4th Biennial Workshop on Subduction Processes emphasizing the Japan-Kurile-Kamchatka-Aleutian Arcs

Linkages among tectonics, seismicity, magma genesis, and eruption in volcanic arcs.

Institute of Volcanology and Seismology FED RAS and Kamchatkan Experimental Methodical Seismological Department of Geophysical Service RAS
Petropavlovsk-Kamchatsky

August 21-27, 2004

3rd CIRCULAR
Steering committee:
Boris Ivanov and Evgenii Gordeev, Petropavlovsk-Kamchatsky, Russia
Minoru Kasahara and Mitsuhiro Nakagawa, Sapporo, Japan
Jon Dehn and John Eichelberger, Fairbanks, AK, USA

Local organizing committee:
Evgenii Gordeev (chairman), Boris Ivanov (vice-chairman), Alexander Vikulin, Olga Girina, Oxana Evdokimova, Ivan Melekestzev, Vladimir Leonov, Aelita Razina, and Victor Kazantsev, Institute of Volcanology and Seismology;
Victor Chebrov, Vadim Saltykov, and Yulia Kugaenko, Kamchatkan Experimental Methodical&Seismological Department of Geophysical Service RAS;
Yelena Vesna, Kamchatkan State Pedagogical University

Form of Workshop:
Invited speakers are asked to talk for 15 minutes. Overhead and multi-media projector are provided. Poster presentations are welcome, no more than two from a participant. Posters should be presented in A0 format on the first day of the workshop to be available throughout the dates of the workshop.

Meeting venue:
Institute of Volcanology and Seismology FED RAS (IVS) and Kamchatkan Experimental Methodical Seismological Department GS RAS (KEMSD), Petropavlovsk- Kamchatsky.

Registration
Registration of the participants starts at 9 a.m. – 6 p.m. on August 21 and continues on August 22 same hours at the Institute of Volcanology and Seismology, 9 Piip Blvd, Petropavlovsk-Kamchatsky. Workshop and excursion fee should be paid in roubles while registration. For non-Russian participants it is $250 and $50 for students. The workshop cost for the Russian participants is 800 roubles.

Excursions:
Costs of the excursions were provided in the registration form to the workshop:
Cabin lorry trip to Avachinsky, Mutnovsky and Gorely volcanoes makes up $50. Helicopter trip to Karymsky volcano is $150 for all participants. Because of possible bad weather conditions, excursion days could be replaced by scientific sessions and vice versa. Ground trips and hiking volcanoes will start assuming good weather

Meal:
On the days of scientific sessions we arrange a set meal for all participants of the workshop in the “Svarog” café. Meal cost is already included in the workshop fee.

Weather:
August in Petropavlovsk-Kamchatsky is one of the most favorable months and generally sunny with occasional rains and daytime temperatures averaging +18°C. However, there is always a possibility of heavy rain and cold. Daytime temperature can range from 10°C to 18°C.
Bring warm clothes, rain gear and good mountain boots that will provide you with much comfort on these days.
**Paratunka Resort:**
We plan the participants could be taken for one of the Paratunka resort after scientific session to bathe and relax. Please bring swimsuits to bath in a thermal water pool.

**Accommodation and airport pick-up:**
There are two hotels available for the participants of the workshop named “Edelweiss” and “Russ”. The “Edelweiss” is the closest hotel with basic facilities and within an easy walking distance to the IVS and KEMSD location. A number of suites available for reservation at the Edelweiss are limited this summer. Breakfasts are included to the cost of the suite.

The “Russ” hotel lies northeast from the institute and needs transportation about 15 minutes that will be arranged for the participants. The ‘Russ’ is ideal place for those who value isolation and quiet. They suggest a restaurant, a conference room and sauna. Breakfasts are not included.

**Hotel reservation and dates of arrival/departure:**
*Dr. Vadim A. Saltykov, e-mail: AJAKS-lives@emsd.iks.ru*

**Financial support:**
The organizers anticipate support by Administration of Kamchatka Region, the Far East Division of Russian Academy of Science (FED RAS), Minnauka of Russian Federation, US Geological Survey (USGS), National Scientific Foundation (NSF), National Aeronautical and Space Administration (NASA), and the UAF Geophysical Institute (UAF/GI), and International Arctic Research Center (UAF/IARC).

On the questions regarding this meeting, please contact Oxana Evdokimova (evdokimova@kcs.iks.ru).

US participation is coordinated by UAF/GI through Jon Dehn (jdehn@gi.alaska.edu) and Pavel Izbekov (pavel@gi.alaska.edu).

Japan participation is coordinated through Hokkaido University by Minoru Kasahara (mkasa@eos.hokudai.ac.jp) and Mitsuhiro Nakagawa (nakagawa@ep.sci.hokudai.ac.jp).

