

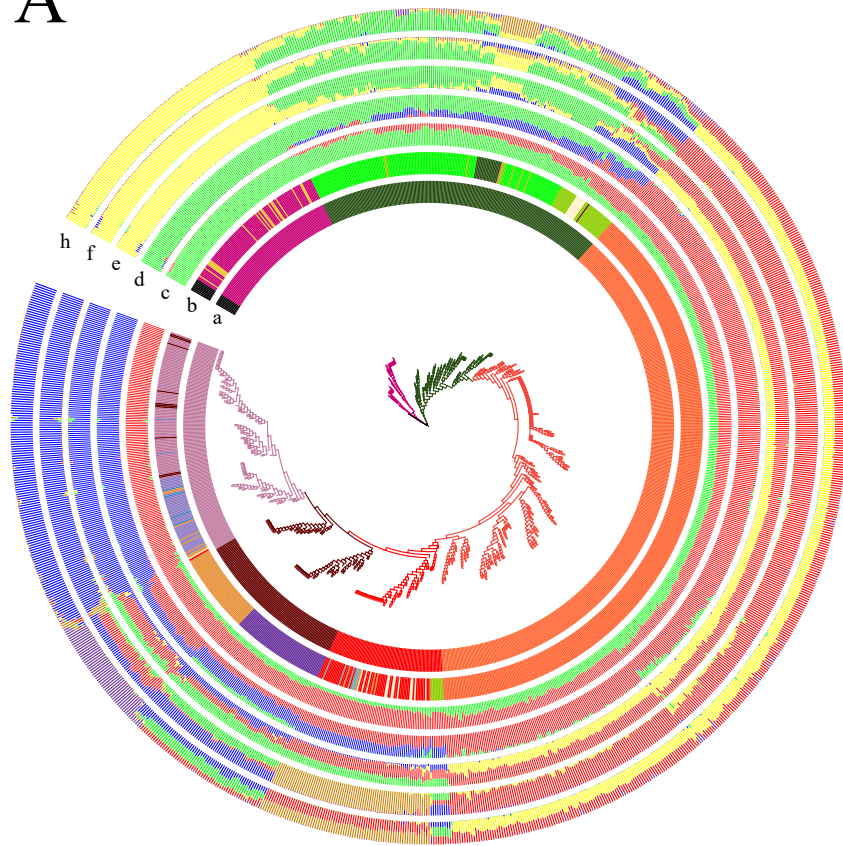
Figure S1. The pipeline involves the development, verification and application of the HG-SNP markers.

A

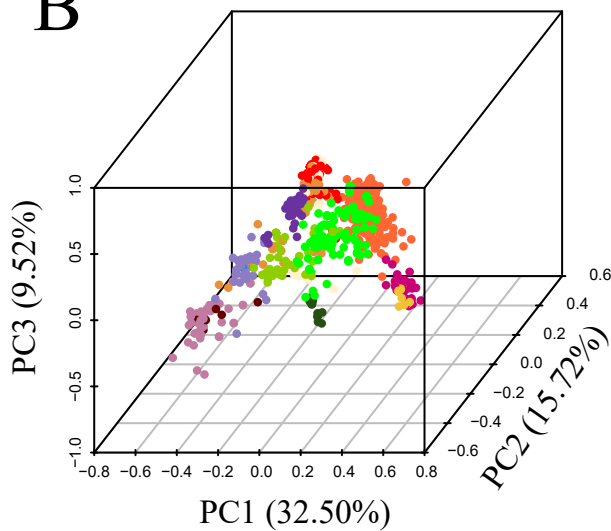
a. Molecular Group



b. Geographic Group



B



C

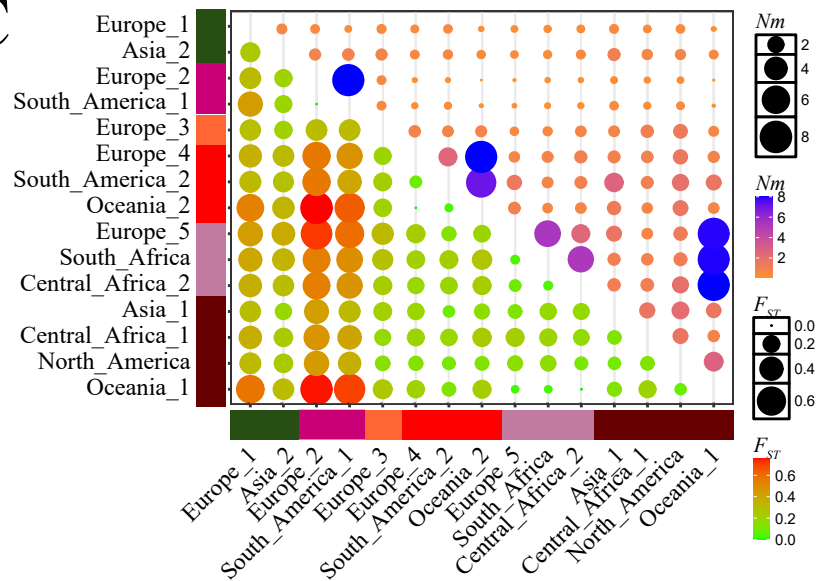


Figure S2. Population genetic structure analysis of 1,052 *Puccinia striiformis* f. sp. *tritici* (*Pst*) isolates all over the world. (A) Phylogenetic and genetic structure analysis of *Pst* populations by the HG-SNP marker. Tracks from inner (a) to outer (h) rings indicate the following: a, Molecular group; b, Geographic group; c-h, Population genetic structure with K values from 2 to 6. (B) 3D-PCA analysis by the HG-SNP marker. (C) Fixation index (below diagonal) and gene flow (above diagonal) analysis by the HG-SNP marker.

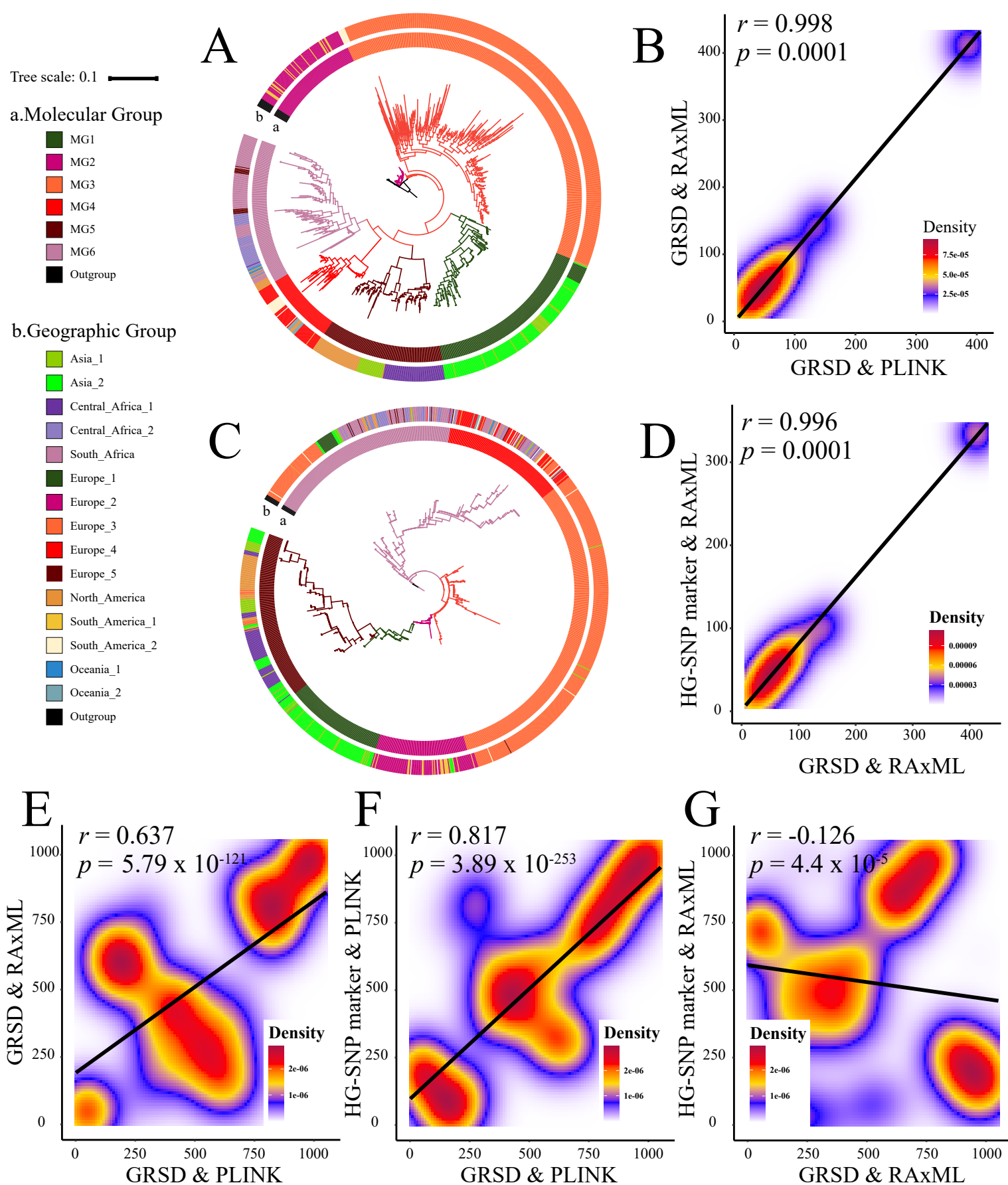


Figure S3. Accuracy detection of the HG-SNP markers. Phylogenetic tree of *Puccinia striiformis* f. sp. *tritici* (*Pst*) populations using RAXML based on the GRSD (A) and HG-SNP markers (C). a, Molecular group; b, Geographic group. (B) Correlation analysis of phylogenetic matrix between PLINK and RAXML software based on GRSD. (D) Correlation analysis of phylogenetic matrix between GRSD and HG-SNP markers using RAXML software. (E) Correlation analysis of phylogenetic sequence between PLINK and RAXML software based on GRSD. (F) Correlation analysis of phylogenetic sequence between GRSD and HG-SNP markers using PLINK (F) and RAXML (G) software.

Table S1. Sample information statistical of *Puccinia striiformis* f. sp. *tritici* in the world.

Run	Assay Type	Geographic Group	Country	BioProject	BioSample	Specie
ERR1607744	RNA-Seq	Central_Africa_2	Ethiopia	PRJEB15280	SAMEA4415662	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607746	RNA-Seq	Central_Africa_2	Ethiopia	PRJEB15280	SAMEA4415664	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607748	RNA-Seq	Central_Africa_2	Ethiopia	PRJEB15280	SAMEA4415666	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607749	RNA-Seq	Central_Africa_2	Ethiopia	PRJEB15280	SAMEA4415667	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607750	RNA-Seq	Central_Africa_2	Ethiopia	PRJEB15280	SAMEA4415668	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607752	RNA-Seq	Europe_2	Croatia	PRJEB15280	SAMEA4415670	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607753	RNA-Seq	Europe_2	Czech Republic	PRJEB15280	SAMEA4415671	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607754	RNA-Seq	Europe_3	France	PRJEB15280	SAMEA4415672	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607755	RNA-Seq	Europe_3	France	PRJEB15280	SAMEA4415673	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607756	RNA-Seq	Europe_3	France	PRJEB15280	SAMEA4415674	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607757	RNA-Seq	Europe_3	France	PRJEB15280	SAMEA4415675	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607760	RNA-Seq	Europe_5	Poland	PRJEB15280	SAMEA4415678	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607761	RNA-Seq	Europe_2	Croatia	PRJEB15280	SAMEA4415679	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607762	RNA-Seq	Europe_3	France	PRJEB15280	SAMEA4415680	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607763	RNA-Seq	Europe_2	France	PRJEB15280	SAMEA4415681	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607764	RNA-Seq	Europe_3	France	PRJEB15280	SAMEA4415682	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607765	RNA-Seq	Europe_3	UK	PRJEB15280	SAMEA4415683	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607766	RNA-Seq	Europe_3	UK	PRJEB15280	SAMEA4415684	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607767	RNA-Seq	Europe_3	UK	PRJEB15280	SAMEA4415685	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607768	RNA-Seq	Europe_3	UK	PRJEB15280	SAMEA4415686	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607769	RNA-Seq	Europe_3	UK	PRJEB15280	SAMEA4415687	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607770	RNA-Seq	Europe_3	UK	PRJEB15280	SAMEA4415688	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607771	RNA-Seq	Europe_3	Poland	PRJEB15280	SAMEA4415689	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607772	RNA-Seq	Europe_1	Poland	PRJEB15280	SAMEA4415690	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607773	RNA-Seq	Europe_2	Poland	PRJEB15280	SAMEA4415691	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607774	RNA-Seq	Europe_1	Poland	PRJEB15280	SAMEA4415692	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607775	RNA-Seq	Europe_3	Germany	PRJEB15280	SAMEA4415693	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607776	RNA-Seq	Europe_3	Germany	PRJEB15280	SAMEA4415694	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607777	RNA-Seq	Europe_3	Germany	PRJEB15280	SAMEA4415695	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607778	RNA-Seq	Europe_3	Germany	PRJEB15280	SAMEA4415696	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607779	RNA-Seq	Europe_3	Germany	PRJEB15280	SAMEA4415697	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607780	RNA-Seq	Europe_3	Germany	PRJEB15280	SAMEA4415698	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607781	RNA-Seq	Europe_3	Germany	PRJEB15280	SAMEA4415699	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>

ERR1607782	RNA-Seq	Europe_3	Germany	PRJEB15280	SAMEA4415700	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607783	RNA-Seq	Europe_3	Germany	PRJEB15280	SAMEA4415701	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607784	RNA-Seq	Europe_3	France	PRJEB15280	SAMEA4415702	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607785	RNA-Seq	Europe_3	France	PRJEB15280	SAMEA4415703	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607786	RNA-Seq	Europe_2	Czech Republic	PRJEB15280	SAMEA4415704	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607787	RNA-Seq	Europe_2	Czech Republic	PRJEB15280	SAMEA4415705	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607788	RNA-Seq	Europe_2	Czech Republic	PRJEB15280	SAMEA4415706	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607790	RNA-Seq	Europe_2	Bulgaria	PRJEB15280	SAMEA4415708	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607791	RNA-Seq	Europe_2	Spain	PRJEB15280	SAMEA4415709	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607792	RNA-Seq	Europe_2	Italy	PRJEB15280	SAMEA4415710	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607793	RNA-Seq	Europe_5	Italy	PRJEB15280	SAMEA4415711	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607794	RNA-Seq	Europe_4	Germany	PRJEB15280	SAMEA4415712	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607795	RNA-Seq	Europe_3	Germany	PRJEB15280	SAMEA4415713	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607796	RNA-Seq	Europe_3	Germany	PRJEB15280	SAMEA4415714	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607797	RNA-Seq	Europe_3	Germany	PRJEB15280	SAMEA4415715	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607799	RNA-Seq	Europe_3	Germany	PRJEB15280	SAMEA4415717	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607800	RNA-Seq	Europe_3	Germany	PRJEB15280	SAMEA4415718	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607801	RNA-Seq	Europe_3	Germany	PRJEB15280	SAMEA4415719	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607802	RNA-Seq	Europe_3	Germany	PRJEB15280	SAMEA4415720	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607803	RNA-Seq	Europe_3	Germany	PRJEB15280	SAMEA4415721	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607804	RNA-Seq	Europe_3	Germany	PRJEB15280	SAMEA4415722	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607805	RNA-Seq	Europe_2	Slovakia	PRJEB15280	SAMEA4415723	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607806	RNA-Seq	Europe_2	Slovakia	PRJEB15280	SAMEA4415724	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607807	RNA-Seq	Europe_3	France	PRJEB15280	SAMEA4415725	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607808	RNA-Seq	Europe_3	Belgium	PRJEB15280	SAMEA4415726	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607809	RNA-Seq	Europe_3	Belgium	PRJEB15280	SAMEA4415727	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607810	RNA-Seq	Europe_3	Belgium	PRJEB15280	SAMEA4415728	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607811	RNA-Seq	Europe_2	Belgium	PRJEB15280	SAMEA4415729	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607812	RNA-Seq	Europe_2	Romania	PRJEB15280	SAMEA4415730	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607813	RNA-Seq	Europe_2	Turkey	PRJEB15280	SAMEA4415731	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607814	RNA-Seq	Europe_2	Serbia	PRJEB15280	SAMEA4415732	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607815	RNA-Seq	Europe_3	UK	PRJEB15280	SAMEA4415733	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607816	RNA-Seq	Europe_3	France	PRJEB15280	SAMEA4415734	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607818	RNA-Seq	Europe_5	Germany	PRJEB15280	SAMEA4415736	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR1607819	RNA-Seq	Europe_3	UK	PRJEB15280	SAMEA4415737	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>

ERR1607857	RNA-Seq	Europe_3	UK	PRJEB15280	SAMEA4415775	<i>Puccinia striiformis</i>	f. sp. tritici
ERR1607858	RNA-Seq	Europe_3	UK	PRJEB15280	SAMEA4415776	<i>Puccinia striiformis</i>	f. sp. tritici
ERR1607859	RNA-Seq	Europe_3	UK	PRJEB15280	SAMEA4415777	<i>Puccinia striiformis</i>	f. sp. tritici
ERR1607860	RNA-Seq	Europe_3	UK	PRJEB15280	SAMEA4415778	<i>Puccinia striiformis</i>	f. sp. tritici
ERR1607861	RNA-Seq	Europe_3	UK	PRJEB15280	SAMEA4415779	<i>Puccinia striiformis</i>	f. sp. tritici
ERR1607862	RNA-Seq	Europe_3	UK	PRJEB15280	SAMEA4415780	<i>Puccinia striiformis</i>	f. sp. tritici
ERR1607863	RNA-Seq	Europe_3	UK	PRJEB15280	SAMEA4415781	<i>Puccinia striiformis</i>	f. sp. tritici
ERR1607864	RNA-Seq	Europe_3	UK	PRJEB15280	SAMEA4415782	<i>Puccinia striiformis</i>	f. sp. tritici
ERR1607865	RNA-Seq	Europe_3	UK	PRJEB15280	SAMEA4415783	<i>Puccinia striiformis</i>	f. sp. tritici
ERR1607866	RNA-Seq	Europe_3	UK	PRJEB15280	SAMEA4415784	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4152485	RNA-Seq	Central_Africa_2	Ethiopia	PRJEB15280	SAMEA4415663	<i>Puccinia striiformis</i>	f. sp. tritici
ERR3170179	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366301	<i>Puccinia striiformis</i>	f. sp. tritici
ERR3170180	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366302	<i>Puccinia striiformis</i>	f. sp. tritici
ERR3170181	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366303	<i>Puccinia striiformis</i>	f. sp. tritici
ERR3170182	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366304	<i>Puccinia striiformis</i>	f. sp. tritici
ERR3170183	RNA-Seq	South_Africa	South Africa	PRJEB31334	SAMEA5366305	<i>Puccinia striiformis</i>	f. sp. tritici
ERR3170184	RNA-Seq	South_Africa	South Africa	PRJEB31334	SAMEA5366306	<i>Puccinia striiformis</i>	f. sp. tritici
ERR3170185	RNA-Seq	Central_Africa_1	Ethiopia	PRJEB31334	SAMEA5366307	<i>Puccinia striiformis</i>	f. sp. tritici
ERR3170186	RNA-Seq	Central_Africa_1	Ethiopia	PRJEB31334	SAMEA5366308	<i>Puccinia striiformis</i>	f. sp. tritici
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ERR3170192	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366314	<i>Puccinia striiformis</i>	f. sp. tritici
ERR3170193	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366315	<i>Puccinia striiformis</i>	f. sp. tritici
ERR3170194	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366316	<i>Puccinia striiformis</i>	f. sp. tritici
ERR3170195	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366317	<i>Puccinia striiformis</i>	f. sp. tritici
ERR3170196	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366318	<i>Puccinia striiformis</i>	f. sp. tritici
ERR3170197	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366319	<i>Puccinia striiformis</i>	f. sp. tritici
ERR3170198	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366320	<i>Puccinia striiformis</i>	f. sp. tritici
ERR3170199	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366321	<i>Puccinia striiformis</i>	f. sp. tritici
ERR3170200	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366322	<i>Puccinia striiformis</i>	f. sp. tritici
ERR3170201	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366323	<i>Puccinia striiformis</i>	f. sp. tritici
ERR3170202	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366324	<i>Puccinia striiformis</i>	f. sp. tritici

ERR3170203	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366325	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170204	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366326	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170205	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366327	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170206	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366328	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170207	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366329	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170208	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366330	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170209	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366331	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170210	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366332	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170211	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366333	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170212	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366334	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170213	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366335	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170214	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366336	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170215	RNA-Seq	Europe_1	Sweden	PRJEB31334	SAMEA5366337	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170216	RNA-Seq	Europe_1	Sweden	PRJEB31334	SAMEA5366338	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170217	RNA-Seq	Europe_1	Sweden	PRJEB31334	SAMEA5366339	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170218	RNA-Seq	Europe_1	Sweden	PRJEB31334	SAMEA5366340	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170219	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366341	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170220	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366342	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170221	RNA-Seq	Europe_1	Sweden	PRJEB31334	SAMEA5366343	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
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ERR3170223	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366345	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
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ERR3170225	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366347	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
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ERR3170228	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366350	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170229	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366351	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170230	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366352	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170231	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366353	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
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ERR3170233	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366355	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170234	RNA-Seq	Europe_1	UK	PRJEB31334	SAMEA5366356	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170236	RNA-Seq	Europe_5	France	PRJEB31334	SAMEA5366358	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170237	RNA-Seq	Europe_5	France	PRJEB31334	SAMEA5366359	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170238	RNA-Seq	Europe_5	France	PRJEB31334	SAMEA5366360	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>

ERR3170239	RNA-Seq	Europe_5	France	PRJEB31334	SAMEA5366361	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170240	RNA-Seq	Europe_1	Poland	PRJEB31334	SAMEA5366362	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170241	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366363	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170242	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366364	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170243	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366365	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170244	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366366	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170246	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366368	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170247	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366369	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170248	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366370	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170249	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366371	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170250	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366372	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170251	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366373	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170252	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366374	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170253	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366375	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170254	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366376	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170255	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366377	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170256	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366378	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170257	RNA-Seq	North_America	Canada	PRJEB31334	SAMEA5366379	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170258	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366380	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170259	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366381	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170260	RNA-Seq	Asia_2	China	PRJEB31334	SAMEA5366382	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170261	RNA-Seq	North_America	Canada	PRJEB31334	SAMEA5366383	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170262	RNA-Seq	North_America	Canada	PRJEB31334	SAMEA5366384	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170263	RNA-Seq	North_America	Canada	PRJEB31334	SAMEA5366385	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170264	RNA-Seq	North_America	Canada	PRJEB31334	SAMEA5366386	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170265	RNA-Seq	North_America	Canada	PRJEB31334	SAMEA5366387	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170266	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366388	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170267	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366389	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170268	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366390	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170269	RNA-Seq	Europe_1	Sweden	PRJEB31334	SAMEA5366391	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170272	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366394	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170273	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366395	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170274	RNA-Seq	Europe_1	Sweden	PRJEB31334	SAMEA5366396	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170275	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366397	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3170277	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366399	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>

ERR3188465	RNA-Seq	Central_Africa_1	Ethiopia	PRJEB31334	SAMEA5366284	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3188466	RNA-Seq	Central_Africa_1	Ethiopia	PRJEB31334	SAMEA5366285	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3188467	RNA-Seq	Central_Africa_2	Ethiopia	PRJEB31334	SAMEA5366286	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3188468	RNA-Seq	Central_Africa_1	Ethiopia	PRJEB31334	SAMEA5366287	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3188469	RNA-Seq	Central_Africa_2	Ethiopia	PRJEB31334	SAMEA5366288	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3188470	RNA-Seq	Central_Africa_1	Ethiopia	PRJEB31334	SAMEA5366289	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3188471	RNA-Seq	Central_Africa_1	Ethiopia	PRJEB31334	SAMEA5366290	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3188472	RNA-Seq	Central_Africa_2	Ethiopia	PRJEB31334	SAMEA5366291	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3188473	RNA-Seq	Central_Africa_1	Ethiopia	PRJEB31334	SAMEA5366292	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3188474	RNA-Seq	Central_Africa_1	Ethiopia	PRJEB31334	SAMEA5366293	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3188475	RNA-Seq	Central_Africa_1	Ethiopia	PRJEB31334	SAMEA5366294	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3188476	RNA-Seq	Central_Africa_1	Ethiopia	PRJEB31334	SAMEA5366295	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3188477	RNA-Seq	Central_Africa_1	Ethiopia	PRJEB31334	SAMEA5366296	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3188478	RNA-Seq	Central_Africa_1	Ethiopia	PRJEB31334	SAMEA5366297	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3188479	RNA-Seq	Central_Africa_1	Ethiopia	PRJEB31334	SAMEA5366298	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3188480	RNA-Seq	Central_Africa_1	Ethiopia	PRJEB31334	SAMEA5366299	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3188481	RNA-Seq	Central_Africa_1	Ethiopia	PRJEB31334	SAMEA5366300	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3188482	RNA-Seq	Europe_1	Sweden	PRJEB31334	SAMEA5366392	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3188483	RNA-Seq	North_America	USA	PRJEB31334	SAMEA5366393	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3383632	RNA-Seq	South_Africa	Zimbabwe	PRJEB33109	SAMEA5723237	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3383633	RNA-Seq	South_Africa	Zimbabwe	PRJEB33109	SAMEA5723238	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3383634	RNA-Seq	South_Africa	Zimbabwe	PRJEB33109	SAMEA5723239	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3383635	RNA-Seq	South_Africa	Zimbabwe	PRJEB33109	SAMEA5723240	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3383636	RNA-Seq	South_Africa	Zimbabwe	PRJEB33109	SAMEA5723241	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3383637	RNA-Seq	South_Africa	Zimbabwe	PRJEB33109	SAMEA5723242	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3383638	RNA-Seq	South_Africa	Zimbabwe	PRJEB33109	SAMEA5723243	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3383639	RNA-Seq	South_Africa	Zimbabwe	PRJEB33109	SAMEA5723244	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3383640	RNA-Seq	South_Africa	Zimbabwe	PRJEB33109	SAMEA5723245	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3383641	RNA-Seq	South_Africa	Zimbabwe	PRJEB33109	SAMEA5723246	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3383642	RNA-Seq	South_Africa	Zimbabwe	PRJEB33109	SAMEA5723247	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3850339	RNA-Seq	Europe_3	France	PRJEB36444	SAMEA6505839	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3850340	RNA-Seq	Europe_3	UK	PRJEB36444	SAMEA6505840	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3850341	RNA-Seq	Europe_2	UK	PRJEB36444	SAMEA6505841	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3850342	RNA-Seq	Europe_3	UK	PRJEB36444	SAMEA6505842	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3850343	RNA-Seq	Europe_3	UK	PRJEB36444	SAMEA6505843	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>

ERR3850344	RNA-Seq	Europe_4	UK	PRJEB36444	SAMEA6505844	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3850345	RNA-Seq	Europe_3	UK	PRJEB36444	SAMEA6505845	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3850346	RNA-Seq	Europe_3	UK	PRJEB36444	SAMEA6505846	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3850347	RNA-Seq	Europe_3	UK	PRJEB36444	SAMEA6505847	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3850348	RNA-Seq	Europe_3	Germany	PRJEB36444	SAMEA6505848	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3850349	RNA-Seq	Europe_3	UK	PRJEB36444	SAMEA6505849	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3850350	RNA-Seq	Europe_3	UK	PRJEB36444	SAMEA6505850	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3850352	RNA-Seq	Europe_3	UK	PRJEB36444	SAMEA6505852	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3850353	RNA-Seq	Europe_3	UK	PRJEB36444	SAMEA6505853	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3850354	RNA-Seq	Europe_3	UK	PRJEB36444	SAMEA6505854	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3850355	RNA-Seq	Europe_3	UK	PRJEB36444	SAMEA6505855	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3850356	RNA-Seq	Europe_3	UK	PRJEB36444	SAMEA6505856	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3850357	RNA-Seq	Europe_3	UK	PRJEB36444	SAMEA6505857	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3850360	RNA-Seq	Europe_3	UK	PRJEB36444	SAMEA6505860	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3850361	RNA-Seq	Europe_3	UK	PRJEB36444	SAMEA6505861	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3850362	RNA-Seq	Europe_3	UK	PRJEB36444	SAMEA6505862	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3850363	RNA-Seq	Europe_3	UK	PRJEB36444	SAMEA6505863	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3856807	WGS	Central_Africa_2	Kenya	PRJEB36485	SAMEA6512673	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3856808	WGS	Central_Africa_2	Kenya	PRJEB36485	SAMEA6512674	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3856810	WGS	Central_Africa_2	Ethiopia	PRJEB36485	SAMEA6512676	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3856813	RNA-Seq	Central_Africa_2	Kenya	PRJEB36485	SAMEA6512679	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3856814	RNA-Seq	Central_Africa_2	Kenya	PRJEB36485	SAMEA6512680	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3856815	RNA-Seq	Central_Africa_2	Kenya	PRJEB36485	SAMEA6512681	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3856816	RNA-Seq	Central_Africa_2	Kenya	PRJEB36485	SAMEA6512682	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3856817	RNA-Seq	Central_Africa_2	Kenya	PRJEB36485	SAMEA6512683	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3856818	RNA-Seq	Central_Africa_2	Kenya	PRJEB36485	SAMEA6512684	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3856819	RNA-Seq	Central_Africa_2	Kenya	PRJEB36485	SAMEA6512685	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3856820	RNA-Seq	Central_Africa_2	Kenya	PRJEB36485	SAMEA6512686	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3856821	RNA-Seq	Central_Africa_2	Kenya	PRJEB36485	SAMEA6512687	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3856822	RNA-Seq	Central_Africa_2	Kenya	PRJEB36485	SAMEA6512688	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3856823	RNA-Seq	Central_Africa_2	Kenya	PRJEB36485	SAMEA6512689	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3856824	RNA-Seq	Central_Africa_2	Kenya	PRJEB36485	SAMEA6512690	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3856825	RNA-Seq	Central_Africa_2	Kenya	PRJEB36485	SAMEA6512691	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3856826	WGS	South_Africa	South Africa	PRJEB36485	SAMEA6512692	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR3856827	WGS	South_Africa	South Africa	PRJEB36485	SAMEA6512693	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>

ERR4315153	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035794	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315154	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035795	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315155	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035796	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315156	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035797	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315157	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035798	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315158	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035799	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315159	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035800	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315160	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035801	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315161	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035802	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315163	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035805	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315164	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035806	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315165	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035807	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315166	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035808	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315167	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035809	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315168	RNA-Seq	Europe_4	UK	PRJEB39201	SAMEA7035810	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315169	RNA-Seq	Europe_4	UK	PRJEB39201	SAMEA7035811	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315170	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035812	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315171	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035813	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315172	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035814	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315178	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035820	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315179	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035821	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315180	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035822	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315181	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035823	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315182	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035824	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315183	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035825	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315184	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035826	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315185	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035827	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315186	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035828	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315187	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035829	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315189	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035831	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315197	RNA-Seq	Europe_3	Netherlands	PRJEB39201	SAMEA7035839	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315198	RNA-Seq	Europe_3	Netherlands	PRJEB39201	SAMEA7035840	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315199	RNA-Seq	Europe_2	Italy	PRJEB39201	SAMEA7035841	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315201	RNA-Seq	Europe_3	Italy	PRJEB39201	SAMEA7035843	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315202	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035844	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>

ERR4315203	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035845	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315204	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035846	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315206	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035848	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315208	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035850	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315209	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035851	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315210	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035852	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315211	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035853	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315212	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035854	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315213	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035855	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315214	RNA-Seq	Europe_3	Belgium	PRJEB39201	SAMEA7035856	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315215	RNA-Seq	Europe_2	Belgium	PRJEB39201	SAMEA7035857	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315216	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035858	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315217	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035859	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315219	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035861	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315220	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035862	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315222	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035864	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315223	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035865	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315224	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035866	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315228	RNA-Seq	Europe_3	Netherlands	PRJEB39201	SAMEA7035870	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315229	RNA-Seq	Europe_2	Hungary	PRJEB39201	SAMEA7035871	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315230	RNA-Seq	Europe_2	Hungary	PRJEB39201	SAMEA7035872	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315231	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7035873	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315232	RNA-Seq	Europe_2	Bulgaria	PRJEB39201	SAMEA7035874	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315233	RNA-Seq	Europe_2	Bulgaria	PRJEB39201	SAMEA7035875	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315234	RNA-Seq	Europe_2	France	PRJEB39201	SAMEA7035876	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315235	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035877	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315236	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035878	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315237	RNA-Seq	Europe_2	Croatia	PRJEB39201	SAMEA7035879	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315238	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7035880	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315239	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7035881	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315240	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7035882	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315241	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035883	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315242	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7035884	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315243	RNA-Seq	Europe_2	Turkey	PRJEB39201	SAMEA7035885	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315244	RNA-Seq	Europe_2	Turkey	PRJEB39201	SAMEA7035886	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>

ERR4315245	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7035887	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315246	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7035888	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315247	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7035889	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315248	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7035890	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315249	RNA-Seq	Europe_2	Czech Republic	PRJEB39201	SAMEA7035891	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315250	RNA-Seq	Europe_3	Czech Republic	PRJEB39201	SAMEA7035892	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315251	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035893	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315252	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035894	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315254	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035896	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315256	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035898	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315257	RNA-Seq	Europe_3	Poland	PRJEB39201	SAMEA7035899	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315258	RNA-Seq	Europe_3	Poland	PRJEB39201	SAMEA7035900	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315259	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035901	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315260	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035902	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315261	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035903	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315262	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035904	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315263	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035905	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315264	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035906	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315265	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035907	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315266	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035908	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315267	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7035909	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315268	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7035910	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315269	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7035911	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315270	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7035912	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315271	RNA-Seq	Europe_2	France	PRJEB39201	SAMEA7035913	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315272	RNA-Seq	Europe_2	France	PRJEB39201	SAMEA7035914	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315274	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7035916	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315275	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7035917	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315276	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035918	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315277	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035919	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315279	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035921	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315280	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035922	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315281	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035923	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315282	RNA-Seq	Europe_2	Croatia	PRJEB39201	SAMEA7035924	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315285	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035927	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>

ERR4315286	RNA-Seq	Europe_3	Spain	PRJEB39201	SAMEA7035928	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315288	RNA-Seq	Europe_3	Spain	PRJEB39201	SAMEA7035930	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315289	RNA-Seq	Europe_3	Spain	PRJEB39201	SAMEA7035931	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315292	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035934	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315293	RNA-Seq	Europe_3	Czech Republic	PRJEB39201	SAMEA7035935	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315295	RNA-Seq	Europe_3	Poland	PRJEB39201	SAMEA7035937	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315296	RNA-Seq	Europe_3	Poland	PRJEB39201	SAMEA7035938	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315297	RNA-Seq	Europe_3	Netherlands	PRJEB39201	SAMEA7035939	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315298	RNA-Seq	Europe_3	Netherlands	PRJEB39201	SAMEA7035940	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315300	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7035942	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315301	RNA-Seq	Europe_4	Netherlands	PRJEB39201	SAMEA7035943	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315302	RNA-Seq	Europe_3	Netherlands	PRJEB39201	SAMEA7035944	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315305	RNA-Seq	Europe_3	Poland	PRJEB39201	SAMEA7035947	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315306	RNA-Seq	Europe_3	Poland	PRJEB39201	SAMEA7035948	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315307	RNA-Seq	Europe_3	Hungary	PRJEB39201	SAMEA7035949	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315309	RNA-Seq	Europe_3	Poland	PRJEB39201	SAMEA7035951	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315310	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035952	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315311	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035953	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315312	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7035954	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315313	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035955	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315314	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7035956	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315316	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7035958	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315319	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035961	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315320	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035962	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315323	RNA-Seq	Europe_3	Italy	PRJEB39201	SAMEA7035965	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315325	RNA-Seq	Europe_2	Netherlands	PRJEB39201	SAMEA7035967	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315326	RNA-Seq	Europe_3	Netherlands	PRJEB39201	SAMEA7035968	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315327	RNA-Seq	Europe_2	Netherlands	PRJEB39201	SAMEA7035969	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315328	RNA-Seq	Europe_3	Netherlands	PRJEB39201	SAMEA7035970	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315329	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035971	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315330	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035972	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315333	RNA-Seq	Central_Africa_2	Ethiopia	PRJEB39201	SAMEA7035975	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315334	RNA-Seq	Central_Africa_2	Ethiopia	PRJEB39201	SAMEA7035976	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315336	RNA-Seq	Central_Africa_1	Ethiopia	PRJEB39201	SAMEA7035978	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315337	RNA-Seq	Central_Africa_1	Ethiopia	PRJEB39201	SAMEA7035979	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>

ERR4315338	RNA-Seq	Central_Africa_1	Ethiopia	PRJEB39201	SAMEA7035980	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315339	RNA-Seq	Central_Africa_2	Ethiopia	PRJEB39201	SAMEA7035981	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315342	RNA-Seq	Central_Africa_2	Ethiopia	PRJEB39201	SAMEA7035984	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315343	RNA-Seq	Central_Africa_2	Ethiopia	PRJEB39201	SAMEA7035985	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315352	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035994	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315354	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035996	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315355	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035997	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315356	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035998	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315357	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7035999	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315358	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036000	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315359	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036001	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315360	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036002	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315361	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036003	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315362	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036004	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315363	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036005	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315364	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036006	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315365	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036007	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315366	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036008	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315367	RNA-Seq	South_America_1	Argentina	PRJEB39201	SAMEA7036009	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315368	RNA-Seq	South_America_1	Argentina	PRJEB39201	SAMEA7036010	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315369	RNA-Seq	South_America_2	Argentina	PRJEB39201	SAMEA7036011	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315370	RNA-Seq	South_America_2	Argentina	PRJEB39201	SAMEA7036012	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315371	RNA-Seq	South_America_2	Argentina	PRJEB39201	SAMEA7036013	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315372	RNA-Seq	South_America_2	Argentina	PRJEB39201	SAMEA7036014	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315373	RNA-Seq	South_America_2	Argentina	PRJEB39201	SAMEA7036015	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315375	RNA-Seq	South_America_2	Argentina	PRJEB39201	SAMEA7036017	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315376	RNA-Seq	South_America_2	Argentina	PRJEB39201	SAMEA7036018	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315378	RNA-Seq	South_America_2	Argentina	PRJEB39201	SAMEA7036020	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315379	RNA-Seq	South_America_2	Argentina	PRJEB39201	SAMEA7036021	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315380	RNA-Seq	South_America_1	Argentina	PRJEB39201	SAMEA7036022	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315381	RNA-Seq	South_America_2	Argentina	PRJEB39201	SAMEA7036023	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315382	RNA-Seq	South_America_1	Argentina	PRJEB39201	SAMEA7036024	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315383	RNA-Seq	South_America_1	Argentina	PRJEB39201	SAMEA7036025	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315385	RNA-Seq	Central_Africa_1	Ethiopia	PRJEB39201	SAMEA7036027	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315386	RNA-Seq	Central_Africa_1	Ethiopia	PRJEB39201	SAMEA7036028	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>

ERR4315387	RNA-Seq	Central_Africa_1	Ethiopia	PRJEB39201	SAMEA7036029	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315388	RNA-Seq	Central_Africa_1	Ethiopia	PRJEB39201	SAMEA7036030	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315389	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036031	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315390	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036032	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315391	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036033	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315392	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036034	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315393	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036035	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315394	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036036	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315395	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036037	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315396	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036038	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315397	RNA-Seq	Europe_4	UK	PRJEB39201	SAMEA7036039	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315398	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036040	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315399	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036041	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315400	RNA-Seq	Europe_4	UK	PRJEB39201	SAMEA7036042	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315401	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036043	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315407	RNA-Seq	South_America_2	Argentina	PRJEB39201	SAMEA7036049	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315408	RNA-Seq	South_America_2	Argentina	PRJEB39201	SAMEA7036050	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315409	RNA-Seq	South_America_2	Argentina	PRJEB39201	SAMEA7036051	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315410	RNA-Seq	South_America_1	Argentina	PRJEB39201	SAMEA7036052	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315411	RNA-Seq	South_America_1	Argentina	PRJEB39201	SAMEA7036053	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315413	RNA-Seq	South_America_2	Argentina	PRJEB39201	SAMEA7036055	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315414	RNA-Seq	South_America_2	Argentina	PRJEB39201	SAMEA7036056	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315415	RNA-Seq	Europe_2	Serbia	PRJEB39201	SAMEA7036057	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315416	RNA-Seq	Europe_2	Serbia	PRJEB39201	SAMEA7036058	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315417	RNA-Seq	Europe_3	Serbia	PRJEB39201	SAMEA7036059	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315418	RNA-Seq	Europe_2	Serbia	PRJEB39201	SAMEA7036060	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315419	RNA-Seq	Europe_2	Serbia	PRJEB39201	SAMEA7036061	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315420	RNA-Seq	Europe_2	Serbia	PRJEB39201	SAMEA7036062	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315421	RNA-Seq	Europe_2	Serbia	PRJEB39201	SAMEA7036063	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315422	RNA-Seq	Europe_2	Serbia	PRJEB39201	SAMEA7036064	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315423	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036065	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315424	RNA-Seq	Europe_1	UK	PRJEB39201	SAMEA7036066	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315425	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036067	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315426	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036068	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315427	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036069	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>

ERR4315428	RNA-Seq	Central_Africa_2	Kenya	PRJEB39201	SAMEA7036070	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315429	RNA-Seq	Central_Africa_2	Kenya	PRJEB39201	SAMEA7036071	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315430	RNA-Seq	Central_Africa_2	Kenya	PRJEB39201	SAMEA7036072	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315431	RNA-Seq	Central_Africa_2	Kenya	PRJEB39201	SAMEA7036073	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315432	RNA-Seq	Central_Africa_2	Kenya	PRJEB39201	SAMEA7036074	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315433	RNA-Seq	Central_Africa_1	Kenya	PRJEB39201	SAMEA7036075	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315434	RNA-Seq	Central_Africa_2	Kenya	PRJEB39201	SAMEA7036076	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315435	RNA-Seq	Central_Africa_2	Kenya	PRJEB39201	SAMEA7036077	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315436	RNA-Seq	Central_Africa_1	Kenya	PRJEB39201	SAMEA7036078	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315437	RNA-Seq	Central_Africa_2	Kenya	PRJEB39201	SAMEA7036079	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315438	RNA-Seq	Central_Africa_2	Kenya	PRJEB39201	SAMEA7036080	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315439	RNA-Seq	Central_Africa_2	Kenya	PRJEB39201	SAMEA7036081	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315440	RNA-Seq	Central_Africa_1	Kenya	PRJEB39201	SAMEA7036082	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315441	RNA-Seq	Central_Africa_2	Kenya	PRJEB39201	SAMEA7036083	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315442	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036084	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315443	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036085	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315444	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7036086	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315445	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7036087	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315446	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7036088	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315447	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036089	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315448	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036090	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315449	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036091	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315450	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036092	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315452	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7036094	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315453	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7036095	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315454	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036096	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315455	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036097	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315457	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036099	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315458	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036100	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315459	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036101	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315460	RNA-Seq	Europe_2	France	PRJEB39201	SAMEA7036102	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315461	RNA-Seq	Europe_2	France	PRJEB39201	SAMEA7036103	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315462	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036104	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315469	RNA-Seq	Europe_1	Sweden	PRJEB39201	SAMEA7036111	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315470	RNA-Seq	Europe_2	Spain	PRJEB39201	SAMEA7036112	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>

ERR4315471	RNA-Seq	Europe_2	Spain	PRJEB39201	SAMEA7036113	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315472	RNA-Seq	Europe_2	Spain	PRJEB39201	SAMEA7036114	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315473	RNA-Seq	Europe_3	Spain	PRJEB39201	SAMEA7036115	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315474	RNA-Seq	Europe_3	Spain	PRJEB39201	SAMEA7036116	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315475	RNA-Seq	Europe_3	Spain	PRJEB39201	SAMEA7036117	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315477	RNA-Seq	Europe_2	Czech Republic	PRJEB39201	SAMEA7036119	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315478	RNA-Seq	Europe_4	UK	PRJEB39201	SAMEA7036120	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315480	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036122	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315481	RNA-Seq	Europe_4	UK	PRJEB39201	SAMEA7036123	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315482	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036124	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315483	RNA-Seq	Europe_3	Spain	PRJEB39201	SAMEA7036125	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315485	RNA-Seq	Europe_3	Spain	PRJEB39201	SAMEA7036127	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315486	RNA-Seq	Europe_3	Spain	PRJEB39201	SAMEA7036128	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315488	RNA-Seq	Europe_3	Spain	PRJEB39201	SAMEA7036130	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315491	RNA-Seq	Europe_3	Czech Republic	PRJEB39201	SAMEA7036133	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315492	RNA-Seq	Europe_2	Czech Republic	PRJEB39201	SAMEA7036134	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315493	RNA-Seq	Europe_4	UK	PRJEB39201	SAMEA7036135	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315496	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036138	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315497	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036139	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315498	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036140	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315499	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036141	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315500	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036142	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315501	RNA-Seq	Europe_4	UK	PRJEB39201	SAMEA7036143	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315502	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036144	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315503	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036145	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315505	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036147	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315506	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036148	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315507	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036149	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315508	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036150	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315509	RNA-Seq	Europe_2	France	PRJEB39201	SAMEA7036151	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315510	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7036152	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315511	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036153	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315512	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036154	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315513	RNA-Seq	Europe_3	Spain	PRJEB39201	SAMEA7036155	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315514	RNA-Seq	Europe_3	Spain	PRJEB39201	SAMEA7036156	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>

ERR4315515	RNA-Seq	North_America	Canada	PRJEB39201	SAMEA7036157	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315516	RNA-Seq	Europe_2	UK	PRJEB39201	SAMEA7036158	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315517	RNA-Seq	Europe_3	Czech Republic	PRJEB39201	SAMEA7036159	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315518	RNA-Seq	Europe_3	Czech Republic	PRJEB39201	SAMEA7036160	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315519	RNA-Seq	Europe_2	Czech Republic	PRJEB39201	SAMEA7036161	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315520	RNA-Seq	Europe_3	Czech Republic	PRJEB39201	SAMEA7036162	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315521	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036163	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315524	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036166	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315525	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036167	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315526	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036169	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315527	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036170	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315528	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036171	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315530	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036173	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315531	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036174	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315532	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036175	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315533	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036176	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315534	RNA-Seq	Europe_4	UK	PRJEB39201	SAMEA7036177	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315535	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036178	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315536	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036179	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315537	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036180	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315538	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036181	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315539	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036182	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315540	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036183	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315541	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036184	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315543	RNA-Seq	South_America_1	Argentina	PRJEB39201	SAMEA7036186	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315544	RNA-Seq	South_America_1	Argentina	PRJEB39201	SAMEA7036187	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315545	RNA-Seq	South_America_1	Argentina	PRJEB39201	SAMEA7036188	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315546	RNA-Seq	South_America_2	Argentina	PRJEB39201	SAMEA7036189	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315547	RNA-Seq	South_America_2	Argentina	PRJEB39201	SAMEA7036190	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315548	RNA-Seq	South_America_1	Argentina	PRJEB39201	SAMEA7036191	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315552	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7036195	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315554	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7036197	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315557	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7036200	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315558	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7036201	<i>Puccinia striiformis</i>	f. sp. tritici
ERR4315560	RNA-Seq	Europe_2	Czech Republic	PRJEB39201	SAMEA7036203	<i>Puccinia striiformis</i>	f. sp. tritici

ERR4315561	RNA-Seq	Europe_2	Czech Republic	PRJEB39201	SAMEA7036204	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315565	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7036208	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315566	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036209	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315567	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036210	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315568	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036211	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315569	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036212	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315570	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036213	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315571	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036214	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315572	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036215	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315573	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036216	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315574	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036217	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315575	RNA-Seq	Europe_3	Czech Republic	PRJEB39201	SAMEA7036218	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315577	RNA-Seq	Europe_3	Czech Republic	PRJEB39201	SAMEA7036220	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315578	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036221	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315579	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036222	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315580	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036223	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315581	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036224	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315582	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036225	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315585	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036228	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315587	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036230	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315588	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036231	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315590	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036233	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315591	RNA-Seq	Europe_3	Ireland	PRJEB39201	SAMEA7036234	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315592	RNA-Seq	Europe_3	Ireland	PRJEB39201	SAMEA7036235	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315593	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036236	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315595	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036238	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315596	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036239	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315598	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036241	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315599	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036242	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315600	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036243	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315601	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036244	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315602	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036245	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315603	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036246	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315604	RNA-Seq	South_America_2	Argentina	PRJEB39201	SAMEA7036247	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>
ERR4315605	RNA-Seq	South_America_2	Argentina	PRJEB39201	SAMEA7036248	<i>Puccinia striiformis</i>	f. sp. <i>tritici</i>

ERR4315606	RNA-Seq	South_America_1	Argentina	PRJEB39201	SAMEA7036249	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315607	RNA-Seq	South_America_1	Argentina	PRJEB39201	SAMEA7036250	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315608	RNA-Seq	South_America_1	Argentina	PRJEB39201	SAMEA7036251	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315609	RNA-Seq	South_America_1	Argentina	PRJEB39201	SAMEA7036252	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315610	RNA-Seq	South_America_1	Argentina	PRJEB39201	SAMEA7036253	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315611	RNA-Seq	South_America_1	Argentina	PRJEB39201	SAMEA7036254	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315612	RNA-Seq	South_America_2	Argentina	PRJEB39201	SAMEA7036255	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315613	RNA-Seq	South_America_1	Argentina	PRJEB39201	SAMEA7036256	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315619	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036262	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315622	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036265	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315624	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036267	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315625	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036268	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315626	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036269	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315627	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036270	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315628	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036271	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315629	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036272	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315630	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036273	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315631	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036274	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315632	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036275	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315633	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036276	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315634	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036277	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315635	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036278	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315636	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036279	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315637	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036280	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315638	RNA-Seq	Europe_3	France	PRJEB39201	SAMEA7036281	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315639	RNA-Seq	Europe_2	UK	PRJEB39201	SAMEA7036282	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315640	RNA-Seq	Europe_2	UK	PRJEB39201	SAMEA7036283	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315641	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036284	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315642	RNA-Seq	Europe_2	UK	PRJEB39201	SAMEA7036285	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315643	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036286	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315644	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036287	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315645	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036288	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315646	RNA-Seq	Europe_3	Germany	PRJEB39201	SAMEA7036289	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315648	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036291	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315649	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036292	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>

ERR4315650	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036293	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315651	RNA-Seq	Europe_2	UK	PRJEB39201	SAMEA7036294	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315652	RNA-Seq	Europe_2	UK	PRJEB39201	SAMEA7036295	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315653	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036296	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315654	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036297	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315655	RNA-Seq	Europe_4	UK	PRJEB39201	SAMEA7036298	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315656	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036299	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315657	RNA-Seq	Europe_4	UK	PRJEB39201	SAMEA7036300	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315658	RNA-Seq	Europe_4	UK	PRJEB39201	SAMEA7036301	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315659	RNA-Seq	Europe_4	UK	PRJEB39201	SAMEA7036302	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315660	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036303	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315662	RNA-Seq	Europe_4	UK	PRJEB39201	SAMEA7036305	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315663	RNA-Seq	Europe_1	UK	PRJEB39201	SAMEA7036306	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315664	RNA-Seq	Europe_4	UK	PRJEB39201	SAMEA7036307	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315665	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7036308	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315666	RNA-Seq	South_Africa	South Africa	PRJEB39201	SAMEA7036309	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315667	RNA-Seq	South_Africa	South Africa	PRJEB39201	SAMEA7036310	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315668	RNA-Seq	South_Africa	South Africa	PRJEB39201	SAMEA7036311	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315669	RNA-Seq	South_Africa	South Africa	PRJEB39201	SAMEA7036312	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315670	RNA-Seq	South_Africa	South Africa	PRJEB39201	SAMEA7036313	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315671	RNA-Seq	South_Africa	South Africa	PRJEB39201	SAMEA7036314	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315672	RNA-Seq	South_Africa	South Africa	PRJEB39201	SAMEA7036315	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315673	RNA-Seq	South_Africa	South Africa	PRJEB39201	SAMEA7036316	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315674	RNA-Seq	South_Africa	South Africa	PRJEB39201	SAMEA7036317	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315675	RNA-Seq	South_Africa	South Africa	PRJEB39201	SAMEA7036318	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315676	RNA-Seq	South_Africa	South Africa	PRJEB39201	SAMEA7036319	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315677	RNA-Seq	South_Africa	South Africa	PRJEB39201	SAMEA7036320	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315678	RNA-Seq	Europe_3	Denmark	PRJEB39201	SAMEA7036321	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4315685	RNA-Seq	Europe_4	UK	PRJEB39201	SAMEA7035803	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4761816	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7490578	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4761817	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7490579	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4761818	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7490580	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4761819	RNA-Seq	Europe_3	UK	PRJEB39201	SAMEA7490581	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4761820	RNA-Seq	Europe_4	UK	PRJEB39201	SAMEA7490582	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
ERR4761821	RNA-Seq	Europe_4	UK	PRJEB39201	SAMEA7490583	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>

ERR5960086	RNA-Seq	South_Africa	South Africa	PRJEB45236	SAMEA8804409	<i>Puccinia striiformis</i>	f. sp. tritici
SRR653741	WGS	North_America	USA	PRJNA181959	SAMN01818051	<i>Puccinia striiformis</i>	f. sp. tritici
SRR11440843	RNA-Seq	Europe_2	UK	PRJNA256347	SAMN03075691	<i>Puccinia striiformis</i>	f. sp. tritici
SRR11440844	RNA-Seq	Europe_4	UK	PRJNA256347	SAMN03075690	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1555123	RNA-Seq	Europe_4	UK	PRJNA256347	SAMN02943226	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1555294	RNA-Seq	Europe_3	UK	PRJNA256347	SAMN02943267	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1555295	RNA-Seq	Europe_3	UK	PRJNA256347	SAMN02943264	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1555738	RNA-Seq	Europe_2	UK	PRJNA256347	SAMN02943239	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1555739	RNA-Seq	Europe_3	UK	PRJNA256347	SAMN02943260	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1555740	RNA-Seq	Europe_4	UK	PRJNA256347	SAMN02943219	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1556067	RNA-Seq	Europe_3	UK	PRJNA256347	SAMN02943258	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1557190	RNA-Seq	Europe_2	UK	PRJNA256347	SAMN02943236	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1557191	RNA-Seq	Europe_3	UK	PRJNA256347	SAMN02943247	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1557212	RNA-Seq	Europe_3	UK	PRJNA256347	SAMN02943262	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1557213	RNA-Seq	Europe_2	UK	PRJNA256347	SAMN02943237	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1557214	RNA-Seq	Europe_2	UK	PRJNA256347	SAMN02943242	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1557259	RNA-Seq	Europe_4	UK	PRJNA256347	SAMN02943217	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1562049	RNA-Seq	Europe_3	UK	PRJNA256347	SAMN02943268	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1562077	RNA-Seq	Europe_3	UK	PRJNA256347	SAMN02943269	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1562078	RNA-Seq	Europe_3	UK	PRJNA256347	SAMN02943259	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1562080	RNA-Seq	Europe_3	UK	PRJNA256347	SAMN02943263	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1562081	RNA-Seq	Europe_4	UK	PRJNA256347	SAMN02943227	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1562084	RNA-Seq	Europe_3	UK	PRJNA256347	SAMN02943270	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1562085	RNA-Seq	Europe_3	UK	PRJNA256347	SAMN02943265	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1562182	RNA-Seq	Europe_3	UK	PRJNA256347	SAMN02943245	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1562185	RNA-Seq	Europe_4	UK	PRJNA256347	SAMN02943218	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1562262	RNA-Seq	Europe_3	UK	PRJNA256347	SAMN02943261	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1562263	RNA-Seq	Europe_5	UK	PRJNA256347	SAMN02943230	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1575605	RNA-Seq	Europe_2	UK	PRJNA256347	SAMN02943238	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1575607	RNA-Seq	Europe_3	UK	PRJNA256347	SAMN02943266	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1575608	RNA-Seq	Europe_2	UK	PRJNA256347	SAMN02943243	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1576647	RNA-Seq	Europe_2	UK	PRJNA256347	SAMN02943235	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1576651	RNA-Seq	Europe_5	UK	PRJNA256347	SAMN02943231	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1576668	RNA-Seq	Europe_5	UK	PRJNA256347	SAMN02943232	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1576784	RNA-Seq	Europe_5	UK	PRJNA256347	SAMN02943233	<i>Puccinia striiformis</i>	f. sp. tritici

