

JOINT CAT/SCAN-RETREAT WORKSHOP

Hotel Meranda, Camigliatello Sila, Italia

30 June – 2 July 2004

GENERAL ORGANIZATION:

The workshop begins with an introduction to the CAT/SCAN and RETREAT projects presented by lead PI's, followed by comments from Leonard Johnson, Program Officer for Continental Dynamics at NSF. The first day is largely devoted to a topic relevant to both projects: mantle-asthenospheric flow, related to slab rollback, beneath the entire Italian Peninsula. The second day begins with a session devoted to the CAT/SCAN seismic experiment, seismotectonics of southern Italy, and a progress report on seismic and geodetic networks in southern Italy. During the remainder of the second day, participants will hear reports on final results and progress from research projects in RETREAT. On the third day, smaller breakout groups will plan future research and collaborative work between RETREAT and CAT/SCAN. The workshop closes with a plenary session: reports from the breakout groups and general discussion.

Tuesday, 29 June

ARRIVAL ARRANGEMENTS:

Field trip participants will already have arrived at Hotel Meranda the night of June 28. Participants not on the field trip must make their own arrangements to reach Hotel Meranda in Camigliatello Sila. Service in group vans from/to either the Cosenza train station or Lamezia Terme airport can be arranged.

2000: Welcoming dinner at Hotel Meranda

Wednesday, 30 June

MORNING SESSION

INTRODUCTORY REMARKS

0800: CAT/SCAN—introductory remarks [Steckler/Lerner]

0820: RETREAT—introductory remarks and overview of workshop [Brandon]

0840: INGV and Italian seismology – introductory remarks [Amato]

0900: Welcome to Calabria {Guerra}

0920: NSF-CD [Leonard Johnson]

MANTLE-ASTHENOSPHERIC FLOW BENEATH THE ITALIAN PENINSULA

0930: Reference frames [Brandon/Willett]

1000: Kinematics and finite strain of flow in mantle wedge [Sherrington]

1030: break

1050: Dynamic topography due to mantle flow [Pysklywec]

1145: Discussion

1200-1600: **Lunch and afternoon break**

AFTERNOON SESSION

1600: Lattice-preferred-orientation (LPO) and mantle flow [Park]
1630: Wave propagation in an anisotropic retreating mantle wedge [Levin/Okaya]
1700: RETREAT seismic experiment [Park/Levin/Okaya]
1800: Deep structure in southern Italy [Piromallo]
1845: Mantle structure and anisotropy [Margheriti]

1930: end session of first day

Dinner: participants can arrange dinner on their own, at the hotel or in the town.

Thursday, 1 July

MORNING SESSION

CAT/SCAN, AND THE SEISMOTECTONICS OF SOUTHERN ITALY

0800: CAT/SCAN seismic experiment [Seeber/Lerner/Steckler]
0900: Seismicity, seismotectonics, crustal structure in southern Italy [Chiarabba]
0930: The national seismic network, the new satellite network, the GPS network, and the most recent projects to collect data in southern Italy: the up-to-date framework [Amato/Chiaraluce]
1045 Some recent seismic sequences in Northern Calabria and Lucania [Guerra]
1115: Ground motion scaling studies [Akinci]
1130: CAT/SCAN Web site – moving online [Lerner]

1200-1600: **Lunch and afternoon break**

AFTERNOON SESSION

RETREAT REPORTS

1600: Thermochronology: Final results of fission-track and helium data [Thomson, Brandon, Isaacson]
1700: Geomorphology: Final results, including recent work in Spring 2004 [Pazzaglia]
1800: Tectonics/structure: Cross sections from interpreted seismic reflection data in RETREAT transect area [Pini]; analogue modeling of northern Apennine orogenic wedge [Del Castello]
1845: Geodetics: Status of GPS installation and acquisition of data [Bennett]

2000: **Group banquet**; information on venue and transportation provided at the workshop.

Friday, 2 July

MORNING SESSION

BREAKOUT SESSIONS WITH INDIVIDUAL GROUPS

0800-1200:

- CAT/SCAN seismology planning (Data collection and exchange report, website, science planning for next year)

- RETREAT Seismology planning for next year.
- When completed, CAT/SCAN and RETREAT seismology groups combine for longer range discussions
- Individual discipline groups

1200-1400: **Lunch**

AFTERNOON SESSION

1400-1800:

PLENARY SESSION: REPORT OF BREAKOUT GROUPS AND OPEN DISCUSSION

Dinner: participants can arrange dinner on their own, at the hotel or in the town.