

# 29th Himalaya-Karakoram-Tibet workshop



## 29<sup>th</sup> Himalaya, Karakoram and Tibet Workshop, Lucca, Italy 2-4 September 2014 “Palazzo Ducale”, Lucca

### PROGRAM

#### MONDAY, SEPTEMBER 1, 2014

17:00-19:00 Registration, Palazzo Ducale, **Piazza Napoleone 1, Lucca.**

19:00-21:00 Welcome drink and appetizers Palazzo Ducale (Sala del Trono), Lucca

#### TUESDAY, SEPTEMBER 2, 2014

**Sala Ademollo, Palazzo Ducale**

08:00-8:30 Registration

**8:30-9:00**      **Opening of the 29<sup>th</sup> HKT**

9:00-9:15      Commemoration of Bruno Lombardo (F. Rolfo)

9:15-9:30      Commemoration of Patrick Le Fort (S. Guillot)

#### *Earthquakes, seismicity*

*Chairpersons: Hetényi G., Wu C.*

09:30-09:50    P. Tapponnier, L. Bollinger, E. Kali, A. Coudurier-Curveur, Ç. Karakaş, M. Rizza, S.N. Sapkota, S Baruah, S. Choudhury, J. Van der Woerd, Y. Klinger, E. Okal (Keynote):

***Great Earthquakes Recurrence Times in the Eastern Himalayas***

09:50-10:10    G. Hetényi, J. Singer, E. Kissling, T. Diehl, J. Chopel, A. Burtin, S. Löw, D. Drukpa:

***Crustal structure, seismicity and landslide activity in Bhutan – preliminary results from a temporary seismological network***

10:10-10:30    A. Coudurier-Curveur, E. Kali, P. Tapponnier, J. van Der Woerd, S. Baruah, S. Choudhury, P. Banerjee, S. Ildefonso, Ç. Karakaş:

***Active tectonic uplift in the eastern Himalayan Syntaxis: geomorphic traces of the 1950 Assam earthquake rupture***

10:30-10:50    H. Li, Z. Sun, J. Pan, D. Liu, J. Zhang, C. Li, K. Liu, K. Yun, Z. Gong:

***Field Study of the 12 February 2014 Yutian Ms7.3 Earthquake: A Special Surface Rupture Zone***

**10:50-11:20**    **Coffee Break and poster session**

Tectonics

Chairpersons: Godin L., Jain A.K.

- 11:20-11:40 R.D. Law (Keynote):  
***Along-strike continuity in quartz recrystallization microstructures adjacent to the MCT: deformation temperatures, strain rates and implications for flow stresses***
- 11:40-12:00 A.J. Parsons, R.J. Phillips, G.E. Lloyd, M.P. Searle, R.D. Law:  
***Kinematic evolution of the Greater Himalayan Sequence, Annapurna-Dhaulagiri Himalaya, central Nepal***
- 12:00-12:20 R. Gibson, L. Godin, J.M. Cottle, D.A. Kellett:  
***Along-strike strain variation and timing of deformation in the lower Himalayan metamorphic core, west-central Nepal***
- 12:20-12:40 D.M. Robinson, S. Khanal, M.J. Kohn, S. Mandal:  
***Evidence for a far traveled thrust sheet in the Greater Himalayan thrust system, and an alternative model to building the Himalaya***
- 12:40-13:40 Lunch (Sala del Trono)**

Petrology (granites)

Chairpersons: King J., Kumar S.

- 13:40 -14:00 S. Singh (Keynote):  
***Pan-African Magmatism and Himalayan Collisional Tectonism***
- 14:00-14:20 T.N. Hopkinson, C.J. Warren, N.B.W. Harris, S. Hammond, R.R. Parrish:  
***Chemical evolution of Himalayan leucogranites based on an integrated zircon O, U-Pb, Hf study***
- 14:20-14:40 X. Chen, Z. Xu, Z. Cai, H. Li:  
***Origin of Late Cretaceous-Paleocene granites from Tengchong terrane, Western Yunnan: implications for continental arc evolution and lithosphere subduction***
- 14:40-15:00 S. Faisal, K.P. Larson:  
***Pluton crystallization and petrogenesis in the Eastern Hindu Kush, NW Pakistan***
- 15:00-15:20 S. Kumar, S. Bora, U.K. Sharma, K. Yi, N. Kim:  
***Petrology and U-Pb SHRIMP zircon chronology of granitoids from Shyok Suture Zone, Ladakh Himalaya, India: Evidence of Early Cretaceous subvolcanic calc-alkaline granitoid magmatism***
- 15:20-15:50 Coffee Break and poster session**

Climate, climate changes, paleoclimate, geomorphology

Chairpersons: Chevalier M.L., Groppo C.

