XSEDE Scientific Impact Metrics for the Period between July 1, 2017 to Sept 30, 2017

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Sep 30, 2017
Technical Report, Indiana University, Bloomington, IN

1.1. Scientific Impact Metrics (SIM)

This appendix presents the current Scientific Impact Metrics data as of end of September 2017. This is part of the *XD Metrics Service (*XMS*) (*formerly *NSF Technology Audit Service (*TAS*))* effort.

We are currently working on adapting the data and results structure so most of these results would be available as display via XDMoD in future.

1.1.1. *Summary Impact Metrics*

Table SIM-1 shows the essential scientific summary impact metrics as of the end of Q3 2017. The increasing values for each metric are listed in the table indicating the changes during the last quarter. By calculating such metrics periodically we can show the trends, as depicted in Figure SIM-2 and Figure SIM-3. Both show steadily increasing trends.

Table SIM-1: Overall Scientific Impact Metrics Data

	Number of externally verified unique publications*	i10-index (Number of publications cited at least 10 times)	Overall citation count*	h-index	g-index
Since 2005 (TG+XD)	11,738	5,111	250,666	166	301
Since 2011 (XD)	9,392	3,390	131,144	110	187
Change from last quarter (TG+XD)	+442	+307	+15,457	+3	+7
Change from last quarter (XD)	+442	+288	+12,944	+7	+10
* Data updated as of Sept 30th, 2017.					

1.1.2. *Historical Trend*

Figure SIM-2 and SIM-3 show the increasing quarterly trend regarding publications, citations, and other impact metrics such as H-Index and G-Index. Both suggest the increasing impact of XSEDE during the past years, based on verified unique publication count; citation count; h-index and g-index.
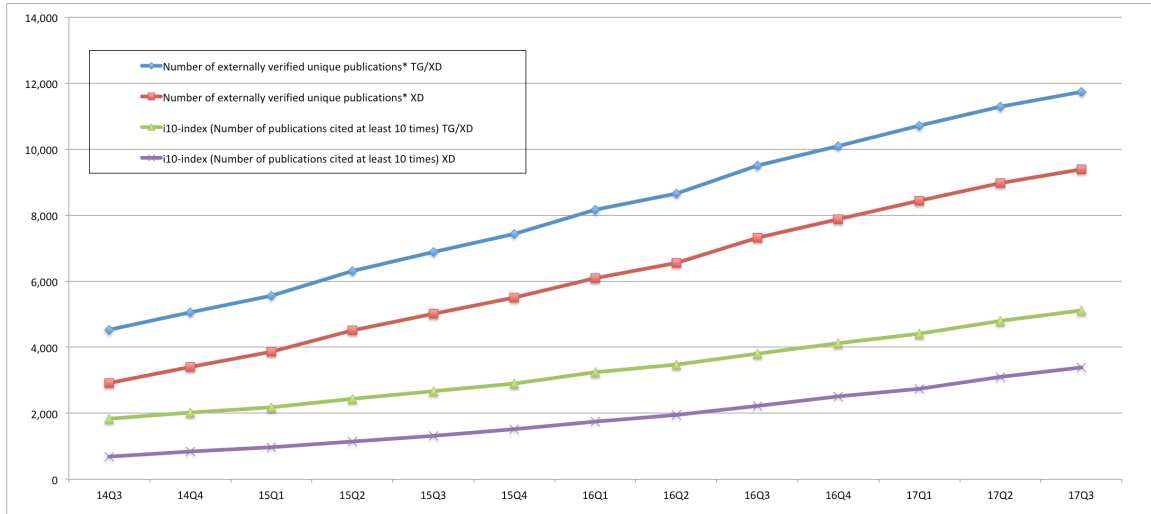

Figure SIM-2. Counts of all externally verified publications for TG/XD (since 2005) and XD (since 2011) and of those being cited at least 10 times (i10-index).
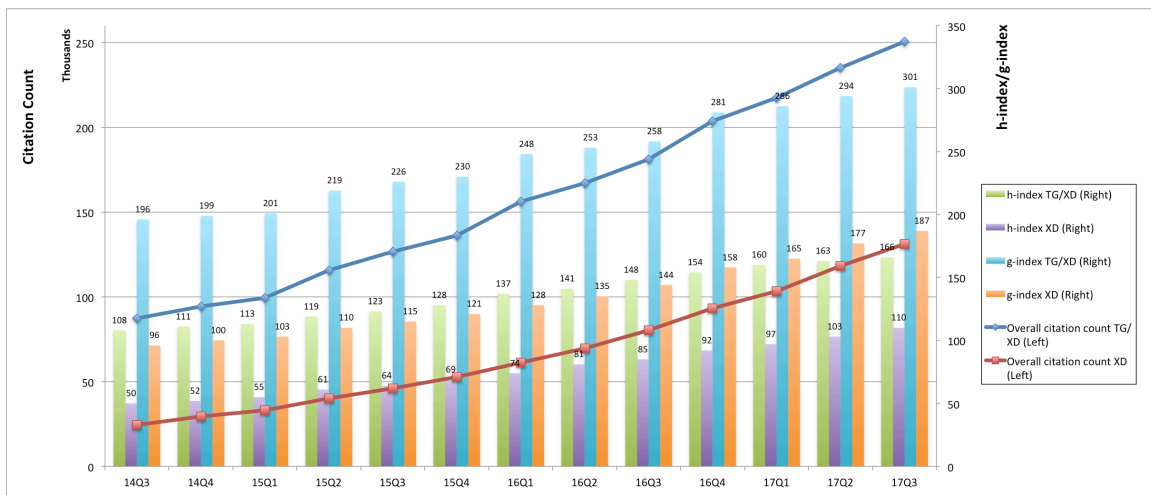

Figure SIM-3. Accumulated citation count (line, left axis) as well as h-index and g-index metrics (bar, right axis) for TG/XD(since 2005) and XD(since 2011).