Supplementary material 3: type: f=Fisher statistic on the N directions measured in the temperature interval Tmin-Tmax.¬L o = vector anchored to the origin; L =vector not anchored to the origin; DI-IS and DI-TC are the¬ characteristic directions in in situ or tilt corrected coordinates; mad is the maximum angle¬ deviation for the vector determination or the semi-angle of confidence for the Fisher statistics.¬ VGP is the the virtual geomagnetic pole calculated from the tilt corrected direction. Reversal angle¬ is the angle between the observed diretion and the expected characteristic direction at 60Ma for ¬ Eurasia (apparent polar wander path from Torsvik et al., 2012)

sample	Height	type	N	Tmin	Tmax	(DI-IS)		(DI-TC)		mad	VGP lat/lon		Reversal Angle¬
16LA0268A	42.30	f	6	210	410	211.6	-75.4	174.5	-40.6	4.9	-69.7	17.1	168.6¬
16LA0001A	43.50	L o	5	330	450	232.7	-70.9	184.3	-42.3	2.5	-71.1	350.3	171.6¬
16LA0002A	43.90	L o	5	330	490	212.0	-72.5	177.1	-38.5	5.8	-68.5	9.8	167.3¬
16LA0006A	50.50	L o	7	290	530	191.8	-62.1	175.5	-25.7	0.7	-60.3	11.4	154.6¬
16LA0007A	50.90	L o	8	290	530	197.0	-59.6	179.2	-24.4	1.3	-59.8	4.1	153.7¬
16LA0008A	51.50	L o	7	290	530	196.8	-60.0	178.9	-24.8	0.8	-60.0	4.7	154.0¬
16LA0010A	64.00	L o	3	450	530	115.0	-12.7	114.2	15.8	3.6	-11.6	69.7	91.0¬
16LA0011A	66.00	L o	3	450	530	234.2	-20.5	224.9	-6.7	5.1	-33.9	304.5	123.7¬
16LA0020A	79.25	f	7	290	530	215.6	-39.3	200.5	-12.6	7.0	-49.1	330.3	139.2¬
16LA0031A	89.00	f	5	250	410	261.0	-75.1	183.1	-51.3	5.6	-78.7	348.8	179.1¬
16LA0045A	100.10	L o	6	330	530	229.4	-78.8	174.5	-45.8	3.0	-73.6	20.0	172.9¬
16LA0056A	112.40	L o	6	330	530	-19.7	-67.7	158.0	-73.0	11.9	-69.4	148.7	155.3¬
16LA0064A	120.00	f	3	240	340	227.1	-63.2	190.2	-35.6	10.2	-65.2	339.1	164.0¬
16LA0067A	121.00	L o	6	340	590	226.8	-81.7	170.5	-47.0	6.1	-73.3	32.8	171.4¬
16LA0079A	137.90	L	4	290	410	268.1	-76.3	181.3	-53.1	7.0	-80.6	356.1	177.4¬
16LA0080A	138.00	L	5	290	450	60.6	-87.3	155.0	-51.0	11.0	-67.3	71.0	162.8¬
16LA0082A	139.50	f	5	210	370	257.2	-74.5	183.7	-50.3	12.1	-77.7	347.5	179.1¬
16LA0086A	140.20	f	4	170	290	263.6	-55.2	212.6	-46.5	4.9	-59.6	291.8	159.7¬
16LA0092A	148.70	f	6	210	410	221.1	-74.4	177.8	-41.7	5.9	-70.9	8.7	170.5¬
16LA0093A	149.00	L o	5	370	530	228.9	-78.7	174.5	-45.7	7.6	-73.5	19.9	172.8¬
16LA0095A	149.60	f	6	210	410	174.0	-48.6	169.1	-10.1	14.5	-50.9	19.9	138.0¬
16LA0097A	150.40	f	4	210	330	186.3	-54.3	175.4	-17.4	12.2	-55.6	10.5	146.3¬
16LA0107A	155.30	f	4	210	330	114.0	-46.8	129.0	-15.0	8.2	-33.2	69.4	124.5¬
16LA0117A	162.50	L	7	290	530	56.7	-74.9	135.1	-51.5	8.7	-53.3	90.6	150.8¬
16LA0118A	163.00	L	7	290	530	171.3	-80.0	162.0	-40.9	7.4	-65.4	45.4	162.9¬
16LA0119A	170.50	f	5	210	330	210.0	-73.8	175.5	-39.1	12.3	-68.8	14.1	167.5¬
16LA0121A	171.00	L	6	290	490	132.0	-67.6	147.7	-30.1	14.8	-51.6	58.2	147.0¬
16LA0156A	183.60	f	5	210	370	155.9	-41.9	156.8	-2.6	6.7	-43.4	35.4	127.4¬
16LA0164A	196.50	f	5	210	370	161.7	-73.0	160.1	-33.7	10.4	-60.3	43.0	156.6¬
16LA0167A	197.50	L o	4	290	410	50.5	-53.1	101.4	-47.8	3.6	-27.1	107.8	129.7¬
16LA0179A	207.00	f	4	210	330	158.3	-75.4	159.0	-36.1	11.3	-61.0	46.6	157.8¬
16LA0134A	224.70	L o	5	290	450	176.7	-73.7	165.2	-34.9	6.9	-63.2	34.8	160.0¬
16LA0135A	224.90	L o	5	290	450	180.3	-84.0	162.3	-45.0	6.1	-68.2	49.4	165.5¬
16LA0137A	229.30	f	5	210	370	222.2	-65.8	186.1	-36.0	12.0	-66.4	348.1	165.2¬
16LA0150A	240.30	f	5	210	370	180.5	-69.0	168.0	-30.7	9.7	-61.6	27.4	157.4¬
16LA0152A	241.00	f	5	210	370	227.3	-76.0	177.5	-43.9	5.9	-72.6	10.1	172.5¬
16LA0153B	241.00	f	5	210	370	157.6	-57.4	158.3	-18.1	8.7	-51.3	38.1	142.2¬
16LA0185A	246.00	f	5	210	370	129.0	-61.7	144.0	-25.0	10.6	-47.0	59.5	141.0¬
16LA0195A	265.30	L o	6	290	490	205.5	-76.8	171.9	-40.8	7.5	-69.2	23.8	167.8¬
16LA0197A	265.50	L o	7	290	530	-19.8	-84.0	159.1	-56.7	6.8	-73.1	79.7	165.0¬
16LA0198A	265.50	L o	7	290	530	153.9	-83.9	158.5	-44.6	2.1	-65.8	55.7	162.9¬
16LA0223A	342.80	f	5	210	370	113.1	-79.8	149.2	-43.2	14.4	-59.1	67.1	156.3¬
16LA0234A	377.80	L o	6	290	490	187.7	-73.8	168.7	-36.0	7.3	-65.1	28.3	162.4¬
16LA0235A	377.90	f	5	210	370	138.0	-86.9	157.6	-47.8	14.0	-67.1	61.6	163.6¬
16LA0237A	378.40	L o	6	290	490	258.2	-73.2	185.8	-50.3	7.6	-77.1	339.5	177.8¬
16LA0238A	423.00	f	4	210	330	171.3	-61.3	165.5	-22.4	10.0	-56.2	28.7	148.8¬
16LA0253A	466.00	f	5	210	370	200.7	-61.8	179.9	-27.2	8.4	-61.4	2.8	156.5¬