

7th International Triassic Field Workshop (Pan-European Correlation of the Triassic)

Dolomites Field trip to the UNESCO World Heritage Site of the Tethyan Triassic

September 5–10, 2010, Dolomites, Southern Alps, Italy

2nd Circular

PIERO GIANOLLA (COORDINATOR): Dipartimento di Scienze della Terra, Università di Ferrara

MARCO AVANZINI: Museo Tridentino di Scienze Naturali, Trento

EVELYN KUSTATSCHER: (SEGRETARIAT): Naturmuseum Bozen

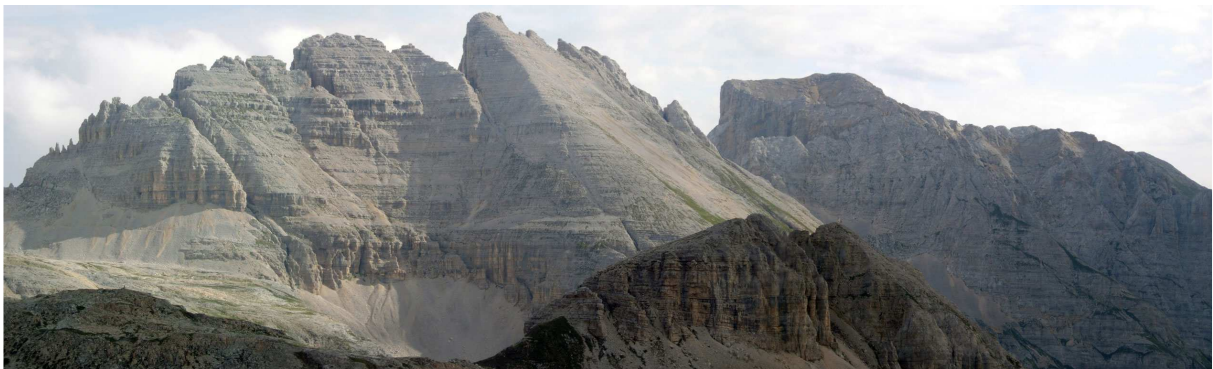
PAOLO MIETTO: Dipartimento di Geoscienze – Università di Padova

NEREO PRETO: Dipartimento di Geoscienze – Università di Padova

GUIDO ROGHI: Dipartimento di Geoscienze – Università di Padova & CNR – Institute of Geosciences and Georesources Padova

"The nine components of The Dolomites World Heritage property protect a series of highly distinctive mountain landscapes that are of exceptional natural beauty. Their dramatic vertical and pale colored peaks in a variety of distinctive sculptural forms is extraordinary in a global context. This property also contains an internationally important combination of earth science values. The quantity and concentration of highly varied limestone formations is extraordinary in a global context, whilst the superbly exposed geology provides an insight into the recovery of marine life in the Triassic period, after the greatest extinction event recorded in the history of life on Earth. The sublime, monumental and colorful landscapes of the Dolomites have also long attracted hosts of travellers and a history of scientific and artistic interpretations of its values."

(Declaration of outstanding universal value, World Heritage Committee, Seville 26.06.2009)



