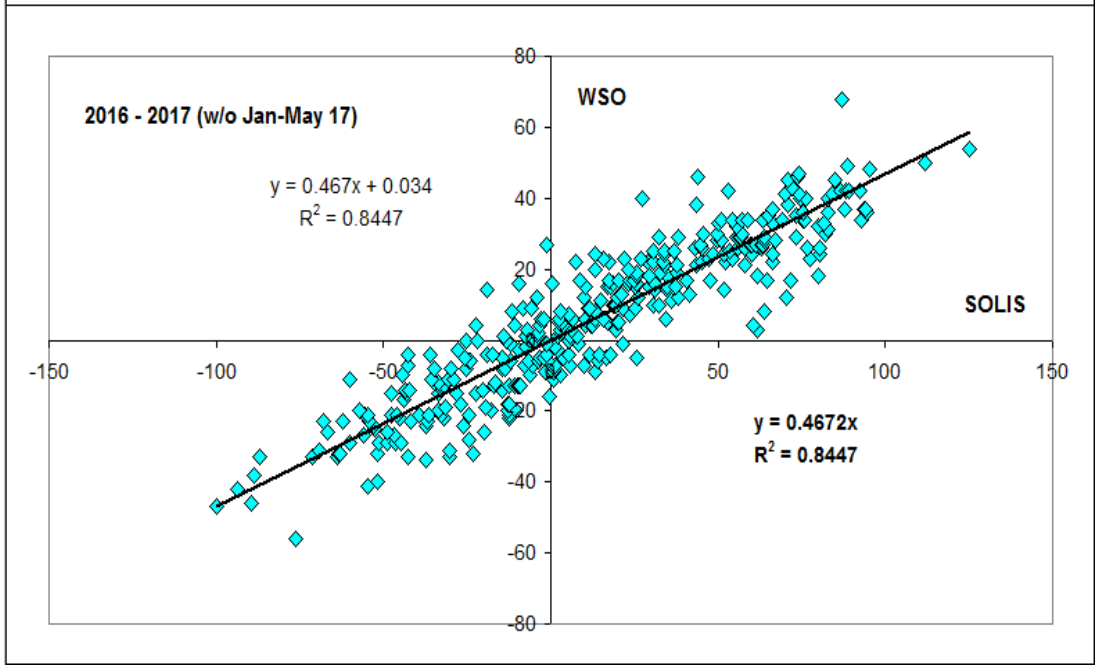
SOLIS = 1.919 WSO (=1/0.521)

Average

WSO = 0.57 SOLIS

SOLIS = 1.76 WSO (=1/0.57)





Compare SOLIS and WSO Mean Fields Outside the 2017 Glitch

SOLIS = 1.825 WSO

WSO = 0.548 SOLIS (=1/1.825)

WSO = 0.4672 SOLIS

SOLIS = 2.14 WSO (=1/0.4672)

