Average Priority of Issues Fixed in multi-programming-language commits (MPLCs) of The Selected Projects

Project Name	MPLC		Non-MPLC		*p-value*
	AveIssuePriority	**#Issue**	**AveIssuePriority**	**#Issue**	
Airavata	2.94	51	3.00	688	0.440
Ambari	3.33	1280	3.35	15793	0.156
Arrow	2.93	1026	2.87	3333	<0.001
Beam	2.82	120	2.79	2971	0.608
Carbondata	2.72	859	2.62	943	<0.001
Cloudstack	3.12	266	3.43	3987	<0.001
Couchdb	3.11	114	2.93	244	0.447
Dispatch	2.96	231	2.94	827	0.312
Ignite	3.10	440	3.10	4235	0.897
Impala	3.35	1291	3.57	2881	<0.001
Kafka	3.21	731	3.12	3244	0.001
Kylin	2.85	60	2.80	1769	0.319
Ranger	2.98	154	2.88	1464	0.013
Reef	2.76	99	2.63	954	0.072
Spark	2.91	2214	2.82	12261	<0.001
Subversion	3.12	371	3.18	1328	0.188
Thrift	2.77	334	2.65	2133	0.012
Zeppelin	2.92	272	2.88	1459	0.263

In JIRA, the priority of a bug can be one of the following five labels (from highest to lowest): blocker, critical, major, minor, and trivial. First, we assigned numbers to the five priority labels: blocker=5, critical=4, major=3, minor=2, and trivial=1. Then, we ran the Whitney-Mann U test on the priority numbers of issues resolved in MPLCs and non-MPLCs of each project. The results are shown in the table above, where AveIssuePriority denotes the average priority number of all issues in a selected project, and #Issue is the number of resolved issues. As shown in the table, there is a significant difference between the priority of issues resolved in MPLCs and the priority of issues resolved in non-MPLCs for 8 projects (i.e., $p\text{-value}<0.05$); there is no significant difference between the priority of issues resolved in MPLCs and the priority of issues resolved in non-MPLCs for 10 projects.