Sequencing and the GISAID EpiFlu™ Database

Naomi Komadina

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WHO Collaborating Centre
for Reference and
Research on Influenza
VIDRL

EpiFlu Database training activities:

How to customise search results settings

How to search in GISAID

How to upload data to GISAID

How to retrieve sequences from the GISAID database (download)

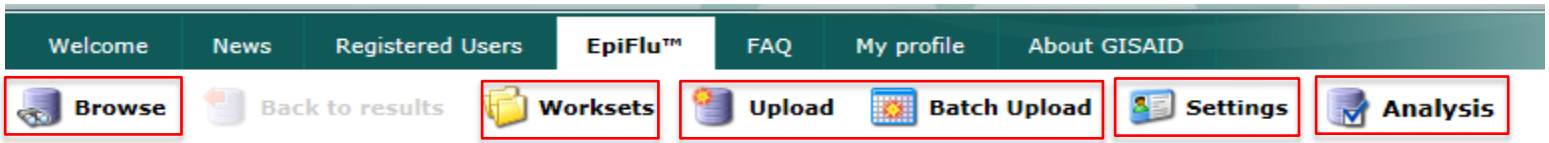
How to blast a sequence

How to align sequences

How to create preliminary phylogenetic trees

How to download sequences & meta data

How to download an acknowledgement table



Enter and search in GISAID database

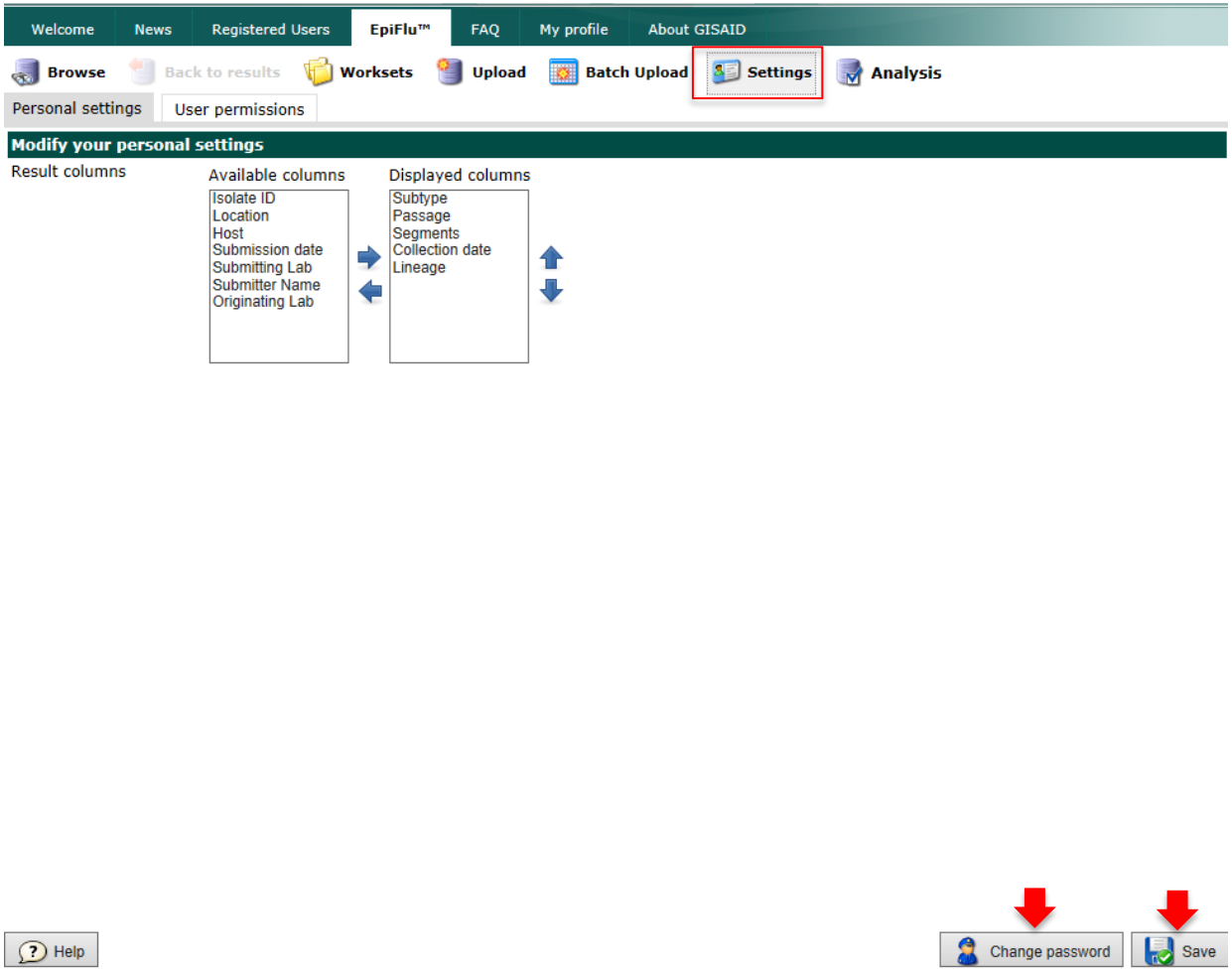
Create a workset

Upload your sequences

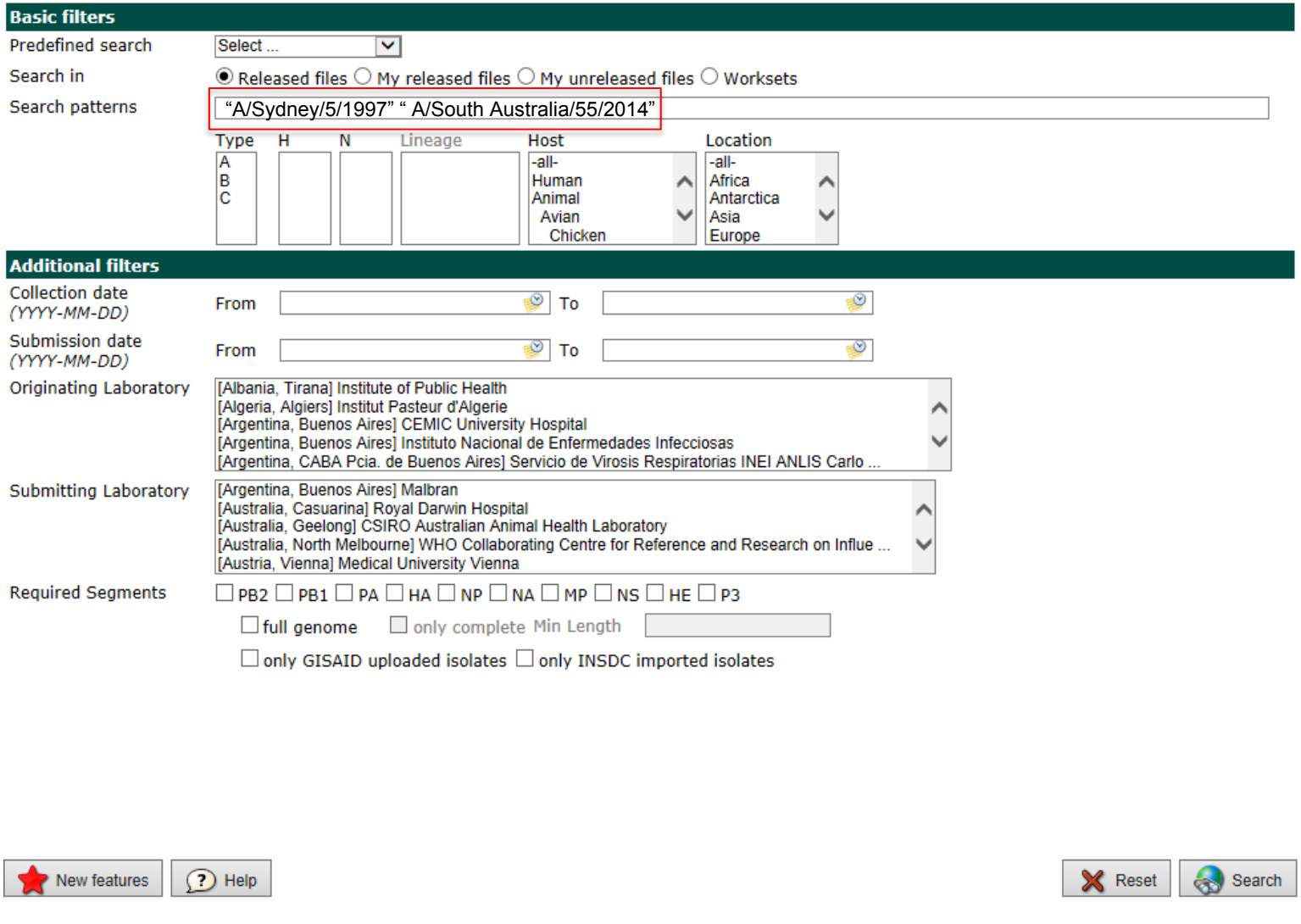
Customise your search results in the database

