

Altmetric analysis in the context of the Open Science Slovenia



Gordana Budimir

Institute of information science, Maribor, SI
gordana.budimir@izum.si

Policy and rules



Government – Law on Research and Development Activity

Ministry of Education, Science and Sport (MIZS)
Resolution on Research and Innovation Strategy of Slovenia 2011-2020
Slovenian strategy for strengthening the European Research Area 2016-2020

National strategy of open access to scientific publications and research data in Slovenia 2015-2020 (Action Plan for Implementation)

Slovenian Research Agency (ARRS, SRA)
Rules on the co-financing and evaluation procedures and the monitoring of the implementation of research activities

Methodology for evaluating applications for tenders
Bibliographic criteria for scientific and professional performance - quantitative assessment

Central Specialised Information Centres (CSICs) for each science field - categorisation of scientific

Institute of information science (IZUM) – SICRIS, COBISS

Platform

Open Science Slovenia
ACCESS TO KNOWLEDGE FROM SLOVENIAN RESEARCH ORGANIZATIONS



ARRS
Researchers
Projects
Programs
Organizations



SICRIS
Bibliographies
Reports

COBISS
Bibliographic
data (Union
catalogue
COBIB.SI)

typology of
works
(scientific or
professional)

CSICs
Verifications



COBISS/SciMet
Aggregator

JCR, SNIP
Impact factor
Categories of journals

**Lists of scientific
journals,
databases,
archives**










WoS, Scopus
Data on citations

Author identifiers
ORCID
Scopus AuthorID
ResearcherID

Open Access
SHERPA/Romeo

Altmetrics
Altmetric.com
PlumX
Open Science Slovenia

COBISS/SciMet

h-indeks = 3		TC	CI	CIAu	Leto	TC	CI	CIAu
1. Tomaž Bartol et al. Assessment of research fields in Scopus and Web of Science in the view of national research evaluation in Slovenia. <i>Scientometrics</i> , ISSN 0138-9130, 2014, 99(2), 149-159. 10.1007/s11192-013-1144-4 [Scopus] SHERPA/RoME  PlumX Metrics  Altmetric 1	23	16	3.2	2014	4	4	0.8	
				2015	9	6	1.2	
				2016	8	5	1	
				2017	2	1	0.2	
2. Simona Juvan, Tomaž Bartol. Data structuring and classification of newly-emerging scientific information review. <i>Information review</i> , ISSN 29(5), 483-498. 10.1108/1468452051062062 [Scopus] SHERPA/RoME  PlumX Metrics	9	6	1.99	2009	2	0	0	
				2010	0	0	0	
				2011	1	1	0.33	
				2012	3	2	0.67	
				2013	1	1	0.33	
				2014	0	0	0	
				2015	1	1	0.33	
				2016	0	0	0	
3. Tomaž Bartol. Scientometric assessment of publishing patterns and performance indicators in agriculture in the JCEA member countries. <i>Journal of central European agriculture</i> , ISSN 1332-9049, 2010, 11(1), 1-10. [COBISS, Scopus] SHERPA/RoME openscience.si  <input type="radio"/> Download <input checked="" type="radio"/> View Highcharts.com	5	4	4	2013	1	1	1	
				2014	3	3	3	
				2015	0	0	0	
				2016	1	0	0	
4. Tomaž Bartol. Assessment of indexing trends with specific and general terms for herbal medicine. <i>Health information and libraries journal</i> , ISSN 1471-1834, 2012, 29(4), 285-295. 10.1111/hir.12005 [COBISS, Scopus] SHERPA/RoME  PlumX Metrics  Altmetric 4 openscience.si  <input type="radio"/> Download <input checked="" type="radio"/> View Highcharts.com	4	3	3	2012	1	1	1	
				2013	0	0	0	
				2014	0	0	0	
				2015	1	0	0	
				2016	1	1	1	
				2017	1	1	1	
5. Tomaž Bartol. Assessment of	5	3	3	2010	1	0	0	

PLUMX

Usage
 Abstract Views: **428**
 Link-outs: **30**

Captures
 Exports-Saves: **35**
 Readers: **70**

Social Media
 Shares, Likes & Comments: **33**

Citations
 Citation Indexes: **23**

[see details](#)

