

## **THE DEVELOPING FILTER BASED ON SUBSIDENCE MODEL AND GROUNDWATER LEVEL TO SEPARATE TIME LAPSE MICROGRAVITY ANOMALY**

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### **Abstract**

The developing filter has been done based on two source anomaly, there are subsidence and groundwater level. The gravity response due to subsidence, groundwater level and both of themes combination is accomplished by FFT 2D. Input is the combination responses of gravity due to subsidence and groundwater level, and output is the data of gravity response due to subsidence or groundwater level. The results show that in order to create a filter with a small error when using the equal dimensions of subsidence filter XY or the larger dimension of the filtered subsidence. The small error value given when using the equal dimensions of subsidence filter Z or the smaller dimension of the filtered subsidence. The difference dimensions between the subsidence filter and the filtered subsidence of 1 cm giving error 7,322%.

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