

## Supplementary Material

**Table S1:** Line listing of isolates in European panel (n=451) including clonal complex, *fHbp* IGR, *fHbp* peptide and MEASURE assay-derived MFI value.

PubMLST ID	Strain ID	Country	Clonal complex (MLST)	<i>fHbp</i> peptide ID	<i>fHbp</i> IGR (igr_up_NEIS0349)	MEASURE MFI
42473	M16 240001	EW&NI	ST-32 complex	224	127	3531
42477	M16 240007	EW&NI	ST-41/44 complex	4	2	3430
42488	M16 240019	EW&NI	ST-269 complex	13	3	2911
42498	M16 240033	EW&NI	ST-269 complex	15	4	23132
42501	M16 240036	EW&NI	ST-461 complex	215	5	7097
42507	M16 240042	EW&NI	ST-32 complex	1	6	9417
42509	M16 240044	EW&NI	ST-32 complex	1	6	11858
42510	M16 240045	EW&NI	ST-269 complex	13	3	4486
42511	M16 240046	EW&NI	ST-41/44 complex	4	2	2420
42514	M16 240049	EW&NI	ST-41/44 complex	4	2	3399
42520	M16 240056	EW&NI	not assigned	14	1	6121
42521	M16 240058	EW&NI	ST-213 complex	13	3	3996
42522	M16 240059	EW&NI	ST-41/44 complex	4	2	2949
42523	M16 240061	EW&NI	ST-269 complex	622	4	4298
42528	M16 240068	EW&NI	ST-41/44 complex	4	2	2793
42531	M16 240071	EW&NI	ST-269 complex	15	4	20405
42536	M16 240076	EW&NI	ST-269 complex	15	4	20379
42542	M16 240085	EW&NI	ST-213 complex	30	17	7947
42544	M16 240087	EW&NI	not assigned	86	4	19290
42546	M16 240089	EW&NI	ST-213 complex	45	61	3581
42547	M16 240090	EW&NI	ST-461 complex	47	1	1140
42548	M16 240091	EW&NI	ST-269 complex	13	3	2384
42554	M16 240113	EW&NI	ST-269 complex	15	4	16506
42558	M16 240119	EW&NI	not assigned	19	1	2341
42560	M16 240121	EW&NI	ST-269 complex	13	3	2261
42562	M16 240124	EW&NI	ST-32 complex	456	73	2390
42563	M16 240125	EW&NI	ST-461 complex	110	21	14692
42565	M16 240127	EW&NI	ST-41/44 complex	19	1	2660
42567	M16 240130	EW&NI	ST-213 complex	45	33	9212
42571	M16 240135	EW&NI	ST-41/44 complex	19	18	51215
42579	M16 240145	EW&NI	ST-269 complex	13	3	2169
42580	M16 240146	EW&NI	not assigned	14	1	2358
42583	M16 240149	EW&NI	ST-213 complex	257	128	16182
42584	M16 240150	EW&NI	ST-461 complex	47	1	4562
42587	M16 240155	EW&NI	ST-41/44 complex	4	2	3172
42588	M16 240156	EW&NI	ST-41/44 complex	4	2	2511
42589	M16 240157	EW&NI	ST-162 complex	215	22	4970
42591	M16 240159	EW&NI	ST-269 complex	13	3	3775

42592	M16 240160	EW&NI	ST-41/44 complex	4	2	1705
42594	M16 240162	EW&NI	ST-41/44 complex	4	2	2880
42598	M16 240169	EW&NI	ST-269 complex	13	3	3512
42601	M16 240175	EW&NI	ST-32 complex	510	28	5472
42602	M16 240176	EW&NI	ST-213 complex	102	47	21384
42603	M16 240178	EW&NI	not assigned	14	1	2740
42604	M16 240179	EW&NI	ST-213 complex	276	26	8064
42610	M16 240187	EW&NI	ST-41/44 complex	4	2	5667
42611	M16 240188	EW&NI	ST-41/44 complex	4	2	2621
44696	M16 240199	EW&NI	ST-213 complex	13	3	3740
44700	M16 240209	EW&NI	ST-41/44 complex	4	2	1973