SRR1576786	RNA-Seq	Europe_4	UK	PRJNA256347	SAMN02943229	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1576813	RNA-Seq	Europe_2	UK	PRJNA256347	SAMN02943240	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1576814	RNA-Seq	Europe_2	UK	PRJNA256347	SAMN02943241	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1583659	RNA-Seq	Europe_2	UK	PRJNA256347	SAMN02948007	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1583660	RNA-Seq	Europe_3	UK	PRJNA256347	SAMN03075688	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1583679	RNA-Seq	Europe_2	UK	PRJNA256347	SAMN03075692	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1583680	RNA-Seq	Europe_4	UK	PRJNA256347	SAMN03075693	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1533752	WGS	Europe_4	UK	PRJNA257181	SAMN02948010	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1533791	WGS	Europe_4	UK	PRJNA257181	SAMN02948008	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1533792	WGS	Europe_2	UK	PRJNA257181	SAMN02948007	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1533793	WGS	Europe_4	UK	PRJNA257181	SAMN02948006	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1534174	WGS	Europe_4	UK	PRJNA257181	SAMN02948004	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1534190	WGS	Europe_4	UK	PRJNA257181	SAMN02948003	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1534208	WGS	Europe_4	UK	PRJNA257181	SAMN02948001	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1534347	WGS	Europe_4	UK	PRJNA257181	SAMN02947997	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1534348	WGS	Europe_4	UK	PRJNA257181	SAMN02947996	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1534359	WGS	Europe_4	UK	PRJNA257181	SAMN02947995	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1534385	WGS	Europe_4	UK	PRJNA257181	SAMN02947994	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1534386	WGS	Europe_4	UK	PRJNA257181	SAMN02947993	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1534393	WGS	Europe_4	UK	PRJNA257181	SAMN02947980	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1538789	WGS	Europe_4	France	PRJNA257181	SAMN02954136	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1538830	WGS	Europe_4	France	PRJNA257181	SAMN02954137	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1539204	WGS	Europe_4	France	PRJNA257181	SAMN02954138	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1539205	WGS	Europe_4	France	PRJNA257181	SAMN02954139	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1539263	WGS	Europe_4	France	PRJNA257181	SAMN02954140	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1539285	WGS	Europe_4	France	PRJNA257181	SAMN02954149	<i>Puccinia striiformis</i>	f. sp. tritici
SRR1539286	WGS	Europe_4	France	PRJNA257181	SAMN02954151	<i>Puccinia striiformis</i>	f. sp. tritici
SRR6031720	WGS	Oceania_2	Australia	PRJNA396589	SAMN07430048	<i>Puccinia striiformis</i>	f. sp. tritici
SRR6031721	WGS	Oceania_2	Australia	PRJNA396589	SAMN07430048	<i>Puccinia striiformis</i>	f. sp. tritici
SRR6031722	WGS	Oceania_2	Australia	PRJNA396589	SAMN07430048	<i>Puccinia striiformis</i>	f. sp. tritici
SRR987407	WGS	North_America	USA	PRJNA41279	SAMN00254207	<i>Puccinia striiformis</i>	f. sp. tritici
SRR8208848	WGS	North_America	USA	PRJNA422914	SAMN08200485	<i>Puccinia striiformis</i>	f. sp. tritici
SRR8208849	WGS	North_America	USA	PRJNA422914	SAMN08200486	<i>Puccinia striiformis</i>	f. sp. tritici
SRR058505	WGS	North_America	USA	PRJNA51241	SAMN00025370	<i>Puccinia striiformis</i>	f. sp. tritici
SRR058506	WGS	North_America	USA	PRJNA51241	SAMN00025370	<i>Puccinia striiformis</i>	f. sp. tritici

SRR10406086	WGS	Europe_2	Denmark	PRJNA588102	SAMN12098061	<i>Puccinia striiformis</i>	f. sp. tritici
SRR172666	WGS	Europe_4	UK	PRJNA60743	SAMN00254054	<i>Puccinia striiformis</i>	f. sp. tritici
SRR172668	WGS	North_America	USA	PRJNA60743	SAMN00254052	<i>Puccinia striiformis</i>	f. sp. tritici
SRR172669	WGS	Europe_4	UK	PRJNA60743	SAMN00254054	<i>Puccinia striiformis</i>	f. sp. tritici
SRR172670	WGS	North_America	USA	PRJNA60743	SAMN00254051	<i>Puccinia striiformis</i>	f. sp. tritici
SRR172672	WGS	North_America	USA	PRJNA60743	SAMN00254052	<i>Puccinia striiformis</i>	f. sp. tritici
SRR172674	WGS	North_America	USA	PRJNA60743	SAMN00254051	<i>Puccinia striiformis</i>	f. sp. tritici
SRR247931	WGS	North_America	USA	PRJNA60743	SAMN02356342	<i>Puccinia striiformis</i>	f. sp. tritici
SRR305202	WGS	North_America	USA	PRJNA60743	SAMN00254051	<i>Puccinia striiformis</i>	f. sp. tritici
SRR305301	WGS	North_America	USA	PRJNA60743	SAMN00254051	<i>Puccinia striiformis</i>	f. sp. tritici
SRR354036	WGS	North_America	USA	PRJNA60743	SAMN02356342	<i>Puccinia striiformis</i>	f. sp. tritici
SRR354203	WGS	North_America	USA	PRJNA60743	SAMN00254051	<i>Puccinia striiformis</i>	f. sp. tritici
SRR13781819	WGS	Oceania_2	Australia	PRJNA704774	SAMN18055423	<i>Puccinia striiformis</i>	f. sp. tritici
SRR13781820	WGS	Oceania_2	Australia	PRJNA704774	SAMN18055422	<i>Puccinia striiformis</i>	f. sp. tritici
SRR13799079	WGS	Oceania_1	Australia	PRJNA704774	SAMN18055426	<i>Puccinia striiformis</i>	f. sp. tritici
SRR13799080	WGS	Oceania_1	Australia	PRJNA704774	SAMN18055425	<i>Puccinia striiformis</i>	f. sp. tritici
SRR13799081	WGS	Oceania_2	Australia	PRJNA704774	SAMN18055424	<i>Puccinia striiformis</i>	f. sp. tritici
SRR15496036	WGS	North_America	Canada	PRJNA704774	SAMN20822871	<i>Puccinia striiformis</i>	f. sp. tritici
SRR15496038	WGS	North_America	Canada	PRJNA704774	SAMN20822869	<i>Puccinia striiformis</i>	f. sp. tritici
SRR15496039	WGS	North_America	Canada	PRJNA704774	SAMN20822868	<i>Puccinia striiformis</i>	f. sp. tritici
SRR15496040	WGS	North_America	Canada	PRJNA704774	SAMN20822867	<i>Puccinia striiformis</i>	f. sp. tritici
SRR15496041	WGS	North_America	Canada	PRJNA704774	SAMN20822866	<i>Puccinia striiformis</i>	f. sp. tritici
SRR15496042	WGS	North_America	Canada	PRJNA704774	SAMN20822865	<i>Puccinia striiformis</i>	f. sp. tritici
SRR15357740	WGS	Oceania_1	Australia	PRJNA749614	SAMN20585433	<i>Puccinia striiformis</i>	f. sp. tritici
SRR15357741	WGS	Oceania_1	Australia	PRJNA749614	SAMN20585433	<i>Puccinia striiformis</i>	f. sp. tritici
SRR18091433	WGS	Asia_2	China	PRJNA809046	SAMN26138566	<i>Puccinia striiformis</i>	f. sp. tritici
SRR18091434	WGS	Asia_2	China	PRJNA809046	SAMN26138565	<i>Puccinia striiformis</i>	f. sp. tritici
SRR18091435	WGS	Asia_2	China	PRJNA809046	SAMN26138564	<i>Puccinia striiformis</i>	f. sp. tritici
SRR18091436	WGS	Asia_2	China	PRJNA809046	SAMN26138563	<i>Puccinia striiformis</i>	f. sp. tritici
SRR18091437	WGS	Asia_2	China	PRJNA809046	SAMN26138562	<i>Puccinia striiformis</i>	f. sp. tritici
SRR18091438	WGS	Asia_1	China	PRJNA809046	SAMN26138561	<i>Puccinia striiformis</i>	f. sp. tritici
SRR18091439	WGS	Asia_2	China	PRJNA809046	SAMN26138560	<i>Puccinia striiformis</i>	f. sp. tritici
SRR18091440	WGS	Asia_1	China	PRJNA809046	SAMN26138559	<i>Puccinia striiformis</i>	f. sp. tritici
SRR18091441	WGS	Asia_2	China	PRJNA809046	SAMN26138558	<i>Puccinia striiformis</i>	f. sp. tritici
SRR18091442	WGS	Asia_1	China	PRJNA809046	SAMN26138557	<i>Puccinia striiformis</i>	f. sp. tritici

SRR18091583	WGS	Asia_2	China	PRJNA809046	SAMN26138567	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
SRR18091584	WGS	Asia_1	China	PRJNA809046	SAMN26138477	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
SRR18091585	WGS	Asia_2	China	PRJNA809046	SAMN26138468	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
SRR18091586	WGS	Asia_2	China	PRJNA809046	SAMN26138467	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>
SRR11070881	WGS	Outgroup	USA	PRJNA77809	SAMN14084951	<i>Puccinia triticina</i>
SRR11070887	WGS	Outgroup	USA	PRJNA77809	SAMN14084961	<i>Puccinia triticina</i>
SRR11070893	WGS	Outgroup	USA	PRJNA77809	SAMN14084955	<i>Puccinia triticina</i>
SRR11070894	WGS	Outgroup	USA	PRJNA77809	SAMN14084946	<i>Puccinia triticina</i>
SRR17888320	WGS	Outgroup	USA	PRJNA803546	SAMN25656425	<i>Puccinia graminis</i> f. sp. <i>tritici</i>
SRR17888321	WGS	Outgroup	USA	PRJNA803546	SAMN25656424	<i>Puccinia graminis</i> f. sp. <i>tritici</i>
SRR17888322	WGS	Outgroup	USA	PRJNA803546	SAMN25656423	<i>Puccinia graminis</i> f. sp. <i>tritici</i>
SRR17888323	WGS	Outgroup	USA	PRJNA803546	SAMN25656422	<i>Puccinia graminis</i> f. sp. <i>tritici</i>

Table S2. Primer information statistics of HG-SNP markers.

ID	Length (bp)	SNP Number	Tm ^a (°C)	Group
W2.545	166	1	58	A
W2.793	271	8	58	A
W3.496	205	1	58	A
W3.498	267	3	58	A
W8.274	265	3	58	A
W12.309	273	6	58	A
W21.52	271	6	58	A
W21.56	155	1	58	A
W26.35	263	6	58	A
W36.131	224	1	58	A
W36.164	182	8	58	A
W36.165	223	6	58	A
W36.204	178	1	58	A
W36.81	167	4	58	A
W38.59	275	6	58	A
W52.18	255	8	58	A
W1.835	198	2	65	B
W2.244	277	2	65	B
W2.785	282	6	65	B
W12.245	273	6	65	B
W16.345	253	13	65	B
W21.223	237	2	65	B
W21.227	214	7	65	B
W21.51	228	4	65	B
W26.40	247	3	65	B
W37.91	279	5	65	B
W50.68	244	2	65	B
W63.23	261	4	65	B
W63.25	261	11	65	B
W1.764	176	2	65	C
W5.334	168	1	65	C
W12.254	165	4	65	C
W18.175	175	1	65	C
W19.228	210	1	65	C
W14.69	238	2	58	C
W37.94	155	10	58	C
W40.118	171	3	58	C
W51.24	231	1	58	C
W52.15	175	4	58	C
Total	8758	165		

a The represents the annealing temperature.

Table S3. Primer sequences of HG-SNP markers.

Primer Name	Primer Sequence(5'-3')
W1.764-F	CTTCAGCTCCCAATTGTATCATGTG
W1.764-R	CAAGCATGCTGACGCATACGAGAAG
W2.545-F	GATGTTGTATATGGACGAACTTGATG
W2.545-R	TAATCTGGATTGATGTTTTCTTGCC
W2.793-F	ATCGGTGTTGGTTGATTTATTGA
W2.793-R	GTGGACTTAGCGTCTCAAATGATAC
W3.496-F	CCATCCCATAATACATCATCCTC
W3.496-R	AAACTATCCACTTGATTTTCGGT
W3.498-F	GACAAATTGCTCACTCTTATTCA
W3.498-R	TGTTGTGTTTCGTCATCTGTTCG
W8.274-F	TCCATCTTCAACCATCTCCCACT
W8.274-R	ACAACATAGATACAGGAAGGAAC
W14.69-F	TTGGAAGGTATTTTCGAGTAATGC
W14.69-R	TACAGAACTTCAGTGGCGGATA
W16.345-F	CATATCACAATCAACAAGAACGC
W16.345-R	AACTGGTCCAAGAGCACTTTACC
W21.51-F	TGACTGACCTGTGAGAGAAGAAC
W21.51-R	ATCCTAGCCCCGACGATTAATAT
W21.52-F	AAGATCCGCCATTCAGCAAACCTC
W21.52-R	TGCAATTCTTGACGCTGAACACA
W21.56-F	TCTTTGCATCTATTTCTACTCGAGA
W21.56-R	TCTCCGTCGGACAAGATGATCAAG
W26.35-F	TATGGACATCCCAACTATCACTATCAA
W26.35-R	TAAGAAGCGAAAAGCGTCCAGAAC
W36.131-F	GAAGAGATGAAATTATTGATGTGC
W36.131-R	GCTGATCCTTCAACTACTGCTTC
W36.164-F	ATCCAATTTGATCGTCTCGTCTTC
W36.164-R	AATCAAATCAGGAACACTCTGTC
W36.165-F	ATGTCTTCCATTGATAGGTAGTC
W36.165-R	CAACAGAATTGTGGATTGTCTAC
W36.204-F	TAATCTGTAAACGAAGAAGGAAC
W36.204-R	GACCACTTCAGATATGTACCAAC
W36.81-F	AGTTTCAGCATTCTTTATGATGG
W36.81-R	GAGAGAAAGTTCACAAGTTATTG
W37.94-F	TCTCAACTCATGAACTTAAACCC
W37.94-R	CGCCGAATCTGAAATTAGGACC
W38.59-F	TGTCCATCCTAAGGTAGGTAGAT
W38.59-R	GTAAACGCTCCCACTCTCTTTCTCAT
W40.118-F	TTAAGATTGAGAAACCAACTTACCTC
W40.118-R	CCTATCGAAGGTGAATTACTTACTCC
W50.68-F	CGATGCTCCTAGAGACAGTGTTGG
W50.68-R	GACTACTATTACTCCGATGGCTTC
W51.24-F	TTACAGTTGAGGACAATCTTACC
W51.24-R	AACTGGAACAAGACCCTATTAC
W52.15-F	AACCTCCACCAATCACTAACAAG
W52.15-R	GAGTCTCAAAGCGTAAGCTCAC
W1.835-F	GATGTTCCGTGTCGGACCTGAATTG
W1.835-R	CACGACCGATGGGTACCATTGCG
W2.244-F	CGTTGATCTCCGAGTTCTCTAGAC
W2.244-R	CATGGTGGCATGCTTTCACCATC
W2.785-F	TGTCACCACCACTCACCATCAACAG
W2.785-R	CATTACCTTTCTCTAAATCCCAACCG
W5.334-F	CATGTGTCTAGGGTCTACTTTCAATCC

W5.334-R CTCGCTCTTCTTACTCTGCCTGC
W12.245-F AATACCCTCTGTTCACTTTGCGT
W12.245-R AACTAGCGATTAGGTTGACTCAT
W12.254-F AGACTAACCGTTGGTTCCCATTC
W12.254-R CATGCGCGCATTCTGTTCACTC
W12.309-F AACCGAAGATACAATGATCGAAAC
W12.309-R AGAGTGTTGAAACTACAAACGCG
W18.175-F GTACCGATCTGAAATATCGAACCTAG
W18.175-R CTAATTGCCTCATTACATACAGTCAC
W19.228-F TGACATCCCATAGCCACCCTCTG
W19.228-R ATTCCGTTTCGATACTCTCTGTC
W21.223-F CACGCGTCAGTGTGAGCCATCTG
W21.223-R TTGGCGTTCATAGTCTCGTTAG
W21.227-F GACCAGCTTCGGTACAAACGGCCTTG
W21.227-R CAAGATCGAGACATTAGATCCAGCC
W26.40-F GTTTCCATCCGTTCCCTTCATTA
W26.40-R TCTTCCACAGTCGCTAGATTTCAG
W37.91-F AGTCCTTGTGCATTCAATAGAGC
W37.91-R TCTCACTCACACTCTCACTACCA
W52.18-F AAGGAATAACGACCCACTCACTTG
W52.18-R TTCTGATCATTTGGCTGAATCTGATG
W63.23-F AGCACGGAGAGTCAAGCTAAGGA
W63.23-R CGTGAATGCGAAGAAGAGAAAGC
W63.25-F GTACATGGCACTACATCTAGCCC
W63.25-R GACGAGAAGTAATCCAGGACCTTC

Table S4. Barcode information statistics of HG-SNP markers.

F Barcode	R Barcode
GAA	CAA
GAG	CAG
GAC	CAC
GAT	CAT
GGA	CGA
GGG	CGG
GGC	CGC
GGT	CGT
GCA	CCA
GCG	CCG
GCC	CCC
GCT	CCT
GTA	CTA
GTG	CTG
GTC	CTC
GTT	CTT

Table S5. Fixation index (F_{ST}) (below diagonal) and gene flow (N_m) (above diagonal) analysis for all geographic groups in the world using GRSD

	Europe_1	Asia_2	Europe_2	South_America_1	Europe_3	Europe_4	South_America_2	Oceania_2	Europe_5	South_Africa	Central_Africa_2	Asia_1	Central_Africa_1	North_America	Oceania_1
Europe_1		0.176	0.677	0.547	0.753	0.524	0.538	0.315	0.206	0.523	0.442	0.463	0.533	0.903	1.448
Asia_2	0.587		0.217	0.525	0.473	0.583	0.396	0.468	0.250	0.216	0.335	0.367	0.557	1.560	1.739
Europe_2	0.270	0.535		0.115	0.479	0.427	0.469	0.350	0.433	0.174	0.107	0.278	0.294	0.631	2.262
South_America_1	0.314	0.322	0.684		0.159	0.678	0.546	0.741	0.511	0.529	0.276	0.185	0.519	0.419	0.624
Europe_3	0.249	0.346	0.343	0.611		0.486	0.818	0.995	0.637	0.686	0.796	0.595	0.887	0.939	1.221
Europe_4	0.323	0.300	0.369	0.269	0.340		0.862	1.440	1.179	1.352	1.160	1.148	0.996	30.430	3.279
South_America_2	0.317	0.387	0.348	0.314	0.234	0.225		1.461	2.028	1.319	2.406	1.551	1.446	2.023	3.795
Oceania_2	0.442	0.348	0.417	0.252	0.201	0.148	0.146		1.043	1.284	0.809	1.517	0.895	0.816	1.002
Europe_5	0.548	0.500	0.366	0.328	0.282	0.175	0.110	0.193		2.359	2.173	1.040	2.700	3.374	18.539
South_Africa	0.324	0.537	0.589	0.321	0.267	0.156	0.159	0.163	0.096		2.030	2.009	1.321	1.980	3.801
Central_Africa_2	0.361	0.427	0.701	0.476	0.239	0.177	0.094	0.236	0.103	0.110		11.239	3.954	1.243	1.763
Asia_1	0.351	0.405	0.474	0.574	0.296	0.179	0.139	0.141	0.194	0.111	0.022		2.262	2.613	1.535
Central_Africa_1	0.319	0.310	0.460	0.325	0.220	0.201	0.147	0.218	0.085	0.159	0.059	0.100		0.757	1.667
North_America	0.217	0.138	0.284	0.373	0.210	0.008	0.110	0.235	0.069	0.112	0.167	0.087	0.248		4.608
Oceania_1	0.147	0.126	0.002	0.286	0.170	0.071	0.062	0.200	0.013	0.062	0.124	0.140	0.130	0.051	

Table S6. Fixation index (F_{ST}) (below diagonal) and gene flow (N_m) (above diagonal) analysis for all geographic groups in the world using HG-SNP markers.

	Europe_1	Asia_2	Europe_2	South_America_1	Europe_3	Europe_4	South_America_2	Oceania_2	Europe_5	South_Africa	Central_Africa_2	Asia_1	Central_Africa_1	North_America	Oceania_1
Europe_1		0.187	0.539	0.432	0.579	0.433	0.388	0.327	0.221	0.535	0.443	0.584	0.331	0.553	0.7169
Asia_2	0.572		0.562	0.767	0.774	1.102	0.578	0.481	0.413	0.498	0.623	0.555	0.927	0.997	0.9376
Europe_2	0.317	0.308		0.085	0.320	0.287	0.343	0.215	0.215	0.103	0.082	0.197	0.198	0.560	8.000
South_America_1	0.367	0.246	0.747		0.110	0.438	0.367	0.533	0.283	0.262	0.173	0.141	0.377	0.284	0.563
Europe_3	0.301	0.244	0.439	0.694		0.719	1.452	1.162	0.858	0.825	0.610	0.519	0.906	0.850	0.984
Europe_4	0.366	0.185	0.465	0.363	0.258		0.931	1.565	0.995	1.079	1.114	0.891	0.807	8.000	2.541
South_America_2	0.392	0.302	0.421	0.405	0.147	0.212		1.719	2.043	1.078	2.695	1.058	0.852	1.579	7.029
Oceania_2	0.433	0.342	0.538	0.319	0.177	0.138	0.127		0.830	1.692	0.788	1.338	0.827	0.680	1.029
Europe_5	0.531	0.377	0.538	0.469	0.226	0.201	0.109	0.231		7.876	1.366	0.841	1.728	2.548	5.332
South_Africa	0.318	0.334	0.709	0.488	0.233	0.188	0.188	0.129	0.031		7.922	1.270	0.976	1.102	5.205
Central_Africa_2	0.361	0.286	0.754	0.591	0.291	0.183	0.085	0.241	0.155	0.031		8.000	2.001	1.215	1.161
Asia_1	0.300	0.311	0.559	0.639	0.325	0.219	0.191	0.157	0.229	0.164	0.000		1.620	2.206	1.772
Central_Africa_1	0.430	0.212	0.557	0.399	0.216	0.237	0.227	0.232	0.126	0.204	0.111	0.134		0.968	1.724
North_America	0.311	0.201	0.309	0.468	0.227	0.000	0.137	0.269	0.089	0.185	0.171	0.102	0.205		2.7799
Oceania_1	0.259	0.211	0.000	0.308	0.203	0.090	0.034	0.195	0.045	0.046	0.177	0.124	0.127	0.083	

Table S7. Sample information statistical of *Puccinia striiformis* f. sp. *tritici* in China.

Sample_ID	F_Bar code	R_Bar code	Barcode_ID	Geographic_ID	Time	Province	City	Longitude	Latitude	Altitude	Molecular Group	Geographic Group
A1_B1_C1	GAA	CAA	1GAACAA	21GS-LN-1-1	2021.4.16	Gansu	Longnan	106.2358	33.8819	1206.1	MG7	GSLN
A1_B1_C1	GAA	CAC	1GAACAC	21GS-PL-1-13	2021.5.25	Gansu	Pingliang	108.2425	35.1906	1300	MG3	GSLD
A1_B1_C1	GAA	CAG	1GAACAG	21GS-PL-1-1	2021.5.25	Gansu	Pingliang	108.2425	35.1906	1300	MG7	GSLD
A1_B1_C1	GAA	CCT	1GAACCT	21QH-HNZ-1-1	2021.9.16	Qinhai	Hainanzhou	101.5344	36.2992	3121	MG6	QH
A1_B1_C1	GAA	CGA	1GAACGA	21GS-TS-1-1	2021.5.24	Gansu	Tianshui	105.9300	34.4719	1223.3	MG4	GSLN
A1_B1_C1	GAA	CGC	1GAACGC	21GS-TS-3-1	2021.5.24	Gansu	Tianshui	104.8475	34.6239	1760	MG1	GSLN
A1_B1_C1	GAA	CGG	1GAACGG	21GS-TS-2-1	2021.5.24	Gansu	Tianshui	105.8781	34.6608	1665.3	MG2	GSLN
A1_B1_C1	GAA	CGT	1GAACGT	21GS-DX-1-1	2021.5.21	Gansu	Dingxi	104.0303	35.0883	2309.6	MG3	GSC
A1_B1_C1	GAA	CTC	1GAACTC	22GS-TS-1-1	2022.6.16	Gansu	Tianshui	105.5888	34.3154	1510	MG1	GSLN
A1_B1_C1	GAC	CAG	1GACCAG	21GS-PL-1-3	2021.5.25	Gansu	Pingliang	108.2425	35.1906	1300	MG5	GSLD
A1_B1_C1	GAC	CAT	1GACCAT	21GS-PL-2-3	2021.5.25	Gansu	Pingliang	106.8075	35.3853	1700	MG3	GSLD
A1_B1_C1	GAC	CCA	1GACCCA	21QH-HD-1-3	2021.9.15	Qinhai	Haidong	101.8561	36.9650	2941	MG3	QH
A1_B1_C1	GAC	CCG	1GACCCG	21QH-HD-2-3	2021.9.16	Qinhai	Haidong	101.9311	36.2553	3097	MG4	QH
A1_B1_C1	GAC	CCT	1GACCCT	21QH-HNZ-1-3	2021.9.16	Qinhai	Hainanzhou	101.5344	36.2992	3121	MG3	QH
A1_B1_C1	GAC	CGA	1GACCGA	21GS-TS-1-3	2021.5.24	Gansu	Tianshui	105.9300	34.4719	1223.3	MG3	GSLN
A1_B1_C1	GAC	CGC	1GACCGC	21GS-TS-3-3	2021.5.24	Gansu	Tianshui	104.8475	34.6239	1760	MG1	GSLN
A1_B1_C1	GAC	CGG	1GACCGG	21GS-TS-2-3	2021.5.24	Gansu	Tianshui	105.8781	34.6608	1665.3	MG2	GSLN
A1_B1_C1	GAC	CTA	1GACCTA	21QH-XN-1-3	2021.9.15	Qinhai	Xining	101.6600	37.0425	2666	MG4	QH
A1_B1_C1	GAC	CTC	1GACCTC	22GS-TS-1-3	2022.6.16	Gansu	Tianshui	105.5888	34.3154	1510	MG2	GSLN
A1_B1_C1	GAC	CTG	1GACCTG	21QH-XN-2-3	2021.9.16	Qinhai	Xining	101.5233	36.4711	2787	MG1	QH
A1_B1_C1	GAC	CTT	1GACCTT	22GS-TS-2-3	2022.6.16	Gansu	Tianshui	105.4822	34.6083	1656.5	MG2	GSLN
A1_B1_C1	GAG	CAA	1GAGCAA	21GS-LN-1-2	2021.4.16	Gansu	Longnan	106.2358	33.8819	1206.1	MG2	GSLN
A1_B1_C1	GAG	CAC	1GAGCAC	21GS-PL-1-14	2021.5.25	Gansu	Pingliang	108.2425	35.1906	1300	MG3	GSLD
A1_B1_C1	GAG	CAT	1GAGCAT	21GS-PL-2-2	2021.5.25	Gansu	Pingliang	106.8075	35.3853	1700	MG2	GSLD
A1_B1_C1	GAG	CCA	1GAGCCA	21QH-HD-1-2	2021.9.15	Qinhai	Haidong	101.8561	36.9650	2941	MG2	QH
A1_B1_C1	GAG	CCG	1GAGCCG	21QH-HD-2-2	2021.9.16	Qinhai	Haidong	101.9311	36.2553	3097	MG4	QH
A1_B1_C1	GAG	CCT	1GAGCCT	21QH-HNZ-1-2	2021.9.16	Qinhai	Hainanzhou	101.5344	36.2992	3121	MG2	QH
A1_B1_C1	GAG	CGA	1GAGCGA	21GS-TS-1-2	2021.5.24	Gansu	Tianshui	105.9300	34.4719	1223.3	MG1	GSLN
A1_B1_C1	GAG	CGC	1GAGCGC	21GS-TS-3-2	2021.5.24	Gansu	Tianshui	104.8475	34.6239	1760	MG1	GSLN
A1_B1_C1	GAG	CTA	1GAGCTA	21QH-XN-1-2	2021.9.15	Qinhai	Xining	101.6600	37.0425	2666	MG2	QH
A1_B1_C1	GAG	CTC	1GAGCTC	22GS-TS-1-2	2022.6.16	Gansu	Tianshui	105.5888	34.3154	1510	MG2	GSLN
A1_B1_C1	GAG	CTG	1GAGCTG	21QH-XN-2-2	2021.9.16	Qinhai	Xining	101.5233	36.4711	2787	MG2	QH
A1_B1_C1	GAG	CTT	1GAGCTT	22GS-TS-2-2	2022.6.16	Gansu	Tianshui	105.4822	34.6083	1656.5	MG1	GSLN
A1_B1_C1	GAT	CAC	1GATCAC	21GS-PL-1-16	2021.5.25	Gansu	Pingliang	108.2425	35.1906	1300	MG3	GSLD

A1_B1_C1	GAT	CAG	1GATCAG	21GS-PL-1-4	2021.5.25	Gansu	Pingliang	108.2425	35.1906	1300	MG5	GSLD
A1_B1_C1	GAT	CAT	1GATCAT	21GS-PL-2-4	2021.5.25	Gansu	Pingliang	106.8075	35.3853	1700	MG3	GSLD
A1_B1_C1	GAT	CCA	1GATCCA	21QH-HD-1-4	2021.9.15	Qinhai	Haidong	101.8561	36.9650	2941	MG5	QH
A1_B1_C1	GAT	CCC	1GATCCC	21QH-HD-3-4	2021.5.22	Qinhai	Haidong	102.3728	35.8725	1889	MG6	QH
A1_B1_C1	GAT	CCG	1GATCCG	21QH-HD-2-4	2021.9.16	Qinhai	Haidong	101.9311	36.2553	3097	MG4	QH
A1_B1_C1	GAT	CGA	1GATCGA	21GS-TS-1-4	2021.5.24	Gansu	Tianshui	105.9300	34.4719	1223.3	MG1	GSLN
A1_B1_C1	GAT	CGC	1GATCGC	21GS-TS-3-4	2021.5.24	Gansu	Tianshui	104.8475	34.6239	1760	MG1	GSLN
A1_B1_C1	GAT	CGG	1GATCGG	21GS-TS-2-4	2021.5.24	Gansu	Tianshui	105.8781	34.6608	1665.3	MG2	GSLN
A1_B1_C1	GAT	CTC	1GATCTC	22GS-TS-1-4	2022.6.16	Gansu	Tianshui	105.5888	34.3154	1510	MG2	GSLN
A1_B1_C1	GAT	CTT	1GATCTT	22GS-TS-2-4	2022.6.16	Gansu	Tianshui	105.4822	34.6083	1656.5	MG1	GSLN
A1_B1_C1	GCA	CAT	1GCACAT	21GS-PL-2-9	2021.5.25	Gansu	Pingliang	106.8075	35.3853	1700	MG3	GSLD
A1_B1_C1	GCA	CCG	1GCACCG	21QH-HD-2-9	2021.9.16	Qinhai	Haidong	101.9311	36.2553	3097	MG2	QH
A1_B1_C1	GCA	CCT	1GCACCT	21QH-HNZ-1-9	2021.9.16	Qinhai	Hainanzhou	101.5344	36.2992	3121	MG3	QH
A1_B1_C1	GCA	CGA	1GCACGA	21GS-TS-1-9	2021.5.24	Gansu	Tianshui	105.9300	34.4719	1223.3	MG2	GSLN
A1_B1_C1	GCA	CGC	1GCACGC	21GS-TS-3-9	2021.5.24	Gansu	Tianshui	104.8475	34.6239	1760	MG1	GSLN
A1_B1_C1	GCA	CGG	1GCACGG	21GS-TS-2-9	2021.5.24	Gansu	Tianshui	105.8781	34.6608	1665.3	MG2	GSLN
A1_B1_C1	GCA	CTA	1GCACTA	21QH-XN-1-9	2021.9.15	Qinhai	Xining	101.6600	37.0425	2666	MG2	QH
A1_B1_C1	GCA	CTC	1GCACTC	22GS-TS-1-9	2022.6.16	Gansu	Tianshui	105.5888	34.3154	1510	MG1	GSLN
A1_B1_C1	GCA	CTG	1GCACTG	21QH-XN-2-9	2021.9.16	Qinhai	Xining	101.5233	36.4711	2787	MG5	QH
A1_B1_C1	GCA	CTT	1GCACTT	22GS-TS-2-9	2022.6.16	Gansu	Tianshui	105.4822	34.6083	1656.5	MG1	GSLN
A1_B1_C1	GCC	CAA	1GCCCAA	21GS-LN-3-3	2021.4.17	Gansu	Longnan	104.8136	33.0942	995.1	MG2	GSLN
A1_B1_C1	GCC	CAT	1GCCCAT	21GS-PL-2-11	2021.5.25	Gansu	Pingliang	106.8075	35.3853	1700	MG3	GSLD
A1_B1_C1	GCC	CCA	1GCCCCA	21QH-HD-1-11	2021.9.15	Qinhai	Haidong	101.8561	36.9650	2941	MG2	QH
A1_B1_C1	GCC	CCC	1GCCCCC	21QH-HD-3-11	2021.5.22	Qinhai	Haidong	102.3728	35.8725	1889	MG2	QH
A1_B1_C1	GCC	CCG	1GCCCCG	21QH-HD-2-11	2021.9.16	Qinhai	Haidong	101.9311	36.2553	3097	MG5	QH
A1_B1_C1	GCC	CCT	1GCCCCT	21QH-HNZ-1-11	2021.9.16	Qinhai	Hainanzhou	101.5344	36.2992	3121	MG3	QH
A1_B1_C1	GCC	CGA	1GCCCGA	21GS-TS-1-11	2021.5.24	Gansu	Tianshui	105.9300	34.4719	1223.3	MG1	GSLN
A1_B1_C1	GCC	CGC	1GCCCGC	21GS-TS-4-1	2021.4.19	Gansu	Tianshui	105.4822	34.6083	1656.5	MG1	GSLN
A1_B1_C1	GCC	CGG	1GCCCGG	21GS-TS-2-11	2021.5.24	Gansu	Tianshui	105.8781	34.6608	1665.3	MG2	GSLN
A1_B1_C1	GCC	CTA	1GCCCTA	21QH-XN-1-11	2021.9.15	Qinhai	Xining	101.6600	37.0425	2666	MG5	QH
A1_B1_C1	GCC	CTG	1GCCCTG	21QH-XN-2-11	2021.9.16	Qinhai	Xining	101.5233	36.4711	2787	MG2	QH
A1_B1_C1	GCC	CTT	1GCCCTT	22GS-TS-2-11	2022.6.16	Gansu	Tianshui	105.4822	34.6083	1656.5	MG1	GSLN
A1_B1_C1	GCG	CAT	1GCGCAT	21GS-PL-2-10	2021.5.25	Gansu	Pingliang	106.8075	35.3853	1700	MG3	GSLD
A1_B1_C1	GCG	CCT	1GCGCCT	21QH-HNZ-1-10	2021.9.16	Qinhai	Hainanzhou	101.5344	36.2992	3121	MG4	QH
A1_B1_C1	GCG	CGC	1GCGCGC	21GS-TS-3-10	2021.5.24	Gansu	Tianshui	104.8475	34.6239	1760	MG1	GSLN
A1_B1_C1	GCG	CTA	1GCGCTA	21QH-XN-1-10	2021.9.15	Qinhai	Xining	101.6600	37.0425	2666	MG2	QH
A1_B1_C1	GCG	CTG	1GCGCTG	21QH-XN-2-10	2021.9.16	Qinhai	Xining	101.5233	36.4711	2787	MG3	QH
A1_B1_C1	GCG	CTT	1GCGCTT	22GS-TS-2-10	2022.6.16	Gansu	Tianshui	105.4822	34.6083	1656.5	MG1	GSLN

A1_B1_C1	GCT	CAT	1GCTCAT	21GS-PL-2-12	2021.5.25	Gansu	Pingliang	106.8075	35.3853	1700	MG5	GSLD
A1_B1_C1	GCT	CCT	1GCTCCT	21QH-HNZ-1-12	2021.9.16	Qinhai	Hainanzhou	101.5344	36.2992	3121	MG6	QH
A1_B1_C1	GCT	CGA	1GCTCGA	21GS-TS-1-12	2021.5.24	Gansu	Tianshui	105.9300	34.4719	1223.3	MG2	GSLN
A1_B1_C1	GCT	CGC	1GCTCGC	21GS-TS-4-2	2021.4.19	Gansu	Tianshui	105.4822	34.6083	1656.5	MG1	GSLN
A1_B1_C1	GCT	CGG	1GCTCGG	21GS-TS-2-12	2021.5.24	Gansu	Tianshui	105.8781	34.6608	1665.3	MG2	GSLN
A1_B1_C1	GCT	CTG	1GCTCTG	21QH-XN-2-12	2021.9.16	Qinhai	Xining	101.5233	36.4711	2787	MG3	QH
A1_B1_C1	GCT	CTT	1GCTCTT	22GS-TS-2-12	2022.6.16	Gansu	Tianshui	105.4822	34.6083	1656.5	MG4	GSLN
A1_B1_C1	GGA	CAT	1GGACAT	21GS-PL-2-5	2021.5.25	Gansu	Pingliang	106.8075	35.3853	1700	MG3	GSLD
A1_B1_C1	GGA	CCG	1GGACCG	21QH-HD-2-5	2021.9.16	Qinhai	Haidong	101.9311	36.2553	3097	MG2	QH
A1_B1_C1	GGA	CGC	1GGACGC	21GS-TS-3-5	2021.5.24	Gansu	Tianshui	104.8475	34.6239	1760	MG1	GSLN
A1_B1_C1	GGA	CGG	1GGACGG	21GS-TS-2-5	2021.5.24	Gansu	Tianshui	105.8781	34.6608	1665.3	MG2	GSLN
A1_B1_C1	GGA	CTA	1GGACTA	21QH-XN-1-5	2021.9.15	Qinhai	Xining	101.6600	37.0425	2666	MG2	QH
A1_B1_C1	GGA	CTC	1GGACTC	22GS-TS-1-5	2022.6.16	Gansu	Tianshui	105.5888	34.3154	1510	MG1	GSLN
A1_B1_C1	GGA	CTT	1GGACTT	22GS-TS-2-5	2022.6.16	Gansu	Tianshui	105.4822	34.6083	1656.5	MG2	GSLN
A1_B1_C1	GGC	CAT	1GGCCAT	21GS-PL-2-7	2021.5.25	Gansu	Pingliang	106.8075	35.3853	1700	MG5	GSLD
A1_B1_C1	GGC	CCA	1GGCCCA	21QH-HD-1-7	2021.9.15	Qinhai	Haidong	101.8561	36.9650	2941	MG2	QH
A1_B1_C1	GGC	CGA	1GGCCGA	21GS-TS-1-7	2021.5.24	Gansu	Tianshui	105.9300	34.4719	1223.3	MG2	GSLN
A1_B1_C1	GGC	CGC	1GGCCGC	21GS-TS-3-7	2021.5.24	Gansu	Tianshui	104.8475	34.6239	1760	MG1	GSLN
A1_B1_C1	GGC	CGG	1GGCCGG	21GS-TS-2-7	2021.5.24	Gansu	Tianshui	105.8781	34.6608	1665.3	MG2	GSLN
A1_B1_C1	GGC	CTA	1GGCCTA	21QH-XN-1-7	2021.9.15	Qinhai	Xining	101.6600	37.0425	2666	MG3	QH
A1_B1_C1	GGC	CTC	1GGCCTC	22GS-TS-1-7	2022.6.16	Gansu	Tianshui	105.5888	34.3154	1510	MG1	GSLN
A1_B1_C1	GGC	CTG	1GGCCTG	21QH-XN-2-7	2021.9.16	Qinhai	Xining	101.5233	36.4711	2787	MG1	QH
A1_B1_C1	GGG	CAG	1GGGCAG	21GS-PL-1-6	2021.5.25	Gansu	Pingliang	108.2425	35.1906	1300	MG5	GSLD
A1_B1_C1	GGG	CAT	1GGGCAT	21GS-PL-2-6	2021.5.25	Gansu	Pingliang	106.8075	35.3853	1700	MG3	GSLD
A1_B1_C1	GGG	CCA	1GGGCCA	21QH-HD-1-6	2021.9.15	Qinhai	Haidong	101.8561	36.9650	2941	MG2	QH
A1_B1_C1	GGG	CCG	1GGGCCG	21QH-HD-2-6	2021.9.16	Qinhai	Haidong	101.9311	36.2553	3097	MG2	QH
A1_B1_C1	GGG	CGC	1GGGCGC	21GS-TS-3-6	2021.5.24	Gansu	Tianshui	104.8475	34.6239	1760	MG1	GSLN
A1_B1_C1	GGG	CGG	1GGGCGG	21GS-TS-2-6	2021.5.24	Gansu	Tianshui	105.8781	34.6608	1665.3	MG2	GSLN
A1_B1_C1	GGG	CTG	1GGGCTG	21QH-XN-2-6	2021.9.16	Qinhai	Xining	101.5233	36.4711	2787	MG2	QH
A1_B1_C1	GGG	CTT	1GGGCTT	22GS-TS-2-6	2022.6.16	Gansu	Tianshui	105.4822	34.6083	1656.5	MG2	GSLN
A1_B1_C1	GGT	CAC	1GGTCAC	21GS-PL-1-20	2021.5.25	Gansu	Pingliang	108.2425	35.1906	1300	MG3	GSLD
A1_B1_C1	GGT	CAT	1GGTCAT	21GS-PL-2-8	2021.5.25	Gansu	Pingliang	106.8075	35.3853	1700	MG3	GSLD
A1_B1_C1	GGT	CCG	1GGTCCG	21QH-HD-2-8	2021.9.16	Qinhai	Haidong	101.9311	36.2553	3097	MG2	QH
A1_B1_C1	GGT	CCT	1GGTCCT	21QH-HNZ-1-8	2021.9.16	Qinhai	Hainanzhou	101.5344	36.2992	3121	MG6	QH
A1_B1_C1	GGT	CGC	1GGTCGC	21GS-TS-3-8	2021.5.24	Gansu	Tianshui	104.8475	34.6239	1760	MG1	GSLN
A1_B1_C1	GGT	CGG	1GGTCGG	21GS-TS-2-8	2021.5.24	Gansu	Tianshui	105.8781	34.6608	1665.3	MG2	GSLN
A1_B1_C1	GGT	CTC	1GGTCTC	22GS-TS-1-8	2022.6.16	Gansu	Tianshui	105.5888	34.3154	1510	MG1	GSLN
A1_B1_C1	GGT	CTG	1GGTCTG	21QH-XN-2-8	2021.9.16	Qinhai	Xining	101.5233	36.4711	2787	MG3	QH

A1_B1_C1	GGT	CTT	1GGTCTT	22GS-TS-2-8	2022.6.16	Gansu	Tianshui	105.4822	34.6083	1656.5	MG4	GSLN
A1_B1_C1	GTA	CAA	1GTACAA	23SC-GY-2-1	2023.4.1	Sichuan	Guangyuan	105.8875	32.6704	465.1	MG7	SC
A1_B1_C1	GTA	CAG	1GTACAG	23SC-MS-1-1	2023.4.4	Sichuan	Meishan	104.1838	30.0842	376	MG7	SC
A1_B1_C1	GTA	CCG	1GTACCG	23SC-MS-1-5	2023.4.4	Sichuan	Meishan	104.1838	30.0842	376	MG7	SC
A1_B1_C1	GTA	CCT	1GTACCT	23SC-MY-3-5	2023.4.2	Sichuan	Mianyang	104.9294	31.0172	368.2	MG6	SC
A1_B1_C1	GTA	CGA	1GTACGA	23SC-MY-4-1	2023.4.2	Sichuan	Mianyang	104.9763	31.0219	368.6	MG6	SC
A1_B1_C1	GTA	CGC	1GTACGC	23SC-NC-2-1	2023.4.5	Sichuan	Nanchong	105.8142	30.8854	279	MG7	SC
A1_B1_C1	GTA	CGT	1GTACGT	23SC-NC-3-1	2023.4.5	Sichuan	Nanchong	105.9767	31.1661	370.5	MG2	SC
A1_B1_C1	GTA	CTA	1GTACTA	23SC-MY-4-5	2023.4.2	Sichuan	Mianyang	104.9763	31.0219	368.6	MG5	SC
A1_B1_C1	GTA	CTC	1GTACTC	23SC-NC-2-5	2023.4.5	Sichuan	Nanchong	105.8142	30.8854	279	MG7	SC
A1_B1_C1	GTA	CTG	1GTACTG	23SC-MY-5-5	2023.4.3	Sichuan	Mianyang	104.9473	31.2449	408.4	MG7	SC
A1_B1_C1	GTA	CTT	1GTACTT	23SC-NC-3-5	2023.4.5	Sichuan	Nanchong	105.9767	31.1661	370.5	MG2	SC
A1_B1_C1	GTC	CAG	1GTCCAG	23SC-MS-1-3	2023.4.4	Sichuan	Meishan	104.1838	30.0842	376	MG7	SC
A1_B1_C1	GTC	CAT	1GTCCAT	23SC-MY-3-3	2023.4.2	Sichuan	Mianyang	104.9294	31.0172	368.2	MG2	SC
A1_B1_C1	GTC	CCA	1GTCCCA	23SC-GY-2-7	2023.4.1	Sichuan	Guangyuan	105.8875	32.6704	465.1	MG7	SC
A1_B1_C1	GTC	CCC	1GTCCCC	23SC-NC-1-1	2023.4.10	Sichuan	Nanchong	106.6403	31.0563		MG2	SC
A1_B1_C1	GTC	CCG	1GTCCCG	23SC-MS-1-7	2023.4.4	Sichuan	Meishan	104.1838	30.0842	376	MG7	SC
A1_B1_C1	GTC	CCT	1GTCCCT	23SC-MY-3-7	2023.4.2	Sichuan	Mianyang	104.9294	31.0172	368.2	MG2	SC
A1_B1_C1	GTC	CGA	1GTCCGA	23SC-MY-4-3	2023.4.2	Sichuan	Mianyang	104.9763	31.0219	368.6	MG4	SC
A1_B1_C1	GTC	CGC	1GTCCGC	23SC-NC-2-3	2023.4.5	Sichuan	Nanchong	105.8142	30.8854	279	MG7	SC
A1_B1_C1	GTC	CGG	1GTCCGG	23SC-MY-5-3	2023.4.3	Sichuan	Mianyang	104.9473	31.2449	408.4	MG2	SC
A1_B1_C1	GTC	CTA	1GTCCTA	23SC-MY-4-7	2023.4.2	Sichuan	Mianyang	104.9763	31.0219	368.6	MG2	SC
A1_B1_C1	GTC	CTC	1GTCCTC	23SC-NC-2-7	2023.4.5	Sichuan	Nanchong	105.8142	30.8854	279	MG6	SC
A1_B1_C1	GTC	CTT	1GTCCTT	23SC-NC-3-7	2023.4.5	Sichuan	Nanchong	105.9767	31.1661	370.5	MG1	SC
A1_B1_C1	GTG	CAA	1GTGCAA	23SC-GY-2-2	2023.4.1	Sichuan	Guangyuan	105.8875	32.6704	465.1	MG5	SC
A1_B1_C1	GTG	CAG	1GTGCAG	23SC-MS-1-2	2023.4.4	Sichuan	Meishan	104.1838	30.0842	376	MG7	SC
A1_B1_C1	GTG	CAT	1GTGCAT	23SC-MY-3-2	2023.4.2	Sichuan	Mianyang	104.9294	31.0172	368.2	MG6	SC
A1_B1_C1	GTG	CCG	1GTGCCG	23SC-MS-1-6	2023.4.4	Sichuan	Meishan	104.1838	30.0842	376	MG7	SC
A1_B1_C1	GTG	CCT	1GTGCCT	23SC-MY-3-6	2023.4.2	Sichuan	Mianyang	104.9294	31.0172	368.2	MG7	SC
A1_B1_C1	GTG	CGC	1GTGCGC	23SC-NC-2-2	2023.4.5	Sichuan	Nanchong	105.8142	30.8854	279	MG7	SC
A1_B1_C1	GTG	CTA	1GTGCTA	23SC-MY-4-6	2023.4.2	Sichuan	Mianyang	104.9763	31.0219	368.6	MG1	SC
A1_B1_C1	GTG	CTC	1GTGCTC	23SC-NC-2-6	2023.4.5	Sichuan	Nanchong	105.8142	30.8854	279	MG5	SC
A1_B1_C1	GTG	CTG	1GTGCTG	23SC-MY-5-6	2023.4.3	Sichuan	Mianyang	104.9473	31.2449	408.4	MG2	SC
A1_B1_C1	GTG	CTT	1GTGCTT	23SC-NC-3-6	2023.4.5	Sichuan	Nanchong	105.9767	31.1661	370.5	MG1	SC
A1_B1_C1	GTT	CAG	1GTTCAG	23SC-MS-1-4	2023.4.4	Sichuan	Meishan	104.1838	30.0842	376	MG7	SC
A1_B1_C1	GTT	CCG	1GTTCCG	23SC-MS-1-8	2023.4.4	Sichuan	Meishan	104.1838	30.0842	376	MG7	SC
A1_B1_C1	GTT	CCT	1GTTCCT	23SC-MY-3-8	2023.4.2	Sichuan	Mianyang	104.9294	31.0172	368.2	MG2	SC
A1_B1_C1	GTT	CGA	1GTTCGA	23SC-MY-4-4	2023.4.2	Sichuan	Mianyang	104.9763	31.0219	368.6	MG2	SC

A1_B1_C1	GTT	CGG	1GTTCCGG	23SC-MY-5-4	2023.4.3	Sichuan	Mianyang	104.9473	31.2449	408.4	MG1	SC
A1_B1_C1	GTT	CTA	1GTTCTA	23SC-MY-4-8	2023.4.2	Sichuan	Mianyang	104.9763	31.0219	368.6	MG5	SC
A1_B1_C1	GTT	CTG	1GTTCTG	23SC-MY-5-8	2023.4.3	Sichuan	Mianyang	104.9473	31.2449	408.4	MG2	SC
A1_B1_C1	GTT	CTT	1GTTCTT	23SC-NC-3-8	2023.4.5	Sichuan	Nanchong	105.9767	31.1661	370.5	MG4	SC
A2_B2_C2	GAA	CAA	2GAACAA	22GS-DX-1-1	2022.9.16	Gansu	Dingxi	104.2223	35.4773	2394	MG2	GSC
A2_B2_C2	GAA	CAC	2GAACAC	22GS-LN-3-1	2022.6.19	Gansu	Longnan	105.3852	33.9993	1696	MG7	GSLN
A2_B2_C2	GAA	CAG	2GAACAG	22GS-LN-2-1	2022.6.19	Gansu	Longnan	105.7443	33.7563		MG3	GSLN
A2_B2_C2	GAA	CCA	2GAACCA	22QH-HB-1-1	2022.8.5	Qinhai	Haibeizhou	101.9865	37.2686	2635	MG2	QH
A2_B2_C2	GAA	CCG	2GAACCG	22QH-HD-1-5	2022.8.4	Qinhai	Haidong	102.0729	36.1781	2667	MG1	QH
A2_B2_C2	GAA	CCT	2GAACCT	22QH-HD-3-1	2022.8.4	Qinhai	Haidong	101.9784	36.2275	2747	MG2	QH
A2_B2_C2	GAA	CGG	2GAACGG	22GS-PL-2-1	2022.9.14	Gansu	Pingliang	106.4933	35.2529	1656	MG4	GSLD
A2_B2_C2	GAA	CTA	2GAACTA	22QH-HD-4-1	2022.8.4	Qinhai	Haidong	102.1121	36.1867	2803	MG2	QH
A2_B2_C2	GAA	CTC	2GAACTC	22QH-HNZ-1-7	2022.8.3	Qinhai	Hainanzhou	100.6566	36.1923	2818	MG3	QH
A2_B2_C2	GAC	CAG	2GACCAG	22GS-LN-2-3	2022.6.19	Gansu	Longnan	105.7443	33.7563		MG3	GSLN
A2_B2_C2	GAC	CCA	2GACCCA	22QH-HB-1-3	2022.8.5	Qinhai	Haibeizhou	101.9865	37.2686	2635	MG2	QH
A2_B2_C2	GAC	CCG	2GACCCG	22QH-HD-1-7	2022.8.4	Qinhai	Haidong	102.0729	36.1781	2667	MG1	QH
A2_B2_C2	GAC	CCT	2GACCCT	22QH-HD-3-3	2022.8.4	Qinhai	Haidong	101.9784	36.2275	2747	MG2	QH
A2_B2_C2	GAC	CGA	2GACCGA	22GS-PL-1-3	2022.9.14	Gansu	Pingliang	106.9910	35.2321	1466	MG3	GSLD
A2_B2_C2	GAC	CTA	2GACCTA	22QH-HD-4-3	2022.8.4	Qinhai	Haidong	102.1121	36.1867	2803	MG2	QH
A2_B2_C2	GAC	CTC	2GACCTC	22QH-XN-1-1	2022.8.3	Qinhai	Xining	101.1300	36.5239	3094	MG3	QH
A2_B2_C2	GAC	CTT	2GACCTT	22QH-XN-2-3	2022.8.5	Qinhai	Xining	101.6909	37.0439	2818	MG3	QH
A2_B2_C2	GAG	CAC	2GAGCAC	22GS-LN-3-2	2022.6.19	Gansu	Longnan	105.3852	33.9993	1696	MG1	GSLN
A2_B2_C2	GAG	CAG	2GAGCAG	22GS-LN-2-2	2022.6.19	Gansu	Longnan	105.7443	33.7563		MG3	GSLN
A2_B2_C2	GAG	CCA	2GAGCCA	22QH-HB-1-2	2022.8.5	Qinhai	Haibeizhou	101.9865	37.2686	2635	MG2	QH
A2_B2_C2	GAG	CCG	2GAGCCG	22QH-HD-1-6	2022.8.4	Qinhai	Haidong	102.0729	36.1781	2667	MG1	QH
A2_B2_C2	GAG	CGC	2GAGCGC	22GS-PL-3-2	2022.9.15	Gansu	Pingliang	105.8560	35.4410	1692	MG1	GSLD
A2_B2_C2	GAG	CGT	2GAGCGT	22GS-PL-4-2	2022.9.20	Gansu	Pingliang	106.7224	35.6912	1593	MG4	GSLD
A2_B2_C2	GAG	CTA	2GAGCTA	22QH-HD-4-2	2022.8.4	Qinhai	Haidong	102.1121	36.1867	2803	MG2	QH
A2_B2_C2	GAG	CTC	2GAGCTC	22QH-HNZ-1-8	2022.8.3	Qinhai	Hainanzhou	100.6566	36.1923	2818	MG5	QH
A2_B2_C2	GAG	CTG	2GAGCTG	22QH-HD-5-2	2022.8.4	Qinhai	Haidong	102.2138	36.4849	2014	MG1	QH
A2_B2_C2	GAT	CAA	2GATCAA	22GS-DX-1-4	2022.9.16	Gansu	Dingxi	104.2223	35.4773	2394	MG4	GSC
A2_B2_C2	GAT	CAG	2GATCAG	22GS-LN-2-4	2022.6.19	Gansu	Longnan	105.7443	33.7563		MG3	GSLN
A2_B2_C2	GAT	CAT	2GATCAT	22GS-LN-4-4	2022.6.19	Gansu	Longnan	104.9362	33.9809	2005.8	MG5	GSLN
A2_B2_C2	GAT	CCG	2GATCCG	22QH-HD-1-8	2022.8.4	Qinhai	Haidong	102.0729	36.1781	2667	MG1	QH
A2_B2_C2	GAT	CCT	2GATCCT	22QH-HD-3-4	2022.8.4	Qinhai	Haidong	101.9784	36.2275	2747	MG2	QH
A2_B2_C2	GAT	CTA	2GATCTA	22QH-HD-4-4	2022.8.4	Qinhai	Haidong	102.1121	36.1867	2803	MG2	QH
A2_B2_C2	GAT	CTC	2GATCTC	22QH-XN-1-2	2022.8.3	Qinhai	Xining	101.1300	36.5239	3094	MG3	QH
A2_B2_C2	GAT	CTG	2GATCTG	22QH-HD-5-4	2022.8.4	Qinhai	Haidong	102.2138	36.4849	2014	MG1	QH