Methodology of evaluation

86 different quantitative and qualitative indicators divided into groups



scientific
excellence of
researchers

relevance of
researcher
achievements or
support activities

ability to act and
vitality of the
research team,
scientific,
technological or
innovation excellence

potential
impact due to
the
development

dissemination
and use of
expected
research results

quality and efficiency
of implementation,
management,
implemented support
activity and
applications

Quantitative indicators

- used only as an entry requirement
- based on IF quartiles of journals in JCR/SNIP and citations
- **quality of publications** (A1) – for last five-year period
- **scientific excellence** - achievements for last five-year period
 - A'' - **exceptional**
 - A' - **high-quality**
 - A^{1/2} - **important**
- **visibility** (CI) - large number of net citations in WoS or Scopus for the period of the **last ten years** regardless of the publication year
- **financing** of other funders (A3)
- publishing according to the principles of **open access**





accessibility



frequency of use



links to social and cultural activities



public presentation and popularization of the project



economic, social and cultural impact



cooperation with users



dissemination of research results



Relevance
&
Impact

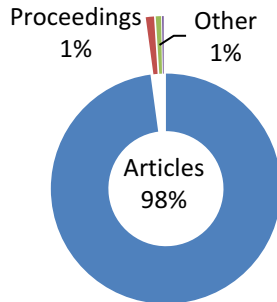
Altmetrics

- **additional quantitative indicator** (A4) only as an entry requirement for calls
- **altimetric data** captured by Altmetric.com, (ALTM) , PlumX (PLUM), Open Science Slovenia portal (OSIM)
- preliminary study - **an overview** of the altmetric data for Slovenian researchers
- **objectives**
 - how publications are covered by the altmetrics tools
 - types of altmetric events
 - distribution of altmetric data across scientific disciplines
- **methods**
 - **64,865 documents** published from 1970 by **13,931 Slovenian researchers**
 - at least one event captured by at least one of aggregators ALTM, PLUM or OSIM
 - scientific disciplines defined by researchers
 - the principles of whole counting - publication was counted once in each discipline of its authors
 - **23/26 different events type** for ALTM/PLUM, views and downloads for OSIM

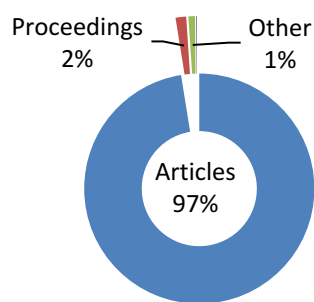
Results

	Researchers	Publications	After 2000	Open Access
ALTM	5,061 (33%)	8,914 (9%)	98%	97%
PLUM	10,150 (67%)	37,178 (36%)	95%	89%
OSIM	10,511 (69%)	30,000 (30%)	88%	16%
ALTM, PLUM or OSIM	13,931 (91%)	64,865 (63%)	90%	56%