44701	M16 240210	EW&NI	ST-41/44 complex	4	2	1968
44702	M16 240211	EW&NI	ST-41/44 complex	14	5	5419
44703	M16 240212	EW&NI	ST-269 complex	13	3	2991
44705	M16 240215	EW&NI	ST-32 complex	224	15	3837
44707	M16 240218	EW&NI	ST-32 complex	1	6	9709
44710	M16 240221	EW&NI	ST-32 complex	1	6	6373
44711	M16 240222	EW&NI	ST-269 complex	31	49	8193
44635	M16 240225	EW&NI	ST-32 complex	1	6	11076
44713	M16 240229	EW&NI	ST-41/44 complex	4	2	4510
44637	M16 240230	EW&NI	ST-41/44 complex	4	2	2321
44715	M16 240235	EW&NI	ST-213 complex	45	94	6300
44717	M16 240237	EW&NI	ST-213 complex	738	248	2256
44722	M16 240243	EW&NI	ST-32 complex	1	6	6656
44723	M16 240244	EW&NI	ST-1157 complex	13	3	4005
44729	M16 240251	EW&NI	ST-269 complex	15	4	12880
44734	M16 240256	EW&NI	ST-9316 complex	321	111	871
44735	M16 240257	EW&NI	ST-41/44 complex	4	2	2390
44737	M16 240262	EW&NI	ST-269 complex	683	4	24993
44743	M16 240272	EW&NI	ST-269 complex	19	1	3674
44744	M16 240275	EW&NI	ST-41/44 complex	4	2	1914
44745	M16 240276	EW&NI	ST-41/44 complex	4	2	1978
47017	M16 240277	EW&NI	ST-41/44 complex	951	2	1390
44749	M16 240282	EW&NI	ST-213 complex	45	33	7760
44750	M16 240283	EW&NI	ST-41/44 complex	302	24	9116
44641	M16 240288	EW&NI	ST-41/44 complex	4	2	2738
44752	M16 240289	EW&NI	ST-41/44 complex	4	2	2289
47018	M16 240292	EW&NI	ST-269 complex	13	3	3515
44756	M16 240297	EW&NI	ST-213 complex	952	8	574
44757	M16 240300	EW&NI	ST-213 complex	13	3	2659
44758	M16 240301	EW&NI	ST-22 complex	16	1	733
44764	M16 240367	EW&NI	ST-213 complex	953	1	2483
44766	M16 240369	EW&NI	ST-269 complex	19	1	5094
44771	M16 240384	EW&NI	ST-461 complex	47	1	4090
44772	M16 240385	EW&NI	ST-162 complex	21	1	3392

44774	M16 240387	EW&NI	ST-269 complex	90	72	47099
44776	M16 240390	EW&NI	ST-269 complex	13	3	3388
44778	M16 240394	EW&NI	ST-461 complex	47	1	6112
44780	M16 240396	EW&NI	ST-269 complex	15	4	21822
44781	M16 240398	EW&NI	ST-41/44 complex	4	2	2804
44783	M16 240400	EW&NI	ST-32 complex	1	6	21100
44787	M16 240405	EW&NI	ST-32 complex	510	28	7461
44791	M16 240410	EW&NI	ST-60 complex	13	3	3294
44794	M16 240414	EW&NI	ST-41/44 complex	4	2	2481
44797	M16 240418	EW&NI	ST-32 complex	1	6	13478
44800	M16 240422	EW&NI	ST-269 complex	954	24	1998
44801	M16 240423	EW&NI	ST-41/44 complex	4	2	3166
44803	M16 240426	EW&NI	ST-269 complex	13	3	5154
44807	M16 240432	EW&NI	ST-41/44 complex	4	2	4173
44808	M16 240433	EW&NI	ST-41/44 complex	4	2	3730
44809	M16 240434	EW&NI	ST-41/44 complex	4	2	4118
44811	M16 240436	EW&NI	not assigned	0	0	88
44812	M16 240437	EW&NI	ST-213 complex	45	14	8141
44813	M16 240438	EW&NI	ST-269 complex	15	4	15202
44815	M16 240441	EW&NI	not assigned	0	0	71
44816	M16 240443	EW&NI	not assigned	13	3	3585
44819	M16 240450	EW&NI	ST-461 complex	110	21	18644