A2_B2_C2	GAT	CTT	2GATCTT	22QH-XN-2-4	2022.8.5	Qinhai	Xining	101.6909	37.0439	2818	MG3	QH
A2_B2_C2	GCA	CAA	2GCACAA	22GS-LN-1-5	2022.6.19	Gansu	Longnan	105.3852	33.9993	1696	MG2	GSLN
A2_B2_C2	GCA	CAG	2GCACAG	22GS-LN-2-9	2022.6.19	Gansu	Longnan	105.7443	33.7563		MG2	GSLN
A2_B2_C2	GCA	CAT	2GCACAT	22GS-LN-4-9	2022.6.19	Gansu	Longnan	104.9362	33.9809	2005.8	MG3	GSLN
A2_B2_C2	GCA	CCA	2GCACCA	22QH-HD-1-1	2022.8.4	Qinhai	Haidong	102.0729	36.1781	2667	MG1	QH
A2_B2_C2	GCA	CTC	2GCACTC	22QH-XN-1-7	2022.8.3	Qinhai	Xining	101.1300	36.5239	3094	MG3	QH
A2_B2_C2	GCA	CTG	2GCACTG	22QH-HNZ-1-3	2022.8.3	Qinhai	Hainanzhou	100.6566	36.1923	2818	MG3	QH
A2_B2_C2	GCA	CTT	2GCACTT	22QH-XN-3-2	2022.8.3	Qinhai	Xining	101.0446	36.7376	3012	MG6	QH
A2_B2_C2	GCC	CAA	2GCCCAA	22GS-LN-1-7	2022.6.19	Gansu	Longnan	105.3852	33.9993	1696	MG3	GSLN
A2_B2_C2	GCC	CAG	2GCCCAG	22GS-LN-2-11	2022.6.19	Gansu	Longnan	105.7443	33.7563		MG2	GSLN
A2_B2_C2	GCC	CCA	2GCCCCA	22QH-HD-1-3	2022.8.4	Qinhai	Haidong	102.0729	36.1781	2667	MG1	QH
A2_B2_C2	GCC	CTA	2GCCCTA	22QH-HD-4-11	2022.8.4	Qinhai	Haidong	102.1121	36.1867	2803	MG2	QH
A2_B2_C2	GCC	CTG	2GCCCTG	22QH-HNZ-1-5	2022.8.3	Qinhai	Hainanzhou	100.6566	36.1923	2818	MG3	QH
A2_B2_C2	GCC	CTT	2GCCCTT	22QH-XN-3-4	2022.8.3	Qinhai	Xining	101.0446	36.7376	3012	MG3	QH
A2_B2_C2	GCG	CAA	2GCGCAA	22GS-LN-1-6	2022.6.19	Gansu	Longnan	105.3852	33.9993	1696	MG1	GSLN
A2_B2_C2	GCG	CAG	2GCGCAG	22GS-LN-2-10	2022.6.19	Gansu	Longnan	105.7443	33.7563		MG3	GSLN
A2_B2_C2	GCG	CCA	2GCGCCA	22QH-HD-1-2	2022.8.4	Qinhai	Haidong	102.0729	36.1781	2667	MG1	QH
A2_B2_C2	GCG	CTA	2GCGCTA	22QH-HD-4-10	2022.8.4	Qinhai	Haidong	102.1121	36.1867	2803	MG2	QH
A2_B2_C2	GCG	CTT	2GCGCTT	22QH-XN-3-3	2022.8.3	Qinhai	Xining	101.0446	36.7376	3012	MG3	QH
A2_B2_C2	GCT	CAA	2GCTCAA	22GS-LN-1-8	2022.6.19	Gansu	Longnan	105.3852	33.9993	1696	MG1	GSLN
A2_B2_C2	GCT	CAG	2GCTCAG	22GS-LN-2-12	2022.6.19	Gansu	Longnan	105.7443	33.7563		MG2	GSLN
A2_B2_C2	GCT	CAT	2GCTCAT	22GS-LN-4-12	2022.6.19	Gansu	Longnan	104.9362	33.9809	2005.8	MG3	GSLN
A2_B2_C2	GCT	CCA	2GCTCCA	22QH-HD-1-4	2022.8.4	Qinhai	Haidong	102.0729	36.1781	2667	MG1	QH
A2_B2_C2	GCT	CTG	2GCTCTG	22QH-HNZ-1-6	2022.8.3	Qinhai	Hainanzhou	100.6566	36.1923	2818	MG3	QH
A2_B2_C2	GCT	CTT	2GCTCTT	22QH-XN-3-5	2022.8.3	Qinhai	Xining	101.0446	36.7376	3012	MG3	QH
A2_B2_C2	GGA	CAA	2GGACAA	22GS-LN-1-1	2022.6.19	Gansu	Longnan	105.3852	33.9993	1696	MG2	GSLN
A2_B2_C2	GGA	CAG	2GGACAG	22GS-LN-2-5	2022.6.19	Gansu	Longnan	105.7443	33.7563		MG3	GSLN
A2_B2_C2	GGA	CCA	2GGACCA	22QH-HB-1-5	2022.8.5	Qinhai	Haibeizhou	101.9865	37.2686	2635	MG5	QH
A2_B2_C2	GGA	CCG	2GGACCG	22QH-HD-1-9	2022.8.4	Qinhai	Haidong	102.0729	36.1781	2667	MG1	QH
A2_B2_C2	GGA	CCT	2GGACCT	22QH-HD-3-5	2022.8.4	Qinhai	Haidong	101.9784	36.2275	2747	MG2	QH
A2_B2_C2	GGA	CTA	2GGACTA	22QH-HD-4-5	2022.8.4	Qinhai	Haidong	102.1121	36.1867	2803	MG1	QH
A2_B2_C2	GGA	CTC	2GGACTC	22QH-XN-1-3	2022.8.3	Qinhai	Xining	101.1300	36.5239	3094	MG3	QH
A2_B2_C2	GGA	CTG	2GGACTG	22QH-HD-5-5	2022.8.4	Qinhai	Haidong	102.2138	36.4849	2014	MG1	QH
A2_B2_C2	GGA	CTT	2GGACTT	22QH-XN-2-5	2022.8.5	Qinhai	Xining	101.6909	37.0439	2818	MG3	QH
A2_B2_C2	GGC	CAA	2GGCCAA	22GS-LN-1-3	2022.6.19	Gansu	Longnan	105.3852	33.9993	1696	MG1	GSLN
A2_B2_C2	GGC	CAG	2GGCCAG	22GS-LN-2-7	2022.6.19	Gansu	Longnan	105.7443	33.7563		MG3	GSLN
A2_B2_C2	GGC	CTA	2GGCCTA	22QH-HD-4-7	2022.8.4	Qinhai	Haidong	102.1121	36.1867	2803	MG1	QH
A2_B2_C2	GGC	CTG	2GGCCTG	22QH-HNZ-1-1	2022.8.3	Qinhai	Hainanzhou	100.6566	36.1923	2818	MG3	QH

A2_B2_C2	GGC	CTT	2GGCCTT	22QH-XN-2-7	2022.8.5	Qinhai	Xining	101.6909	37.0439	2818	MG2	QH
A2_B2_C2	GGG	CAG	2GGGCAG	22GS-LN-2-6	2022.6.19	Gansu	Longnan	105.7443	33.7563		MG3	GSLN
A2_B2_C2	GGG	CCA	2GGGCCA	22QH-HB-1-6	2022.8.5	Qinhai	Haibeizhou	101.9865	37.2686	2635	MG5	QH
A2_B2_C2	GGG	CGT	2GGGCGT	22GS-PL-4-6	2022.9.20	Gansu	Pingliang	106.7224	35.6912	1593	MG5	GSLD
A2_B2_C2	GGG	CTA	2GGGCTA	22QH-HD-4-6	2022.8.4	Qinhai	Haidong	102.1121	36.1867	2803	MG1	QH
A2_B2_C2	GGG	CTC	2GGGCTC	22QH-XN-1-4	2022.8.3	Qinhai	Xining	101.1300	36.5239	3094	MG6	QH
A2_B2_C2	GGG	CTG	2GGGCTG	22QH-HD-5-6	2022.8.4	Qinhai	Haidong	102.2138	36.4849	2014	MG1	QH
A2_B2_C2	GGT	CAA	2GGTCAA	22GS-LN-1-4	2022.6.19	Gansu	Longnan	105.3852	33.9993	1696	MG5	GSLN
A2_B2_C2	GGT	CAG	2GGTCAG	22GS-LN-2-8	2022.6.19	Gansu	Longnan	105.7443	33.7563		MG3	GSLN
A2_B2_C2	GGT	CCT	2GGTCCT	22QH-HD-3-8	2022.8.4	Qinhai	Haidong	101.9784	36.2275	2747	MG2	QH
A2_B2_C2	GGT	CGC	2GGTCGC	22GS-PL-3-8	2022.9.15	Gansu	Pingliang	105.8560	35.4410	1692	MG4	GSLD
A2_B2_C2	GGT	CTA	2GGTCTA	22QH-HD-4-8	2022.8.4	Qinhai	Haidong	102.1121	36.1867	2803	MG4	QH
A2_B2_C2	GGT	CTC	2GGTCTC	22QH-XN-1-6	2022.8.3	Qinhai	Xining	101.1300	36.5239	3094	MG6	QH
A2_B2_C2	GGT	CTG	2GGTCTG	22QH-HNZ-1-2	2022.8.3	Qinhai	Hainanzhou	100.6566	36.1923	2818	MG3	QH
A2_B2_C2	GGT	CTT	2GGTCTT	22QH-XN-3-1	2022.8.3	Qinhai	Xining	101.0446	36.7376	3012	MG2	QH
A2_B2_C2	GTA	CAA	2GTACAA	23SC-GY-2-9	2023.4.1	Sichuan	Guangyuan	105.8875	32.6704	465.1	MG4	SC
A2_B2_C2	GTA	CAC	2GTACAC	23SC-NC-1-3	2023.4.10	Sichuan	Nanchong	106.6403	31.0563		MG2	SC
A2_B2_C2	GTA	CAG	2GTACAG	23SC-MS-1-9	2023.4.4	Sichuan	Meishan	104.1838	30.0842	376	MG7	SC
A2_B2_C2	GTA	CCA	2GTACCA	23SC-NJ-1-1	2023.4.4	Sichuan	Neijiang	105.1708	29.6981	295.2	MG3	SC
A2_B2_C2	GTA	CCG	2GTACCG	23SC-SN-1-1	2023.4.4	Sichuan	Suining	105.8001	30.4711	298.4	MG7	SC
A2_B2_C2	GTA	CCT	2GTACCT	23CQ-CQ-1-1	2023.4.6	Chongqing	Chongqing	109.0344	30.9884	473.9	MG6	SC
A2_B2_C2	GTA	CGG	2GTACGG	23SC-MY-5-9	2023.4.3	Sichuan	Mianyang	104.9473	31.2449	408.4	MG1	SC
A2_B2_C2	GTA	CGT	2GTACGT	23SC-NC-3-9	2023.4.5	Sichuan	Nanchong	105.9767	31.1661	370.5	MG5	SC
A2_B2_C2	GTA	CTA	2GTACTA	23CQ-CQ-1-13	2023.4.6	Chongqing	Chongqing	109.0344	30.9884	473.9	MG1	SC
A2_B2_C2	GTA	CTG	2GTACTG	23CQ-CQ-2-1	2023.4.6	Chongqing	Chongqing	109.8604	31.1056	507.4	MG7	SC
A2_B2_C2	GTC	CAC	2GTCCAC	23SC-NC-1-5	2023.4.10	Sichuan	Nanchong	106.6403	31.0563		MG2	SC
A2_B2_C2	GTC	CAG	2GTCCAG	23SC-MY-2-1	2023.4.2	Sichuan	Mianyang	104.8906	31.0130	366.9	MG2	SC
A2_B2_C2	GTC	CAT	2GTCCAT	23SC-MY-3-11	2023.4.2	Sichuan	Mianyang	104.9294	31.0172	368.2	MG6	SC
A2_B2_C2	GTC	CCA	2GTCCCA	23SC-NJ-1-3	2023.4.4	Sichuan	Neijiang	105.1708	29.6981	295.2	MG2	SC
A2_B2_C2	GTC	CCG	2GTCCCG	23SC-SN-1-3	2023.4.4	Sichuan	Suining	105.8001	30.4711	298.4	MG4	SC
A2_B2_C2	GTC	CCT	2GTCCCT	23CQ-CQ-1-3	2023.4.6	Chongqing	Chongqing	109.0344	30.9884	473.9	MG6	SC
A2_B2_C2	GTC	CGA	2GTCCGA	23SC-MY-4-11	2023.4.2	Sichuan	Mianyang	104.9763	31.0219	368.6	MG6	SC
A2_B2_C2	GTC	CGT	2GTCCGT	23SC-NC-3-11	2023.4.5	Sichuan	Nanchong	105.9767	31.1661	370.5	MG2	SC
A2_B2_C2	GTC	CTC	2GTCCTC	23CQ-CQ-2-15	2023.4.6	Chongqing	Chongqing	109.8604	31.1056	507.4	MG7	SC
A2_B2_C2	GTC	CTG	2GTCCTG	23CQ-CQ-2-3	2023.4.6	Chongqing	Chongqing	109.8604	31.1056	507.4	MG7	SC
A2_B2_C2	GTC	CTT	2GTCCTT	23CQ-CQ-3-9	2023.4.6	Chongqing	Chongqing	108.2720	30.6587	476.3	MG7	SC
A2_B2_C2	GTG	CAA	2GTGCAA	23SC-GY-2-10	2023.4.1	Sichuan	Guangyuan	105.8875	32.6704	465.1	MG7	SC
A2_B2_C2	GTG	CAC	2GTGCAC	23SC-NC-1-4	2023.4.10	Sichuan	Nanchong	106.6403	31.0563		MG2	SC

A2_B2_C2	GTG	CAG	2GTGCAG	23SC-MS-1-10	2023.4.4	Sichuan	Meishan	104.1838	30.0842	376	MG7	SC
A2_B2_C2	GTG	CAT	2GTGCAT	23SC-MY-3-10	2023.4.2	Sichuan	Mianyang	104.9294	31.0172	368.2	MG4	SC
A2_B2_C2	GTG	CCA	2GTGCCA	23SC-NJ-1-2	2023.4.4	Sichuan	Neijiang	105.1708	29.6981	295.2	MG4	SC
A2_B2_C2	GTG	CGC	2GTGCGC	23SC-NC-2-10	2023.4.5	Sichuan	Nanchong	105.8142	30.8854	279	MG1	SC
A2_B2_C2	GTG	CGG	2GTGCGG	23SC-MY-5-10	2023.4.3	Sichuan	Mianyang	104.9473	31.2449	408.4	MG4	SC
A2_B2_C2	GTG	CGT	2GTGCGT	23SC-NC-3-10	2023.4.5	Sichuan	Nanchong	105.9767	31.1661	370.5	MG5	SC
A2_B2_C2	GTG	CTA	2GTGCTA	23CQ-CQ-1-14	2023.4.6	Chongqing	Chongqing	109.0344	30.9884	473.9	MG7	SC
A2_B2_C2	GTG	CTC	2GTGCTC	23CQ-CQ-2-14	2023.4.6	Chongqing	Chongqing	109.8604	31.1056	507.4	MG7	SC
A2_B2_C2	GTG	CTG	2GTGCTG	23CQ-CQ-2-2	2023.4.6	Chongqing	Chongqing	109.8604	31.1056	507.4	MG7	SC
A2_B2_C2	GTT	CAA	2GTTCAA	23SC-GY-2-12	2023.4.1	Sichuan	Guangyuan	105.8875	32.6704	465.1	MG7	SC
A2_B2_C2	GTT	CAG	2GTTCAG	23SC-MY-2-2	2023.4.2	Sichuan	Mianyang	104.8906	31.0130	366.9	MG2	SC
A2_B2_C2	GTT	CAT	2GTTCAT	23SC-MY-3-12	2023.4.2	Sichuan	Mianyang	104.9294	31.0172	368.2	MG4	SC
A2_B2_C2	GTT	CCA	2GTTCCA	23SC-NJ-1-4	2023.4.4	Sichuan	Neijiang	105.1708	29.6981	295.2	MG4	SC
A2_B2_C2	GTT	CGA	2GTTCGA	23SC-MY-4-12	2023.4.2	Sichuan	Mianyang	104.9763	31.0219	368.6	MG7	SC
A2_B2_C2	GTT	CGG	2GTTCGG	23SC-MY-5-12	2023.4.3	Sichuan	Mianyang	104.9473	31.2449	408.4	MG2	SC
A2_B2_C2	GTT	CGT	2GTTCGT	23SC-NC-3-12	2023.4.5	Sichuan	Nanchong	105.9767	31.1661	370.5	MG4	SC
A2_B2_C2	GTT	CTA	2GTTCTA	23CQ-CQ-1-16	2023.4.6	Chongqing	Chongqing	109.0344	30.9884	473.9	MG6	SC
A2_B2_C2	GTT	CTC	2GTTCTC	23CQ-CQ-2-16	2023.4.6	Chongqing	Chongqing	109.8604	31.1056	507.4	MG7	SC
A2_B2_C2	GTT	CTG	2GTTCTG	23CQ-CQ-2-4	2023.4.6	Chongqing	Chongqing	109.8604	31.1056	507.4	MG7	SC
A2_B2_C2	GTT	CTT	2GTTCTT	23CQ-CQ-3-10	2023.4.6	Chongqing	Chongqing	108.2720	30.6587	476.3	MG7	SC
A3_B3_C3	GAA	CAG	3GAACAG	23GS-DX-2-1	2023.7.9	Gansu	Dingxi	104.0796	34.3614	2360	MG1	GSC
A3_B3_C3	GAA	CAT	3GAACAT	23GS-DX-4-3	2023.6.12	Gansu	Dingxi	103.8105	35.2614	1880	MG3	GSC
A3_B3_C3	GAA	CCA	3GAACCA	22QH-HNZ-2-1	2022.8.3	Qinhai	Hainanzhou	100.6116	36.2254	2737	MG3	QH
A3_B3_C3	GAA	CCC	3GAACCC	22QH-HNZ-4-1	2022.8.2	Qinhai	Hainanzhou	101.3718	35.7310	2833	MG3	QH
A3_B3_C3	GAA	CCG	3GAACCG	22QH-HNZ-3-1	2022.8.2	Qinhai	Hainanzhou	101.5357	36.3003	3088	MG6	QH
A3_B3_C3	GAA	CGA	3GAACGA	23GS-DX-6-1	2023.7.8	Gansu	Dingxi	104.2638	34.8643	2101	MG4	GSC
A3_B3_C3	GAA	CGT	3GAACGT	23GS-LXZ-1-1	2023.7.8	Gansu	Linxiashou	103.4592	35.2834	2269	MG1	GSC
A3_B3_C3	GAA	CTA	3GAACTA	22QH-HNZ-6-1	2022.8.2	Qinhai	Hainanzhou	101.2120	36.1663	2686	MG1	QH
A3_B3_C3	GAA	CTC	3GAACTC	22QH-HN-1-1	2022.8.4	Qinhai	Huangnanzhou	101.8859	36.0019	2695	MG1	QH
A3_B3_C3	GAA	CTT	3GAACTT	22QH-HN-1-13	2022.8.4	Qinhai	Huangnanzhou	101.8859	36.0019	2695	MG3	QH
A3_B3_C3	GAC	CAA	3GACCAA	23GS-DX-1-3	2023.7.8	Gansu	Dingxi	103.6975	35.2076	2136	MG2	GSC
A3_B3_C3	GAC	CAC	3GACCAC	23GS-DX-3-3	2023.7.8	Gansu	Dingxi	103.9751	35.0836	2284	MG3	GSC
A3_B3_C3	GAC	CAG	3GACCAG	23GS-DX-2-3	2023.7.9	Gansu	Dingxi	104.0796	34.3614	2360	MG3	GSC
A3_B3_C3	GAC	CCA	3GACCCA	22QH-HNZ-2-3	2022.8.3	Qinhai	Hainanzhou	100.6116	36.2254	2737	MG2	QH
A3_B3_C3	GAC	CGA	3GACCGA	23GS-DX-6-3	2023.7.8	Gansu	Dingxi	104.2638	34.8643	2101	MG4	GSC
A3_B3_C3	GAC	CGC	3GACCGC	23GS-DX-8-3	2023.7.8	Gansu	Dingxi	104.2182	35.0868	2105	MG1	GSC
A3_B3_C3	GAC	CGG	3GACCGG	23GS-DX-7-3	2023.7.8	Gansu	Dingxi	104.0904	34.2871	2449	MG1	GSC
A3_B3_C3	GAC	CGT	3GACCGT	23GS-LXZ-1-3	2023.7.8	Gansu	Linxiashou	103.4592	35.2834	2269	MG1	GSC

A3_B3_C3	GAC	CTA	3GACCTA	22QH-HNZ-6-3	2022.8.2	Qinhai	Hainanzhou	101.2120	36.1663	2686	MG1	QH
A3_B3_C3	GAC	CTG	3GACCTG	22QH-HNZ-7-3	2022.8.2	Qinhai	Hainanzhou	101.2256	36.2021	2932	MG3	QH
A3_B3_C3	GAC	CTT	3GACCTT	22QH-HN-1-15	2022.8.4	Qinhai	Huangnanzhou	101.8859	36.0019	2695	MG1	QH
A3_B3_C3	GAG	CAA	3GAGCAA	23GS-DX-1-2	2023.7.8	Gansu	Dingxi	103.6975	35.2076	2136	MG2	GSC
A3_B3_C3	GAG	CAG	3GAGCAG	23GS-DX-2-2	2023.7.9	Gansu	Dingxi	104.0796	34.3614	2360	MG3	GSC
A3_B3_C3	GAG	CCA	3GAGCCA	22QH-HNZ-2-2	2022.8.3	Qinhai	Hainanzhou	100.6116	36.2254	2737	MG3	QH
A3_B3_C3	GAG	CCC	3GAGCCC	22QH-HNZ-4-2	2022.8.2	Qinhai	Hainanzhou	101.3718	35.7310	2833	MG3	QH
A3_B3_C3	GAG	CCT	3GAGCCT	22QH-HNZ-5-2	2022.8.2	Qinhai	Hainanzhou	101.3890	35.9179	2410	MG4	QH
A3_B3_C3	GAG	CGA	3GAGCGA	23GS-DX-6-2	2023.7.8	Gansu	Dingxi	104.2638	34.8643	2101	MG3	GSC
A3_B3_C3	GAG	CGG	3GAGCGG	23GS-DX-7-2	2023.7.8	Gansu	Dingxi	104.0904	34.2871	2449	MG1	GSC
A3_B3_C3	GAG	CGT	3GAGCGT	23GS-LXZ-1-2	2023.7.8	Gansu	Linxiashou	103.4592	35.2834	2269	MG2	GSC
A3_B3_C3	GAG	CTA	3GAGCTA	22QH-HNZ-6-2	2022.8.2	Qinhai	Hainanzhou	101.2120	36.1663	2686	MG1	QH
A3_B3_C3	GAG	CTC	3GAGCTC	22QH-HN-1-2	2022.8.4	Qinhai	Huangnanzhou	101.8859	36.0019	2695	MG3	QH
A3_B3_C3	GAG	CTT	3GAGCTT	22QH-HN-1-14	2022.8.4	Qinhai	Huangnanzhou	101.8859	36.0019	2695	MG2	QH
A3_B3_C3	GAT	CAC	3GATCAC	23GS-DX-3-4	2023.7.8	Gansu	Dingxi	103.9751	35.0836	2284	MG1	GSC
A3_B3_C3	GAT	CAT	3GATCAT	23GS-DX-4-6	2023.6.12	Gansu	Dingxi	103.8105	35.2614	1880	MG2	GSC
A3_B3_C3	GAT	CCT	3GATCCT	22QH-HNZ-5-4	2022.8.2	Qinhai	Hainanzhou	101.3890	35.9179	2410	MG4	QH
A3_B3_C3	GAT	CGG	3GATCGG	23GS-DX-7-4	2023.7.8	Gansu	Dingxi	104.0904	34.2871	2449	MG1	GSC
A3_B3_C3	GAT	CGT	3GATCGT	23GS-LXZ-1-4	2023.7.8	Gansu	Linxiashou	103.4592	35.2834	2269	MG3	GSC
A3_B3_C3	GAT	CTA	3GATCTA	22QH-HNZ-6-4	2022.8.2	Qinhai	Hainanzhou	101.2120	36.1663	2686	MG1	QH
A3_B3_C3	GAT	CTT	3GATCTT	22QH-HN-1-16	2022.8.4	Qinhai	Huangnanzhou	101.8859	36.0019	2695	MG1	QH
A3_B3_C3	GCA	CAA	3GCACAA	23GS-DX-1-9	2023.7.8	Gansu	Dingxi	103.6975	35.2076	2136	MG2	GSC
A3_B3_C3	GCA	CAC	3GCACAC	23GS-DX-3-9	2023.7.8	Gansu	Dingxi	103.9751	35.0836	2284	MG2	GSC
A3_B3_C3	GCA	CCC	3GCACCC	22QH-HNZ-4-9	2022.8.2	Qinhai	Hainanzhou	101.3718	35.7310	2833	MG3	QH
A3_B3_C3	GCA	CCG	3GCACCG	22QH-HNZ-3-9	2022.8.2	Qinhai	Hainanzhou	101.5357	36.3003	3088	MG1	QH
A3_B3_C3	GCA	CGA	3GCACGA	23GS-DX-6-9	2023.7.8	Gansu	Dingxi	104.2638	34.8643	2101	MG4	GSC
A3_B3_C3	GCA	CGC	3GCACGC	23GS-DX-8-9	2023.7.8	Gansu	Dingxi	104.2182	35.0868	2105	MG3	GSC
A3_B3_C3	GCA	CGG	3GCACGG	23GS-DX-7-9	2023.7.8	Gansu	Dingxi	104.0904	34.2871	2449	MG2	GSC
A3_B3_C3	GCA	CGT	3GCACGT	23GS-LXZ-1-9	2023.7.8	Gansu	Linxiashou	103.4592	35.2834	2269	MG3	GSC
A3_B3_C3	GCA	CTG	3GCACTG	22QH-HNZ-7-9	2022.8.2	Qinhai	Hainanzhou	101.2256	36.2021	2932	MG5	QH
A3_B3_C3	GCA	CTT	3GCACTT	22QH-HN-1-21	2022.8.4	Qinhai	Huangnanzhou	101.8859	36.0019	2695	MG2	QH
A3_B3_C3	GCC	CAA	3GCCCAA	23GS-DX-1-11	2023.7.8	Gansu	Dingxi	103.6975	35.2076	2136	MG2	GSC
A3_B3_C3	GCC	CAC	3GCCCAC	23GS-DX-4-1	2023.6.12	Gansu	Dingxi	103.8105	35.2614	1880	MG2	GSC
A3_B3_C3	GCC	CAT	3GCCCAT	23GS-DX-5-5	2023.6.12	Gansu	Dingxi	104.2097	35.0797	2131	MG1	GSC
A3_B3_C3	GCC	CCA	3GCCCCA	22QH-HNZ-2-11	2022.8.3	Qinhai	Hainanzhou	100.6116	36.2254	2737	MG3	QH
A3_B3_C3	GCC	CCG	3GCCCCG	22QH-HNZ-3-11	2022.8.2	Qinhai	Hainanzhou	101.5357	36.3003	3088	MG6	QH
A3_B3_C3	GCC	CCT	3GCCCCT	22QH-HNZ-5-11	2022.8.2	Qinhai	Hainanzhou	101.3890	35.9179	2410	MG3	QH
A3_B3_C3	GCC	CGA	3GCCCGA	23GS-DX-6-11	2023.7.8	Gansu	Dingxi	104.2638	34.8643	2101	MG4	GSC

A3_B3_C3	GCC	CGC	3GCCCCG	23GS-DX-8-11	2023.7.8	Gansu	Dingxi	104.2182	35.0868	2105	MG5	GSC
A3_B3_C3	GCC	CGT	3GCCCCGT	23GS-LXZ-1-11	2023.7.8	Gansu	Linxiashou	103.4592	35.2834	2269	MG2	GSC
A3_B3_C3	GCC	CTA	3GCCCTA	22QH-HNZ-6-11	2022.8.2	Qinhai	Hainanzhou	101.2120	36.1663	2686	MG1	QH
A3_B3_C3	GCC	CTC	3GCCCTC	22QH-HN-1-11	2022.8.4	Qinhai	Huangnanzhou	101.8859	36.0019	2695	MG1	QH
A3_B3_C3	GCC	CTG	3GCCCTG	22QH-HNZ-7-11	2022.8.2	Qinhai	Hainanzhou	101.2256	36.2021	2932	MG2	QH
A3_B3_C3	GCC	CTT	3GCCCTT	22QH-HN-1-23	2022.8.4	Qinhai	Huangnanzhou	101.8859	36.0019	2695	MG2	QH
A3_B3_C3	GCG	CAA	3GCGCAA	23GS-DX-1-10	2023.7.8	Gansu	Dingxi	103.6975	35.2076	2136	MG2	GSC
A3_B3_C3	GCG	CAG	3GCGCAG	23GS-DX-2-10	2023.7.9	Gansu	Dingxi	104.0796	34.3614	2360	MG3	GSC
A3_B3_C3	GCG	CAT	3GCGCAT	23GS-DX-5-4	2023.6.12	Gansu	Dingxi	104.2097	35.0797	2131	MG2	GSC
A3_B3_C3	GCG	CCT	3GCGCCT	22QH-HNZ-5-10	2022.8.2	Qinhai	Hainanzhou	101.3890	35.9179	2410	MG5	QH
A3_B3_C3	GCG	CTC	3GCGCTC	22QH-HN-1-10	2022.8.4	Qinhai	Huangnanzhou	101.8859	36.0019	2695	MG2	QH
A3_B3_C3	GCG	CTG	3GCGCTG	22QH-HNZ-7-10	2022.8.2	Qinhai	Hainanzhou	101.2256	36.2021	2932	MG5	QH
A3_B3_C3	GCG	CTT	3GCGCTT	22QH-HN-1-22	2022.8.4	Qinhai	Huangnanzhou	101.8859	36.0019	2695	MG1	QH
A3_B3_C3	GCT	CAC	3GCTCAC	23GS-DX-4-2	2023.6.12	Gansu	Dingxi	103.8105	35.2614	1880	MG2	GSC
A3_B3_C3	GCT	CAG	3GCTCAG	23GS-DX-2-12	2023.7.9	Gansu	Dingxi	104.0796	34.3614	2360	MG1	GSC
A3_B3_C3	GCT	CAT	3GCTCAT	23GS-DX-5-6	2023.6.12	Gansu	Dingxi	104.2097	35.0797	2131	MG2	GSC
A3_B3_C3	GCT	CCT	3GCTCCT	22QH-HNZ-5-12	2022.8.2	Qinhai	Hainanzhou	101.3890	35.9179	2410	MG4	QH
A3_B3_C3	GCT	CGC	3GCTCGC	23GS-DX-8-12	2023.7.8	Gansu	Dingxi	104.2182	35.0868	2105	MG1	GSC
A3_B3_C3	GCT	CGT	3GCTCGT	23GS-LXZ-1-12	2023.7.8	Gansu	Linxiashou	103.4592	35.2834	2269	MG1	GSC
A3_B3_C3	GCT	CTA	3GCTCTA	22QH-HNZ-6-12	2022.8.2	Qinhai	Hainanzhou	101.2120	36.1663	2686	MG1	QH
A3_B3_C3	GCT	CTT	3GCTCTT	22QH-HN-1-24	2022.8.4	Qinhai	Huangnanzhou	101.8859	36.0019	2695	MG1	QH
A3_B3_C3	GGA	CAA	3GGACAA	23GS-DX-1-5	2023.7.8	Gansu	Dingxi	103.6975	35.2076	2136	MG2	GSC
A3_B3_C3	GGA	CAC	3GGACAC	23GS-DX-3-5	2023.7.8	Gansu	Dingxi	103.9751	35.0836	2284	MG1	GSC
A3_B3_C3	GGA	CAG	3GGACAG	23GS-DX-2-5	2023.7.9	Gansu	Dingxi	104.0796	34.3614	2360	MG1	GSC
A3_B3_C3	GGA	CAT	3GGACAT	23GS-DX-4-7	2023.6.12	Gansu	Dingxi	103.8105	35.2614	1880	MG1	GSC
A3_B3_C3	GGA	CCC	3GGACCC	22QH-HNZ-4-5	2022.8.2	Qinhai	Hainanzhou	101.3718	35.7310	2833	MG3	QH
A3_B3_C3	GGA	CCT	3GGACCT	22QH-HNZ-5-5	2022.8.2	Qinhai	Hainanzhou	101.3890	35.9179	2410	MG3	QH
A3_B3_C3	GGA	CGA	3GGACGA	23GS-DX-6-5	2023.7.8	Gansu	Dingxi	104.2638	34.8643	2101	MG4	GSC
A3_B3_C3	GGA	CGG	3GGACGG	23GS-DX-7-5	2023.7.8	Gansu	Dingxi	104.0904	34.2871	2449	MG3	GSC
A3_B3_C3	GGA	CGT	3GGACGT	23GS-LXZ-1-5	2023.7.8	Gansu	Linxiashou	103.4592	35.2834	2269	MG1	GSC
A3_B3_C3	GGA	CTA	3GGACTA	22QH-HNZ-6-5	2022.8.2	Qinhai	Hainanzhou	101.2120	36.1663	2686	MG1	QH
A3_B3_C3	GGA	CTC	3GGACTC	22QH-HN-1-5	2022.8.4	Qinhai	Huangnanzhou	101.8859	36.0019	2695	MG2	QH
A3_B3_C3	GGA	CTG	3GGACTG	22QH-HNZ-7-5	2022.8.2	Qinhai	Hainanzhou	101.2256	36.2021	2932	MG1	QH
A3_B3_C3	GGA	CTT	3GGACTT	22QH-HN-1-17	2022.8.4	Qinhai	Huangnanzhou	101.8859	36.0019	2695	MG1	QH
A3_B3_C3	GGC	CAA	3GGCCAA	23GS-DX-1-7	2023.7.8	Gansu	Dingxi	103.6975	35.2076	2136	MG2	GSC
A3_B3_C3	GGC	CAG	3GGCCAG	23GS-DX-2-7	2023.7.9	Gansu	Dingxi	104.0796	34.3614	2360	MG1	GSC
A3_B3_C3	GGC	CCA	3GGCCCA	22QH-HNZ-2-7	2022.8.3	Qinhai	Hainanzhou	100.6116	36.2254	2737	MG3	QH
A3_B3_C3	GGC	CCC	3GGCCCC	22QH-HNZ-4-7	2022.8.2	Qinhai	Hainanzhou	101.3718	35.7310	2833	MG1	QH

A3_B3_C3	GGC	CCT	3GGCCCT	22QH-HNZ-5-7	2022.8.2	Qinhai	Hainanzhou	101.3890	35.9179	2410	MG6	QH
A3_B3_C3	GGC	CGA	3GGCCGA	23GS-DX-6-7	2023.7.8	Gansu	Dingxi	104.2638	34.8643	2101	MG1	GSC
A3_B3_C3	GGC	CGC	3GGCCGC	23GS-DX-8-7	2023.7.8	Gansu	Dingxi	104.2182	35.0868	2105	MG5	GSC
A3_B3_C3	GGC	CGG	3GGCCGG	23GS-DX-7-7	2023.7.8	Gansu	Dingxi	104.0904	34.2871	2449	MG2	GSC
A3_B3_C3	GGC	CTA	3GGCCTA	22QH-HNZ-6-7	2022.8.2	Qinhai	Hainanzhou	101.2120	36.1663	2686	MG3	QH
A3_B3_C3	GGC	CTG	3GGCCTG	22QH-HNZ-7-7	2022.8.2	Qinhai	Hainanzhou	101.2256	36.2021	2932	MG1	QH
A3_B3_C3	GGC	CTT	3GGCCTT	22QH-HN-1-19	2022.8.4	Qinhai	Huangnanzhou	101.8859	36.0019	2695	MG2	QH
A3_B3_C3	GGG	CAA	3GGGCAA	23GS-DX-1-6	2023.7.8	Gansu	Dingxi	103.6975	35.2076	2136	MG2	GSC
A3_B3_C3	GGG	CAC	3GGGCAC	23GS-DX-3-6	2023.7.8	Gansu	Dingxi	103.9751	35.0836	2284	MG1	GSC
A3_B3_C3	GGG	CAT	3GGGCAT	23GS-DX-4-8	2023.6.12	Gansu	Dingxi	103.8105	35.2614	1880	MG2	GSC
A3_B3_C3	GGG	CCA	3GGGCCA	22QH-HNZ-2-6	2022.8.3	Qinhai	Hainanzhou	100.6116	36.2254	2737	MG3	QH
A3_B3_C3	GGG	CCG	3GGGCCG	22QH-HNZ-3-6	2022.8.2	Qinhai	Hainanzhou	101.5357	36.3003	3088	MG6	QH
A3_B3_C3	GGG	CCT	3GGGCCT	22QH-HNZ-5-6	2022.8.2	Qinhai	Hainanzhou	101.3890	35.9179	2410	MG4	QH
A3_B3_C3	GGG	CGA	3GGGCCGA	23GS-DX-6-6	2023.7.8	Gansu	Dingxi	104.2638	34.8643	2101	MG4	GSC
A3_B3_C3	GGG	CGC	3GGGCCGC	23GS-DX-8-6	2023.7.8	Gansu	Dingxi	104.2182	35.0868	2105	MG3	GSC
A3_B3_C3	GGG	CGG	3GGGCCGG	23GS-DX-7-6	2023.7.8	Gansu	Dingxi	104.0904	34.2871	2449	MG1	GSC
A3_B3_C3	GGG	CGT	3GGGCGT	23GS-LXZ-1-6	2023.7.8	Gansu	Linxiashou	103.4592	35.2834	2269	MG2	GSC
A3_B3_C3	GGG	CTG	3GGGCTG	22QH-HNZ-7-6	2022.8.2	Qinhai	Hainanzhou	101.2256	36.2021	2932	MG3	QH
A3_B3_C3	GGG	CTT	3GGGCTT	22QH-HN-1-18	2022.8.4	Qinhai	Huangnanzhou	101.8859	36.0019	2695	MG1	QH
A3_B3_C3	GGT	CAA	3GGTCAA	23GS-DX-1-8	2023.7.8	Gansu	Dingxi	103.6975	35.2076	2136	MG2	GSC
A3_B3_C3	GGT	CAG	3GGTCAG	23GS-DX-2-8	2023.7.9	Gansu	Dingxi	104.0796	34.3614	2360	MG1	GSC
A3_B3_C3	GGT	CCA	3GGTCCA	22QH-HNZ-2-8	2022.8.3	Qinhai	Hainanzhou	100.6116	36.2254	2737	MG2	QH
A3_B3_C3	GGT	CCT	3GGTCCT	22QH-HNZ-5-8	2022.8.2	Qinhai	Hainanzhou	101.3890	35.9179	2410	MG4	QH
A3_B3_C3	GGT	CGC	3GGTCGC	23GS-DX-8-8	2023.7.8	Gansu	Dingxi	104.2182	35.0868	2105	MG5	GSC
A3_B3_C3	GGT	CGG	3GGTCGG	23GS-DX-7-8	2023.7.8	Gansu	Dingxi	104.0904	34.2871	2449	MG2	GSC
A3_B3_C3	GGT	CGT	3GGTCGT	23GS-LXZ-1-8	2023.7.8	Gansu	Linxiashou	103.4592	35.2834	2269	MG1	GSC
A3_B3_C3	GGT	CTA	3GGTCTA	22QH-HNZ-6-8	2022.8.2	Qinhai	Hainanzhou	101.2120	36.1663	2686	MG1	QH
A3_B3_C3	GGT	CTG	3GGTCTG	22QH-HNZ-7-8	2022.8.2	Qinhai	Hainanzhou	101.2256	36.2021	2932	MG2	QH
A3_B3_C3	GGT	CTT	3GGTCTT	22QH-HN-1-20	2022.8.4	Qinhai	Huangnanzhou	101.8859	36.0019	2695	MG2	QH
A3_B3_C3	GTA	CAC	3GTACAC	23SC-ZY-1-5	2023.4.4	Sichuan	Ziyang	105.3423	30.0284	269	MG6	SC
A3_B3_C3	GTA	CGG	3GTACGG	23CQ-CQ-2-5	2023.4.6	Chongqing	Chongqing	109.8604	31.1056	507.4	MG7	SC
A3_B3_C3	GTA	CGT	3GTACGT	23CQ-CQ-3-11	2023.4.6	Chongqing	Chongqing	108.2720	30.6587	476.3	MG3	SC
A3_B3_C3	GTA	CTG	3GTACTG	23CQ-CQ-2-9	2023.4.6	Chongqing	Chongqing	109.8604	31.1056	507.4	MG1	SC
A3_B3_C3	GTA	CTT	3GTACTT	23CQ-CQ-3-15	2023.4.6	Chongqing	Chongqing	108.2720	30.6587	476.3	MG3	SC
A3_B3_C3	GTC	CAC	3GTCCAC	23SC-ZY-1-7	2023.4.4	Sichuan	Ziyang	105.3423	30.0284	269	MG3	SC
A3_B3_C3	GTC	CGG	3GTCCGG	23CQ-CQ-2-7	2023.4.6	Chongqing	Chongqing	109.8604	31.1056	507.4	MG7	SC
A3_B3_C3	GTC	CTG	3GTCCTG	23CQ-CQ-2-11	2023.4.6	Chongqing	Chongqing	109.8604	31.1056	507.4	MG1	SC
A3_B3_C3	GTC	CTT	3GTCCTT	23CQ-CQ-3-17	2023.4.6	Chongqing	Chongqing	108.2720	30.6587	476.3	MG3	SC

A3_B3_C3	GTG	CAC	3GTGCAC	23SC-ZY-1-6	2023.4.4	Sichuan	Ziyang	105.3423	30.0284	269	MG6	SC
A3_B3_C3	GTG	CGC	3GTGCGC	23CQ-CQ-2-18	2023.4.6	Chongqing	Chongqing	109.8604	31.1056	507.4	MG7	SC
A3_B3_C3	GTG	CGG	3GTGCGG	23CQ-CQ-2-6	2023.4.6	Chongqing	Chongqing	109.8604	31.1056	507.4	MG7	SC
A3_B3_C3	GTG	CGT	3GTGCGT	23CQ-CQ-3-12	2023.4.6	Chongqing	Chongqing	108.2720	30.6587	476.3	MG3	SC
A3_B3_C3	GTG	CTG	3GTGCTG	23CQ-CQ-2-10	2023.4.6	Chongqing	Chongqing	109.8604	31.1056	507.4	MG7	SC
A3_B3_C3	GTT	CAC	3GTTCAC	23SC-ZY-1-8	2023.4.4	Sichuan	Ziyang	105.3423	30.0284	269	MG6	SC
A3_B3_C3	GTT	CCC	3GTTCCC	23SC-ZY-1-12	2023.4.4	Sichuan	Ziyang	105.3423	30.0284	269	MG6	SC
A3_B3_C3	GTT	CGG	3GTTCCG	23CQ-CQ-2-8	2023.4.6	Chongqing	Chongqing	109.8604	31.1056	507.4	MG7	SC
A3_B3_C3	GTT	CGT	3GTTCCG	23CQ-CQ-3-14	2023.4.6	Chongqing	Chongqing	108.2720	30.6587	476.3	MG3	SC
A3_B3_C3	GTT	CTC	3GTTCTC	23CQ-CQ-3-6	2023.4.6	Chongqing	Chongqing	108.2720	30.6587	476.3	MG3	SC
A3_B3_C3	GTT	CTT	3GTTCTT	23CQ-CQ-3-18	2023.4.6	Chongqing	Chongqing	108.2720	30.6587	476.3	MG3	SC
A4_B4_C4	GAA	CAA	4GAACAA	23GS-LN-1-1	2023.7.9	Gansu	Longnan	104.2467	34.1931	2134	MG1	GSLN
A4_B4_C4	GAA	CAC	4GAACAC	23GS-LN-3-1	2023.6.11	Gansu	Longnan	105.3165	34.0803	1507	MG2	GSLN
A4_B4_C4	GAA	CAG	4GAACAG	23GS-LN-2-1	2023.7.9	Gansu	Longnan	104.7422	34.1581	2185	MG1	GSLN
A4_B4_C4	GAA	CAT	4GAACAT	23GS-PL-1-1	2023.6.13	Gansu	Pingliang	106.4732	35.2355	1746	MG3	GSLD
A4_B4_C4	GAA	CCA	4GAACCA	23QH-HD-1-1	2023.8.11	Qinhai	Haidong	102.0542	36.8048	2619	MG2	QH
A4_B4_C4	GAA	CCC	4GAACCC	23QH-HD-4-1	2023.8.13	Qinhai	Haidong	102.0231	36.9414	2717	MG1	QH
A4_B4_C4	GAA	CCG	4GAACCG	23QH-HD-2-1	2023.8.13	Qinhai	Haidong	102.0511	36.9100	2704	MG2	QH
A4_B4_C4	GAA	CCT	4GAACCT	23QH-HD-6-1	2023.8.11	Qinhai	Haidong	101.9818	36.8504	2531	MG2	QH
A4_B4_C4	GAA	CGA	4GAACGA	23GS-PL-2-1	2023.6.16	Gansu	Pingliang	106.5558	35.1978	1559	MG3	GSLD
A4_B4_C4	GAA	CGC	4GAACGC	23GS-PL-4-1	2023.6.15	Gansu	Pingliang	107.6317	35.1102	1233	MG2	GSLD
A4_B4_C4	GAA	CGG	4GAACGG	23GS-PL-3-1	2023.6.14	Gansu	Pingliang	106.5787	35.4567	2111	MG4	GSLD
A4_B4_C4	GAA	CTT	4GAACCT	23QH-HD-11-1	2023.8.11	Qinhai	Haidong	101.9884	36.3098	2804	MG3	QH
A4_B4_C4	GAC	CAA	4GACCAA	23GS-LN-1-3	2023.7.9	Gansu	Longnan	104.2467	34.1931	2134	MG1	GSLN
A4_B4_C4	GAC	CAC	4GACCAC	23GS-LN-3-3	2023.6.11	Gansu	Longnan	105.3165	34.0803	1507	MG2	GSLN
A4_B4_C4	GAC	CAG	4GACCAG	23GS-LN-2-3	2023.7.9	Gansu	Longnan	104.7422	34.1581	2185	MG1	GSLN
A4_B4_C4	GAC	CAT	4GACCAT	23GS-PL-1-3	2023.6.13	Gansu	Pingliang	106.4732	35.2355	1746	MG6	GSLD
A4_B4_C4	GAC	CCA	4GACCCA	23QH-HD-1-3	2023.8.11	Qinhai	Haidong	102.0542	36.8048	2619	MG1	QH
A4_B4_C4	GAC	CCC	4GACCCC	23QH-HD-4-3	2023.8.13	Qinhai	Haidong	102.0231	36.9414	2717	MG2	QH
A4_B4_C4	GAC	CCG	4GACCCG	23QH-HD-2-3	2023.8.13	Qinhai	Haidong	102.0511	36.9100	2704	MG2	QH
A4_B4_C4	GAC	CCT	4GACCCT	23QH-HD-6-3	2023.8.11	Qinhai	Haidong	101.9818	36.8504	2531	MG3	QH
A4_B4_C4	GAC	CGA	4GACCGA	23GS-PL-2-3	2023.6.16	Gansu	Pingliang	106.5558	35.1978	1559	MG6	GSLD
A4_B4_C4	GAC	CGC	4GACCGC	23GS-PL-4-3	2023.6.15	Gansu	Pingliang	107.6317	35.1102	1233	MG6	GSLD
A4_B4_C4	GAC	CGG	4GACCGG	23GS-PL-3-3	2023.6.14	Gansu	Pingliang	106.5787	35.4567	2111	MG3	GSLD
A4_B4_C4	GAC	CGT	4GACCGT	23GS-PL-5-3	2023.6.13	Gansu	Pingliang	106.2313	35.1733	1903	MG2	GSLD
A4_B4_C4	GAC	CTC	4GACCTC	23QH-HD-10-3	2023.8.11	Qinhai	Haidong	102.0344	36.2098	2819	MG1	QH
A4_B4_C4	GAG	CAA	4GAGCAA	23GS-LN-1-2	2023.7.9	Gansu	Longnan	104.2467	34.1931	2134	MG1	GSLN
A4_B4_C4	GAG	CAG	4GAGCAG	23GS-LN-2-2	2023.7.9	Gansu	Longnan	104.7422	34.1581	2185	MG1	GSLN

A4_B4_C4	GAG	CAT	4GAGCAT	23GS-PL-1-2	2023.6.13	Gansu	Pingliang	106.4732	35.2355	1746	MG3	GSLD
A4_B4_C4	GAG	CCA	4GAGCCA	23QH-HD-1-2	2023.8.11	Qinhai	Haidong	102.0542	36.8048	2619	MG2	QH
A4_B4_C4	GAG	CCC	4GAGCCC	23QH-HD-4-2	2023.8.13	Qinhai	Haidong	102.0231	36.9414	2717	MG2	QH
A4_B4_C4	GAG	CCG	4GAGCCG	23QH-HD-2-2	2023.8.13	Qinhai	Haidong	102.0511	36.9100	2704	MG2	QH
A4_B4_C4	GAG	CCT	4GAGCCT	23QH-HD-6-2	2023.8.11	Qinhai	Haidong	101.9818	36.8504	2531	MG5	QH
A4_B4_C4	GAG	CGA	4GAGCGA	23GS-PL-2-2	2023.6.16	Gansu	Pingliang	106.5558	35.1978	1559	MG6	GSLD
A4_B4_C4	GAG	CGC	4GAGCGC	23GS-PL-4-2	2023.6.15	Gansu	Pingliang	107.6317	35.1102	1233	MG2	GSLD
A4_B4_C4	GAG	CGG	4GAGCGG	23GS-PL-3-2	2023.6.14	Gansu	Pingliang	106.5787	35.4567	2111	MG1	GSLD
A4_B4_C4	GAG	CGT	4GAGCGT	23GS-PL-5-2	2023.6.13	Gansu	Pingliang	106.2313	35.1733	1903	MG1	GSLD
A4_B4_C4	GAG	CTA	4GAGCTA	23QH-HD-7-2	2023.8.11	Qinhai	Haidong	102.0987	36.1896	2770	MG1	QH
A4_B4_C4	GAG	CTC	4GAGCTC	23QH-HD-10-2	2023.8.11	Qinhai	Haidong	102.0344	36.2098	2819	MG2	QH
A4_B4_C4	GAG	CTG	4GAGCTG	23QH-HD-8-2	2023.7.7	Qinhai	Haidong	101.9838	36.1138	2229	MG3	QH
A4_B4_C4	GAT	CAA	4GATCAA	23GS-LN-1-4	2023.7.9	Gansu	Longnan	104.2467	34.1931	2134	MG1	GSLN
A4_B4_C4	GAT	CAC	4GATCAC	23GS-LN-3-4	2023.6.11	Gansu	Longnan	105.3165	34.0803	1507	MG2	GSLN
A4_B4_C4	GAT	CAG	4GATCAG	23GS-LN-2-4	2023.7.9	Gansu	Longnan	104.7422	34.1581	2185	MG1	GSLN
A4_B4_C4	GAT	CAT	4GATCAT	23GS-PL-1-4	2023.6.13	Gansu	Pingliang	106.4732	35.2355	1746	MG3	GSLD
A4_B4_C4	GAT	CCA	4GATCCA	23QH-HD-1-4	2023.8.11	Qinhai	Haidong	102.0542	36.8048	2619	MG1	QH
A4_B4_C4	GAT	CCC	4GATCCC	23QH-HD-4-4	2023.8.13	Qinhai	Haidong	102.0231	36.9414	2717	MG2	QH
A4_B4_C4	GAT	CCG	4GATCCG	23QH-HD-2-4	2023.8.13	Qinhai	Haidong	102.0511	36.9100	2704	MG2	QH
A4_B4_C4	GAT	CCT	4GATCCT	23QH-HD-6-4	2023.8.11	Qinhai	Haidong	101.9818	36.8504	2531	MG3	QH
A4_B4_C4	GAT	CGC	4GATCGC	23GS-PL-4-4	2023.6.15	Gansu	Pingliang	107.6317	35.1102	1233	MG2	GSLD
A4_B4_C4	GAT	CGG	4GATCGG	23GS-PL-3-4	2023.6.14	Gansu	Pingliang	106.5787	35.4567	2111	MG2	GSLD
A4_B4_C4	GAT	CGT	4GATCGT	23GS-PL-5-4	2023.6.13	Gansu	Pingliang	106.2313	35.1733	1903	MG1	GSLD
A4_B4_C4	GAT	CTC	4GATCTC	23QH-HD-10-4	2023.8.11	Qinhai	Haidong	102.0344	36.2098	2819	MG1	QH
A4_B4_C4	GAT	CTG	4GATCTG	23QH-HD-8-4	2023.7.7	Qinhai	Haidong	101.9838	36.1138	2229	MG3	QH
A4_B4_C4	GAT	CTT	4GATCTT	23QH-HD-11-4	2023.8.11	Qinhai	Haidong	101.9884	36.3098	2804	MG6	QH
A4_B4_C4	GCA	CAA	4GCACAA	23GS-LN-1-9	2023.7.9	Gansu	Longnan	104.2467	34.1931	2134	MG1	GSLN
A4_B4_C4	GCA	CAG	4GCACAG	23GS-LN-2-9	2023.7.9	Gansu	Longnan	104.7422	34.1581	2185	MG1	GSLN
A4_B4_C4	GCA	CAT	4GCACAT	23GS-PL-1-9	2023.6.13	Gansu	Pingliang	106.4732	35.2355	1746	MG3	GSLD
A4_B4_C4	GCA	CCA	4GCACCA	23QH-HD-1-9	2023.8.11	Qinhai	Haidong	102.0542	36.8048	2619	MG1	QH
A4_B4_C4	GCA	CCC	4GCACCC	23QH-HD-5-1	2023.8.13	Qinhai	Haidong	101.9660	36.9955	2700	MG2	QH
A4_B4_C4	GCA	CGG	4GCACGG	23GS-PL-3-9	2023.6.14	Gansu	Pingliang	106.5787	35.4567	2111	MG2	GSLD
A4_B4_C4	GCA	CGT	4GCACGT	23GS-PL-5-9	2023.6.13	Gansu	Pingliang	106.2313	35.1733	1903	MG1	GSLD
A4_B4_C4	GCA	CTA	4GCACTA	23QH-HD-7-9	2023.8.11	Qinhai	Haidong	102.0987	36.1896	2770	MG2	QH
A4_B4_C4	GCA	CTC	4GCACTC	23QH-HD-10-9	2023.8.11	Qinhai	Haidong	102.0344	36.2098	2819	MG4	QH
A4_B4_C4	GCA	CTG	4GCACTG	23QH-HD-9-1	2023.7.8	Qinhai	Haidong	102.5530	35.7747	1993	MG1	QH
A4_B4_C4	GCC	CAC	4GCCAC	23GS-LN-3-11	2023.6.11	Gansu	Longnan	105.3165	34.0803	1507	MG2	GSLN
A4_B4_C4	GCC	CAT	4GCCAT	23GS-PL-1-11	2023.6.13	Gansu	Pingliang	106.4732	35.2355	1746	MG3	GSLD

A4_B4_C4	GCC	CCA	4GCCCCA	23QH-HD-1-11	2023.8.11	Qinhai	Haidong	102.0542	36.8048	2619	MG1	QH
A4_B4_C4	GCC	CCC	4GCCCCC	23QH-HD-5-3	2023.8.13	Qinhai	Haidong	101.9660	36.9955	2700	MG2	QH
A4_B4_C4	GCC	CCG	4GCCCCG	23QH-HD-3-5	2023.8.11	Qinhai	Haidong	102.1326	36.7335	2601	MG1	QH
A4_B4_C4	GCC	CCT	4GCCCCT	23QH-HD-6-11	2023.8.11	Qinhai	Haidong	101.9818	36.8504	2531	MG3	QH
A4_B4_C4	GCC	CGC	4GCCCGC	23GS-PL-4-11	2023.6.15	Gansu	Pingliang	107.6317	35.1102	1233	MG1	GSLD
A4_B4_C4	GCC	CGT	4GCCCGT	23GS-PL-5-11	2023.6.13	Gansu	Pingliang	106.2313	35.1733	1903	MG1	GSLD
A4_B4_C4	GCC	CTC	4GCCCTC	23QH-HD-10-11	2023.8.11	Qinhai	Haidong	102.0344	36.2098	2819	MG3	QH
A4_B4_C4	GCC	CTT	4GCCCTT	23QH-HD-11-11	2023.8.11	Qinhai	Haidong	101.9884	36.3098	2804	MG2	QH
A4_B4_C4	GCG	CAA	4GCGCAA	23GS-LN-1-10	2023.7.9	Gansu	Longnan	104.2467	34.1931	2134	MG1	GSLN
A4_B4_C4	GCG	CAG	4GCGCAG	23GS-LN-2-10	2023.7.9	Gansu	Longnan	104.7422	34.1581	2185	MG1	GSLN
A4_B4_C4	GCG	CCT	4GCGCCT	23QH-HD-6-10	2023.8.11	Qinhai	Haidong	101.9818	36.8504	2531	MG2	QH
A4_B4_C4	GCG	CGA	4GCGCGA	23GS-PL-2-10	2023.6.16	Gansu	Pingliang	106.5558	35.1978	1559	MG3	GSLD
A4_B4_C4	GCG	CGC	4GCGCGC	23GS-PL-4-10	2023.6.15	Gansu	Pingliang	107.6317	35.1102	1233	MG3	GSLD
A4_B4_C4	GCG	CGG	4GCGCGG	23GS-PL-3-10	2023.6.14	Gansu	Pingliang	106.5787	35.4567	2111	MG2	GSLD
A4_B4_C4	GCG	CTG	4GCGCTG	23QH-HD-9-2	2023.7.8	Qinhai	Haidong	102.5530	35.7747	1993	MG2	QH
A4_B4_C4	GCT	CAA	4GCTCAA	23GS-LN-1-12	2023.7.9	Gansu	Longnan	104.2467	34.1931	2134	MG1	GSLN
A4_B4_C4	GCT	CAG	4GCTCAG	23GS-LN-2-12	2023.7.9	Gansu	Longnan	104.7422	34.1581	2185	MG1	GSLN
A4_B4_C4	GCT	CAT	4GCTCAT	23GS-PL-1-12	2023.6.13	Gansu	Pingliang	106.4732	35.2355	1746	MG3	GSLD
A4_B4_C4	GCT	CCA	4GCTCCA	23QH-HD-1-12	2023.8.11	Qinhai	Haidong	102.0542	36.8048	2619	MG2	QH
A4_B4_C4	GCT	CCC	4GCTCCC	23QH-HD-5-4	2023.8.13	Qinhai	Haidong	101.9660	36.9955	2700	MG2	QH
A4_B4_C4	GCT	CCG	4GCTCCG	23QH-HD-3-6	2023.8.11	Qinhai	Haidong	102.1326	36.7335	2601	MG1	QH
A4_B4_C4	GCT	CCT	4GCTCCT	23QH-HD-6-12	2023.8.11	Qinhai	Haidong	101.9818	36.8504	2531	MG2	QH
A4_B4_C4	GCT	CGA	4GCTCGA	23GS-PL-2-12	2023.6.16	Gansu	Pingliang	106.5558	35.1978	1559	MG3	GSLD
A4_B4_C4	GCT	CGC	4GCTCGC	23GS-PL-4-12	2023.6.15	Gansu	Pingliang	107.6317	35.1102	1233	MG3	GSLD
A4_B4_C4	GCT	CGG	4GCTCGG	23GS-PL-3-12	2023.6.14	Gansu	Pingliang	106.5787	35.4567	2111	MG2	GSLD
A4_B4_C4	GCT	CGT	4GCTCGT	23GS-PL-5-12	2023.6.13	Gansu	Pingliang	106.2313	35.1733	1903	MG2	GSLD
A4_B4_C4	GCT	CTG	4GCTCTG	23QH-HD-9-4	2023.7.8	Qinhai	Haidong	102.5530	35.7747	1993	MG2	QH
A4_B4_C4	GCT	CTT	4GCTCTT	23QH-HD-11-12	2023.8.11	Qinhai	Haidong	101.9884	36.3098	2804	MG1	QH
A4_B4_C4	GGA	CAG	4GGACAG	23GS-LN-2-5	2023.7.9	Gansu	Longnan	104.7422	34.1581	2185	MG1	GSLN
A4_B4_C4	GGA	CAT	4GGACAT	23GS-PL-1-5	2023.6.13	Gansu	Pingliang	106.4732	35.2355	1746	MG3	GSLD
A4_B4_C4	GGA	CCA	4GGACCA	23QH-HD-1-5	2023.8.11	Qinhai	Haidong	102.0542	36.8048	2619	MG2	QH
A4_B4_C4	GGA	CCG	4GGACCG	23QH-HD-2-5	2023.8.13	Qinhai	Haidong	102.0511	36.9100	2704	MG2	QH
A4_B4_C4	GGA	CCT	4GGACCT	23QH-HD-6-5	2023.8.11	Qinhai	Haidong	101.9818	36.8504	2531	MG3	QH
A4_B4_C4	GGA	CGA	4GGACGA	23GS-PL-2-5	2023.6.16	Gansu	Pingliang	106.5558	35.1978	1559	MG2	GSLD
A4_B4_C4	GGA	CGC	4GGACGC	23GS-PL-4-5	2023.6.15	Gansu	Pingliang	107.6317	35.1102	1233	MG2	GSLD
A4_B4_C4	GGA	CGG	4GGACGG	23GS-PL-3-5	2023.6.14	Gansu	Pingliang	106.5787	35.4567	2111	MG2	GSLD
A4_B4_C4	GGA	CGT	4GGACGT	23GS-PL-5-5	2023.6.13	Gansu	Pingliang	106.2313	35.1733	1903	MG1	GSLD
A4_B4_C4	GGA	CTG	4GGACTG	23QH-HD-8-5	2023.7.7	Qinhai	Haidong	101.9838	36.1138	2229	MG6	QH

