

EGU & Copernicus report about citation stacking in the EGU journals SE and SOIL

27 February 2017

The executive editors of the EGU journal SOIL recognized that some SOIL articles had very high citations on Google Scholar and that many of them came from articles published in the journal Land Degradation & Development (LDD), published by Wiley. Furthermore, they doubted the increase of the Impact Factor of LDD from 3.1 in 2014 to 8.1 in 2015. After some preliminary analysis, they found some strong indications for citation stacking and asked Copernicus to look into the editorial activity of the journal SOIL. Copernicus compiled a further analysis using the editor reports of the two EGU journals SOIL and Solid Earth (SE). This analysis showed a clear malpractice of one topical editor who used his position as editor and reviewer of SE and SOIL to disproportionately promote citations to personal papers and associated journals. Copernicus has no access to similar data from LDD or other non-EGU journals.

EGU and Copernicus reacted quickly and published an editorial in all EGU journals on **13 February 2017** together with a community mailing to the editors, referees, and authors of the journals SOIL and SE as well as information to Thomson Reuters and Scopus. They also informed the relevant other journals in soil sciences, namely LDD, CATENA (Elsevier), and Geoderma (Elsevier). The above-mentioned topical editor stepped down from the editorial boards of the EGU journals SOIL, SE, and ESurf, and the EGU decided to exclude him from any activity as session convener at the upcoming EGU General Assembly. Furthermore, his pending activities as reviewer for manuscripts in review were stopped.

On **18 February**, an anonymous author or a group of anonymous authors compiled a report about an alleged "citation cartel" in soil sciences and circulated this report by email using the pseudonym "Akhenaten McDonald" to at least 102 recipients (email from 18 February, 18:33 GMT). In this report, without asking the involved journals or publishers for any comment or evidence, the authors accused eight members of the soil science community as members of an organized citation cartel and five journals to be involved. The report also named the Soil System Sciences Division of EGU (SSS) to be the melting pot of this citation cartel.

Afterwards, EGU and Copernicus compiled detailed analyses for all eight accused scientists and the results of these careful investigations are part of the following sections. Besides the statistics from activities within EGU journals we also list the reports some of the eight accused scientists compiled on their own to also reflect their editorial and reviewing activities for the other journals named in the McDonald report. The following sections list the eight scientists alphabetically.

Our present report shows that there is no such "citation cartel" and that one has to clearly differentiate between editors and reviewers with malpractice and those who have done a proper job for the journals, to whom we are very grateful.

We would like to take this opportunity to stress again that EGU and Copernicus adhere to strict publication ethics and we urge editors, referees, and authors to familiarize themselves with our policies and to strictly adhere to the principles of our publication ethics. EGU has been the pioneer of public peer review to foster transparency in scientific quality assurance. Editor and reviewer comments posted during the so-called Interactive Public Peer Review are openly accessible and are permanently archived. Everybody is invited to look into the reviews of SE and SOIL.

Martin Rasmussen, Copernicus Publications
Hubert Savenije, EGU Publications Committee Chair
Hans Thybo, EGU President
Jonathan Bamber, EGU Vice-President

Journals and scientists

The McDonald report referred to the journals LDD, SE, SOIL, CATENA, and Geoderma. We name these journals directly. We also include all other journals appearing in editor and reviewer reports and summarize them in the group "others". The accused scientists are in alphabetical order Eric Brevik, Artemi Cerdà, Antonio Jordán, Saskia Keesstra, Jorge Mataix-Solera, Juan Murillo, Agata Novara, and Paulo Pereira.

Eric Brevik

Eric Brevik has served the journal SOIL as executive editor and reviewed papers for HESS, SE, and SOIL.

As executive editor of SOIL, Eric Brevik was responsible for the final CE decisions of **30** SOIL manuscripts. For **2** manuscripts he suggested to include in total **3** additional references to journals of the category C. None of the suggestions were included by the authors. His maximum was 2 suggestions for a manuscript.

As reviewer, Eric Brevik worked on **12** manuscripts in the journals HESS (1), SE (8), and SOIL (3). For **8** manuscripts he suggested to include in total **42** additional references to the journals LDD (3), SOIL (10), CATENA (1), and others (28). His maximum was 15 suggestions for a manuscript.

In his own report, Eric Brevik counts in 109 reviews for various journals (including HESS, SE, and SOIL) over the last two years 106 suggestions to SOIL, 15 to LDD, 1 to SE, and 248 to other journals, all together 370 suggestions.

Artemi Cerdà

Artemi Cerdà served the journals SE and SOIL as topical editor and reviewed papers for BG, ESurf, HESS, SE, and SOIL.