44821	M16 240452	EW&NI	not assigned	14	1	5044
44823	M16 240493	EW&NI	not assigned	260	33	12923
44824	M16 240494	EW&NI	ST-11 complex	13	5	1658
44825	M16 240495	EW&NI	ST-269 complex	19	1	2004
44826	M16 240496	EW&NI	ST-269 complex	15	10	17830
44827	M16 240497	EW&NI	ST-213 complex	955	97	7995
44830	M16 240501	EW&NI	not assigned	956	6	13987
44831	M16 240502	EW&NI	ST-269 complex	19	1	663
44834	M16 240507	EW&NI	ST-41/44 complex	4	2	2502
47261	M16 240512	EW&NI	ST-41/44 complex	14	7	4331
47267	M16 240519	EW&NI	ST-269 complex	13	3	3174
47268	M16 240520	EW&NI	ST-269 complex	13	3	2664
47269	M16 240521	EW&NI	ST-162 complex	341	48	7096
47272	M16 240524	EW&NI	ST-162 complex	21	1	268
47276	M16 240530	EW&NI	ST-41/44 complex	14	1	812
47278	M16 240532	EW&NI	ST-41/44 complex	4	2	3297
47279	M16 240534	EW&NI	ST-41/44 complex	4	2	2625
47285	M16 240540	EW&NI	ST-269 complex	13	3	2728
47286	M16 240541	EW&NI	ST-269 complex	15	4	14267
47288	M16 240543	EW&NI	ST-269 complex	15	4	14660
47291	M16 240548	EW&NI	ST-32 complex	16	1	2043
47292	M16 240549	EW&NI	ST-461 complex	13	3	4508
47300	M16 240566	EW&NI	ST-32 complex	1	6	7850

47306	M16 240628	EW&NI	ST-35 complex	785	131	28451
47307	M16 240631	EW&NI	ST-32 complex	1	6	9306
47309	M16 240635	EW&NI	ST-269 complex	19	1	7007
47310	M16 240636	EW&NI	not assigned	31	9	8319
47312	M16 240638	EW&NI	ST-213 complex	297	15	1839
47314	M16 240640	EW&NI	ST-41/44 complex	4	2	1528
47319	M16 240647	EW&NI	not assigned	110	32	8062
47321	M16 240649	EW&NI	ST-103 complex	14	7	4255
47323	M16 240653	EW&NI	ST-41/44 complex	19	1	9575
47328	M16 240661	EW&NI	ST-32 complex	1	6	9149
47331	M16 240669	EW&NI	not assigned	979	4	24329
47332	M16 240670	EW&NI	not assigned	979	4	21643
47333	M16 240671	EW&NI	ST-41/44 complex	4	2	3282
47341	M16 240702	EW&NI	ST-9316 complex	321	111	1040
47342	M16 240703	EW&NI	ST-269 complex	15	4	16082
53057	M16 240711	EW&NI	not assigned	86	4	18330
53059	M16 240713	EW&NI	ST-41/44 complex	14	1	5525
53063	M16 240720	EW&NI	ST-41/44 complex	14	7	4901
53065	M16 240722	EW&NI	ST-41/44 complex	4	2	2497
53068	M16 240728	EW&NI	ST-213 complex	45	8	475
53070	M16 240730	EW&NI	ST-41/44 complex	4	2	2869
53071	M16 240732	EW&NI	ST-41/44 complex	4	2	2467
53073	M16 240735	EW&NI	ST-60 complex	13	3	2280
53075	M16 240737	EW&NI	ST-269 complex	13	3	2766
60594	M16 240739	EW&NI	ST-269 complex	15	4	20471
53083	M16 240746	EW&NI	ST-269 complex	15	4	16273
53094	M16 240759	EW&NI	ST-35 complex	13	3	6555
53097	M16 240763	EW&NI	ST-269 complex	143	4	31839
53099	M16 240768	EW&NI	ST-32 complex	510	28	3943
53101	M16 240770	EW&NI	ST-213 complex	90	170	14004
53102	M16 240772	EW&NI	ST-41/44 complex	14	1	2435
53104	M16 240774	EW&NI	not assigned	16	3	1355