Tools
BLAST
Alignments
phylogenetic analyses
downloads

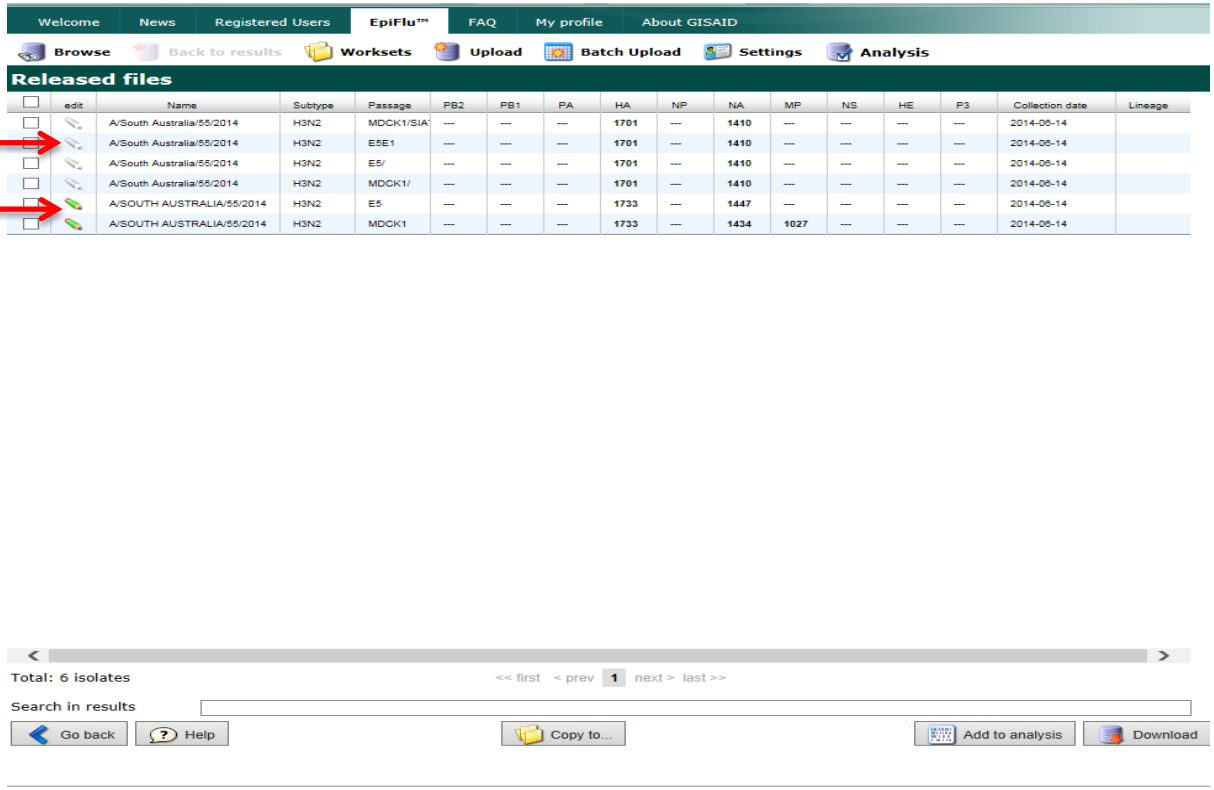
Customise Settings



Search Functions



Search Results



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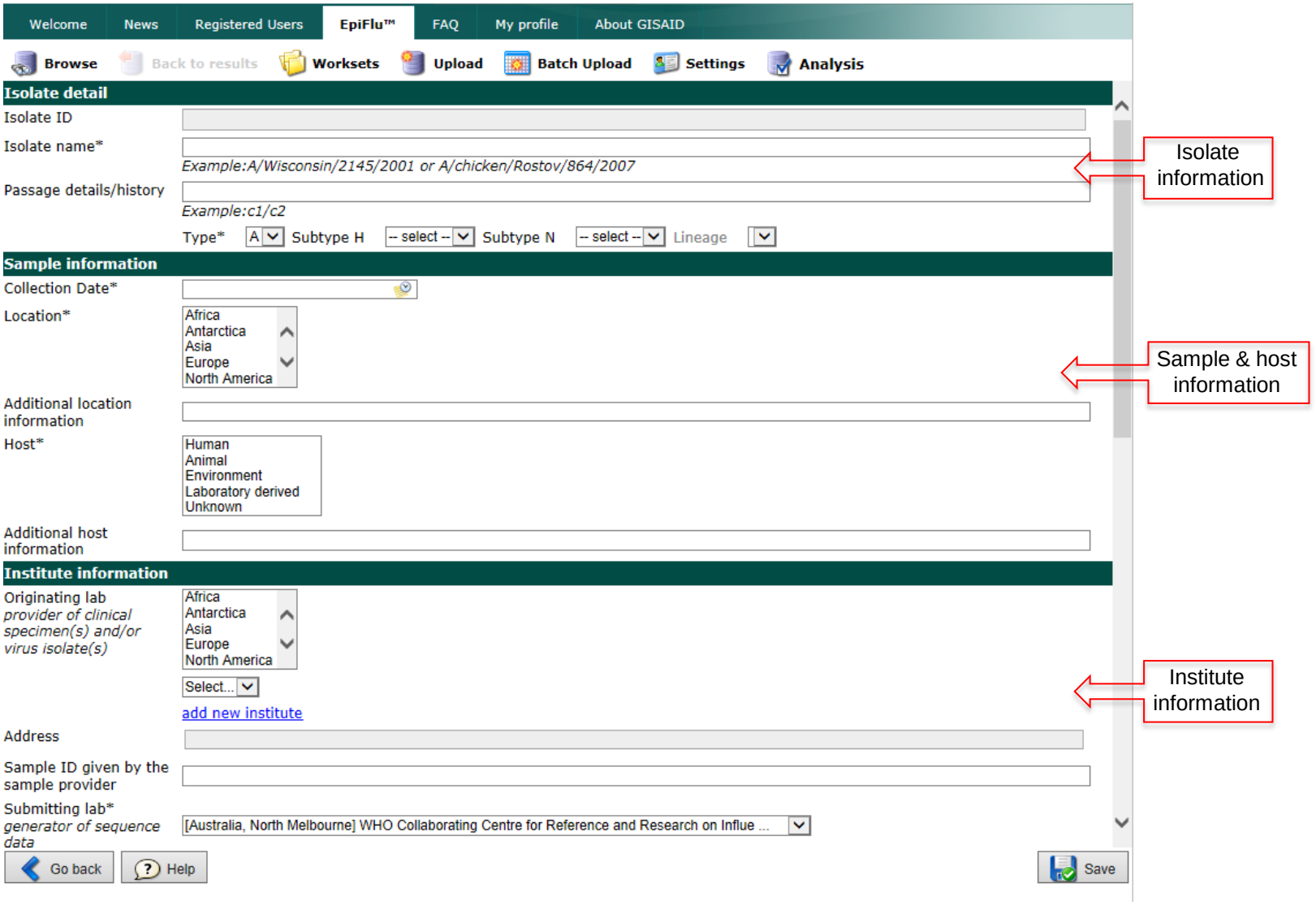