- 15:50-16:10 C.S. Dubey, N. Singh, D.P. Shukla, R.P. Singh (Keynote):  
***Orographic and Tectono - Geomorphic controls of recent disasters in Himalaya: An appraisal from East to West Himalaya***
- 16:10-16:30 M.-L. Chevalier, J. Pan, H. Li, Z. Sun, D. Liu, J. Pei, W. Xu, C. Wu:  
***First tectonic-geomorphology study along the Longmu – Gozha Co fault system, Western Tibet: Insights on the youngest segment of the Altyn Tagh fault***
- 16:30-16:50 C. Andermann, M. Struck, N. Hovius, J. Turowski, O. Korup, R. Bista:  
***Hydrology, hillslope processes and suspended sediment transport in the central Himalayas of Nepal***
- 16:50-17:10 F. Rolfo, C. Groppo, P. Mosca:  
***Petrologic assesment of deep CO2 production in the active Himalayan orogen***
- 17:10-17:30 F. Girault, F. Perrier, M. Bhattarai, B.P. Koirala, C. France-Lanord, L. Bollinger, S. Rajaure, J. Gaillardet, M. Fort, S.N. Sapkota:  
***Large-scale organization of carbon dioxide discharge in the Nepal Himalayas: Evidence of a 110-km-long facilitated pathway for metamorphic CO2 release***

17:30-19:00 Poster session (*Sala Maria Luisa*)

WEDNESDAY, SEPTEMBER 3, 2014

*Sala Ademollo, Palazzo Ducale, Lucca*

*Climate, climate changes, paleoclimate, geomorphology*

*Chairpersons: Rolfo F., Jimenez-Munt I.*

- 08:30 -08:50 L. Filippi, E. Palazzi, J. von Hardenberg, A. Provenzale:  
***NAO effect on winter precipitation in the Hindu-Kush Karakoram and its secular variations***
- 08:50-09:10 S. Tariq, M. Ahmad, I. Mahmood:  
***Climate change impacts on Chitral-Kabul trans-boundary rivers, Northern Pakistan***
- 09:10-09:30 I. Jiménez-Munt, D. Garcia-Castellanos:  
***Topographic evolution and climate aridification during continental collision: insights from numerical modeling***
- 09:30-09:50 S. Terzago, E. Palazzi, J. von Hardenberg, A. Provenzale:  
***Precipitation and snow resources in the Hindu-Kush Karakoram Himalaya mountains: current picture and expected changes***
- 09:50-10:10 S.A. Rashid, J.A. Ganai:  
***A record of shift in climate and orogenic events in Tethys Himalaya: evidence from geochemistry and petrography of Permo-Carboniferous sandstones from the Spiti region, Himachal Pradesh, India***

