		TRUE CLASS	
		Non-Fire	Fire
PREDICTED CLASS	Non-Fire	1855	45
	Fire	51	1090

The performance metrics in Table 9 were obtained as a result of the calculations made using the confusion matrix data of all models.

images. The edges of the flame zone obtained after these processes have been determined to make sure that it is really a flame zone. With these filters applied to the image containing 1141 flame regions, the flame region has been removed with 100% success. However, in images that do not contain a flame region, objects that resemble flame color are also removed as flame regions. Therefore, fire detection is not possible with this method alone. Because fire has many color and shape features. Multiple algorithms are needed to detect fire with high success using these features. Therefore, a three-stage fire detection framework has been proposed.

The second method used to detect fire is to detect the mobility of the flame. Flame is an event that is in constant motion. By using