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Article

Weakly soft b-open sets and their usages via soft topologies: A novel approach

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Authors:

**Tareq Al-chami**
Sana'a University**Rodyna A. Hosny**
Zagazig University**Abdelwaheb Mhemdi**
Prince Sultan bin Abdulaziz University**Redwan abu gadiri**
Zarqa University[Show all 5 authors](#)[Download citation](#)[Copy link](#)[Citations \(3\)](#)[References \(54\)](#)

Abstract

The objective of the current article, is introducing the notion of weakly soft b-open subsets (ws b-open) and investigating some of its properties. A lot of relationships between this family of soft sets and some generalizations of soft open sets with some interpretative examples are examined. With extended and hyperconnected soft topologies, various relevant outcomes and several relationships are achieved. By ws b-open and weakly soft b-closed (ws b-closed) sets, the weakly b- interior, weakly b-closure operators are constructed and soft continuity are established with some of their substantial features. Commonly, the methodical relations and results that are lost through this study are discussed. The necessary stipulations to preserve some of these relations and results like extended, full, and hyperconnected soft topology are demonstrated.

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