A4_B4_C4	GGC	CAC	4GGCCAC	23GS-LN-3-7	2023.6.11	Gansu	Longnan	105.3165	34.0803	1507	MG3	GSLN
A4_B4_C4	GGC	CAG	4GGCCAG	23GS-LN-2-7	2023.7.9	Gansu	Longnan	104.7422	34.1581	2185	MG1	GSLN
A4_B4_C4	GGC	CCA	4GGCCCA	23QH-HD-1-7	2023.8.11	Qinhai	Haidong	102.0542	36.8048	2619	MG2	QH
A4_B4_C4	GGC	CCC	4GGCCCC	23QH-HD-4-7	2023.8.13	Qinhai	Haidong	102.0231	36.9414	2717	MG2	QH
A4_B4_C4	GGC	CCG	4GGCCCG	23QH-HD-3-1	2023.8.11	Qinhai	Haidong	102.1326	36.7335	2601	MG1	QH
A4_B4_C4	GGC	CCT	4GGCCCT	23QH-HD-6-7	2023.8.11	Qinhai	Haidong	101.9818	36.8504	2531	MG2	QH
A4_B4_C4	GGC	CGC	4GGCCGC	23GS-PL-4-7	2023.6.15	Gansu	Pingliang	107.6317	35.1102	1233	MG2	GSLD
A4_B4_C4	GGC	CGG	4GGCCGG	23GS-PL-3-7	2023.6.14	Gansu	Pingliang	106.5787	35.4567	2111	MG6	GSLD
A4_B4_C4	GGC	CGT	4GGCCGT	23GS-PL-5-7	2023.6.13	Gansu	Pingliang	106.2313	35.1733	1903	MG1	GSLD
A4_B4_C4	GGC	CTA	4GGCCTA	23QH-HD-7-7	2023.8.11	Qinhai	Haidong	102.0987	36.1896	2770	MG2	QH
A4_B4_C4	GGC	CTG	4GGCCTG	23QH-HD-8-7	2023.7.7	Qinhai	Haidong	101.9838	36.1138	2229	MG6	QH
A4_B4_C4	GGG	CAG	4GGGCAG	23GS-LN-2-6	2023.7.9	Gansu	Longnan	104.7422	34.1581	2185	MG1	GSLN
A4_B4_C4	GGG	CCA	4GGGCCA	23QH-HD-1-6	2023.8.11	Qinhai	Haidong	102.0542	36.8048	2619	MG1	QH
A4_B4_C4	GGG	CCT	4GGGCCT	23QH-HD-6-6	2023.8.11	Qinhai	Haidong	101.9818	36.8504	2531	MG3	QH
A4_B4_C4	GGG	CGC	4GGGCGC	23GS-PL-4-6	2023.6.15	Gansu	Pingliang	107.6317	35.1102	1233	MG2	GSLD
A4_B4_C4	GGG	CGG	4GGGCGG	23GS-PL-3-6	2023.6.14	Gansu	Pingliang	106.5787	35.4567	2111	MG4	GSLD
A4_B4_C4	GGT	CAC	4GGTCAC	23GS-LN-3-8	2023.6.11	Gansu	Longnan	105.3165	34.0803	1507	MG2	GSLN
A4_B4_C4	GGT	CAG	4GGTCAG	23GS-LN-2-8	2023.7.9	Gansu	Longnan	104.7422	34.1581	2185	MG1	GSLN
A4_B4_C4	GGT	CAT	4GGTCAT	23GS-PL-1-8	2023.6.13	Gansu	Pingliang	106.4732	35.2355	1746	MG3	GSLD
A4_B4_C4	GGT	CCA	4GGTCCA	23QH-HD-1-8	2023.8.11	Qinhai	Haidong	102.0542	36.8048	2619	MG1	QH
A4_B4_C4	GGT	CCC	4GGTCCC	23QH-HD-4-8	2023.8.13	Qinhai	Haidong	102.0231	36.9414	2717	MG1	QH
A4_B4_C4	GGT	CCT	4GGTCCT	23QH-HD-6-8	2023.8.11	Qinhai	Haidong	101.9818	36.8504	2531	MG4	QH
A4_B4_C4	GGT	CGC	4GGTCGC	23GS-PL-4-8	2023.6.15	Gansu	Pingliang	107.6317	35.1102	1233	MG2	GSLD
A4_B4_C4	GGT	CGG	4GGTCGG	23GS-PL-3-8	2023.6.14	Gansu	Pingliang	106.5787	35.4567	2111	MG2	GSLD
A4_B4_C4	GGT	CGT	4GGTCGT	23GS-PL-5-8	2023.6.13	Gansu	Pingliang	106.2313	35.1733	1903	MG1	GSLD
A4_B4_C4	GGT	CTC	4GGTCTC	23QH-HD-10-8	2023.8.11	Qinhai	Haidong	102.0344	36.2098	2819	MG2	QH
A4_B4_C4	GGT	CTG	4GGTCTG	23QH-HD-8-8	2023.7.7	Qinhai	Haidong	101.9838	36.1138	2229	MG6	QH
A4_B4_C4	GTA	CAT	4GTACAT	22XZ-LZ-1-3	2022.6.19	Xizang	Linzhi	94.3094	29.2728	3865	MG7	XZ
A4_B4_C4	GTA	CCT	4GTACCT	22XZ-LZ-2-3	2022.6.19	Xizang	Linzhi	94.6103	29.4928	2884	MG7	XZ
A4_B4_C4	GTA	CGA	4GTACGA	23XZ-LZ-3-1	2023.6.21	Xizang	Linzhi	94.4206	29.4983	2908	MG7	XZ
A4_B4_C4	GTA	CGC	4GTACGC	23XZ-LZ-4-1	2023.6.21	Xizang	Linzhi	93.9423	29.1845	2942	MG7	XZ
A4_B4_C4	GTA	CGG	4GTACGG	23XZ-LZ-3-13	2023.6.21	Xizang	Linzhi	94.4206	29.4983	2908	MG2	XZ
A4_B4_C4	GTA	CGT	4GTACGT	23XZ-LZ-4-13	2023.6.21	Xizang	Linzhi	93.9423	29.1845	2942	MG7	XZ
A4_B4_C4	GTA	CTA	4GTACTA	23XZ-LZ-3-5	2023.6.21	Xizang	Linzhi	94.4206	29.4983	2908	MG7	XZ
A4_B4_C4	GTA	CTC	4GTACTC	23XZ-LZ-4-5	2023.6.21	Xizang	Linzhi	93.9423	29.1845	2942	MG7	XZ
A4_B4_C4	GTA	CTG	4GTACTG	23XZ-LZ-3-17	2023.6.21	Xizang	Linzhi	94.4206	29.4983	2908	MG7	XZ
A4_B4_C4	GTC	CAA	4GTCCAA	21XZ-LZ-1-3	2021.7.7	Xizang	Linzhi	93.8867	29.7958	3119	MG4	XZ
A4_B4_C4	GTC	CAT	4GTCCAT	22XZ-LZ-2-1	2022.6.19	Xizang	Linzhi	94.6103	29.4928	2884	MG7	XZ

A4_B4_C4	GTC	CCA	4GTCCCA	21XZ-LZ-2-4	2021.7.7	Xizang	Linshi	94.4194	29.5697	2868	MG4	XZ
A4_B4_C4	GTC	CCG	4GTCCCG	21XZ-LZ-6-1	2021.7.7	Xizang	Linshi	94.3094	29.2728	3865	MG7	XZ
A4_B4_C4	GTC	CCT	4GTCCCT	22XZ-LZ-2-5	2022.6.19	Xizang	Linshi	94.6103	29.4928	2884	MG7	XZ
A4_B4_C4	GTC	CGA	4GTCCGA	23XZ-LZ-3-3	2023.6.21	Xizang	Linshi	94.4206	29.4983	2908	MG7	XZ
A4_B4_C4	GTC	CGC	4GTCCGC	23XZ-LZ-4-3	2023.6.21	Xizang	Linshi	93.9423	29.1845	2942	MG7	XZ
A4_B4_C4	GTC	CGG	4GTCCGG	23XZ-LZ-3-15	2023.6.21	Xizang	Linshi	94.4206	29.4983	2908	MG7	XZ
A4_B4_C4	GTC	CGT	4GTCCGT	23XZ-LZ-4-15	2023.6.21	Xizang	Linshi	93.9423	29.1845	2942	MG7	XZ
A4_B4_C4	GTC	CTA	4GTCCTA	23XZ-LZ-3-7	2023.6.21	Xizang	Linshi	94.4206	29.4983	2908	MG7	XZ
A4_B4_C4	GTC	CTC	4GTCCTC	23XZ-LZ-4-7	2023.6.21	Xizang	Linshi	93.9423	29.1845	2942	MG7	XZ
A4_B4_C4	GTC	CTG	4GTCCTG	23XZ-LZ-3-19	2023.6.21	Xizang	Linshi	94.4206	29.4983	2908	MG7	XZ
A4_B4_C4	GTC	CTT	4GTCCTT	23XZ-LZ-4-19	2023.6.21	Xizang	Linshi	93.9423	29.1845	2942	MG7	XZ
A4_B4_C4	GTG	CAT	4GTGCAT	22XZ-LZ-1-4	2022.6.19	Xizang	Linshi	94.3094	29.2728	3865	MG7	XZ
A4_B4_C4	GTG	CGA	4GTGCCGA	23XZ-LZ-3-2	2023.6.21	Xizang	Linshi	94.4206	29.4983	2908	MG7	XZ
A4_B4_C4	GTG	CGC	4GTGCCGC	23XZ-LZ-4-2	2023.6.21	Xizang	Linshi	93.9423	29.1845	2942	MG7	XZ
A4_B4_C4	GTG	CGG	4GTGCCGG	23XZ-LZ-3-14	2023.6.21	Xizang	Linshi	94.4206	29.4983	2908	MG7	XZ
A4_B4_C4	GTG	CGT	4GTGCCGT	23XZ-LZ-4-14	2023.6.21	Xizang	Linshi	93.9423	29.1845	2942	MG7	XZ
A4_B4_C4	GTG	CTA	4GTGCTA	23XZ-LZ-3-6	2023.6.21	Xizang	Linshi	94.4206	29.4983	2908	MG7	XZ
A4_B4_C4	GTG	CTC	4GTGCTC	23XZ-LZ-4-6	2023.6.21	Xizang	Linshi	93.9423	29.1845	2942	MG7	XZ
A4_B4_C4	GTG	CTG	4GTGCTG	23XZ-LZ-3-18	2023.6.21	Xizang	Linshi	94.4206	29.4983	2908	MG7	XZ
A4_B4_C4	GTG	CTT	4GTGCTT	23XZ-LZ-4-18	2023.6.21	Xizang	Linshi	93.9423	29.1845	2942	MG7	XZ
A4_B4_C4	GTT	CAA	4GTTCAA	21XZ-LZ-2-1	2021.7.7	Xizang	Linshi	94.4194	29.5697	2868	MG2	XZ
A4_B4_C4	GTT	CAC	4GTTCAC	21XZ-CD-1-1	2021.7.4	Xizang	Changdou	97.5014	30.1928	3649	MG2	XZ
A4_B4_C4	GTT	CAT	4GTTCAT	22XZ-LZ-2-2	2022.6.19	Xizang	Linshi	94.6103	29.4928	2884	MG7	XZ
A4_B4_C4	GTT	CCT	4GTTCCT	22XZ-LZ-2-6	2022.6.19	Xizang	Linshi	94.6103	29.4928	2884	MG7	XZ
A4_B4_C4	GTT	CGA	4GTTCGA	23XZ-LZ-3-4	2023.6.21	Xizang	Linshi	94.4206	29.4983	2908	MG7	XZ
A4_B4_C4	GTT	CGC	4GTTCGC	23XZ-LZ-4-4	2023.6.21	Xizang	Linshi	93.9423	29.1845	2942	MG7	XZ
A4_B4_C4	GTT	CGG	4GTTCGG	23XZ-LZ-3-16	2023.6.21	Xizang	Linshi	94.4206	29.4983	2908	MG7	XZ
A4_B4_C4	GTT	CTA	4GTTCTA	23XZ-LZ-3-8	2023.6.21	Xizang	Linshi	94.4206	29.4983	2908	MG7	XZ
A4_B4_C4	GTT	CTC	4GTTCTC	23XZ-LZ-4-8	2023.6.21	Xizang	Linshi	93.9423	29.1845	2942	MG7	XZ
A4_B4_C4	GTT	CTG	4GTTCTG	23XZ-LZ-3-20	2023.6.21	Xizang	Linshi	94.4206	29.4983	2908	MG7	XZ
A4_B4_C4	GTT	CTT	4GTTCTT	23XZ-LZ-4-20	2023.6.21	Xizang	Linshi	93.9423	29.1845	2942	MG7	XZ
A5_B5_C5	GAA	CAA	5GAACAA	23GS-PL-6-1	2023.6.13	Gansu	Pingliang	105.7659	35.5120	1744	MG3	GSLD
A5_B5_C5	GAA	CAC	5GAACAC	23GS-QY-3-1	2023.6.15	Gansu	Qingyang	107.4425	35.6974	1314	MG3	GSLD
A5_B5_C5	GAA	CAG	5GAACAG	23GS-QY-2-1	2023.6.15	Gansu	Qingyang	107.2022	35.6953	1326	MG3	GSLD
A5_B5_C5	GAA	CAT	5GAACAT	23GS-BY-1-1	2023.6.12	Gansu	Baiyin	105.4161	35.6912	1907	MG1	GSC
A5_B5_C5	GAA	CCG	5GAACCG	23QH-HNZ-2-1	2023.8.12	Qinhai	Hainanzhou	100.6815	36.3433	3032	MG4	QH
A5_B5_C5	GAA	CGC	5GAACGC	23GS-LZ-1-1	2023.7.6	Gansu	Lanzhou	103.4832	36.4817	1801	MG1	GSC
A5_B5_C5	GAA	CGG	5GAACGG	23GS-TS-3-1	2023.6.13	Gansu	Tianshui	106.2396	35.0612	1738	MG1	GSLN

A5_B5_C5	GAA	CTA	5GAACTA	23QH-HNZ-5-1	2023.8.12	Qinhai	Hainanzhou	100.7046	36.1778	2696	MG4	QH
A5_B5_C5	GAA	CTC	5GAACTC	23QH-HN-1-1	2023.7.7	Qinhai	Huangnanzhou	101.9283	36.0611	2085	MG1	QH
A5_B5_C5	GAA	CTG	5GAACTG	23QH-HNZ-6-1	2023.7.7	Qinhai	Hainanzhou	101.4154	36.0252	2193	MG1	QH
A5_B5_C5	GAA	CTT	5GAACTT	23QH-XN-2-1	2023.8.13	Qinhai	Xining	101.8151	37.0583	2687	MG2	QH
A5_B5_C5	GAC	CAA	5GACCAA	23GS-PL-6-3	2023.6.13	Gansu	Pingliang	105.7659	35.5120	1744	MG2	GSLD
A5_B5_C5	GAC	CAC	5GACCAC	23GS-QY-3-3	2023.6.15	Gansu	Qingyang	107.4425	35.6974	1314	MG3	GSLD
A5_B5_C5	GAC	CAG	5GACCAG	23GS-QY-2-3	2023.6.15	Gansu	Qingyang	107.2022	35.6953	1326	MG3	GSLD
A5_B5_C5	GAC	CAT	5GACCAT	23GS-BY-1-3	2023.6.12	Gansu	Baiyin	105.4161	35.6912	1907	MG1	GSC
A5_B5_C5	GAC	CCT	5GACCCT	23QH-HNZ-4-3	2023.8.12	Qinhai	Hainanzhou	100.6558	36.1917	2815	MG5	QH
A5_B5_C5	GAC	CGA	5GACCGA	23GS-TS-2-3	2023.6.11	Gansu	Tianshui	104.9612	34.7308	1425	MG7	GSLN
A5_B5_C5	GAC	CGC	5GACCGC	23GS-LZ-1-3	2023.7.6	Gansu	Lanzhou	103.4832	36.4817	1801	MG1	GSC
A5_B5_C5	GAC	CGG	5GACCGG	23GS-TS-3-3	2023.6.13	Gansu	Tianshui	106.2396	35.0612	1738	MG1	GSLN
A5_B5_C5	GAC	CGT	5GACCGT	23GS-LXZ-3-3	2023.7.8	Gansu	Linxiashou	102.8603	35.5601	2551	MG3	GSC
A5_B5_C5	GAC	CTA	5GACCTA	23QH-HNZ-5-3	2023.8.12	Qinhai	Hainanzhou	100.7046	36.1778	2696	MG5	QH
A5_B5_C5	GAC	CTC	5GACCTC	23QH-HN-1-3	2023.7.7	Qinhai	Huangnanzhou	101.9283	36.0611	2085	MG1	QH
A5_B5_C5	GAC	CTG	5GACCTG	23QH-HNZ-6-3	2023.7.7	Qinhai	Hainanzhou	101.4154	36.0252	2193	MG3	QH
A5_B5_C5	GAC	CTT	5GACCTT	23QH-XN-2-3	2023.8.13	Qinhai	Xining	101.8151	37.0583	2687	MG2	QH
A5_B5_C5	GAG	CAA	5GAGCAA	23GS-PL-6-2	2023.6.13	Gansu	Pingliang	105.7659	35.5120	1744	MG3	GSLD
A5_B5_C5	GAG	CAC	5GAGCAC	23GS-QY-3-2	2023.6.15	Gansu	Qingyang	107.4425	35.6974	1314	MG3	GSLD
A5_B5_C5	GAG	CAG	5GAGCAG	23GS-QY-2-2	2023.6.15	Gansu	Qingyang	107.2022	35.6953	1326	MG3	GSLD
A5_B5_C5	GAG	CAT	5GAGCAT	23GS-BY-1-2	2023.6.12	Gansu	Baiyin	105.4161	35.6912	1907	MG1	GSC
A5_B5_C5	GAG	CGA	5GAGCGA	23GS-TS-2-2	2023.6.11	Gansu	Tianshui	104.9612	34.7308	1425	MG2	GSLN
A5_B5_C5	GAG	CGG	5GAGCGG	23GS-TS-3-2	2023.6.13	Gansu	Tianshui	106.2396	35.0612	1738	MG1	GSLN
A5_B5_C5	GAG	CGT	5GAGCGT	23GS-LXZ-3-2	2023.7.8	Gansu	Linxiashou	102.8603	35.5601	2551	MG1	GSC
A5_B5_C5	GAG	CTC	5GAGCTC	23QH-HN-1-2	2023.7.7	Qinhai	Huangnanzhou	101.9283	36.0611	2085	MG1	QH
A5_B5_C5	GAG	CTT	5GAGCTT	23QH-XN-2-2	2023.8.13	Qinhai	Xining	101.8151	37.0583	2687	MG2	QH
A5_B5_C5	GAT	CAA	5GATCAA	23GS-PL-6-4	2023.6.13	Gansu	Pingliang	105.7659	35.5120	1744	MG3	GSLD
A5_B5_C5	GAT	CAC	5GATCAC	23GS-QY-3-4	2023.6.15	Gansu	Qingyang	107.4425	35.6974	1314	MG3	GSLD
A5_B5_C5	GAT	CAT	5GATCAT	23GS-BY-1-4	2023.6.12	Gansu	Baiyin	105.4161	35.6912	1907	MG1	GSC
A5_B5_C5	GAT	CGA	5GATCGA	23GS-TS-2-4	2023.6.11	Gansu	Tianshui	104.9612	34.7308	1425	MG2	GSLN
A5_B5_C5	GAT	CGC	5GATCGC	23GS-LZ-1-4	2023.7.6	Gansu	Lanzhou	103.4832	36.4817	1801	MG1	GSC
A5_B5_C5	GAT	CGG	5GATCGG	23GS-TS-3-4	2023.6.13	Gansu	Tianshui	106.2396	35.0612	1738	MG3	GSLN
A5_B5_C5	GAT	CTA	5GATCTA	23QH-HNZ-5-4	2023.8.12	Qinhai	Hainanzhou	100.7046	36.1778	2696	MG4	QH
A5_B5_C5	GAT	CTC	5GATCTC	23QH-HN-1-4	2023.7.7	Qinhai	Huangnanzhou	101.9283	36.0611	2085	MG1	QH
A5_B5_C5	GAT	CTG	5GATCTG	23QH-HNZ-6-4	2023.7.7	Qinhai	Hainanzhou	101.4154	36.0252	2193	MG2	QH
A5_B5_C5	GAT	CTT	5GATCTT	23QH-XN-2-4	2023.8.13	Qinhai	Xining	101.8151	37.0583	2687	MG2	QH
A5_B5_C5	GCA	CAC	5GCACAC	23GS-QY-3-9	2023.6.15	Gansu	Qingyang	107.4425	35.6974	1314	MG3	GSLD
A5_B5_C5	GCA	CAG	5GCACAG	23GS-QY-2-9	2023.6.15	Gansu	Qingyang	107.2022	35.6953	1326	MG3	GSLD

A5_B5_C5	GCA	CAT	5GCACAT	23GS-TS-1-5	2023.6.11	Gansu	Tianshui	105.5888	34.3154	1510	MG1	GSLN
A5_B5_C5	GCA	CGA	5GCACGA	23GS-TS-2-9	2023.6.11	Gansu	Tianshui	104.9612	34.7308	1425	MG2	GSLN
A5_B5_C5	GCA	CGG	5GCACGG	23GS-TS-3-9	2023.6.13	Gansu	Tianshui	106.2396	35.0612	1738	MG1	GSLN
A5_B5_C5	GCA	CTC	5GCACTC	23QH-HN-1-9	2023.7.7	Qinhai	Huangnanzhou	101.9283	36.0611	2085	MG1	QH
A5_B5_C5	GCA	CTT	5GCACTT	23QH-XN-2-9	2023.8.13	Qinhai	Xining	101.8151	37.0583	2687	MG1	QH
A5_B5_C5	GCC	CAA	5GCCCAA	23GS-QY-1-5	2023.6.15	Gansu	Qingyang	107.5515	35.6875	1317	MG1	GSLD
A5_B5_C5	GCC	CAC	5GCCCAC	23GS-QY-3-11	2023.6.15	Gansu	Qingyang	107.4425	35.6974	1314	MG3	GSLD
A5_B5_C5	GCC	CAG	5GCCCAG	23GS-QY-2-11	2023.6.15	Gansu	Qingyang	107.2022	35.6953	1326	MG3	GSLD
A5_B5_C5	GCC	CGA	5GCCCGA	23GS-TS-2-11	2023.6.11	Gansu	Tianshui	104.9612	34.7308	1425	MG1	GSLN
A5_B5_C5	GCC	CGC	5GCCCGC	23GS-LXZ-2-5	2023.7.8	Gansu	Linxiashou	102.9323	35.5086	2238	MG1	GSC
A5_B5_C5	GCC	CGG	5GCCCGG	23GS-TS-3-11	2023.6.13	Gansu	Tianshui	106.2396	35.0612	1738	MG1	GSLN
A5_B5_C5	GCC	CTC	5GCCCTC	23QH-HN-1-11	2023.7.7	Qinhai	Huangnanzhou	101.9283	36.0611	2085	MG1	QH
A5_B5_C5	GCC	CTG	5GCCCTG	23QH-HNZ-6-11	2023.7.7	Qinhai	Hainanzhou	101.4154	36.0252	2193	MG2	QH
A5_B5_C5	GCC	CTT	5GCCCTT	23QH-XN-2-11	2023.8.13	Qinhai	Xining	101.8151	37.0583	2687	MG1	QH
A5_B5_C5	GCG	CAA	5GCGCAA	23GS-QY-1-4	2023.6.15	Gansu	Qingyang	107.5515	35.6875	1317	MG1	GSLD
A5_B5_C5	GCG	CAC	5GCGCAC	23GS-QY-3-10	2023.6.15	Gansu	Qingyang	107.4425	35.6974	1314	MG3	GSLD
A5_B5_C5	GCG	CGA	5GCGCGA	23GS-TS-2-10	2023.6.11	Gansu	Tianshui	104.9612	34.7308	1425	MG3	GSLN
A5_B5_C5	GCG	CGC	5GCGCGC	23GS-LXZ-2-4	2023.7.8	Gansu	Linxiashou	102.9323	35.5086	2238	MG7	GSC
A5_B5_C5	GCG	CGG	5GCGCGG	23GS-TS-3-10	2023.6.13	Gansu	Tianshui	106.2396	35.0612	1738	MG1	GSLN
A5_B5_C5	GCG	CTC	5GCGCTC	23QH-HN-1-10	2023.7.7	Qinhai	Huangnanzhou	101.9283	36.0611	2085	MG1	QH
A5_B5_C5	GCG	CTG	5GCGCTG	23QH-HNZ-6-10	2023.7.7	Qinhai	Hainanzhou	101.4154	36.0252	2193	MG1	QH
A5_B5_C5	GCG	CTT	5GCGCTT	23QH-XN-2-10	2023.8.13	Qinhai	Xining	101.8151	37.0583	2687	MG1	QH
A5_B5_C5	GCT	CAC	5GCTCAC	23GS-QY-3-12	2023.6.15	Gansu	Qingyang	107.4425	35.6974	1314	MG3	GSLD
A5_B5_C5	GCT	CGA	5GCTCGA	23GS-TS-2-12	2023.6.11	Gansu	Tianshui	104.9612	34.7308	1425	MG1	GSLN
A5_B5_C5	GCT	CGC	5GCTCGC	23GS-LXZ-2-6	2023.7.8	Gansu	Linxiashou	102.9323	35.5086	2238	MG1	GSC
A5_B5_C5	GCT	CGG	5GCTCGG	23GS-TS-3-12	2023.6.13	Gansu	Tianshui	106.2396	35.0612	1738	MG1	GSLN
A5_B5_C5	GCT	CTC	5GCTCTC	23QH-HN-1-12	2023.7.7	Qinhai	Huangnanzhou	101.9283	36.0611	2085	MG1	QH
A5_B5_C5	GCT	CTT	5GCTCTT	23QH-XN-2-12	2023.8.13	Qinhai	Xining	101.8151	37.0583	2687	MG1	QH
A5_B5_C5	GGA	CAA	5GGACAA	23GS-PL-6-5	2023.6.13	Gansu	Pingliang	105.7659	35.5120	1744	MG3	GSLD
A5_B5_C5	GGA	CAC	5GGACAC	23GS-QY-3-5	2023.6.15	Gansu	Qingyang	107.4425	35.6974	1314	MG3	GSLD
A5_B5_C5	GGA	CAG	5GGACAG	23GS-QY-2-5	2023.6.15	Gansu	Qingyang	107.2022	35.6953	1326	MG3	GSLD
A5_B5_C5	GGA	CAT	5GGACAT	23GS-TS-1-1	2023.6.11	Gansu	Tianshui	105.5888	34.3154	1510	MG1	GSLN
A5_B5_C5	GGA	CGA	5GGACGA	23GS-TS-2-5	2023.6.11	Gansu	Tianshui	104.9612	34.7308	1425	MG7	GSLN
A5_B5_C5	GGA	CTC	5GGACTC	23QH-HN-1-5	2023.7.7	Qinhai	Huangnanzhou	101.9283	36.0611	2085	MG1	QH
A5_B5_C5	GGA	CTG	5GGACTG	23QH-HNZ-6-5	2023.7.7	Qinhai	Hainanzhou	101.4154	36.0252	2193	MG6	QH
A5_B5_C5	GGA	CTT	5GGACTT	23QH-XN-2-5	2023.8.13	Qinhai	Xining	101.8151	37.0583	2687	MG2	QH
A5_B5_C5	GGC	CAA	5GGCCAA	23GS-QY-1-1	2023.6.15	Gansu	Qingyang	107.5515	35.6875	1317	MG4	GSLD
A5_B5_C5	GGC	CAC	5GGCCAC	23GS-QY-3-7	2023.6.15	Gansu	Qingyang	107.4425	35.6974	1314	MG3	GSLD

A5_B5_C5	GGC	CAT	5GGCCAT	23GS-TS-1-3	2023.6.11	Gansu	Tianshui	105.5888	34.3154	1510	MG4	GSLN
A5_B5_C5	GGC	CGA	5GGCCGA	23GS-TS-2-7	2023.6.11	Gansu	Tianshui	104.9612	34.7308	1425	MG1	GSLN
A5_B5_C5	GGC	CGG	5GGCCGG	23GS-TS-3-7	2023.6.13	Gansu	Tianshui	106.2396	35.0612	1738	MG1	GSLN
A5_B5_C5	GGC	CGT	5GGCCGT	23GS-LXZ-3-7	2023.7.8	Gansu	Linxiashou	102.8603	35.5601	2551	MG1	GSC
A5_B5_C5	GGC	CTC	5GGCCTC	23QH-HN-1-7	2023.7.7	Qinhai	Huangnanzhou	101.9283	36.0611	2085	MG2	QH
A5_B5_C5	GGC	CTG	5GGCCTG	23QH-HNZ-6-7	2023.7.7	Qinhai	Hainanzhou	101.4154	36.0252	2193	MG3	QH
A5_B5_C5	GGC	CTT	5GGCCTT	23QH-XN-2-7	2023.8.13	Qinhai	Xining	101.8151	37.0583	2687	MG2	QH
A5_B5_C5	GGG	CAA	5GGGCAA	23GS-PL-6-6	2023.6.13	Gansu	Pingliang	105.7659	35.5120	1744	MG3	GSLD
A5_B5_C5	GGG	CAC	5GGGCAC	23GS-QY-3-6	2023.6.15	Gansu	Qingyang	107.4425	35.6974	1314	MG3	GSLD
A5_B5_C5	GGG	CAG	5GGGCAG	23GS-QY-2-6	2023.6.15	Gansu	Qingyang	107.2022	35.6953	1326	MG3	GSLD
A5_B5_C5	GGG	CAT	5GGGCAT	23GS-TS-1-2	2023.6.11	Gansu	Tianshui	105.5888	34.3154	1510	MG1	GSLN
A5_B5_C5	GGG	CGA	5GGGCGA	23GS-TS-2-6	2023.6.11	Gansu	Tianshui	104.9612	34.7308	1425	MG1	GSLN
A5_B5_C5	GGG	CGC	5GGGCGC	23GS-LZ-1-6	2023.7.6	Gansu	Lanzhou	103.4832	36.4817	1801	MG1	GSC
A5_B5_C5	GGG	CGG	5GGGCGG	23GS-TS-3-6	2023.6.13	Gansu	Tianshui	106.2396	35.0612	1738	MG1	GSLN
A5_B5_C5	GGG	CTC	5GGGCTC	23QH-HN-1-6	2023.7.7	Qinhai	Huangnanzhou	101.9283	36.0611	2085	MG1	QH
A5_B5_C5	GGG	CTG	5GGGCTG	23QH-HNZ-6-6	2023.7.7	Qinhai	Hainanzhou	101.4154	36.0252	2193	MG3	QH
A5_B5_C5	GGG	CTT	5GGGCTT	23QH-XN-2-6	2023.8.13	Qinhai	Xining	101.8151	37.0583	2687	MG1	QH
A5_B5_C5	GGT	CAA	5GGTCAA	23GS-QY-1-2	2023.6.15	Gansu	Qingyang	107.5515	35.6875	1317	MG3	GSLD
A5_B5_C5	GGT	CAC	5GGTCAC	23GS-QY-3-8	2023.6.15	Gansu	Qingyang	107.4425	35.6974	1314	MG3	GSLD
A5_B5_C5	GGT	CAG	5GGTCAG	23GS-QY-2-8	2023.6.15	Gansu	Qingyang	107.2022	35.6953	1326	MG3	GSLD
A5_B5_C5	GGT	CAT	5GGTCAT	23GS-TS-1-4	2023.6.11	Gansu	Tianshui	105.5888	34.3154	1510	MG1	GSLN
A5_B5_C5	GGT	CGC	5GGTCGC	23GS-LXZ-2-2	2023.7.8	Gansu	Linxiashou	102.9323	35.5086	2238	MG1	GSC
A5_B5_C5	GGT	CGG	5GGTCGG	23GS-TS-3-8	2023.6.13	Gansu	Tianshui	106.2396	35.0612	1738	MG1	GSLN
A5_B5_C5	GGT	CTC	5GGTCTC	23QH-HN-1-8	2023.7.7	Qinhai	Huangnanzhou	101.9283	36.0611	2085	MG1	QH
A5_B5_C5	GGT	CTG	5GGTCTG	23QH-HNZ-6-8	2023.7.7	Qinhai	Hainanzhou	101.4154	36.0252	2193	MG6	QH
A5_B5_C5	GGT	CTT	5GGTCTT	23QH-XN-2-8	2023.8.13	Qinhai	Xining	101.8151	37.0583	2687	MG1	QH
A5_B5_C5	GTA	CAT	5GTACAT	22XZ-LZ-2-7	2022.6.19	Xizang	Linzhi	94.6103	29.4928	2884	MG4	XZ
A5_B5_C5	GTA	CCG	5GTACCG	21XJ-YL-2-7	2021.6.29	Xinjiang	Yili	83.3378	43.5969	841	MG5	XJ
A5_B5_C5	GTA	CGA	5GTACGA	23XZ-LZ-3-9	2023.6.21	Xizang	Linzhi	94.4206	29.4983	2908	MG7	XZ
A5_B5_C5	GTA	CGC	5GTACGC	23XZ-LZ-4-9	2023.6.21	Xizang	Linzhi	93.9423	29.1845	2942	MG7	XZ
A5_B5_C5	GTA	CGG	5GTACGG	23XZ-LZ-3-21	2023.6.21	Xizang	Linzhi	94.4206	29.4983	2908	MG7	XZ
A5_B5_C5	GTA	CGT	5GTACGT	23XZ-LZ-4-21	2023.6.21	Xizang	Linzhi	93.9423	29.1845	2942	MG7	XZ
A5_B5_C5	GTA	CTT	5GTACTT	23XJ-YL-2-7	2023.6.27	Xinjiang	Yili	82.7114	43.4300	778.9	MG5	XJ
A5_B5_C5	GTC	CAT	5GTCCAT	22XZ-LZ-2-9	2022.6.19	Xizang	Linzhi	94.6103	29.4928	2884	MG7	XZ
A5_B5_C5	GTC	CCG	5GTCCCG	21XJ-YL-2-9	2021.6.29	Xinjiang	Yili	83.3378	43.5969	841	MG5	XJ
A5_B5_C5	GTC	CGA	5GTCCGA	23XZ-LZ-3-11	2023.6.21	Xizang	Linzhi	94.4206	29.4983	2908	MG7	XZ
A5_B5_C5	GTC	CGC	5GTCCGC	23XZ-LZ-4-11	2023.6.21	Xizang	Linzhi	93.9423	29.1845	2942	MG7	XZ
A5_B5_C5	GTC	CGG	5GTCCGG	23XZ-LZ-3-23	2023.6.21	Xizang	Linzhi	94.4206	29.4983	2908	MG7	XZ

A5_B5_C5	GTC	CGT	5GTCCGT	23XZ-LZ-4-23	2023.6.21	Xizang	Linzhi	93.9423	29.1845	2942	MG7	XZ
A5_B5_C5	GTC	CTA	5GTCCTA	21XJ-YL-7-3	2021.6.15	Xinjiang	Yili	81.8100	43.8400	775.2	MG5	XJ
A5_B5_C5	GTC	CTG	5GTCCTG	23XJ-YL-1-1	2023.6.8	Xinjiang	Yili	82.3114	43.4958	741	MG4	XJ
A5_B5_C5	GTG	CAT	5GTGCAT	22XZ-LZ-2-8	2022.6.19	Xizang	Linzhi	94.6103	29.4928	2884	MG7	XZ
A5_B5_C5	GTG	CCG	5GTGCCG	21XJ-YL-2-8	2021.6.29	Xinjiang	Yili	83.3378	43.5969	841	MG5	XJ
A5_B5_C5	GTG	CGA	5GTGCGA	23XZ-LZ-3-10	2023.6.21	Xizang	Linzhi	94.4206	29.4983	2908	MG7	XZ
A5_B5_C5	GTG	CGC	5GTGCGC	23XZ-LZ-4-10	2023.6.21	Xizang	Linzhi	93.9423	29.1845	2942	MG7	XZ
A5_B5_C5	GTG	CGG	5GTGCGG	23XZ-LZ-3-22	2023.6.21	Xizang	Linzhi	94.4206	29.4983	2908	MG7	XZ
A5_B5_C5	GTG	CGT	5GTGCGT	23XZ-LZ-4-22	2023.6.21	Xizang	Linzhi	93.9423	29.1845	2942	MG7	XZ
A5_B5_C5	GTG	CTA	5GTGCTA	21XJ-YL-7-2	2021.6.15	Xinjiang	Yili	81.8100	43.8400	775.2	MG5	XJ
A5_B5_C5	GTG	CTT	5GTGCTT	23XJ-YL-2-8	2023.6.27	Xinjiang	Yili	82.7114	43.4300	778.9	MG5	XJ
A5_B5_C5	GTT	CAA	5GTTCAA	21XZ-LZ-3-4	2021.7.7	Xizang	Linzhi	94.6103	29.4928	2884	MG4	XZ
A5_B5_C5	GTT	CAC	5GTTCAC	22XZ-LZ-1-2	2022.6.19	Xizang	Linzhi	94.3094	29.2728	3865	MG7	XZ
A5_B5_C5	GTT	CAT	5GTTCAT	22XZ-LZ-2-10	2022.6.19	Xizang	Linzhi	94.6103	29.4928	2884	MG7	XZ
A5_B5_C5	GTT	CCG	5GTTCCG	21XJ-YL-2-10	2021.6.29	Xinjiang	Yili	83.3378	43.5969	841	MG5	XJ
A5_B5_C5	GTT	CGA	5GTTCGA	23XZ-LZ-3-12	2023.6.21	Xizang	Linzhi	94.4206	29.4983	2908	MG7	XZ
A5_B5_C5	GTT	CGC	5GTTCGC	23XZ-LZ-4-12	2023.6.21	Xizang	Linzhi	93.9423	29.1845	2942	MG7	XZ
A5_B5_C5	GTT	CGG	5GTTCGG	23XZ-LZ-3-24	2023.6.21	Xizang	Linzhi	94.4206	29.4983	2908	MG7	XZ
A5_B5_C5	GTT	CGT	5GTTCGT	23XZ-LZ-4-24	2023.6.21	Xizang	Linzhi	93.9423	29.1845	2942	MG7	XZ
A5_B5_C5	GTT	CTA	5GTTCTA	21XJ-YL-7-4	2021.6.15	Xinjiang	Yili	81.8100	43.8400	775.2	MG7	XJ
A5_B5_C5	GTT	CTG	5GTTCTG	23XJ-YL-1-2	2023.6.8	Xinjiang	Yili	82.3114	43.4958	741	MG5	XJ
A5_B5_C5	GTT	CTT	5GTTCTT	23XJ-YL-2-10	2023.6.27	Xinjiang	Yili	82.7114	43.4300	778.9	MG5	XJ
A6_B6_C6	GAA	CAC	6GAACAC	23GZ-BJ-1-1	2023.4.17	Guizhou	Biji	105.7600	27.5077	1386	MG1	YG
A6_B6_C6	GAA	CCA	6GAACCA	23QH-XN-3-1	2023.8.13	Qinhai	Xining	101.7545	37.0032	2532	MG4	QH
A6_B6_C6	GAA	CCC	6GAACCC	23QH-XN-6-1	2023.9.22	Qinhai	Xining	101.6472	37.0342	2616.7	MG2	QH
A6_B6_C6	GAA	CCT	6GAACCT	23QH-XN-8-1	2023.9.22	Qinhai	Xining	101.1100	36.6975	2919.4	MG2	QH
A6_B6_C6	GAA	CGA	6GAACGA	23GZ-BJ-3-1	2023.4.17	Guizhou	Biji	105.9395	27.0569	1244.7	MG7	YG
A6_B6_C6	GAA	CGC	6GAACGC	23GZ-GY-1-1	2023.4.18	Guizhou	Guiyang	106.6747	26.3992	1101.2	MG2	YG
A6_B6_C6	GAA	CGT	6GAACGT	23GZ-LPS-1-1	2023.4.18	Guizhou	Liupanshui	105.3948	26.3237	1155.4	MG7	YG
A6_B6_C6	GAA	CTC	6GAACTC	23QH-XN-12-1	2023.9.22	Qinhai	Xining	101.0439	36.7381	3048.2	MG3	QH
A6_B6_C6	GAA	CTG	6GAACTG	23QH-XN-11-1	2023.8.11	Qinhai	Xining	101.6848	36.4539	2619	MG2	QH
A6_B6_C6	GAC	CAC	6GACCAC	23GZ-BJ-1-3	2023.4.17	Guizhou	Biji	105.7600	27.5077	1386	MG1	YG
A6_B6_C6	GAC	CAT	6GACCAT	23GZ-BJ-2-3	2023.4.16	Guizhou	Biji	104.7099	27.2247	1501.3	MG7	YG
A6_B6_C6	GAC	CCA	6GACCCA	23QH-XN-3-3	2023.8.13	Qinhai	Xining	101.7545	37.0032	2532	MG2	QH
A6_B6_C6	GAC	CCG	6GACCCG	23QH-XN-5-1	2023.8.13	Qinhai	Xining	101.7099	37.1475	2920	MG1	QH
A6_B6_C6	GAC	CCT	6GACCCT	23QH-XN-8-3	2023.9.22	Qinhai	Xining	101.1100	36.6975	2919.4	MG2	QH
A6_B6_C6	GAC	CGA	6GACCGA	23GZ-BJ-3-3	2023.4.17	Guizhou	Biji	105.9395	27.0569	1244.7	MG7	YG
A6_B6_C6	GAC	CGC	6GACCGC	23GZ-GY-1-3	2023.4.18	Guizhou	Guiyang	106.6747	26.3992	1101.2	MG2	YG

A6_B6_C6	GAC	CGT	6GACCGT	23GZ-LPS-1-3	2023.4.18	Guizhou	Liupanshui	105.3948	26.3237	1155.4	MG7	YG
A6_B6_C6	GAC	CTC	6GACCTC	23QH-XN-12-3	2023.9.22	Qinhai	Xining	101.0439	36.7381	3048.2	MG3	QH
A6_B6_C6	GAC	CTG	6GACCTG	23QH-XN-11-3	2023.8.11	Qinhai	Xining	101.6848	36.4539	2619	MG2	QH
A6_B6_C6	GAC	CTT	6GACCTT	23QH-XN-13-3	2023.9.21	Qinhai	Xining	102.3733	35.8719	1884.1	MG3	QH
A6_B6_C6	GAG	CAC	6GAGCAC	23GZ-BJ-1-2	2023.4.17	Guizhou	Biji	105.7600	27.5077	1386	MG1	YG
A6_B6_C6	GAG	CCA	6GAGCCA	23QH-XN-3-2	2023.8.13	Qinhai	Xining	101.7545	37.0032	2532	MG2	QH
A6_B6_C6	GAG	CCC	6GAGCCC	23QH-XN-6-2	2023.9.22	Qinhai	Xining	101.6472	37.0342	2616.7	MG2	QH
A6_B6_C6	GAG	CCT	6GAGCCT	23QH-XN-8-2	2023.9.22	Qinhai	Xining	101.1100	36.6975	2919.4	MG2	QH
A6_B6_C6	GAG	CGA	6GAGCGA	23GZ-BJ-3-2	2023.4.17	Guizhou	Biji	105.9395	27.0569	1244.7	MG7	YG
A6_B6_C6	GAG	CGC	6GAGCGC	23GZ-GY-1-2	2023.4.18	Guizhou	Guiyang	106.6747	26.3992	1101.2	MG2	YG
A6_B6_C6	GAG	CGT	6GAGCGT	23GZ-LPS-1-2	2023.4.18	Guizhou	Liupanshui	105.3948	26.3237	1155.4	MG7	YG
A6_B6_C6	GAG	CTC	6GAGCTC	23QH-XN-12-2	2023.9.22	Qinhai	Xining	101.0439	36.7381	3048.2	MG3	QH
A6_B6_C6	GAG	CTG	6GAGCTG	23QH-XN-11-2	2023.8.11	Qinhai	Xining	101.6848	36.4539	2619	MG2	QH
A6_B6_C6	GAT	CAA	6GATCAA	23GZ-AS-1-4	2023.4.18	Guizhou	Anshun	105.5264	26.3172	1131.1	MG2	YG
A6_B6_C6	GAT	CAC	6GATCAC	23GZ-BJ-1-4	2023.4.17	Guizhou	Biji	105.7600	27.5077	1386	MG1	YG
A6_B6_C6	GAT	CAG	6GATCAG	23GZ-AS-2-4	2023.4.18	Guizhou	Anshun	106.1815	26.1855	1240.8	MG1	YG
A6_B6_C6	GAT	CAT	6GATCAT	23GZ-BJ-2-4	2023.4.16	Guizhou	Biji	104.7099	27.2247	1501.3	MG1	YG
A6_B6_C6	GAT	CCG	6GATCCG	23QH-XN-5-2	2023.8.13	Qinhai	Xining	101.7099	37.1475	2920	MG1	QH
A6_B6_C6	GAT	CCT	6GATCCT	23QH-XN-8-4	2023.9.22	Qinhai	Xining	101.1100	36.6975	2919.4	MG1	QH
A6_B6_C6	GAT	CGA	6GATCGA	23GZ-BJ-3-4	2023.4.17	Guizhou	Biji	105.9395	27.0569	1244.7	MG7	YG
A6_B6_C6	GAT	CGC	6GATCGC	23GZ-GY-1-4	2023.4.18	Guizhou	Guiyang	106.6747	26.3992	1101.2	MG2	YG
A6_B6_C6	GAT	CGT	6GATCGT	23GZ-LPS-1-4	2023.4.18	Guizhou	Liupanshui	105.3948	26.3237	1155.4	MG7	YG
A6_B6_C6	GAT	CTC	6GATCTC	23QH-XN-12-4	2023.9.22	Qinhai	Xining	101.0439	36.7381	3048.2	MG5	QH
A6_B6_C6	GAT	CTG	6GATCTG	23QH-XN-11-4	2023.8.11	Qinhai	Xining	101.6848	36.4539	2619	MG2	QH
A6_B6_C6	GAT	CTT	6GATCTT	23QH-XN-13-4	2023.9.21	Qinhai	Xining	102.3733	35.8719	1884.1	MG2	QH
A6_B6_C6	GCA	CAA	6GCACAA	23GZ-AS-1-9	2023.4.18	Guizhou	Anshun	105.5264	26.3172	1131.1	MG1	YG
A6_B6_C6	GCA	CAC	6GCACAC	23GZ-BJ-1-9	2023.4.17	Guizhou	Biji	105.7600	27.5077	1386	MG2	YG
A6_B6_C6	GCA	CAG	6GCACAG	23GZ-AS-2-9	2023.4.18	Guizhou	Anshun	106.1815	26.1855	1240.8	MG2	YG
A6_B6_C6	GCA	CAT	6GCACAT	23GZ-BJ-2-9	2023.4.16	Guizhou	Biji	104.7099	27.2247	1501.3	MG7	YG
A6_B6_C6	GCA	CCA	6GCACCA	23QH-XN-3-9	2023.8.13	Qinhai	Xining	101.7545	37.0032	2532	MG2	QH
A6_B6_C6	GCA	CCG	6GCACCG	23QH-XN-5-7	2023.8.13	Qinhai	Xining	101.7099	37.1475	2920	MG3	QH
A6_B6_C6	GCA	CCT	6GCACCT	23QH-XN-9-3	2023.8.14	Qinhai	Xining	101.0812	36.7632	2885	MG2	QH
A6_B6_C6	GCA	CGA	6GCACGA	23GZ-BJ-3-9	2023.4.17	Guizhou	Biji	105.9395	27.0569	1244.7	MG7	YG
A6_B6_C6	GCA	CGC	6GCACGC	23GZ-GY-1-9	2023.4.18	Guizhou	Guiyang	106.6747	26.3992	1101.2	MG7	YG
A6_B6_C6	GCA	CGT	6GCACGT	23GZ-LPS-1-9	2023.4.18	Guizhou	Liupanshui	105.3948	26.3237	1155.4	MG2	YG
A6_B6_C6	GCA	CTG	6GCACTG	23QH-XN-11-9	2023.8.11	Qinhai	Xining	101.6848	36.4539	2619	MG2	QH
A6_B6_C6	GCC	CAA	6GCCCAA	23GZ-AS-1-11	2023.4.18	Guizhou	Anshun	105.5264	26.3172	1131.1	MG2	YG
A6_B6_C6	GCC	CAC	6GCCCAC	23GZ-BJ-1-11	2023.4.17	Guizhou	Biji	105.7600	27.5077	1386	MG2	YG

A6_B6_C6	GCC	CAG	6GCCCAG	23GZ-AS-2-11	2023.4.18	Guizhou	Anshun	106.1815	26.1855	1240.8	MG1	YG
A6_B6_C6	GCC	CCA	6GCCCCA	23QH-XN-4-1	2023.9.22	Qinhai	Xining	101.8283	37.0694	2795.5	MG2	QH
A6_B6_C6	GCC	CCG	6GCCCCG	23QH-XN-5-9	2023.8.13	Qinhai	Xining	101.7099	37.1475	2920	MG1	QH
A6_B6_C6	GCC	CCT	6GCCCCT	23QH-XN-9-5	2023.8.14	Qinhai	Xining	101.0812	36.7632	2885	MG2	QH
A6_B6_C6	GCC	CGA	6GCCCGA	23GZ-BJ-3-11	2023.4.17	Guizhou	Biji	105.9395	27.0569	1244.7	MG2	YG
A6_B6_C6	GCC	CGC	6GCCCGC	23GZ-GY-1-11	2023.4.18	Guizhou	Guiyang	106.6747	26.3992	1101.2	MG7	YG
A6_B6_C6	GCC	CTA	6GCCCTA	23QH-XN-10-11	2023.8.14	Qinhai	Xining	101.1705	36.7408	2691	MG1	QH
A6_B6_C6	GCC	CTG	6GCCCTG	23QH-XN-11-11	2023.8.11	Qinhai	Xining	101.6848	36.4539	2619	MG2	QH
A6_B6_C6	GCG	CAA	6GCGCAA	23GZ-AS-1-10	2023.4.18	Guizhou	Anshun	105.5264	26.3172	1131.1	MG2	YG
A6_B6_C6	GCG	CAC	6GCGCAC	23GZ-BJ-1-10	2023.4.17	Guizhou	Biji	105.7600	27.5077	1386	MG1	YG
A6_B6_C6	GCG	CAG	6GCGCAG	23GZ-AS-2-10	2023.4.18	Guizhou	Anshun	106.1815	26.1855	1240.8	MG2	YG
A6_B6_C6	GCG	CAT	6GCGCAT	23GZ-BJ-2-10	2023.4.16	Guizhou	Biji	104.7099	27.2247	1501.3	MG7	YG
A6_B6_C6	GCT	CAC	6GCTCAC	23GZ-BJ-1-12	2023.4.17	Guizhou	Biji	105.7600	27.5077	1386	MG3	YG
A6_B6_C6	GCT	CAG	6GCTCAG	23GZ-AS-2-12	2023.4.18	Guizhou	Anshun	106.1815	26.1855	1240.8	MG2	YG
A6_B6_C6	GCT	CAT	6GCTCAT	23GZ-BJ-2-12	2023.4.16	Guizhou	Biji	104.7099	27.2247	1501.3	MG6	YG
A6_B6_C6	GCT	CCA	6GCTCCA	23QH-XN-4-2	2023.9.22	Qinhai	Xining	101.8283	37.0694	2795.5	MG2	QH
A6_B6_C6	GCT	CCC	6GCTCCC	23QH-XN-7-6	2023.8.14	Qinhai	Xining	101.1059	36.7909	2831	MG2	QH
A6_B6_C6	GCT	CCT	6GCTCCT	23QH-XN-9-6	2023.8.14	Qinhai	Xining	101.0812	36.7632	2885	MG2	QH
A6_B6_C6	GCT	CGA	6GCTCGA	23GZ-BJ-3-12	2023.4.17	Guizhou	Biji	105.9395	27.0569	1244.7	MG7	YG
A6_B6_C6	GCT	CGC	6GCTCGC	23GZ-GY-1-12	2023.4.18	Guizhou	Guiyang	106.6747	26.3992	1101.2	MG2	YG
A6_B6_C6	GCT	CGT	6GCTCGT	23GZ-LPS-1-12	2023.4.18	Guizhou	Liupanshui	105.3948	26.3237	1155.4	MG7	YG
A6_B6_C6	GCT	CTG	6GCTCTG	23QH-XN-11-12	2023.8.11	Qinhai	Xining	101.6848	36.4539	2619	MG1	QH
A6_B6_C6	GGA	CAA	6GGACAA	23GZ-AS-1-5	2023.4.18	Guizhou	Anshun	105.5264	26.3172	1131.1	MG2	YG
A6_B6_C6	GGA	CAC	6GGACAC	23GZ-BJ-1-5	2023.4.17	Guizhou	Biji	105.7600	27.5077	1386	MG1	YG
A6_B6_C6	GGA	CAG	6GGACAG	23GZ-AS-2-5	2023.4.18	Guizhou	Anshun	106.1815	26.1855	1240.8	MG2	YG
A6_B6_C6	GGA	CAT	6GGACAT	23GZ-BJ-2-5	2023.4.16	Guizhou	Biji	104.7099	27.2247	1501.3	MG2	YG
A6_B6_C6	GGA	CCA	6GGACCA	23QH-XN-3-5	2023.8.13	Qinhai	Xining	101.7545	37.0032	2532	MG1	QH
A6_B6_C6	GGA	CCC	6GGACCC	23QH-XN-6-5	2023.9.22	Qinhai	Xining	101.6472	37.0342	2616.7	MG1	QH
A6_B6_C6	GGA	CCG	6GGACCG	23QH-XN-5-3	2023.8.13	Qinhai	Xining	101.7099	37.1475	2920	MG2	QH
A6_B6_C6	GGA	CCT	6GGACCT	23QH-XN-8-5	2023.9.22	Qinhai	Xining	101.1100	36.6975	2919.4	MG7	QH
A6_B6_C6	GGA	CGA	6GGACGA	23GZ-BJ-3-5	2023.4.17	Guizhou	Biji	105.9395	27.0569	1244.7	MG7	YG
A6_B6_C6	GGA	CGC	6GGACGC	23GZ-GY-1-5	2023.4.18	Guizhou	Guiyang	106.6747	26.3992	1101.2	MG1	YG
A6_B6_C6	GGA	CGT	6GGACGT	23GZ-LPS-1-5	2023.4.18	Guizhou	Liupanshui	105.3948	26.3237	1155.4	MG2	YG
A6_B6_C6	GGA	CTA	6GGACTA	23QH-XN-10-5	2023.8.14	Qinhai	Xining	101.1705	36.7408	2691	MG4	QH
A6_B6_C6	GGA	CTC	6GGACTC	23QH-XN-12-5	2023.9.22	Qinhai	Xining	101.0439	36.7381	3048.2	MG5	QH
A6_B6_C6	GGA	CTG	6GGACTG	23QH-XN-11-5	2023.8.11	Qinhai	Xining	101.6848	36.4539	2619	MG1	QH
A6_B6_C6	GGC	CAG	6GGCCAG	23GZ-AS-2-7	2023.4.18	Guizhou	Anshun	106.1815	26.1855	1240.8	MG2	YG
A6_B6_C6	GGC	CAT	6GGCCAT	23GZ-BJ-2-7	2023.4.16	Guizhou	Biji	104.7099	27.2247	1501.3	MG7	YG

