

MICROWAVE IMAGING BY NEARFIELD MEASUREMENT

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ABSTRACT

THE EXPERIMENT IN THIS PAPER IS CONDUCTED WITH ELECTROMAGNETIC ANECCHOIC CHAMBER, HP8720D (VECTOR NETWORK ANALYZER) AND NEAR FIELD MEASUREMENT SYSTEM RECOVER THE MICROWAVE IMAGES OF THE SCATTERERS. IN THE PAPER, WE HAVE USED TWO DIFFERENT METHODS TO GET MICROWAVE IMAGES OF THE SCATTERERS. ONE IS THE METHOD OF LINEAR SAR(LINEAR SYNTHETIC APERTURE RADAR), THE OTHER IS THE METHOD OF ISAR (INVERSE SYNTHETIC APERTURE RADAR). BESIDES MICROWAVE IMAGES RECOVERY, WE ALSO STEP FURTHER TO IMPROVE THE QUALITY AND RESOLUTION OF IMAGING .

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Table of Contents

第一章 簡介--P 1 1.1 研究動機與實驗背景--P.2 1.2 內容概要--P 3 第二章 合成孔徑雷達成像原理--P 6 2.1 成像技術回顧--P 7 2.2 大觀測角信號處理法則--P8 第三章 反合成孔徑雷達實驗--P 14 3.1 反合成孔徑雷達成像系統--P 14 3.2 反合成孔徑雷達的實驗程序--P 15 3.3 數值模擬與量測結果--P 15 第四章 線性合成孔徑雷達的成像系統--P 24 4.1 線性合成孔徑雷達的成像系統--P 24 4.2 線性合成孔徑雷達的實驗程序--P 25 4.3 數值模擬與量測結果--P 25 第五章 提升影像品質之實驗--P 32 5.1 提升解析度的實驗--P 32 5.2 提升靈敏度的實驗--P 34 5.3 其他相關實驗--P 36 第六章 結論--P 50

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