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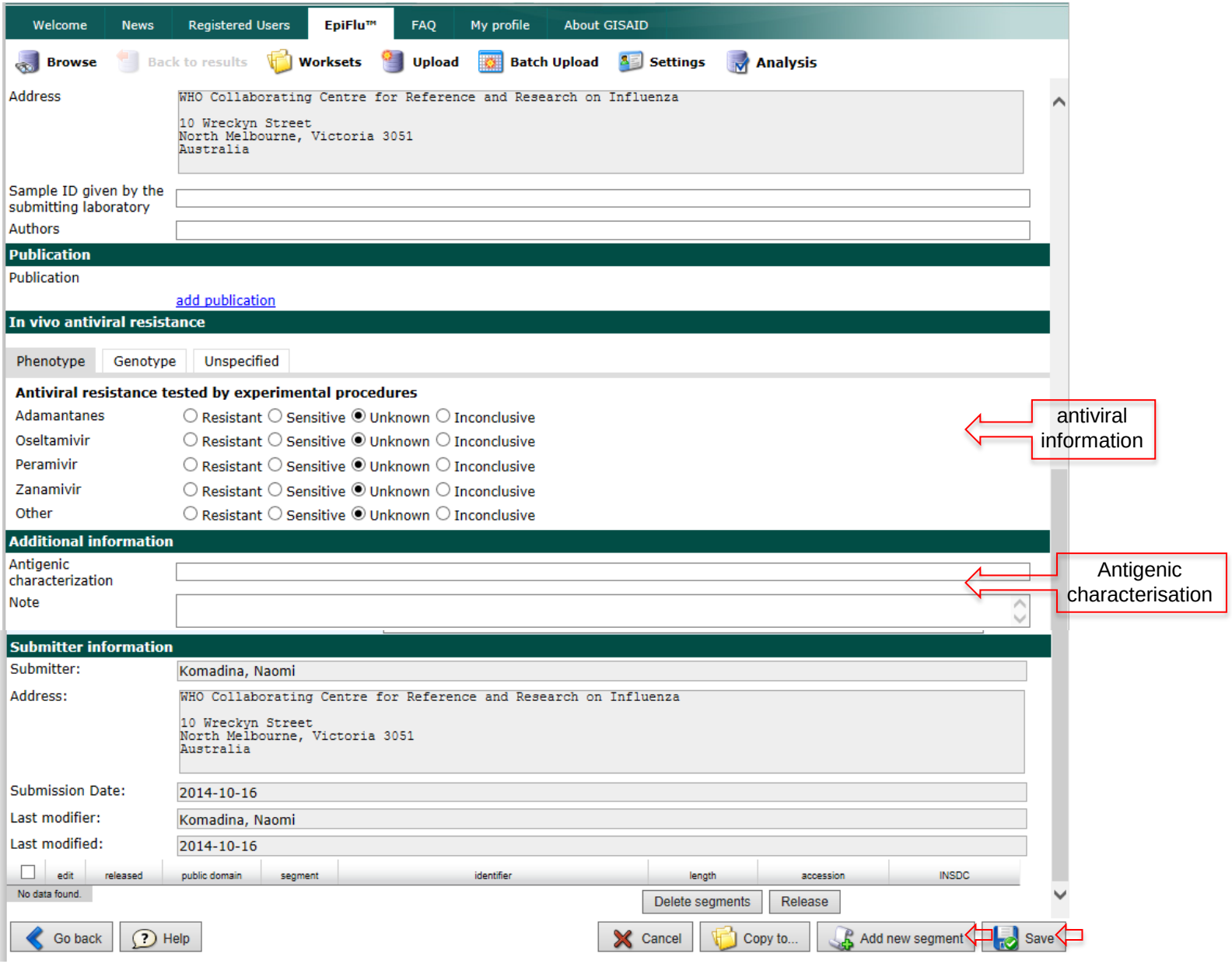

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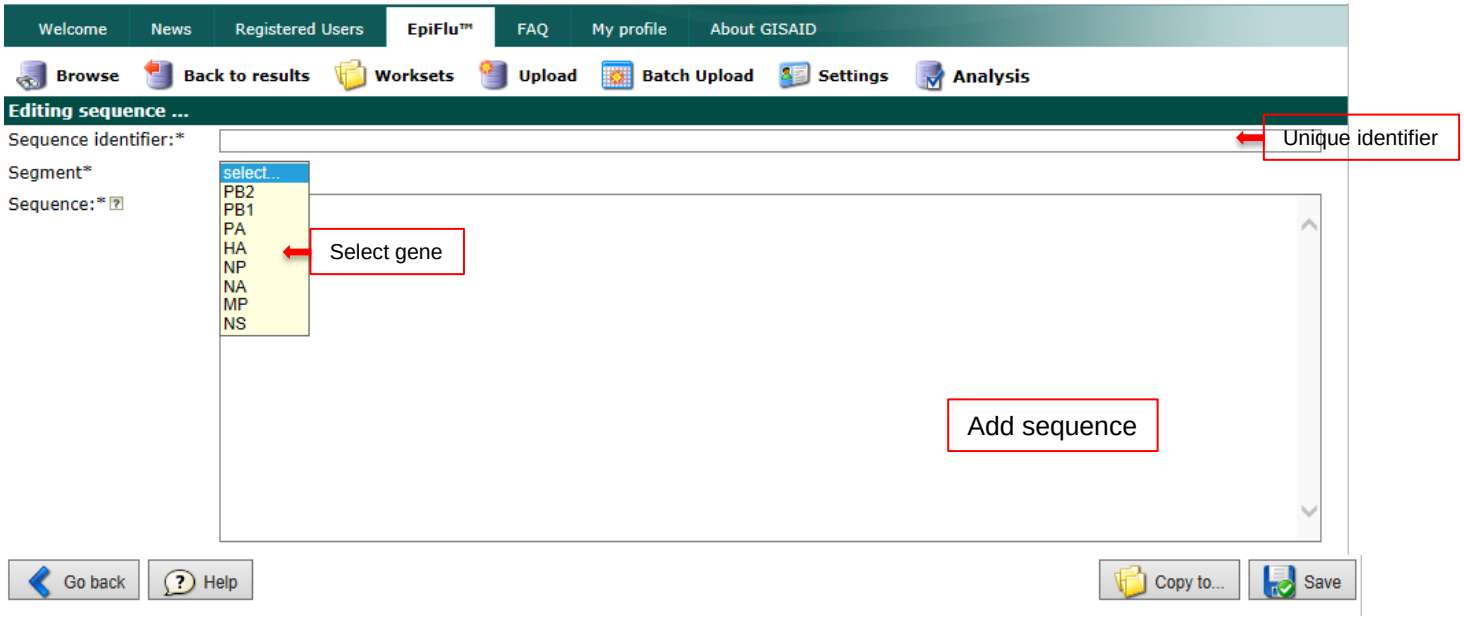