Average

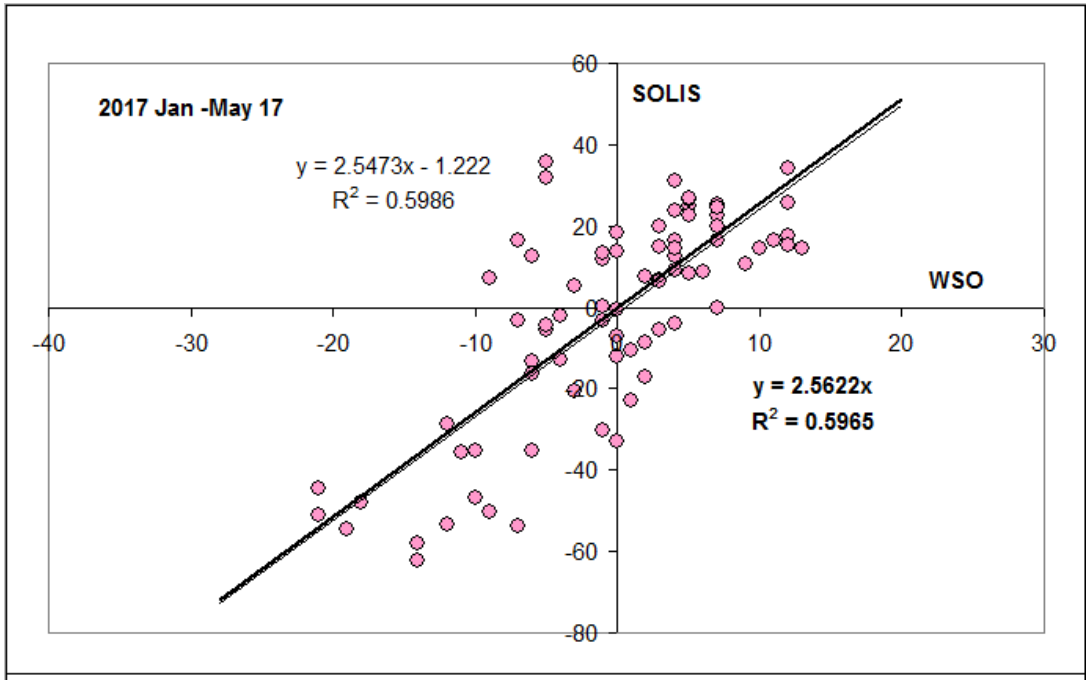
WSO = 0.51 SOLIS

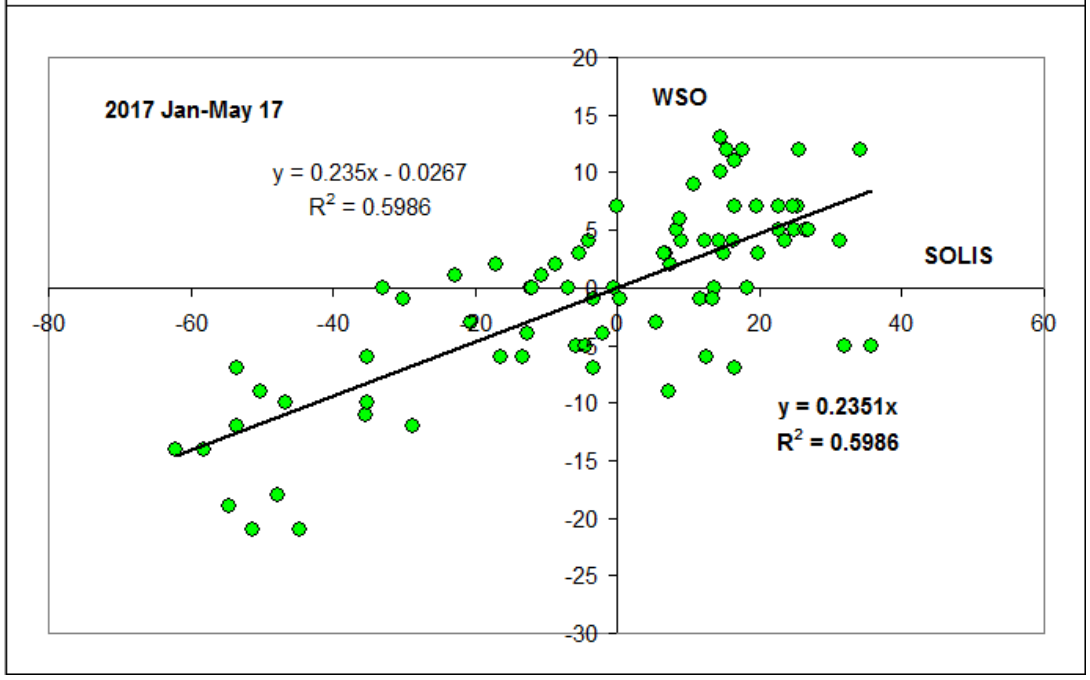
SOLIS = 1.97 WSO (=1/0.51)

Conversion Factors w/o Glitch

SOLIS => WSO	WSO => SOLIS	When
0.50	2.00	Before
0.57	1.76	After
0.51	1.97	Outside
0.53	**1.91**	Adopted (mean)

This is the intrinsic conversion factor WSO => SOLIS





Compare SOLIS and WSO Mean Fields During the 2017 Glitch

SOLIS = 2.5622 WSO

WSO = 0.390 SOLIS (=1/2.5622)

WSO = 0.2351 SOLIS

SOLIS = 4.254 WSO (=1/0.2351)

Average

WSO = 0.303 SOLIS

SOLIS = 3.303 WSO (=1/0.303)

The Magnitude of the Glitch

SOLIS => WSO	WSO => SOLIS	When
0.30	3.30	During Glitch
0.51	1.91	No Glitch
1.70	**1.73**	Ratio

So, I adopt the correction factor for the mean field to be 1.73±0.16 (95%) with the error being mostly determined by the spread of the points during the glitch on slide 3 (run a standard regression on the points). WSO mean fields should then be multiplied by the constant 1.73.

The starting time of the glitch seems to be somewhere between Dec 6 and Dec 16, 2016. Say, Dec 10, 2016 without loss of ‘reality’. Ending time May 18, 2017