



Debris and Structural Damage Massively in Mayfield, Kentucky, USA | Dec 15, 2021 | GF-7

GF-7 SATELLITE

65 cm, Bi-stereoscopic, Optical, Laser Altimeter

GF-7 (short for Gaofen-7) was launched on November 3, 2019. It is a very high-resolution optical imaging satellite, and collects bi-stereoscopic and panchromatic-multispectral imagery. It is also equipped one laser altimeter. The satellite collects overlap images and enables 1:10,000-scale stereoscopic mapping. Its laser altimeter provides great supports in mapping difficult geographic terrains. The satellite mainly applies in monitoring land resources, basic mapping, and investigating globally geographic features.

Technical Specifications

Mission life	8 years
Weight	2800 kg
Launch time	November. 3, 2019
Orbit	Sun-synchronous, 10:30 am descending node, 506 km altitude
Sensor bands	Panchromatic, blue, green, red and near-infrared
Resolution (at nadir)	Panchromatic: 80 cm (front camera), 65 cm (rear camera); multi-spectral: 2.6 m (rear camera)
Locational accuracy	20 m CE90 (w/o GCPs)
Dynamic range at imaging	11 bits
Swath width (at nadir)	20 km (at nadir)
Revisit capacity	5 days