53107	M16 240778	EW&NI	ST-41/44 complex	4	2	2807
53109	M16 240780	EW&NI	not assigned	16	1	4518
53111	M16 240782	EW&NI	ST-41/44 complex	19	1	3336
53114	M16 240786	EW&NI	ST-32 complex	1	6	6496
53115	M16 240788	EW&NI	ST-41/44 complex	14	1	1615
53116	M16 240789	EW&NI	ST-60 complex	13	3	1419
53117	M16 240790	EW&NI	ST-41/44 complex	14	1	2220
53118	M16 240793	EW&NI	ST-269 complex	13	3	2430
53120	M16 240795	EW&NI	not assigned	200	1	1969
53124	M16 240802	EW&NI	ST-269 complex	15	10	24036
53126	M16 240804	EW&NI	ST-41/44 complex	14	7	4917
53127	M16 240805	EW&NI	ST-41/44 complex	186	9	5721
53128	M16 240806	EW&NI	ST-41/44 complex	4	2	1634

53129	M16 240807	EW&NI	ST-41/44 complex	4	2	1630
53130	M16 240808	EW&NI	ST-269 complex	15	4	21809
53131	M16 240810	EW&NI	ST-11 complex	22	1	691
53132	M16 240815	EW&NI	ST-32 complex	1	6	10618
53134	M16 240818	EW&NI	ST-32 complex	1	6	7631
53136	M16 240822	EW&NI	not assigned	13	3	2042
53137	M16 240823	EW&NI	ST-32 complex	1	6	7137
53138	M16 240826	EW&NI	ST-269 complex	15	4	17139
53140	M16 240832	EW&NI	not assigned	86	4	17946
53144	M16 240837	EW&NI	ST-269 complex	2	5	9421
53145	M16 240838	EW&NI	ST-41/44 complex	4	37	1816
53148	M16 240841	EW&NI	ST-41/44 complex	4	2	3019
60835	M16 240845	EW&NI	ST-213 complex	31	9	6833
53152	M16 240846	EW&NI	ST-32 complex	13	3	3258
53153	M16 240848	EW&NI	ST-41/44 complex	14	5	5506
53157	M16 240852	EW&NI	ST-41/44 complex	4	2	3394
53161	M16 240857	EW&NI	not assigned	25	1	618
53163	M16 240859	EW&NI	ST-32 complex	1	6	20178
53169	M16 240868	EW&NI	ST-269 complex	30	4	43097
53173	M16 240874	EW&NI	ST-18 complex	37	1	1614
53175	M16 240876	EW&NI	ST-41/44 complex	4	2	2266
53177	M16 240878	EW&NI	ST-269 complex	15	4	17208
53181	M16 240883	EW&NI	ST-32 complex	1	6	12391
53182	M16 240884	EW&NI	ST-162 complex	62	35	4582
53184	M16 240886	EW&NI	ST-41/44 complex	4	2	2373
53185	M16 240887	EW&NI	ST-41/44 complex	4	50	2806
53186	M16 240888	EW&NI	ST-269 complex	15	4	19190
53187	M16 240889	EW&NI	ST-162 complex	21	1	1777
53189	M16 240892	EW&NI	ST-269 complex	13	3	2544
53191	M16 240894	EW&NI	not assigned	13	3	2284
53197	M16 240903	EW&NI	ST-41/44 complex	4	2	3940
149783	DE13555	Germany	ST-213 complex	45	61	6951
149784	DE13556	Germany	not assigned	19	1	1832
149785	DE13559	Germany	not assigned	232	2	3924
84437	DE13562	Germany	not assigned	1	6	7473
149786	DE13563	Germany	ST-269 complex	15	10	13490
84438	DE13566	Germany	ST-162 complex	474	9	7043
149787	DE13568	Germany	ST-269 complex	15	10	20979
149788	DE13570	Germany	ST-162 complex	13	262	6479
149789	DE13572	Germany	ST-269 complex	15	10	29882
149790	DE13574	Germany	ST-41/44 complex	14	7	5779
149791	DE13576	Germany	ST-41/44 complex	4	2	3487
149792	DE13580	Germany	ST-32 complex	510	28	3842