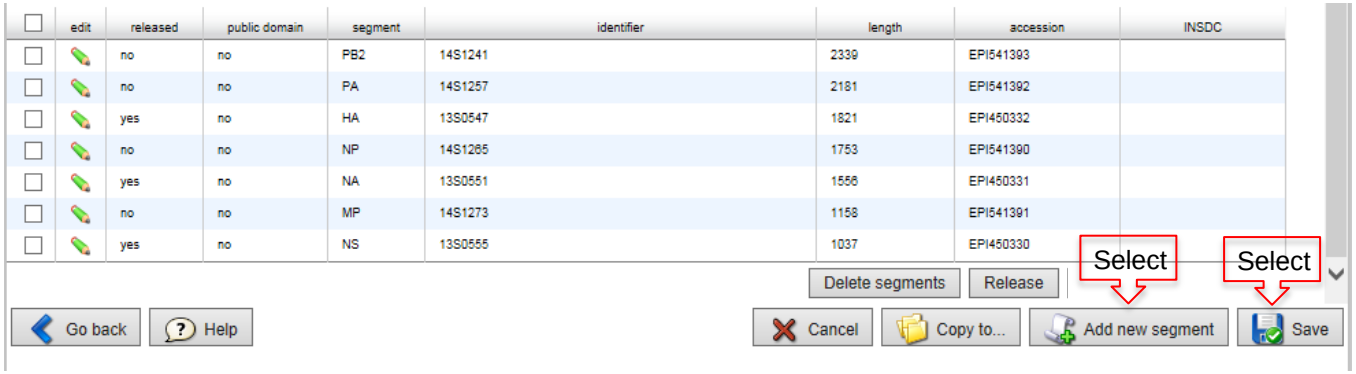

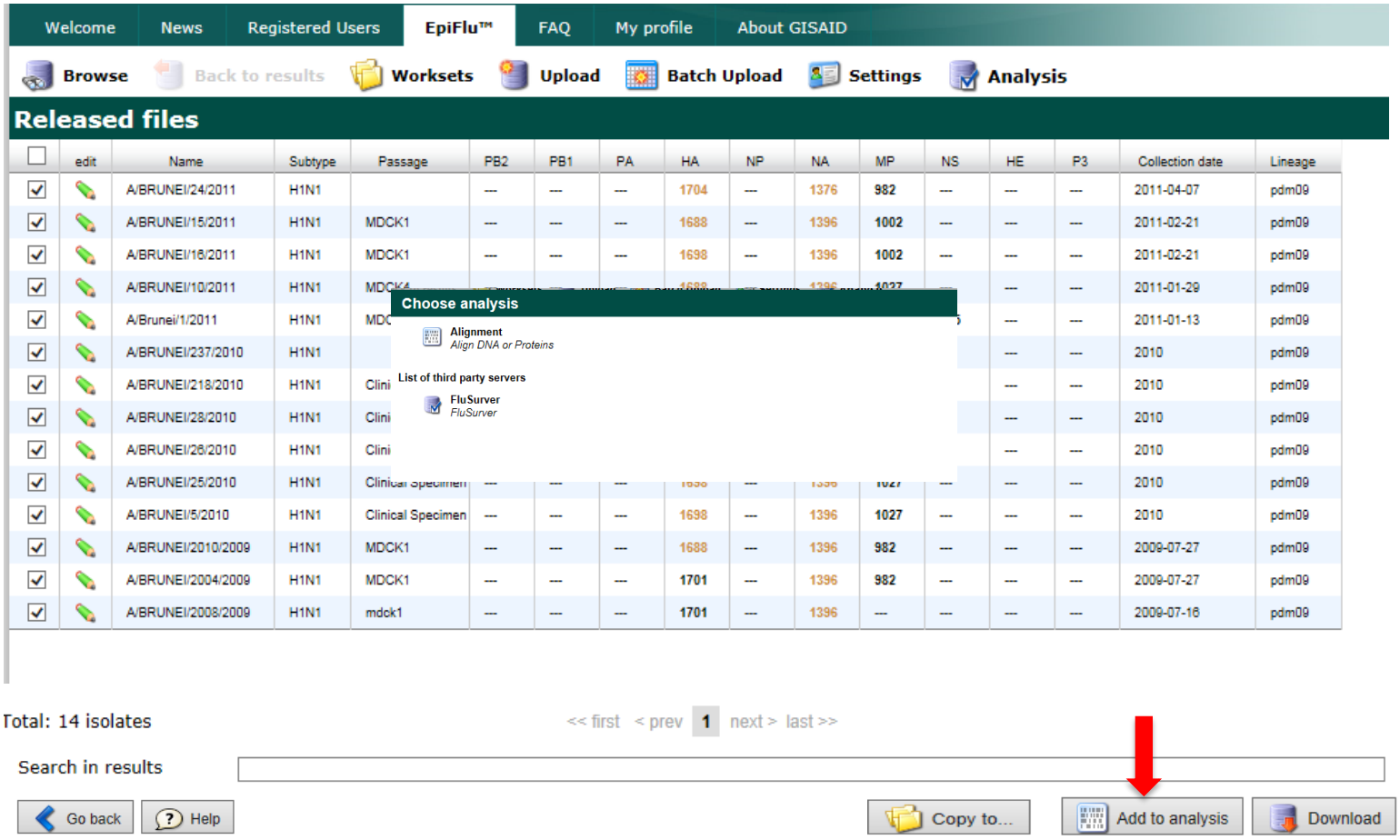
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Collection date
Lineage
A/BRUNEI/24/2011 H1N1 1704 1376 982 2011-04-07 pdm09
A/BRUNEI/15/2011 H1N1 MDCK1 1688 1396 1002 2011-02-21 pdm09
A/BRUNEI/16/2011 H1N1 MDCK1 1698 1396 1002 2011-02-21 pdm09
A/BRUNEI/10/2011 H1N1 2011-01-29 pdm09
Choose analysis
Alignment
Align DNA or Proteins
List of third party servers
FluSurver
FluSurver
A/Brunei/1/2011 H1N1 2011-01-13 pdm09
A/BRUNEI/237/2010 H1N1 2010 pdm09
A/BRUNEI/218/2010 H1N1 2010 pdm09
A/BRUNEI/28/2010 H1N1 2010 pdm09
A/BRUNEI/26/2010 H1N1 2010 pdm09
A/BRUNEI/25/2010 H1N1 2010 pdm09
A/BRUNEI/5/2010 H1N1 Clinical Specimen 1698 1396 1027 2010 pdm09
A/BRUNEI/2010/2009 H1N1 MDCK1 1688 1396 982 2009-07-27 pdm09
A/BRUNEI/2004/2009 H1N1 MDCK1 1701 1396 982 2009-07-27 pdm09
A/BRUNEI/2008/2009 H1N1 mdck1 1701 1396 2009-07-16 pdm09
Total: 14 isolates
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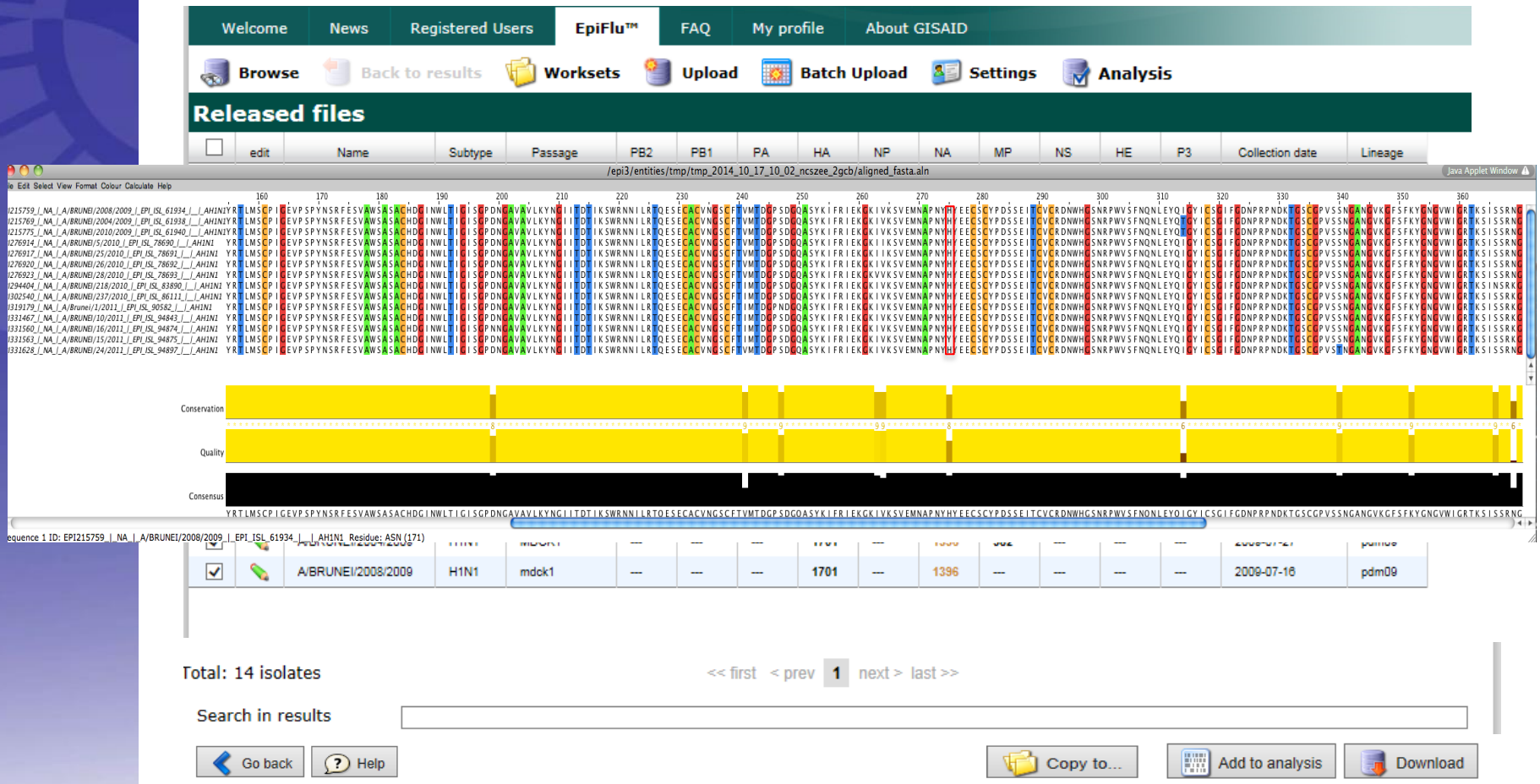
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Quality
Consensus