The updated information will be posted at www.avoo.alaska.edu/kasp and at www.kcs.iks.ru/konf.html (in Russian)
4th Biennial Workshop on Subduction Processes
emphasizing the Japan-Kurile-Kamchatkan-Aleutian Arcs

August 21st-27th, 2004
Petropavlovsk-Kamchatsky

Saturday, August 21
09:00 – 18:00 Check-in and registration at the Institute of Volcanology and Seismology
19:00 – 21:00 Icebreaker

Sunday, August 22
09:00 – 18:00 Registration at the Institute of Volcanology and Seismology
09:00 – 10:30 Introduction and welcome
11:00 – 13:00 Scientific session: Active Volcanism
   Lunch
14:30 – 18:00 Scientific session: Active volcanism
18:00 – 18:30 Film presentation on Kamchatkan volcanoes

Monday, August 23
09:30-13:00 Scientific session Geodynamics, tectonics, geochemistry, petrology and magma formation
   Lunch
14:30 – 18:00 Scientific session: Geodynamics, tectonics, geochemistry, petrology and magma formation
18:00 – 22:00 Informal discussion in the Paratunka Resort followed by a dinner.

Tuesday, August 24
10:00 Excursion: Helicopter trip to Karymsky volcano.
08:00 Excursion: A day trip to Avachinsky volcano.

Wednesday, August 25
08:00 Excursion: A day trip to Mutnovsky volcano.
08:00 Excursion: A day trip to Gorely volcano.

Thursday, August 26.
09:00 – 13:00 Scientific session: Far East and Eastern Siberia seismicity problems
   Lunch
14:30 – 18:00 Scientific session: Far East and Eastern Siberia seismicity problems
19:00-23:00 Farewell party

Friday, August 27
09:00–11:30 Discussion of new international collaborations and educational exchange.
11:30 – 12:30 Concluding remarks
   Lunch
Free time and departure of participants.
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<td>09:00 – 10:30</td>
<td>INTRODUCTION</td>
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<td>10:30 – 11:00</td>
<td>Coffee Break</td>
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<td>11:00 – 18:00</td>
<td>SESSION: ACTIVE VOLCANISM</td>
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<td>Oral Session</td>
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<td>Chairs: Boris V. Ivanov, Russia and Stephen R. McNutt, USA</td>
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<td>11:00 – 11:15</td>
<td>ORDER CLUSTERING IN THE SEQUENCES OF VOLCANIC ERUPTIONS AND EARTHQUAKES OF THE WORLD Alexander A. Gusev</td>
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<td>11:30 – 11:45</td>
<td>THE ERUPTION OF SHEVELUCH VOLCANO, KAMCHATKA, ON MAY 10, 2004 Olga A. Girina, Sergey L. Senyukov, Yury V. Demyunchuk, Sergey A. Khubunaya and Sergey A. Ushakov</td>
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<tr>
<td>11:45 – 12:00</td>
<td>RECURRENT CALDERA-FORMING ERUPTIONS: KSUDACH CASE STUDY Pavel Izbekov, James Gardner, Ivan Melekestsev and John Eichelberger</td>
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<td>12:00 – 12:15</td>
<td>DEEP STRUCTURE OF KAMCHATKA NORTHERN VOLCANIC GROUP: SEISMICITY, 3D VELOCITY STRUCTURE AND MAGMA SOURCES. Gontovaya L., Nizkous I., Kissling E., Senyukov S., Sanina I. and Khrenov A.</td>
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<td>12:15 – 12:30</td>
<td>DIRECT SAMPLING OF ERUPTIVE CLOUDS USING TETHERED BALLOONS: RESULTS OF FIELD EXPERIMENT ON KARYMSKY VOLCANO, KAMCHATKA, RUSSIA Alexander B. Belousov and Marina Belousova</td>
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<tr>
<td>12:30 – 12:45</td>
<td>ERUPTION REGIME AND MAGMA SYSTEM PARAMETERS OF THE VOLCANO SHIVELUCH Yury B. Slezin</td>
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13:00 – 14:30  
Lunch

Chairs:  Christina A. Neal, David J. Schneider, USA and Olga Girina, Russia

14:30 – 14:45  
MINI-ULTRAVIOLET SPECTROMETER (MUSE) AND THERMAL INFRARED IMAGE OBSERVATIONS OF ALASKAN VOLCANOES: COMPARISONS TO ASTER SATELLITE DATA  
David Schneider, Yvonne Branan, Courtney Kearney and Rick Wessels

14:45 – 15:00  
DETECTING SMALL GEOTHERMAL FEATURES AT NORTHERN PACIFIC VOLCANOES USING TERRA SATELLITE ASTER THERMAL INFRARED DATA  
Rick Wessels, Sergey Senyukov, Anastasia Tranbenkova, and Dave Schneider

15:00 – 15:15  
THE POTENTIAL OF INSAR FOR VOLCANO DEFORMATION MONITORING: TEN YEARS OF ERS OBSERVATIONS AT MT. ETNA, ITALY  
Paul Lundgren, F. Casu, M. Manzo, A. Pepe, P. Berardino, E. Sansosti, and R. Lanari

