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Kenya International Radio Observatory

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This paper proposes the building of a new type of versatile, multipurpose, world-class facility for space, environmental and communication research. Located in northern Kenya in the geomagnetic equator, the KIRO will have the ability to cover major parts of both the Northern and the Southern hemispheres of the sky. This will be a unique feature of this observatory and indeed of tremendous scientific value.

The proposed site of the project, through which the equator passes, is relatively inaccessible and remote, and therefore free from the electromagnetic radiation from broadcast. TV utilities and radar stations developed on the ground. KIRO is therefore a radio facility designed foremost for the study of terrestrial magnetosphere, ionosphere and neutral atmosphere using traditional as well as newly developed diagnostic techniques. With its flexible modular design, KIRO will be ideally suited for studies of fundamental physical and chemical processes in the upper atmosphere, the ionosphere and the magnetosphere, which have a decisive influence on life on Earth. With KIRO, it will also be possible to make unprecedented studies of the Sun, Moon, the planets, the interplanetary plasma and galactic and extragalactic radio sources. Finally, KIRO will be an excellent facility for application of modern electronics and communication technologies.