

ACKNOWLEDGEMENT

Diese Arbeit wurde finanziell ermöglicht durch den Sonderforschungsbereich SFB 267 „Deformationsprozesse in den Anden“ Teilprojekt F1 und F4. Die Autorin bedankt sich sehr herzlich bei Doktorvater Prof. Dr. Hans Jürgen Götze für die fachliche Unterstützung und Motivation während des gesamten Studiums, und insbesondere für die intensiven Diskussionen fachlicher und menschlicher Art. Meiner Doktormutter Prof. Dr. Carla Braitenberg sei an dieser Stelle sehr herzlich gedankt - für die Motivation beim Programmieren und die vielen fachlichen Hilfestellungen und Erklärungen. Ich danke beiden sehr dafür, daß sie mir ihr Wissen weiter gegeben haben. Auch meiner Doktortante Dr. Nina Kukowski möchte ich sehr herzlich für Ihre fachliche und menschliche Hilfe, Motivation, Zeit, Mühe und Unterstützung danken. Vielen Dank auch an Prof. Christof Heubeck für seine Korrekturvorschläge und nützlichen Hinweise.

Großen Dank an Dr. Marc Schneider, Susanne Fildebrandt, Alexander Nogelitzig, Tobias Müller-Wrana und Dr. Jörg Ebbing für das Korrekturlesen und die aufmunternden Ratschläge sowie fachlichen Tipps. Ganz besonderer liebevoller Dank für die fachliche und seelische Unterstützung und die vielen inspirierenden Diskussionen soll hier an Tanja Kollersberger gehen. Für die herzliche Motivation, liebevolle Zuversicht und seelische Stärke danke ich sehr Alexander Nogelitzig. Beide Menschen trugen sehr viel durch ihr Zuhören und ihre Ratschläge zum Gelingen dieser Arbeit bei. Zudem sei Tobias Müller-Wrana sehr herzlich gedankt für seine fachliche Hilfe sowie die kollegiale und freundschaftliche Unterstützung. Antje Kellner danke ich sehr für die Zusammenarbeit bei den Finiten Element Modellierungen und Dr. Sabine Schmidt für den Daten Support. Ich möchte mich bei Dietrich Lange und Janek Greskowiak herzlich bedanken für ihre fachlichen Ratschläge und Tipps. Ich danke für die fachlichen Diskussion und aufbauenden Gespräche Andres Tassara, Prof. Dr. Ron Hackney, Dr. Zuzana Tasarova, Dr. Norbert Ott, Dr. Kerstin Fiedler und Dr. Harald Ege. Ich danke allgemein für die Unterstützung von Dr. Henry Brasse, Susanne Rentsch, Beate Latif, Dr. Peter Wigger, Stefan Pohle, Stefan Krause, Dr. Georg Goltz, Dr. Andreas Müller, Aurora Kusumita, und insgesamt meinen Kollegen aus dem Haus N und D.

Was wäre die Welt ohne Britta Lipka, Peter Rintsch, Ingo Wendorf, Mirko Giese, Stefan Fiege, Elena Charalambakis und Karin Hellmich. Ihnen ganz besonderen Dank für ihren Glauben an mich, die vielen motivierenden Gespräche, ihr Zuhören und Ratschläge. Wolfgang Born danke ich für seine Liebe und Freundschaft, für seine Unterstützung sowie technischen Support bei Computerangelegenheiten. Ganz besonders danke ich meinen Eltern Dr. Joachim Wienecke und Christa Hesse. Sie haben mir schon früh den Glauben gegeben, daß ich sehr viel weiß. Ich mußte erst studieren, um festzustellen, daß sie damit unrecht hatten. Ihr beständiger Glauben an mich und ihre Liebe gab und gibt mir stets Kraft. Zudem danke ich Thomas Wienecke, Etienne Wienecke, Anja Breuer, Doris Heyer, Mary-José Born, Reiner Hesse, Heike Hense und last but not least Nicky Krechnyak für ihren Glauben an mich und ihre Zuversicht.