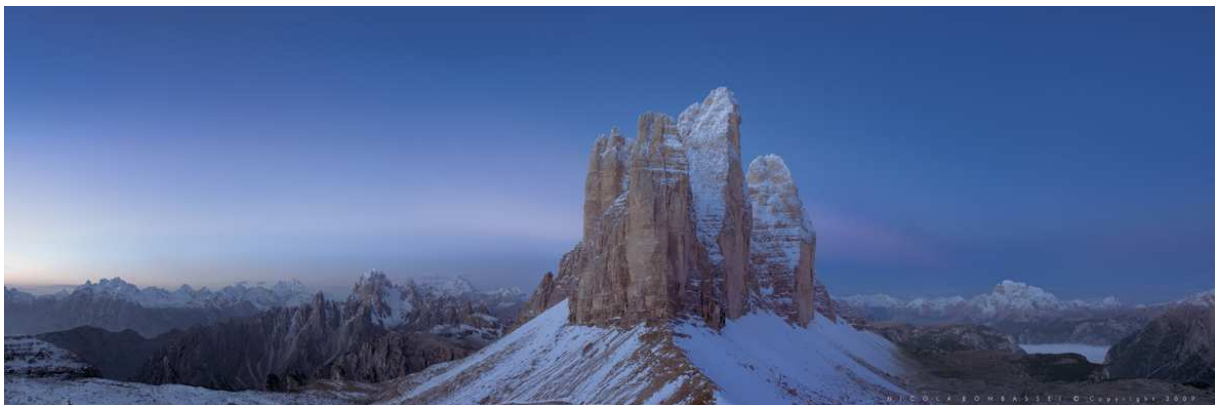
The 7th International Triassic Field Workshop is dedicated to visit the classical localities of the Triassic of the Dolomites, after their inscription in the World Heritage List as serial natural property. On June 26th, 2009 the Dolomites have been inscribed in the WHL because of their exceptional beauty and unique landscape, but also for their scientific importance from the geological and geomorphological point of views (criteria vii and viii). In particular, the criterion viii (*to be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features*), is strictly related to the geological importance of the Dolomites for the Triassic as summarized by the motivation given by the World Heritage Committee in Seville (Spain):

“The Dolomites are of international significance for geomorphology, as the classic site for the development of mountains in dolomitic limestone. The area presents a wide range of landforms related to erosion, tectonism and glaciation. The quantity and concentration of extremely varied limestone formations is extraordinary in a global context, including peaks, towers, pinnacles and some of the highest vertical rock walls in the world. The geological values are also of international significance, notably the evidence of Mesozoic carbonate platforms, or “fossilized atolls”, particularly in terms of the evidence they provide of the evolution of the bio-constructors after the Permian/Triassic boundary, and the preservation of the relationships between the reefs they constructed and their surrounding basins. The Dolomites also include several internationally important type sections for the stratigraphy of the Triassic Period. The scientific values of the property are also supported by the evidence of a long history of study and recognition at the international level. Taken together, the combination of geomorphological and geological values creates a property of global significance.”

(Declaration of outstanding universal value, World Heritage Committee, Seville 26.06.2009)

Therefore this workshop is the opportunity to touch in the field the exceptional exposure of depositional geometries and interactions between landscape and geology that make the Dolomites unique for Triassic students and so important for all humanity.

This workshop is in ideal continuity with earlier international Triassic workshops held in England (2004), Central Germany (2005), Eastern France (2006), Western Poland (2007), Hungary (2008) and South Germany (2009).



Program

September 5th: arrival in Bozen/Bolzano, registration and welcome party at the Museum of Nature South Tyrol. The welcome party includes a tasting of local wines; a local producer will give some description of the geographical, pedological and geological characters of the vineyards. Three key lectures about the stratigraphy, the paleontological and historical importance of the Dolomites for the Earth Science will be also given.

September 6-10: Field trip to Permian/Triassic outcrops of the Dolomites: (see below).

Sunday, September 5th, 2009

6 p.m. Icebreaker Party, Museum of Nature South Tyrol (Geology and wine)

7.30 p.m. Piero Gianolla: Dolomites and the UNESCO

8.00 p.m. Alfonso Bosellini: The Geology of the Dolomites

8.30 p.m. Marco Avanzini: The Paleontology of the Dolomites

Importance of the Dolomites for geological and palaeontological studies

Field Trips

Monday, September 6th, 2009

The Bletterbach gorge (Late Permian – Early Triassic)

Guides: **EVELYN KUSTATSCHER, MARCO AVANZINI & PIERO GIANOLLA**

Visit to one of the best exposed sections of the continental to marginal marine Upper Permian and Lowermost Triassic of the Southern Alps.