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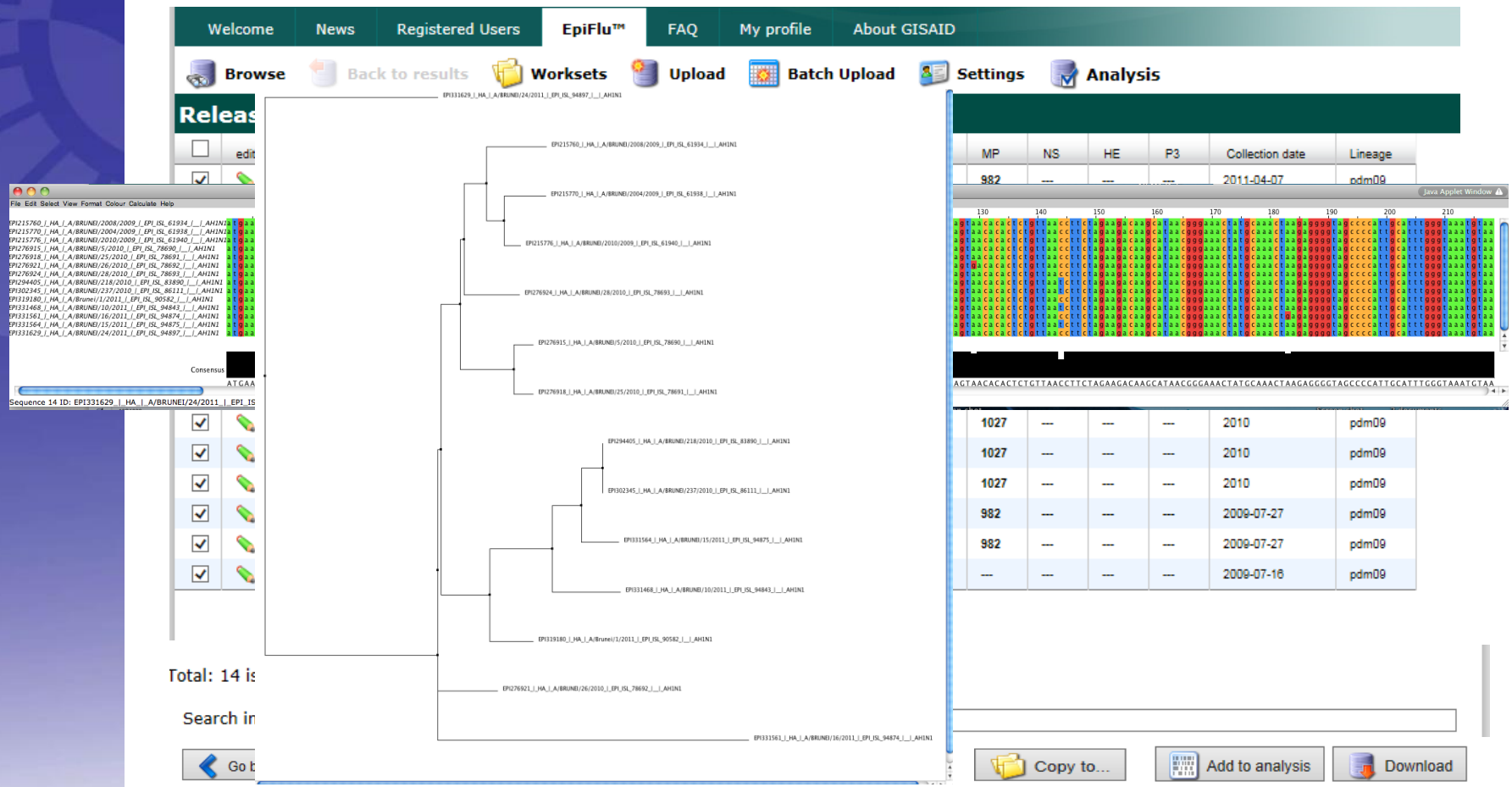
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982 --- --- --- 2011-04-07 pdm09
1027 --- --- --- 2010 pdm09
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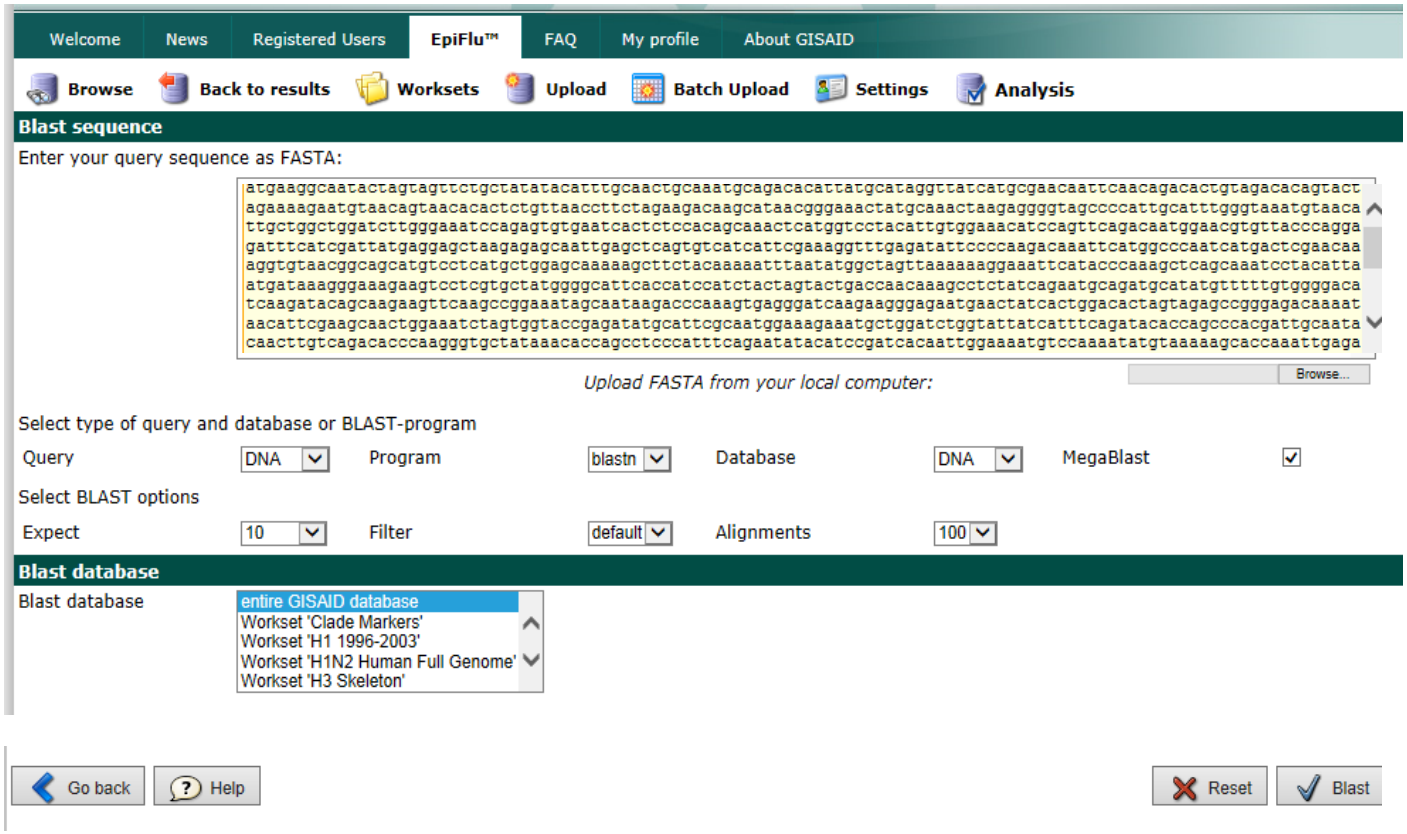
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Upload FASTA from your local computer:
Browse...
Select type of query and database or BLAST-program
Query
DNA
Program
blastn
Database
DNA
MegaBlast
Select BLAST options
Expect
10
Filter
default
Alignments
100
Blast database
Blast database
entire GISAID database
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Workset 'H1N2 Human Full Genome'
Workset 'H3 Skeleton'
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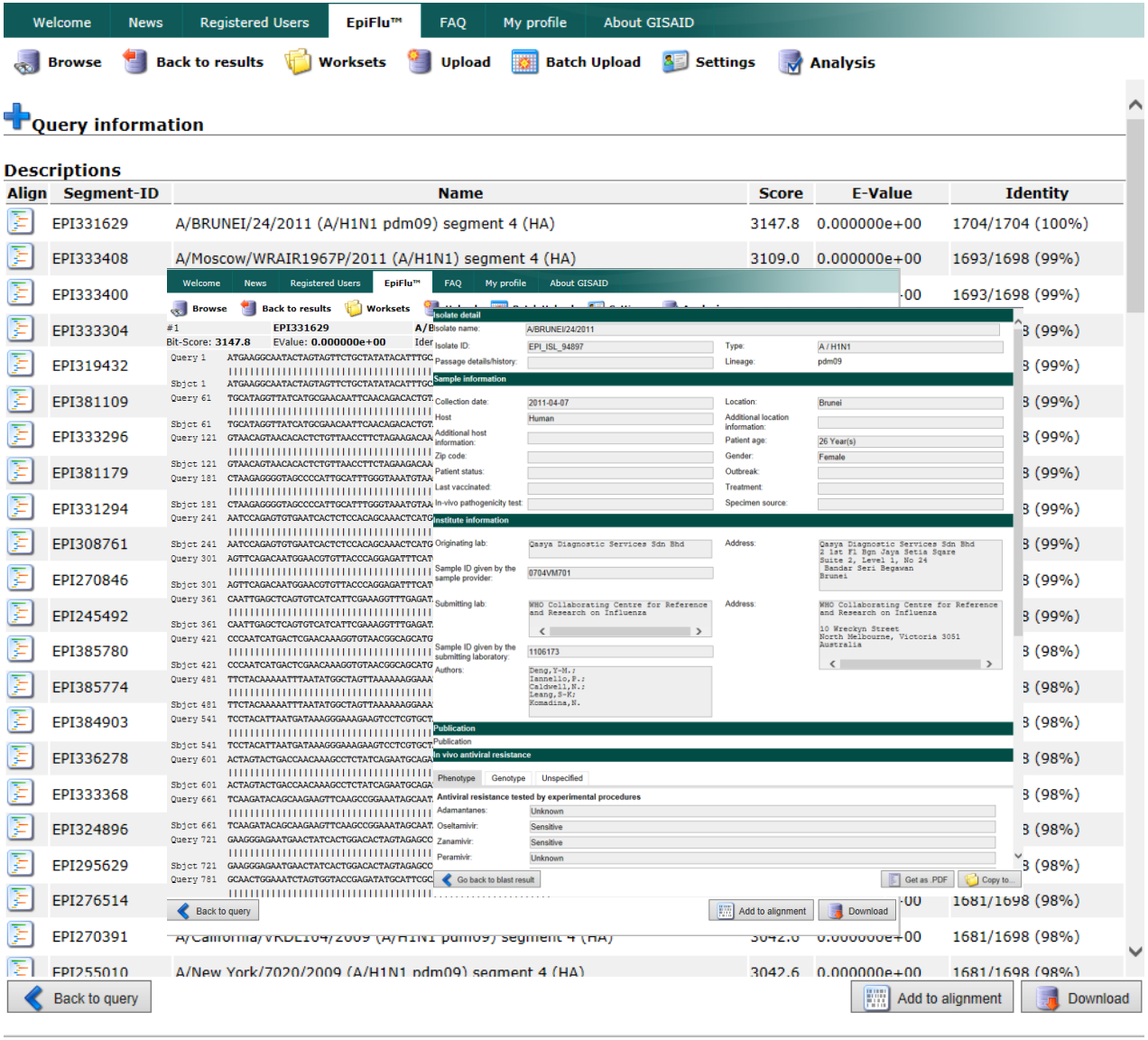
Blast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Worksets
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Analysis
Query information
Descriptions
Align
Segment-ID
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Score
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Identity
EPI331629 A/BRUNEI/24/2011 (A/H1N1 pdm09) segment 4 (HA) 3147.8 0.000000e+00 1704/1704 (100%)
