QUATERNARY REMOVED GEOLOGICAL MAP

(KYRGYZ RANGE AND CHU BASIN)

KYRGYZSTAN

Scale 1: 200 000

SNF, Project No 7KSPJ065518 http://www.kyrgyzstan.ethz.ch

2004 Free use 74°0'0"E 74°20'0"E 74°40'0"E 74°40'0"E 74°20'0"E **Kilometers**

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 Neotectonic thrusts Paleozoic faults Paleozoic thrusts 	X X X X X	Conglomerate Gabbro Gabbro-diorite Monzonite Nepheline syenite	* * * * * * * * * * * * * * * * * * *	Diorite Granodiorite Granite Leucocratic granite Granite porphyry	± ↓ .*	Orientation of bedding planes Orientation of foliation planes Orientation of overturned planes Algae Flora	283 U/Pb •	U/Pb age Cross Section Rivers Small rivers Tributaries
Minor Boundary Basement isodepth lines (km)					⊚. ♥. ♥ _°	Invertebrate Vertebrate Vertebrate (probable location)		Altitude-400

Legend

Sharpyldak Formation, Late Pliocene - Eearly Pleistocene (N -Q ₁šr). Grey conglomerates, gritstones, sandstones Chu Formation, Eearly Pliocene (N ₂ču). Motley mudstone, and grey sandstones, gritstones Saryagach Formation, Late Miocene (N şg). Sandstones, motley siltstones Djel'dysu Formation, Miocene (N øj). Mudstone, silts, sandstones Kyrgyz Redstone Formation, Paleocene-Miocene (E -N kg). Limestones, clay, sandstones and conglomerates Suluterek Formation, Paleocene-Eocene (E ₁₋șt). Limestones, marls, clay with conglomerate beds LATE PALEOZOIC STRUCTURAL COMPLEX Sandyk Formation, Late Carboniferous - Eearly Permian(μ,Σξ,ξ C₃-P₁s). Monzonite, nepheline-syenite, syenite, quartz-syenite Djanbulak Formation, Middle Carboniferous (C db). Rhyolite tuffs, sandstones, limestones Kegaty Formation, Eearly – Middle Carboniferous (C ₁₋₂kg). Limestones, andesitic tuffs, dacites, rhyolites, siltstones, Minteke Formation, Eearly Carboniferous (C mm). Motley dacitic tuffs, rhyolites, siltstones and limestones 📗 Torsu Formation, Late part, Late Devonian - Eearly Carboniferous (D -Ç tӷ)₂Reddish siltstones and sandstones Torsu Formation, Eearly part, Late Devonian - Eearly Carboniferous (D -Ե tϝ).₁Sandstones, gritstones, conglomerates Djardysu Formation, Late Devonian (D ds). Sandstones, siltstones and limestones Aral Formation, Middle - Late Devonian (D ₂₋₃ar). Basalts, andesite-basalts and tuffs Aksu Formation, Eearly - Middle Devonian (D ₁₋as). Rhyolites, dacitic lavas and tuffs Aksu Formation, intrusive phase, Early - Middle Devonian ($\gamma\pi$ D₁₋₂a). Granitic and granodioritic porphyries Sugandy Formation, Eearly Devonian (D sn). Basalts, andesites and tuffs Kolbashy Formation, Eearly? Devonian (D 7kb). Trachytes, leucite basalts, tuffs LATE ORDOVICIAN – SILURIAN STRUCTURAL COMPLEX Alama Formation, Late Silurian (I γ S₂a). Leucocratic granite, granite porphyries Issykata Formation,phase 3, Late Ordovician(γ₃O₃i). Granites Issykata Formation, phase 2, Late Ordovician (δγ,γ₂O₃i). Granodiorites, granites Issykata Formation, phase 1, Late Ordovician ($v\delta$, δ 1 O_3 i). Gabbro-diorites, diorites, quartz-diorites Suusamyr Formation, phase 2, Late Ordovician (γ₂O₃s). Granites Suusamyr Formation, phase 1, Late Ordovician (δγ,γ₁O₃s). Granodiorites, granites Djartash Formation, Late Ordovician (O d ž). Limestones, sandstones and gritstones Chonkaindy Formation, Late Ordovician(O 3čk). Sandstones, siltstones and shales Karabalta Formation, Late Ordovician (O kb). Sandstones, siltstones and shales Karamoynok Formation, Late Ordovician (O kr). Conglomerates, sandstones Melange, Late Ordovician (m O). Serpentinites, blocks of gabbro, limestones, schists EARLY – MIDDLE ORDOVICIAN STRUCTURAL COMPLEX Kazyk Formation, Middle Ordovician (v,δ O₂k). Gabbro, diorites Westsuek Formation, Eearly - Middle Ordovician (O _{1.}w/s). Sandstones, siltstones, andesitic and dacitic tuffs Aktoy Formation, Eearly - Middle Ordovician (O _{1.}ak). Siltstones, cherts, andesitic and dacitic tuffs Dolon Formation, Eearly Ordovician (O dl). Olistostrome **CAMBRIAN – TREMADOCIAN STRUCTURAL COMPLEX** Alamedin Formation, phase 3, Early Ordovician (γ₃O₁a). Granites Alamedin Formation, phase 2, Early Ordovician (δγ,γ₂ O₁a). Granodiorites, granites Alamedin Formation, phase 1, Early Ordovician (δ,qδ₁ Ο₁a). Diorites, quartz-diorites Djelamysh Formation, Eearly Ordovician (O dj). Conglomerates, gritstones, sandstones Karadjorgo Formation, Late Cambrian - Early Ordovician (E₃–O₁ kd). Chery and green tuff siltstone, cherts, andesitic tuffs Shyrgyi Formation, Cambrian - Eearly Ordovician (😮 🕆 sr). Andesites, tuffs Toraygyr Formation, Cambrian – Eearly Ordovician (**દ**-O ∤r). Limestones, dolomites, marbles, shales Kentor Formation, Cambrian – Eearly ? Ordovician (ᢓ-O ₁?kt). Subalkaline basalts, tuffs, cherts Karakatty Formation, Cambrian (**E**kr). Basalts, cherts LATE PROTEROZOIC COMPLEX Karakorum Formation, Late Riphean (R kr). Aporhyolite and apodacite schists **DIKES** Permian dike Formation ($\delta \pi, \chi$ P). Lamprophyre Sandyk Formation, Late Carboniferous - Early Permian (ξπ C₃-P₁s). Syenite porphyries

- Aksu Formation, intrusive phase, Early - Middle Devonian ($\gamma \pi D_{1-2}a$). Granite porphyries, quartz porphyries

Sugandy Formation, intrusive phase, Early Devonian (δπ D₁s). Diorite porphyrites

Kolbashy Formation, intrusive phase, Early ? Devonian (μπ D₁?k). Monzonite porphyries