149793	DE13584	Germany	ST-41/44 complex	4	2	4687
84678	DE13588	Germany	not assigned	19	1	3972

149794	DE13589	Germany	ST-32 complex	1	6	15722
149795	DE13591	Germany	ST-269 complex	13	3	2117
149796	DE13594	Germany	ST-41/44 complex	4	2	1958
149797	DE13596	Germany	ST-269 complex	13	3	3505
149798	DE13608	Germany	ST-41/44 complex	14	7	4730
149799	DE13609	Germany	ST-41/44 complex	14	7	5184
149800	DE13612	Germany	ST-41/44 complex	245	123	12206
149801	DE13617	Germany	not assigned	14	1	630
149802	DE13618	Germany	ST-269 complex	15	10	17130
149803	DE13621	Germany	ST-32 complex	1	6	7476
105750	DE13624	Germany	ST-213 complex	322	66	3311
149804	DE13625	Germany	ST-32 complex	1	6	8449
149805	DE13626	Germany	ST-213 complex	45	33	4505
84673	DE13627	Germany	not assigned	119	1	1740
84443	DE13628	Germany	ST-213 complex	13	261	8203
149806	DE13630	Germany	ST-213 complex	45	91	4536
149807	DE13632	Germany	ST-41/44 complex	14	271	1682
84444	DE13634	Germany	not assigned	321	111	332
149808	DE13635	Germany	ST-41/44 complex	14	7	3876
84695	DE13639	Germany	ST-213 complex	45	8	511
149809	DE13643	Germany	ST-269 complex	19	1	1612
149810	DE13644	Germany	ST-162 complex	4	1	3538
84684	DE13645	Germany	ST-60 complex	13	3	2191
149811	DE13646	Germany	ST-32 complex	1	6	4991
149813	DE13648	Germany	ST-41/44 complex	14	271	848
149814	DE13649	Germany	ST-41/44 complex	24	1	1838
84445	DE13650	Germany	ST-41/44 complex	4	2	2681
149815	DE13651	Germany	ST-41/44 complex	14	271	1347
149816	DE13652	Germany	ST-213 complex	45	14	5021
149818	DE13655	Germany	ST-41/44 complex	22	189	5876
149819	DE13656	Germany	ST-32 complex	1	6	9389
149820	DE13657	Germany	ST-41/44 complex	608	2	3320
149821	DE13658	Germany	ST-41/44 complex	14	271	1228
149822	DE13659	Germany	ST-213 complex	45	8	832
84446	DE13660	Germany	ST-162 complex	13	3	4160
149823	DE13661	Germany	ST-32 complex	144	1	4345
149824	DE13665	Germany	ST-41/44 complex	14	7	5198
149825	DE13668	Germany	ST-32 complex	1	6	5763
149826	DE13670	Germany	ST-269 complex	15	10	14557
149827	DE13671	Germany	ST-213 complex	45	33	6270
84448	DE13680	Germany	ST-32 complex	1	6	14038
149828	DE13683	Germany	ST-41/44 complex	14	7	5805
149829	DE13684	Germany	ST-269 complex	15	10	18358
149830	DE13685	Germany	ST-32 complex	1	6	6720
149831	DE13686	Germany	ST-41/44 complex	14	1	2826

149832	DE13687	Germany	ST-41/44 complex	14	1	1741
84449	DE13688	Germany	ST-1572 complex	13	3	2672
84674	DE13692	Germany	ST-35 complex	25	1	818
149833	DE13694	Germany	ST-41/44 complex	19	1	4868
149834	DE13695	Germany	ST-41/44 complex	21	7	2370
149835	DE13701	Germany	ST-41/44 complex	4	2	1517
149836	DE13704	Germany	ST-213 complex	45	8	792
149837	DE13706	Germany	ST-162 complex	390	216	2709
149838	DE13707	Germany	not assigned	197	163	13987