10:10-10:30 ***Coffee Break and poster session***

*Tectonics, geodynamics*

*Chairpersons: Searle M.P., Garzanti E.*

- 10:30-10:50 F.A. Capitanio, A. Replumaz, N. Riel (Keynote):  
***The Geodynamics of Asian continental tectonics: insights from numerical modeling***
- 10:50-11:10 Y. Najman, D. Jenks, L. Godin, M. Boudagher-Fadel, P. Bown, M. Horstwood, E. Garzanti, L. Bracciali, I. Millar:  
***What collided with India at 50 Ma in the western (Ladakh) Himalaya?***
- 11:10-11:30 T. Blayney, Y. Najman, G. Dupont-Nivet, E. Garzanti, A. Carter, I. Millar, M. Rittner:  
***Tectonic Evolution of the North-western Tibetan margin and the Pamirs as determined from the sedimentary record of Aertashi, Western Tarim Basin, China***
- 11:30-11:50 E. Garzanti, X. Hu:  
***The Tethys Himalaya in the Cretaceous/Paleocene: anorogenic evolution driven by Deccan-related uplift***
- 11:50-12:10 M.P. Searle, N.J. Gardiner, C.K. Morley, U.K. Htun:  
***Tectonics of the Mogok Metamorphic Belt, Myanmar (Burma) and its correlations from the East Himalayan Syntaxis to the Malay Peninsula***
- 12:10-12:30 R. Vernon, D. Cunningham, Z. Jin, R. England:  
***Plateau growth around the Changma Basin in NE Tibet***

12:30-13:40 ***Lunch (Sala del Trono) and poster session***

Tectonics

Chairpersons: Coutand I., Leloup H.P.

- 13:40 –14:00 C. Montomoli, R. Carosi, S. Iaccarino:  
***Tectono-metamorphic discontinuities within the Greater Himalayan Sequence, a local or a regional feature?***
- 14:00-14:20 A.K. Jain, M. Shreshtha, P. Seth, L. Kanyal, S. Singh, R. Carosi, C. Montomoli, S. Iaccarino:  
***Higher Himalayan Crystalline (HHC) Belt: its shear sense indicators and their implications on its tectonic evolution***
- 14:20-14:40 Zhiqin Xu, Hui Cao, Zhihui Cai, L. Zeng, S.M. Rai, H. Li, Z. Li, X. Chen, W. Qi:  
***Three Dimensional Exhumation Process of the Greater Himalayan Complex above the Main Himalaya Thrust***
- 14:40-15:00 R. Soucy La Roche, L. Godin, Z. Braden:  
***Recognition of the South Tibetan Detachment in the Karnali klippe, western Nepal: implications for emplacement of Himalayan external crystalline nappes***
- 15:00-15:20 S. Iaccarino, C. Montomoli, R. Carosi, H.-J. Massonne, A. Langone, D. Visonà:  
***Geological and tectono-metamorphic characterization of the Himalayan metamorphic core (HMC) in the Mugu Karnali valley (Western Nepal, Central Himalaya)***
- 15:20-15:50 Coffee Break and poster session**

Tectonics

Chairpersons: Robinson D., Xu Z.

- 15:50-16:10 D. Grujic, J. Hirschmiller, D. Mallyon (Keynote):  
***What controls the growth and shape of the Himalayan foreland fold-and-thrust belt?***
- 16:10-16:30 P.H. Leloup, X. Liu, G. Mahéo, J.-L. Paquette, N. Arnaud, A. Aubray, X. Liu:  
***Time constraints on partial melting and deformation of the Himalayan Crystalline Sequence, Nyalam Tibet: implications for orogenic models***
- 16:30-16:50 L. Gourbet, G. Mahéo, P. H. Leloup, P. Sorrel, D.L. Shuster, J.-L. Paquette, F. Quillévéré:  
***Farwestern Tibet: evolution of the relief since Oligo-Miocene times, from sedimentology and low-temperature thermochronometry***
- 16:50-17:10 I. Coutand, D.M. Whipp Jr., D. Grujic, M. Bernet, M.G. Fellin, B. Bookhagen, K.R. Landry, S.K. Ghalley, C. Duncan:  
***Geometry and kinematics of the Main Himalayan Thrust and Neogene crustal exhumation in the Bhutanese Himalaya derived from inversion of multi-thermochronologic data***
- 17:10-17:30 L. Godin, L.B. Harris:  
***Tracking basement cross-strike discontinuities in the Indian crust beneath the Himalayan orogen using gravity data – relationship to upper crustal faults***
- 17:30-17:50 Ç. Karakaş, P. Tapponnier, S. Sapkota, L. Bollinger, Y. Klinger, M. Rizza, A. Coudurier-Curveur:  
***Paleoseismic geomorphology of the Main Frontal Thrust between 85°49' and 86°27' E***
- 17:50-19:30 Poster session (Sala Maria Luisa)**

**20:30 Conference dinner at “Real Collegio”, Lucca.**

THURSDAY, SEPTEMBER 4, 2014

**Sala Ademollo, Palazzo Ducale, Lucca**

*Petrology*

Chairpersons: Lian F., Villa I.