EPI333408 A/Moscow/WRAIR1967P/2011 (A/H1N1) segment 4 (HA) 3109.0 0.000000e+00 1693/1698 (99%)
EPI333400 1693/1698 (99%)
EPI333304 (99%)
EPI319432 (99%)
EPI381109 (99%)
EPI333296 (99%)
EPI381179 (99%)
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EPI270846 (99%)
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EPI336278 (98%)
EPI333368 (98%)
EPI324896 (98%)
EPI295629 (98%)
EPI276514
EPI270391 1681/1698 (98%)
EPI255010 A/New York/7020/2009 (A/H1N1 pdm09) segment 4 (HA) 3042.6 0.000000e+00 1681/1698 (98%)
Isolate detail
Isolate name: A/BRUNEI/24/2011
Isolate ID: EPI_ISL_94897
Type: A / H1N1
Passage details/history:
Lineage: pdm09
Sample information
Collection date: 2011-04-07
Location: Brunei
Host: Human
Additional location information:
Additional host information:
Patient age: 26 Year(s)
Zip code:
Gender: Female
Patient status:
Outbreak:
Last vaccinated:
Treatment:
In-vivo pathogenicity test:
Specimen source:
Institute information
Originating lab: Qasya Diagnostic Services Sdn Bhd
Address: Qasya Diagnostic Services Sdn Bhd
2 1st Fl Bgn Jaya Setia Sqare
Suite 2, Level 1, No 24
