Strengths
Matrix Method: Our approach concerning difference matrix is quite simple at the level of thought, which is understandable for readers. And its result is the most accurate in the all methods we use.

KDT: The model does not have high requirement for computer's VRAM. And the speed of calculation and comparison is much faster.

HFBNNA: In high-frequency band processing, noise can be a major challenge. Neural networks can learn to filter out unwanted noise and focus on the meaningful signal components, improving the quality of the processed data.

Weaknesses
Matrix Method: If there is a large amount of data, it's difficult for a normal computer to deal with the model's algorithm in a short period of time. That is the reason why when the range of time is prolonged to 24 hours, other methods are taken into consideration instead of the matrix approach.

Further Discussion
Accurate measurements of the geomagnetic field are crucial for space weather prediction. Solar activities such as solar wind and geomagnetic storms can influence the Earth's magnetic field, causing phenomena like geomagnetic storms. By monitoring changes in the geomagnetic field, it is possible to predict geomagnetic storms in advance and issue warnings to mitigate potential impacts on satellite communications, power grids, and navigation systems. Space weather prediction helps protect spacecraft, satellites, and ground infrastructure, ensuring their proper functioning during periods of intense solar activity.