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| **MODULE 2: Introduction to RS** | |
| **OBJECTIVES** | * Reflect on Remote Sensing (RS) principles * Define electromagnetic waves and their characteristics * Describe the role of the Earth’s atmosphere for remote sensing * Satellites data * Conduct simple analysis using a range of different types of optical Earth observation (EO) data |
| **METHODS** | Live session, reading material, video’s, links to resources, application exercises, quizzes & discussions |
| **DURATION** | 6 hours for participants |

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| **SESSION** | | | **DURATION** | **PARTICIPANTS…** |
| Online | 1.0 | Introduction to Remote Sensing | 60 min. | * Are exposed to the concepts of Remote Sensing |
| 1.1 | Fundamentals of Remote Sensing | 25 min. | * Get familiar to the fundamentals of remote sensing and the definitions of the key concepts. * Learn about two types of remote sensing: active and passive. |
| 1.2 | Electromagnetic Radiation | 50 min. | * Explore what satellite signals are. * Explore electromagnetic radiation, including wave characteristics and spectrum. |
| 1.3 | Energy Interactions | 25 min. | * Learn about energy interactions. * Learn about the mechanisms of scattering and absorption. |
| 1.4 | Information extraction | 65 min. | * Get an understanding of what makes an image a quality image. * Learn about what very cell (pixel) on image represents, what and how many bands makes images. |
| 1.5 | Application and Documentation | 125 min. | * Learn to create an overview and evaluate different RS use cases. * Explore how to conduct simple analysis using a range of different types of optical Earth. |