Bandar Seri Begawan
Brunei
Sample ID given by the sample provider: 0704VM701
Submitting lab: WHO Collaborating Centre for Reference and Research on Influenza
Address: WHO Collaborating Centre for Reference and Research on Influenza
10 Wreckyn Street
North Melbourne, Victoria 3051
Australia
Sample ID given by the submitting laboratory: 1106173
Authors: Deng,Y-M.; Iannello,P.; Caldwell,N.; Leang,S-K; Komadina,N.
Publication
Publication
In vivo antiviral resistance
Phenotype
Genotype
Unspecified
Antiviral resistance tested by experimental procedures
Adamantanes: Unknown
Oseltamivir: Sensitive
Zanamivir: Sensitive
Peramivir: Unknown
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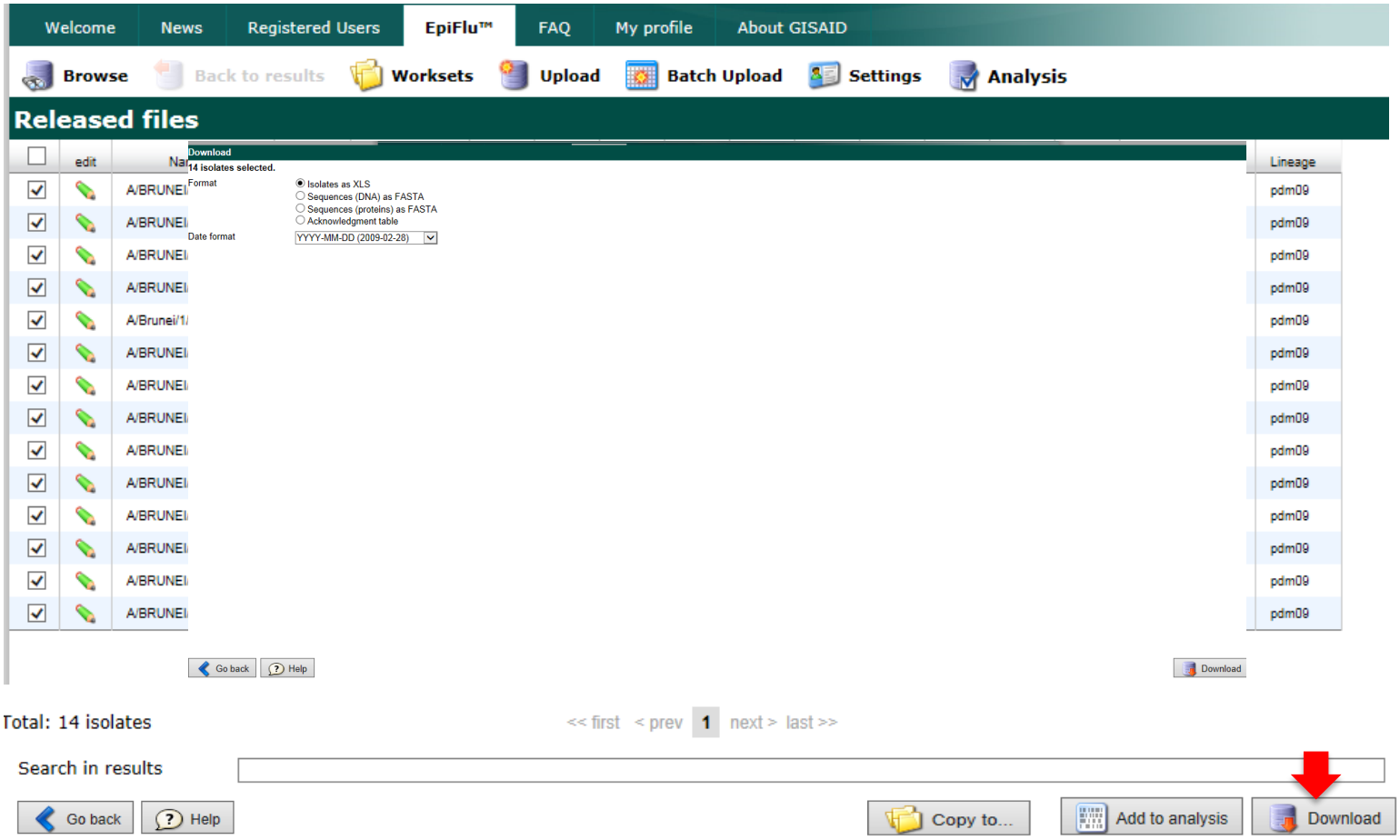
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14 isolates selected.
Format
Isolates as XLS
Sequences (DNA) as FASTA
Sequences (proteins) as FASTA
Acknowledgment table
Date format
YYYY-MM-DD (2009-02-28)
pdm09
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Total: 14 isolates
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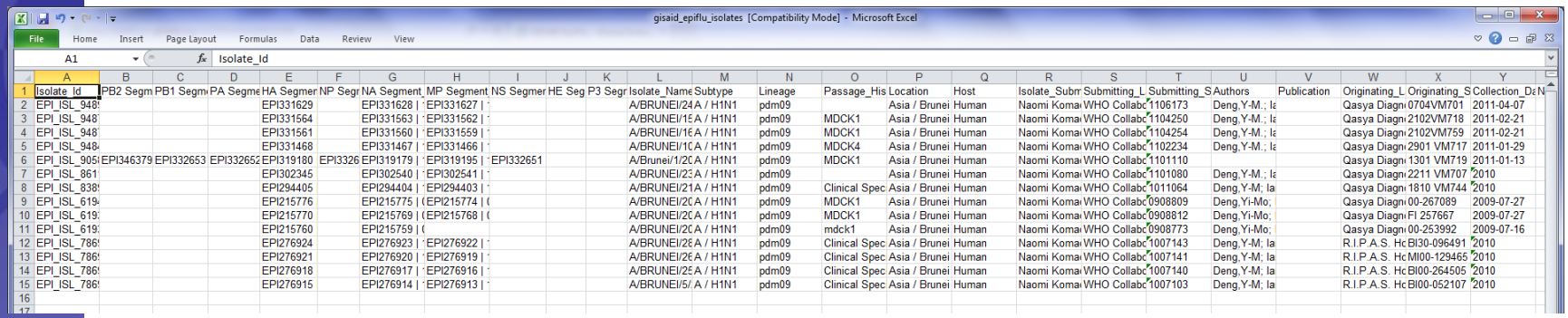
Isolate meta data



