



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
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شبكة المعلومات الجامعية



شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون أية تغيرات



يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of
15 – 25c and relative humidity 20-40 %



شبكة المعلومات الجامعية



بعض الوثائق الأصلية تالفة



شبكة المعلومات الجامعية



بالرسالة صفحات

لم ترد بالأصل



Mansoura University
Faculty of Engineering
Public Works Eng. Department

Leveling By Using Global Positioning System

By

Eng./ Mosbeh Rashed Mosbeh Kaloop

B.Sc. Civil Engineering - Mansoura University, 2002
Demonstrator in Public Works Department- Mansoura University

A Thesis

Submitted in Partial Fulfillment for the
Requirement of the Degree of Master of Science

Supervisors

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Ass. Prof. in Geomatic Engineering in
Geodynamic Department, National Research
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Helwan, Cairo, Egypt

B 9.74

2005



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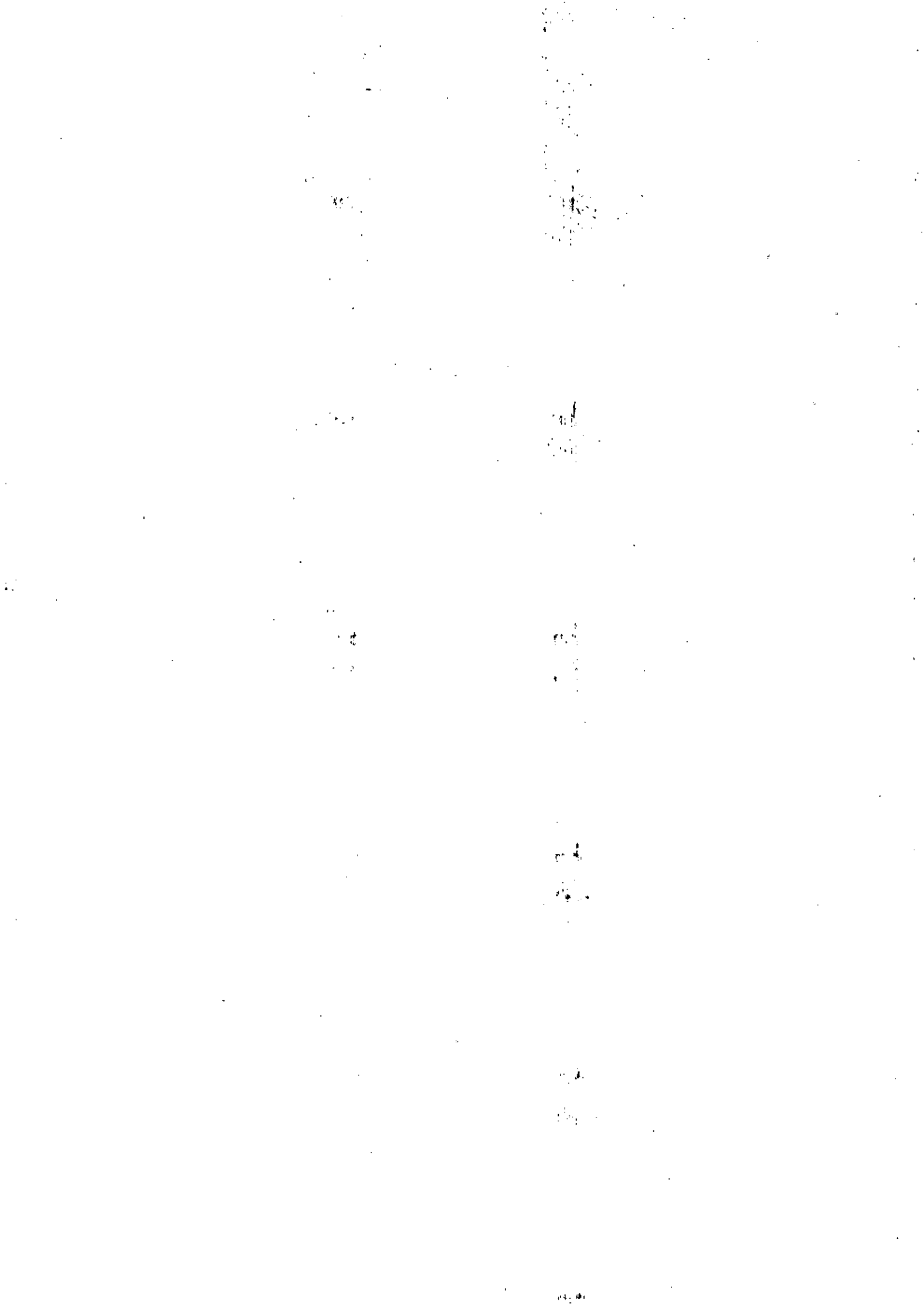
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Supervisors



Thesis Title:

Leveling By Using Global Positioning System

Researcher:

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Dept. Head

Prof.Dr. A.Fadel



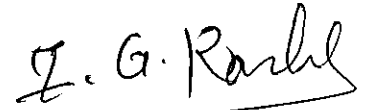
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Prof. Dr. I.Rashed



25/12/2005

Examination Committee

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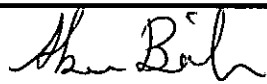

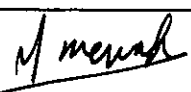

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Examination Committee

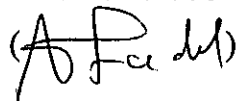
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2	<i>Asso. Prof. Dr. Zaki Mohammed Ziedan</i>	
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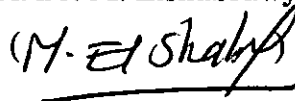
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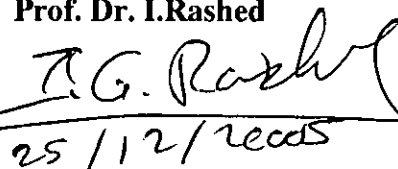
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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

”وَقِيلَ يَا أَرْضُ ابْلَعِي
مَاءَكَ وَيَا سَمَاءُ اقْلَعِي
وَوَخَّضْ الْمَاءَ وَقْضِي
الْأَمْرَ وَاسْتَوْتِ عَلَى
الْجُودَى وَقِيلَ يَعْدا
لِلْقَوْمِ الظَّالِمِينَ”

صدق الله العظيم

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ABSTRACT

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According to wide spread use of satellite based positioning techniques, especially GPS (Global Positioning System), a greater attention has started to be paid to precise determination of geoid models with an aim to replace the geometric leveling measurements with GPS measurements during geodetic and surveying works.

This research discusses methodology used in the construction of a Egyptian local geoid with high accuracy, numerical solution of geoid modeling determination applying surface fitting; polynomial, least square collocation and minimum curvature surface are presented for deriving the system of linear equations from boundary integral equation.

In addition a comparative study of these three popular interpolation techniques, mainly it is going to emphasize the applicability of interpolation techniques as a tool for modeling the geoid in a local area precisely using GPS/Leveling data to serve practical applications of geodesy. Also, the obtained results revealed that, the applicability of MCS technique as a tool for determining the precise local geoid in Egypt with low distortion at common points.

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