149839	DE13709	Germany	ST-41/44 complex	14	7	3970
149840	DE13710	Germany	ST-41/44 complex	19	1	1108
149841	DE13713	Germany	ST-269 complex	13	3	1960
149842	DE13715	Germany	ST-32 complex	510	267	148194
84450	DE13716	Germany	not assigned	232	2	3322
149843	DE13719	Germany	ST-32 complex	1	6	9471
149844	DE13727	Germany	ST-32 complex	31	264	10464
149845	DE13730	Germany	ST-461 complex	47	1	7278
149846	DE13736	Germany	not assigned	197	163	23731
149847	DE13740	Germany	ST-32 complex	1	6	13098
149848	DE13741	Germany	ST-18 complex	37	1	953
84451	DE13743	Germany	not assigned	19	1	5184
149849	DE13744	Germany	ST-32 complex	510	28	7775
149850	DE13746	Germany	not assigned	19	1	4706
149851	DE13747	Germany	ST-213 complex	323	99	12825
149852	DE13748	Germany	ST-41/44 complex	110	21	6819
149853	DE13749	Germany	ST-41/44 complex	14	7	4491
84452	DE13753	Germany	ST-41/44 complex	14	7	3931
149854	DE13756	Germany	ST-269 complex	15	10	24523
149855	DE13757	Germany	ST-213 complex	45	47	4264
84685	DE13759	Germany	ST-269 complex	15	10	29343
149856	DE13760	Germany	ST-41/44 complex	19	1	2087
149857	DE13763	Germany	ST-41/44 complex	4	2	3686
149858	DE13768	Germany	ST-41/44 complex	110	21	6036
149859	DE13772	Germany	not assigned	232	2	5334
149860	DE13778	Germany	ST-32 complex	1	6	6261
149861	DE13781	Germany	ST-35 complex	16	1	2154
149862	DE13782	Germany	ST-269 complex	15	4	11959
149863	DE13783	Germany	ST-269 complex	110	32	9059
84690	DE13784	Germany	ST-213 complex	294	263	8544
149864	DE13786	Germany	ST-269 complex	13	3	1740
149865	DE13788	Germany	ST-32 complex	510	28	3889
149866	DE13790	Germany	ST-213 complex	45	14	3412
149867	DE13791	Germany	not assigned	70	270	15816
84453	DE13792	Germany	ST-41/44 complex	4	2	2898
149868	DE13793	Germany	ST-41/44 complex	14	7	6075

149870	DE13796	Germany	ST-41/44 complex	4	1	1264
149871	DE13798	Germany	ST-269 complex	15	10	11596
149872	DE13799	Germany	not assigned	110	32	6012
149873	DE13800	Germany	not assigned	232	2	4166
149874	DE13801	Germany	ST-213 complex	45	8	607
149875	DE13802	Germany	ST-32 complex	1	6	9521
84454	DE13806	Germany	ST-41/44 complex	14	7	8309
149876	DE13807	Germany	ST-41/44 complex	14	7	5457
149877	DE13808	Germany	ST-213 complex	45	61	5294
149878	DE13811	Germany	ST-269 complex	15	10	7509
149879	DE13812	Germany	ST-41/44 complex	14	7	6096
84455	DE13819	Germany	ST-32 complex	144	1	1114
149880	DE13821	Germany	ST-32 complex	1	6	14044
149881	DE13827	Germany	ST-213 complex	1468	48	7096
149882	DE13829	Germany	not assigned	19	1	3142
149883	DE13830	Germany	ST-32 complex	510	28	3934
149885	DE13836	Germany	ST-269 complex	15	10	17253
149886	DE13839	Germany	ST-269 complex	19	1	373
149887	DE13844	Germany	not assigned	23	52	7309