15:15 – 15:30  
KAMCHATKAN VOLCANIC ERUPTION RESPONSE TEAM (KVERT) PROJECT IN 2002-2004  
Olga A. Girina, Sergey L. Senyukov, Christina A. Neal

15:30 – 15:45  
PROSPECTS OF VOLCANIC ACTIVITY MONITORING IN THE KURIL ISLANDS  
A.V. Rybin, Y.V. Karagusov, P. E. Izbekov, N.S. Terentyev, V.B. Guryanov and R.V. Zharkov

15:45 – 16:00  
AVACHINSKY VOLCANO GEOTHERMAL RESERVOIR BASED ON FUMAROLES ACTIVITY AND SEISMOLOGICAL NETWORK DATA  
V.A. Drozmin, I.K. Dubrovskaya, A.V. Kiryukhin, E.V. Chernykh, S.L. Senyukov and G.O. Ivanysko

16:00 - 16:30  
Coffee Break

16:30 - 16:45  
THERMAL UNREST AT KAMCHATKAN VOLCANOES: FIVE YEARS OF MODIS OBSERVATIONS  
Robert Wright

16:45 – 17:00  
RETROSPECTIVE INSIGHT ON TWINS VOLCANOES VRANGEL (ALASKA) AND USHKOVSKY (KAMCHATKA): THEIR RECENT ACTIVITY AND VOLCANO-GLACIAL INTERACTION.  
C. Benson, Ya. Muravyev

17:00 – 17:30  
Poster Session
MENDELEEV VOLCANO: HISTORY OF DEVELOPMENT AND RECENT STATE (KUNASHIR ISL., KURIL ISLANDS)

ANALYSIS OF COMPOSITION AND CHRONOLOGY OF DOME EMIPLACEMENT AT BLACK PEAK, ALASKA UTILIZING ASTER REMOTE SENSING DATA AND FIELD-BASED STUDIES

PRODUCTS OF HYDROVOLCANISM IN OKMOK CALDERA, ALASKA, U.S. A.
Leslie D. Almberg, James E. Begét

ASSESSMENT OF VOLCANIC HAZARD FROM AVACHINSKY VOLCANO, KAMCHATKA, RUSSIA

TEPHROCHRONOLOGY AS A TOOL FOR DATING FLANK ERUPTIONS ON KLIUCHEVSKOI VOLCANO, KAMCHATKA, RUSSIA
Braitseva O.A.; Ponomareva V.V.; Melekestsev I.V.

40AR/39AR GEOCHRONOLOGY OF KHAPITSA PLATEAU AND STUDYONAYA RIVER BASALTS AND BASALTIC ANDESITES IN CENTRAL KAMCHATKA DEPRESSION, KAMCHATKA, RUSSIA
Julie A Calkins

VOLCANIC ACTIVITY AT SEDANKINSKY DOL LAVA FIELD, SREDINNY RIDGE DURING THE HOLOCENE (KAMCHATKA, RUSSIA)
Dirksen O.V., Bazanova L.I., Pletchov P.Yu., Portnyagin M.V. and Bychkov K.A.

PALEOENVIRONMENTAL EFFECT AND PLANTS RECOVERING AFTER 7600 BP CATASTROPHIC KURILE LAKE CALDERA-FORMING ERUPTION, KAMCHATKA.
Dirksen V.G., Dirksen O.V.

ERUPTION OF SHIVELUCH VOLCANO IN 2001-2004, KAMCHATKA.

THERMAL INFRARED SPACE-BASED SO2 DETECTION: A NEW TECHNIQUE FOR THE ALASKA VOLCANO OBSERVATORY
Courtney Kearney, Jon Dehn and Ken Dean.

THE LAVA FLOWS OF BEZYMIIANNY VOLCANO, KAMCHATKA.
Vladimir M. Ladygin, Olga A. Girina, Julia V. Frolova and Igor A. Kondrashov

LIFE ON THE EDGE: HOLOCENE HISTORY AND TEPHRA STRATIGRAPHY OF TANGINAK ANCHORAGE, SITKALIDAK ISLAND, KODIAK ARCHIPELAGO, ALASKA
Elizabeth Mahrt and Joanne Bourgeois.
VOLCANIC TREMOR AND ITS USE IN ESTIMATING ERUPTION PARAMETERS
Stephen R. McNutt

REMOTE SENSING IN APPLICATION TO GEOMORPHOLOGICAL STUDY OF MUTNOVSKY VOLCANO
Dmitry V. Melnikov.

RECENT VOLCANIC ACTIVITY IN HOKKAIDO, JAPAN AND MONITORING BY SAPPORO DMO, JMA
Jun’ichi Miyamura

1817 INTRACALDERA ERUPTION OF OKMOK VOLCANO, ALASKA: TRANSITION FROM HYDROMAGMATIC TO STROMBOLIAN ACTIVITY
Christina Neal and Jim Beget

GEOTHERMAL ACTIVITY OF TOKACHIDAKE VOLCANO, CENTRAL HOKKAIDO, JAPAN
Noritoshi Okazaki, Makoto Tamura, Satoshi Ishimaru

Lara Owens, David Eggler and Barry Voight.