As topical editor, Artemi Cerdà handled **82** manuscripts for the journals SE (76) and SOIL (6). For **41** manuscripts he suggested to include in total **622** additional references to the journals LDD (327), SOIL (78), SE (99), CATENA (10), Geoderma (3), and others (116). From these suggestions, **399** were included by the authors of **38** manuscripts. These inclusions reference to LDD (201), SE (65), SOIL (54), CATENA (6), Geoderma (2), and others (71). His maximum was 53 suggestions for a manuscript.

As reviewer, Artemi Cerdà worked on **51** manuscripts in the journals BG (1), ESurf (1), HESS (6), SE (37) and SOIL (6). For **38** manuscripts he suggested to include in total **423** additional references to the journals LDD (229), SOIL, (30), SE (49), CATENA (12), and others (103). His maximum was 28 suggestions for a manuscript.

Antonio Jordán

Antonio Jordán has served the journals SOIL and SE as topical editor and reviewed papers for SE and SOIL.

As topical editor, Antonio Jordán handled **2** SOIL and **25** SE manuscripts. He did not suggest any additional references in his editor reports.

As reviewer, Antonio Jordán worked on **28** manuscripts in the journals SE (24) and SOIL (4). For **7** manuscripts he suggested to include in total **45** additional references to the journals LDD (6), SE (6), CATENA (5), Geoderma (1), and others (27). His maximum was 18 suggestions for a manuscript.

In his own report, Antonio Jordán counts 35 further reviews for LDD in which he suggested for 1 manuscript 1 additional reference to SOIL.

Saskia Keesstra

Saskia Keesstra served the journal SOIL as guest editor of a special issue and reviewed papers for SE.

As guest editor, Saskia Keesstra handled **4** SOIL manuscripts. For **1** manuscript she suggested to include in total **20** additional references to the journals LDD (5), SOIL (1), SE (1), and others (13). None of the suggestions were included by the authors. Her maximum was 20 suggestions for a manuscript.

As reviewer, Saskia Keesstra worked on **8** SE manuscripts. For **4** manuscripts she suggested to include in total **35** additional references to the journals LDD (14), SOIL (8), SE (4), CATENA (1), and others (8). Her maximum was 15 suggestions for a manuscript.

Jorge Mataix-Solera

Jorge Mataix-Solera has served the journal SOIL as executive editor and reviewed one paper for SE.

As executive editor of SOIL, Jorge Mataix-Solera was responsible for the final CE decisions of **52** SOIL manuscripts. He did not suggest any additional references in his executive editor reports.

As reviewer, Jorge Mataix-Solera worked on **1** SE manuscript. He suggested including **1** additional reference to Geoderma.

In his own report, Jorge Mataix-Solera counts in 100 reviews for LDD, SOIL, SE, CATENA, and Geoderma over the last 10 years no suggestions as editor and a total of 13 suggestions as reviewer. These 13 suggested references are to various journals.

Juan Murillo

Juan Murillo reviewed a total of 1 paper for HESS and 8 papers for SE. He did not suggest any additional references in his reviewer reports.

Agata Novara

Agata Novara reviewed **15** manuscripts in the journals SE (11) and SOIL (4). For **4** manuscripts she suggested to include in total **13** additional references to the journals LDD (6), SOIL (2), and others (5). Her maximum was 6 suggestions for a manuscript.

Paulo Pereira

Paulo Pereira has served the journal SE as topical editor and reviewed papers for ESurf and SE.

As topical editor, Paulo Pereira handled **42** SE manuscripts. For **4** manuscripts he suggested to include in total **16** additional references to the journals LDD (7), SOIL (1), and others (8). From these suggestions, **6** were included by the authors of **3** manuscripts. These inclusions reference to LDD (2), SOIL (1), and others (3). His maximum was 10 suggestions for a manuscript.

As reviewer, Paulo Pereira worked on **17** manuscripts in the journals ESurf (2) and SE (15). For **3** manuscripts he suggested to include in total **16** additional references to the journals LDD (1), SOIL (2), SE (6), and others (7). His maximum was 7 suggestions for a manuscript.

Conclusions

From our analysis it appears that only one editor, Artemi Cerdà, violated our ethical rule that “any manipulation of citations (e.g. including citations not contributing to a manuscript’s scientific content, citations solely aiming at increasing an author’s or a journal’s citations) is regarded as scientific malpractice.” There is no indication that other editors would have violated relevant ethical rules, and there is no evidence that a group of editors would have formed a “cartel” to boost citations to their journals.