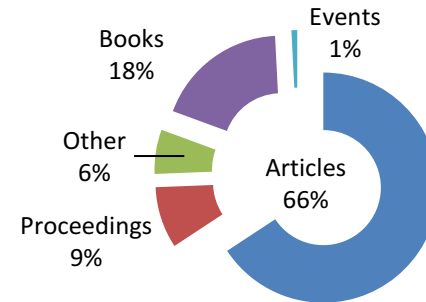
ALTM



PLUM

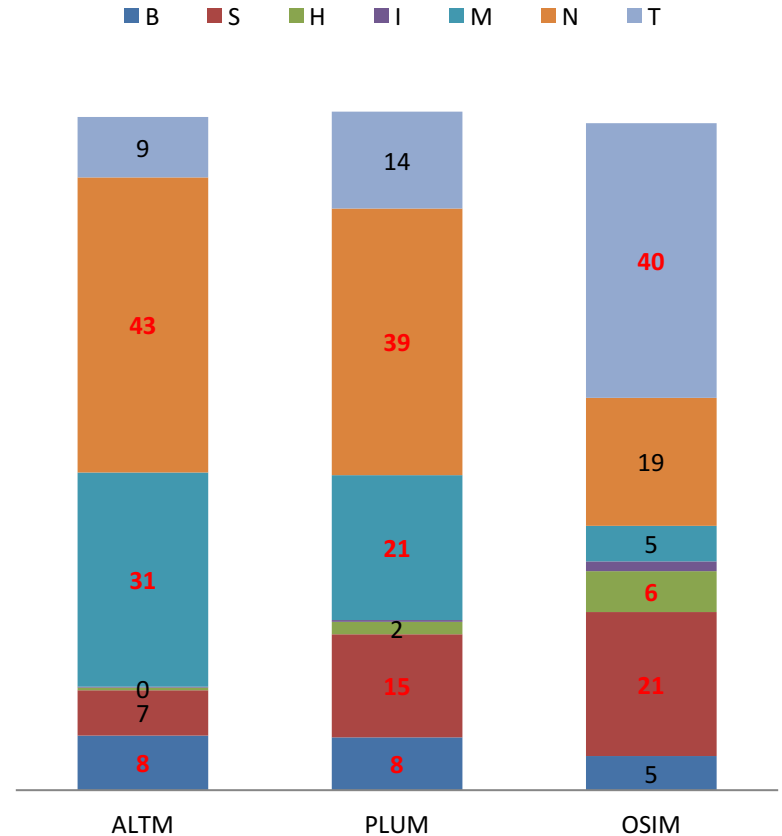


OSIM



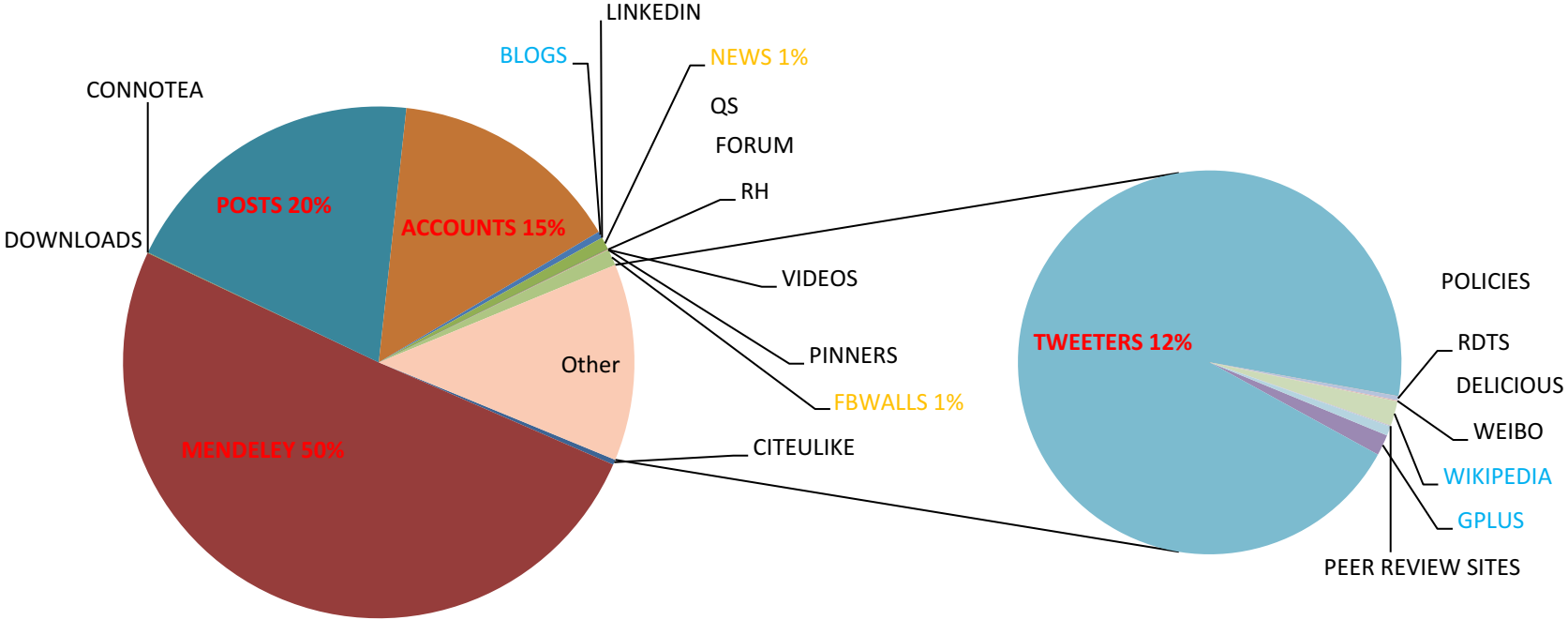
Scientific disciplines

- biggest shares of events
 - M, N, B in ALTM and PLUM
 - S in OSIM and PLUM
 - T, H, I in OSIM
- similar for the top 10th percentile of most recorded publications in each aggregator