NEW DATA ON HOLOCENE MONOGENETIC VOLCANISM OF THE NORTHERN KAMCHATKA: AGES AND SPACE DISTRIBUTION.
Maria M. Pevzner

STROMBOLIAN CALDERA-FORMING ERUPTIONS IN KAMCHATKA
Oleg B. Selyangin

RE­LA­TING THERMAL ANOMALIES OBSERVED IN SATEL­LITE DATA TO THE GROWTH OF BEZYMIA­N­NY VOLCANO’S LAVA­DOME DURING THE FALL 2000 ERUPTION.
Andrea M. Steffke, Jonathan Dehn and Ken Dean

THE MECHANISM OF GENERATION OF AUTO FLUCTUATIONS AT VOLCANO KARYMSKY EXPLOSIONS
Storcheus A.V., Ozerov A.Yu., Firstov P.P., Manevich A.

EVOLUTION OF HISTORIC MAGMA SYSTEM OF HOKKAIDO-KOMAGATAKE VOLCANO, JAPAN: IMPLICATIONS FOR STRUCTURE AND ERUPTION PROCESSES OF MUSH CHAMBER
Ryo Takahashi, Mitsuhiro Yoshimoto, Mitsuhiro Nakagawa

GEOPHYSICAL OBSERVATIONS IN TARUMAI VOLCANO, HOKKAIDO, JAPAN
Makoto Tamura
CALIPSO BOREHOLE INSTRUMENTATION AT A BEZYMIIANNY-LIKE ANDESITE VOLCANO: CALIPSO PROJECT AT SOUFIERE HILLS VOLCANO, MONTSERRAT
B Voight and CALIPSO team (GS Mattioli, SR Young, AT Linde, IS Sacks, PE Malin, E Shalev, D Hidayat, D Elsworth, C Widiwijayanti, V Miller, RSJ Sparks, J Neuberg, V Bass, P Dunkley, M Edmonds, R Herd, A Jolly, G Norton, T Syers, G Thompson, P Williams)

14C TIMING OF VOLCANIC AND PALEOSEISMIC EVENTS IN KAMCHATKA
N.E. Zaretskaya

17:30 – 18:00 Open Discussion

18:00 – 18:30 Film about Kamchatkan volcanoes

August 23, Monday

09:00 - 18:00 SESSION: GEODYNAMICS, TECTONICS, GEOCHEMISTRY, PETROLOGY AND MAGMA-FORMATION

Chairs: Evgenii I. Gordeev, Russia and Minoru Kasahara, Japan

Oral Session

09:00 – 09:15 GEODYNAMICS OF VOLCANISM OF THE KAMCHATKA-ALEUTIAN JUNCTION
Gennadii P. Avdeiko and Aida A. Palueva

09:15 – 09:30 TECTONICS, VOLCANISM AND SEISMICITY: ISSUES OF PARAGENETIC RELATION
Boris V. Ivanov and Vladimir A. Shirokov

09:30 – 09:45 THE PLATE SUBDUCTION UNDER KAMCHATKA: "SEISMIC" SPEED, SLOW EVENTS, DEFORMATION VELOCITY
E.I. Gordeev, V.M. Pavlov, V.E. Levin, V.F. Bakhtiarov

09:45 – 10:00 ETUDES OF THE ROTATIONAL CONCEPTION OF WESTERN-PACIFIC TRANSITION ZONE DEVELOPMENT IN CENOZOIC
Alexander V. Koloskov and Gennadiy I. Anosov.

10:00 – 10:15 SUBDUCTION-ZONE BEHAVIOR BACKED OUT OF TSUNAMI DEPOSITS, KAMCHATKA, FAR EASTERN RUSSIA
Joanne Bourgeois, Vasily Titov and Tanya Pinegina.
10:15 – 10:30 SEISMOTECTONIC PATTERN, SOURCE REGION OF VOLCANISM AND ONSET OF A NEW SUBDUCTION CYCLE IN THE KURILE ISLANDS AND ALEUTIAN ISLANDS REGION
Aleš Špičák, Václav Hanuš and Jiří Vaněk

10:30 – 11:00 Coffee Break

11:00 – 11:15 THE 2003 TOKACHI-OKI EARTHQUAKE, OFF SOUTHEASTERN HOKKAIDO, JAPAN: SEISMIC ACTIVITIES FROM THE FORMER 1952 TOKACHI-OKI EARTHQUAKE, FORESHOCK, MAINSHOCK, AFTERSHOCKS, AND TRIGGERED EARTHQUAKES
Minoru Kasahara, Hiroaki Takahashi

11:15 – 11:30 NON-SUBDUCTION SEISMICITY IN KAMCHATKA: FIRST DATA ON PALEOSEISMOLOGY OF THE EAST KAMCHATKA FAULT ZONE

11:30 – 11:45 STRUCTURE OF VELOCITY HETEROGENEITIES AND THEIR INTERCONNECTION WITH GEODYNAMICS OF TRANSITION ZONE (KAMCHATKA)
Nizkous I., Kissling E., Gontovaya L. and Levina V.

