

Table 2. Example Metrics. A variety of metrics can be used to attempt to interpret to usefulness, reliability, and uptake by the community and more. Here we describe metrics used by the authors of the paper. See [Lenarduzzi et al., 2020, Eisty et al., 2018, Thelwall and Kousha, 2016] for more information about metrics used by others.

Measure	Example Metrics	Use
Tool Dissemination	<ul style="list-style-type: none"> •Total unique downloads [Eisty et al., 2018, Zhao et al., 2021, Thelwall and Kousha, 2016] •New users [Begany et al., 2021, Sayyed-Alikhani et al., 2021] •Returning users [Begany et al., 2021, Sayyed-Alikhani et al., 2021] •Download count by version [Rossi et al., 2010, Howison et al., 2015] 	<ul style="list-style-type: none"> •Determining popularity of a given tool
	<ul style="list-style-type: none"> •Download count by version 	<ul style="list-style-type: none"> •Assessing if users are keeping up-to-date
Tool Usefulness	<ul style="list-style-type: none"> •Number of software engagements by user [Begany et al., 2021, Chang et al., 2021] 	<ul style="list-style-type: none"> •Determining prevalence of usage
Tool Reliability	<ul style="list-style-type: none"> •Proportion of runs without a crash or error [Eisty et al., 2018, Hunter-Zinck et al., 2021] •Test coverage [Hunter-Zinck et al., 2021] 	<ul style="list-style-type: none"> •Improving error handling, bug fixes
Tool Versatility	<ul style="list-style-type: none"> •Distribution of data types (inferred from metadata) [Eisty et al., 2018] 	<ul style="list-style-type: none"> •Improving tool flexibility & generalizability
Interface Acceptability	<ul style="list-style-type: none"> •Proportion of visitors who actually engage with the tool [Kumar and Hasteer, 2017, Ramakrishnan and Gunter, 2017] •User error frequency [Kumar and Hasteer, 2017, Eisty et al., 2018] 	<ul style="list-style-type: none"> •Graphical tool and website acceptability
Performance	<ul style="list-style-type: none"> •Maximum memory usage [Eisty et al., 2018] •Average time-to-complete of algorithmic steps [Eisty et al., 2018] 	<ul style="list-style-type: none"> •Requirements analysis •Tuning