Appendix: data tables

Eric Brevik as executive editor of SOIL

MS no.	Suggestions	LDD	SOIL	SE	Catena	Geoderma	Others
soil-2016-61	0						
soil-2016-52	0						
soil-2016-51	0						
soil-2016-50	0						
soil-2016-45	0						
soil-2016-43	0						
soil-2016-42	0						
soil-2016-40	0						
soil-2016-28	0						
soil-2016-27	0						
soil-2016-20	0						
soil-2016-18	0						
soil-2015-82	0						
soil-2015-74	0						
soil-2015-71	0						
soil-2015-67	0						
soil-2015-59	0						
soil-2015-58	0						
soil-2015-47	0						
soil-2015-40	2						2
soil-2015-35	1						1
soil-2015-30	0						
soil-2015-26	0						
soil-2015-21	0						
soil-2015-10	0						
soil-2014-7	0						
soil-2014-38	0						
soil-2014-31	0						
soil-2014-22	0						
soil-2014-2	0						
Sum	3						3

Eric Brevik as reviewer of HESS, SE, and SOIL

MS no.	Suggestions	LDD	SOIL	SE	Catena	Geoderma	Others
hess-2016-93	5						5
se-2014-112 (disc.)	15						15
se-2014-112 (peer-rev.)	0						
se-2015-109	8	3	1				4
se-2015-110	6		5				1
se-2016-112 (disc.)	0						
se-2016-112 (peer-rev.)	0						
se-2016-51	1		1				
se-2016-8	2		2				
soil-2016-2	2						2
soil-2016-25	3		1		1		1
soil-2016-71	0						
Sum	42	3	10	0	1	0	28

Artemi Cerdà as topical editor of SE and SOIL

Suggestions

MS no.	Suggestions	LDD	SOIL	SE	Catena	Geoderma	Others
soil-2016-33	8	7	1				
soil-2015-59	0						
soil-2015-33	0						
soil-2015-4	16	5	2	4			5
soil-2014-43	7	4	2	1			
soil-2014-35	7	4	1	2			
se-2016-63	0						
se-2016-59	20	13	5				2
se-2016-57	9	6			1	1	1
se-2016-55	28	13	4	2	1		8
se-2016-52	0						
se-2016-51	0						
se-2016-49	28	17	3	3			5
se-2016-46	26	8	5	6	1		6
se-2016-31	0						
se-2016-30	25	11	4	6			4
se-2016-29	0						
se-2016-28	0						
se-2016-26	7	2		4			1
se-2016-15	0						
se-2016-11	6	2	1				3
se-2015-133	26	22		4			
se-2015-125	19	19					
se-2015-124	0						
se-2015-121	11	4	1	2			4
se-2015-117	0						

MS no.	Suggestions	LDD	SOIL	SE	Catena	Geoderma	Others
se-2015-111	18	9	2	4			3
se-2015-110	48	23	6	12	1		6
se-2015-109	0						
se-2015-104	5	6	7				3
se-2015-102	0						
se-2015-98	11	10		1			
se-2015-95	10	4	3	1			2
se-2015-92	0						
se-2015-91	0						
se-2015-82	0						
se-2015-76	0						
se-2015-75	0						
se-2015-74	0						
se-2015-70	8	5	1	1			1
se-2015-67	0						
se-2015-54	34	12	5	7	1	1	8
se-2015-46	0						
se-2015-42	20	9	2	3			6
se-2015-34	11	5	4				2
se-2015-31	24	17	3	1	1		2
se-2015-29	0						
se-2015-18	11	5		6			
se-2015-17	11	7		4			
se-2015-16	0						
se-2015-14	21	8	2	5			6
se-2015-13	53	17	6	8	4	1	17
se-2015-10	14	7	3				4
se-2015-9	8	6	1				1
se-2015-2	2	1					1
se-2015-1	0						
se-2014-96	0						
se-2014-95	0						
se-2014-94	0						
se-2014-61	0						
se-2014-37	0						
se-2014-30	0						
se-2014-23	6	6					
se-2014-22	0						
se-2014-140	17	10	3	2			2
se-2014-131	3			3			
se-2014-128	0						
se-2014-127	0						
se-2014-125	0						
se-2014-122	0						
se-2014-121	0						
se-2014-113	0						
se-2014-106	14	4	1	6			3
se-2014-10	0						

MS no.	Suggestions	LDD	SOIL	SE	Catena	Geoderma	Others
se-2013-66	9	9					
se-2013-53	10	6					4
se-2013-18	3	1					2
se-2012-56	7	2		1			4
se-2012-48	0						
se-2012-28	1	1					
se-2011-1	0						
se-2010-8	0						
Sum	622	327	78	99	10	3	116