11:45 – 12:00 STUDIES OF DUCTILE DEFORMATION ZONE IN THE EARTH CRUST OF THE KARYMSKY VOLCANIC CENTER (EASTERN KAMCHATKA) ACCORDING TO SEISMOLOGICAL DATA
V.V. Ivanov

12:00 – 12:15 SILENT EARTHQUAKES AND THE POPOCATEPETL VOLCANO UNREST
Vladimir Kostoglodov, Carlos M. Valdés González and Luis Quintanar

12:15 – 12:30 COSEISMIC AND SHORT TERM AFTERSLIP OF THE 2003 TOKACHI OKI EARTHQUAKE INFERRED FROM KINEMATIC GPS ANALYSIS
Meilano Irwan, Fumiaki Kimata, Naoyuki Fujii, Kazuro Hirahara, Takeshi Sagiya and Atsushi Yamigawa

12:30 – 12:45 TIME DEPENDENT MODEL OF HUGE DIKE INTRUSION AT THE 2000 MIYAKE KOZU VOLCANIC EVENTS, BASED ON GROUD DEFORMATION BY GPS MEASUREMENTS
Masayuki Murase and Fumiaki Kimata

12:45 – 13:00 RECENT CRUST MOVEMENTS AND THEIR RELATION TO THE SEISMIC AND VOLCANIC ACTIVITIES ON THE KAMCHATKA PENINSULA.
Levin V.Ye., Maguskin M.A., Bakhtiarov V.F., Pavlov V.M., Prilepin M.T. and Titkov N.N.

13:00 – 14:30 Lunch

Chairs: Alexander V. Koloskov, Russia and John Eichelberger, USA
14:30 – 14:45  IONOSPHERIC PERTURBATION BY THE SURFACE WAVE OF THE 2003 TOKACHI-OKI EQS (MJMA=8.0) DETECTED USING A DENSE GPS ARRAY Kosuke Heki

14:45 – 15:00  VOLCANISM AND STRUCTURE OF SOUTH-WESTERN KAMCHATKA Popruzhenko S.V. and Aprelkov S.E.

15:00 – 15:15  BEHAVIOR OF STORED MAGMA IN ARC CRUST John Eichelberger, Pavel Izbekov, and Brandon Browne


15:30 – 15:45  RAPID AND TIME-VARIABLE INFLATION OF OKMOK VOLCANO, ALEUTIAN ARC Jeffrey T. Freymueller, Thomas Fournier, Yousuke Miyagi and Fumiaki Kimata

15:45 – 16:00  ARC TO OCEANIC MAGMATISM TRANSITION ALONG THE CENTRAL KAMCHATKA DEPRESSION Maxim Portnyagin, Kaj Hoernle and Gennady Avdeiko

16:00 - 16:30  Coffee Break

16:30 – 16:45  ORIGIN OF VARIOUS TYPES OF VOLCANIC KURILE ROCKS FROM A UNIFORM SOURCE. Olga A. Khleborodova

16:45 – 17:00  HETEROGENEITY OF MANTLE SOURCE OF LATER PLEISTOCENE-HOLOCENE MONOGENETIC VOLCANISM IN SREDINNY RIDGE OF KAMCHATKA. Volynets A.O. and Churikova T.G.

17:00 – 17:30  Poster Session


MAGMA COMPOSITIONS AND PECULIARITY OF CRYSTALLISATION IN ANDESITES OF BEZYMANNY, SHIVELUCH,AVACHINSKII AND KARYMSKY VOLCANOES (KAMCHATKA) (ACCORDING TO THE DATA ON STUDY OF MELT INCLUSIONS) Bogoyavlenskaya G.E., Naumov V.B., Tolstykh M.L. and Khubunaya S.A.
KINEMATICS EVOLUTION OF FLANK AREA OF THE OCEAN-CONTINENT TRANSITIONAL ZONE DURING LATE MESOZOIC – LATE PLEISTOCENE.
O.N. Egorov

GEOLOGICAL STRUCTURE AND PETROCHEMICAL FEATURES OF MAGNESIAL BASALTS OF KHARCHINSKY VOLCANO, KAMCHATKA.
N.V. Gorbach and S.A. Khubunaya

THE GEOLOGICAL-PETROLOGICAL MODEL OF THE KARYMSKY VOLCANIC CENTER
B.V. Ivanov

SEISMOTECTONICS AND EVOLUTION OF SOLDATSKAYA BAY (KAMCHATKA) DURING THE HOLOCENE
E. A. Kravchynovskaya, T.K. Pinegina, Joanne Bourgeois and Kevin Pedoja

PRINCIPLE OF THE EARTH'S GRAVITATIONAL ENERGY MINIMIZATION AND THE MECHANISMS OF ITS EMBODIMENT
Kuznetsov V.V.