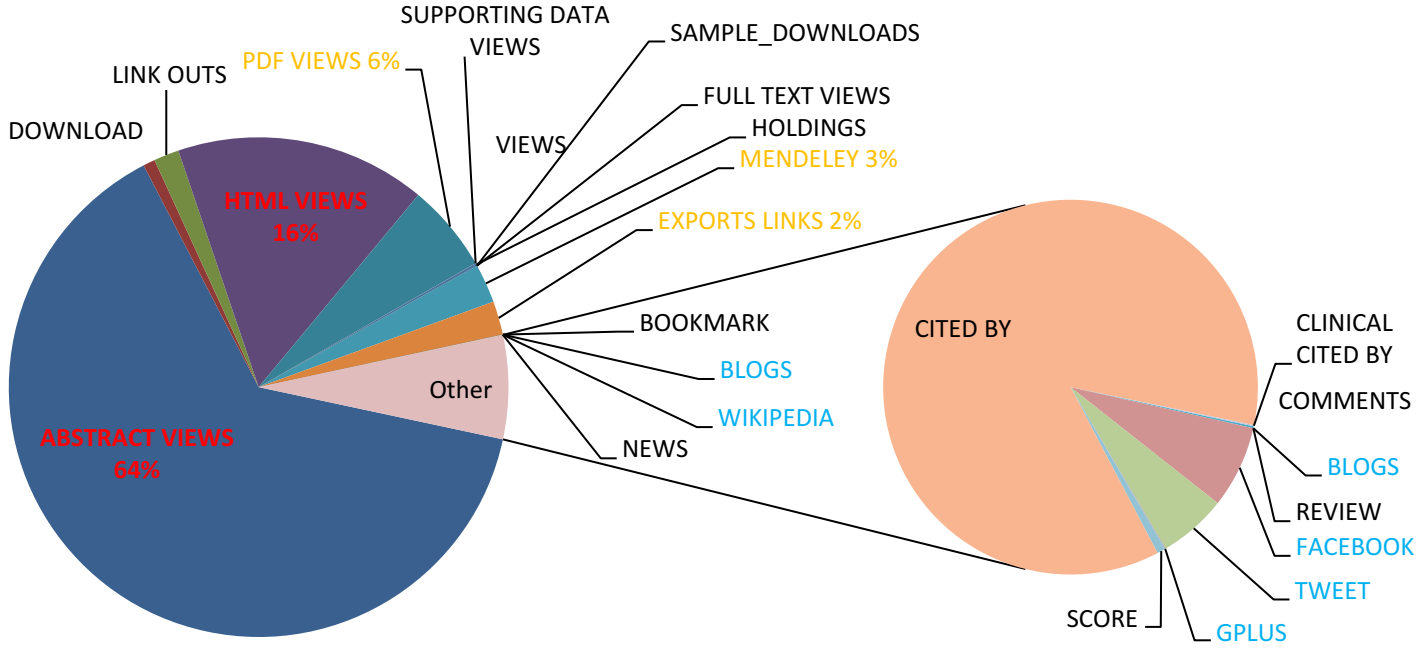


Shares for science in ALTM, PLUM and OSIM

Events in Altmetric.com



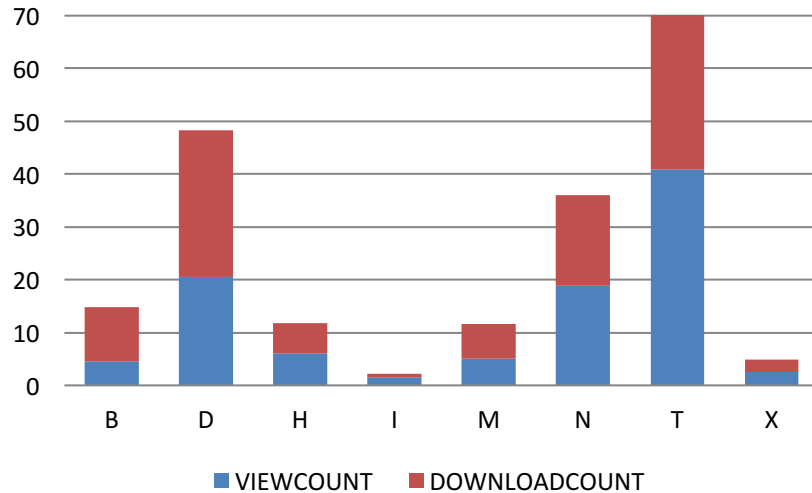
Events in PlumX



Events in Open Science Slovenia

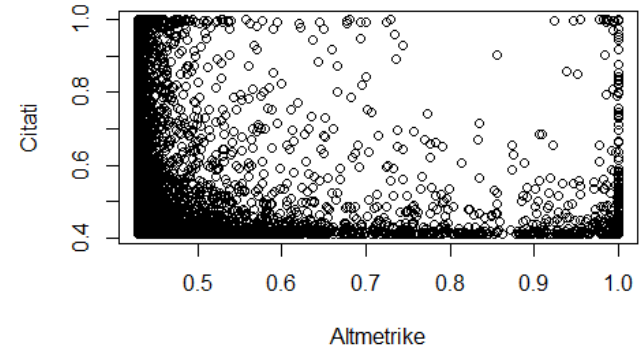
Shares of events by science

- biggest share – T, S, N
- downloads - approx. 10 times lower than views

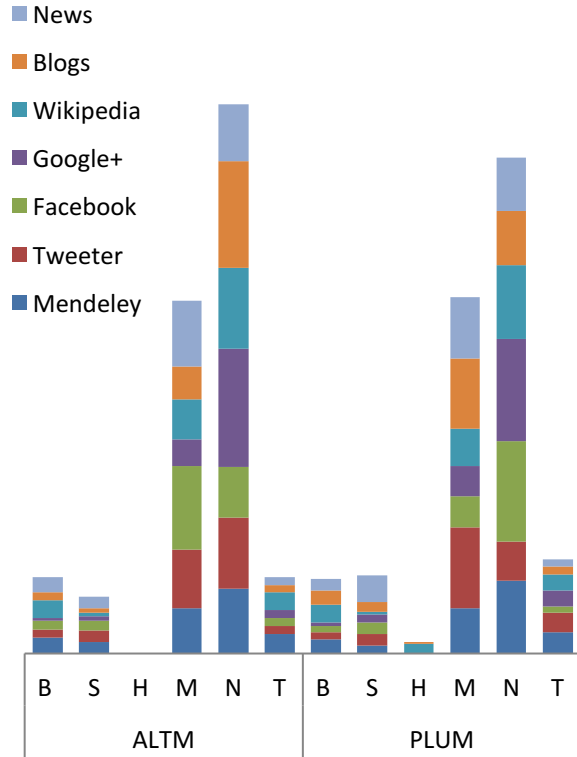


Correlation

- not exist between the maximum number of net citations in WoS or Scopus and the number of views and downloads
- researchers' ranks with altmetric vs. citations data – 50% : 50%



Events by science in Altmetric.com and PlumX



- similar shares for common event types in ALTM and PLUM
 - B, S, T – 2% – 16%
 - N, M – 16% - 60%, differences for Tweeter, Facebook, Blogs and Google+
 - H - < 1%, except Wikipedia (6%) in PLUM
- views in PLUM, posts and accounts in ALTM
 - M, N – 18% - 51%
 - B, S, T – 4% - 17%
 - H < 2%

Conclusions

- coverage of our researchers' publications in Altmetric.com, PlumX and Open Science Slovenia is quite high - journal articles and conference proceedings, 56% in open access
- altimetric data could be used in the assessment of some impact of researchers' output
 - ALTM and PLUM appropriate for M, N
 - OSIM for other scientific disciplines - overall lack of DOIs in ALTM and PLUM
- event types on social media recorded in ALTM and PLUM - sciences are evenly covered in both tools
- more research
 - what particular altmetric event types actually reflect
 - which of them could be used in the assessment
 - next step





<https://www.facebook.com/COBISS.SI>



gordana.budimir@izum.si



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<http://blog.cobiss.si>



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<https://www.linkedin.com/company/institute-of-information-science>

