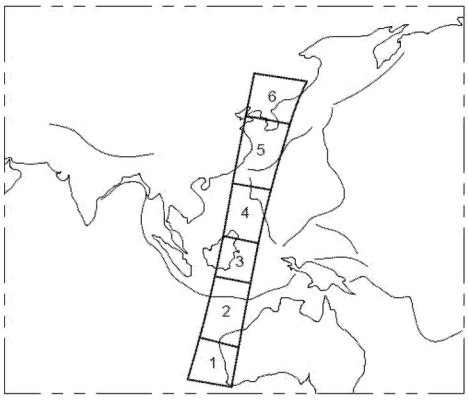
ON IMPROVING SATELLITE IMAGES GEOLOCATION ACCURACY

Technological advantages

- Improvement the images geolocation accuracy especially where ground control points are missing.

Invention synthesis

The proposed process allows for the improvement of the satellite images geolocation accuracy where ground control points are missing. A first segment of images is acquired during a time interval. A new segment of images is acquired on a new time interval that begins or ends within the first segment of images. Both segment of images are merged in a concatenated time period. A clipping parameter allows finding well allocated ground control points in the new segment of images. The error model in the geolocation processing will be tailored according the quality and number of ground control points to avoid error propagation.



Schematic view for a segment sequencing

1) to 6) Segment sequence with several ground images

Potential applications

- Process for satellites or aerial imagery,
- Well suited to geolocation where fixed ground control points are missing such as ocean, sea, lakes, islands, snowy area, ice floe…
- Also suited to geolocation where mobile occulting objects (such as clouds) are present.

Commercial benefits

- Improvement in the reliability and accuracy for the overall processing of satellite images geolocation.

Patented invention - under license.

For more information :

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