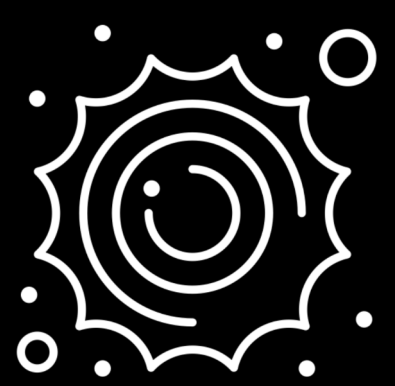


SPATIAL GENETICS

Advances in Earth observation systems and genetic methods hold potential for the investigations of plants genetic structure using Remote Sensing techniques. Spatially and temporally continuous monitoring is especially important in the context of the current pace of global change.

SUN

is the star at the center of our solar system. In its core it fuses about 600 million tons of hydrogen into helium per second, converting matter into energy. This energy escapes the surface of sun in the form of electromagnetic radiation.



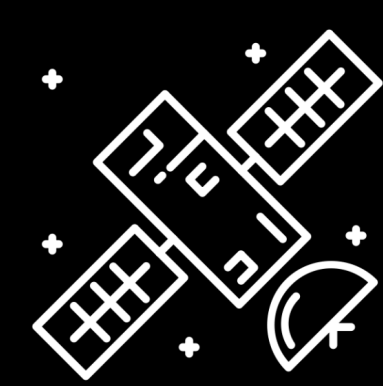
ELECTROMAGNETIC RADIATION

consists of waves which are synchronized oscillations of electric and magnetic fields. They propagate through vacuum with the speed of light carrying electromagnetic radiant energy and ultimately interact with matter and exert force on them.



SATELLITES

are objects that orbit a star or a planet. Among other applications, artificial satellites can record reflected or emitted radiation and could provide spatially and temporally continuous information about earth surface.



PLANTS

are diverse multi-cellular organisms that are able to obtain energy from sunlight via photosynthesis. They are an ultimate source of energy and organic matter in nearly all ecosystems.



GENES

code sequences of nucleotides in DNA or RNA. They underpin all processes of living organisms and are a key component of evolution that results in diverse forms of life on Earth.