POLOVINKA-ODNOBOKAYA-AKADEMII NAUK CALDERA COMPLEX, KAMCHATKA: STRUCTURAL POSITION AND MAGMATIC EVOLUTION
Vladimir L. Leonov and Yelena N. Grib

TEHUANTEPEC RIDGE FORMATION AND CHIAPAS VOLCANIC GAP
M. Manea, V.C. Manea, V. Kostoglodov and L. Ferrari

THE THERMAL STRUCTURE BENEATH SOUTHERN KAMCHATKA INFERRRED FROM NUMERICAL MODELS
V.C. Manea, M. Manea, V. Kostoglodov and G. Sewell

EFFUSIVE ERUPTIONS OF SILICIC MAGMAS AND MECHANISM OF THE DEEP DEGASSING OF AQUEOUS MAGMAS.
Alexander P. Maximov.

GRAVITY AND GEODYNAMIC MODELING OF THE LITHOSPHERE IN THE TRANSITION AREA BETWEEN AREA OF THE PHILIPPINE PLATE AND THE ASIAN CONTINENT
Maslov L.A., Gil’manova G.Z.

THE PLATE BOUNDARY OBSERVATORY IN ALASKA AND THE ALEUTIAN ARC.
Dave Mencin, Ben Pauk, Tom Murray, John Power, Mike Jackson

RAPID INFLATION OF OKMOK CALDERA, ALASKA, DETECTED BY GPS CAMPAIGNS 2000-2003
Yousuke Miyagi, Jeffrey T. Freymueller, Fumiaki Kimata, Toshiya Sato and Doerte Mann.
NEOTECTONICS NEAR THE NW CORNER OF THE PACIFIC PLATE: MARINE TERRACES ON OZERNOI AND KAMCHATSKII PENINSULAS, KAMCHATKA, RUSSIA
Kevin Pedoja, Joanne Bourgeois and Tatiana Pinegina

HOLOCENE VERTICAL MOVEMENTS OF THE KAMCHATKA PACIFIC COAST: GEOMORPHOLOGIC RECONSTRUCTION AND RELATION TO SEISMOTECTONIC PROCESSES
Tatiana Pinegina and Joanne Bourgeois

THE INITIAL PLINIAN BASIC ANDESITE ERUPTIONS OF THE YOUNG CONE, AVACHINSKY VOLCANO (KAMCHATKA)
M.Yu. Puzankov, L.I. Bazanova, A.P. Maximov and S.V. Moskalyova

RADIOACTIVE ELEMENTS IN HYDROTHERMAL SYSTEMS OF KAMCHATKA
Puzankov Yu.M., Bobrov V.A., Rashidov V.A., Puzankov M.Yu. and Andreev V.I.

RADIOACTIVE ELEMENTS AS INDICATORS OF CRUSTAL TYPES FORMING ON THE BASE AND IN THE FRAME OF ACTIVE CONTINENTAL MARGIN
Puzankov Yu.M. and Stefanov Yu.M.

ON PROBABLE GAS-HYDROTHERMAL ACTIVITY OF THE SUBMARINE VOLCANO KRILATKA (KURILE ISLAND ARC)
Rashidov V.A. and Bondarenko V.I.

AFTERSHOCKS OF DEEP EARTHQUAKES IN THE KAMCHATKA-ALEUTIAN JUNCTION ZONE
Vadim A. Saltykov

QUATERNARY THRUSTS IN THE KAMCHATKA-ALEUTIAN JUNCTION ZONE
Dmitry Saveliev

THE SHOWES OF ALKALINE MAGMATISM IN ENVIRONS OF AVACHINSKAJA BAY

INITIAL RESULTS OF GPS MEASUREMENT IN PRIMORSKI KRAI

RAPID NEURONET INVERSION OF 2D MAGNETOTELLURIC DATA FOR MONITORING OF COMPLEX GEOELECTRICAL SECTIONS
M.I. Shimelevich, E.A. Obornev, S. Gavryushov

TESTING PREDICTIONS OF THE DEGREE OF PLATE COUPLING IN THE KURIL SUBDUCTION ZONE
POSTSEISMIC CRUSTAL DEFORMATION ASSOCIATED WITH THE 2003 TOKACHI-OKI EARTHQUAKE (MJMA8.0), OFF SOUTHEASTERN HOKKAIDO, JAPAN
Hiroaki Takahashi, Shigeru Nakao, Noritoshi Okazaki, Takeshi Sagiya, Manabu Hashimoto, Teruyuki Kato, Takeshi Matsushima and Minoru Kasahara.

