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Within the field of space weather, a robust understanding of the ambient solar wind is crucial. Previous research has discussed the origins of the phenomenon, in addition to the utilization of traditional numerical models to monitor and forecast events. More recently, there has been novel research conducted on harnessing machine learning algorithms to predict ambient solar wind for Earth in an automated manner. For example, models were trained on ADAPT magnetic map data to forecast solar wind conditions on Earth a certain number of hours or days later, achieving state-of-the-art results. However, a significant challenge that we face in regards to machine learning and deep learning is ensuring the interpretability of the developed algorithms, which is crucial for a keen understanding of the value of the results produced and is important for real-world deployment. To tackle this challenge, we propose the construction of gradient-weighted class activation maps to display saliency, allowing us to further understand the inner decision-making process of the model. Conducting these tasks on visual data is critical to reexamining previous computer vision models. To achieve this, we utilize previous models in the literature with some improvements in model specification. More broadly, the goal of this work is to make black box models more accessible, advancing this emerging intersection between artificial intelligence and solar weather.