- 08:30-08:50 S. Guillot, K. Schulmann, K. Hattori, O. Lexa, V. Janoušek, P. Maierová, A. Replumaz, P. Stipska (Keynote):  
**Significance of HP to UHP metamorphism along Himalaya - What we can learn from the Bohemian massif**
- 08:50-09:10 F.D.H. Wilke, P.J. O'Brien, A. Schmidt:  
**The subduction and exhumation path of one UHP-eclogite from the Tso Moriri complex**
- 09:10-09:30 R.M. Palin, M.R. St-Onge, D.J. Waters, M.P. Searle, B. Dyck:  
**Thermodynamic phase equilibria modelling of retrograde amphibole and clinozoisite in mafic eclogite from the Tso Moriri massif, northwest India: Insights into the source and behavior of metamorphic fluid during exhumation**
- 09:30-09:50 F. Liang, Jingsui Yang, Z. Xu, J. Zhao:  
**Moissanite and chromium-rich olivine in the Luobusa mantle peridotite and chromitite, Tibet: Deep mantle origin implication**
- 09:50-10:10 R. Sharma, D.R. Rao, D.S. Chauhan:  
**Records of Proterozoic magmatism and Himalayan exhumation in sulphide minerals and fluid inclusions from the klippen rocks of Lesser Himalayan tectonic domain**
- 10:10-10:40 Coffee Break**

*Petrology*

- 10:40-11:00 K.P. Kaphle, H.C. Einfalt:  
**Prospects of Precious and Semiprecious stones in Nepal Himalaya and their Mining Opportunities**
- 11:00-11:20 I.M. Villa:  
**Geochronology from the producer to the consumer**
- 11:20-11:40 A.R. Heri, J.A. King, F. Rolfo, J.C. Aitchison, J. Bahl, I.M. Villa  
**Geochemistry and geobarometry of Eocene dykes intruding the Ladakh Batholith**

*Geophysics*

Chairpersons: Romanelli F., Kumar N.

- 11:40-12:00 J. Mechie, R. Kind, X. Yuan, B. Schurr, F. Schneider, C. Sippl, W. Zhao, M. Feng, Z. Wu, D. Shi, H. Su, G. Xue, H. Qian, P. Kumar, V. Minaev, M. Gadoev, I. Oimahmadov, U. Abdybachaev, B. Moldobekov, S. Orunbaev, S. Negmatullaev (Keynote):  
**Imaging the subduction of continental crust and lithosphere beneath the northern margin of the Tibet-Pamir plateau**
- 12:00-12:20 B. Schurr, C. Haberland, C. Sippl, X. Yuan, J. Mechie, F. Schneider:  
**Imaging continental collision and subduction in the Pamir mountain range by seismic attenuation tomography**
- 12:20-12:40 W.-P. Chen, T.-L. Tseng, S.-H. Hung, C.-Y. Wang:  
**From Continental Collision to the Earth's Deep Water Cycle**
- 12:40-13:40 Lunch (Sala del Trono)**

## Geophysics

Chairpersons: Liang, Liu

- 13:40 -14:00 E. Brandmayr, F. Romanelli, G.F. Panza:  
***The subduction of continental lithosphere: insights from multiscale geophysical modelling of the Periadriatic region***
- 14:00-14:20 F. Romanelli, G.F. Panza:  
***A geophysical perspective on the lithosphere-asthenosphere system of the Qinghai-Tibet plateau and its adjacent areas***
- 14:20-14:40 N. Kumar, A. Aoudia:  
***Investigation of sub-surface structure and anisotropy in the Himalaya-Karakoram-Tibet collision using Seismic tomography***
- 14:40-15:00 C. Braitenberg:  
***Dynamic implications of temporal gravity changes over Himalaya-Tibet***

## Tectonics

Chairpersons: Steck A., Molli G.