PHYSICO-CHEMICAL PARAMETERS OF THE MAGMA CHAMBER UNDER KIZIMEN VOLCANO (KAMCHATKA)
Sergey V. Trusov and Pavel Yu. Pletchov

FEATURES OF A STRUCTURE AND DEVELOPMENT NORTHWEST MARGIN OF THE PACIFIC OCEAN MOBILE BELT AS A GLOBAL ZONE OF SHEAR DEFORMATIONS
T.Ju. Tveritinova

SURFACE DEFORMATIONS IN SAKHALIN FROM GPS DATA

STRESS TRANSFER BEFORE AND DURING THE 1996 KARYMSKY-AKADEMIA NAUK ERUPTION
T. R. Walter and F. Amelung

17:30 – 18:00 Open Discussion
18:00 – 18:30 Film about Kamchatkan volcanoes

Thursday, August 26

Session: FAR EAST AND EASTERN SIBERIA SEISMICITY PROBLEMS

Oral Session

Chairs: V.N. Chebrov and A.A. Gusev, Russia

09:00 – 09:15 LONG-TERM EARTHQUAKE PREDICTION FOR THE KURIL-KAMCHATKA ARC FOR 2004-2008 AND RETROSPECTIVE PREDICTION FOR SEPTEMBER 25, 2003 HOKKAIDO EARTHQUAKE, M = 8.1
Fedotov S.A., Solomatin A.V., Chernyshev S.D.

09:15 – 09:30 ACTIVE GEOLOGICAL PROCESSES CONTROLLING SEISMISITY IN NORTHEAST RUSSIA
V.S. Imaev, L.P. Imaeva, B.M. Kozmin
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<td>09:30 – 09:45</td>
<td>SEISMIC FOCAL ZONE AS A SYSTEM OF DEEP FAULTS AT THE BOUNDARY OF CONTINENTAL AND OCEANIC STRUCTURES</td>
<td>R.Z. Tarakanov</td>
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<td>09:45 – 10:00</td>
<td>SPATIO-TEMPORAL AND ENERGY CHARACTERISTICS OF THE SYSTEMS OF SEISMOGENERATING CRUSTAL FAULTS AND MANTLE IN THE JUNCTURE AREA OF THE PACIFIC AND CENTRAL-ASIAN MOBILE BELTS</td>
<td>V. A. Bormotov</td>
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<td>10:00 – 10:15</td>
<td>STICK-SLIP IN THE CRUSTAL FAULTS AS A SELF-EXCITING WAVE PROCESS</td>
<td>V.G. Bykov</td>
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<td>10:15 – 10:30</td>
<td>VORTEX-RELATED AND EARTHQUAKES</td>
<td>A.V. Vikulin</td>
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<td>10:30 – 11:00</td>
<td>Coffee Break</td>
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<td>11:00 – 11:15</td>
<td>GEOMECHANICS OF EARTHQUAKES</td>
<td>S.V. Goldin</td>
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<td>11:15 – 11:30</td>
<td>A NEW TECHNIQUE FOR SEISMOGRAM CALCULATION IN A LAYERED HALF-SPACE, AS APPLIED TO SEISMIC MOMENT TENSOR INVERSIONS</td>
<td>V.M. Pavlov</td>
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<td>11:30 – 11:45</td>
<td>ANISOTROPY AND TEMPORAL VARIATION OF FAST S-WAVE POLARIZATION AZIMUTHS BENEATH SOUTH KAMCHATKA</td>
<td>Margarita Luneva, Jung Mo Lee</td>
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<td>11:45 – 12:00</td>
<td>NON DOUBLE COUPLE SEISMIC SOURCES</td>
<td>Yunga S., Lutikov A.</td>
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<td>12:00 – 12:15</td>
<td>SEISMICITY INDICES OF ACTIV FAULTS OF THE LITHOSPHERE AND THE PROBLEM OF EARTHQUAKE PREDICTION</td>
<td>S.I. Sherman, V.A. Savitsky</td>
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<td>12:15 – 12:30</td>
<td>HF SEISMIC ATTENUATION IN KINKI REGION, JAPAN (PHILIPPINE SEA SUBDUCTION ZONE)</td>
<td>A. Petukhin, T. Kagawa</td>
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<td>12:30 – 12:45</td>
<td>VIBROSEISMIC MONITORING ON SOUTH BAIKAL RESEARCH POLIGON</td>
<td>Tatkov G.I., Tubanov T.A., Bazarov A.D.</td>
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<tr>
<td>12:45 – 13:00</td>
<td>ON THE WAVE NATURE OF SEISMODISLOCATIONS: RESONANCE MODEL (AS EXEMPLIFIED FROM EAST ASIA)</td>
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13:00 – 14:30  
Lunch

Chairs: V.G. Bykov and B.V. Levin

14:30 – 14:45  
EFFICIENCY OF KAMCHATKAN REGIONAL SEISMIC NETWORK
V.N.Chebrov

14:45 – 15:00  
SEISMIC MONITORING OF STRONG EARTHQUAKES SOURCE AREAS
Lutikov A.I.

15:00 – 15:15  
MONITORING OF SEISMICITY PARAMETERS IN KAMCHATKA
Saltykov V., Kravchenko N.

