## GEOLOGICAL MAP

## (KYRGYZ RANGE AND CHU BASIN) KYRGYZSTAN Scale 1: 200 000

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2004 Free use 74°20'0"E

Source: N.B. Baeva, 1999; S.A. Chekina et al., 1975, 1983; A.A. Cherepanov,1963; V.V. Galanin et al. 1982; V.A. Grishchenko, 1965; F.N. Judakhin et al., 1968; S.E. Khristov, 1986; T.D. L 'yanov, 1997; V.G. Morozov, 1986; A.D. Pavlenkin et al., 1973; V.I. Rubtsov, 1988; I.L. Zakharov, 1981, 1992 & present researches

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	Quaternary faults Neotectonic faults		Conglomerate Gabbro	*	Diorite Granodiorite	<u>.</u>	Orientation of bedding planes Orientation of foliation planes	U/Pb 283	U/Pb age Cross Section
	Neotectonic thrusts	(	Gabbro-diorite	+ . + . + . + .	Granite	+	Orientation of overturned planes		Rivers
	Paleozoic faults	x x x x	Monzonite		Leucocratic granite	ø	Algae		Small rivers
<b>-</b>	Paleozoic thrusts	, A A A	Nepheline syenite	+ : + : + : + : + : +	Granite porphyry	\$ <b>.</b>	Flora		Tributaries
	Minor Boundary					<b>.</b>	Invertebrate		Altitude-400
	Basement isodepth lines (km)					∀.	Vertebrate		
						$\nabla_{\!$	Vertebrate (probable location)		