A6_B6_C6	GGC	CCA	6GGCCCA	23QH-XN-3-7	2023.8.13	Qinhai	Xining	101.7545	37.0032	2532	MG2	QH
A6_B6_C6	GGC	CCC	6GGCCCC	23QH-XN-7-1	2023.8.14	Qinhai	Xining	101.1059	36.7909	2831	MG1	QH
A6_B6_C6	GGC	CCT	6GGCCCT	23QH-XN-9-1	2023.8.14	Qinhai	Xining	101.0812	36.7632	2885	MG2	QH
A6_B6_C6	GGC	CGA	6GGCCGA	23GZ-BJ-3-7	2023.4.17	Guizhou	Biji	105.9395	27.0569	1244.7	MG7	YG
A6_B6_C6	GGC	CGC	6GGCCGC	23GZ-GY-1-7	2023.4.18	Guizhou	Guiyang	106.6747	26.3992	1101.2	MG2	YG
A6_B6_C6	GGC	CGT	6GGCCGT	23GZ-LPS-1-7	2023.4.18	Guizhou	Liupanshui	105.3948	26.3237	1155.4	MG2	YG
A6_B6_C6	GGG	CAA	6GGGCAA	23GZ-AS-1-6	2023.4.18	Guizhou	Anshun	105.5264	26.3172	1131.1	MG2	YG
A6_B6_C6	GGG	CAC	6GGGCAC	23GZ-BJ-1-6	2023.4.17	Guizhou	Biji	105.7600	27.5077	1386	MG1	YG
A6_B6_C6	GGG	CCT	6GGGCCT	23QH-XN-8-6	2023.9.22	Qinhai	Xining	101.1100	36.6975	2919.4	MG2	QH
A6_B6_C6	GGG	CGA	6GGGCGA	23GZ-BJ-3-6	2023.4.17	Guizhou	Biji	105.9395	27.0569	1244.7	MG7	YG
A6_B6_C6	GGG	CGC	6GGGCGC	23GZ-GY-1-6	2023.4.18	Guizhou	Guiyang	106.6747	26.3992	1101.2	MG2	YG
A6_B6_C6	GGG	CGT	6GGGCGT	23GZ-LPS-1-6	2023.4.18	Guizhou	Liupanshui	105.3948	26.3237	1155.4	MG2	YG
A6_B6_C6	GGG	CTC	6GGGCTC	23QH-XN-12-6	2023.9.22	Qinhai	Xining	101.0439	36.7381	3048.2	MG5	QH
A6_B6_C6	GGG	CTG	6GGGCTG	23QH-XN-11-6	2023.8.11	Qinhai	Xining	101.6848	36.4539	2619	MG1	QH
A6_B6_C6	GGT	CAA	6GGTCAA	23GZ-AS-1-8	2023.4.18	Guizhou	Anshun	105.5264	26.3172	1131.1	MG1	YG
A6_B6_C6	GGT	CAT	6GGTCAT	23GZ-BJ-2-8	2023.4.16	Guizhou	Biji	104.7099	27.2247	1501.3	MG7	YG
A6_B6_C6	GGT	CCA	6GGTCCA	23QH-XN-3-8	2023.8.13	Qinhai	Xining	101.7545	37.0032	2532	MG2	QH
A6_B6_C6	GGT	CCC	6GGTCCC	23QH-XN-7-2	2023.8.14	Qinhai	Xining	101.1059	36.7909	2831	MG1	QH
A6_B6_C6	GGT	CCG	6GGTCCG	23QH-XN-5-6	2023.8.13	Qinhai	Xining	101.7099	37.1475	2920	MG3	QH
A6_B6_C6	GGT	CCT	6GGTCCT	23QH-XN-9-2	2023.8.14	Qinhai	Xining	101.0812	36.7632	2885	MG2	QH
A6_B6_C6	GGT	CGA	6GGTCGA	23GZ-BJ-3-8	2023.4.17	Guizhou	Biji	105.9395	27.0569	1244.7	MG7	YG
A6_B6_C6	GGT	CGC	6GGTCGC	23GZ-GY-1-8	2023.4.18	Guizhou	Guiyang	106.6747	26.3992	1101.2	MG7	YG
A6_B6_C6	GGT	CGT	6GGTCGT	23GZ-LPS-1-8	2023.4.18	Guizhou	Liupanshui	105.3948	26.3237	1155.4	MG3	YG
A6_B6_C6	GGT	CTC	6GGTCTC	23QH-HB-1-2	2023.9.21	Qinhai	Haibeizhou	101.8483	37.3210	2696	MG2	QH
A6_B6_C6	GGT	CTG	6GGTCTG	23QH-XN-11-8	2023.8.11	Qinhai	Xining	101.6848	36.4539	2619	MG2	QH
A6_B6_C6	GTA	CAG	6GTACAG	21XJ-YL-2-11	2021.6.29	Xinjiang	Yili	83.3378	43.5969	841	MG5	XJ
A6_B6_C6	GTA	CCA	6GTACCA	21XJ-YL-2-3	2021.6.29	Xinjiang	Yili	83.3378	43.5969	841	MG5	XJ
A6_B6_C6	GTA	CCC	6GTACCC	21XJ-YL-4-1	2021.6.29	Xinjiang	Yili	83.3117	43.4250	827	MG5	XJ
A6_B6_C6	GTA	CCG	6GTACCG	21XJ-YL-2-15	2021.6.29	Xinjiang	Yili	83.3378	43.5969	841	MG5	XJ
A6_B6_C6	GTA	CCT	6GTACCT	21XJ-YL-6-2	2021.6.29	Xinjiang	Yili	83.2756	43.4597	969	MG5	XJ
A6_B6_C6	GTA	CGA	6GTACGA	21XJ-YL-7-5	2021.6.15	Xinjiang	Yili	81.8100	43.8400	775.2	MG7	XJ
A6_B6_C6	GTA	CGC	6GTACGC	21XJ-YL-9-5	2021.6.15	Xinjiang	Yili	81.4600	43.8300	641.2	MG4	XJ
A6_B6_C6	GTA	CGG	6GTACGG	23XJ-YL-1-3	2023.6.8	Xinjiang	Yili	82.3114	43.4958	741	MG5	XJ
A6_B6_C6	GTA	CGT	6GTACGT	23XJ-YL-2-11	2023.6.27	Xinjiang	Yili	82.7114	43.4300	778.9	MG5	XJ
A6_B6_C6	GTA	CTA	6GTACTA	21XJ-YL-7-9	2021.6.15	Xinjiang	Yili	81.8100	43.8400	775.2	MG5	XJ
A6_B6_C6	GTA	CTC	6GTACTC	23XJ-YL-2-3	2023.6.27	Xinjiang	Yili	82.7114	43.4300	778.9	MG5	XJ
A6_B6_C6	GTA	CTG	6GTACTG	23XJ-YL-1-7	2023.6.8	Xinjiang	Yili	82.3114	43.4958	741	MG5	XJ
A6_B6_C6	GTA	CTT	6GTACTT	23XJ-YL-2-15	2023.6.27	Xinjiang	Yili	82.7114	43.4300	778.9	MG5	XJ

A6_B6_C6	GTC	CAG	6GTCCAG	21XJ-YL-2-13	2021.6.29	Xinjiang	Yili	83.3378	43.5969	841	MG5	XJ
A6_B6_C6	GTC	CAT	6GTCCAT	21XJ-YL-5-7	2021.6.15	Xinjiang	Yili	43.4700	82.1400	786	MG5	XJ
A6_B6_C6	GTC	CCA	6GTCCCA	21XJ-YL-2-5	2021.6.29	Xinjiang	Yili	83.3378	43.5969	841	MG5	XJ
A6_B6_C6	GTC	CCC	6GTCCCC	21XJ-YL-4-3	2021.6.29	Xinjiang	Yili	83.3117	43.4250	827	MG5	XJ
A6_B6_C6	GTC	CCG	6GTCCCG	21XJ-YL-2-17	2021.6.29	Xinjiang	Yili	83.3378	43.5969	841	MG5	XJ
A6_B6_C6	GTC	CCT	6GTCCCT	21XJ-YL-6-4	2021.6.29	Xinjiang	Yili	83.2756	43.4597	969	MG5	XJ
A6_B6_C6	GTC	CGA	6GTCCGA	21XJ-YL-7-7	2021.6.15	Xinjiang	Yili	81.8100	43.8400	775.2	MG5	XJ
A6_B6_C6	GTC	CGC	6GTCCGC	23XJ-YL-2-1	2023.6.27	Xinjiang	Yili	82.7114	43.4300	778.9	MG5	XJ
A6_B6_C6	GTC	CGG	6GTCCGG	23XJ-YL-1-5	2023.6.8	Xinjiang	Yili	82.3114	43.4958	741	MG5	XJ
A6_B6_C6	GTC	CGT	6GTCCGT	23XJ-YL-2-13	2023.6.27	Xinjiang	Yili	82.7114	43.4300	778.9	MG5	XJ
A6_B6_C6	GTC	CTA	6GTCCTA	21XJ-YL-7-11	2021.6.15	Xinjiang	Yili	81.8100	43.8400	775.2	MG5	XJ
A6_B6_C6	GTC	CTC	6GTCCTC	23XJ-YL-2-5	2023.6.27	Xinjiang	Yili	82.7114	43.4300	778.9	MG5	XJ
A6_B6_C6	GTC	CTT	6GTCCTT	23XJ-YL-2-17	2023.6.27	Xinjiang	Yili	82.7114	43.4300	778.9	MG5	XJ
A6_B6_C6	GTG	CAG	6GTGCAG	21XJ-YL-2-12	2021.6.29	Xinjiang	Yili	83.3378	43.5969	841	MG5	XJ
A6_B6_C6	GTG	CCA	6GTGCCA	21XJ-YL-2-4	2021.6.29	Xinjiang	Yili	83.3378	43.5969	841	MG5	XJ
A6_B6_C6	GTG	CCC	6GTGCCC	21XJ-YL-4-2	2021.6.29	Xinjiang	Yili	83.3117	43.4250	827	MG5	XJ
A6_B6_C6	GTG	CGA	6GTGCGA	21XJ-YL-7-6	2021.6.15	Xinjiang	Yili	81.8100	43.8400	775.2	MG5	XJ
A6_B6_C6	GTG	CGC	6GTGCGC	21XJ-YL-9-6	2021.6.15	Xinjiang	Yili	81.4600	43.8300	641.2	MG5	XJ
A6_B6_C6	GTG	CGG	6GTGCGG	23XJ-YL-1-4	2023.6.8	Xinjiang	Yili	82.3114	43.4958	741	MG5	XJ
A6_B6_C6	GTG	CGT	6GTGCGT	23XJ-YL-2-12	2023.6.27	Xinjiang	Yili	82.7114	43.4300	778.9	MG5	XJ
A6_B6_C6	GTG	CTA	6GTGCTA	21XJ-YL-7-10	2021.6.15	Xinjiang	Yili	81.8100	43.8400	775.2	MG5	XJ
A6_B6_C6	GTG	CTC	6GTGCTC	23XJ-YL-2-4	2023.6.27	Xinjiang	Yili	82.7114	43.4300	778.9	MG5	XJ
A6_B6_C6	GTG	CTG	6GTGCTG	23XJ-YL-1-8	2023.6.8	Xinjiang	Yili	82.3114	43.4958	741	MG5	XJ
A6_B6_C6	GTG	CTT	6GTGCTT	23XJ-YL-2-16	2023.6.27	Xinjiang	Yili	82.7114	43.4300	778.9	MG5	XJ
A6_B6_C6	GTT	CAA	6GTTCAA	21XJ-YL-2-2	2021.6.29	Xinjiang	Yili	83.3378	43.5969	841	MG5	XJ
A6_B6_C6	GTT	CAC	6GTTCAC	21XJ-YL-3-8	2021.6.14	Xinjiang	Yili	81.2508	43.8003	567.91	MG5	XJ
A6_B6_C6	GTT	CAG	6GTTCAG	21XJ-YL-2-14	2021.6.29	Xinjiang	Yili	83.3378	43.5969	841	MG5	XJ
A6_B6_C6	GTT	CAT	6GTTCAT	21XJ-YL-6-1	2021.6.29	Xinjiang	Yili	83.2756	43.4597	969	MG5	XJ
A6_B6_C6	GTT	CCA	6GTTCCA	21XJ-YL-2-6	2021.6.29	Xinjiang	Yili	83.3378	43.5969	841	MG5	XJ
A6_B6_C6	GTT	CCG	6GTTCCG	21XJ-YL-2-18	2021.6.29	Xinjiang	Yili	83.3378	43.5969	841	MG5	XJ
A6_B6_C6	GTT	CGA	6GTTCGA	21XJ-YL-7-8	2021.6.15	Xinjiang	Yili	81.8100	43.8400	775.2	MG7	XJ
A6_B6_C6	GTT	CGC	6GTTCGC	23XJ-YL-2-2	2023.6.27	Xinjiang	Yili	82.7114	43.4300	778.9	MG5	XJ
A6_B6_C6	GTT	CGG	6GTTCCGG	23XJ-YL-1-6	2023.6.8	Xinjiang	Yili	82.3114	43.4958	741	MG5	XJ
A6_B6_C6	GTT	CGT	6GTTCGT	23XJ-YL-2-14	2023.6.27	Xinjiang	Yili	82.7114	43.4300	778.9	MG5	XJ
A6_B6_C6	GTT	CTA	6GTTCTA	21XJ-YL-7-12	2021.6.15	Xinjiang	Yili	81.8100	43.8400	775.2	MG5	XJ
A6_B6_C6	GTT	CTC	6GTTCTC	23XJ-YL-2-6	2023.6.27	Xinjiang	Yili	82.7114	43.4300	778.9	MG5	XJ
A6_B6_C6	GTT	CTT	6GTTCTT	23XJ-YL-2-18	2023.6.27	Xinjiang	Yili	82.7114	43.4300	778.9	MG5	XJ
A7_B7_C7	GAA	CAA	7GAACAA	21HN-LH-1-1	2021.5.22	Henan	Luohu	114.1300	33.5578	50	MG2	HN

A7_B7_C7	GAA	CAC	7GAACAC	21HN-NY-3-1	2021.4.11	Henan	Nanyang	112.7208	32.6342	110	MG2	HN
A7_B7_C7	GAA	CAG	7GAACAG	21HN-NY-2-11	2021.4.11	Henan	Nanyang	112.7483	32.6844	140	MG3	HN
A7_B7_C7	GAA	CCA	7GAACCA	23SD-HZ-1-1	2023.5.17	Shandong	Heze	115.6320	34.7890	36	MG3	SD
A7_B7_C7	GAA	CCC	7GAACCC	23SD-HZ-2-13	2023.5.17	Shandong	Heze	115.6353	35.0402	36	MG6	SD
A7_B7_C7	GAA	CCG	7GAACCG	23SD-HZ-2-1	2023.5.17	Shandong	Heze	115.6353	35.0402	36	MG2	SD
A7_B7_C7	GAA	CGA	7GAACGA	21HN-NY-6-1	2021.4.10	Henan	Nanyang	112.1333	33.0256	172	MG3	HN
A7_B7_C7	GAA	CGG	7GAACGG	21HN-PDS-1-1	2021.4.10	Henan	Pingdingshan	112.9433	33.7789	150	MG6	HN
A7_B7_C7	GAA	CTA	7GAACTA	23SD-HZ-4-13	2023.5.17	Shandong	Heze	115.8516	35.4318	37	MG6	SD
A7_B7_C7	GAA	CTC	7GAACTC	23SD-LC-2-1	2023.5.18	Shandong	Liaocheng	115.6562	36.4845	23	MG4	SD
A7_B7_C7	GAA	CTT	7GAACTT	23SD-TA-1-1	2023.5.18	Shandong	Taian	116.4683	35.8417	39	MG2	SD
A7_B7_C7	GAC	CAA	7GACCAA	21HN-LH-1-3	2021.5.22	Henan	Luohe	114.1300	33.5578	50	MG3	HN
A7_B7_C7	GAC	CAC	7GACCAC	21HN-NY-3-3	2021.4.11	Henan	Nanyang	112.7208	32.6342	110	MG2	HN
A7_B7_C7	GAC	CAT	7GACCAT	21HN-NY-4-5	2021.4.10	Henan	Nanyang	112.4158	33.0203	140	MG4	HN
A7_B7_C7	GAC	CCA	7GACCCA	23SD-HZ-1-3	2023.5.17	Shandong	Heze	115.6320	34.7890	36	MG2	SD
A7_B7_C7	GAC	CCC	7GACCCC	23SD-LC-3-1	2023.5.18	Shandong	Liaocheng	116.2118	36.2960	28	MG2	SD
A7_B7_C7	GAC	CCG	7GACCCG	23SD-HZ-2-3	2023.5.17	Shandong	Heze	115.6353	35.0402	36	MG7	SD
A7_B7_C7	GAC	CCT	7GACCCT	23SD-HZ-4-3	2023.5.17	Shandong	Heze	115.8516	35.4318	37	MG3	SD
A7_B7_C7	GAC	CGA	7GACCGA	21HN-NY-6-3	2021.4.10	Henan	Nanyang	112.1333	33.0256	172	MG3	HN
A7_B7_C7	GAC	CGG	7GACCGG	21HN-PDS-1-3	2021.4.10	Henan	Pingdingshan	112.9433	33.7789	150	MG6	HN
A7_B7_C7	GAC	CGT	7GACCGT	21HN-XY-2-5	2021.4.29	Henan	Xinyang	114.0064	32.2981	90	MG4	HN
A7_B7_C7	GAC	CTC	7GACCTC	23SD-LC-2-3	2023.5.18	Shandong	Liaocheng	115.6562	36.4845	23	MG1	SD
A7_B7_C7	GAC	CTG	7GACCTG	23SD-LC-1-3	2023.5.18	Shandong	Liaocheng	115.9293	36.3478	25	MG3	SD
A7_B7_C7	GAC	CTT	7GACCTT	23SD-TA-1-3	2023.5.18	Shandong	Taian	116.4683	35.8417	39	MG2	SD
A7_B7_C7	GAG	CAA	7GAGCAA	21HN-LH-1-2	2021.5.22	Henan	Luohe	114.1300	33.5578	50	MG2	HN
A7_B7_C7	GAG	CAC	7GAGCAC	21HN-NY-3-2	2021.4.11	Henan	Nanyang	112.7208	32.6342	110	MG2	HN
A7_B7_C7	GAG	CCA	7GAGCCA	23SD-HZ-1-2	2023.5.17	Shandong	Heze	115.6320	34.7890	36	MG3	SD
A7_B7_C7	GAG	CCC	7GAGCCC	23SD-HZ-2-14	2023.5.17	Shandong	Heze	115.6353	35.0402	36	MG6	SD
A7_B7_C7	GAG	CCG	7GAGCCG	23SD-HZ-2-2	2023.5.17	Shandong	Heze	115.6353	35.0402	36	MG1	SD
A7_B7_C7	GAG	CGA	7GAGCGA	21HN-NY-6-2	2021.4.10	Henan	Nanyang	112.1333	33.0256	172	MG3	HN
A7_B7_C7	GAG	CGC	7GAGCGC	21HN-XY-1-2	2021.4.11	Henan	Xinyang	114.2611	32.1856	100	MG4	HN
A7_B7_C7	GAG	CTA	7GAGCTA	23SD-HZ-4-14	2023.5.17	Shandong	Heze	115.8516	35.4318	37	MG3	SD
A7_B7_C7	GAG	CTC	7GAGCTC	23SD-LC-2-2	2023.5.18	Shandong	Liaocheng	115.6562	36.4845	23	MG3	SD
A7_B7_C7	GAG	CTG	7GAGCTG	23SD-LC-1-2	2023.5.18	Shandong	Liaocheng	115.9293	36.3478	25	MG3	SD
A7_B7_C7	GAG	CTT	7GAGCTT	23SD-TA-1-2	2023.5.18	Shandong	Taian	116.4683	35.8417	39	MG2	SD
A7_B7_C7	GAT	CAA	7GATCAA	21HN-LH-1-4	2021.5.22	Henan	Luohe	114.1300	33.5578	50	MG1	HN
A7_B7_C7	GAT	CAT	7GATCAT	21HN-NY-4-6	2021.4.10	Henan	Nanyang	112.4158	33.0203	140	MG4	HN
A7_B7_C7	GAT	CCA	7GATCCA	23SD-HZ-1-4	2023.5.17	Shandong	Heze	115.6320	34.7890	36	MG2	SD
A7_B7_C7	GAT	CCG	7GATCCG	23SD-HZ-2-4	2023.5.17	Shandong	Heze	115.6353	35.0402	36	MG2	SD

A7_B7_C7	GAT	CGA	7GATCGA	21HN-NY-6-4	2021.4.10	Henan	Nanyang	112.1333	33.0256	172	MG3	HN
A7_B7_C7	GAT	CGC	7GATCGC	21HN-XY-1-4	2021.4.11	Henan	Xinyang	114.2611	32.1856	100	MG5	HN
A7_B7_C7	GAT	CGT	7GATCGT	21HN-XY-2-6	2021.4.29	Henan	Xinyang	114.0064	32.2981	90	MG4	HN
A7_B7_C7	GAT	CTA	7GATCTA	23SD-HZ-4-16	2023.5.17	Shandong	Heze	115.8516	35.4318	37	MG3	SD
A7_B7_C7	GAT	CTC	7GATCTC	23SD-LC-2-4	2023.5.18	Shandong	Liaocheng	115.6562	36.4845	23	MG6	SD
A7_B7_C7	GAT	CTG	7GATCTG	23SD-LC-1-4	2023.5.18	Shandong	Liaocheng	115.9293	36.3478	25	MG6	SD
A7_B7_C7	GAT	CTT	7GATCTT	23SD-TA-1-4	2023.5.18	Shandong	Taian	116.4683	35.8417	39	MG2	SD
A7_B7_C7	GCA	CAA	7GCACAA	21HN-NY-1-9	2021.4.10	Henan	Nanyang	111.7844	33.0422	443	MG6	HN
A7_B7_C7	GCA	CAG	7GCACAG	21HN-NY-2-9	2021.4.11	Henan	Nanyang	112.7483	32.6844	140	MG6	HN
A7_B7_C7	GCA	CCA	7GCACCA	23SD-HZ-1-9	2023.5.17	Shandong	Heze	115.6320	34.7890	36	MG2	SD
A7_B7_C7	GCA	CCG	7GCACCG	23SD-HZ-2-9	2023.5.17	Shandong	Heze	115.6353	35.0402	36	MG7	SD
A7_B7_C7	GCA	CCT	7GCACCT	23SD-HZ-4-9	2023.5.17	Shandong	Heze	115.8516	35.4318	37	MG3	SD
A7_B7_C7	GCA	CGC	7GCACGC	21HN-XY-1-9	2021.4.11	Henan	Xinyang	114.2611	32.1856	100	MG5	HN
A7_B7_C7	GCA	CGG	7GCACGG	21HN-PDS-1-9	2021.4.10	Henan	Pingdingshan	112.9433	33.7789	150	MG6	HN
A7_B7_C7	GCA	CTA	7GCACTA	23SD-JN-1-3	2023.5.18	Shandong	Jinan	116.4543	36.1551	74	MG2	SD
A7_B7_C7	GCA	CTC	7GCACTC	23SD-LC-2-9	2023.5.18	Shandong	Liaocheng	115.6562	36.4845	23	MG2	SD
A7_B7_C7	GCA	CTG	7GCACTG	23SD-LC-1-9	2023.5.18	Shandong	Liaocheng	115.9293	36.3478	25	MG3	SD
A7_B7_C7	GCC	CAC	7GCCAC	21HN-NY-4-1	2021.4.10	Henan	Nanyang	112.4158	33.0203	140	MG3	HN
A7_B7_C7	GCC	CCA	7GCCCA	23SD-HZ-1-11	2023.5.17	Shandong	Heze	115.6320	34.7890	36	MG2	SD
A7_B7_C7	GCC	CCG	7GCCCG	23SD-HZ-2-11	2023.5.17	Shandong	Heze	115.6353	35.0402	36	MG7	SD
A7_B7_C7	GCC	CCT	7GCCCT	23SD-HZ-4-11	2023.5.17	Shandong	Heze	115.8516	35.4318	37	MG3	SD
A7_B7_C7	GCC	CGA	7GCCGA	21HN-NY-7-1	2021.4.10	Henan	Nanyang	111.4886	33.0822	193	MG1	HN
A7_B7_C7	GCC	CGC	7GCCGC	21HN-XY-2-1	2021.4.29	Henan	Xinyang	114.0064	32.2981	90	MG7	HN
A7_B7_C7	GCC	CGG	7GCCGG	21HN-PDS-1-11	2021.4.10	Henan	Pingdingshan	112.9433	33.7789	150	MG6	HN
A7_B7_C7	GCC	CTA	7GCCCTA	23SD-JN-1-5	2023.5.18	Shandong	Jinan	116.4543	36.1551	74	MG2	SD
A7_B7_C7	GCG	CCG	7GCGCCG	23SD-HZ-2-10	2023.5.17	Shandong	Heze	115.6353	35.0402	36	MG1	SD
A7_B7_C7	GCT	CAA	7GCTCAA	21HN-NY-1-6	2021.4.10	Henan	Nanyang	111.7844	33.0422	443	MG6	HN
A7_B7_C7	GCT	CCA	7GCTCCA	23SD-HZ-1-12	2023.5.17	Shandong	Heze	115.6320	34.7890	36	MG2	SD
A7_B7_C7	GCT	CCG	7GCTCCG	23SD-HZ-2-12	2023.5.17	Shandong	Heze	115.6353	35.0402	36	MG7	SD
A7_B7_C7	GCT	CCT	7GCTCCT	23SD-HZ-4-12	2023.5.17	Shandong	Heze	115.8516	35.4318	37	MG6	SD
A7_B7_C7	GCT	CGA	7GCTCGA	21HN-NY-7-2	2021.4.10	Henan	Nanyang	111.4886	33.0822	193	MG2	HN
A7_B7_C7	GCT	CGC	7GCTCGC	21HN-XY-2-2	2021.4.29	Henan	Xinyang	114.0064	32.2981	90	MG6	HN
A7_B7_C7	GCT	CGG	7GCTCGG	21HN-PDS-1-12	2021.4.10	Henan	Pingdingshan	112.9433	33.7789	150	MG7	HN
A7_B7_C7	GCT	CTA	7GCTCTA	23SD-JN-1-6	2023.5.18	Shandong	Jinan	116.4543	36.1551	74	MG2	SD
A7_B7_C7	GGA	CCA	7GGACCA	23SD-HZ-1-5	2023.5.17	Shandong	Heze	115.6320	34.7890	36	MG2	SD
A7_B7_C7	GGA	CCT	7GGACCT	23SD-HZ-4-5	2023.5.17	Shandong	Heze	115.8516	35.4318	37	MG6	SD
A7_B7_C7	GGA	CGC	7GGACGC	21HN-XY-1-5	2021.4.11	Henan	Xinyang	114.2611	32.1856	100	MG5	HN
A7_B7_C7	GGA	CGG	7GGACGG	21HN-PDS-1-5	2021.4.10	Henan	Pingdingshan	112.9433	33.7789	150	MG3	HN

A7_B7_C7	GGA	CGT	7GGACGT	21HN-XY-2-7	2021.4.29	Henan	Xinyang	114.0064	32.2981	90	MG6	HN
A7_B7_C7	GGA	CTA	7GGACTA	23SD-HZ-4-17	2023.5.17	Shandong	Heze	115.8516	35.4318	37	MG3	SD
A7_B7_C7	GGA	CTC	7GGACTC	23SD-LC-2-5	2023.5.18	Shandong	Liaocheng	115.6562	36.4845	23	MG6	SD
A7_B7_C7	GGA	CTG	7GGACTG	23SD-LC-1-5	2023.5.18	Shandong	Liaocheng	115.9293	36.3478	25	MG3	SD
A7_B7_C7	GGA	CTT	7GGACTT	23SD-TA-1-5	2023.5.18	Shandong	Taian	116.4683	35.8417	39	MG2	SD
A7_B7_C7	GGC	CAT	7GGCCAT	21HN-NY-4-9	2021.4.10	Henan	Nanyang	112.4158	33.0203	140	MG6	HN
A7_B7_C7	GGC	CCA	7GGCCCA	23SD-HZ-1-7	2023.5.17	Shandong	Heze	115.6320	34.7890	36	MG2	SD
A7_B7_C7	GGC	CCG	7GGCCCG	23SD-HZ-2-7	2023.5.17	Shandong	Heze	115.6353	35.0402	36	MG1	SD
A7_B7_C7	GGC	CCT	7GGCCCT	23SD-HZ-4-7	2023.5.17	Shandong	Heze	115.8516	35.4318	37	MG5	SD
A7_B7_C7	GGC	CGC	7GGCCGC	21HN-XY-1-7	2021.4.11	Henan	Xinyang	114.2611	32.1856	100	MG5	HN
A7_B7_C7	GGC	CGG	7GGCCGG	21HN-PDS-1-7	2021.4.10	Henan	Pingdingshan	112.9433	33.7789	150	MG3	HN
A7_B7_C7	GGC	CGT	7GGCCGT	21HN-XY-2-9	2021.4.29	Henan	Xinyang	114.0064	32.2981	90	MG4	HN
A7_B7_C7	GGC	CTA	7GGCCTA	23SD-JN-1-1	2023.5.18	Shandong	Jinan	116.4543	36.1551	74	MG2	SD
A7_B7_C7	GGC	CTC	7GGCCTC	23SD-LC-2-7	2023.5.18	Shandong	Liaocheng	115.6562	36.4845	23	MG1	SD
A7_B7_C7	GGC	CTT	7GGCCTT	23SD-TA-1-7	2023.5.18	Shandong	Taian	116.4683	35.8417	39	MG2	SD
A7_B7_C7	GGG	CCA	7GGGCCA	23SD-HZ-1-6	2023.5.17	Shandong	Heze	115.6320	34.7890	36	MG2	SD
A7_B7_C7	GGG	CCT	7GGGCCT	23SD-HZ-4-6	2023.5.17	Shandong	Heze	115.8516	35.4318	37	MG3	SD
A7_B7_C7	GGG	CGT	7GGGCGT	21HN-XY-2-8	2021.4.29	Henan	Xinyang	114.0064	32.2981	90	MG4	HN
A7_B7_C7	GGG	CTA	7GGGCTA	23SD-HZ-4-18	2023.5.17	Shandong	Heze	115.8516	35.4318	37	MG3	SD
A7_B7_C7	GGG	CTC	7GGGCTC	23SD-LC-2-6	2023.5.18	Shandong	Liaocheng	115.6562	36.4845	23	MG6	SD
A7_B7_C7	GGG	CTG	7GGGCTG	23SD-LC-1-6	2023.5.18	Shandong	Liaocheng	115.9293	36.3478	25	MG3	SD
A7_B7_C7	GGG	CTT	7GGGCTT	23SD-TA-1-6	2023.5.18	Shandong	Taian	116.4683	35.8417	39	MG2	SD
A7_B7_C7	GGT	CCG	7GGTCCG	23SD-HZ-2-8	2023.5.17	Shandong	Heze	115.6353	35.0402	36	MG7	SD
A7_B7_C7	GGT	CCT	7GGTCCT	23SD-HZ-4-8	2023.5.17	Shandong	Heze	115.8516	35.4318	37	MG6	SD
A7_B7_C7	GGT	CGC	7GGTCGC	21HN-XY-1-8	2021.4.11	Henan	Xinyang	114.2611	32.1856	100	MG5	HN
A7_B7_C7	GGT	CGG	7GGTCGG	21HN-PDS-1-8	2021.4.10	Henan	Pingdingshan	112.9433	33.7789	150	MG3	HN
A7_B7_C7	GGT	CGT	7GGTCGT	21HN-XY-2-10	2021.4.29	Henan	Xinyang	114.0064	32.2981	90	MG2	HN
A7_B7_C7	GGT	CTA	7GGTCTA	23SD-JN-1-2	2023.5.18	Shandong	Jinan	116.4543	36.1551	74	MG2	SD
A7_B7_C7	GGT	CTC	7GGTCTC	23SD-LC-2-8	2023.5.18	Shandong	Liaocheng	115.6562	36.4845	23	MG2	SD
A7_B7_C7	GGT	CTG	7GGTCTG	23SD-LC-1-8	2023.5.18	Shandong	Liaocheng	115.9293	36.3478	25	MG2	SD
A7_B7_C7	GTA	CAA	7GTACAA	23YN-CX-1-1	2023.4.18	Yunnan	Chuxiong	102.4340	25.6230	1577.7	MG2	YG
A7_B7_C7	GTA	CAC	7GTACAC	22YN-LC-1-1	2022.2.26	Yunnan	Lincang	100.1311	24.4446		MG2	YG
A7_B7_C7	GTA	CAG	7GTACAG	23YN-KM-1-1	2023.4.18	Yunnan	Kunming	103.6410	25.2121	1913.3	MG7	YG
A7_B7_C7	GTA	CAT	7GTACAT	23YN-PE-1-1	2023.2.2	Yunnan	Puer	99.8000	22.7100	1461.6	MG7	YG
A7_B7_C7	GTA	CCG	7GTACCG	23YN-KM-1-5	2023.4.18	Yunnan	Kunming	103.6410	25.2121	1913.3	MG2	YG
A7_B7_C7	GTA	CCT	7GTACCT	23YN-PE-1-5	2023.2.2	Yunnan	Puer	99.8000	22.7100	1461.6	MG7	YG
A7_B7_C7	GTA	CGA	7GTACGA	23YN-YX-1-1	2023.4.18	Yunnan	Yuxi	102.1220	24.4840	1682.7	MG1	YG
A7_B7_C7	GTA	CGC	7GTACGC	23YN-ZT-1-1	2023.4.17	Yunnan	Zhaotong	104.9775	27.4108	1522	MG1	YG

A7_B7_C7	GTA	CGG	7GTACGG	23YN-YX-2-1	2023.4.18	Yunnan	Yuxi	102.1045	24.3939	1581.3	MG5	YG
A7_B7_C7	GTA	CTA	7GTACTA	23YN-YX-1-5	2023.4.18	Yunnan	Yuxi	102.1220	24.4840	1682.7	MG2	YG
A7_B7_C7	GTA	CTC	7GTACTC	23YN-ZT-1-5	2023.4.17	Yunnan	Zhaotong	104.9775	27.4108	1522	MG7	YG
A7_B7_C7	GTC	CAA	7GTCCAA	23YN-CX-1-3	2023.4.18	Yunnan	Chuxiong	102.4340	25.6230	1577.7	MG2	YG
A7_B7_C7	GTC	CAC	7GTCCAC	22YN-LC-1-3	2022.2.26	Yunnan	Lincang	100.1311	24.4446		MG2	YG
A7_B7_C7	GTC	CAG	7GTCCAG	23YN-KM-1-3	2023.4.18	Yunnan	Kunming	103.6410	25.2121	1913.3	MG2	YG
A7_B7_C7	GTC	CAT	7GTCCAT	23YN-PE-1-3	2023.2.2	Yunnan	Puer	99.8000	22.7100	1461.6	MG7	YG
A7_B7_C7	GTC	CCA	7GTCCCA	23YN-CX-1-7	2023.4.18	Yunnan	Chuxiong	102.4340	25.6230	1577.7	MG2	YG
A7_B7_C7	GTC	CCC	7GTCCCC	22YN-LC-1-7	2022.2.26	Yunnan	Lincang	100.1311	24.4446		MG2	YG
A7_B7_C7	GTC	CCT	7GTCCCT	23YN-PE-1-7	2023.2.2	Yunnan	Puer	99.8000	22.7100	1461.6	MG7	YG
A7_B7_C7	GTC	CGA	7GTCCGA	23YN-YX-1-3	2023.4.18	Yunnan	Yuxi	102.1220	24.4840	1682.7	MG2	YG
A7_B7_C7	GTC	CGC	7GTCCGC	23YN-ZT-1-3	2023.4.17	Yunnan	Zhaotong	104.9775	27.4108	1522	MG7	YG
A7_B7_C7	GTC	CGG	7GTCCGG	23YN-YX-2-3	2023.4.18	Yunnan	Yuxi	102.1045	24.3939	1581.3	MG6	YG
A7_B7_C7	GTC	CGT	7GTCCGT	22GS-PL-5-3	2022.6.17	Gansu	Pingliang	106.7224	35.6912	1593	MG6	GSLD
A7_B7_C7	GTC	CTA	7GTCCTA	23YN-YX-1-7	2023.4.18	Yunnan	Yuxi	102.1220	24.4840	1682.7	MG6	YG
A7_B7_C7	GTC	CTC	7GTCCTC	23YN-ZT-1-7	2023.4.17	Yunnan	Zhaotong	104.9775	27.4108	1522	MG7	YG
A7_B7_C7	GTC	CTT	7GTCCTT	22GS-PL-5-7	2022.6.17	Gansu	Pingliang	106.7224	35.6912	1593	MG4	GSLD
A7_B7_C7	GTG	CAA	7GTGCAA	23YN-CX-1-2	2023.4.18	Yunnan	Chuxiong	102.4340	25.6230	1577.7	MG1	YG
A7_B7_C7	GTG	CAC	7GTGCAC	22YN-LC-1-2	2022.2.26	Yunnan	Lincang	100.1311	24.4446		MG2	YG
A7_B7_C7	GTG	CAG	7GTGCAG	23YN-KM-1-2	2023.4.18	Yunnan	Kunming	103.6410	25.2121	1913.3	MG2	YG
A7_B7_C7	GTG	CAT	7GTGCAT	23YN-PE-1-2	2023.2.2	Yunnan	Puer	99.8000	22.7100	1461.6	MG7	YG
A7_B7_C7	GTG	CCA	7GTGCCA	23YN-CX-1-6	2023.4.18	Yunnan	Chuxiong	102.4340	25.6230	1577.7	MG6	YG
A7_B7_C7	GTG	CCG	7GTGCCG	23YN-KM-1-6	2023.4.18	Yunnan	Kunming	103.6410	25.2121	1913.3	MG1	YG
A7_B7_C7	GTG	CCT	7GTGCCT	23YN-PE-1-6	2023.2.2	Yunnan	Puer	99.8000	22.7100	1461.6	MG7	YG
A7_B7_C7	GTG	CGA	7GTGCGA	23YN-YX-1-2	2023.4.18	Yunnan	Yuxi	102.1220	24.4840	1682.7	MG2	YG
A7_B7_C7	GTG	CGC	7GTGCGC	23YN-ZT-1-2	2023.4.17	Yunnan	Zhaotong	104.9775	27.4108	1522	MG7	YG
A7_B7_C7	GTG	CTC	7GTGCTC	23YN-ZT-1-6	2023.4.17	Yunnan	Zhaotong	104.9775	27.4108	1522	MG7	YG
A7_B7_C7	GTT	CAC	7GTTCAC	22YN-LC-1-4	2022.2.26	Yunnan	Lincang	100.1311	24.4446		MG2	YG
A7_B7_C7	GTT	CAG	7GTTCAG	23YN-KM-1-4	2023.4.18	Yunnan	Kunming	103.6410	25.2121	1913.3	MG6	YG
A7_B7_C7	GTT	CAT	7GTTCAT	23YN-PE-1-4	2023.2.2	Yunnan	Puer	99.8000	22.7100	1461.6	MG7	YG
A7_B7_C7	GTT	CCA	7GTTCCA	23YN-CX-1-8	2023.4.18	Yunnan	Chuxiong	102.4340	25.6230	1577.7	MG2	YG
A7_B7_C7	GTT	CCC	7GTTCCC	22YN-LC-1-8	2022.2.26	Yunnan	Lincang	100.1311	24.4446		MG2	YG
A7_B7_C7	GTT	CCG	7GTTCCG	23YN-KM-1-8	2023.4.18	Yunnan	Kunming	103.6410	25.2121	1913.3	MG7	YG
A7_B7_C7	GTT	CCT	7GTTCCT	23YN-PE-1-8	2023.2.2	Yunnan	Puer	99.8000	22.7100	1461.6	MG7	YG
A7_B7_C7	GTT	CGC	7GTTCGC	23YN-ZT-1-4	2023.4.17	Yunnan	Zhaotong	104.9775	27.4108	1522	MG7	YG
A7_B7_C7	GTT	CGT	7GTTCGT	22GS-PL-5-4	2022.6.17	Gansu	Pingliang	106.7224	35.6912	1593	MG3	GSLD
A7_B7_C7	GTT	CTC	7GTTCTC	23YN-ZT-1-8	2023.4.17	Yunnan	Zhaotong	104.9775	27.4108	1522	MG7	YG
A7_B7_C7	GTT	CTG	7GTTCTG	23YN-YX-2-8	2023.4.18	Yunnan	Yuxi	102.1045	24.3939	1581.3	MG6	YG

A7_B7_C7	GTT	CTT	7GTTCTT	22GS-PL-5-8	2022.6.17	Gansu	Pingliang	106.7224	35.6912	1593	MG2	GSLD
A8_B8_C8	GAA	CAA	8GAACAA	21HN-ZK-1-1	2021.5.21	Henan	Zhoukou	115.3750	33.8919	40	MG3	HN
A8_B8_C8	GAA	CAC	8GAACAC	21HN-ZMD-2-1	2021.4.11	Henan	Zhumadian	113.3036	32.6719	160	MG2	HN
A8_B8_C8	GAA	CAG	8GAACAG	21HN-ZMD-1-1	2021.4.11	Henan	Zhumadian	114.3456	32.3925	70	MG6	HN
A8_B8_C8	GAA	CAT	8GAACAT	23HN-NY-1-1	2023.5.15	Henan	Nanyang	111.8549	33.1039	152	MG7	HN
A8_B8_C8	GAA	CCA	8GAACCA	21SX-BJ-1-1	2021.4.13	Shaanxi	Baoji	107.4728	34.4978	760	MG2	SXC
A8_B8_C8	GAA	CCC	8GAACCC	21SX-BJ-3-1	2021.4.13	Shaanxi	Baoji	107.6219	34.3594	680	MG4	SXC
A8_B8_C8	GAA	CCG	8GAACCG	21SX-BJ-2-1	2021.4.13	Shaanxi	Baoji	107.7142	34.3069	500	MG2	SXC
A8_B8_C8	GAA	CGA	8GAACGA	23HN-NY-3-1	2023.5.15	Henan	Nanyang	111.7271	33.1693	174	MG1	HN
A8_B8_C8	GAA	CGC	8GAACGC	23HN-NY-5-1	2023.5.15	Henan	Nanyang	112.2661	33.0146	145	MG1	HN
A8_B8_C8	GAA	CGG	8GAACGG	23HN-NY-4-1	2023.5.15	Henan	Nanyang	112.2794	32.8833	112	MG7	HN
A8_B8_C8	GAA	CTC	8GAACTC	21SX-SL-3-1	2021.5.4	Shaanxi	Shangluo	110.1053	34.0214	1030	MG1	SXC
A8_B8_C8	GAA	CTG	8GAACTG	21SX-SL-2-1	2021.4.13	Shaanxi	Shangluo	109.8819	33.5322		MG2	SXC
A8_B8_C8	GAC	CAA	8GACCAA	21HN-ZK-1-3	2021.5.21	Henan	Zhoukou	115.3750	33.8919	40	MG4	HN
A8_B8_C8	GAC	CAC	8GACCAC	21HN-ZMD-2-3	2021.4.11	Henan	Zhumadian	113.3036	32.6719	160	MG2	HN
A8_B8_C8	GAC	CAG	8GACCAG	21HN-ZMD-1-3	2021.4.11	Henan	Zhumadian	114.3456	32.3925	70	MG2	HN
A8_B8_C8	GAC	CAT	8GACCAT	23HN-NY-1-3	2023.5.15	Henan	Nanyang	111.8549	33.1039	152	MG7	HN
A8_B8_C8	GAC	CCA	8GACCCA	21SX-BJ-1-3	2021.4.13	Shaanxi	Baoji	107.4728	34.4978	760	MG3	SXC
A8_B8_C8	GAC	CCC	8GACCCC	21SX-BJ-3-3	2021.4.13	Shaanxi	Baoji	107.6219	34.3594	680	MG6	SXC
A8_B8_C8	GAC	CCG	8GACCCG	21SX-BJ-2-3	2021.4.13	Shaanxi	Baoji	107.7142	34.3069	500	MG2	SXC
A8_B8_C8	GAC	CCT	8GACCCT	21SX-BJ-4-3	2021.6.5	Shaanxi	Baoji	107.3069	34.0519	1540	MG2	SXC
A8_B8_C8	GAC	CGA	8GACCGA	23HN-NY-3-3	2023.5.15	Henan	Nanyang	111.7271	33.1693	174	MG1	HN
A8_B8_C8	GAC	CGC	8GACCGC	23HN-NY-5-3	2023.5.15	Henan	Nanyang	112.2661	33.0146	145	MG3	HN
A8_B8_C8	GAC	CGG	8GACCGG	23HN-NY-4-3	2023.5.15	Henan	Nanyang	112.2794	32.8833	112	MG7	HN
A8_B8_C8	GAC	CGT	8GACCGT	23HN-ZK-1-3	2023.5.17	Henan	Zhoukou	114.4086	33.9672	40	MG2	HN
A8_B8_C8	GAC	CTA	8GACCTA	20SX-HZ-1-3	2020.4.29	Shaanxi	Hanzhong	105.8725	32.8761	524.71	MG2	GSLN
A8_B8_C8	GAC	CTC	8GACCTC	21SX-SL-3-3	2021.5.4	Shaanxi	Shangluo	110.1053	34.0214	1030	MG2	SXC
A8_B8_C8	GAG	CAC	8GAGCAC	21HN-ZMD-2-2	2021.4.11	Henan	Zhumadian	113.3036	32.6719	160	MG2	HN
A8_B8_C8	GAG	CAT	8GAGCAT	23HN-NY-1-2	2023.5.15	Henan	Nanyang	111.8549	33.1039	152	MG7	HN
A8_B8_C8	GAG	CCA	8GAGCCA	21SX-BJ-1-2	2021.4.13	Shaanxi	Baoji	107.4728	34.4978	760	MG6	SXC
A8_B8_C8	GAG	CCC	8GAGCCC	21SX-BJ-3-2	2021.4.13	Shaanxi	Baoji	107.6219	34.3594	680	MG2	SXC
A8_B8_C8	GAG	CCT	8GAGCCT	21SX-BJ-4-2	2021.6.5	Shaanxi	Baoji	107.3069	34.0519	1540	MG5	SXC
A8_B8_C8	GAG	CGA	8GAGCGA	23HN-NY-3-2	2023.5.15	Henan	Nanyang	111.7271	33.1693	174	MG1	HN
A8_B8_C8	GAG	CGG	8GAGCGG	23HN-NY-4-2	2023.5.15	Henan	Nanyang	112.2794	32.8833	112	MG7	HN
A8_B8_C8	GAT	CAA	8GATCAA	21HN-ZK-1-4	2021.5.21	Henan	Zhoukou	115.3750	33.8919	40	MG1	HN
A8_B8_C8	GAT	CAC	8GATCAC	21HN-ZMD-2-4	2021.4.11	Henan	Zhumadian	113.3036	32.6719	160	MG3	HN
A8_B8_C8	GAT	CAG	8GATCAG	21HN-ZMD-1-4	2021.4.11	Henan	Zhumadian	114.3456	32.3925	70	MG2	HN
A8_B8_C8	GAT	CAT	8GATCAT	23HN-NY-1-4	2023.5.15	Henan	Nanyang	111.8549	33.1039	152	MG7	HN

A8_B8_C8	GAT	CCA	8GATCCA	21SX-BJ-1-4	2021.4.13	Shaanxi	Baoji	107.4728	34.4978	760	MG3	SXC
A8_B8_C8	GAT	CCG	8GATCCG	21SX-BJ-2-4	2021.4.13	Shaanxi	Baoji	107.7142	34.3069	500	MG5	SXC
A8_B8_C8	GAT	CCT	8GATCCT	21SX-BJ-4-4	2021.6.5	Shaanxi	Baoji	107.3069	34.0519	1540	MG4	SXC
A8_B8_C8	GAT	CGA	8GATCGA	23HN-NY-3-4	2023.5.15	Henan	Nanyang	111.7271	33.1693	174	MG1	HN
A8_B8_C8	GAT	CGG	8GATCGG	23HN-NY-4-4	2023.5.15	Henan	Nanyang	112.2794	32.8833	112	MG7	HN
A8_B8_C8	GAT	CTA	8GATCTA	20SX-HZ-1-4	2020.4.29	Shaanxi	Hanzhong	105.8725	32.8761	524.71	MG2	GSLN
A8_B8_C8	GAT	CTC	8GATCTC	21SX-SL-3-4	2021.5.4	Shaanxi	Shangluo	110.1053	34.0214	1030	MG2	SXC
A8_B8_C8	GCA	CAA	8GCACAA	21HN-ZK-1-9	2021.5.21	Henan	Zhoukou	115.3750	33.8919	40	MG1	HN
A8_B8_C8	GCA	CAT	8GCACAT	23HN-NY-1-9	2023.5.15	Henan	Nanyang	111.8549	33.1039	152	MG7	HN
A8_B8_C8	GCA	CCA	8GCACCA	21SX-BJ-1-9	2021.4.13	Shaanxi	Baoji	107.4728	34.4978	760	MG4	SXC
A8_B8_C8	GCA	CCT	8GCACCT	21SX-BJ-4-9	2021.6.5	Shaanxi	Baoji	107.3069	34.0519	1540	MG4	SXC
A8_B8_C8	GCA	CGG	8GCACGG	23HN-NY-4-9	2023.5.15	Henan	Nanyang	112.2794	32.8833	112	MG6	HN
A8_B8_C8	GCA	CGT	8GCACGT	23HN-ZK-2-3	2023.5.17	Henan	Zhoukou	114.8666	33.9990	35	MG7	HN
A8_B8_C8	GCA	CTA	8GCACTA	20SX-HZ-1-9	2020.4.29	Shaanxi	Hanzhong	105.8725	32.8761	524.71	MG2	GSLN
A8_B8_C8	GCA	CTC	8GCACTC	21SX-SL-3-9	2021.5.4	Shaanxi	Shangluo	110.1053	34.0214	1030	MG2	SXC
A8_B8_C8	GCA	CTG	8GCACTG	21SX-SL-2-9	2021.4.13	Shaanxi	Shangluo	109.8819	33.5322		MG3	SXC
A8_B8_C8	GCA	CTT	8GCACTT	21SX-WN-2-3	2021.5.23	Shaanxi	Weinan	109.5000	34.8664	370	MG2	SXC
A8_B8_C8	GCC	CAA	8GCCCAA	21HN-ZK-1-11	2021.5.21	Henan	Zhoukou	115.3750	33.8919	40	MG1	HN
A8_B8_C8	GCC	CAG	8GCCCAG	21HN-ZMD-1-11	2021.4.11	Henan	Zhumadian	114.3456	32.3925	70	MG2	HN
A8_B8_C8	GCC	CCA	8GCCCCA	21SX-BJ-1-11	2021.4.13	Shaanxi	Baoji	107.4728	34.4978	760	MG2	SXC
A8_B8_C8	GCC	CCT	8GCCCCT	21SX-BJ-4-11	2021.6.5	Shaanxi	Baoji	107.3069	34.0519	1540	MG2	SXC
A8_B8_C8	GCC	CGG	8GCCCGG	23HN-NY-4-11	2023.5.15	Henan	Nanyang	112.2794	32.8833	112	MG3	HN
A8_B8_C8	GCC	CTA	8GCCCTA	20SX-HZ-1-11	2020.4.29	Shaanxi	Hanzhong	105.8725	32.8761	524.71	MG2	GSLN
A8_B8_C8	GCC	CTC	8GCCCTC	21SX-SL-3-11	2021.5.4	Shaanxi	Shangluo	110.1053	34.0214	1030	MG6	SXC
A8_B8_C8	GCC	CTG	8GCCCTG	21SX-SL-2-11	2021.4.13	Shaanxi	Shangluo	109.8819	33.5322		MG2	SXC
A8_B8_C8	GCG	CAA	8GCGCAA	21HN-ZK-1-10	2021.5.21	Henan	Zhoukou	115.3750	33.8919	40	MG1	HN
A8_B8_C8	GCG	CAG	8GCGCAG	21HN-ZMD-1-10	2021.4.11	Henan	Zhumadian	114.3456	32.3925	70	MG5	HN
A8_B8_C8	GCG	CAT	8GCGCAT	23HN-NY-1-10	2023.5.15	Henan	Nanyang	111.8549	33.1039	152	MG7	HN
A8_B8_C8	GCG	CCT	8GCGCCT	21SX-BJ-4-10	2021.6.5	Shaanxi	Baoji	107.3069	34.0519	1540	MG4	SXC
A8_B8_C8	GCG	CGC	8GCGCGC	23HN-NY-5-10	2023.5.15	Henan	Nanyang	112.2661	33.0146	145	MG1	HN
A8_B8_C8	GCG	CGG	8GCGCGG	23HN-NY-4-10	2023.5.15	Henan	Nanyang	112.2794	32.8833	112	MG7	HN
A8_B8_C8	GCG	CTC	8GCGCTC	21SX-SL-3-10	2021.5.4	Shaanxi	Shangluo	110.1053	34.0214	1030	MG4	SXC
A8_B8_C8	GCT	CAA	8GCTCAA	21HN-ZK-1-12	2021.5.21	Henan	Zhoukou	115.3750	33.8919	40	MG1	HN
A8_B8_C8	GCT	CAT	8GCTCAT	23HN-NY-2-2	2023.5.16	Henan	Nanyang	112.7122	32.7822	112	MG7	HN
A8_B8_C8	GCT	CGC	8GCTCGC	23HN-NY-5-12	2023.5.15	Henan	Nanyang	112.2661	33.0146	145	MG1	HN
A8_B8_C8	GCT	CGG	8GCTCGG	23HN-NY-4-12	2023.5.15	Henan	Nanyang	112.2794	32.8833	112	MG3	HN
A8_B8_C8	GCT	CTC	8GCTCTC	21SX-SL-3-12	2021.5.4	Shaanxi	Shangluo	110.1053	34.0214	1030	MG6	SXC
A8_B8_C8	GCT	CTG	8GCTCTG	21SX-SL-2-12	2021.4.13	Shaanxi	Shangluo	109.8819	33.5322		MG2	SXC