- 15:00-15:20 G. Zhuang, Y. Najman, I. Millar, C. Chauvel, S. Guillot, A. Carter:  
***Spatial-temporal evolution of the Indus River and implications for western Himalayan tectonics: constraints from Sr-Nd isotopes and detrital zircon geochronology of Paleogene-Neogene rocks in the Katawaz basin, NW Pakistan***
- 15:20-15:40 W. Huang, D.J.J. van Hinsbergen, M. Maffione, D.A. Orme, G. Dupont-Nivet, P.C. Lippert, C. Guilmette, N. Borneman, K. Hodges, L. Ding; Z. Guo, P. Kapp:  
***The early Cretaceous Xigaze ophiolites formed in the Lhasa forearc: evidence from paleomagnetism, sedimentary provenance, and stratigraphy***
- 15:40-16:00 P.K. Mukherjee, A.K. Jain, S. Ghosh, P. Singh:  
***Two-stage Petrogenetic Evolution of the Miocene Higher Himalayan Leucogranite from Migmatites***
- 16:00-16:20 Coffee Break**
- 16:20-17:00 **General discussion and forthcoming HKT WORKSHOPS**

**17:00 END OF THE 29TH HKT WORKSHOP**

**\* Dinner only for the participants to the Field Trip in Sardinia**

## POSTER SESSION

**Tuesday, September 2, 2014**

### *Earthquakes, seismicity*

A.K.M.K. Alam:

*Sikkim Earthquake 2011: Bangladesh Experience*

M. Basharat, J. Rohn:

*Seismically reactivated Panjgran mass movement in the Northeast Himalayas of Pakistan*

P.K. Khan, Md.A. Ansari, V.M. Tiwari, S. Mohanty, J. Banerjee:

*Bearing of topography and converging plate geometry on earthquake incidences in the Central Himalaya*

MonaLisa, M.Q. Jan:

*Awaran, Pakistan, earthquake of Mw 7.7 in Makran Accretionary Zone, 24 September 2013: focal-mechanism solution and tectonic implications*

- A. Saric, D. Grujic:  
*Seismicity and convergence partitioning in the eastern Himalaya*
- T. Singh, A.K. Awasthi, D. Paul, R. Caputo:  
*Role of Internal Thrusts in NW Sub-Himalaya, India, for SHA*
- C. Wu, T. Xu, Z. Zhang, J. Teng:  
*Seismic anisotropy from shear wave splitting across east Kunlun fault*

#### *Climate, climate changes, paleoclimate, geomorphology*

- M. Bohlin, M. Bickle, S. Misra:  
*Controls on weathering kinetics and the  $\delta^7\text{Li}$  of Himalayan rivers*
- E. Deal, J. Braun:  
*Precipitation stochasticity and its effects on discharge and erosion in the Himalaya*
- B. Khalid, H. Ishtiaq, N. Fatima:  
*Assessment of land covers change due to flooding alongside Jhelum and Chenab rivers*
- M.R. Paudel:  
*Facies analysis in the southern part of Kathmandu basin and its significance for lake delta deposits during late stage of ancient lake*
- P. Shrestha, N.K. Tamrakar:  
*Morpho-dynamic characteristics and their controls, Bagmati River of Central Nepal Himalaya*

#### *Petrology*

- S. Bora, S. Kumar, U.K. Sharma, K. Yi, N. Kim:  
*Petrology and U-Pb SHRIMP zircon chronology of migmatite from Tangtse Shear Zone, eastern Ladakh Himalaya, India: Evidences of melting of granitoid protoliths and formation of leucogranite-granulite*
- A. Borghini, C. Groppo, F. Rolfo, S. Ferrando:  
*Petrographic study of the andalusite-bearing graphitic schists from the Northern Karakoram (Sargo Laggo, K2 and Gasherbrum Glaciers moreins, Xinjiang, China)*
- S. Botta, C. Groppo, F. Rolfo:  
*Petrographic study of the xenoliths hosted within lamprophyric dykes from the Shaksgam Valley (Xinjiang, China)*
- R. Carosi, C. Montomoli, A. Langone, A. Turina, C. Bernardo, S. Iaccarino, L. Fascioli, D. Visonà, A. Ronchi, S.M. Rai:  
*Eocene partial melting recorded in peritectic garnets from kyanite-gneiss, Greater Himalayan Sequence, central Nepal*
- Y. Kouketsu, K. Hattori, S. Guillot, N. Rayner:  
*Retrogression and recrystallization of the Stak eclogite in the northwestern Himalaya: constraints from Raman spectroscopy of residual pressures of quartz in garnet*