NOTATION

x, y	Cartesian coordinates, e.g. UTM-coordinates
$\bar{r}(x, y)$	vector of a point
$\frac{\partial}{\partial x}$	partial derivation e.g. for x coordinate
$\frac{\partial^2}{\partial x^2}$	partial second derivation e.g. for x coordinate
$\frac{\partial^4}{\partial x^4}$	partial fourth derivation e.g. for x coordinate
Δ	Laplace operator in Cartesian coordinates $\Delta = \frac{\partial^2}{\partial x^2} + \frac{\partial^2}{\partial y^2} + \frac{\partial^2}{\partial z^2}$ in Polar coordinates $\Delta = \frac{\partial^2}{\partial r^2} + \frac{1}{r} \frac{\partial}{\partial r} + \frac{1}{r^2} \frac{\partial^2}{\partial \varphi^2}$
z	Cartesian coordinate in direction of depth
d	distance or depth
a, b	sides (and side lengths) of a body
R	radius of regionality, radius of convolution
A	area
V	volume

Grid parameter:

L	side length of a grid
dx, dy	distance of grid nodes for x direction and y direction
n, m	number of nodes for x and y direction

Mechanical parameter:

m	mass
F	force
Q	shearing force
$p = f(x, y)$	force per unit area
M	bending moment
I	moment of inertia
m_T	moment of temperature

Elastic parameter:

E	Young's modulus
ν	Poisson's ratio
D	flexural rigidity
T_e	elastic thickness

β	flexure parameter
Viscoelastic parameter:	
t	time (only in paragraph 4.5.)
η	viscosity
τ	Maxwell relaxation time
Density:	
ρ_c	density of crust
ρ_m	density of mantle
ρ_w	density of water
$\Delta\rho$	density contrast
Gravity:	
G	gravitational constant
g	gravity
Δg	gravity anomaly
g_{sed}	gravity effect of sediments
\tilde{g}_{sed}	calculated gravity effect of sediments with depth-density function
Load and Flexure:	
h or h_T	topographic height
h_i	any single topographic height
h_{PT}	height of pseudo topography
T_0	normal crustal thickness
t_i	any single crustal thickness
t^*	crustal root, corresponds to the deflection
w	flexure
L_{pseudo}	load of pseudo topography
L_{sum}	entire load
Fourier transformation:	
k_x, k_y	wave numbers corresponds to x and y coordinates
\vec{k}	2-dimensional vector of wave numbers
ξ	sum of wave numbers with $\sqrt{k_x^2 + k_y^2}$
$H(k_x, k_y)$ or $FT[h(\vec{r})]$	Fourier transform of topography h
$W(k_x, k_y)$ or $FT[w(\vec{r})]$	Fourier transform of flexure w
$\Delta\Gamma(\vec{k})$ or $FT[\Delta g_p(\vec{r})]$	Fourier transform of gravity anomaly
$M[\vec{k}]$	surface mass

$Z(\vec{k})$	admittance
$\gamma^2(\vec{k})$	coherence
$\varphi_e(\vec{k})$ or $\Phi_e(\vec{k})$	flexural response function/transfer function
$C_s(\vec{k})$	cross-spectrum e.g. of the gravity anomaly

P_t power spectrum of topography

P_g power spectrum of gravity

Temperature:

t temperature

t_0 temperature at surface

k coefficient of thermal conductivity

α coefficient of thermal expansion

H heat production

H_0 surface heat production rate

h_r length scale for the decrease in H

q heat flux; flow of heat per unit area and unit time

q_0 surface heat flow

q_m heat flux of mantle

ABBREVIATIONS

CAGH	Central Andean gravity high
CMI	crust-mantle interface
e.g.	for example (Latin: exempli gratia)
Eq.	equation
et al.	and others (Latin: et alii)
FE	finite element
FFT	fast Fourier transformation
Fig.	Figure
GEBCO	British Oceanographic Data Center HTTP://WWW.BODC.AC.UK
i.e.	That is to say (Latin: id est)
LAB	lithosphere-asthenosphere boundary
MIGRA	mediciones internacionales de la gravedad de los Andes
Moho	Mohorovicic seismic discontinuity
NOAA	National Oceanographic Data Center HTTP://WWW.NODC.NOAA.GOV
no.	numerical order
pers. comm.	personal communication
SFB	Collaboration Research Center HTTP://WWW.FU-BERLIN.DE/SFB267 (German: Sonderforschungsbereich)

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