A8_B8_C8	GCT	CTT	8GCTCTT	21SX-WN-2-6	2021.5.23	Shaanxi	Weinan	109.5000	34.8664	370	MG2	SXC
A8_B8_C8	GGA	CAA	8GGACAA	21HN-ZK-1-5	2021.5.21	Henan	Zhoukou	115.3750	33.8919	40	MG2	HN
A8_B8_C8	GGA	CAG	8GGACAG	21HN-ZMD-1-5	2021.4.11	Henan	Zhumadian	114.3456	32.3925	70	MG2	HN
A8_B8_C8	GGA	CAT	8GGACAT	23HN-NY-1-5	2023.5.15	Henan	Nanyang	111.8549	33.1039	152	MG7	HN
A8_B8_C8	GGA	CCA	8GGACCA	21SX-BJ-1-5	2021.4.13	Shaanxi	Baoji	107.4728	34.4978	760	MG3	SXC
A8_B8_C8	GGA	CCG	8GGACCG	21SX-BJ-2-5	2021.4.13	Shaanxi	Baoji	107.7142	34.3069	500	MG6	SXC
A8_B8_C8	GGA	CGA	8GGACGA	23HN-NY-3-5	2023.5.15	Henan	Nanyang	111.7271	33.1693	174	MG1	HN
A8_B8_C8	GGA	CGC	8GGACGC	23HN-NY-5-5	2023.5.15	Henan	Nanyang	112.2661	33.0146	145	MG1	HN
A8_B8_C8	GGA	CGG	8GGACGG	23HN-NY-4-5	2023.5.15	Henan	Nanyang	112.2794	32.8833	112	MG7	HN
A8_B8_C8	GGA	CTA	8GGACTA	20SX-HZ-1-5	2020.4.29	Shaanxi	Hanzhong	105.8725	32.8761	524.71	MG2	GSLN
A8_B8_C8	GGA	CTC	8GGACTC	21SX-SL-3-5	2021.5.4	Shaanxi	Shangluo	110.1053	34.0214	1030	MG2	SXC
A8_B8_C8	GGA	CTG	8GGACTG	21SX-SL-2-5	2021.4.13	Shaanxi	Shangluo	109.8819	33.5322		MG2	SXC
A8_B8_C8	GGC	CAA	8GGCCAA	21HN-ZK-1-7	2021.5.21	Henan	Zhoukou	115.3750	33.8919	40	MG1	HN
A8_B8_C8	GGC	CAC	8GGCCAC	21HN-XY-3-3	2021.4.29	Henan	Xinyang	114.6928	32.4044	60	MG4	HN
A8_B8_C8	GGC	CAT	8GGCCAT	23HN-NY-1-7	2023.5.15	Henan	Nanyang	111.8549	33.1039	152	MG7	HN
A8_B8_C8	GGC	CCG	8GGCCCG	21SX-SL-1-1	2021.4.21	Shaanxi	Shangluo	109.0142	33.2058	463	MG2	SXC
A8_B8_C8	GGC	CCT	8GGCCCT	21SX-BJ-4-7	2021.6.5	Shaanxi	Baoji	107.3069	34.0519	1540	MG4	SXC
A8_B8_C8	GGC	CGA	8GGCCGA	23HN-NY-3-7	2023.5.15	Henan	Nanyang	111.7271	33.1693	174	MG1	HN
A8_B8_C8	GGC	CGG	8GGCCGG	23HN-NY-4-7	2023.5.15	Henan	Nanyang	112.2794	32.8833	112	MG7	HN
A8_B8_C8	GGC	CGT	8GGCCGT	23HN-ZK-2-1	2023.5.17	Henan	Zhoukou	114.8666	33.9990	35	MG7	HN
A8_B8_C8	GGC	CTA	8GGCCTA	20SX-HZ-1-7	2020.4.29	Shaanxi	Hanzhong	105.8725	32.8761	524.71	MG4	GSLN
A8_B8_C8	GGC	CTC	8GGCCTC	21SX-SL-3-7	2021.5.4	Shaanxi	Shangluo	110.1053	34.0214	1030	MG6	SXC
A8_B8_C8	GGG	CAA	8GGGCAA	21HN-ZK-1-6	2021.5.21	Henan	Zhoukou	115.3750	33.8919	40	MG1	HN
A8_B8_C8	GGG	CAC	8GGGCAC	21HN-XY-3-2	2021.4.29	Henan	Xinyang	114.6928	32.4044	60	MG4	HN
A8_B8_C8	GGG	CAT	8GGGCAT	23HN-NY-1-6	2023.5.15	Henan	Nanyang	111.8549	33.1039	152	MG7	HN
A8_B8_C8	GGG	CCG	8GGGCCG	21SX-BJ-2-6	2021.4.13	Shaanxi	Baoji	107.7142	34.3069	500	MG5	SXC
A8_B8_C8	GGG	CCT	8GGGCCT	21SX-BJ-4-6	2021.6.5	Shaanxi	Baoji	107.3069	34.0519	1540	MG4	SXC
A8_B8_C8	GGG	CGA	8GGGCGA	23HN-NY-3-6	2023.5.15	Henan	Nanyang	111.7271	33.1693	174	MG1	HN
A8_B8_C8	GGG	CTA	8GGGCTA	20SX-HZ-1-6	2020.4.29	Shaanxi	Hanzhong	105.8725	32.8761	524.71	MG2	GSLN
A8_B8_C8	GGG	CTC	8GGGCTC	21SX-SL-3-6	2021.5.4	Shaanxi	Shangluo	110.1053	34.0214	1030	MG4	SXC
A8_B8_C8	GGT	CAA	8GGTCAA	21HN-ZK-1-8	2021.5.21	Henan	Zhoukou	115.3750	33.8919	40	MG1	HN
A8_B8_C8	GGT	CAT	8GGTCAT	23HN-NY-1-8	2023.5.15	Henan	Nanyang	111.8549	33.1039	152	MG7	HN
A8_B8_C8	GGT	CCA	8GGTCCA	21SX-BJ-1-8	2021.4.13	Shaanxi	Baoji	107.4728	34.4978	760	MG6	SXC
A8_B8_C8	GGT	CGA	8GGTCGA	23HN-NY-3-8	2023.5.15	Henan	Nanyang	111.7271	33.1693	174	MG1	HN
A8_B8_C8	GGT	CGC	8GGTCGC	23HN-NY-5-8	2023.5.15	Henan	Nanyang	112.2661	33.0146	145	MG2	HN
A8_B8_C8	GGT	CGG	8GGTCGG	23HN-NY-4-8	2023.5.15	Henan	Nanyang	112.2794	32.8833	112	MG7	HN
A8_B8_C8	GGT	CGT	8GGTCGT	23HN-ZK-2-2	2023.5.17	Henan	Zhoukou	114.8666	33.9990	35	MG7	HN
A8_B8_C8	GGT	CTA	8GGTCTA	20SX-HZ-1-8	2020.4.29	Shaanxi	Hanzhong	105.8725	32.8761	524.71	MG2	GSLN

A8_B8_C8	GGT	CTC	8GGTCTC	21SX-SL-3-8	2021.5.4	Shaanxi	Shangluo	110.1053	34.0214	1030	MG2	SXC
A8_B8_C8	GGT	CTG	8GGTCTG	21SX-SL-2-8	2021.4.13	Shaanxi	Shangluo	109.8819	33.5322		MG3	SXC
A8_B8_C8	GGT	CTT	8GGTCTT	21SX-WN-2-2	2021.5.23	Shaanxi	Weinan	109.5000	34.8664	370	MG3	SXC
A8_B8_C8	GTA	CAA	8GTACAA	23YN-CX-1-9	2023.4.18	Yunnan	Chuxiong	102.4340	25.6230	1577.7	MG1	YG
A8_B8_C8	GTA	CAC	8GTACAC	22YN-LC-1-9	2022.2.26	Yunnan	Lincang	100.1311	24.4446		MG2	YG
A8_B8_C8	GTA	CAG	8GTACAG	23YN-KM-1-9	2023.4.18	Yunnan	Kunming	103.6410	25.2121	1913.3	MG1	YG
A8_B8_C8	GTA	CAT	8GTACAT	23YN-PE-1-9	2023.2.2	Yunnan	Puer	99.8000	22.7100	1461.6	MG7	YG
A8_B8_C8	GTA	CCA	8GTACCA	21SX-XY-3-1	2021.5.16	Shaanxi	Xianyang	108.1600	34.7022	987	MG3	SXC
A8_B8_C8	GTA	CCT	8GTACCT	23GZ-QXN-2-1	2023.4.16	Guizhou	Qianxinan	105.3777	25.4947	1317.4	MG2	YG
A8_B8_C8	GTA	CGA	8GTACGA	23YN-YX-1-9	2023.4.18	Yunnan	Yuxi	102.1220	24.4840	1682.7	MG1	YG
A8_B8_C8	GTA	CGC	8GTACGC	23YN-ZT-1-9	2023.4.17	Yunnan	Zhaotong	104.9775	27.4108	1522	MG7	YG
A8_B8_C8	GTA	CGG	8GTACGG	23YN-YX-2-9	2023.4.18	Yunnan	Yuxi	102.1045	24.3939	1581.3	MG7	YG
A8_B8_C8	GTA	CTA	8GTACTA	23GZ-QXN-1-1	2023.4.15	Guizhou	Qianxinan	105.1927	25.1071	1196	MG2	YG
A8_B8_C8	GTA	CTC	8GTACTC	23SX-YC-1-1	2023.5.20	Shanxi	Yuncheng	110.3593	34.8419	321.9	MG3	SXC
A8_B8_C8	GTC	CAA	8GTCCAA	23YN-CX-1-11	2023.4.18	Yunnan	Chuxiong	102.4340	25.6230	1577.7	MG1	YG
A8_B8_C8	GTC	CAC	8GTCCAC	22YN-LC-1-11	2022.2.26	Yunnan	Lincang	100.1311	24.4446		MG2	YG
A8_B8_C8	GTC	CAG	8GTCCAG	23YN-KM-1-11	2023.4.18	Yunnan	Kunming	103.6410	25.2121	1913.3	MG2	YG
A8_B8_C8	GTC	CCA	8GTCCCA	21SX-XY-3-3	2021.5.16	Shaanxi	Xianyang	108.1600	34.7022	987	MG3	SXC
A8_B8_C8	GTC	CCG	8GTCCCG	21SX-XY-1-3	2021.5.25	Shaanxi	Xianyang	108.2425	34.5867	830	MG5	SXC
A8_B8_C8	GTC	CCT	8GTCCCT	23GZ-QXN-2-3	2023.4.16	Guizhou	Qianxinan	105.3777	25.4947	1317.4	MG2	YG
A8_B8_C8	GTC	CGC	8GTCCGC	23YN-ZT-1-11	2023.4.17	Yunnan	Zhaotong	104.9775	27.4108	1522	MG7	YG
A8_B8_C8	GTC	CGG	8GTCCGG	23YN-YX-2-11	2023.4.18	Yunnan	Yuxi	102.1045	24.3939	1581.3	MG2	YG
A8_B8_C8	GTC	CGT	8GTCCGT	22GS-PL-5-11	2022.6.17	Gansu	Pingliang	106.7224	35.6912	1593	MG2	GSLD
A8_B8_C8	GTC	CTC	8GTCCTC	23SX-YC-1-3	2023.5.20	Shanxi	Yuncheng	110.3593	34.8419	321.9	MG3	SXC
A8_B8_C8	GTG	CAA	8GTGCAA	23YN-CX-1-10	2023.4.18	Yunnan	Chuxiong	102.4340	25.6230	1577.7	MG1	YG
A8_B8_C8	GTG	CAG	8GTGCAG	23YN-KM-1-10	2023.4.18	Yunnan	Kunming	103.6410	25.2121	1913.3	MG7	YG
A8_B8_C8	GTG	CAT	8GTGCAT	23YN-PE-1-10	2023.2.2	Yunnan	Puer	99.8000	22.7100	1461.6	MG7	YG
A8_B8_C8	GTG	CCA	8GTGCCA	21SX-XY-3-2	2021.5.16	Shaanxi	Xianyang	108.1600	34.7022	987	MG2	SXC
A8_B8_C8	GTG	CCG	8GTGCCG	21SX-XY-1-2	2021.5.25	Shaanxi	Xianyang	108.2425	34.5867	830	MG6	SXC
A8_B8_C8	GTG	CGC	8GTGCGC	23YN-ZT-1-10	2023.4.17	Yunnan	Zhaotong	104.9775	27.4108	1522	MG7	YG
A8_B8_C8	GTG	CGT	8GTGCGT	22GS-PL-5-10	2022.6.17	Gansu	Pingliang	106.7224	35.6912	1593	MG6	GSLD
A8_B8_C8	GTG	CTA	8GTGCTA	23GZ-QXN-1-2	2023.4.15	Guizhou	Qianxinan	105.1927	25.1071	1196	MG5	YG
A8_B8_C8	GTG	CTC	8GTGCTC	23SX-YC-1-2	2023.5.20	Shanxi	Yuncheng	110.3593	34.8419	321.9	MG3	SXC
A8_B8_C8	GTT	CAA	8GTTCAA	23YN-CX-1-12	2023.4.18	Yunnan	Chuxiong	102.4340	25.6230	1577.7	MG1	YG
A8_B8_C8	GTT	CAC	8GTTCAC	22YN-LC-1-12	2022.2.26	Yunnan	Lincang	100.1311	24.4446		MG2	YG
A8_B8_C8	GTT	CAG	8GTTCAG	23YN-KM-1-12	2023.4.18	Yunnan	Kunming	103.6410	25.2121	1913.3	MG2	YG
A8_B8_C8	GTT	CCA	8GTTCCA	21SX-XY-3-4	2021.5.16	Shaanxi	Xianyang	108.1600	34.7022	987	MG3	SXC
A8_B8_C8	GTT	CCC	8GTTCCC	21SX-SL-4-4	2021	Shaanxi	Shangluo	110.3272	33.6959		MG2	SXC

A8_B8_C8	GTT	CCT	8GTTCT	23GZ-QXN-2-4	2023.4.16	Guizhou	Qianxinan	105.3777	25.4947	1317.4	MG2	YG
A8_B8_C8	GTT	CGC	8GTTCCG	23YN-ZT-1-12	2023.4.17	Yunnan	Zhaotong	104.9775	27.4108	1522	MG7	YG
A8_B8_C8	GTT	CGG	8GTTCCG	23YN-YX-2-12	2023.4.18	Yunnan	Yuxi	102.1045	24.3939	1581.3	MG7	YG
A8_B8_C8	GTT	CTA	8GTTCTA	23GZ-QXN-1-4	2023.4.15	Guizhou	Qianxinan	105.1927	25.1071	1196	MG1	YG
A8_B8_C8	GTT	CTC	8GTTCTC	23SX-YC-1-4	2023.5.20	Shanxi	Yuncheng	110.3593	34.8419	321.9	MG3	SXC
A9_B9_C9	GAA	CAC	9GAACAC	23HB-ES-1-13	2023.4.6	Hubei	Enshi	110.3764	31.1027	757.8	MG7	HB
A9_B9_C9	GAA	CAG	9GAACAG	23HB-ES-1-1	2023.4.6	Hubei	Enshi	110.3764	31.1027	757.8	MG1	HB
A9_B9_C9	GAA	CAT	9GAACAT	23HB-JM-1-1	2023.4.9	Hubei	Jingmen	112.8827	31.1692	101	MG6	HB
A9_B9_C9	GAA	CCC	9GAACCC	22SX-WN-2-1	2022.5.16	Shaanxi	Weinan	109.1803	34.7511		MG1	SXC
A9_B9_C9	GAA	CCG	9GAACCG	22SX-BJ-2-1	2022.5.30	Shaanxi	Baoji	107.3069	34.0519	1540	MG6	SXC
A9_B9_C9	GAA	CCT	9GAACCT	22SX-XY-1-1	2022.5.16	Shaanxi	Xianyang	108.2272	34.2453	430	MG2	SXC
A9_B9_C9	GAA	CGA	9GAACGA	23HB-JM-2-1	2023.4.8	Hubei	Jingmen	113.2881	31.1544	49	MG7	HB
A9_B9_C9	GAA	CGC	9GAACGC	23HB-JZ-1-13	2023.4.8	Hubei	Jingzhou	113.8469	30.1556	10	MG7	HB
A9_B9_C9	GAA	CGG	9GAACGG	23HB-JZ-1-1	2023.4.8	Hubei	Jingzhou	113.8469	30.1556	10	MG7	HB
A9_B9_C9	GAA	CGT	9GAACGT	23HB-JZ-2-1	2023.4.7	Hubei	Jingzhou	112.3451	29.6851	20	MG7	HB
A9_B9_C9	GAA	CTA	9GAACTA	22SX-XY-2-1	2022.5.21	Shaanxi	Xianyang	108.0846	34.2722		MG4	SXC
A9_B9_C9	GAA	CTC	9GAACTC	23SX-AK-2-1	2023.4.11	Shaanxi	Ankang	109.1335	33.1426	378	MG7	HB
A9_B9_C9	GAA	CTG	9GAACTG	23SX-AK-1-1	2023.4.10	Shaanxi	Ankang	109.1510	32.7900	299.4	MG1	HB
A9_B9_C9	GAA	CTT	9GAACTT	23SX-BJ-1-1	2023.3.31	Shaanxi	Baoji	107.1804	34.5084	680.8	MG5	SXC
A9_B9_C9	GAC	CAC	9GACCAC	23HB-ES-1-15	2023.4.6	Hubei	Enshi	110.3764	31.1027	757.8	MG7	HB
A9_B9_C9	GAC	CAG	9GACCAG	23HB-ES-1-3	2023.4.6	Hubei	Enshi	110.3764	31.1027	757.8	MG7	HB
A9_B9_C9	GAC	CAT	9GACCAT	23HB-JM-1-3	2023.4.9	Hubei	Jingmen	112.8827	31.1692	101	MG5	HB
A9_B9_C9	GAC	CCA	9GACCCA	22SX-BJ-1-3	2022.5.18	Shaanxi	Baoji	107.7884	34.2976	609.8	MG2	SXC
A9_B9_C9	GAC	CCC	9GACCCC	22SX-WN-2-3	2022.5.16	Shaanxi	Weinan	109.1803	34.7511		MG1	SXC
A9_B9_C9	GAC	CCT	9GACCCT	22SX-XY-1-3	2022.5.16	Shaanxi	Xianyang	108.2272	34.2453	430	MG3	SXC
A9_B9_C9	GAC	CGC	9GACCGC	23HB-JZ-1-15	2023.4.8	Hubei	Jingzhou	113.8469	30.1556	10	MG7	HB
A9_B9_C9	GAC	CGG	9GACCGG	23HB-JZ-1-3	2023.4.8	Hubei	Jingzhou	113.8469	30.1556	10	MG7	HB
A9_B9_C9	GAC	CTA	9GACCTA	22SX-XY-2-3	2022.5.21	Shaanxi	Xianyang	108.0846	34.2722		MG5	SXC
A9_B9_C9	GAC	CTC	9GACCTC	23SX-AK-2-3	2023.4.11	Shaanxi	Ankang	109.1335	33.1426	378	MG7	HB
A9_B9_C9	GAC	CTG	9GACCTG	23SX-AK-1-3	2023.4.10	Shaanxi	Ankang	109.1510	32.7900	299.4	MG3	HB
A9_B9_C9	GAC	CTT	9GACCTT	23SX-BJ-1-3	2023.3.31	Shaanxi	Baoji	107.1804	34.5084	680.8	MG6	SXC
A9_B9_C9	GAG	CAC	9GAGCAC	23HB-ES-1-14	2023.4.6	Hubei	Enshi	110.3764	31.1027	757.8	MG7	HB
A9_B9_C9	GAG	CAG	9GAGCAG	23HB-ES-1-2	2023.4.6	Hubei	Enshi	110.3764	31.1027	757.8	MG2	HB
A9_B9_C9	GAG	CAT	9GAGCAT	23HB-JM-1-2	2023.4.9	Hubei	Jingmen	112.8827	31.1692	101	MG7	HB
A9_B9_C9	GAG	CCC	9GAGCCC	22SX-WN-2-2	2022.5.16	Shaanxi	Weinan	109.1803	34.7511		MG1	SXC
A9_B9_C9	GAG	CCT	9GAGCCT	22SX-XY-1-2	2022.5.16	Shaanxi	Xianyang	108.2272	34.2453	430	MG6	SXC
A9_B9_C9	GAG	CGT	9GAGCGT	23HB-JZ-2-2	2023.4.7	Hubei	Jingzhou	112.3451	29.6851	20	MG7	HB
A9_B9_C9	GAG	CTA	9GAGCTA	22SX-XY-2-2	2022.5.21	Shaanxi	Xianyang	108.0846	34.2722		MG1	SXC

A9_B9_C9	GAG	CTC	9GAGCTC	23SX-AK-2-2	2023.4.11	Shaanxi	Ankang	109.1335	33.1426	378	MG7	HB
A9_B9_C9	GAG	CTG	9GAGCTG	23SX-AK-1-2	2023.4.10	Shaanxi	Ankang	109.1510	32.7900	299.4	MG2	HB
A9_B9_C9	GAG	CTT	9GAGCTT	23SX-BJ-1-2	2023.3.31	Shaanxi	Baoji	107.1804	34.5084	680.8	MG5	SXC
A9_B9_C9	GAT	CAC	9GATCAC	23HB-ES-1-16	2023.4.6	Hubei	Enshi	110.3764	31.1027	757.8	MG7	HB
A9_B9_C9	GAT	CAG	9GATCAG	23HB-ES-1-4	2023.4.6	Hubei	Enshi	110.3764	31.1027	757.8	MG1	HB
A9_B9_C9	GAT	CCA	9GATCCA	22SX-BJ-1-4	2022.5.18	Shaanxi	Baoji	107.7884	34.2976	609.8	MG6	SXC
A9_B9_C9	GAT	CCC	9GATCCC	22SX-WN-2-4	2022.5.16	Shaanxi	Weinan	109.1803	34.7511		MG5	SXC
A9_B9_C9	GAT	CCG	9GATCCG	22SX-BJ-2-4	2022.5.30	Shaanxi	Baoji	107.3069	34.0519	1540	MG6	SXC
A9_B9_C9	GAT	CCT	9GATCCT	22SX-XY-1-4	2022.5.16	Shaanxi	Xianyang	108.2272	34.2453	430	MG6	SXC
A9_B9_C9	GAT	CGC	9GATCGC	23HB-JZ-1-16	2023.4.8	Hubei	Jingzhou	113.8469	30.1556	10	MG7	HB
A9_B9_C9	GAT	CGG	9GATCGG	23HB-JZ-1-4	2023.4.8	Hubei	Jingzhou	113.8469	30.1556	10	MG7	HB
A9_B9_C9	GAT	CGT	9GATCGT	23HB-JZ-2-4	2023.4.7	Hubei	Jingzhou	112.3451	29.6851	20	MG7	HB
A9_B9_C9	GAT	CTA	9GATCTA	22SX-XY-2-4	2022.5.21	Shaanxi	Xianyang	108.0846	34.2722		MG5	SXC
A9_B9_C9	GAT	CTC	9GATCTC	23SX-AK-2-4	2023.4.11	Shaanxi	Ankang	109.1335	33.1426	378	MG7	HB
A9_B9_C9	GAT	CTG	9GATCTG	23SX-AK-1-4	2023.4.10	Shaanxi	Ankang	109.1510	32.7900	299.4	MG5	HB
A9_B9_C9	GAT	CTT	9GATCTT	23SX-BJ-1-4	2023.3.31	Shaanxi	Baoji	107.1804	34.5084	680.8	MG5	SXC
A9_B9_C9	GCA	CAC	9GCACAC	23HB-ES-1-21	2023.4.6	Hubei	Enshi	110.3764	31.1027	757.8	MG7	HB
A9_B9_C9	GCA	CAG	9GCACAG	23HB-ES-1-9	2023.4.6	Hubei	Enshi	110.3764	31.1027	757.8	MG7	HB
A9_B9_C9	GCA	CCA	9GCACCA	22SX-BJ-1-9	2022.5.18	Shaanxi	Baoji	107.7884	34.2976	609.8	MG2	SXC
A9_B9_C9	GCA	CCT	9GCACCT	22SX-XY-1-9	2022.5.16	Shaanxi	Xianyang	108.2272	34.2453	430	MG6	SXC
A9_B9_C9	GCA	CGC	9GCACGC	23HB-JZ-1-21	2023.4.8	Hubei	Jingzhou	113.8469	30.1556	10	MG7	HB
A9_B9_C9	GCA	CGG	9GCACGG	23HB-JZ-1-9	2023.4.8	Hubei	Jingzhou	113.8469	30.1556	10	MG7	HB
A9_B9_C9	GCA	CTG	9GCACTG	23SX-AK-1-9	2023.4.10	Shaanxi	Ankang	109.1510	32.7900	299.4	MG1	HB
A9_B9_C9	GCA	CTT	9GCACTT	23SX-BJ-3-1	2023.4.10	Shaanxi	Baoji	107.5926	34.3244	486.7	MG1	SXC
A9_B9_C9	GCC	CAC	9GCCAC	23HB-ES-1-23	2023.4.6	Hubei	Enshi	110.3764	31.1027	757.8	MG7	HB
A9_B9_C9	GCC	CAG	9GCCAG	23HB-ES-1-11	2023.4.6	Hubei	Enshi	110.3764	31.1027	757.8	MG7	HB
A9_B9_C9	GCC	CCA	9GCCCA	22SX-BJ-1-11	2022.5.18	Shaanxi	Baoji	107.7884	34.2976	609.8	MG3	SXC
A9_B9_C9	GCC	CCT	9GCCCT	22SX-XY-1-11	2022.5.16	Shaanxi	Xianyang	108.2272	34.2453	430	MG2	SXC
A9_B9_C9	GCC	CGA	9GCCGA	23HB-JM-2-11	2023.4.8	Hubei	Jingmen	113.2881	31.1544	49	MG7	HB
A9_B9_C9	GCC	CGC	9GCCGC	23HB-JZ-1-23	2023.4.8	Hubei	Jingzhou	113.8469	30.1556	10	MG7	HB
A9_B9_C9	GCC	CGG	9GCCGG	23HB-JZ-1-11	2023.4.8	Hubei	Jingzhou	113.8469	30.1556	10	MG7	HB
A9_B9_C9	GCC	CGT	9GCCGT	23HB-JZ-2-11	2023.4.7	Hubei	Jingzhou	112.3451	29.6851	20	MG6	HB
A9_B9_C9	GCC	CTC	9GCCCTC	23SX-AK-2-11	2023.4.11	Shaanxi	Ankang	109.1335	33.1426	378	MG7	HB
A9_B9_C9	GCC	CTG	9GCCCTG	23SX-AK-1-11	2023.4.10	Shaanxi	Ankang	109.1510	32.7900	299.4	MG1	HB
A9_B9_C9	GCC	CTT	9GCCCTT	23SX-BJ-3-3	2023.4.10	Shaanxi	Baoji	107.5926	34.3244	486.7	MG1	SXC
A9_B9_C9	GCG	CAC	9GCGCAC	23HB-ES-1-22	2023.4.6	Hubei	Enshi	110.3764	31.1027	757.8	MG7	HB
A9_B9_C9	GCG	CAG	9GCGCAG	23HB-ES-1-10	2023.4.6	Hubei	Enshi	110.3764	31.1027	757.8	MG3	HB
A9_B9_C9	GCG	CCA	9GCGCCA	22SX-BJ-1-10	2022.5.18	Shaanxi	Baoji	107.7884	34.2976	609.8	MG1	SXC

A9_B9_C9	GCG	CTT	9GCGCTT	23SX-BJ-3-2	2023.4.10	Shaanxi	Baoji	107.5926	34.3244	486.7	MG1	SXC
A9_B9_C9	GCT	CAC	9GCTCAC	23HB-ES-1-24	2023.4.6	Hubei	Enshi	110.3764	31.1027	757.8	MG7	HB
A9_B9_C9	GCT	CCT	9GCTCCT	22SX-XY-1-12	2022.5.16	Shaanxi	Xianyang	108.2272	34.2453	430	MG6	SXC
A9_B9_C9	GCT	CGT	9GCTCGT	23HB-JZ-2-12	2023.4.7	Hubei	Jingzhou	112.3451	29.6851	20	MG7	HB
A9_B9_C9	GCT	CTG	9GCTCTG	23SX-AK-1-12	2023.4.10	Shaanxi	Ankang	109.1510	32.7900	299.4	MG2	HB
A9_B9_C9	GCT	CTT	9GCTCTT	23SX-BJ-3-4	2023.4.10	Shaanxi	Baoji	107.5926	34.3244	486.7	MG1	SXC
A9_B9_C9	GGA	CAC	9GGACAC	23HB-ES-1-17	2023.4.6	Hubei	Enshi	110.3764	31.1027	757.8	MG7	HB
A9_B9_C9	GGA	CAG	9GGACAG	23HB-ES-1-5	2023.4.6	Hubei	Enshi	110.3764	31.1027	757.8	MG2	HB
A9_B9_C9	GGA	CCT	9GGACCT	22SX-XY-1-5	2022.5.16	Shaanxi	Xianyang	108.2272	34.2453	430	MG4	SXC
A9_B9_C9	GGA	CGA	9GGACGA	23HB-JM-2-5	2023.4.8	Hubei	Jingmen	113.2881	31.1544	49	MG3	HB
A9_B9_C9	GGA	CGC	9GGACGC	23HB-JZ-1-17	2023.4.8	Hubei	Jingzhou	113.8469	30.1556	10	MG7	HB
A9_B9_C9	GGA	CGG	9GGACGG	23HB-JZ-1-5	2023.4.8	Hubei	Jingzhou	113.8469	30.1556	10	MG7	HB
A9_B9_C9	GGA	CTC	9GGACTC	23SX-AK-2-5	2023.4.11	Shaanxi	Ankang	109.1335	33.1426	378	MG7	HB
A9_B9_C9	GGA	CTG	9GGACTG	23SX-AK-1-5	2023.4.10	Shaanxi	Ankang	109.1510	32.7900	299.4	MG1	HB
A9_B9_C9	GGC	CAC	9GGCCAC	23HB-ES-1-19	2023.4.6	Hubei	Enshi	110.3764	31.1027	757.8	MG7	HB
A9_B9_C9	GGC	CAG	9GGCCAG	23HB-ES-1-7	2023.4.6	Hubei	Enshi	110.3764	31.1027	757.8	MG1	HB
A9_B9_C9	GGC	CAT	9GGCCAT	23HB-JM-1-7	2023.4.9	Hubei	Jingmen	112.8827	31.1692	101	MG7	HB
A9_B9_C9	GGC	CCA	9GGCCCA	22SX-BJ-1-7	2022.5.18	Shaanxi	Baoji	107.7884	34.2976	609.8	MG4	SXC
A9_B9_C9	GGC	CCG	9GGCCCG	22SX-BJ-2-7	2022.5.30	Shaanxi	Baoji	107.3069	34.0519	1540	MG4	SXC
A9_B9_C9	GGC	CGC	9GGCCGC	23HB-JZ-1-19	2023.4.8	Hubei	Jingzhou	113.8469	30.1556	10	MG7	HB
A9_B9_C9	GGC	CGG	9GGCCGG	23HB-JZ-1-7	2023.4.8	Hubei	Jingzhou	113.8469	30.1556	10	MG7	HB
A9_B9_C9	GGC	CGT	9GGCCGT	23HB-JZ-2-7	2023.4.7	Hubei	Jingzhou	112.3451	29.6851	20	MG7	HB
A9_B9_C9	GGC	CTC	9GGCCTC	23SX-AK-2-7	2023.4.11	Shaanxi	Ankang	109.1335	33.1426	378	MG7	HB
A9_B9_C9	GGC	CTG	9GGCCTG	23SX-AK-1-7	2023.4.10	Shaanxi	Ankang	109.1510	32.7900	299.4	MG6	HB
A9_B9_C9	GGC	CTT	9GGCCTT	23SX-BJ-1-7	2023.3.31	Shaanxi	Baoji	107.1804	34.5084	680.8	MG5	SXC
A9_B9_C9	GGG	CCA	9GGGCCA	22SX-BJ-1-6	2022.5.18	Shaanxi	Baoji	107.7884	34.2976	609.8	MG2	SXC
A9_B9_C9	GGG	CCT	9GGGCCT	22SX-XY-1-6	2022.5.16	Shaanxi	Xianyang	108.2272	34.2453	430	MG6	SXC
A9_B9_C9	GGG	CGA	9GGGCGA	23HB-JM-2-6	2023.4.8	Hubei	Jingmen	113.2881	31.1544	49	MG3	HB
A9_B9_C9	GGG	CGG	9GGGCGG	23HB-JZ-1-6	2023.4.8	Hubei	Jingzhou	113.8469	30.1556	10	MG7	HB
A9_B9_C9	GGG	CGT	9GGGCGT	23HB-JZ-2-6	2023.4.7	Hubei	Jingzhou	112.3451	29.6851	20	MG6	HB
A9_B9_C9	GGG	CTC	9GGGCTC	23SX-AK-2-6	2023.4.11	Shaanxi	Ankang	109.1335	33.1426	378	MG7	HB
A9_B9_C9	GGT	CAC	9GGTCAC	23HB-ES-1-20	2023.4.6	Hubei	Enshi	110.3764	31.1027	757.8	MG7	HB
A9_B9_C9	GGT	CAG	9GGTCAG	23HB-ES-1-8	2023.4.6	Hubei	Enshi	110.3764	31.1027	757.8	MG1	HB
A9_B9_C9	GGT	CCA	9GGTCCA	22SX-BJ-1-8	2022.5.18	Shaanxi	Baoji	107.7884	34.2976	609.8	MG2	SXC
A9_B9_C9	GGT	CCC	9GGTCCC	22SX-WN-2-8	2022.5.16	Shaanxi	Weinan	109.1803	34.7511		MG6	SXC
A9_B9_C9	GGT	CCG	9GGTCCG	22SX-BJ-2-8	2022.5.30	Shaanxi	Baoji	107.3069	34.0519	1540	MG6	SXC
A9_B9_C9	GGT	CCT	9GGTCCT	22SX-XY-1-8	2022.5.16	Shaanxi	Xianyang	108.2272	34.2453	430	MG6	SXC
A9_B9_C9	GGT	CGC	9GGTCGC	23HB-JZ-1-20	2023.4.8	Hubei	Jingzhou	113.8469	30.1556	10	MG7	HB

A9_B9_C9	GGT	CGG	9GGTCGG	23HB-JZ-1-8	2023.4.8	Hubei	Jingzhou	113.8469	30.1556	10	MG7	HB
A9_B9_C9	GGT	CGT	9GGTCGT	23HB-JZ-2-8	2023.4.7	Hubei	Jingzhou	112.3451	29.6851	20	MG3	HB
A9_B9_C9	GGT	CTC	9GGTCTC	23SX-AK-2-8	2023.4.11	Shaanxi	Ankang	109.1335	33.1426	378	MG7	HB
A9_B9_C9	GGT	CTT	9GGTCTT	23SX-BJ-1-8	2023.3.31	Shaanxi	Baoji	107.1804	34.5084	680.8	MG6	SXC
A9_B9_C9	GTA	CAA	9GTACAA	21SX-XY-3-5	2021.5.16	Shaanxi	Xianyang	108.1600	34.7022	987	MG3	SXC
A9_B9_C9	GTA	CAC	9GTACAC	21ZJ-KZ-1-1	2021.4.15	Zhejiang	Hangzhou	120.1189	30.3089	19	MG6	AZJ
A9_B9_C9	GTA	CCA	9GTACCA	21SX-XY-3-9	2021.5.16	Shaanxi	Xianyang	108.1600	34.7022	987	MG3	SXC
A9_B9_C9	GTA	CCG	9GTACCG	21SX-XA-1-1	2021.4.13	Shaanxi	Xian	108.5153	34.1517	410	MG6	SXC
A9_B9_C9	GTA	CGA	9GTACGA	23GZ-QXN-1-5	2023.4.15	Guizhou	Qianxinan	105.1927	25.1071	1196	MG2	YG
A9_B9_C9	GTA	CGC	9GTACGC	23SX-YC-1-5	2023.5.20	Shanxi	Yuncheng	110.3593	34.8419	321.9	MG3	SXC
A9_B9_C9	GTA	CGG	9GTACGG	21AH-HN-1-5	2021.5.21	Anhui	Huinan	116.6319	32.7839	20	MG7	AZJ
A9_B9_C9	GTA	CTC	9GTACTC	23SX-YC-1-9	2023.5.20	Shanxi	Yuncheng	110.3593	34.8419	321.9	MG3	SXC
A9_B9_C9	GTC	CAA	9GTCCAA	21SX-XY-3-7	2021.5.16	Shaanxi	Xianyang	108.1600	34.7022	987	MG3	SXC
A9_B9_C9	GTC	CAC	9GTCCAC	21ZJ-KZ-1-3	2021.4.15	Zhejiang	Hangzhou	120.1189	30.3089	19	MG2	AZJ
A9_B9_C9	GTC	CAG	9GTCCAG	21SX-XY-1-7	2021.5.25	Shaanxi	Xianyang	108.2425	34.5867	830	MG6	SXC
A9_B9_C9	GTC	CAT	9GTCCAT	23GZ-QXN-2-7	2023.4.16	Guizhou	Qianxinan	105.3777	25.4947	1317.4	MG7	YG
A9_B9_C9	GTC	CCA	9GTCCCA	21SX-XY-3-11	2021.5.16	Shaanxi	Xianyang	108.1600	34.7022	987	MG3	SXC
A9_B9_C9	GTC	CCT	9GTCCCT	23GZ-QXN-2-11	2023.4.16	Guizhou	Qianxinan	105.3777	25.4947	1317.4	MG7	YG
A9_B9_C9	GTC	CGA	9GTCCGA	23GZ-QXN-1-7	2023.4.15	Guizhou	Qianxinan	105.1927	25.1071	1196	MG7	YG
A9_B9_C9	GTC	CGC	9GTCCGC	23SX-YC-1-7	2023.5.20	Shanxi	Yuncheng	110.3593	34.8419	321.9	MG3	SXC
A9_B9_C9	GTC	CGG	9GTCCGG	21AH-HN-1-7	2021.5.21	Anhui	Huinan	116.6319	32.7839	20	MG7	AZJ
A9_B9_C9	GTC	CTA	9GTCCTA	23GZ-QXN-1-11	2023.4.15	Guizhou	Qianxinan	105.1927	25.1071	1196	MG2	YG
A9_B9_C9	GTC	CTC	9GTCCCTC	23SX-YC-1-11	2023.5.20	Shanxi	Yuncheng	110.3593	34.8419	321.9	MG6	SXC
A9_B9_C9	GTC	CTT	9GTCCCTT	21SX-XY-2-1	2021.4.13	Shaanxi	Xianyang	108.2272	34.2453	430	MG3	SXC
A9_B9_C9	GTG	CAA	9GTGCAA	21SX-XY-3-6	2021.5.16	Shaanxi	Xianyang	108.1600	34.7022	987	MG4	SXC
A9_B9_C9	GTG	CAG	9GTGCAG	21SX-XY-1-6	2021.5.25	Shaanxi	Xianyang	108.2425	34.5867	830	MG2	SXC
A9_B9_C9	GTG	CCA	9GTGCCA	21SX-XY-3-10	2021.5.16	Shaanxi	Xianyang	108.1600	34.7022	987	MG2	SXC
A9_B9_C9	GTG	CCG	9GTGCCG	21SX-XA-1-2	2021.4.13	Shaanxi	Xian	108.5153	34.1517	410	MG6	SXC
A9_B9_C9	GTG	CGA	9GTGCCGA	23GZ-QXN-1-6	2023.4.15	Guizhou	Qianxinan	105.1927	25.1071	1196	MG7	YG
A9_B9_C9	GTG	CGC	9GTGCCGC	23SX-YC-1-6	2023.5.20	Shanxi	Yuncheng	110.3593	34.8419	321.9	MG3	SXC
A9_B9_C9	GTG	CTA	9GTGCTA	23GZ-QXN-1-10	2023.4.15	Guizhou	Qianxinan	105.1927	25.1071	1196	MG2	YG
A9_B9_C9	GTG	CTC	9GTGCTC	23SX-YC-1-10	2023.5.20	Shanxi	Yuncheng	110.3593	34.8419	321.9	MG6	SXC
A9_B9_C9	GTG	CTG	9GTGCTG	21AH-HN-1-10	2021.5.21	Anhui	Huinan	116.6319	32.7839	20	MG2	AZJ
A9_B9_C9	GTT	CAA	9GTTCAA	21SX-XY-3-8	2021.5.16	Shaanxi	Xianyang	108.1600	34.7022	987	MG2	SXC
A9_B9_C9	GTT	CCA	9GTTCCA	21SX-XY-3-12	2021.5.16	Shaanxi	Xianyang	108.1600	34.7022	987	MG3	SXC
A9_B9_C9	GTT	CCT	9GTTCCT	23GZ-QXN-2-12	2023.4.16	Guizhou	Qianxinan	105.3777	25.4947	1317.4	MG7	YG
A9_B9_C9	GTT	CGA	9GTTCGA	23GZ-QXN-1-8	2023.4.15	Guizhou	Qianxinan	105.1927	25.1071	1196	MG2	YG
A9_B9_C9	GTT	CGC	9GTTCGC	23SX-YC-1-8	2023.5.20	Shanxi	Yuncheng	110.3593	34.8419	321.9	MG3	SXC

A9_B9_C9	GTT	CTA	9GTTCTA	23GZ-QXN-1-12	2023.4.15	Guizhou	Qianxinan	105.1927	25.1071	1196	MG6	YG
A9_B9_C9	GTT	CTC	9GTTCTC	23SX-YC-1-12	2023.5.20	Shanxi	Yuncheng	110.3593	34.8419	321.9	MG3	SXC
A10_B10_C1GAA	CAA	10GAACAA	23HB-JZ-3-1	2023.4.7	Hubei	Jingzhou	111.8775	30.1088	25	MG1	HB	
A10_B10_C1GAA	CAC	10GAACAC	23HB-XN-1-1	2023.4.8	Hubei	Xianning	113.9196	29.8794	9.6	MG7	HB	
A10_B10_C1GAA	CAG	10GAACAG	23HB-JZ-4-1	2023.4.7	Hubei	Jingzhou	111.8163	30.1443	22.6	MG2	HB	
A10_B10_C1GAA	CAT	10GAACAT	23HB-XG-2-1	2023.4.8	Hubei	Xiaogan	113.5054	30.4465	17.9	MG7	HB	
A10_B10_C1GAA	CCA	10GAACCA	23SX-BJ-2-1	2023.4.7	Shaanxi	Baoji	107.7884	34.2976	609.8	MG2	SXC	
A10_B10_C1GAA	CCC	10GAACCC	23SX-HZ-2-1	2023.4.1	Shaanxi	Hanzhong	105.9061	32.8983	522.2	MG6	GSLN	
A10_B10_C1GAA	CCG	10GAACCG	23SX-HZ-1-1	2023.3.31	Shaanxi	Hanzhong	106.7893	33.1591	502.4	MG1	GSLN	
A10_B10_C1GAA	CCT	10GAACCT	23SX-SL-1-1	2023.4.11	Shaanxi	Shangluo	109.1866	33.2989	458	MG2	SXC	
A10_B10_C1GAA	CGC	10GAACGC	23HU-YY-2-1	2023.4.7	Hunan	Yueyang	113.5178	29.8085	11	MG7	HB	
A10_B10_C1GAA	CGG	10GAACGG	23HU-YY-1-1	2023.4.7	Hunan	Yueyang	113.3451	29.6588	14	MG7	HB	
A10_B10_C1GAA	CGT	10GAACGT	23HU-YY-3-1	2023.4.7	Hunan	Yueyang	113.2427	29.5478	11.8	MG6	HB	
A10_B10_C1GAA	CTA	10GAACTA	23SX-WN-1-1	2023	Shaanxi	Weinan	109.4922	34.4982		MG6	SXC	
A10_B10_C1GAA	CTC	10GAACTC	23SX-XA-2-1	2023.3.30	Shaanxi	Xian	108.2011	34.0643	437.9	MG3	SXC	
A10_B10_C1GAA	CTG	10GAACTG	23SX-XA-1-1	2023.5.15	Shaanxi	Xian	109.3235	34.1513	410	MG4	SXC	
A10_B10_C1GAA	CTT	10GAACCT	23SX-XY-2-1	2023.6.15	Shaanxi	Xianyang	107.7557	35.2221	1176	MG2	SXC	
A10_B10_C1GAC	CAA	10GACCAA	23HB-JZ-3-3	2023.4.7	Hubei	Jingzhou	111.8775	30.1088	25	MG2	HB	
A10_B10_C1GAC	CAC	10GACCAC	23HB-XN-1-3	2023.4.8	Hubei	Xianning	113.9196	29.8794	9.6	MG7	HB	
A10_B10_C1GAC	CAT	10GACCAT	23HB-XG-2-3	2023.4.8	Hubei	Xiaogan	113.5054	30.4465	17.9	MG3	HB	
A10_B10_C1GAC	CCA	10GACCCA	23SX-BJ-2-3	2023.4.7	Shaanxi	Baoji	107.7884	34.2976	609.8	MG3	SXC	
A10_B10_C1GAC	CCG	10GACCCG	23SX-HZ-1-3	2023.3.31	Shaanxi	Hanzhong	106.7893	33.1591	502.4	MG2	GSLN	
A10_B10_C1GAC	CCT	10GACCCT	23SX-SL-1-3	2023.4.11	Shaanxi	Shangluo	109.1866	33.2989	458	MG2	SXC	
A10_B10_C1GAC	CGC	10GACCGC	23HU-YY-2-3	2023.4.7	Hunan	Yueyang	113.5178	29.8085	11	MG2	HB	
A10_B10_C1GAC	CTA	10GACCTA	23SX-WN-1-3	2023	Shaanxi	Weinan	109.4922	34.4982		MG3	SXC	
A10_B10_C1GAC	CTC	10GACCTC	23SX-XA-2-3	2023.3.30	Shaanxi	Xian	108.2011	34.0643	437.9	MG4	SXC	
A10_B10_C1GAC	CTG	10GACCTG	23SX-XA-1-3	2023.5.15	Shaanxi	Xian	109.3235	34.1513	410	MG2	SXC	
A10_B10_C1GAC	CTT	10GACCTT	23SX-XY-2-3	2023.6.15	Shaanxi	Xianyang	107.7557	35.2221	1176	MG2	SXC	
A10_B10_C1GAG	CAA	10GAGCAA	23HB-JZ-3-2	2023.4.7	Hubei	Jingzhou	111.8775	30.1088	25	MG1	HB	
A10_B10_C1GAG	CAC	10GAGCAC	23HB-XN-1-2	2023.4.8	Hubei	Xianning	113.9196	29.8794	9.6	MG7	HB	
A10_B10_C1GAG	CAG	10GAGCAG	23HB-JZ-4-2	2023.4.7	Hubei	Jingzhou	111.8163	30.1443	22.6	MG1	HB	
A10_B10_C1GAG	CCC	10GAGCCC	23SX-HZ-2-2	2023.4.1	Shaanxi	Hanzhong	105.9061	32.8983	522.2	MG3	GSLN	
A10_B10_C1GAG	CCG	10GAGCCG	23SX-HZ-1-2	2023.3.31	Shaanxi	Hanzhong	106.7893	33.1591	502.4	MG1	GSLN	
A10_B10_C1GAG	CGA	10GAGCGA	23HB-XG-3-2	2023.4.8	Hubei	Xiaogan	113.4813	30.6378	9	MG6	HB	
A10_B10_C1GAG	CGC	10GAGCGC	23HU-YY-2-2	2023.4.7	Hunan	Yueyang	113.5178	29.8085	11	MG7	HB	
A10_B10_C1GAG	CGG	10GAGCGG	23HU-YY-1-2	2023.4.7	Hunan	Yueyang	113.3451	29.6588	14	MG7	HB	
A10_B10_C1GAG	CGT	10GAGCGT	23HU-YY-3-2	2023.4.7	Hunan	Yueyang	113.2427	29.5478	11.8	MG7	HB	
A10_B10_C1GAG	CTG	10GAGCTG	23SX-XA-1-2	2023.5.15	Shaanxi	Xian	109.3235	34.1513	410	MG4	SXC	

A10_B10_C1GAG	CTT	10GAGCTT	23SX-XY-2-2	2023.6.15	Shaanxi	Xianyang	107.7557	35.2221	1176	MG2	SXC
A10_B10_C1GAT	CAA	10GATCAA	23HB-JZ-3-4	2023.4.7	Hubei	Jingzhou	111.8775	30.1088	25	MG7	HB
A10_B10_C1GAT	CAC	10GATCAC	23HB-XN-1-4	2023.4.8	Hubei	Xianning	113.9196	29.8794	9.6	MG7	HB
A10_B10_C1GAT	CAG	10GATCAG	23HB-JZ-4-4	2023.4.7	Hubei	Jingzhou	111.8163	30.1443	22.6	MG3	HB
A10_B10_C1GAT	CAT	10GATCAT	23HB-XG-2-4	2023.4.8	Hubei	Xiaogan	113.5054	30.4465	17.9	MG7	HB
A10_B10_C1GAT	CCA	10GATCCA	23SX-BJ-2-4	2023.4.7	Shaanxi	Baoji	107.7884	34.2976	609.8	MG2	SXC
A10_B10_C1GAT	CCC	10GATCCC	23SX-HZ-2-4	2023.4.1	Shaanxi	Hanzhong	105.9061	32.8983	522.2	MG3	GSLN
A10_B10_C1GAT	CCG	10GATCCG	23SX-HZ-1-4	2023.3.31	Shaanxi	Hanzhong	106.7893	33.1591	502.4	MG2	GSLN
A10_B10_C1GAT	CCT	10GATCCT	23SX-SL-1-4	2023.4.11	Shaanxi	Shangluo	109.1866	33.2989	458	MG1	SXC
A10_B10_C1GAT	CGC	10GATCGC	23HU-YY-2-4	2023.4.7	Hunan	Yueyang	113.5178	29.8085	11	MG7	HB
A10_B10_C1GAT	CGT	10GATCGT	23HU-YY-3-4	2023.4.7	Hunan	Yueyang	113.2427	29.5478	11.8	MG6	HB
A10_B10_C1GAT	CTA	10GATCTA	23SX-WN-1-4	2023	Shaanxi	Weinan	109.4922	34.4982		MG3	SXC
A10_B10_C1GAT	CTC	10GATCTC	23SX-XA-2-4	2023.3.30	Shaanxi	Xian	108.2011	34.0643	437.9	MG3	SXC
A10_B10_C1GAT	CTG	10GATCTG	23SX-XA-1-4	2023.5.15	Shaanxi	Xian	109.3235	34.1513	410	MG3	SXC
A10_B10_C1GAT	CTT	10GATCTT	23SX-XY-2-4	2023.6.15	Shaanxi	Xianyang	107.7557	35.2221	1176	MG3	SXC
A10_B10_C1GCA	CAT	10GCACAT	23HB-XG-2-9	2023.4.8	Hubei	Xiaogan	113.5054	30.4465	17.9	MG3	HB
A10_B10_C1GCA	CCA	10GCACCA	23SX-BJ-2-9	2023.4.7	Shaanxi	Baoji	107.7884	34.2976	609.8	MG3	SXC
A10_B10_C1GCA	CCC	10GCACCC	23SX-HZ-2-9	2023.4.1	Shaanxi	Hanzhong	105.9061	32.8983	522.2	MG3	GSLN
A10_B10_C1GCA	CCG	10GCACCG	23SX-HZ-1-9	2023.3.31	Shaanxi	Hanzhong	106.7893	33.1591	502.4	MG1	GSLN
A10_B10_C1GCA	CCT	10GCACCT	23SX-SL-1-9	2023.4.11	Shaanxi	Shangluo	109.1866	33.2989	458	MG2	SXC
A10_B10_C1GCA	CGG	10GCACGG	23HU-YY-1-9	2023.4.7	Hunan	Yueyang	113.3451	29.6588	14	MG7	HB
A10_B10_C1GCA	CTA	10GCACTA	23SX-WN-1-9	2023	Shaanxi	Weinan	109.4922	34.4982		MG3	SXC
A10_B10_C1GCA	CTC	10GCACTC	23SX-XA-2-9	2023.3.30	Shaanxi	Xian	108.2011	34.0643	437.9	MG6	SXC
A10_B10_C1GCA	CTG	10GCACTG	23SX-XY-1-3	2023.3.30	Shaanxi	Xianyang	108.4198	34.3194	430.3	MG3	SXC
A10_B10_C1GCA	CTT	10GCACTT	23SX-XY-2-9	2023.6.15	Shaanxi	Xianyang	107.7557	35.2221	1176	MG3	SXC
A10_B10_C1GCC	CCC	10GCCCCC	23SX-HZ-2-11	2023.4.1	Shaanxi	Hanzhong	105.9061	32.8983	522.2	MG1	GSLN
A10_B10_C1GCC	CCG	10GCCCCG	23SX-HZ-1-11	2023.3.31	Shaanxi	Hanzhong	106.7893	33.1591	502.4	MG2	GSLN
A10_B10_C1GCC	CCT	10GCCCCT	23SX-SL-1-11	2023.4.11	Shaanxi	Shangluo	109.1866	33.2989	458	MG2	SXC
A10_B10_C1GCC	CTA	10GCCCTA	23SX-WN-1-11	2023	Shaanxi	Weinan	109.4922	34.4982		MG3	SXC
A10_B10_C1GCC	CTC	10GCCCTC	23SX-XA-2-11	2023.3.30	Shaanxi	Xian	108.2011	34.0643	437.9	MG3	SXC
A10_B10_C1GCC	CTT	10GCCCTT	23SX-XY-2-11	2023.6.15	Shaanxi	Xianyang	107.7557	35.2221	1176	MG3	SXC
A10_B10_C1GCT	CAA	10GCTCAA	23HB-JZ-3-12	2023.4.7	Hubei	Jingzhou	111.8775	30.1088	25	MG1	HB
A10_B10_C1GCT	CAT	10GCTCAT	23HB-XG-2-12	2023.4.8	Hubei	Xiaogan	113.5054	30.4465	17.9	MG7	HB
A10_B10_C1GCT	CCA	10GCTCCA	23SX-BJ-2-12	2023.4.7	Shaanxi	Baoji	107.7884	34.2976	609.8	MG3	SXC
A10_B10_C1GCT	CCC	10GCTCCC	23SX-HZ-2-12	2023.4.1	Shaanxi	Hanzhong	105.9061	32.8983	522.2	MG3	GSLN
A10_B10_C1GCT	CTA	10GCTCTA	23SX-WN-1-12	2023	Shaanxi	Weinan	109.4922	34.4982		MG6	SXC
A10_B10_C1GCT	CTC	10GCTCTC	23SX-XA-2-12	2023.3.30	Shaanxi	Xian	108.2011	34.0643	437.9	MG6	SXC
A10_B10_C1GCT	CTT	10GCTCTT	23SX-XY-2-12	2023.6.15	Shaanxi	Xianyang	107.7557	35.2221	1176	MG3	SXC

A10_B10_C1GGA	CAA	10GGACAA	23HB-JZ-3-5	2023.4.7	Hubei	Jingzhou	111.8775	30.1088	25	MG2	HB
A10_B10_C1GGA	CAG	10GGACAG	23HB-JZ-4-5	2023.4.7	Hubei	Jingzhou	111.8163	30.1443	22.6	MG3	HB
A10_B10_C1GGA	CAT	10GGACAT	23HB-XG-2-5	2023.4.8	Hubei	Xiaogan	113.5054	30.4465	17.9	MG7	HB
A10_B10_C1GGA	CCA	10GGACCA	23SX-BJ-2-5	2023.4.7	Shaanxi	Baoji	107.7884	34.2976	609.8	MG4	SXC
A10_B10_C1GGA	CCC	10GGACCC	23SX-HZ-2-5	2023.4.1	Shaanxi	Hanzhong	105.9061	32.8983	522.2	MG3	GSLN
A10_B10_C1GGA	CCG	10GGACCG	23SX-HZ-1-5	2023.3.31	Shaanxi	Hanzhong	106.7893	33.1591	502.4	MG3	GSLN
A10_B10_C1GGA	CTA	10GGACTA	23SX-WN-1-5	2023	Shaanxi	Weinan	109.4922	34.4982		MG3	SXC
A10_B10_C1GGA	CTC	10GGACTC	23SX-XA-2-5	2023.3.30	Shaanxi	Xian	108.2011	34.0643	437.9	MG3	SXC
A10_B10_C1GGA	CTG	10GGACTG	23SX-XA-1-5	2023.5.15	Shaanxi	Xian	109.3235	34.1513	410	MG3	SXC
A10_B10_C1GGA	CTT	10GGACTT	23SX-XY-2-5	2023.6.15	Shaanxi	Xianyang	107.7557	35.2221	1176	MG2	SXC
A10_B10_C1GGC	CAG	10GGCCAG	23HB-JZ-4-7	2023.4.7	Hubei	Jingzhou	111.8163	30.1443	22.6	MG3	HB
A10_B10_C1GGC	CCA	10GGCCCA	23SX-BJ-2-7	2023.4.7	Shaanxi	Baoji	107.7884	34.2976	609.8	MG3	SXC
A10_B10_C1GGC	CCC	10GGCCCC	23SX-HZ-2-7	2023.4.1	Shaanxi	Hanzhong	105.9061	32.8983	522.2	MG3	GSLN
A10_B10_C1GGC	CCG	10GGCCCG	23SX-HZ-1-7	2023.3.31	Shaanxi	Hanzhong	106.7893	33.1591	502.4	MG2	GSLN
A10_B10_C1GGC	CCT	10GGCCCT	23SX-SL-1-7	2023.4.11	Shaanxi	Shangluo	109.1866	33.2989	458	MG2	SXC
A10_B10_C1GGC	CTA	10GGCCTA	23SX-WN-1-7	2023	Shaanxi	Weinan	109.4922	34.4982		MG6	SXC
A10_B10_C1GGC	CTC	10GGCCTC	23SX-XA-2-7	2023.3.30	Shaanxi	Xian	108.2011	34.0643	437.9	MG3	SXC
A10_B10_C1GGC	CTT	10GGCCTT	23SX-XY-2-7	2023.6.15	Shaanxi	Xianyang	107.7557	35.2221	1176	MG6	SXC
A10_B10_C1GGG	CCA	10GGGCCA	23SX-BJ-2-6	2023.4.7	Shaanxi	Baoji	107.7884	34.2976	609.8	MG3	SXC
A10_B10_C1GGG	CCC	10GGGCCC	23SX-HZ-2-6	2023.4.1	Shaanxi	Hanzhong	105.9061	32.8983	522.2	MG3	GSLN
A10_B10_C1GGG	CCG	10GGGCCG	23SX-HZ-1-6	2023.3.31	Shaanxi	Hanzhong	106.7893	33.1591	502.4	MG2	GSLN
A10_B10_C1GGG	CCT	10GGGCCT	23SX-SL-1-6	2023.4.11	Shaanxi	Shangluo	109.1866	33.2989	458	MG2	SXC
A10_B10_C1GGG	CTA	10GGGCTA	23SX-WN-1-6	2023	Shaanxi	Weinan	109.4922	34.4982		MG3	SXC
A10_B10_C1GGG	CTC	10GGGCTC	23SX-XA-2-6	2023.3.30	Shaanxi	Xian	108.2011	34.0643	437.9	MG3	SXC
A10_B10_C1GGG	CTG	10GGGCTG	23SX-XA-1-6	2023.5.15	Shaanxi	Xian	109.3235	34.1513	410	MG4	SXC
A10_B10_C1GGG	CTT	10GGGCTT	23SX-XY-2-6	2023.6.15	Shaanxi	Xianyang	107.7557	35.2221	1176	MG6	SXC
A10_B10_C1GGT	CAG	10GGTCAG	23HB-JZ-4-8	2023.4.7	Hubei	Jingzhou	111.8163	30.1443	22.6	MG5	HB
A10_B10_C1GGT	CCA	10GGTCCA	23SX-BJ-2-8	2023.4.7	Shaanxi	Baoji	107.7884	34.2976	609.8	MG3	SXC
A10_B10_C1GGT	CCC	10GGTCCC	23SX-HZ-2-8	2023.4.1	Shaanxi	Hanzhong	105.9061	32.8983	522.2	MG2	GSLN
A10_B10_C1GGT	CCT	10GGTCCT	23SX-SL-1-8	2023.4.11	Shaanxi	Shangluo	109.1866	33.2989	458	MG2	SXC
A10_B10_C1GGT	CTA	10GGTCTA	23SX-WN-1-8	2023	Shaanxi	Weinan	109.4922	34.4982		MG6	SXC
A10_B10_C1GGT	CTC	10GGTCTC	23SX-XA-2-8	2023.3.30	Shaanxi	Xian	108.2011	34.0643	437.9	MG6	SXC
A10_B10_C1GGT	CTT	10GGTCTT	23SX-XY-2-8	2023.6.15	Shaanxi	Xianyang	107.7557	35.2221	1176	MG2	SXC
A10_B10_C1GTA	CAA	10GTACAA	20HN-ZZ-1-1	2020	Henan	Zhenzhou	114.1061	34.7831	70	MG2	HN
A10_B10_C1GTA	CAG	10GTACAG	20HN-XX-1-1	2020	Henan	Xinxiang	113.9594	35.3472	50	MG2	HN
A10_B10_C1GTA	CAT	10GTACAT	21HN-NY-2-3	2021.4.11	Henan	Nanyang	112.7428	32.4736	142	MG3	HN
A10_B10_C1GTA	CCA	10GTACCA	20HN-ZZ-1-5	2020	Henan	Zhenzhou	114.1061	34.7831	70	MG2	HN
A10_B10_C1GTA	CCC	10GTACCC	20HN-XX-1-14	2020	Henan	Xinxiang	113.9594	35.3472	50	MG2	HN