Inclusions

MS no.	Included	LDD	SOIL	SE	Catena	Geoderma	Others
soil-2016-33	0						
soil-2015-59	0						
soil-2015-33	0						
soil-2015-4	3	1	1				1
soil-2014-43	7	4	2	1			
soil-2014-35	8	4	1	2			1
se-2016-63	0						
se-2016-59	16	12	3				1
se-2016-57	9	6			1	1	1
se-2016-55	5		2				3
se-2016-52	0						
se-2016-51	0						
se-2016-49	28	17	3	3			5
se-2016-46	20	4	5	5	1		5
se-2016-31	0						
se-2016-30	20	6	4	6			4
se-2016-29	0						
se-2016-28	0						
se-2016-26	4	1		2			1
se-2016-15	0						
se-2016-11	6	2	1				3
se-2015-133	11	7		4			
se-2015-125	10	10					
se-2015-124	0						
se-2015-121	0						
se-2015-117	0						
se-2015-111	17	8	2	3			4
se-2015-110	14	5	1	5			3
se-2015-109	0						
se-2015-104	17	4	4	6			3
se-2015-102	0						
se-2015-98	0						
se-2015-95	5	1	2	1			1
se-2015-92	0						

MS no.	Included	LDD	SOIL	SE	Catena	Geoderma	Others
se-2015-91	0						
se-2015-82	0						
se-2015-76	0						
se-2015-75	0						
se-2015-74	0						
se-2015-70	8	5	1	1			1
se-2015-67	0						
se-2015-54	14	7	2	2			3
se-2015-46	0						
se-2015-42	17	9	2	2			4
se-2015-34	4		3				1
se-2015-31	19	14	3	1			1
se-2015-29	0						
se-2015-18	9	3		6			
se-2015-17	5	3		2			
se-2015-16	0						
se-2015-14	11	7	1	1			2
se-2015-13	41	15	3	3	4	1	15
se-2015-10	10	5	3				2
se-2015-9	6	5	1				
se-2015-2	2	1					1
se-2015-1	0						
se-2014-96	0						
se-2014-95	0						
se-2014-94	0						
se-2014-61	0						
se-2014-37	0						
se-2014-30	0						
se-2014-23	6	6					
se-2014-22	0						
se-2014-140	17	10	3	2			2
se-2014-131	3			3			
se-2014-128	0						
se-2014-127	0						
se-2014-125	0						
se-2014-122	0						
se-2014-121	0						
se-2014-113	0						
se-2014-106	7	3	1	3			
se-2014-10	0						
se-2013-66	8	8					
se-2013-53	6	5					1
se-2013-18	1	1					
se-2012-56	4	1		1			2
se-2012-48	0						
se-2012-28	1	1					
se-2011-1	0						
se-2010-8	0						

MS no.	Included	LDD	SOIL	SE	Catena	Geoderma	Others
Sum	399	201	54	65	6	2	71

Artemi Cerdà as reviewer of BG, ESurf, HESS, SE, and SOIL

MS no.	Suggestions	LDD	SOIL	SE	Catena	Geoderma	Others
bg-2013-257	8	4			1		3
esurf-2016-32	8	6		1			1
hess-2009-267	0						
hess-2009-267	0						
hess-2013-39	6				2		4
hess-2015-278	12	7					5
hess-2015-490	19	6	2	2			9
hess-2016-44	20	13			2		5
se-2013-44	0						
se-2014-100	16	14					2
se-2014-107	3	3					
se-2014-107	0						
se-2014-109	5	5					
se-2014-109	5			5			
se-2014-115	4	3					1
se-2014-126	0						
se-2014-4	13	11					2
se-2014-4	4	4					
se-2014-4	0						
se-2014-81	11	11					
se-2014-88	19	11			3		5
se-2014-88	7	7					
se-2014-97	9	4	1	2			2
se-2015-100	13	10		3			
se-2015-36	6	4	2				
se-2015-36	3	2					1
se-2015-40	3	1					2
se-2015-47	5	3					2
se-2015-47	8	2		1			5
se-2015-55	10	6	1	2			1
se-2015-55	3						3
se-2015-59	20	8	1	4	1		6
se-2015-59	0						
se-2015-94	0						
se-2015-99	24	8	5	5			6
se-2016-126	23	11	4	3	1		4
se-2016-126	0						
se-2016-127	12	10		2			
se-2016-129	28	18	1	4			5
se-2016-163	20	4	2	1	1		12
se-2016-22	14	4	4	1			5
se-2016-8	0						