## Legend

H	lolocene deposits							
	Middle Pleistocene deposits  Upper Pleistocene deposits							
	opper Fielstocene deposits							
S	Sharpyldak Formation, Late Pliocene - Eearly Pleistocene (N -Q ₁šr). Grey conglomerates, gritstones, sandstones							
С	hu Formation, Eearly Pliocene (N <sub>2</sub> ču). Motley mudstone, and grey sandstones, gritstones							
S	Saryagach Formation, Late Miocene (N şg). Sandstones, motley siltstones							
D	)jel'dysu Formation, Miocene (N ̞βj). Mudstone, silts, sandstones							
K	Kyrgyz Redstone Formation, Paleocene-Miocene (E -Ŋ k̞g). Limestones, clay, sandstones and conglomerates							
S	Suluterek Formation, Paleocene-Eocene (E <sub>1-</sub> st). Limestones, marls, clay with conglomerate beds							
L	ATE PALEOZOIC STRUCTURAL COMPLEX							
S	Sandyk Formation, Late Carboniferous - Eearly Permian(μ,Σξ,ξ C <sub>3</sub> -P₁s). Monzonite, nepheline-syenite, syenite, quartz-syenite							
D	ojanbulak Formation, Middle Carboniferous (C ฝุb). Rhyolite tuffs, sandstones, limestones							
K	Kegaty Formation, Eearly – Middle Carboniferous (C <sub>1-2</sub> kg). Limestones, andesitic tuffs, dacites, rhyolites, siltstones,							
M	/linteke Formation, Eearly Carboniferous (C m̞n). Motley dacitic tuffs, rhyolites, siltstones and limestones							
T	'orsu Formation, Late part, Late Devonian - Eearly Carboniferous (D -Ç tӷ ) <sub>2</sub> Reddish siltstones and sandstones							
T	'orsu Formation, Eearly part, Late Devonian - Eearly Carboniferous (D -Ç tқ ). <sub>1</sub> Sandstones, gritstones, conglomerates							
D	jardysu Formation, Late Devonian (D ds). Sandstones, siltstones and limestones							
A	ral Formation, Middle - Late Devonian (D <sub>2-3</sub> ar). Basalts, andesite-basalts and tuffs							
A	ksu Formation, Eearly - Middle Devonian (D <sub>1-</sub> a̞s). Rhyolites, dacitic lavas and tuffs							
A	ksu Formation, intrusive phase, Early - Middle Devonian(γπ D <sub>1-2</sub> a). Granitic and granodioritic porphyries							
S	Sugandy Formation, Eearly Devonian (D sn). Basalts, andesites and tuffs							
K	Kolbashy Formation, Eearly?Devonian (D ʔkb). Trachytes, leucite basalts, tuffs							
L	ATE ORDOVICIAN – SILURIAN STRUCTURAL COMPLEX							
A	Alama Formation, Late Silurian (I γ S <sub>2</sub> a). Leucocratic granite, granite porphyries							
Is	ssykata Formation,  phase 3, Late Ordovician (  γ <sub>3</sub> Οᢋਂ). Granites							
Is	ssykata Formation, phase 2, Late Ordovician(δγ,γ <sub>2</sub> Ο <sub>3</sub> i). Granodiorites, granites							
Is	ssykata Formation, phase 1, Late Ordovician(νδ,δ <sub>1</sub> Ο <sub>3</sub> i). Gabbro-diorites, diorites, quartz-diorites							
S	Buusamyr Formation, phase 2, Late Ordovician(γ <sub>2</sub> Ο <sub>3</sub> s). Granites							
S	Buusamyr Formation, phase 1, Late Ordovician(δγ,γ <sub>1</sub> Ο <sub>3</sub> s). Granodiorites, granites							
D	)jartash Formation, Late Ordovician (O ɡ̞ ž). Limestones, sandstones and gritstones							
C	Chonkaindy Formation, Late Ordovician(O <sub>3</sub> čk). Sandstones, siltstones and shales							
K	Karabalta Formation, Late Ordovician (O kื่b). Sandstones, siltstones and shales							
	Karamoynok Formation, Late Ordovician (O ϗr). Conglomerates, sandstones							
	lelange, Late Ordovician (m O ). Serpentinites, blocks of gabbro, limestones, schists							
	ARLY – MIDDLE ORDOVICIAN STRUCTURAL COMPLEX							
K	αzyk Formation, Middle Ordovician ( ν,δ O₂k). Gabbro, diorites							
	Vestsuek Formation, Eearly - Middle Ordovician (O <sub>1.</sub> ws). Sandstones, siltstones, andesitic and dacitic tuffs							
A	ktoy Formation, Eearly - Middle Ordovician (O معلية). Siltstones, cherts, andesitic and dacitic tuffs							
D D	olon Formation, Eearly Ordovician (O ຝ়l). Olistostrome							
c	AMBRIAN – TREMADOCIAN STRUCTURAL COMPLEX							
	lamedin Formation, phase 3, Early Ordovician(γ <sub>3</sub> Ο <sub>1</sub> a). Granites							
	lamedin Formation, phase 2, Early Ordovician ( δγ,γ <sub>2</sub> Ο <sub>1</sub> a). Granodiorites, granites							
	lamedin Formation, phase 1, Early Ordovician ( δ,qδ <sub>1</sub> Ο <sub>1</sub> a). Diorites, quartz-diorites							
	ojelamysh Formation, Eearly Ordovician (O þj). Conglomerates, gritstones, sandstones							
	Karadjorgo Formation, Late Cambrian - Early Ordovician ( <b>E</b> <sub>3</sub> –O <sub>1</sub> kd). Chery and green tuff siltstone, cherts, andesitic tuffs							
	Shyrgyi Formation,  Cambrian - Eearly Ordovician  (  & D <sub>1</sub> šr). Andesites, tuffs							
	'oraygyr Formation, Cambrian – Eearly Ordovician ( <b>ɛ-</b> O ̞tr). Limestones, dolomites, marbles, shales							
	Kentor Formation, Cambrian – Eearly ? Ordovician ( <b>ε</b> -O i²kt). Subalkaline basalts, tuffs, cherts							
	(arakatty Formation, Cambrian ( <b>S</b> kr). Basalts, cherts .ATE PROTEROZOIC COMPLEX							
	Karakorum Formation, Late Riphean (R ̞k̞r). Aporhyolite and apodacite schists							
	OIKES Parmian dika Formation ( δπ v D) Lamprophyra							
	ermian dike Formation ( δπ,χ P). Lamprophyre Sandyk Formation, Late Carboniferous - Farly Permian ( ξπ.C -P.s). Svenite porphyries							
	andyk Formation, Late Carboniferous - Early Permian(ξπ C <sub>3</sub> -P <sub>1</sub> s). Syenite porphyries skey Formation, intrusive phase. Farly - Middle Dovenian (σπ D. ες). Granite porphyries, guartz porphyries							
	ksu Formation, intrusive phase, Early - Middle Devonian(γπ D <sub>1-2</sub> a). Granite porphyries, quartz porphyries Sugandy Formation, intrusive phase, Early Devonian(δπ D₁s). Diorite porphyrites							
	Kolbashy Formation, intrusive phase, Early ? Devonian ( μπ D <sub>1</sub> ?k). Monzonite porphyries							