#### *Tectonics*

- R. Almeida, J. Hubbard, P. Polivka, D. Peterson, S.N. Sapkota, A. Schmid, P. Tapponnier, C. Timsina:  
*Characterizing the sub-surface geometry of the Main Frontal Thrust in the Dhalkebar area of central Nepal*
- S. Lahoti, Y. Gupta, K. Kumud, A.K. Jain:  
*Tectonics of the Chamba Nappe, NW Himalaya and its regional implications*
- C. Montomoli, S. Iaccarino, B. Antolin, E. Appel, I. Dunkl, L. Ding, D. Visonà:  
*P-T-d path of chloritoid schist of the Tethyan Sedimentary Sequence (SE Tibet)*
- P. Mosca, C. Groppo, F. Rolfo:  
*Geological map of the Eastern Nepal Himalaya*
- A.J. Parsons, R.J. Phillips, G.E. Lloyd, M.P. Searle, R.D. Law:  
*Quantified vertical strain profile through the Greater Himalayan Sequence, Annapurna-Dhaulagiri Himalaya, central Nepal*
- P.C. Pertusati, B. Lombardo, R. Carosi, C. Frassi, C. Groppo, D. Iacopini, G. Molli, C. Montomoli, G. Musumeci, F. Rolfo, D. Visonà:  
*Geological map of Chomolungma (Everest), Cho-Oyu and Makalu area (Nepal-Tibet)*

A. Riella, M. Vendramini, A. Eusebio, E. Rabbi, P. Notaro, M. Spanò, D. Grandis, A. Fassone:  
*The development of the Geological Reference Model for some key infrascutural project in Indian Himalaya*

A. Steck, J.-L. Epard, M. Robyr, M. Schlup, J.-C. Vannay:  
*The NE-directed Shikar Beh nappe in the Himalayan orogenic prism of Lahul and Ladakh*

**Wednesday, September 3, 2014**

*Climate, climate changes, paleoclimate, geomorphology*

A.R. Faiziev, F.A. Malakhov, N.S.Safaraliev:

*The pulsing glaciers of Vanj Valley (Pamir)*

L. Gemignani, J.R. Wijbrans, Y. Najman, P. van der Beek, G. Govin:

*Isotope provenance of Eastern Himalayan rivers draining to the south into India, Nepal and Bhutan*

C. Groppo, F. Rolfo, P. Mosca, D. Castelli:

*Metamorphic CO<sub>2</sub> production in scapolite-bearing calc-silicate rocks from the upper Greater Himalayan Sequence (eastern Nepal Himalaya)*

N. Hatano, K. Yoshida, S. Mori, S. Irie:

*The intense weathering condition in the Middle Miocene period supplied from the fluvial sediments in central Japan*

F. Rolfo, E. Costa, E. Destefanis, C. Groppo, P. Mosca, K.P.Kaphle, B.R. Pant:

*Preliminary chemical and isotopic characterization of cold and hot-spring waters from Nepal*

G. Roohi, S.M. Raza, M. Akhtar:

*Dental hypoplasia in Siwalik Rhinos: additional information on Neogene climate of South Asia*

R. Singh, B. Phartiyal, S.K. Patil:

*Climate Variability during the past 50 ka in the Trans Himalaya- a case study from Tangtse Valley, Ladakh*

N. Vögeli, P. van der Beek, P. Huyghe, Y. Najman, D. Sachse:

*A record of weathering, hydrological and monsoon evolution in the Eastern Himalaya since 13 Ma from detrital and organic geochemistry, Kameng River Section, Arunachal Pradesh*

*Tectonics, geodynamics*

K. L. Cook, Y.-H. Lee, X. Tan:

*Oligocene activity on the eastern margin of the Tibetan Plateau*

A.K. Jain:

*Continental subduction vs. collision: What shaped the Himalaya?*

M.J. Kelly, Y. Najman, P. Mishra, A. Copley, S. Clarke:

*The potential record of far-field effects of the India-Asia collision: Barmer Basin, Rajasthan, India*

M. Kong, C. Liu, W. Jiang, X. Li, Y. Yang, P. Ye:

*Geochronology of the volcanic rocks from the Luobusha Conglomerates in Tibet and their implications*

M. Krobicki, J. Golonka:

*Palaeobiogeographical distribution of the Early Jurassic Lithotia-type bivalves versus Lhasa Block history*

K. Meng, G. Wu, E. Wang, H. Lu:

*The Early Neogene decelerated denudation of the Red River-Ailao Shan shear zone, SE Asia: new sedimentary and paleomagnetic constraints on the Middle Miocene deposits*

L. Tunini, I. Jiménez-Munt, M. Fernández, J. Vergès:

*Neotectonic modeling of Central Asia*

R. Vernon, D. Cunningham, Z. Jin, R. England:

*Inherited basement controls on the development of Neogene thrust faults in the Northeast Tibetan Plateau*

*Tectonics*

R. Carosi, C. Montomoli, S. Iaccarino, D. Visonà:

*In-sequence shearing within the Greater Himalayan Sequence in Central Himalaya: deformation and metamorphism by crustal accretion from the Indian plate*



I. Coutand, D.M. Whipp Jr., B. Bookhagen, M. Bernet, E. Garzanti, D. Grujic:

*Neogene exhumation history of the Bhutan Himalaya quantified using multiple detrital proxies*

G. Govin, Y. Najman, P. van der Beek, I. Millar, M. Bernet, G. Dupont-Nivet, J. Wijbrans, L. Gemignani, N. Vögeli, P. Huyghe:

*Constraining the timing of exhumation of the Eastern Himalayan syntaxis, from a study of the palaeo-Brahmaputra deposits, Siwalik Group, Arunachal Pradesh, India*

K. Landry, I. Coutand, D.M. Whipp Jr., D. Grujic:

*Late Miocene-present exhumation kinematics of the Sikkim Himalaya derived from inversion of zircon (U-Th)/He and apatite fission-track ages using 3-D thermokinematic modelling*

R. Le Roux-Mallouf, V. Godard, M. Ferry, R. Cattin, J.-F. Ritz, D. Drukpa, J. Gyeltshen:

*Uplift-driven denudation rates and associated channel response across Bhutan, Himalaya*

G. Molli, D. Iacopini, P.C. Pertusati:

*The South Tibetan Detachment between Karta and Tingri (South Tibet Himalaya)*

C. Montomoli, R. Carosi, D. Visonà, S. Iaccarino, A. Langone:

*Relations between the South Tibetan Detachment and leucogranite emplacement in Western Nepal: consequences for exhumation of the Greater Himalayan Sequence*

K.R. Paudyal, L.P. Paudel:

*Geological Structures, deformation and metamorphism of Lesser Himalaya between Mugling-Damauli area, central Nepal*

R.V. Rosenkranz, M.S. Sohi, C. Spiegel:

*Exhumation history of the Tethyan Himalaya based on apatite (U-Th-Sm)/He dates from the Takkhola graben and the Mustang granite (Nepal)*

M.S. Sohi, R. Rosenkranz, C. Spiegel:

*Paleo-denudation history of the Ladakh Batholith - new constraints from bedrock and detrital apatite (U-Th-Sm)/He thermochronology*

#### Geophysics

X. Liang, Y. Chen, X. Tian, Z. Zhang:

*Frontier of the underthrusting Indian lithosphere beneath the central Tibet from finite frequency tomography*

Z. Liu, X.b Tian, X. Liang, J.-W Teng:

*Upper mantle structure beneath central Tibet by teleseismic S wave tomography along INDEPTH-III profile*

J. Singer, G. Hetényi, E. Kissling, T. Diehl:

*Towards a high-resolution seismic image of the lithospheric structure of the Himalayan orogenic wedge beneath Bhutan*