CONTENTS

ACKNOWLEDGEMENTS

ABSTRAK

ABSTRACT

CHAPTER 1	INTRODUCTION	1
011111 1 2 2 1 0 1		
1.1	Introduction	1
1.2	A Survey of Works on Nonlinear Models	2
1.3	Layout of the Dissertation	4
CHAPTER 2	REGION ESTIMATES BASED ON LIKELIHOOD RATIO IN A NONLINEAR MODEL	5
2.1	Introduction	5
2.2	Approximation of the Minimum Residual Sum of Squares	6
2.3	Approximation of the Coverage Probability	1.5

CHAPTER 3	ADJUSTMENT OF REGION ESTIMATES BASED ON LIKELIHOOD RATIO IN A NONLINEAR MODEL	41
3.1	Introduction	41
3.2	Estimate of Error Variance and Nonlinearity	42
3.3	First Stage of Adjustment of Confidence Regions	62
3.4	Second Stage of Adjustment of Confidence Regions	75
CHAPTER 4	COVERAGE PROBABILITIES OF REGION	
	ESTIMATES IN NONLINEAR MODELS WITH FOUR OBSERVATIONS	76
4.1	Introduction	76
4.2	Coverage Probability Calculated by Numerical Integration	77
4.3	Comparison of Approximate and Exact Values of Coverage Probability	77
REFERENCES		100