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UN keeps a steady eye on the Sun's effect on the Earth

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Back in the seventeenth century, the French moralist François Duc De La Rochefoucauld wrote that "Death and the Sun are two things we cannot look on with a steady eye." Now in the twenty-first century, scientists are challenging that axiom by venturing to explore the Sun and its effect on the Earth. Globally, there is growing interest in better understanding patterns and trends in space weather as our reliance on space-related technological systems increases.

Through the **International Space Weather Initiative**, the **UN Office for Outer Space Affairs** (OOSA) and **UN Committee on the Peaceful Uses of Outer Space** (COPUOS) Member States are raising awareness of the issue and promoting international cooperation to address it. The Initiative contributes to the observation of space weather through the deployment of instrument arrays and the sharing of observed data among researchers around the world. Stanford University, for example, has developed inexpensive space weather monitors that students can install and use at their local high schools, along with a database for storing information collected worldwide.

According to OOSA, the Sun is the central driver of space weather, those conditions and processes occurring in space which have the potential to affect the near-Earth environment. Space weather phenomena regularly influences the performance and reliability of space-borne and Earth-based technological systems

In Vienna, the UN Permanent Space Exhibit located at the **Vienna International Centre** has recently become one of the many sites worldwide from which the occurrence of Sun flares is being monitored. The idea for setting up a monitoring device - an antenna and a radio transmitter connected to a computer - came almost by chance during a conversation between Rom Kieffer of the **UN Office at Vienna** (UNOV), Sharafat Gadimova and Hans Haubold of OOSA.

Once the device had been put together and plugged in, Rom said, "We started getting results immediately. It was very straightforward." The data from the instrument is being sent automatically to Stanford for further analysis. It is indeed a practical and totally enjoyable contribution to the global cooperation to ensure that "we will be able to come up with an early warning system that can, for example, get the satellites to turn around and shut down, to minimize the damage," according to Rom.

OOSA's space weather team has been urging participation in the Initiative through installation of space weather instruments to enable the international community to fully grasp the effects of solar activities here on the Earth.

"Nothing less than a global effort is needed to allow us to gain a comprehensive insight into space weather. We welcome efforts from all institutions to contribute to the International Space Weather Initiative," urged OOSA Director Mazlan Othman.