149888	DE13846	Germany	ST-41/44 complex	4	2	2989
149889	DE13850	Germany	ST-32 complex	1	6	10970
149890	DE13851	Germany	ST-213 complex	45	91	3755
41655	2751	Italy	ST-41/44 complex	14	7	8598
41657	2753	Italy	ST-1572 complex	322	163	12447
41658	2754	Italy	ST-32 complex	1	6	9453
41664	2764	Italy	ST-269 complex	110	32	6369
84058	2788	Italy	not assigned	291	20	4231
52931	2790	Italy	ST-167 complex	24	1	1190
84059	2817	Italy	not assigned	296	90	18832
52937	2818	Italy	ST-865 complex	119	1	2990
84060	2819	Italy	ST-162 complex	390	216	2623
52938	2822	Italy	ST-162 complex	390	216	2258
84061	2823	Italy	ST-162 complex	390	216	1992
84062	2836	Italy	ST-41/44 complex	16	1	1063
52939	2840	Italy	ST-162 complex	390	216	1091
52940	2843	Italy	ST-162 complex	390	216	2514
52942	2862	Italy	ST-1572 complex	260	1	4563
52943	2873	Italy	ST-162 complex	21	1	1777
84067	2875	Italy	ST-461 complex	47	1	1041
52945	2876	Italy	ST-41/44 complex	19	1	3191
84069	2889	Italy	ST-213 complex	45	8	396
52948	2890	Italy	ST-162 complex	21	1	1595
52949	2891	Italy	ST-162 complex	390	216	3603
52950	2894	Italy	ST-32 complex	16	1	1557
84070	2895	Italy	ST-213 complex	160	150	7192

52953	2901	Italy	ST-41/44 complex	0	1	73
52954	2905	Italy	ST-41/44 complex	19	1	9265
52957	2908	Italy	ST-32 complex	1132	6	24722
52958	2935	Italy	ST-162 complex	390	216	4704
52960	2938	Italy	ST-32 complex	510	28	8329
97866	Nmiss2773	Italy	ST-32 complex	1	6	13302
98247	22178	Spain	ST-213 complex	45	8	491
98248	22179	Spain	not assigned	16	1	363
98249	22180	Spain	ST-461 complex	47	1	7756
60458	22183	Spain	not assigned	19	1	5615
98251	22186	Spain	ST-103 complex	25	1	4755
98252	22187	Spain	ST-213 complex	45	33	7255
98253	22188	Spain	ST-461 complex	47	1	2532
60459	22189	Spain	not assigned	119	1	2746
98254	22193	Spain	ST-269 complex	19	1	4890
98255	22196	Spain	ST-60 complex	13	3	3856
98256	22198	Spain	ST-269 complex	19	1	4267
98257	22200	Spain	not assigned	16	1	2202
98258	22202	Spain	not assigned	160	269	3780
98259	22203	Spain	ST-213 complex	79	9	5930
98260	22205	Spain	ST-35 complex	16	1	2131
60460	22207	Spain	ST-213 complex	4	1	7469
98261	22209	Spain	ST-213 complex	45	8	743
98262	22211	Spain	ST-213 complex	45	8	246
98263	22212	Spain	ST-41/44 complex	19	1	4684
98264	22215	Spain	ST-269 complex	19	1	10076
98265	22217	Spain	ST-461 complex	47	1	3319
60453	22218	Spain	ST-41/44 complex	283	48	6979
98266	22221	Spain	ST-213 complex	10	5	9413
98267	22222	Spain	ST-60 complex	13	3	1404
98268	22230	Spain	ST-213 complex	357	4	11853
98269	22234	Spain	ST-35 complex	16	1	1643
60454	22237	Spain	ST-35 complex	14	1	1225
98270	22241	Spain	ST-103 complex	25	1	333
98271	22244	Spain	ST-461 complex	47	189	6599
98272	22245	Spain	ST-269 complex	651	268	6921