15:15 – 15:30  
CHARACTERISTICS OF THE COOPERATION OF GEOPHYSICAL PROCESSES ON STAGES OF THE PREPARATION OF STRONG EARTHQUAKES
Kopylova G.N.

15:30 – 15:45  
VARIATIONS OF GEOACOUSTIC EMISSION LEVEL IN THE DEEP WELL AND THEIR CONNECTION WITH SEISMIC ACTIVITY IN THE SOUTH PART OF KAMCHATKA
V.A. Gavrilov, Yu.V. Morozova and A.V. Storcheus

15:45 – 16:00  
NECESSITY OF LOCAL SEISMIC MONITORING IN THE AREA OF MUTNOVSKY GEOPOWER PLANTS
Yu. Kugaenko, V. Chebrov

16:00 – 16:30  
Coffee Break

16:30 – 17:00  
Poster session

ENGINEERING-SEISMOOMETRIC SERVICE IN PRIBAIKALYE
Chernykh E.N., Pavlenov V.A.

DETERMINATION OF LOCATION OF VIBRATION SOURCES BY THE AMPLITUDE METHOD
Chernykh E.N., Tabulevich V.N.

GEOTHERMAL POTENTIAL IN SOUTHERN PART OF EAST SIBERIA
R.P.Dorofeeva, S.V.Lysak

ABOUT KAMCHATKAN BRANCH OF FEDERAL CENTER OF EQ PREDICTION
Gordeev Ye.I., Saltykov V.A., Serafimova Yu.K.

ON THE POSSIBILITY OF RELIABLE FORECAST FOR LARGE EARTHQUAKES
V.M.Ivshin, E.V. Ivshina
SEISMOTECTONIC MANIFESTATIONS IN THE SOUTHEASTERN CHERSKY RANGE ZONE AND ITS CONTINUATION ON TO KAMCHATKA (NORTHEAST YAKUTIA AND NORTHERN PRIOKHOTYE)
Koz’mín B.M., Petrov A.F., Shibaev S.V., Timirshin K.V.

PLEISTOCENE-HOLOCENE DISLOCATIONS AND ACTIVITY OF THE CONTINENTAL CRUST IN MID-LOWER PRIAMURYE.
A.A. Kokovkin

APPLICATION OF ONE-WAY VARIANCE ANALYSIS FOR DETECTING SEISMIC WAVES REFLECTED FROM FREE SURFACE
A.V. Konovalov, A.I. Ivashchenko

THE ENERGETIC CLASS OF KURIL AND SAKHALIN EARTHQUAKES DEPENDING ON THE NEAR-SURFACE GEOLOGICAL AND SOIL CONDITIONS BENEATH SEISMIC STATIONS
L.S. Oskorbin

ESTIMATION OF Q-VALUE IN KINKI REGION, JAPAN, BY ELIMINATION OF ELASTIC ATTENUATION EFFECT USING RAY THEORY APPROXIMATION IN 3-D VELOCITY MODEL
A. Petukhin, K. Irikura, T.Kagawa, Sh. Ohmi

UNDERGROUND WATER RESPONSE TO SEISMIC ACTIVITY IN CASE OF PINACHEVO SPRINGS, KAMCHATKA.
Ryabinin G.V., Khatkevich Yu.M.

IN SITU EVALUATION OF VISCOELASTIC MODEL IN THE NEFTEGORSK EARTHQUAKE OF 1995 EPICENTER
Saprygin S.M., Senachin V.N.

THE MECHANISM OF SEISMIC EVENTS
V.M.Sharafutdinov, S.V.Mishin, L.V.Sharafutdinova

STANDARD SEISMIC ESTIMATES
V.M.Sharafutdinov, S.V.Mishin, L.V.Sharafutdinova

GEOMAGNETIC VARIATIONS CAUSED BY TIDAL ACTION.
Sheremetyeva O.V., Krolevets A.N.

VELOCITY MODELS AND HODOGRAPHS OF P AND S-P–SWAVES FOR THE FAR EAST REGION
R.Z. Tarakanov

ON THE UPPER MANTLE DISCONTINUITIES (410 KM AND 660 KM) RELATED TO POLYMORPHIC TRANSFORMATIONS
R.Z. Tarakanov

THE SEISMICITY OF MIDDLE BAIKAL ACCORDING TO LOCAL
NETWORK OF GEOPHYSICAL MONITORING
Tatkov G.I., Tubanov T.A., Urban N.A.

PREDICTION OF SEISMICALLY HAZARDOUS PERIODS IN THE REGIONS OF KAMCHATKA AND SOUTH KURILE ISLANDS ON THE BASIS OF PERIODICITIES OF LARGE SHALLOW-FOCUS EARTHQUAKE OCCURRENCES
Tikhonov I.N.

A METHOD OF LARGE SHALLOW-FOCUS EARTHQUAKE PERIODICITIES REVEALING AND OF PREDICTION SEISMICALLY HAZARDOUS TIME INTERVALS
Tikhonov I.N.

17:00 – 17:30  Open discussion