DAFTAR ISI

HALAMAN JUDUL ........................................................................................................ i
HALAMAN PENGESAHAN........................................................................................ ii
HALAMAN PERNYATAAN.......................................................................................... iii
HALAMAN PERSEMBAHAN........................................................................................ iii
KATA PENGANTAR..................................................................................................... v
ABSTRAK ................................................................................................................... vi
ABSTRACT ................................................................................................................. vii
DAFTAR ISI................................................................................................................. viii
DAFTAR GAMBAR...................................................................................................... xi

BAB I. PENDAHULUAN
1.1 Latar Belakang ...................................................................................................... 1
1.2 Rumusan Masalah................................................................................................. 2
1.3 Maksud dan Tujuan Penelitian........................................................................... 3
1.4 Batasan Masalah................................................................................................. 3
1.5 Lokasi Penelitian .............................................................................................. 3

BAB II. TINJAUAN PUSTAKA
2.1 Daerah Penelitian ........................................................................................... 5
2.2 Struktur Geologi ............................................................................................... 7
2.3 Sejarah Letusan................................................................................................. 9
2.4 Geomorfologi.................................................................................................. 10
2.5 Stratigrafi.......................................................................................................... 12

BAB III. DASAR TEORI
3.1 Seismisitas...................................................................................................... 14
3.2 Gelombang Seismik ....................................................................................... 16
   3.2.1 Gelombang Badan................................................................................. 16
   3.2.2 Gelombang Permukaan.................................................................... 18
BAB IV. METODE PENELITIAN

4.1 Skema Penelitian

4.2 Penjelasan Diagram Alir

4.2.1 Pre Processing

4.2.2 Processing

4.2.2.1 Input Data Mseed (SWARM)

4.2.2.2 Display Waveform

4.2.2.3 Spectral Analysis

4.2.2.4 Picking Gempa Tornillo

4.2.2.5 Python (Magma-CAT)

4.2.2.6 Cutting Signal

4.2.2.7 Fast Fourier Transform (FFT)

4.2.2.8 Time Frequency Representation Signal Tornillo

4.2.2.9 Convert Data Mseed to ASCII

4.2.2.10 UBUNTU (SOMPI)

4.2.3 Post Processing

BAB V. HASIL DAN PEMBAHASAN

5.1 Karakteristik Gempa Tornillo Pada Gunungapi Lokon

5.1.1 Gempa Tornillo

5.1.2 Hubungan Tilt, Frekuensi Dominan dan Jumlah Gempa Tornillo

5.2 Lokasi Sumber Gempa Tornillo

5.3 Complex Frequency Analysis
5.3.1. Growth Rate ................................................................................................. 76
5.3.2. Q Faktor dan Frekuensi Osilasi................................................................. 77

BAB VI. KESIMPULAN DAN SARAN
6.1 Kesimpulan ........................................................................................................ 81
6.2 Saran .................................................................................................................... 81

DAFTAR PUSTAKA

LAMPIRAN