

The World Sprite-Watch Partnership

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A global network of observing systems, “The World Sprite-Watch Partnership” (WSWP), is being installed to observe electric processes in the upper atmosphere, the so-called sprites, jets and elves, or “Transient Luminous Events”. The backbone of the WSWP is a network of semi-automated, remote-controlled optical observatories. They include a pair of cameras controlled via the Internet with automated flash event detection software for reduction of the data volume, allowing real time monitoring and camera adjustment from any access point to the Internet. Plans for the network include a cluster of 3 optical platforms in Southern France, providing detailed triangulation and 3D imaging information of TLEs. The system supports simultaneous, co-ordinated observations of other important parameters by a suite of instruments deployed in Southern Europe. The stations are: on the Pic du Midi in the Pyrenees, Puy de Dome in Central Massif, and on Corsica. A station on Cuba will cover a major part of the Caribbean, extending well into Florida. This location is ideal for studies of super discharges from cloud top to ionosphere, the relation of TGFs with sprites and lightning, and discharges above hurricanes.