Main topics of the day:

- Upper Permian footprints and plant fossils of the Val Gardena Sandstone;
- Sequence stratigraphy in a continental – marginal marine setting;
- The Late Permian Transgression and the Bellerophon Formation;
- The Permian - Triassic boundary and the Werfen Formation;

4.00 p.m. Visit to the Museum of the Geoparc Bletterbach

9 p.m. Nereo Preto & Marco Franceschi: Geology of the Latemar

Overnight in Campitello di Fassa

Tuesday, September 7th, 2010

Passo Feudo, Mt. Agnello and Latemar (Middle Triassic)

Guides: **NEREO PRETO**, PAOLO MIETTO & PIERO GIANOLLA

The group will be divided:

- a) Elio Dellantonio & Piero Gianolla: Dos Capello ("sentiero geologico"): Anisico-Ladinico (from Werfen Fm. to various Ladinian successions),
- b) Nereo Preto & Guido Roghi: Torre di Pisa (internal carbonate platform, reef and slope of Cima Feudo), only for experienced hikers, part of the program is off trail, although no alpinistic skills are required.

The day is dedicated to the visit of one of the historical areas for the Triassic of the Dolomites where the relations between volcanism, tectonism and carbonate sedimentation are clearly visible.

Main topics of the day:

- Prevolcanic carbonate platforms and related basinal units: the Anisian platforms and ramps and the high relief carbonate platforms;
- The demise of Mt. Agnello by volcanics and volcanoclastics;
- The slope at Mt. Cavignon and the startup of the Latemar carbonate platform;
- Discussion on Triassic synsedimentary tectonics

5.00 p.m. Visit to the Predazzo Museum, hosted by dott. Elio Dellantonio.

6.00 p.m. Paolo Mietto: Middle Triassic Ammonoid biostratigraphy

Overnight in Campitello di Fassa (TN)

Hotel Sella Ronda

Wednesday, September 8th, 2010

Col Rodella and P.ta Grohmann (Upper Ladinian – Lower Carnian)

Guides: **PIERO GIANOLLA**, PAOLO MIETTO & GUIDO ROGHI

Special guest: **VINCENZO PICOTTI**

The day is dedicated to the visit of a complete basinal succession starting from submarine volcanics (pillow lava, pillow breccia and hyaloclastites), recording the phases of dismantling and erosion of the volcanic area (Wengen Fm) and the re-establishment of the carbonate production (San Cassiano Fm and Cassian Dolomite).

Main topics of the day:

- Triassic volcano-tectonics and associated deposits;
- Sequence stratigraphy in a deep water setting and organisation of a depositional sequence;
- The Ladinian-Carnian boundary in its type area.

Overnight in Campitello di Fassa (TN)

Hotel Sella Ronda

Thursday, September 9th, 2010

Sella Group Ronda (Middle and Upper Triassic)

Guides: **GUIDO ROGHI & PIERO GIANOLLA**

The day is dedicated to the isolated Carnian atoll of the Sella Group and to the discussion about different generations of post volcanic carbonate platforms and related basinal deposits.

Main topics of the day:

- Large scale geometry of a carbonate platform;
- Toe of slope carbonate deposits and models of carbonate exportation;
- Syn-volcanic and post volcanic carbonate platforms.

9.00 p.m. Guido Roghi: The amber of the Dolomites

Overnight in Campitello di Fassa (TN)
Hotel Sella Ronda

Thursday, September 10th, 2010

Lagazuoi, Col dei Bos and Tofana di Rozes (Upper Triassic)

Guides: **NEREO PRETO, GUIDO ROGHI & PIERO GIANOLLA**

Special Guest: **ANNA BREDA**

The day is dedicated to the stratigraphic organisation of the Carnian interval with the progressive closure of the basins related to the progradation of the carbonate and the terrigenous shoreline and the definitive flattening of the paleotopography (Dolomia Cassiana, S. Cassiano, Heiligkreuz, Travenanzes Fms, and Dolomia Principale). Also the sedimentary evidence of a tropical humid climate shift in the Carnian will be discussed in the superb outcrops of the Tofane area.

Main topics of the day:

- Large scale geometry of a carbonate platform;
- The “Carnian Pluvial Event”;
- Rimmed and ramp geometries in carbonate setting.

The end of the field trip is close to Cortina d’Ampezzo (BL), where we will organise on the last evening a special dinner in order to stay together and also for discussions.