A10_B10_C1GTA	CCG	10GTACCG	20HN-XX-1-5	2020	Henan	Xinxiang	113.9594	35.3472	50	MG2	HN
A10_B10_C1GTA	CCT	10GTACCT	21HN-NY-1-1	2021.4.10	Henan	Nanyang	111.6231	33.0294	270	MG2	HN
A10_B10_C1GTA	CTA	10GTACTA	20HN-NY-3-2	2020	Henan	Nanyang	111.4972	33.0772	180	MG2	HN
A10_B10_C1GTA	CTC	10GTACTC	20SX-BJ-4-4	2020.5.23	Shaanxi	Baoji	107.8289	34.3853	610	MG2	SXC
A10_B10_C1GTC	CAA	10GTCCAA	20HN-ZZ-1-3	2020	Henan	Zhenzhou	114.1061	34.7831	70	MG2	HN
A10_B10_C1GTC	CAT	10GTCCAT	21HN-NY-2-5	2021.4.11	Henan	Nanyang	112.7428	32.4736	144	MG6	HN
A10_B10_C1GTC	CCC	10GTCCCC	21HN-NY-2-1	2021.4.11	Henan	Nanyang	112.7428	32.4736	140	MG3	HN
A10_B10_C1GTC	CCG	10GTCCCG	20HN-XX-1-7	2020	Henan	Xinxiang	113.9594	35.3472	50	MG2	HN
A10_B10_C1GTC	CCT	10GTCCCT	21HN-NY-1-3	2021.4.10	Henan	Nanyang	111.6231	33.0294	270	MG2	HN
A10_B10_C1GTC	CGA	10GTCCGA	20HN-XC-1-4	2020	Henan	Xucang	114.8564	33.5197	50	MG3	HN
A10_B10_C1GTC	CTA	10GTCCTA	20HN-NY-3-5	2020	Henan	Nanyang	111.4972	33.0772	180	MG2	HN
A10_B10_C1GTC	CTT	10GTCCTT	20SX-XY-1-3	2020.6.7	Shaanxi	Xianyang	108.0333	35.9272	990	MG7	SXC
A10_B10_C1GTG	CAA	10GTGCAA	20HN-ZZ-1-2	2020	Henan	Zhenzhou	114.1061	34.7831	70	MG2	HN
A10_B10_C1GTG	CAT	10GTGCAT	21HN-NY-2-4	2021.4.11	Henan	Nanyang	112.7428	32.4736	143	MG6	HN
A10_B10_C1GTG	CCA	10GTGCCA	20HN-ZZ-1-6	2020	Henan	Zhenzhou	114.1061	34.7831	70	MG2	HN
A10_B10_C1GTG	CCG	10GTGCCG	20HN-XX-1-6	2020	Henan	Xinxiang	113.9594	35.3472	50	MG1	HN
A10_B10_C1GTG	CCT	10GTGCCT	21HN-NY-1-2	2021.4.10	Henan	Nanyang	111.6231	33.0294	270	MG2	HN
A10_B10_C1GTG	CGT	10GTGCGT	20SX-BJ-1-3	2020.5.23	Shaanxi	Baoji	107.4031	34.4006	730	MG2	SXC
A10_B10_C1GTG	CTA	10GTGCTA	20HN-NY-3-4	2020	Henan	Nanyang	111.4972	33.0772	180	MG2	HN
A10_B10_C1GTT	CAA	10GTTCAA	20HN-ZZ-1-4	2020	Henan	Zhenzhou	114.1061	34.7831	70	MG2	HN
A10_B10_C1GTT	CAC	10GTTCAC	20HN-XX-1-13	2020	Henan	Xinxiang	113.9594	35.3472	50	MG2	HN
A10_B10_C1GTT	CAT	10GTTCAT	21HN-NY-2-6	2021.4.11	Henan	Nanyang	112.7428	32.4736	145	MG6	HN
A10_B10_C1GTT	CCA	10GTTCCA	20HN-ZZ-1-8	2020	Henan	Zhenzhou	114.1061	34.7831	70	MG2	HN
A10_B10_C1GTT	CCC	10GTTCCC	21HN-NY-2-2	2021.4.11	Henan	Nanyang	112.7428	32.4736	141	MG3	HN
A10_B10_C1GTT	CCG	10GTTCCG	20HN-XX-1-9	2020	Henan	Xinxiang	113.9594	35.3472	50	MG2	HN
A10_B10_C1GTT	CGA	10GTTCGA	20HN-NY-3-1	2020	Henan	Nanyang	111.4972	33.0772	180	MG2	HN
A10_B10_C1GTT	CGC	10GTTCGC	20SX-BJ-4-1	2020.5.23	Shaanxi	Baoji	107.8289	34.3853	610	MG7	SXC
A10_B10_C1GTT	CGT	10GTTCGT	20SX-BJ-1-5	2020.5.23	Shaanxi	Baoji	107.4031	34.4006	730	MG4	SXC
A10_B10_C1GTT	CTA	10GTTCTA	20HN-NY-3-6	2020	Henan	Nanyang	111.4972	33.0772	180	MG1	HN
A10_B10_C1GTT	CTC	10GTTCTC	20SX-BJ-1-1	2020.5.23	Shaanxi	Baoji	107.4031	34.4006	730	MG2	SXC
A11_B11_C1GAA	CAA	11GAACAA	21NX-GY-1-1	2021.7.8	Ningxia	Guyuan	106.0956	35.8042	2052.7	MG3	GSLD
A11_B11_C1GAA	CAG	11GAACAG	21NX-GY-1-13	2021.7.8	Ningxia	Guyuan	106.0956	35.8042	2052.7	MG4	GSLD
A11_B11_C1GAA	CCA	11GAACCA	22SC-MY-1-1	2022.4.22	Sichuan	Mianyang	104.7571	31.4550		MG3	SC
A11_B11_C1GAA	CCC	11GAACCC	23SC-BZ-1-1	2023.4.5	Sichuan	Bazhong	106.9891	31.8136	436.5	MG7	SC
A11_B11_C1GAA	CGA	11GAACGA	22NX-GY-5-1	2022.6.18	Ningxia	Guyuan	105.7291	35.9639		MG2	GSLD
A11_B11_C1GAA	CTC	11GAACTC	23SC-GZZ-1-1	2023.7.23	Sichuan	Ganzizhou	100.6014	31.4379	3172	MG2	SC
A11_B11_C1GAA	CTG	11GAACTG	23SC-DZ-1-1	2023.4.5	Sichuan	Dazhou	107.0423	30.8815	217.4	MG7	SC
A11_B11_C1GAC	CAA	11GACCAA	21NX-GY-1-3	2021.7.8	Ningxia	Guyuan	106.0956	35.8042	2052.7	MG2	GSLD

A11_B11_C1GAC	CAG	11GACCAG	21NX-GY-1-15	2021.7.8	Ningxia	Guyuan	106.0956	35.8042	2052.7	MG2	GSLD
A11_B11_C1GAC	CAT	11GACCAT	21NX-GY-3-3	2021.7.8	Ningxia	Guyuan	106.1017	35.9008	2186.64	MG2	GSLD
A11_B11_C1GAC	CCA	11GACCCA	22SC-MY-1-3	2022.4.22	Sichuan	Mianyang	104.7571	31.4550		MG2	SC
A11_B11_C1GAC	CCC	11GACCCC	23SC-BZ-1-3	2023.4.5	Sichuan	Bazhong	106.9891	31.8136	436.5	MG7	SC
A11_B11_C1GAC	CGA	11GACCGA	22NX-GY-5-3	2022.6.18	Ningxia	Guyuan	105.7291	35.9639		MG2	GSLD
A11_B11_C1GAC	CGC	11GACCGC	22NX-GY-8-3	2022.6.18	Ningxia	Guyuan	106.2233	36.1628	1531.89	MG2	GSLD
A11_B11_C1GAC	CGT	11GACCGT	22NX-GY-9-3	2022.6.18	Ningxia	Guyuan	106.2233	36.1628	1531.89	MG3	GSLD
A11_B11_C1GAC	CTA	11GACCTA	23SC-CD-2-3	2023.4.3	Sichuan	Chengdu	103.5757	30.6092	511.4	MG4	SC
A11_B11_C1GAC	CTC	11GACCTC	23SC-GZZ-1-3	2023.7.23	Sichuan	Ganzizhou	100.6014	31.4379	3172	MG1	SC
A11_B11_C1GAC	CTG	11GACCTG	23SC-DZ-1-3	2023.4.5	Sichuan	Dazhou	107.0423	30.8815	217.4	MG7	SC
A11_B11_C1GAG	CAA	11GAGCAA	21NX-GY-1-2	2021.7.8	Ningxia	Guyuan	106.0956	35.8042	2052.7	MG2	GSLD
A11_B11_C1GAG	CAC	11GAGCAC	21NX-GY-2-2	2021.7.8	Ningxia	Guyuan	106.0956	35.8042	2052.7	MG5	GSLD
A11_B11_C1GAG	CAG	11GAGCAG	21NX-GY-1-14	2021.7.8	Ningxia	Guyuan	106.0956	35.8042	2052.7	MG4	GSLD
A11_B11_C1GAG	CAT	11GAGCAT	21NX-GY-3-2	2021.7.8	Ningxia	Guyuan	106.1017	35.9008	2186.64	MG4	GSLD
A11_B11_C1GAG	CCC	11GAGCCC	23SC-BZ-1-2	2023.4.5	Sichuan	Bazhong	106.9891	31.8136	436.5	MG7	SC
A11_B11_C1GAG	CCG	11GAGCCG	22SC-MY-3-2	2022.4.22	Sichuan	Mianyang	104.9358	30.5550	460	MG1	SC
A11_B11_C1GAG	CCT	11GAGCCT	23SC-BZ-2-2	2023.4.5	Sichuan	Bazhong	106.5778	31.7238	432.4	MG7	SC
A11_B11_C1GAG	CGG	11GAGCGG	22NX-GY-7-2	2022.6.18	Ningxia	Guyuan	106.2233	36.1628	1531.89	MG3	GSLD
A11_B11_C1GAG	CGT	11GAGCGT	22NX-GY-9-2	2022.6.18	Ningxia	Guyuan	106.2233	36.1628	1531.89	MG3	GSLD
A11_B11_C1GAG	CTA	11GAGCTA	23SC-CD-2-2	2023.4.3	Sichuan	Chengdu	103.5757	30.6092	511.4	MG7	SC
A11_B11_C1GAG	CTT	11GAGCTT	23SC-GY-1-2	2023.4.1	Sichuan	Guangyuan	105.9100	32.7589	556.2	MG4	SC
A11_B11_C1GAT	CAC	11GATCAC	21NX-GY-2-4	2021.7.8	Ningxia	Guyuan	106.0956	35.8042	2052.7	MG3	GSLD
A11_B11_C1GAT	CAT	11GATCAT	21NX-GY-3-4	2021.7.8	Ningxia	Guyuan	106.1017	35.9008	2186.64	MG2	GSLD
A11_B11_C1GAT	CCA	11GATCCA	22SC-MY-1-4	2022.4.22	Sichuan	Mianyang	104.7571	31.4550		MG1	SC
A11_B11_C1GAT	CCC	11GATCCC	23SC-BZ-1-4	2023.4.5	Sichuan	Bazhong	106.9891	31.8136	436.5	MG7	SC
A11_B11_C1GAT	CCG	11GATCCG	22SC-MY-3-4	2022.4.22	Sichuan	Mianyang	104.9358	30.5550	460	MG2	SC
A11_B11_C1GAT	CCT	11GATCCT	23SC-BZ-2-4	2023.4.5	Sichuan	Bazhong	106.5778	31.7238	432.4	MG5	SC
A11_B11_C1GAT	CGA	11GATCGA	22NX-GY-5-4	2022.6.18	Ningxia	Guyuan	105.7291	35.9639		MG2	GSLD
A11_B11_C1GAT	CGC	11GATCGC	22NX-GY-8-4	2022.6.18	Ningxia	Guyuan	106.2233	36.1628	1531.89	MG3	GSLD
A11_B11_C1GAT	CTA	11GATCTA	23SC-CD-2-4	2023.4.3	Sichuan	Chengdu	103.5757	30.6092	511.4	MG4	SC
A11_B11_C1GAT	CTG	11GATCTG	23SC-DZ-1-4	2023.4.5	Sichuan	Dazhou	107.0423	30.8815	217.4	MG7	SC
A11_B11_C1GCA	CAC	11GCACAC	21NX-GY-2-9	2021.7.8	Ningxia	Guyuan	106.0956	35.8042	2052.7	MG2	GSLD
A11_B11_C1GCA	CAT	11GCACAT	21NX-GY-3-9	2021.7.8	Ningxia	Guyuan	106.1017	35.9008	2186.64	MG2	GSLD
A11_B11_C1GCA	CCA	11GCACCA	22SC-MY-2-3	2022.4.22	Sichuan	Mianyang	104.7246	31.7569		MG2	SC
A11_B11_C1GCA	CCC	11GCACCC	23SC-BZ-1-9	2023.4.5	Sichuan	Bazhong	106.9891	31.8136	436.5	MG7	SC
A11_B11_C1GCA	CCG	11GCACCG	23SC-CD-1-5	2023.4.11	Sichuan	Chengdu	104.3615	30.9013	500	MG1	SC
A11_B11_C1GCA	CGC	11GCACGC	22NX-GY-8-9	2022.6.18	Ningxia	Guyuan	106.2233	36.1628	1531.89	MG3	GSLD
A11_B11_C1GCA	CTA	11GCACTA	23SC-CD-2-9	2023.4.3	Sichuan	Chengdu	103.5757	30.6092	511.4	MG2	SC

A11_B11_C1GCA	CTG	11GCACTG	23SC-DZ-1-9	2023.4.5	Sichuan	Dazhou	107.0423	30.8815	217.4	MG7	SC
A11_B11_C1GCA	CTT	11GCACTT	23SC-MY-1-5	2023.4.3	Sichuan	Mianyang	104.3107	31.3324	533.5	MG3	SC
A11_B11_C1GCC	CAT	11GCCCAT	21NX-GY-3-11	2021.7.8	Ningxia	Guyuan	106.1017	35.9008	2186.64	MG3	GSLD
A11_B11_C1GCC	CCA	11GCCCCA	22SC-MY-2-5	2022.4.22	Sichuan	Mianyang	104.7246	31.7569		MG2	SC
A11_B11_C1GCC	CCC	11GCCCCC	23SC-BZ-1-11	2023.4.5	Sichuan	Bazhong	106.9891	31.8136	436.5	MG7	SC
A11_B11_C1GCC	CGA	11GCCCGA	22NX-GY-6-5	2022.6.18	Ningxia	Guyuan	105.7291	35.9639		MG3	GSLD
A11_B11_C1GCC	CGG	11GCCCGG	21NX-GY-4-1	2021.7.9	Ningxia	Guyuan	106.2233	36.1628	1531.89	MG3	GSLD
A11_B11_C1GCC	CTC	11GCCCTC	23SC-GZZ-1-11	2023.7.23	Sichuan	Ganzizhou	100.6014	31.4379	3172	MG4	SC
A11_B11_C1GCG	CAC	11GCGCAC	21NX-GY-2-10	2021.7.8	Ningxia	Guyuan	106.0956	35.8042	2052.7	MG5	GSLD
A11_B11_C1GCG	CCG	11GCGCCG	23SC-CD-1-6	2023.4.11	Sichuan	Chengdu	104.3615	30.9013	500	MG1	SC
A11_B11_C1GCT	CAC	11GCTCAC	21NX-GY-2-12	2021.7.8	Ningxia	Guyuan	106.0956	35.8042	2052.7	MG2	GSLD
A11_B11_C1GCT	CCC	11GCTCCC	23SC-BZ-1-12	2023.4.5	Sichuan	Bazhong	106.9891	31.8136	436.5	MG7	SC
A11_B11_C1GCT	CCG	11GCTCCG	23SC-CD-1-8	2023.4.11	Sichuan	Chengdu	104.3615	30.9013	500	MG1	SC
A11_B11_C1GCT	CGA	11GCTCGA	22NX-GY-6-6	2022.6.18	Ningxia	Guyuan	105.7291	35.9639		MG2	GSLD
A11_B11_C1GGA	CCC	11GGACCC	23SC-BZ-1-5	2023.4.5	Sichuan	Bazhong	106.9891	31.8136	436.5	MG7	SC
A11_B11_C1GGA	CCG	11GGACCG	23SC-CD-1-1	2023.4.11	Sichuan	Chengdu	104.3615	30.9013	500	MG1	SC
A11_B11_C1GGA	CGC	11GGACGC	22NX-GY-8-5	2022.6.18	Ningxia	Guyuan	106.2233	36.1628	1531.89	MG5	GSLD
A11_B11_C1GGA	CTC	11GGACTC	23SC-GZZ-1-5	2023.7.23	Sichuan	Ganzizhou	100.6014	31.4379	3172	MG1	SC
A11_B11_C1GGA	CTG	11GGACTG	23SC-DZ-1-5	2023.4.5	Sichuan	Dazhou	107.0423	30.8815	217.4	MG7	SC
A11_B11_C1GGC	CAC	11GGCCAC	21NX-GY-2-7	2021.7.8	Ningxia	Guyuan	106.0956	35.8042	2052.7	MG5	GSLD
A11_B11_C1GGC	CAT	11GGCCAT	21NX-GY-3-7	2021.7.8	Ningxia	Guyuan	106.1017	35.9008	2186.64	MG2	GSLD
A11_B11_C1GGC	CCA	11GGCCCA	22SC-MY-2-1	2022.4.22	Sichuan	Mianyang	104.7246	31.7569		MG2	SC
A11_B11_C1GGC	CCC	11GGCCCC	23SC-BZ-1-7	2023.4.5	Sichuan	Bazhong	106.9891	31.8136	436.5	MG7	SC
A11_B11_C1GGC	CCG	11GGCCCG	23SC-CD-1-3	2023.4.11	Sichuan	Chengdu	104.3615	30.9013	500	MG1	SC
A11_B11_C1GGC	CGC	11GGCCGC	22NX-GY-8-7	2022.6.18	Ningxia	Guyuan	106.2233	36.1628	1531.89	MG3	GSLD
A11_B11_C1GGC	CTA	11GGCCTA	23SC-CD-2-7	2023.4.3	Sichuan	Chengdu	103.5757	30.6092	511.4	MG1	SC
A11_B11_C1GGC	CTC	11GGCCTC	23SC-GZZ-1-7	2023.7.23	Sichuan	Ganzizhou	100.6014	31.4379	3172	MG1	SC
A11_B11_C1GGC	CTG	11GGCCTG	23SC-DZ-1-7	2023.4.5	Sichuan	Dazhou	107.0423	30.8815	217.4	MG7	SC
A11_B11_C1GGG	CAT	11GGGCAT	21NX-GY-3-6	2021.7.8	Ningxia	Guyuan	106.1017	35.9008	2186.64	MG4	GSLD
A11_B11_C1GGG	CCC	11GGGCCC	23SC-BZ-1-6	2023.4.5	Sichuan	Bazhong	106.9891	31.8136	436.5	MG7	SC
A11_B11_C1GGG	CCT	11GGGCCT	23SC-BZ-2-6	2023.4.5	Sichuan	Bazhong	106.5778	31.7238	432.4	MG4	SC
A11_B11_C1GGG	CTA	11GGGCTA	23SC-CD-2-6	2023.4.3	Sichuan	Chengdu	103.5757	30.6092	511.4	MG1	SC
A11_B11_C1GGG	CTC	11GGGCTC	23SC-GZZ-1-6	2023.7.23	Sichuan	Ganzizhou	100.6014	31.4379	3172	MG1	SC
A11_B11_C1GGG	CTT	11GGGCTT	23SC-MY-1-2	2023.4.3	Sichuan	Mianyang	104.3107	31.3324	533.5	MG1	SC
A11_B11_C1GGT	CAC	11GGTCAC	21NX-GY-2-8	2021.7.8	Ningxia	Guyuan	106.0956	35.8042	2052.7	MG2	GSLD
A11_B11_C1GGT	CAG	11GGTCAG	21NX-GY-1-20	2021.7.8	Ningxia	Guyuan	106.0956	35.8042	2052.7	MG2	GSLD
A11_B11_C1GGT	CAT	11GGTCAT	21NX-GY-3-8	2021.7.8	Ningxia	Guyuan	106.1017	35.9008	2186.64	MG3	GSLD
A11_B11_C1GGT	CCA	11GGTCCA	22SC-MY-2-2	2022.4.22	Sichuan	Mianyang	104.7246	31.7569		MG2	SC

A11_B11_C1GGT	CCC	11GGTCCC	23SC-BZ-1-8	2023.4.5	Sichuan	Bazhong	106.9891	31.8136	436.5	MG7	SC
A11_B11_C1GGT	CCG	11GGTCCG	23SC-CD-1-4	2023.4.11	Sichuan	Chengdu	104.3615	30.9013	500	MG1	SC
A11_B11_C1GGT	CGC	11GGTCGC	22NX-GY-8-8	2022.6.18	Ningxia	Guyuan	106.2233	36.1628	1531.89	MG3	GSLD
A11_B11_C1GGT	CTG	11GGTCTG	23SC-DZ-1-8	2023.4.5	Sichuan	Dazhou	107.0423	30.8815	217.4	MG7	SC
A11_B11_C1GTA	CAG	11GTACAG	20SX-XY-1-15	2020.6.7	Shaanxi	Xianyang	108.0333	35.9272	990	MG3	SXC
A11_B11_C1GTA	CAT	11GTACAT	21SX-BJ-5-2	2021.1.15	Shaanxi	Baoji	106.8643	34.8931		MG5	SXC
A11_B11_C1GTA	CGA	11GTACGA	20SX-BJ-7-7	2020.1.14	Shaanxi	Baoji	107.5926	34.3244	486.7	MG2	SXC
A11_B11_C1GTA	CGG	11GTACGG	20SX-BJ-2-6	2020.5.23	Shaanxi	Baoji	107.4031	34.4006	730	MG2	SXC
A11_B11_C1GTA	CTA	11GTACTA	20SX-BJ-2-2	2020.5.23	Shaanxi	Baoji	107.4031	34.4006	730	MG2	SXC
A11_B11_C1GTA	CTC	11GTACTC	20SX-BJ-6-3	2020.1.15	Shaanxi	Baoji	107.7142	34.3069	500	MG2	SXC
A11_B11_C1GTA	CTG	11GTACTG	20SX-XA-1-5	2020.5.23	Shaanxi	Xian	108.1111	34.1503	480	MG7	SXC
A11_B11_C1GTC	CAG	11GTCCAG	20SX-BJ-3-2	2020.5.23	Shaanxi	Baoji	107.4181	34.4586	750	MG6	SXC
A11_B11_C1GTC	CAT	11GTCCAT	21SX-BJ-5-4	2021.1.15	Shaanxi	Baoji	106.8643	34.8931		MG2	SXC
A11_B11_C1GTC	CCA	11GTCCCA	20SX-XY-1-13	2020.6.7	Shaanxi	Xianyang	108.0333	35.9272	990	MG3	SXC
A11_B11_C1GTC	CCC	11GTCCCC	20SX-WN-1-8	2020.5.24	Shaanxi	Weinan	109.5003	34.8644	390	MG3	SXC
A11_B11_C1GTC	CCG	11GTCCCG	20SX-BJ-3-6	2020.5.23	Shaanxi	Baoji	107.4181	34.4586	750	MG2	SXC
A11_B11_C1GTC	CCT	11GTCCCT	20SX-BJ-7-5	2020.1.14	Shaanxi	Baoji	107.5926	34.3244	486.7	MG4	SXC
A11_B11_C1GTC	CGA	11GTCCGA	20SX-BJ-7-9	2020.1.14	Shaanxi	Baoji	107.5926	34.3244	486.7	MG2	SXC
A11_B11_C1GTC	CGG	11GTCCGG	20SX-XA-1-2	2020.5.23	Shaanxi	Xian	108.1111	34.1503	480	MG2	SXC
A11_B11_C1GTC	CTA	11GTCCTA	20SX-BJ-2-4	2020.5.23	Shaanxi	Baoji	107.4031	34.4006	730	MG1	SXC
A11_B11_C1GTC	CTC	11GTCCTC	20SX-BJ-6-5	2020.1.15	Shaanxi	Baoji	107.7142	34.3069	500	MG6	SXC
A11_B11_C1GTC	CTG	11GTCCTG	20SX-XA-1-7	2020.5.23	Shaanxi	Xian	108.1111	34.1503	480	MG7	SXC
A11_B11_C1GTG	CAT	11GTGCAT	21SX-BJ-5-3	2021.1.15	Shaanxi	Baoji	106.8643	34.8931		MG2	SXC
A11_B11_C1GTG	CGA	11GTGCGA	20SX-BJ-7-8	2020.1.14	Shaanxi	Baoji	107.5926	34.3244	486.7	MG2	SXC
A11_B11_C1GTG	CGC	11GTGCGC	20SX-XA-1-10	2020.5.23	Shaanxi	Xian	108.1111	34.1503	480	MG2	SXC
A11_B11_C1GTG	CGG	11GTGCGG	20SX-XA-1-1	2020.5.23	Shaanxi	Xian	108.1111	34.1503	480	MG2	SXC
A11_B11_C1GTG	CTA	11GTGCTA	20SX-BJ-2-3	2020.5.23	Shaanxi	Baoji	107.4031	34.4006	730	MG2	SXC
A11_B11_C1GTG	CTC	11GTGCTC	20SX-BJ-6-4	2020.1.15	Shaanxi	Baoji	107.7142	34.3069	500	MG6	SXC
A11_B11_C1GTT	CAT	11GTTCAT	20SX-BJ-7-1	2020.1.14	Shaanxi	Baoji	107.5926	34.3244	486.7	MG2	SXC
A11_B11_C1GTT	CCA	11GTTCCA	20SX-XY-1-14	2020.6.7	Shaanxi	Xianyang	108.0333	35.9272	990	MG6	SXC
A11_B11_C1GTT	CGA	11GTTCGA	20SX-BJ-7-10	2020.1.14	Shaanxi	Baoji	107.5926	34.3244	486.7	MG2	SXC
A11_B11_C1GTT	CGC	11GTTCGC	20SX-BJ-6-2	2020.1.15	Shaanxi	Baoji	107.7142	34.3069	500	MG6	SXC
A11_B11_C1GTT	CTA	11GTTCTA	20SX-BJ-2-5	2020.5.23	Shaanxi	Baoji	107.4031	34.4006	730	MG2	SXC
A11_B11_C1GTT	CTC	11GTTCTC	20SX-BJ-6-6	2020.1.15	Shaanxi	Baoji	107.7142	34.3069	500	MG2	SXC
A11_B11_C1GTT	CTG	11GTTCTG	20SX-XA-1-8	2020.5.23	Shaanxi	Xian	108.1111	34.1503	480	MG6	SXC
A12_B12_C1GAA	CAG	12GAACAG	20GS-BY-3-8	2020.7.4	Gansu	Baiyin	104.5900	36.5300	1473	MG3	GSC
A12_B12_C1GAA	CAT	12GAACAT	20GS-BY-3-5	2020.7.4	Gansu	Baiyin	104.5900	36.5300	1473	MG3	GSC
A12_B12_C1GAA	CCA	12GAACCA	20GS-LZ-1-11	2020.7.4	Gansu	Lanzhou	103.9400	36.3800	1780	MG3	GSC

A12_B12_C1GAA	CCC	12GAACCC	20GS-LZ-1-9	2020.7.4	Gansu	Lanzhou	103.9400	36.3800	1780	MG3	GSC
A12_B12_C1GAA	CCG	12GAACCG	20GS-LZ-1-10	2020.7.4	Gansu	Lanzhou	103.9400	36.3800	1780	MG1	GSC
A12_B12_C1GAA	CTA	12GAACTA	20GS-LZ-1-7	2020.7.4	Gansu	Lanzhou	103.9400	36.3800	1780	MG1	GSC
A12_B12_C1GAA	CTC	12GAACTC	20GS-LZ-1-5	2020.7.4	Gansu	Lanzhou	103.9400	36.3800	1780	MG5	GSC
A12_B12_C1GAA	CTG	12GAACTG	20GS-LZ-1-6	2020.7.4	Gansu	Lanzhou	103.9400	36.3800	1780	MG5	GSC
A12_B12_C1GAA	CTT	12GAACTT	20GS-LXZ-2-6	2020.7.9	Gansu	Linxiashou	103.3900	35.4000	2180	MG2	GSC
A12_B12_C1GAC	CAA	12GACCAA	20GS-QY-2-12	2020.7.4	Gansu	Qingyang	107.8869	35.6717	1230	MG4	GSLD
A12_B12_C1GAC	CAC	12GACCAC	20GS-QY-2-10	2020.7.4	Gansu	Qingyang	107.8869	35.6717	1230	MG2	GSLD
A12_B12_C1GAC	CCC	12GACCCC	20GS-BY-4-1	2020.7.4	Gansu	Baiyin	104.5100	36.6700	1537	MG2	GSC
A12_B12_C1GAC	CGA	12GACCGA	20GS-QY-2-7	2020.7.4	Gansu	Qingyang	107.8869	35.6717	1230	MG4	GSLD
A12_B12_C1GAC	CGC	12GACCGC	20GS-QY-2-1	2020.7.4	Gansu	Qingyang	107.8869	35.6717	1230	MG2	GSLD
A12_B12_C1GAC	CGG	12GACCGG	20GS-QY-2-4	2020.7.4	Gansu	Qingyang	107.8869	35.6717	1230	MG3	GSLD
A12_B12_C1GAC	CGT	12GACCGT	20GS-PL-5-3	2020.7.4	Gansu	Pingliang	105.7242	35.4556	1591.55	MG2	GSLD
A12_B12_C1GAC	CTA	12GACCTA	20GS-LXZ-4-3	2020.7.9	Gansu	Linxiashou	103.4100	35.2700	2396	MG2	GSC
A12_B12_C1GAC	CTT	12GACCTT	20GS-PL-10-6	2020.7.4	Gansu	Pingliang	105.9169	35.3472	1819.28	MG2	GSLD
A12_B12_C1GAG	CAA	12GAGCAA	20GS-PL-5-2	2020.7.4	Gansu	Pingliang	105.7242	35.4556	1591.55	MG1	GSLD
A12_B12_C1GAG	CAG	12GAGCAG	20GS-PL-5-1	2020.7.4	Gansu	Pingliang	105.7242	35.4556	1591.55	MG1	GSLD
A12_B12_C1GAG	CCA	12GAGCCA	20GS-PL-10-5	2020.7.4	Gansu	Pingliang	105.9169	35.3472	1819.28	MG3	GSLD
A12_B12_C1GAG	CCG	12GAGCCG	20GS-PL-10-4	2020.7.4	Gansu	Pingliang	105.9169	35.3472	1819.28	MG3	GSLD
A12_B12_C1GAG	CCT	12GAGCCT	20GS-PL-10-2	2020.7.4	Gansu	Pingliang	105.9169	35.3472	1819.28	MG2	GSLD
A12_B12_C1GAG	CGA	12GAGCGA	20GS-BY-3-13	2020.7.4	Gansu	Baiyin	104.5900	36.5300	1473	MG4	GSC
A12_B12_C1GAG	CGT	12GAGCGT	20GS-BY-3-10	2020.7.4	Gansu	Baiyin	104.5900	36.5300	1473	MG4	GSC
A12_B12_C1GAG	CTA	12GAGCTA	20GS-PL-10-1	2020.7.4	Gansu	Pingliang	105.9169	35.3472	1819.28	MG3	GSLD
A12_B12_C1GAG	CTC	12GAGCTC	20GS-LZ-1-13	2020.7.4	Gansu	Lanzhou	103.9400	36.3800	1780	MG1	GSC
A12_B12_C1GAG	CTG	12GAGCTG	20GS-LZ-1-14	2020.7.4	Gansu	Lanzhou	103.9400	36.3800	1780	MG1	GSC
A12_B12_C1GAG	CTT	12GAGCTT	20GS-LZ-1-12	2020.7.4	Gansu	Lanzhou	103.9400	36.3800	1780	MG2	GSC
A12_B12_C1GAT	CCC	12GATCCC	20GS-BY-2-1	2020.7.4	Gansu	Baiyin	105.6000	35.4600	2183	MG2	GSC
A12_B12_C1GAT	CCG	12GATCCG	20GS-BY-2-2	2020.7.4	Gansu	Baiyin	105.6000	35.4600	2183	MG1	GSC
A12_B12_C1GAT	CCT	12GATCCT	20GS-BY-4-10	2020.7.4	Gansu	Baiyin	104.5100	36.6700	1537	MG2	GSC
A12_B12_C1GAT	CTA	12GATCTA	20GS-BY-4-9	2020.7.4	Gansu	Baiyin	104.5100	36.6700	1537	MG2	GSC
A12_B12_C1GAT	CTC	12GATCTC	20GS-BY-4-7	2020.7.4	Gansu	Baiyin	104.5100	36.6700	1537	MG2	GSC
A12_B12_C1GAT	CTG	12GATCTG	20GS-BY-4-8	2020.7.4	Gansu	Baiyin	104.5100	36.6700	1537	MG2	GSC
A12_B12_C1GAT	CTT	12GATCTT	20GS-BY-4-6	2020.7.4	Gansu	Baiyin	104.5100	36.6700	1537	MG2	GSC
A12_B12_C1GCA	CAC	12GCACAC	20GS-PL-7-5	2020.7.4	Gansu	Pingliang	106.4500	35.2000	1360	MG2	GSLD
A12_B12_C1GCA	CAG	12GCACAG	20GS-PL-7-6	2020.7.4	Gansu	Pingliang	106.4500	35.2000	1360	MG4	GSLD
A12_B12_C1GCA	CCG	12GCACCG	20GS-QY-1-3	2020.7.4	Gansu	Qingyang	107.9714	35.7192	1250	MG4	GSLD
A12_B12_C1GCA	CGA	12GCACGA	20GS-PL-7-3	2020.7.4	Gansu	Pingliang	106.4500	35.2000	1360	MG4	GSLD
A12_B12_C1GCA	CGC	12GCACGC	20GS-PL-7-1	2020.7.4	Gansu	Pingliang	106.4500	35.2000	1360	MG5	GSLD

A12_B12_C1GCA	CGT	12GCACGT	20GS-BY-5-5	2020.7.4	Gansu	Baiyin	104.6400	36.6100	1467	MG2	GSC
A12_B12_C1GCA	CTA	12GCACTA	20GS-PL-4-6	2020.7.4	Gansu	Pingliang	106.0728	35.4933	1996	MG2	GSLD
A12_B12_C1GCA	CTG	12GCACTG	20GS-PL-4-5	2020.7.4	Gansu	Pingliang	106.0728	35.4933	1996	MG2	GSLD
A12_B12_C1GCA	CTT	12GCACTT	20GS-PL-4-3	2020.7.4	Gansu	Pingliang	106.0728	35.4933	1996	MG2	GSLD
A12_B12_C1GCC	CAA	12GCCCAA	20GS-LZ-1-1	2020.7.4	Gansu	Lanzhou	103.9400	36.3800	1780	MG3	GSC
A12_B12_C1GCC	CAG	12GCCCAG	20GS-BY-1-10	2020.7.4	Gansu	Baiyin	105.3000	35.6600	1850	MG3	GSC
A12_B12_C1GCC	CCC	12GCCCCC	20GS-PL-8-4	2020.7.4	Gansu	Pingliang	106.3833	35.3000	1480	MG4	GSLD
A12_B12_C1GCC	CCG	12GCCCCG	20GS-PL-8-5	2020.7.4	Gansu	Pingliang	106.3833	35.3000	1480	MG1	GSLD
A12_B12_C1GCC	CCT	12GCCCCT	20GS-PL-8-3	2020.7.4	Gansu	Pingliang	106.3833	35.3000	1480	MG3	GSLD
A12_B12_C1GCC	CGC	12GCCCGC	20GS-BY-1-4	2020.7.4	Gansu	Baiyin	105.3000	35.6600	1850	MG2	GSC
A12_B12_C1GCC	CTA	12GCCCTA	20GS-PL-8-2	2020.7.4	Gansu	Pingliang	106.3833	35.3000	1480	MG3	GSLD
A12_B12_C1GCC	CTG	12GCCCTG	20GS-PL-8-1	2020.7.4	Gansu	Pingliang	106.3833	35.3000	1480	MG3	GSLD
A12_B12_C1GCC	CTT	12GCCCTT	20GS-LXZ-7-5	2020.7.9	Gansu	Linxiashou	103.5300	35.3800	2280	MG2	GSC
A12_B12_C1GCG	CAT	12GCGCAT	20GS-PL-1-6	2020.7.4	Gansu	Pingliang	107.0767	35.3786	1430	MG2	GSLD
A12_B12_C1GCG	CGA	12GCGCGA	20GS-PL-1-5	2020.7.4	Gansu	Pingliang	107.0767	35.3786	1430	MG2	GSLD
A12_B12_C1GCG	CGC	12GCGCGC	20GS-PL-1-3	2020.7.4	Gansu	Pingliang	107.0767	35.3786	1430	MG4	GSLD
A12_B12_C1GCG	CGT	12GCGCGT	20GS-PL-1-2	2020.7.4	Gansu	Pingliang	107.0767	35.3786	1430	MG3	GSLD
A12_B12_C1GCG	CTT	12GCGCTT	20GS-LZ-5-2	2020.7.4	Gansu	Lanzhou	104.1300	35.8000	2110	MG2	GSC
A12_B12_C1GCT	CAA	12GCTCAA	20GS-LXZ-2-5	2020.7.9	Gansu	Linxiashou	103.3900	35.4000	2180	MG4	GSC
A12_B12_C1GCT	CAC	12GCTCAC	20GS-LXZ-2-3	2020.7.9	Gansu	Linxiashou	103.3900	35.4000	2180	MG4	GSC
A12_B12_C1GCT	CCA	12GCTCCA	20GS-DX-2-8	2020.7.4	Gansu	Dingxi	104.8800	35.6100	2033	MG3	GSC
A12_B12_C1GCT	CCC	12GCTCCC	20GS-DX-2-6	2020.7.4	Gansu	Dingxi	104.8800	35.6100	2033	MG2	GSC
A12_B12_C1GCT	CCG	12GCTCCG	20GS-DX-2-7	2020.7.4	Gansu	Dingxi	104.8800	35.6100	2033	MG2	GSC
A12_B12_C1GCT	CCT	12GCTCCT	20GS-DX-2-5	2020.7.4	Gansu	Dingxi	104.8800	35.6100	2033	MG2	GSC
A12_B12_C1GCT	CGC	12GCTCGC	20GS-LZ-1-3	2020.7.4	Gansu	Lanzhou	103.9400	36.3800	1780	MG5	GSC
A12_B12_C1GCT	CGG	12GCTCGG	20GS-LZ-1-4	2020.7.4	Gansu	Lanzhou	103.9400	36.3800	1780	MG3	GSC
A12_B12_C1GCT	CGT	12GCTCGT	20GS-LZ-1-2	2020.7.4	Gansu	Lanzhou	103.9400	36.3800	1780	MG2	GSC
A12_B12_C1GCT	CTA	12GCTCTA	20GS-DX-2-4	2020.7.4	Gansu	Dingxi	104.8800	35.6100	2033	MG1	GSC
A12_B12_C1GGA	CAG	12GGACAG	20GS-LZ-2-1	2020.7.4	Gansu	Lanzhou	103.6500	36.6500	2090.4	MG1	GSC
A12_B12_C1GGA	CCA	12GGACCA	20GS-PL-6-1	2020.7.4	Gansu	Pingliang	105.8094	35.3575	1539.35	MG3	GSLD
A12_B12_C1GGA	CCC	12GGACCC	20GS-BY-2-9	2020.7.4	Gansu	Baiyin	105.6000	35.4600	2183	MG2	GSC
A12_B12_C1GGA	CCG	12GGACCG	20GS-BY-2-10	2020.7.4	Gansu	Baiyin	105.6000	35.4600	2183	MG1	GSC
A12_B12_C1GGA	CCT	12GGACCT	20GS-BY-2-8	2020.7.4	Gansu	Baiyin	105.6000	35.4600	2183	MG1	GSC
A12_B12_C1GGA	CGA	12GGACGA	20GS-PL-9-4	2020.6.7	Gansu	Pingliang	106.0897	35.2608	1690	MG2	GSLD
A12_B12_C1GGA	CGG	12GGACGG	20GS-PL-9-3	2020.6.7	Gansu	Pingliang	106.0897	35.2608	1690	MG1	GSLD
A12_B12_C1GGA	CGT	12GGACGT	20GS-QY-2-22	2020.7.4	Gansu	Qingyang	107.8869	35.6717	1230	MG2	GSLD
A12_B12_C1GGC	CAC	12GGCCAC	20GS-DX-3-7	2020.7.4	Gansu	Dingxi	105.0000	35.3700	2333	MG2	GSC
A12_B12_C1GGC	CAG	12GGCCAG	20GS-DX-3-8	2020.7.4	Gansu	Dingxi	105.0000	35.3700	2333	MG3	GSC

A12_B12_C1GGC	CCA	12GGCCCA	20GS-LXZ-5-4	2020.7.9	Gansu	Linxiashou	103.4800	35.3400	2403	MG2	GSC
A12_B12_C1GGC	CCC	12GGCCCC	20GS-LXZ-5-1	2020.7.9	Gansu	Linxiashou	103.4800	35.3400	2403	MG2	GSC
A12_B12_C1GGC	CCG	12GGCCCG	20GS-LXZ-5-3	2020.7.9	Gansu	Linxiashou	103.4800	35.3400	2403	MG2	GSC
A12_B12_C1GGC	CCT	12GGCCCT	20GS-LXZ-1-6	2020.7.9	Gansu	Linxiashou	103.5700	35.4300	2278	MG2	GSC
A12_B12_C1GGC	CGA	12GGCCGA	20GS-DX-3-4	2020.7.4	Gansu	Dingxi	105.0000	35.3700	2333	MG2	GSC
A12_B12_C1GGC	CGC	12GGCCGC	20GS-DX-3-2	2020.7.4	Gansu	Dingxi	105.0000	35.3700	2333	MG2	GSC
A12_B12_C1GGC	CGG	12GGCCGG	20GS-DX-3-3	2020.7.4	Gansu	Dingxi	105.0000	35.3700	2333	MG2	GSC
A12_B12_C1GGC	CGT	12GGCCGT	20GS-DX-3-1	2020.7.4	Gansu	Dingxi	105.0000	35.3700	2333	MG2	GSC
A12_B12_C1GGC	CTC	12GGCCTC	20GS-LXZ-1-2	2020.7.9	Gansu	Linxiashou	103.5700	35.4300	2278	MG2	GSC
A12_B12_C1GGC	CTG	12GGCCTG	20GS-LXZ-1-3	2020.7.9	Gansu	Linxiashou	103.5700	35.4300	2278	MG2	GSC
A12_B12_C1GGC	CTT	12GGCCTT	20GS-LXZ-1-1	2020.7.9	Gansu	Linxiashou	103.5700	35.4300	2278	MG2	GSC
A12_B12_C1GGG	CAA	12GGGCAA	20GS-LXZ-3-6	2020.7.9	Gansu	Linxiashou	103.3900	35.3800	2210	MG4	GSC
A12_B12_C1GGG	CAC	12GGGCAC	20GS-LXZ-3-4	2020.7.9	Gansu	Linxiashou	103.3900	35.3800	2210	MG4	GSC
A12_B12_C1GGG	CAG	12GGGCAG	20GS-LXZ-3-5	2020.7.9	Gansu	Linxiashou	103.3900	35.3800	2210	MG4	GSC
A12_B12_C1GGG	CAT	12GGGCAT	20GS-LXZ-3-3	2020.7.9	Gansu	Linxiashou	103.3900	35.3800	2210	MG4	GSC
A12_B12_C1GGG	CCA	12GGGCCA	20GS-PL-2-3	2020.7.4	Gansu	Pingliang	106.8783	35.2097	1820	MG3	GSLD
A12_B12_C1GGG	CCC	12GGGCCC	20GS-PL-2-1	2020.7.4	Gansu	Pingliang	106.8783	35.2097	1820	MG3	GSLD
A12_B12_C1GGG	CCG	12GGGCCG	20GS-PL-2-2	2020.7.4	Gansu	Pingliang	106.8783	35.2097	1820	MG4	GSLD
A12_B12_C1GGG	CCT	12GGGCCT	20GS-LZ-4-2	2020.7.4	Gansu	Lanzhou	104.2600	35.8400	1820	MG1	GSC
A12_B12_C1GGG	CGA	12GGGCGA	20GS-LXZ-3-2	2020.7.9	Gansu	Linxiashou	103.3900	35.3800	2210	MG6	GSC
A12_B12_C1GGG	CGC	12GGGCGC	20GS-LZ-2-4	2020.7.4	Gansu	Lanzhou	103.6500	36.6500	2090.4	MG1	GSC
A12_B12_C1GGG	CGT	12GGGCGT	20GS-LZ-2-3	2020.7.4	Gansu	Lanzhou	103.6500	36.6500	2090.4	MG4	GSC
A12_B12_C1GGG	CTA	12GGGCTA	20GS-LZ-4-1	2020.7.4	Gansu	Lanzhou	104.2600	35.8400	1820	MG2	GSC
A12_B12_C1GGG	CTC	12GGGCTC	20GS-PL-6-3	2020.7.4	Gansu	Pingliang	105.8094	35.3575	1539.35	MG6	GSLD
A12_B12_C1GGG	CTT	12GGGCTT	20GS-PL-6-2	2020.7.4	Gansu	Pingliang	105.8094	35.3575	1539.35	MG6	GSLD
A12_B12_C1GGT	CCA	12GGTCCA	20GS-PL-4-2	2020.7.4	Gansu	Pingliang	106.0728	35.4933	1996	MG1	GSLD
A12_B12_C1GGT	CCC	12GGTCCC	20GS-LXZ-5-10	2020.7.9	Gansu	Linxiashou	103.4800	35.3400	2403	MG2	GSC
A12_B12_C1GGT	CCG	12GGTCCG	20GS-PL-4-1	2020.7.4	Gansu	Pingliang	106.0728	35.4933	1996	MG2	GSLD
A12_B12_C1GGT	CCT	12GGTCCT	20GS-LXZ-5-9	2020.7.9	Gansu	Linxiashou	103.4800	35.3400	2403	MG2	GSC
A12_B12_C1GGT	CGG	12GGTCGG	20GS-DX-3-13	2020.7.4	Gansu	Dingxi	105.0000	35.3700	2333	MG2	GSC
A12_B12_C1GGT	CGT	12GGTCGT	20GS-DX-3-10	2020.7.4	Gansu	Dingxi	105.0000	35.3700	2333	MG2	GSC
A12_B12_C1GGT	CTA	12GGTCTA	20GS-LXZ-5-8	2020.7.9	Gansu	Linxiashou	103.4800	35.3400	2403	MG2	GSC
A12_B12_C1GGT	CTG	12GGTCTG	20GS-LXZ-5-7	2020.7.9	Gansu	Linxiashou	103.4800	35.3400	2403	MG2	GSC
A12_B12_C1GTA	CAA	12GTACAA	20GS-DX-1-5	2020.7.4	Gansu	Dingxi	104.8600	35.6200	2030.5	MG3	GSC
A12_B12_C1GTA	CAG	12GTACAG	20GS-DX-1-4	2020.7.4	Gansu	Dingxi	104.8600	35.6200	2030.5	MG3	GSC
A12_B12_C1GTA	CAT	12GTACAT	20GS-DX-1-2	2020.7.4	Gansu	Dingxi	104.8600	35.6200	2030.5	MG3	GSC
A12_B12_C1GTA	CCA	12GTACCA	20HB-YC-1-5	2020.1.17	Hubei	Yicang	111.9256	30.8769		MG2	HB
A12_B12_C1GTA	CCG	12GTACCG	20HB-YC-1-4	2020.1.17	Hubei	Yicang	111.9256	30.8769		MG2	HB

A12_B12_C1GTA	CGA	12GTACGA	20GS-DX-1-1	2020.7.4	Gansu	Dingxi	104.8600	35.6200	2030.5	MG5	GSC
A12_B12_C1GTA	CGC	12GTACGC	20GS-DX-2-11	2020.7.4	Gansu	Dingxi	104.8800	35.6100	2033	MG1	GSC
A12_B12_C1GTA	CGG	12GTACGG	20GS-DX-2-12	2020.7.4	Gansu	Dingxi	104.8800	35.6100	2033	MG1	GSC
A12_B12_C1GTA	CGT	12GTACGT	20GS-DX-2-9	2020.7.4	Gansu	Dingxi	104.8800	35.6100	2033	MG2	GSC
A12_B12_C1GTA	CTA	12GTACTA	20HB-YC-1-1	2020.1.17	Hubei	Yicang	111.9256	30.8769		MG2	HB
A12_B12_C1GTA	CTC	12GTACTC	20GS-LXZ-6-9	2020.7.9	Gansu	Linxiashou	103.5700	35.4100	2310.6	MG2	GSC
A12_B12_C1GTA	CTG	12GTACTG	20GS-LXZ-6-10	2020.7.9	Gansu	Linxiashou	103.5700	35.4100	2310.6	MG2	GSC
A12_B12_C1GTC	CAA	12GTCCAA	20GS-PL-3-1	2020.6.5	Gansu	Pingliang	106.5539	35.2006	1570	MG2	GSLD
A12_B12_C1GTC	CAC	12GTCCAC	20GS-LZ-3-8	2020.7.4	Gansu	Lanzhou	104.1300	35.8300	1969	MG2	GSC
A12_B12_C1GTC	CAG	12GTCCAG	20GS-LZ-3-9	2020.7.4	Gansu	Lanzhou	104.1300	35.8300	1969	MG1	GSC
A12_B12_C1GTC	CAT	12GTCCAT	20GS-LZ-3-7	2020.7.4	Gansu	Lanzhou	104.1300	35.8300	1969	MG2	GSC
A12_B12_C1GTC	CCC	12GTCCCC	20HB-JM-1-8	2020.1.20	Hubei	Jingmen	112.5000	31.9833	17	MG2	HB
A12_B12_C1GTC	CCT	12GTCCCT	20HB-JM-1-7	2020.1.20	Hubei	Jingmen	112.5000	31.9833	17	MG2	HB
A12_B12_C1GTC	CGA	12GTCCGA	20GS-LZ-3-6	2020.7.4	Gansu	Lanzhou	104.1300	35.8300	1969	MG2	GSC
A12_B12_C1GTC	CGT	12GTCCGT	20GS-LZ-3-3	2020.7.4	Gansu	Lanzhou	104.1300	35.8300	1969	MG2	GSC
A12_B12_C1GTC	CTA	12GTCCTA	20HB-JM-1-5	2020.1.20	Hubei	Jingmen	112.5000	31.9833	17	MG2	HB
A12_B12_C1GTC	CTC	12GTCCTC	20HB-YC-1-15	2020.1.17	Hubei	Yicang	111.9256	30.8769		MG2	HB
A12_B12_C1GTC	CTG	12GTCCTG	20HB-JM-1-3	2020.1.20	Hubei	Jingmen	112.5000	31.9833	17	MG2	HB
A12_B12_C1GTG	CAA	12GTGCAA	20GS-LZ-3-2	2020.7.4	Gansu	Lanzhou	104.1300	35.8300	1969	MG1	GSC
A12_B12_C1GTG	CAC	12GTGCAC	20GS-DX-4-5	2020.7.4	Gansu	Dingxi	105.1000	35.3500	2277	MG2	GSC
A12_B12_C1GTG	CAG	12GTGCAG	20GS-LZ-3-1	2020.7.4	Gansu	Lanzhou	104.1300	35.8300	1969	MG5	GSC
A12_B12_C1GTG	CAT	12GTGCAT	20GS-DX-4-4	2020.7.4	Gansu	Dingxi	105.1000	35.3500	2277	MG1	GSC
A12_B12_C1GTG	CCA	12GTGCCA	20HB-YC-1-13	2020.1.17	Hubei	Yicang	111.9256	30.8769		MG3	HB
A12_B12_C1GTG	CCC	12GTGCCC	20HB-YC-1-11	2020.1.17	Hubei	Yicang	111.9256	30.8769		MG2	HB
A12_B12_C1GTG	CCT	12GTGCCT	20HB-YC-1-10	2020.1.17	Hubei	Yicang	111.9256	30.8769		MG2	HB
A12_B12_C1GTG	CGA	12GTGCGA	20GS-DX-4-3	2020.7.4	Gansu	Dingxi	105.1000	35.3500	2277	MG1	GSC
A12_B12_C1GTG	CGC	12GTGCGC	20GS-DX-4-1	2020.7.4	Gansu	Dingxi	105.1000	35.3500	2277	MG4	GSC
A12_B12_C1GTG	CGT	12GTGCGT	20GS-DX-1-8	2020.7.4	Gansu	Dingxi	104.8600	35.6200	2030.5	MG5	GSC
A12_B12_C1GTG	CTA	12GTGCTA	20HB-YC-1-9	2020.1.17	Hubei	Yicang	111.9256	30.8769		MG1	HB
A12_B12_C1GTG	CTC	12GTGCTC	20HB-YC-1-7	2020.1.17	Hubei	Yicang	111.9256	30.8769		MG1	HB
A12_B12_C1GTG	CTT	12GTGCTT	20HB-YC-1-6	2020.1.17	Hubei	Yicang	111.9256	30.8769		MG1	HB
A12_B12_C1GTT	CAC	12GTTCAC	20GS-LXZ-6-5	2020.7.9	Gansu	Linxiashou	103.5700	35.4100	2310.6	MG2	GSC
A12_B12_C1GTT	CAG	12GTTCAG	20GS-LXZ-6-6	2020.7.9	Gansu	Linxiashou	103.5700	35.4100	2310.6	MG2	GSC
A12_B12_C1GTT	CCT	12GTTCCT	20HB-JZ-1-6	2020.1.19	Hubei	Jingzhou	111.8775	30.1088	25	MG2	HB
A12_B12_C1GTT	CGG	12GTTCCG	20GS-LXZ-6-2	2020.7.9	Gansu	Linxiashou	103.5700	35.4100	2310.6	MG2	GSC
A12_B12_C1GTT	CGT	12GTTCCG	20GS-PL-3-2	2020.6.5	Gansu	Pingliang	106.5539	35.2006	1570	MG2	GSLD
A12_B12_C1GTT	CTC	12GTTCTC	20HB-JZ-1-3	2020.1.19	Hubei	Jingzhou	111.8775	30.1088	25	MG2	HB
A12_B12_C1GTT	CTG	12GTTCTG	20HB-JZ-1-4	2020.1.19	Hubei	Jingzhou	111.8775	30.1088	25	MG2	HB