98273	22248	Spain	ST-32 complex	1145	6	10717
98274	22250	Spain	ST-213 complex	409	9	4200
98275	22252	Spain	ST-213 complex	45	8	594
98276	22253	Spain	ST-213 complex	401	9	5294
98277	22256	Spain	ST-162 complex	21	1	221
60429	22260	Spain	ST-213 complex	45	91	3740
98278	22263	Spain	ST-162 complex	1	6	8697
98279	22266	Spain	ST-461 complex	47	1	1145
98280	22267	Spain	ST-213 complex	245	205	5592

98281	22268	Spain	ST-213 complex	245	205	5825
98282	22269	Spain	ST-32 complex	510	28	6654
98283	22274	Spain	ST-461 complex	47	18	12508
98284	22278	Spain	ST-213 complex	45	61	4302
98285	22279	Spain	ST-41/44 complex	19	1	5252
60456	22280	Spain	ST-41/44 complex	14	7	5198
98286	22281	Spain	ST-269 complex	366	110	8531
98287	22283	Spain	ST-60 complex	1139	1	3724
60430	22287	Spain	ST-213 complex	45	91	4740
98288	22288	Spain	ST-162 complex	21	1	202
60431	22289	Spain	ST-269 complex	15	4	15436
98289	22296	Spain	ST-213 complex	10	5	7121
98290	22301	Spain	ST-213 complex	45	8	720
98291	22302	Spain	ST-18 complex	37	1	923
98292	22304	Spain	ST-1572 complex	13	3	2718
98294	22306	Spain	ST-41/44 complex	19	1	5434
98295	22311	Spain	ST-213 complex	45	33	5287
98296	22312	Spain	not assigned	14	1	2370
98297	22316	Spain	ST-213 complex	45	75	6119
98298	22318	Spain	ST-213 complex	69	265	3449
60457	22320	Spain	not assigned	13	3	3326
98299	22321	Spain	not assigned	207	5	5930
98300	22324	Spain	not assigned	207	5	9555
98301	22325	Spain	ST-461 complex	47	1	4369
98302	22331	Spain	ST-41/44 complex	4	2	1486
98303	22333	Spain	ST-162 complex	318	36	12063
98304	22334	Spain	ST-213 complex	1140	8	750
98306	22336	Spain	ST-269 complex	15	10	26362
98307	22339	Spain	ST-213 complex	45	8	719
98308	22341	Spain	ST-162 complex	108	266	9266
98309	22343	Spain	ST-213 complex	45	8	451
98310	22347	Spain	ST-461 complex	47	1	3184
98311	22349	Spain	ST-213 complex	160	150	5012
98312	22352	Spain	ST-32 complex	145	6	11255
60432	22361	Spain	ST-18 complex	37	1	1875
98315	22363	Spain	ST-461 complex	47	1	1961
98316	22364	Spain	ST-213 complex	276	26	7465
98317	22365	Spain	not assigned	14	1	2035
98318	22366	Spain	ST-1157 complex	203	1	635
98319	22368	Spain	ST-32 complex	1	6	7631
98320	22369	Spain	ST-213 complex	45	33	4961
98322	22377	Spain	ST-213 complex	215	5	5961
98323	22378	Spain	ST-32 complex	1	6	14732
98325	22380	Spain	ST-461 complex	47	1	2805
98326	22386	Spain	ST-461 complex	47	1	4584

60433	22387	Spain	not assigned	228	1	237
98328	22390	Spain	not assigned	16	1	2345
98329	22398	Spain	ST-1572 complex	13	3	1459
98330	22399	Spain	ST-41/44 complex	4	2	1855
98331	22400	Spain	ST-213 complex	45	11	6102
98332	22401	Spain	ST-461 complex	47	1	2412
98333	22402	Spain	ST-269 complex	19	1	4556
98334	22405	Spain	ST-865 complex	511	1	5859