With the exception of Rif. Torre di Pisa (program (b), Tuesday, 7th) all excursions only require basic walking skills, however, most localities are on high mountain environments (up to 2400 m altitude), thus warm/waterproof coating and walking boots are recommended.

Transport will be arranged by private cars and possibly some mini-buses.

Accommodation

Only for the first night in Bolzano/Bozen is request your reservation for the hotels, the accommodation for the other 4/5 nights will be organized by us.

The city of Bozen/Bolzano offers a wide range of accommodation opportunities close to the historical center, where the Museum of Nature South Tyrol is also located.
(for further information: <http://www.bolzano-bozen.it>)

We got some special rates for the workshop in some of the most nearby Hotels.
Price list (per day, including breakfast): Please remember to indicate the conference and/or the Museum to get this special prices:

address	Single room	Double room
HOTEL MONDSCHEN **** Tel: +39 0471 975642 e-mail. info@hotel-luna.it www.hotel-luna.it	91 Euro	147,50 Euro
HOTEL STIEGL **** Tel: +39 0471 976222 e-mail. info@scalahot.com www.scalahot.com	72 Euro	104-134 Euro
HOTEL CITTA *** Tel: +39 0471 975221 e-mail. info@hotelcitta.info www.hotel-luna.it	86 Euro	120 Euro
HOTEL FIGL *** Tel: +39 0471 978412 e-mail. info@figl.net www.figl.net	85-95 Euro	112-122 Euro
HOTEL REGINA A. *** Tel. +39 0471 972195 e-mail. info@hotelreginabz.it www.hotelreginabz.it	65-80 Euro	100-120 Euro
HOTEL FEICHTER ** Tel. +39 0471 978768 e-mail. info@hotelfeichter.it www.hotelfeichter.it	55 Euro	85 Euro
Youth Hotel Bolzano/Bozen tel.+ fax 0471 / 300865 e-mail: bozen@jugendherberge.it http://bozen.jugendherberge.it	25 Euro	22 Euro (shared room of 3-4 persons)

Travel information

Bolzano / Bozen city, at the western margin of the Dolomites, is the capital of the province of South Tyrol, one of the northernmost provinces of Italy.

The small airport of the city permits only flights to Rome (I), better served airports, however, are located in nearby localities, to the North (Munich, Innsbruck) and South (Verona, Venice, Treviso, Bergamo). Bolzano is easily reached by train, from all of these cities.

The museum is located in the center of Bolzano/Bozen. A map is available [here](#)

AIRPORT:



[Airport Bolzano Dolomiti](#)



[Airport Innsbruck](#)



[Airport Verona Villafranca](#)

CAR:



[Road conditions](#)



[Brennero A22 motorway](#)



[Route](#)

RAILWAY:

Information on train connections:



[Fs on-line](#)



[Deutsche Bahn](#)



[Oebb on-line](#)

BUS

Information on bus connections:



[Bus time schedule in South Tyrol](#)



[Holiday Shuttle](#)

Registration Fee

The accommodation in the hotels (we prefer to organise them for everybody in order to archive better prices), shuttle services, tickets for cable lifts etc. will cost about € **300,00** (including overnights in double room, dinners, breakfast and packed lunch).

For those of you that require a single room the price will be slightly higher (about € **350,00**); Please tell us in advance if you require a single room.

Payment

Payments must arrive before June 30, 2010 by international bank transfer on the following bank account. Cheques and credit card payments are not accepted. Transfer costs must be covered by participants.

IBAN : **IT62 K010 0502 0040 0000 0002 000**
 SWIFT : **BNLIITRR**
 Bank Name: Banca Nazionale del Lavoro. Agency MESTREDUE
 Bank adress: via Trento 41/43 Mestre (VE), I-30171
 Account Name: GIANOLLA P. INT. TRIASSIC FIELD
 Posting text: **your name (important to recognize sender)**

Deadlines

Final registration for the field trip: **July 15, 2010**

Registration Form

Please confirm your pre-registration or return the enclosed Registration Form before **July 15, 2010** to Evelyn Kustatscher (e-mail: Evelyn.Kustatscher@naturmuseum.it) or register on the homepage: <http://trias.geodolomiti.net/>