MS no.	Suggestions	LDD	SOIL	SE	Catena	Geoderma	Others
se-2016-84	19	8	2	8			1
se-2016-84	0						
se-2016-84	0						
soil-2014-21	8	7					1
soil-2015-32	5	1		1			3
soil-2015-46	16	7	4	1	1		3
soil-2015-71	11	4	1	2			4
soil-2016-25	0						
soil-2016-44	3	2		1			
Sum	423	229	30	49	12	0	103

Antonio Jordán as reviewer of SE and SOIL

MS no.	Suggestions	LDD	SOIL	SE	Catena	Geoderma	Others
se-2012-56	18	1		2	2		13
se-2013-63	0						
se-2013-84	0						
se-2014-123	2						2
se-2014-124	0						
se-2014-124	0						
se-2014-51	0						
se-2014-51	0						
se-2014-51	0						
se-2014-65	0						
se-2014-80	10	1		1	3		5
se-2014-80	0						
se-2014-87	4	1		3			
se-2014-94	1						1
se-2015-17	0						
se-2015-40	0						
se-2015-43	0						
se-2015-43	0						
se-2015-5	0						
se-2015-5	0						
se-2015-62	0						
se-2015-95	0						
se-2016-126	0						
se-2016-20	5	3					2
soil-2015-23	0						
soil-2015-59	5					1	4
soil-2016-29	0						
soil-2016-44	0						
Sum	45	6	0	6	5	1	27

Saskia Keesstra as guest editor of SOIL

MS no.	Suggestions	LDD	SOIL	SE	Catena	Geoderma	Others
soil-2016-50	20	5	1	1			13
soil-2016-16	0						
soil-2016-17	0						
soil-2016-25	0						
Sum	20						

Saskia Keesstra as reviewer of SE

MS no.	Suggestions	LDD	SOIL	SE	Catena	Geoderma	Others
se-2014-121	0						
se-2015-102	12	5	5				2
se-2015-124	15	9	3	3			
se-2015-2	0						
se-2015-31	0						
se-2015-9	1						1
se-2016-11	7			1	1		5
se-2016-49	0						
Sum	33	14	8	4	1	0	8

Agata Novara as reviewer of SE and SOIL

MS no.	Suggestions	LDD	SOIL	SE	Catena	Geoderma	Others
se-2012-56	0						
se-2014-23	0						
se-2014-7	0						
se-2014-89	0						
se-2014-97	0						
se-2015-14	0						
se-2015-26 (disc.)	0						
se-2015-26 (peer-rev)	3			1			2
se-2015-34	3	3					
se-2015-47	6	3					3
se-2016-148	1			1			
soil-2014-35	0						
soil-2014-43	0						
soil-2015-5	0						
soil-2015-9	0						
Sum	13	6	2	0	0	0	5

Paulo Pereira as topical editor of SE

MS no.	Suggestions	LDD	SOIL	SE	Catena	Geoderma	Others
se-2016-173	0						
se-2016-148	0						
se-2016-129	0						
se-2016-84	0						
se-2016-83	0						
se-2016-70	0						
se-2016-60	0						
se-2016-22	0						
se-2016-9	0						
se-2015-122	0						
se-2015-112	0						
se-2015-100	0						
se-2015-87	2						2
se-2015-63	0						
se-2015-61	1						1
se-2015-59	0						
se-2015-57	0						
se-2015-55	10	7					3
se-2015-47	0						
se-2015-44	0						
se-2015-36	0						
se-2015-26	3		1				2
se-2015-3	0						
se-2014-126	0						
se-2014-124	0						
se-2014-112	0						
se-2014-109	0						
se-2014-107	0						
se-2014-100	0						
se-2014-97	0						
se-2014-89	0						
se-2014-88	0						
se-2014-86	0						
se-2014-80	0						
se-2014-65	0						
se-2014-51	0						
se-2014-4	0						
se-2014-29	0						
se-2014-14	0						
se-2014-7	0						
se-2013-82	0						
se-2013-79	0						
Sum	16	7	1	0	0	0	8

Paulo Pereira as reviewer of ESurf and SE

MS no.	Suggestions	LDD	SOIL	SE	Catena	Geoderma	Others
esurf-2015-47	0						
esurf-2015-47	0						
se-2012-28	0						
se-2012-48	0						
se-2013-5	0						
se-2014-116	0						
se-2014-116	0						
se-2014-122	0						
se-2014-127	0						
se-2014-94	0						
se-2014-96	0						
se-2015-104	3			2			1
se-2015-133	0						
se-2015-17	0						
se-2015-34	7	1	2	4			
se-2016-151	6						6
se-2016-49	0						
Sum	16	1	2	6	0	0	7