

The National Imagery Interpretability Rating Scale (NIIRS)

The National Imagery Interpretability Rating Scale (NIIRS) is used by imagery analysts to define the quality of aerial imagery from different imaging systems. The scale uses a number to indicate the level of detail which may be seen in an image, and therefore how much information may be expected from it.

Military and Civil NIIRS scales are used to grade visible, radar, infra-red and multispectral imagery. This feature describes the Civil NIIRS scale for the visible spectrum.

Rating Level 0

Interpretability of the imagery is precluded by obscuration, degradation or very poor resolution.



Rating Level 1

It is possible to distinguish between major land use classes (e.g. urban, forest, water, agricultural); to detect a medium-sized port facility; to distinguish between runways and taxiways at a large airport; to identify large area drainage patterns by type (e.g. dendritic, trellis, radial).



Rating Level 2

It is possible to identify large fields; detect large buildings; identify major road patterns; detect ice-breaker tracks; detect the wake from large ships.

Rating Level 3

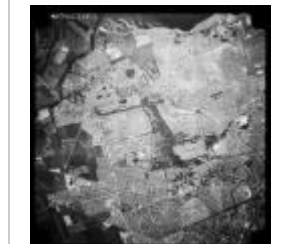
It is possible to detect large area contour ploughing; individual houses in residential areas; trains or strings of rolling stock (but not individual wagons); identify inland waterways navigable by barges; distinguish between natural forest and orchards.

Rating Level 4

It is possible to identify farm buildings as barns, silos or residences; detect basketball or tennis courts in urban areas; identify individual tracks, rail pairs and control towers; detect jeep trails through grassland.

Rating Level 5

It is possible to identify individual rail wagons by type (e.g. flat, box, tank); detect open bay doors of storage buildings; identify tents at recreational camping areas; distinguish between coniferous and deciduous trees during leaf-off conditions; detect large animals in grasslands.



Rating Level 6

It is possible to identify cars as saloon or estate types; identify individual electricity or telephone posts in residential areas; detect footpaths through barren areas; distinguish between grain (e.g. wheat) crops and row (e.g. potatoes, turnips) crops.

Rating Level 7

It is possible to identify individual railway sleepers; detect individual steps on a stairway; detect tree-stumps and rocks in forest clearings and meadows.

Rating Level 8

It is possible to identify vehicle grille detailing and/or the license plate on a truck; identify individual water lilies on a pond; identify the windscreen wipers on a vehicle; count individual lambs.

Rating Level 9

It is possible to identify individual barbs on a barbed-wire fence; detect individual grain heads on small grain crops (e.g. wheat, barley); identify an ear tag on livestock.

Related links

[NIIRS: Overview and Methodology by John M Irvine](#)
[Civil NIIRS Reference Guide](#)



Not available from
historical aerial
imagery.