A12_B12_C1GTT	CTT	12GTTCTT	20HB-JZ-1-2	2020.1.19	Hubei	Jingzhou	111.8775	30.1088	25	MG2	HB
A13_B13_C1GAA	CCA	13GAACCA	22YN-QJ-2-5	2022.3.27	Yunnan	Qujing	104.2855	25.6547	1860	MG1	YG
A13_B13_C1GAA	CCC	13GAACCC	22YN-QJ-2-3	2022.3.27	Yunnan	Qujing	104.2855	25.6547	1860	MG1	YG
A13_B13_C1GAA	CCT	13GAACCT	22YN-QJ-2-2	2022.3.27	Yunnan	Qujing	104.2855	25.6547	1860	MG1	YG
A13_B13_C1GAA	CGA	13GAACGA	22YN-ZT-2-2	2022.3.10	Yunnan	Zhaotong	104.1730	27.5168	1279	MG7	YG
A13_B13_C1GAA	CGC	13GAACGC	22YN-QJ-10-2	2022.3.15	Yunnan	Qujing	103.8874	24.8652	2067	MG7	YG
A13_B13_C1GAA	CGG	13GAACGG	22YN-QJ-10-3	2022.3.15	Yunnan	Qujing	103.8874	24.8652	2067	MG7	YG
A13_B13_C1GAA	CGT	13GAACGT	22YN-QJ-10-1	2022.3.15	Yunnan	Qujing	103.8874	24.8652	2067	MG7	YG
A13_B13_C1GAA	CTA	13GAACTA	22YN-QJ-2-1	2022.3.27	Yunnan	Qujing	104.2855	25.6547	1860	MG1	YG
A13_B13_C1GAA	CTC	13GAACTC	22YN-CX-2-6	2022.3.26	Yunnan	Chuxiongzhou	101.0979	25.2691	1915	MG3	YG
A13_B13_C1GAA	CTG	13GAACTG	22YN-CX-2-7	2022.3.26	Yunnan	Chuxiongzhou	101.0979	25.2691	1915	MG3	YG
A13_B13_C1GAA	CTT	13GAACTT	22YN-CX-2-4	2022.3.26	Yunnan	Chuxiongzhou	101.0979	25.2691	1915	MG3	YG
A13_B13_C1GAC	CCA	13GACCCA	22YN-YX-3-7	2022.3.21	Yunnan	Yuxi	102.4631	24.1642	1491	MG7	YG
A13_B13_C1GAC	CCC	13GACCCC	22YN-YX-3-5	2022.3.21	Yunnan	Yuxi	102.4631	24.1642	1491	MG7	YG
A13_B13_C1GAC	CCG	13GACCCG	22YN-YX-3-6	2022.3.21	Yunnan	Yuxi	102.4631	24.1642	1491	MG7	YG
A13_B13_C1GAC	CCT	13GACCCT	22YN-YX-3-4	2022.3.21	Yunnan	Yuxi	102.4631	24.1642	1491	MG7	YG
A13_B13_C1GAC	CGA	13GACCGA	22YN-YX-7-7	2022.3.22	Yunnan	Yuxi	102.1280	23.3465	1652	MG5	YG
A13_B13_C1GAC	CGC	13GACCGC	22YN-YX-7-5	2022.3.22	Yunnan	Yuxi	102.1280	23.3465	1652	MG7	YG
A13_B13_C1GAC	CGG	13GACCGG	22YN-YX-7-6	2022.3.22	Yunnan	Yuxi	102.1280	23.3465	1652	MG7	YG
A13_B13_C1GAC	CGT	13GACCGT	22YN-YX-7-4	2022.3.22	Yunnan	Yuxi	102.1280	23.3465	1652	MG7	YG
A13_B13_C1GAC	CTA	13GACCTA	22YN-YX-3-3	2022.3.21	Yunnan	Yuxi	102.4631	24.1642	1491	MG7	YG
A13_B13_C1GAC	CTC	13GACCTC	22YN-YX-3-1	2022.3.21	Yunnan	Yuxi	102.4631	24.1642	1491	MG7	YG
A13_B13_C1GAC	CTG	13GACCTG	22YN-YX-3-2	2022.3.21	Yunnan	Yuxi	102.4631	24.1642	1491	MG7	YG
A13_B13_C1GAC	CTT	13GACCTT	22YN-YX-1-5	2022.3.20	Yunnan	Yuxi	102.9093	24.4573	1757	MG2	YG
A13_B13_C1GAG	CAA	13GAGCAA	22YN-YX-7-3	2022.3.22	Yunnan	Yuxi	102.1280	23.3465	1652	MG7	YG
A13_B13_C1GAG	CAC	13GAGCAC	22YN-YX-7-1	2022.3.22	Yunnan	Yuxi	102.1280	23.3465	1652	MG7	YG
A13_B13_C1GAG	CCA	13GAGCCA	22YN-YX-1-4	2022.3.20	Yunnan	Yuxi	102.9093	24.4573	1757	MG1	YG
A13_B13_C1GAG	CCC	13GAGCCC	22YN-YX-1-2	2022.3.20	Yunnan	Yuxi	102.9093	24.4573	1757	MG1	YG
A13_B13_C1GAG	CCG	13GAGCCG	22YN-YX-1-3	2022.3.20	Yunnan	Yuxi	102.9093	24.4573	1757	MG1	YG
A13_B13_C1GAG	CCT	13GAGCCT	22YN-YX-1-1	2022.3.20	Yunnan	Yuxi	102.9093	24.4573	1757	MG1	YG
A13_B13_C1GAG	CGC	13GAGCGC	22YN-ZT-2-11	2022.3.10	Yunnan	Zhaotong	104.1730	27.5168	1279	MG7	YG
A13_B13_C1GAG	CGG	13GAGCGG	22YN-ZT-2-15	2022.3.10	Yunnan	Zhaotong	104.1730	27.5168	1279	MG7	YG
A13_B13_C1GAG	CTA	13GAGCTA	22YN-QJ-7-2	2022.3.15	Yunnan	Qujing	103.8643	24.7091	1827	MG1	YG
A13_B13_C1GAG	CTC	13GAGCTC	22YN-QJ-2-7	2022.3.27	Yunnan	Qujing	104.2855	25.6547	1860	MG1	YG
A13_B13_C1GAG	CTT	13GAGCTT	22YN-QJ-2-6	2022.3.27	Yunnan	Qujing	104.2855	25.6547	1860	MG7	YG
A13_B13_C1GAT	CAT	13GATCAT	22YN-QJ-3-8	2022.3.14	Yunnan	Qujing	103.5299	25.9590	1870	MG7	YG
A13_B13_C1GAT	CCA	13GATCCA	22YN-CX-3-5	2022.3.26	Yunnan	Chuxiongzhou	101.6118	24.7467	1770	MG1	YG
A13_B13_C1GAT	CCG	13GATCCG	22YN-CX-3-4	2022.3.26	Yunnan	Chuxiongzhou	101.6118	24.7467	1770	MG6	YG

A13_B13_C1GAT	CTA	13GATCTA	22YN-CX-3-1	2022.3.26	Yunnan	Chuxiongzhou	101.6118	24.7467	1770	MG7	YG
A13_B13_C1GAT	CTC	13GATCTC	22YN-YX-3-9	2022.3.21	Yunnan	Yuxi	102.4631	24.1642	1491	MG7	YG
A13_B13_C1GAT	CTG	13GATCTG	22YN-YX-3-10	2022.3.21	Yunnan	Yuxi	102.4631	24.1642	1491	MG7	YG
A13_B13_C1GAT	CTT	13GATCTT	22YN-YX-3-8	2022.3.21	Yunnan	Yuxi	102.4631	24.1642	1491	MG7	YG
A13_B13_C1GCA	CCA	13GCACCA	22YN-QJ-5-4	2022.3.19	Yunnan	Qujing	104.3583	24.9137	1415	MG1	YG
A13_B13_C1GCA	CCC	13GCACCC	22YN-QJ-5-2	2022.3.19	Yunnan	Qujing	104.3583	24.9137	1415	MG7	YG
A13_B13_C1GCA	CCG	13GCACCG	22YN-QJ-5-3	2022.3.19	Yunnan	Qujing	104.3583	24.9137	1415	MG7	YG
A13_B13_C1GCA	CCT	13GCACCT	22YN-QJ-5-1	2022.3.19	Yunnan	Qujing	104.3583	24.9137	1415	MG7	YG
A13_B13_C1GCA	CGA	13GCACGA	22YN-QJ-6-1	2022.3.15	Yunnan	Qujing	104.3373	24.8746	1477	MG1	YG
A13_B13_C1GCA	CGC	13GCACGC	22YN-CX-1-19	2022.3.26	Yunnan	Chuxiongzhou	101.0599	25.3076	2262	MG5	YG
A13_B13_C1GCA	CGG	13GCACGG	22YN-CX-1-20	2022.3.26	Yunnan	Chuxiongzhou	101.0599	25.3076	2262	MG5	YG
A13_B13_C1GCA	CGT	13GCACGT	22YN-CX-1-18	2022.3.26	Yunnan	Chuxiongzhou	101.0599	25.3076	2262	MG2	YG
A13_B13_C1GCC	CAA	13GCCCAA	22YN-YX-4-4	2022.3.20	Yunnan	Yuxi	102.7185	24.3312	1740.4	MG2	YG
A13_B13_C1GCC	CAC	13GCCCAC	22YN-YX-4-2	2022.3.20	Yunnan	Yuxi	102.7185	24.3312	1740.4	MG6	YG
A13_B13_C1GCC	CAG	13GCCCAG	22YN-YX-4-3	2022.3.20	Yunnan	Yuxi	102.7185	24.3312	1740.4	MG2	YG
A13_B13_C1GCC	CAT	13GCCCAT	22YN-YX-4-1	2022.3.20	Yunnan	Yuxi	102.7185	24.3312	1740.4	MG2	YG
A13_B13_C1GCC	CCA	13GCCCCA	22YN-PE-1-6	2022.3.23	Yunnan	Puer	100.7492	24.6524	1321	MG1	YG
A13_B13_C1GCC	CGG	13GCCCGG	22YN-ZT-6-8	2022.3.9	Yunnan	Zhaotong	104.9841	27.4045	1454	MG7	YG
A13_B13_C1GCC	CGT	13GCCCGT	22YN-ZT-6-4	2022.3.9	Yunnan	Zhaotong	104.9841	27.4045	1454	MG3	YG
A13_B13_C1GCC	CTC	13GCCCTC	22YN-QJ-1-5	2022.3.27	Yunnan	Qujing	104.2855	25.6547	1860	MG1	YG
A13_B13_C1GCC	CTT	13GCCCTT	22YN-QJ-1-4	2022.3.27	Yunnan	Qujing	104.2855	25.6547	1860	MG1	YG
A13_B13_C1GCG	CCA	13GCGCCA	22YN-QJ-1-3	2022.3.27	Yunnan	Qujing	104.2855	25.6547	1860	MG1	YG
A13_B13_C1GCG	CCG	13GCGCCG	22YN-QJ-1-2	2022.3.27	Yunnan	Qujing	104.2855	25.6547	1860	MG1	YG
A13_B13_C1GCT	CCA	13GCTCCA	20XZ-SN-1-2	2020.7.30	Xizang	Shannan	92.0200	29.2700	3551.16	MG7	XZ
A13_B13_C1GCT	CCC	13GCTCCC	22YN-PE-1-12	2022.3.23	Yunnan	Puer	100.7492	24.6524	1321	MG1	YG
A13_B13_C1GCT	CCG	13GCTCCG	20XZ-SN-1-1	2020.7.30	Xizang	Shannan	92.0200	29.2700	3551.16	MG7	XZ
A13_B13_C1GCT	CCT	13GCTCCT	22YN-PE-1-11	2022.3.23	Yunnan	Puer	100.7492	24.6524	1321	MG3	YG
A13_B13_C1GCT	CGA	13GCTCGA	22YN-YX-4-8	2022.3.20	Yunnan	Yuxi	102.7185	24.3312	1740.4	MG1	YG
A13_B13_C1GCT	CGG	13GCTCGG	22YN-YX-4-7	2022.3.20	Yunnan	Yuxi	102.7185	24.3312	1740.4	MG1	YG
A13_B13_C1GCT	CTC	13GCTCTC	22YN-PE-1-8	2022.3.23	Yunnan	Puer	100.7492	24.6524	1321	MG1	YG
A13_B13_C1GCT	CTT	13GCTCTT	22YN-PE-1-7	2022.3.23	Yunnan	Puer	100.7492	24.6524	1321	MG1	YG
A13_B13_C1GGA	CCA	13GGACCA	22YN-CX-3-13	2022.3.26	Yunnan	Chuxiongzhou	101.6118	24.7467	1770	MG1	YG
A13_B13_C1GGA	CCC	13GGACCC	22YN-CX-3-11	2022.3.26	Yunnan	Chuxiongzhou	101.6118	24.7467	1770	MG3	YG
A13_B13_C1GGA	CCT	13GGACCT	22YN-CX-3-10	2022.3.26	Yunnan	Chuxiongzhou	101.6118	24.7467	1770	MG1	YG
A13_B13_C1GGA	CGA	13GGACGA	22YN-LJ-1-4	2022.3.25	Yunnan	Lijiang	100.0783	27.0576	1818	MG7	YG
A13_B13_C1GGA	CGC	13GGACGC	22YN-LJ-1-2	2022.3.25	Yunnan	Lijiang	100.0783	27.0576	1818	MG7	YG
A13_B13_C1GGA	CGG	13GGACGG	22YN-LJ-1-3	2022.3.25	Yunnan	Lijiang	100.0783	27.0576	1818	MG7	YG
A13_B13_C1GGA	CTA	13GGACTA	22YN-CX-3-9	2022.3.26	Yunnan	Chuxiongzhou	101.6118	24.7467	1770	MG7	YG

A13_B13_C1GGA	CTC	13GGACTC	22YN-CX-3-7	2022.3.26	Yunnan	Chuxiongzhou	101.6118	24.7467	1770	MG7	YG
A13_B13_C1GGA	CTT	13GGACTT	22YN-CX-3-6	2022.3.26	Yunnan	Chuxiongzhou	101.6118	24.7467	1770	MG1	YG
A13_B13_C1GGC	CAG	13GGCCAG	22YN-CX-1-3	2022.3.26	Yunnan	Chuxiongzhou	101.0599	25.3076	2262	MG3	YG
A13_B13_C1GGC	CCA	13GGCCCA	22YN-ZT-7-5	2022.3.29	Yunnan	Zhaotong	104.8635	27.3446	1413	MG1	YG
A13_B13_C1GGC	CCT	13GGCCCT	22YN-ZT-7-2	2022.3.29	Yunnan	Zhaotong	104.8635	27.3446	1413	MG1	YG
A13_B13_C1GGC	CGA	13GGCCGA	22YN-QJ-9-3	2022.3.15	Yunnan	Qujing	103.8640	24.8035	1902	MG1	YG
A13_B13_C1GGC	CGC	13GGCCGC	22YN-YX-2-5	2022.3.20	Yunnan	Yuxi	102.9221	24.6471	1705	MG1	YG
A13_B13_C1GGC	CGG	13GGCCGG	22YN-QJ-9-1	2022.3.15	Yunnan	Qujing	103.8640	24.8035	1902	MG1	YG
A13_B13_C1GGC	CGT	13GGCCGT	22YN-YX-2-3	2022.3.20	Yunnan	Yuxi	102.9221	24.6471	1705	MG1	YG
A13_B13_C1GGC	CTA	13GGCCTA	22YN-ZT-7-1	2022.3.29	Yunnan	Zhaotong	104.8635	27.3446	1413	MG1	YG
A13_B13_C1GGC	CTC	13GGCCTC	22YN-YX-5-9	2022.3.21	Yunnan	Yuxi	102.7059	24.1743	1770	MG1	YG
A13_B13_C1GGC	CTG	13GGCCTG	22YN-YX-5-10	2022.3.21	Yunnan	Yuxi	102.7059	24.1743	1770	MG1	YG
A13_B13_C1GGC	CTT	13GGCCTT	22YN-YX-5-8	2022.3.21	Yunnan	Yuxi	102.7059	24.1743	1770	MG1	YG
A13_B13_C1GGG	CCA	13GGGCCA	22YN-YX-5-7	2022.3.21	Yunnan	Yuxi	102.7059	24.1743	1770	MG1	YG
A13_B13_C1GGG	CCC	13GGGCCC	22YN-YX-5-5	2022.3.21	Yunnan	Yuxi	102.7059	24.1743	1770	MG1	YG
A13_B13_C1GGG	CCG	13GGGCCG	22YN-YX-5-6	2022.3.21	Yunnan	Yuxi	102.7059	24.1743	1770	MG1	YG
A13_B13_C1GGG	CCT	13GGGCCT	22YN-YX-5-4	2022.3.21	Yunnan	Yuxi	102.7059	24.1743	1770	MG1	YG
A13_B13_C1GGG	CGA	13GGGCGA	22YN-QJ-4-2	2022.3.15	Yunnan	Qujing	104.1195	25.0800	1890	MG7	YG
A13_B13_C1GGG	CGC	13GGGCGC	22YN-LJ-1-14	2022.3.25	Yunnan	Lijiang	100.0783	27.0576	1818	MG7	YG
A13_B13_C1GGG	CGT	13GGGCGT	22YN-LJ-1-12	2022.3.25	Yunnan	Lijiang	100.0783	27.0576	1818	MG7	YG
A13_B13_C1GGG	CTA	13GGGCTA	22YN-YX-5-3	2022.3.21	Yunnan	Yuxi	102.7059	24.1743	1770	MG1	YG
A13_B13_C1GGG	CTC	13GGGCTC	22YN-YX-5-1	2022.3.21	Yunnan	Yuxi	102.7059	24.1743	1770	MG1	YG
A13_B13_C1GGG	CTG	13GGGCTG	22YN-YX-5-2	2022.3.21	Yunnan	Yuxi	102.7059	24.1743	1770	MG1	YG
A13_B13_C1GGG	CTT	13GGGCTT	22YN-CX-3-15	2022.3.26	Yunnan	Chuxiongzhou	101.6118	24.7467	1770	MG1	YG
A13_B13_C1GGT	CGA	13GGTCGA	22YN-CX-1-11	2022.3.26	Yunnan	Chuxiongzhou	101.0599	25.3076	2262	MG2	YG
A13_B13_C1GGT	CGC	13GGTCGC	22YN-CX-1-8	2022.3.26	Yunnan	Chuxiongzhou	101.0599	25.3076	2262	MG1	YG
A13_B13_C1GGT	CGG	13GGTCGG	22YN-CX-1-10	2022.3.26	Yunnan	Chuxiongzhou	101.0599	25.3076	2262	MG6	YG
A13_B13_C1GGT	CGT	13GGTCGT	22YN-CX-1-6	2022.3.26	Yunnan	Chuxiongzhou	101.0599	25.3076	2262	MG3	YG
A13_B13_C1GGT	CTC	13GGTCTC	22YN-YX-6-1	2022.3.22	Yunnan	Yuxi	102.1333	23.3734	1677	MG7	YG
A13_B13_C1GGT	CTG	13GGTCTG	22YN-YX-6-2	2022.3.22	Yunnan	Yuxi	102.1333	23.3734	1677	MG2	YG
A13_B13_C1GTA	CAA	13GTACAA	20XZ-SN-1-11	2020.7.30	Xizang	Shannan	92.0200	29.2700	3551.16	MG2	XZ
A13_B13_C1GTA	CAC	13GTACAC	20XZ-SN-1-9	2020.7.30	Xizang	Shannan	92.0200	29.2700	3551.16	MG2	XZ
A13_B13_C1GTA	CAG	13GTACAG	20XZ-SN-1-10	2020.7.30	Xizang	Shannan	92.0200	29.2700	3551.16	MG2	XZ
A13_B13_C1GTA	CAT	13GTACAT	20XZ-SN-1-8	2020.7.30	Xizang	Shannan	92.0200	29.2700	3551.16	MG2	XZ
A13_B13_C1GTA	CCA	13GTACCA	20XZ-LZ-1-11	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTA	CCC	13GTACCC	20XZ-LZ-1-9	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTA	CCG	13GTACCG	20XZ-LZ-1-10	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTA	CCT	13GTACCT	20XZ-LZ-1-8	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ

A13_B13_C1GTA	CGA	13GTACGA	20XZ-SN-1-6	2020.7.30	Xizang	Shannan	92.0200	29.2700	3551.16	MG7	XZ
A13_B13_C1GTA	CGC	13GTACGC	20XZ-SN-1-4	2020.7.30	Xizang	Shannan	92.0200	29.2700	3551.16	MG2	XZ
A13_B13_C1GTA	CGG	13GTACGG	20XZ-SN-1-5	2020.7.30	Xizang	Shannan	92.0200	29.2700	3551.16	MG2	XZ
A13_B13_C1GTA	CGT	13GTACGT	20XZ-SN-1-3	2020.7.30	Xizang	Shannan	92.0200	29.2700	3551.16	MG7	XZ
A13_B13_C1GTA	CTA	13GTACTA	20XZ-LZ-1-7	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTA	CTC	13GTACTC	20XZ-LZ-1-5	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG2	XZ
A13_B13_C1GTA	CTG	13GTACTG	20XZ-LZ-1-6	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG2	XZ
A13_B13_C1GTA	CTT	13GTACTT	20XZ-LZ-1-4	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTC	CAA	13GTCCAA	20XZ-LS-1-11	2020.7.30	Xizang	Lasha	91.8900	29.8900	3762.1	MG2	XZ
A13_B13_C1GTC	CAC	13GTCCAC	20XZ-LS-1-9	2020.7.30	Xizang	Lasha	91.8900	29.8900	3762.1	MG2	XZ
A13_B13_C1GTC	CAG	13GTCCAG	20XZ-LS-1-10	2020.7.30	Xizang	Lasha	91.8900	29.8900	3762.1	MG2	XZ
A13_B13_C1GTC	CAT	13GTCCAT	20XZ-LS-1-8	2020.7.30	Xizang	Lasha	91.8900	29.8900	3762.1	MG2	XZ
A13_B13_C1GTC	CCA	13GTCCCA	20XZ-LZ-2-10	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTC	CCC	13GTCCCC	20XZ-LZ-2-8	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTC	CCG	13GTCCCG	20XZ-LZ-2-9	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTC	CCT	13GTCCCT	20XZ-LZ-2-7	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTC	CGA	13GTCCGA	20XZ-LS-1-7	2020.7.30	Xizang	Lasha	91.8900	29.8900	3762.1	MG2	XZ
A13_B13_C1GTC	CGC	13GTCCGC	20XZ-LS-1-5	2020.7.30	Xizang	Lasha	91.8900	29.8900	3762.1	MG2	XZ
A13_B13_C1GTC	CGG	13GTCCGG	20XZ-LS-1-6	2020.7.30	Xizang	Lasha	91.8900	29.8900	3762.1	MG2	XZ
A13_B13_C1GTC	CGT	13GTCCGT	20XZ-LS-1-4	2020.7.30	Xizang	Lasha	91.8900	29.8900	3762.1	MG2	XZ
A13_B13_C1GTC	CTA	13GTCCTA	20XZ-LZ-2-6	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTC	CTC	13GTCCCTC	20XZ-LZ-2-3	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTC	CTG	13GTCCCTG	20XZ-LZ-2-4	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTC	CTT	13GTCCCTT	20XZ-LZ-2-2	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTG	CAA	13GTGCAA	20XZ-LS-1-3	2020.7.30	Xizang	Lasha	91.8900	29.8900	3762.1	MG2	XZ
A13_B13_C1GTG	CAC	13GTGCAC	20XZ-LS-1-1	2020.7.30	Xizang	Lasha	91.8900	29.8900	3762.1	MG2	XZ
A13_B13_C1GTG	CAT	13GTGCAT	20XZ-SN-1-16	2020.7.30	Xizang	Shannan	92.0200	29.2700	3551.16	MG2	XZ
A13_B13_C1GTG	CCA	13GTGCCA	20XZ-LZ-2-1	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTG	CCC	13GTGCCC	20XZ-LZ-1-17	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTG	CCG	13GTGCCG	20XZ-LZ-1-18	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTG	CCT	13GTGCCCT	20XZ-LZ-1-16	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTG	CGA	13GTGCGA	20XZ-SN-1-15	2020.7.30	Xizang	Shannan	92.0200	29.2700	3551.16	MG7	XZ
A13_B13_C1GTG	CGC	13GTGCGC	20XZ-SN-1-13	2020.7.30	Xizang	Shannan	92.0200	29.2700	3551.16	MG7	XZ
A13_B13_C1GTG	CGT	13GTGCGT	20XZ-SN-1-12	2020.7.30	Xizang	Shannan	92.0200	29.2700	3551.16	MG7	XZ
A13_B13_C1GTG	CTA	13GTGCTA	20XZ-LZ-1-15	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTG	CTC	13GTGCTC	20XZ-LZ-1-13	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTG	CTG	13GTGCTG	20XZ-LZ-1-14	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTG	CTT	13GTGCTT	20XZ-LZ-1-12	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ

A13_B13_C1GTT	CAA	13GTTCAA	20XZ-LZ-1-3	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG2	XZ
A13_B13_C1GTT	CAC	13GTTCAC	20XZ-LZ-1-1	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG2	XZ
A13_B13_C1GTT	CAG	13GTTCAG	20XZ-LZ-1-2	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG2	XZ
A13_B13_C1GTT	CAT	13GTTCAT	20XZ-LS-1-16	2020.7.30	Xizang	Lasha	91.8900	29.8900	3762.1	MG2	XZ
A13_B13_C1GTT	CCA	13GTTCCA	20XZ-LZ-3-6	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTT	CCC	13GTTCCC	20XZ-LZ-3-4	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTT	CCG	13GTTCCG	20XZ-LZ-3-5	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTT	CCT	13GTTCCT	20XZ-LZ-3-3	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTT	CGA	13GTTCGA	20XZ-LS-1-15	2020.7.30	Xizang	Lasha	91.8900	29.8900	3762.1	MG2	XZ
A13_B13_C1GTT	CGC	13GTTCGC	20XZ-LS-1-13	2020.7.30	Xizang	Lasha	91.8900	29.8900	3762.1	MG7	XZ
A13_B13_C1GTT	CGG	13GTTCCGG	20XZ-LS-1-14	2020.7.30	Xizang	Lasha	91.8900	29.8900	3762.1	MG2	XZ
A13_B13_C1GTT	CGT	13GTTCGT	20XZ-LS-1-12	2020.7.30	Xizang	Lasha	91.8900	29.8900	3762.1	MG7	XZ
A13_B13_C1GTT	CTA	13GTTCTA	20XZ-LZ-3-2	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTT	CTC	13GTTCTC	20XZ-LZ-2-12	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTT	CTG	13GTTCTG	20XZ-LZ-3-1	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A13_B13_C1GTT	CTT	13GTTCTT	20XZ-LZ-2-11	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666	MG7	XZ
A14_B14_C1GAA	CAA	14GAACAA	22GZ-ZY-5-1	2022.3.7	Guizhou	Zunyi	106.2741	27.6880	920	MG1	YG
A14_B14_C1GAA	CAC	14GAACAC	22GZ-ZY-4-7	2022.3.7	Guizhou	Zunyi	106.2741	27.6880	920	MG6	YG
A14_B14_C1GAA	CCA	14GAACCA	22GZ-LPS-3-3	2022.3.28	Guizhou	Liupanshui	104.7234	26.1776	1523	MG1	YG
A14_B14_C1GAA	CCC	14GAACCC	22GZ-LPS-3-1	2022.3.28	Guizhou	Liupanshui	104.7234	26.1776	1523	MG1	YG
A14_B14_C1GAA	CCT	14GAACCT	22GZ-QXN-1-8	2022.3.19	Guizhou	Qianxinan	105.0694	25.3524	1510	MG2	YG
A14_B14_C1GAA	CGC	14GAACGC	22GZ-ZY-4-3	2022.3.7	Guizhou	Zunyi	106.2741	27.6880	920	MG3	YG
A14_B14_C1GAA	CGT	14GAACGT	22GZ-ZY-4-1	2022.3.7	Guizhou	Zunyi	106.2741	27.6880	920	MG2	YG
A14_B14_C1GAA	CTA	14GAACTA	22GZ-QXN-1-7	2022.3.19	Guizhou	Qianxinan	105.0694	25.3524	1510	MG2	YG
A14_B14_C1GAA	CTC	14GAACTC	22GZ-QXN-1-5	2022.3.19	Guizhou	Qianxinan	105.0694	25.3524	1510	MG1	YG
A14_B14_C1GAA	CTG	14GAACTG	22GZ-QXN-1-6	2022.3.19	Guizhou	Qianxinan	105.0694	25.3524	1510	MG2	YG
A14_B14_C1GAA	CTT	14GAACTT	22GZ-QXN-1-4	2022.3.19	Guizhou	Qianxinan	105.0694	25.3524	1510	MG1	YG
A14_B14_C1GAC	CCA	14GACCCA	22SC-LSZ-6-2	2022.3.12	Sichuan	Liangshanzhou	102.7556	27.0766	1116	MG7	YG
A14_B14_C1GAC	CCG	14GACCCG	22SC-LSZ-6-1	2022.3.12	Sichuan	Liangshanzhou	102.7556	27.0766	1116	MG5	YG
A14_B14_C1GAC	CGA	14GACCGA	22GZ-ZY-3-6	2022.3.6	Guizhou	Zunyi	107.1719	27.8033	772.6	MG2	YG
A14_B14_C1GAC	CTG	14GACCTG	22SC-LSZ-1-2	2022.3.13	Sichuan	Liangshanzhou	102.2958	26.6018	1725	MG2	YG
A14_B14_C1GAC	CTT	14GACCTT	22SC-LSZ-7-5	2022.3.12	Sichuan	Liangshanzhou	102.7556	27.0766	1116	MG2	YG
A14_B14_C1GAG	CAA	14GAGCAA	22GZ-ZY-3-2	2022.3.6	Guizhou	Zunyi	107.1719	27.8033	772.6	MG1	YG
A14_B14_C1GAG	CAT	14GAGCAT	22GZ-ZY-1-4	2022.3.6	Guizhou	Zunyi	107.1719	27.8033	772.6	MG1	YG
A14_B14_C1GAG	CCA	14GAGCCA	22SC-LSZ-7-4	2022.3.12	Sichuan	Liangshanzhou	102.7556	27.0766	1116	MG3	YG
A14_B14_C1GAG	CCC	14GAGCCC	22SC-LSZ-7-2	2022.3.12	Sichuan	Liangshanzhou	102.7556	27.0766	1116	MG1	YG
A14_B14_C1GAG	CCG	14GAGCCG	22SC-LSZ-7-3	2022.3.12	Sichuan	Liangshanzhou	102.7556	27.0766	1116	MG5	YG
A14_B14_C1GAG	CGA	14GAGCGA	22GZ-ZY-5-9	2022.3.7	Guizhou	Zunyi	106.2741	27.6880	920	MG1	YG

A14_B14_C1GAG	CGG	14GAGCGG	22GZ-ZY-5-8	2022.3.7	Guizhou	Zunyi	106.2741	27.6880	920	MG6	YG
A14_B14_C1GAG	CGT	14GAGCGT	22GZ-ZY-5-3	2022.3.7	Guizhou	Zunyi	106.2741	27.6880	920	MG1	YG
A14_B14_C1GAG	CTA	14GAGCTA	22GZ-LPS-3-7	2022.3.28	Guizhou	Liupanshui	104.7234	26.1776	1523	MG1	YG
A14_B14_C1GAG	CTC	14GAGCTC	22GZ-LPS-3-5	2022.3.28	Guizhou	Liupanshui	104.7234	26.1776	1523	MG1	YG
A14_B14_C1GAG	CTG	14GAGCTG	22GZ-LPS-3-6	2022.3.28	Guizhou	Liupanshui	104.7234	26.1776	1523	MG1	YG
A14_B14_C1GAG	CTT	14GAGCTT	22GZ-LPS-3-4	2022.3.28	Guizhou	Liupanshui	104.7234	26.1776	1523	MG1	YG
A14_B14_C1GAT	CCA	14GATCCA	22SC-LSZ-5-5	2022.3.13	Sichuan	Liangshanzhou	102.2649	26.7408	1890	MG3	YG
A14_B14_C1GAT	CGG	14GATCGG	22GZ-ZY-6-7	2022.3.7	Guizhou	Zunyi	106.5925	28.4552	1027.5	MG1	YG
A14_B14_C1GAT	CTA	14GATCTA	22SC-LSZ-5-1	2022.3.13	Sichuan	Liangshanzhou	102.2649	26.7408	1890	MG3	YG
A14_B14_C1GAT	CTC	14GATCTC	22SC-LSZ-6-4	2022.3.12	Sichuan	Liangshanzhou	102.7556	27.0766	1116	MG6	YG
A14_B14_C1GAT	CTG	14GATCTG	22SC-LSZ-6-5	2022.3.12	Sichuan	Liangshanzhou	102.7556	27.0766	1116	MG5	YG
A14_B14_C1GAT	CTT	14GATCTT	22SC-LSZ-6-3	2022.3.12	Sichuan	Liangshanzhou	102.7556	27.0766	1116	MG6	YG
A14_B14_C1GCA	CAC	14GCACAC	22GZ-BJ-1-2	2022.3.9	Guizhou	Biji	104.7835	27.2914	1731	MG1	YG
A14_B14_C1GCA	CAG	14GCACAG	22GZ-BJ-1-5	2022.3.9	Guizhou	Biji	104.7835	27.2914	1731	MG1	YG
A14_B14_C1GCA	CCA	14GCACCA	20SC-MY-3-2	2020.1.14	Sichuan	Mianyang	104.8536	31.5872	480	MG5	SC
A14_B14_C1GCA	CCC	14GCACCC	20SC-MY-1-11	2020.1.14	Sichuan	Mianyang	104.9358	30.5550	460	MG2	SC
A14_B14_C1GCA	CCG	14GCACCG	20SC-MY-3-1	2020.1.14	Sichuan	Mianyang	104.8536	31.5872	480	MG1	SC
A14_B14_C1GCA	CCT	14GCACCT	20SC-MY-1-10	2020.1.14	Sichuan	Mianyang	104.9358	30.5550	460	MG2	SC
A14_B14_C1GCA	CGC	14GCACGC	22GZ-QXN-2-4	2022.3.18	Guizhou	Qianxinan	105.5837	25.6251	1155	MG1	YG
A14_B14_C1GCA	CGG	14GCACGG	22GZ-QXN-2-6	2022.3.18	Guizhou	Qianxinan	105.5837	25.6251	1155	MG2	YG
A14_B14_C1GCA	CGT	14GCACGT	22GZ-QXN-2-2	2022.3.18	Guizhou	Qianxinan	105.5837	25.6251	1155	MG1	YG
A14_B14_C1GCA	CTA	14GCACTA	20SC-MY-1-9	2020.1.14	Sichuan	Mianyang	104.9358	30.5550	460	MG4	SC
A14_B14_C1GCA	CTC	14GCACTC	20SC-MY-1-7	2020.1.14	Sichuan	Mianyang	104.9358	30.5550	460	MG1	SC
A14_B14_C1GCA	CTG	14GCACTG	20SC-MY-1-8	2020.1.14	Sichuan	Mianyang	104.9358	30.5550	460	MG2	SC
A14_B14_C1GCC	CAA	14GCCAA	22GZ-LPS-4-3	2022.3.28	Guizhou	Liupanshui	104.7234	26.1776	1523	MG3	YG
A14_B14_C1GCC	CAC	14GCCAC	22GZ-LPS-4-1	2022.3.28	Guizhou	Liupanshui	104.7234	26.1776	1523	MG3	YG
A14_B14_C1GCC	CAT	14GCCAT	22GZ-BJ-4-5	2022.3.8	Guizhou	Biji	105.8350	27.6732	943	MG1	YG
A14_B14_C1GCC	CCA	14GCCCA	20XJ-YL-1-1	2020.6.21	Xinjiang	Yili	82.7564	43.2483	1231	MG5	XJ
A14_B14_C1GCC	CGG	14GCCCGG	22GZ-BJ-4-3	2022.3.8	Guizhou	Biji	105.8350	27.6732	943	MG2	YG
A14_B14_C1GCC	CTC	14GCCCTC	22SC-LSZ-3-4	2022.3.13	Sichuan	Liangshanzhou	102.2215	26.5695	1756	MG1	YG
A14_B14_C1GCG	CAA	14GCGAA	22GZ-BJ-3-2	2022.3.8	Guizhou	Biji	105.8350	27.6732	943	MG1	YG
A14_B14_C1GCG	CCA	14GCGCCA	22SC-LSZ-3-2	2022.3.13	Sichuan	Liangshanzhou	102.2215	26.5695	1756	MG3	YG
A14_B14_C1GCG	CGG	14GCGCGG	22GZ-BJ-1-9	2022.3.9	Guizhou	Biji	104.7835	27.2914	1731	MG1	YG
A14_B14_C1GCT	CAA	14GCTCAA	22GZ-QXN-1-3	2022.3.19	Guizhou	Qianxinan	105.0694	25.3524	1510	MG2	YG
A14_B14_C1GCT	CAC	14GCTCAC	22GZ-QXN-1-1	2022.3.19	Guizhou	Qianxinan	105.0694	25.3524	1510	MG1	YG
A14_B14_C1GCT	CAG	14GCTCAG	22GZ-QXN-1-2	2022.3.19	Guizhou	Qianxinan	105.0694	25.3524	1510	MG1	YG
A14_B14_C1GCT	CCA	14GCTCCA	20XJ-YL-4-7	2020.6.22	Xinjiang	Yili	80.7769	44.3183	823	MG5	XJ
A14_B14_C1GCT	CCC	14GCTCCC	20XJ-YL-4-5	2020.6.22	Xinjiang	Yili	80.7769	44.3183	823	MG5	XJ

A14_B14_C1GCT	CCT	14GCTCCT	20XJ-YL-4-4	2020.6.22	Xinjiang	Yili	80.7769	44.3183	823	MG5	XJ
A14_B14_C1GCT	CGA	14GCTCGA	22GZ-LPS-4-8	2022.3.28	Guizhou	Liupanshui	104.7234	26.1776	1523	MG5	YG
A14_B14_C1GCT	CGT	14GCTCGT	22GZ-LPS-4-4	2022.3.28	Guizhou	Liupanshui	104.7234	26.1776	1523	MG1	YG
A14_B14_C1GCT	CTA	14GCTCTA	20XJ-YL-4-3	2020.6.22	Xinjiang	Yili	80.7769	44.3183	823	MG5	XJ
A14_B14_C1GCT	CTC	14GCTCTC	20XJ-YL-4-1	2020.6.22	Xinjiang	Yili	80.7769	44.3183	823	MG5	XJ
A14_B14_C1GCT	CTG	14GCTCTG	20XJ-YL-4-2	2020.6.22	Xinjiang	Yili	80.7769	44.3183	823	MG5	XJ
A14_B14_C1GGA	CAG	14GGACAG	22GZ-BJ-2-3	2022.3.29	Guizhou	Biji	104.7256	27.2299	1563	MG1	YG
A14_B14_C1GGA	CAT	14GGACAT	22GZ-LPS-2-3	2022.3.27	Guizhou	Liupanshui	104.5935	25.6512	1703	MG7	YG
A14_B14_C1GGA	CCC	14GGACCC	22SC-LSZ-4-1	2022.3.13	Sichuan	Liangshanzhou	102.2649	26.7408	1890	MG1	YG
A14_B14_C1GGA	CCT	14GGACCT	22SC-LSZ-8-5	2022.3.12	Sichuan	Liangshanzhou	102.2763	27.0553	1044	MG1	YG
A14_B14_C1GGA	CGC	14GGACGC	22GZ-ZY-6-15	2022.3.7	Guizhou	Zunyi	106.5925	28.4552	1027.5	MG2	YG
A14_B14_C1GGA	CGG	14GGACGG	22GZ-LPS-2-1	2022.3.27	Guizhou	Liupanshui	104.5935	25.6512	1703	MG7	YG
A14_B14_C1GGA	CTA	14GGACTA	22SC-LSZ-8-4	2022.3.12	Sichuan	Liangshanzhou	102.2763	27.0553	1044	MG7	YG
A14_B14_C1GGA	CTC	14GGACTC	22SC-LSZ-8-2	2022.3.12	Sichuan	Liangshanzhou	102.2763	27.0553	1044	MG6	YG
A14_B14_C1GGA	CTT	14GGACTT	22SC-LSZ-8-1	2022.3.12	Sichuan	Liangshanzhou	102.2763	27.0553	1044	MG1	YG
A14_B14_C1GGC	CAT	14GGCCAT	22GZ-BJ-5-1	2022.3.8	Guizhou	Biji	105.8350	27.6732	943	MG1	YG
A14_B14_C1GGC	CCG	14GGCCCG	20SC-MY-2-3	2020.1.14	Sichuan	Mianyang	105.1525	31.5850	460	MG1	SC
A14_B14_C1GGC	CGA	14GGCCGA	22GZ-GY-1-5	2022.3.5	Guizhou	Guiyang	106.6748	26.3984	1099.6	MG6	YG
A14_B14_C1GGC	CGG	14GGCCGG	22GZ-GY-1-4	2022.3.5	Guizhou	Guiyang	106.6748	26.3984	1099.6	MG5	YG
A14_B14_C1GGC	CGT	14GGCCGT	22GZ-GY-1-2	2022.3.5	Guizhou	Guiyang	106.6748	26.3984	1099.6	MG1	YG
A14_B14_C1GGC	CTA	14GGCCTA	22SC-LSZ-2-5	2022.3.13	Sichuan	Liangshanzhou	102.2958	26.6018	1725	MG5	YG
A14_B14_C1GGC	CTT	14GGCCTT	22SC-LSZ-2-2	2022.3.13	Sichuan	Liangshanzhou	102.2958	26.6018	1725	MG1	YG
A14_B14_C1GGG	CAA	14GGGCAA	22GZ-GY-1-1	2022.3.5	Guizhou	Guiyang	106.6748	26.3984	1099.6	MG2	YG
A14_B14_C1GGG	CAC	14GGGCAC	22GZ-ZY-2-5	2022.3.6	Guizhou	Zunyi	107.1719	27.8033	772.6	MG3	YG
A14_B14_C1GGG	CAT	14GGGCAT	22GZ-ZY-2-4	2022.3.6	Guizhou	Zunyi	107.1719	27.8033	772.6	MG3	YG
A14_B14_C1GGG	CCC	14GGGCCC	22SC-LSZ-9-4	2022.3.12	Sichuan	Liangshanzhou	102.2763	27.0553	1044	MG1	YG
A14_B14_C1GGG	CCG	14GGGCCG	22SC-LSZ-9-5	2022.3.12	Sichuan	Liangshanzhou	102.2763	27.0553	1044	MG1	YG
A14_B14_C1GGG	CCT	14GGGCCT	22SC-LSZ-9-3	2022.3.12	Sichuan	Liangshanzhou	102.2763	27.0553	1044	MG1	YG
A14_B14_C1GGG	CGA	14GGGCGA	22GZ-ZY-2-2	2022.3.6	Guizhou	Zunyi	107.1719	27.8033	772.6	MG3	YG
A14_B14_C1GGG	CGC	14GGGCGC	22GZ-BJ-2-8	2022.3.29	Guizhou	Biji	104.7256	27.2299	1563	MG1	YG
A14_B14_C1GGG	CGG	14GGGCGG	22GZ-ZY-2-1	2022.3.6	Guizhou	Zunyi	107.1719	27.8033	772.6	MG5	YG
A14_B14_C1GGG	CGT	14GGGCGT	22GZ-BJ-2-7	2022.3.29	Guizhou	Biji	104.7256	27.2299	1563	MG2	YG
A14_B14_C1GGG	CTA	14GGGCTA	22SC-LSZ-9-2	2022.3.12	Sichuan	Liangshanzhou	102.2763	27.0553	1044	MG1	YG
A14_B14_C1GGG	CTT	14GGGCTT	22SC-LSZ-4-4	2022.3.13	Sichuan	Liangshanzhou	102.2649	26.7408	1890	MG2	YG
A14_B14_C1GGT	CAA	14GGTCAA	22GZ-LPS-1-8	2022.3.28	Guizhou	Liupanshui	105.1139	26.4845	1541	MG2	YG
A14_B14_C1GGT	CAT	14GGTCAT	22GZ-LPS-1-5	2022.3.28	Guizhou	Liupanshui	105.1139	26.4845	1541	MG1	YG
A14_B14_C1GGT	CCA	14GGTCCA	20SC-MY-1-5	2020.1.14	Sichuan	Mianyang	104.9358	30.5550	460	MG2	SC
A14_B14_C1GGT	CCC	14GGTCCC	20SC-MY-1-3	2020.1.14	Sichuan	Mianyang	104.9358	30.5550	460	MG2	SC

A14_B14_C1GGT	CCG	14GGTCCG	20SC-MY-1-4	2020.1.14	Sichuan	Mianyang	104.9358	30.5550	460	MG4	SC
A14_B14_C1GGT	CCT	14GGTCCT	20SC-MY-1-2	2020.1.14	Sichuan	Mianyang	104.9358	30.5550	460	MG2	SC
A14_B14_C1GGT	CGT	14GGTCGT	22GZ-BJ-5-6	2022.3.8	Guizhou	Biji	105.8350	27.6732	943	MG2	YG
A14_B14_C1GGT	CTC	14GGTCTC	20SC-MY-2-6	2020.1.14	Sichuan	Mianyang	105.1525	31.5850	460	MG2	SC
A14_B14_C1GGT	CTT	14GGTCTT	20SC-MY-2-5	2020.1.14	Sichuan	Mianyang	105.1525	31.5850	460	MG1	SC
A14_B14_C1GTA	CAA	14GTACAA	20XJ-YL-6-4	2020.6.19	Xinjiang	Yili	83.8589	43.3825	1176	MG2	XJ
A14_B14_C1GTA	CAG	14GTACAG	20XJ-YL-6-2	2020.6.19	Xinjiang	Yili	83.8589	43.3825	1176	MG4	XJ
A14_B14_C1GTA	CCC	14GTACCC	20JS-YZ-1-3	2020.5.13	Jiangsu	Yangzhou	119.1369	32.2681	10	MG4	AZJ
A14_B14_C1GTA	CGA	14GTACGA	20XJ-YL-4-11	2020.6.22	Xinjiang	Yili	80.7769	44.3183	823	MG4	XJ
A14_B14_C1GTA	CGC	14GTACGC	20XJ-YL-4-9	2020.6.22	Xinjiang	Yili	80.7769	44.3183	823	MG5	XJ
A14_B14_C1GTA	CGG	14GTACGG	20XJ-YL-4-10	2020.6.22	Xinjiang	Yili	80.7769	44.3183	823	MG5	XJ
A14_B14_C1GTA	CGT	14GTACGT	20XJ-YL-4-8	2020.6.22	Xinjiang	Yili	80.7769	44.3183	823	MG5	XJ
A14_B14_C1GTA	CTA	14GTACTA	20JS-YZ-1-1	2020.5.13	Jiangsu	Yangzhou	119.1369	32.2681	10	MG6	AZJ
A14_B14_C1GTA	CTC	14GTACTC	20XJ-YL-7-3	2020.6.19	Xinjiang	Yili	83.8647	43.3808	1167	MG5	XJ
A14_B14_C1GTA	CTG	14GTACTG	20XJ-YL-7-4	2020.6.19	Xinjiang	Yili	83.8647	43.3808	1167	MG5	XJ
A14_B14_C1GTA	CTT	14GTACTT	20XJ-YL-7-2	2020.6.19	Xinjiang	Yili	83.8647	43.3808	1167	MG5	XJ
A14_B14_C1GTC	CAA	14GTCCAA	20XJ-YL-8-10	2020.6.23	Xinjiang	Yili	81.4936	43.9983	639.7	MG4	XJ
A14_B14_C1GTC	CAC	14GTCCAC	20XJ-YL-8-8	2020.6.23	Xinjiang	Yili	81.4936	43.9983	639.7	MG4	XJ
A14_B14_C1GTC	CAG	14GTCCAG	20XJ-YL-8-9	2020.6.23	Xinjiang	Yili	81.4936	43.9983	639.7	MG4	XJ
A14_B14_C1GTC	CAT	14GTCCAT	20XJ-YL-8-7	2020.6.23	Xinjiang	Yili	81.4936	43.9983	639.7	MG4	XJ
A14_B14_C1GTC	CCA	14GTCCCA	20AH-CZ-1-11	2020.5.18	Anhui	Chuzhou	118.2672	32.8292	20	MG4	AZJ
A14_B14_C1GTC	CCC	14GTCCCC	20AH-CZ-1-9	2020.5.18	Anhui	Chuzhou	118.2672	32.8292	20	MG4	AZJ
A14_B14_C1GTC	CCT	14GTCCCT	20AH-CZ-1-7	2020.5.18	Anhui	Chuzhou	118.2672	32.8292	20	MG4	AZJ
A14_B14_C1GTC	CGA	14GTCCGA	20XJ-YL-8-6	2020.6.23	Xinjiang	Yili	81.4936	43.9983	639.7	MG4	XJ
A14_B14_C1GTC	CGC	14GTCCGC	20XJ-YL-8-4	2020.6.23	Xinjiang	Yili	81.4936	43.9983	639.7	MG5	XJ
A14_B14_C1GTC	CGG	14GTCCGG	20XJ-YL-8-5	2020.6.23	Xinjiang	Yili	81.4936	43.9983	639.7	MG5	XJ
A14_B14_C1GTC	CGT	14GTCCGT	20XJ-YL-8-3	2020.6.23	Xinjiang	Yili	81.4936	43.9983	639.7	MG5	XJ
A14_B14_C1GTC	CTA	14GTCCTA	20AH-CZ-1-6	2020.5.18	Anhui	Chuzhou	118.2672	32.8292	20	MG4	AZJ
A14_B14_C1GTC	CTC	14GTCCCTC	20AH-CZ-1-4	2020.5.18	Anhui	Chuzhou	118.2672	32.8292	20	MG3	AZJ
A14_B14_C1GTC	CTG	14GTCCCTG	20AH-CZ-1-5	2020.5.18	Anhui	Chuzhou	118.2672	32.8292	20	MG2	AZJ
A14_B14_C1GTC	CTT	14GTCCCTT	20AH-CZ-1-3	2020.5.18	Anhui	Chuzhou	118.2672	32.8292	20	MG2	AZJ
A14_B14_C1GTG	CGA	14GTGCGA	20XJ-YL-2-3	2020.6.20	Xinjiang	Yili	82.2914	43.6086		MG4	XJ
A14_B14_C1GTG	CGC	14GTGCGC	20XJ-YL-2-1	2020.6.20	Xinjiang	Yili	82.2914	43.6086		MG5	XJ
A14_B14_C1GTG	CGG	14GTGCGG	20XJ-YL-2-2	2020.6.20	Xinjiang	Yili	82.2914	43.6086		MG5	XJ
A14_B14_C1GTG	CGT	14GTGCGT	20XJ-YL-6-5	2020.6.19	Xinjiang	Yili	83.8589	43.3825	1176	MG5	XJ
A14_B14_C1GTG	CTA	14GTGCTA	20JS-YZ-1-9	2020.5.13	Jiangsu	Yangzhou	119.1369	32.2681	10	MG3	AZJ
A14_B14_C1GTG	CTC	14GTGCTC	20JS-YZ-1-7	2020.5.13	Jiangsu	Yangzhou	119.1369	32.2681	10	MG2	AZJ
A14_B14_C1GTG	CTG	14GTGCTG	20JS-YZ-1-8	2020.5.13	Jiangsu	Yangzhou	119.1369	32.2681	10	MG2	AZJ

A14_B14_C1GTG	CTT	14GTGCTT	20JS-YZ-1-6	2020.5.13	Jiangsu	Yangzhou	119.1369	32.2681	10		MG2	AZJ
A14_B14_C1GTT	CAA	14GTTCAA	20XJ-YL-7-1	2020.6.19	Xinjiang	Yili	83.8647	43.3808	1167		MG4	XJ
A14_B14_C1GTT	CAT	14GTTCAT	20XJ-YL-3-3	2020.6.20	Xinjiang	Yili	82.2914	43.6086			MG4	XJ
A14_B14_C1GTT	CCA	14GTTCCA	20XZ-LZ-3-8	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666		MG4	XZ
A14_B14_C1GTT	CCC	14GTTCCC	20HB-YC-2-3	2020.1.17	Hubei	Yicang	111.7604	30.4258			MG4	HB
A14_B14_C1GTT	CCG	14GTTCCG	20XZ-LZ-3-7	2020.6.25	Xizang	Linzhi	95.6417	29.9078	2666		MG4	XZ
A14_B14_C1GTT	CCT	14GTTCCT	20AH-HN-1-3	2020.5.12	Anhui	Huinan	117.0594	33.3078	20		MG4	AZJ
A14_B14_C1GTT	CGA	14GTTCGA	20XJ-YL-3-2	2020.6.20	Xinjiang	Yili	82.2914	43.6086			MG4	XJ
A14_B14_C1GTT	CGC	14GTTCGC	20XJ-YL-8-12	2020.6.23	Xinjiang	Yili	81.4936	43.9983	639.7		MG5	XJ
A14_B14_C1GTT	CGG	14GTTCGG	20XJ-YL-3-1	2020.6.20	Xinjiang	Yili	82.2914	43.6086			MG5	XJ
A14_B14_C1GTT	CGT	14GTTCGT	20XJ-YL-8-11	2020.6.23	Xinjiang	Yili	81.4936	43.9983	639.7		MG5	XJ
A14_B14_C1GTT	CTA	14GTTCTA	20AH-HN-1-2	2020.5.12	Anhui	Huinan	117.0594	33.3078	20		MG4	AZJ
A14_B14_C1GTT	CTC	14GTTCTC	20AH-CZ-1-13	2020.5.18	Anhui	Chuzhou	118.2672	32.8292	20		MG4	AZJ
A14_B14_C1GTT	CTG	14GTTCTG	20AH-HN-1-1	2020.5.12	Anhui	Huinan	117.0594	33.3078	20		MG5	AZJ
A14_B14_C1GTT	CTT	14GTTCTT	20AH-CZ-1-12	2020.5.18	Anhui	Chuzhou	118.2672	32.8292	20		MG4	AZJ

Table S8. Genetic diversity statistics for geographic group based on HG-SNP markers in China.

Location	MG1	MG2	MG3	MG4	MG5	MG6	MG7	Total	Shannon's index
XJ	0	1	0	13	79	0	3	96	0.59
QH	85	110	58	18	16	17	1	305	1.54
GSC	52	72	25	17	9	1	1	177	1.44
GSLD	17	52	78	19	11	9	1	187	1.51
GSLN	69	47	24	5	2	1	4	152	1.31
SXC	12	65	55	21	12	41	4	210	1.67
SD	5	26	16	1	1	10	5	64	1.53
AZJ	0	7	2	9	1	2	2	23	1.5
HN	24	37	19	10	6	15	24	135	1.82
SC	28	34	11	17	8	13	58	169	1.74
HB	15	22	11	1	3	7	65	124	1.41
YG	108	78	20	0	12	16	95	329	1.5
XZ	0	28	0	6	0	0	96	130	0.7
Total	415	579	319	137	160	132	359	2101	1.81

Note: MG1-7 is the number of molecular groups in geographic group; Total is all number of samples.

Table S9. Statistics of the average temperature from July 16 to August 15 from 2005 to 2024, and wheat growing and stripe rust epidemic season in the province from 2020 to 2023 in China.

Location	Altitude/m	Average Temperature/°C	Wheat		Stripe rust
			Planting time	Harvest time	Epidemic time
SD	51	25.14	Oct 1 - Oct 20	Jun 1 - Jun 20	Apr - May
SXC	479	24.42	Oct 1 - Oct 20	Jun 1 - Jun 20	Apr - May
AZJ	33	26.26	Oct 20 - Nov 10	May 20 - Jun 10	Apr - May
HB	33	27.43	Oct 20 - Nov 10	May 20 - Jun 10	Apr - May
HN	181	25.87	Oct 1 - Oct 20	May 20 - Jun 10	Apr - May
SC	522	26.07	Oct 20 - Nov 10	May 20 - Jun 10	Apr - May
YG	1708	20.44	Oct 20 - Nov 10	Mar 1 - Mar 30	Feb - Mar
GSLD	1348	19.51	Sep 1 - Sep 30	Jun 20 - Jul 10	May - Jun
GSLN	1086	21.29	Sep 1 - Sep 30	Jun 20 - Jul 10	May - Jun
GSC	1875	17.85	Sep 1 - Sep 30	Jun 20 - Jul 10	May - Jun
XJ	330	23.31	Sep 20 - Oct 30	Jun 1 - Jul 10	May - Jun
QH	3302	10.18	Mar 20 - Apr 10	Aug 1 - Sep 20	Jul - Aug
XZ	3001	16.06	Mar 20 - Apr 10	Aug 1 - Sep 20	Jul - Aug

Table S10. Fixation index (F_{ST}) (below diagonal) and gene flow (N_m) (above diagonal) analysis for all geographic groups in China.

	XJ	QH	GSC	GSLD	GSLN	SXC	SD	AZJ	HN	SC	HB	YG	XZ
XJ		3.803	4.345	4.829	3.727	5.029	2.84	3.796	4.411	3.356	2.501	2.362	2.246
QH	0.062		42.877	17.268	58.813	10.098	5.841	3.752	5.817	3.964	2.325	4.55	1.949
GSC	0.054	0.006		26.529	36.155	13.41	5.856	5.391	8.059	4.755	2.788	4.59	2.361
GSLD	0.049	0.014	0.009		12.429	78.751	8.273	6.391	10.594	4.937	2.915	4.248	2.768
GSLN	0.063	0.004	0.007	0.02		9.114	4.864	4.105	6.501	4.528	2.654	4.434	2.195
SXC	0.047	0.024	0.018	0.003	0.027		10.031	7.561	12.54	5.036	3.012	4.397	2.702
SD	0.081	0.041	0.041	0.029	0.049	0.024		4.157	8.804	5.709	4.361	6.01	2.497
AZJ	0.062	0.062	0.044	0.038	0.057	0.032	0.057		12.344	7.058	4.456	4.847	3.253
HN	0.054	0.041	0.03	0.023	0.037	0.02	0.028	0.02		20.672	8.14	9.44	3.456
SC	0.069	0.059	0.05	0.048	0.052	0.047	0.042	0.034	0.012		25.915	15.416	3.465
HB	0.091	0.097	0.082	0.079	0.086	0.077	0.054	0.053	0.03	0.01		9.281	3.726
YG	0.096	0.052	0.052	0.056	0.053	0.054	0.04	0.049	0.026	0.016	0.026		2.424
XZ	0.1	0.114	0.096	0.083	0.102	0.085	0.091	0.071	0.067	0.067	0.063	0.093	