

| Landsat series   |  |                |     |  |  |
|--|--|----------------|-----|--|--|
| Landsat 8–<br>Operational Land<br>Imager (OLI)<br>and the Thermal<br>Infrared (TI)<br>Sensor <sup>7,10,12–14, 16–1<br/>9,22,23,25,26,35,37,40,44,<br/>49,52,54,68</sup>                            | B1: Coastal/<br>Aerosol                  | 0.43–0.45 μm   | 30  | Helps in analysing different kinds of LU/<br>LC changes like deforestation, agri-<br>culture development, the evolution of<br>built-up areas and loss of wetlands. | USGS:<br><a href="https://earthexplorer.usgs.gov">earthexplorer.<br/>usgs.gov</a>                              |
|  | B2: Blue                                 | 0.45–0.51 μm   | 30  |  |  |
|  | B3: Green                                | 0.53–0.59 μm   | 30  |  |  |
|  | B4: Red                                  | 0.64–0.67 μm   | 30  |  |  |
|  | B5: NIR                                  | 0.85–0.88 μm   | 30  |  |  |
|  | B6: SWIR 1                               | 1.57–1.65 μm   | 30  |  |  |
|  | B7: SWIR 2                               | 2.11–2.29 μm   | 30  |  |  |
|  | B8: Panchromatic                         | 0.50–0.68 μm   | 15  |  |  |
|  | B9: Cirrus                               | 1.36–1.38 μm   | 30  |  |  |
|  | B10: TIRS 1                              | 10.6- 11.19 μm | 100 |  |  |
|  | B11: TIRS 2                              | 11.50–12.51 μm | 100 |  |  |
| Landsat 7 ETM+<br>Sensor <sup>4,6–9,11,13,14,<br/>16–18,22,24,28,30–32,35,<br/>43,44,52,54,57,64,68–76</sup>   | B1: Blue                                 | 0.45–0.52 μm   | 30  |  |  |
|  | B2: Green                                | 0.52–0.60 μm   | 30  |  |  |
|  | B3: Red                                  | 0.63–0.69 μm   | 30  |  |  |
|  | B4: NIR                                  | 0.77–0.90 μm   | 30  |  |  |
|  | B5: SWIR 1                               | 1.55–1.75 μm   | 30  |  |  |
|  | B6: TIRS                                 | 10.40–12.50 μm | 60  |  |  |
|  | B7: SWIR 2                               | 2.09–2.35 μm   | 30  |  |  |
|  | B8: Panchromatic                         | 0.52–0.90 μm   | 15  |  |  |
| Landsat 4 &<br>Landsat 5<br>Multispectral<br>Scanner (MSS)<br>& Thematic<br>Mapper (TM) <sup>1,6–12,<br/>14–16,18,19,22–28,<br/>31,33,35–37,39,44,49,53,<br/>54,56–58,67–70,72–75,<br/>77–81</sup> | B1: Blue                                 | 0.45–0.52 μm   | 30  |  |  |
|  | B2: Green                                | 0.52–0.60 μm   | 30  |  |  |
|  | B3: Red                                  | 0.63–0.69 μm   | 30  |  |  |
|  | B4: NIR                                  | 0.76–0.90 μm   | 30  |  |  |
|  | B5: SWIR 1                               | 1.55–1.75 μm   | 30  |  |  |
|  | B6: TIRS                                 | 10.40–12.50 μm | 120 |  |  |
|  | B7: SWIR 2                               | 2.08–2.35 μm   | 30  |  |  |
| Sentinel 2 missions  |  |                |     |  |  |
| Sentinel- 2A and<br>2B <sup>13,18,20,51</sup>  | B1: Ultra blue<br>Coastal and<br>Aerosol | 0.443 μm       | 60  | Sentinel missions support the standard<br>LU/LC change detection maps and help<br>in finding leaf water and chlorophyll<br>content.                                | Sentinel's<br>Scientific Data<br>Hub:<br><a href="https://scihub.copernicus.eu">scihub.coper-<br/>nicus.eu</a> |
|  | B2: Blue                                 | 0.490 μm       | 10  |  |  |
|  | B3: Green                                | 0.560 μm       | 10  |  |  |
|  | B4: Red                                  | 0.665 μm       | 10  |  |  |
|  | B5: Vegetation<br>Red Edge               | 0.705 μm       | 20  |  |  |
|  | B6: Vegetation<br>Red Edge               | 0.740 μm       | 20  |  |  |
|  | B7: Vegetation<br>Red Edge               | 0.783 μm       | 20  |  |  |
|  | B8: NIR                                  | 0.842 μm       | 10  |  |  |
|  | B8a: Narrow NIR                          | 0.865 μm       | 20  |  |  |
|  | B9: Water<br>Vapour                      | 0.945 μm       | 60  |  |  |
|  | B10: SWIR-Cirrus                         | 1.375 μm       | 60  |  |  |
|  | B11: SWIR                                | 1.610 μm       | 20  |  |  |
|  | B12: SWIR                                | 2.190 μm       | 20  |  |  |