gisaid_epiflu_isolates [Compatibility Mode] - Microsoft Excel

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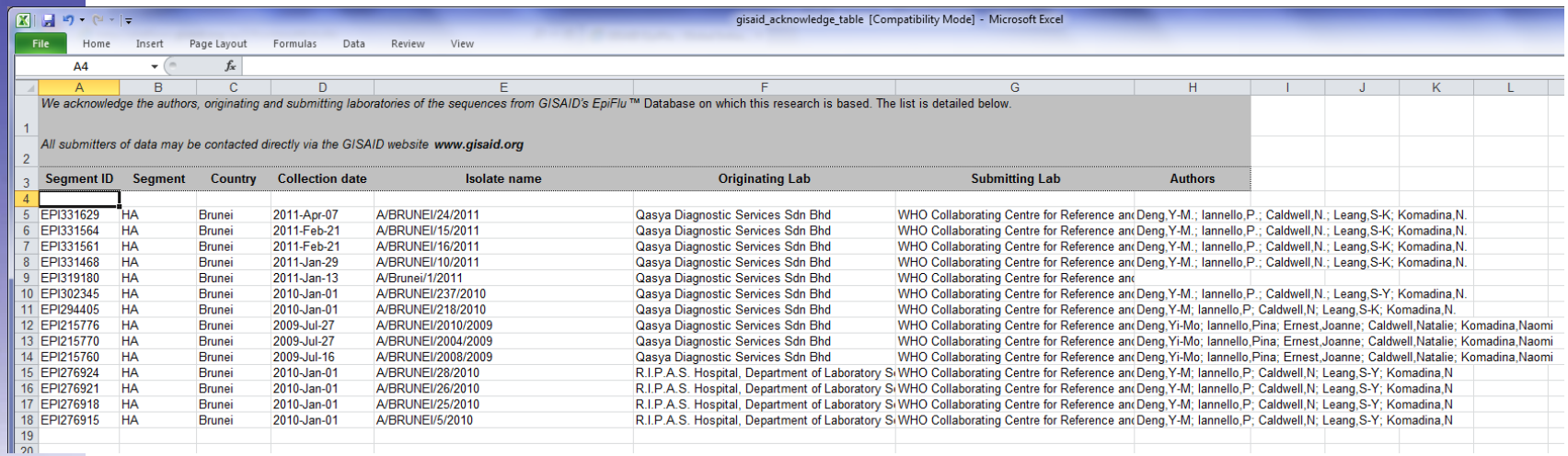
EPI_ISL_948				EPI331629		EPI331628 |	EPI331627 |			A/BRUNEI/24	A / H1N1	pdm09		Asia / Brunei	Human	Naomi Koma	WHO Collabc	1106173	Deng,Y-M.; la		Qasya Diagn	0704VM701	2011-04-07
EPI_ISL_948				EPI331564		EPI331563 |	EPI331562 |			A/BRUNEI/15	A / H1N1	pdm09	MDCK1	Asia / Brunei	Human	Naomi Koma	WHO Collabc	1104250	Deng,Y-M.; la		Qasya Diagn	2102VM718	2011-02-21
EPI_ISL_948				EPI331561		EPI331560 |	EPI331559 |			A/BRUNEI/16	A / H1N1	pdm09	MDCK1	Asia / Brunei	Human	Naomi Koma	WHO Collabc	1104254	Deng,Y-M.; la		Qasya Diagn	2102VM759	2011-02-21
EPI_ISL_948				EPI331468		EPI331467 |	EPI331466 |			A/BRUNEI/10	A / H1N1	pdm09	MDCK4	Asia / Brunei	Human	Naomi Koma	WHO Collabc	1102234	Deng,Y-M.; la		Qasya Diagn	2901 VM717	2011-01-29
EPI_ISL_905	EPI346379	EPI332653	EPI332652	EPI319180	EPI3326	EPI319179 |	EPI319195 |	EPI332651			A/Brunei/1/20	A / H1N1	pdm09	MDCK1	Asia / Brunei	Human	Naomi Koma	WHO Collabc	1101110			Qasya Diagn	1301 VM719	2011-01-13
EPI_ISL_861				EPI302345		EPI302540 |	EPI302541 |			A/BRUNEI/23	A / H1N1	pdm09		Asia / Brunei	Human	Naomi Koma	WHO Collabc	1101080	Deng,Y-M.; la		Qasya Diagn	2211 VM707	2010
EPI_ISL_838				EPI294405		EPI294404 |	EPI294403 |			A/BRUNEI/21	A / H1N1	pdm09	Clinical Spec	Asia / Brunei	Human	Naomi Koma	WHO Collabc	1011064	Deng,Y-M; la		Qasya Diagn	1810 VM744	2010
EPI_ISL_619				EPI215776		EPI215775 | (	EPI215774 | (			A/BRUNEI/20	A / H1N1	pdm09	MDCK1	Asia / Brunei	Human	Naomi Koma	WHO Collabc	0908809	Deng,Yi-Mo;		Qasya Diagn	00-267089	2009-07-27
EPI_ISL_619				EPI215770		EPI215769 | (	EPI215768 | (			A/BRUNEI/20	A / H1N1	pdm09	MDCK1	Asia / Brunei	Human	Naomi Koma	WHO Collabc	0908812	Deng,Yi-Mo;		Qasya Diagn	FI 257667	2009-07-27
EPI_ISL_619				EPI215760		EPI215759 | (				A/BRUNEI/20	A / H1N1	pdm09	mdck1	Asia / Brunei	Human	Naomi Koma	WHO Collabc	0908773	Deng,Yi-Mo;		Qasya Diagn	00-253992	2009-07-16
EPI_ISL_786				EPI276924		EPI276923 |	EPI276922 |			A/BRUNEI/26	A / H1N1	pdm09	Clinical Spec	Asia / Brunei	Human	Naomi Koma	WHO Collabc	1007143	Deng,Y-M; la		R.I.P.A.S. Hc	BI30-096491	2010
EPI_ISL_786				EPI276921		EPI276920 |	EPI276919 |			A/BRUNEI/26	A / H1N1	pdm09	Clinical Spec	Asia / Brunei	Human	Naomi Koma	WHO Collabc	1007141	Deng,Y-M; la		R.I.P.A.S. Hc	MI00-129465	2010
EPI_ISL_786				EPI276918		EPI276917 |	EPI276916 |			A/BRUNEI/25	A / H1N1	pdm09	Clinical Spec	Asia / Brunei	Human	Naomi Koma	WHO Collabc	1007140	Deng,Y-M; la		R.I.P.A.S. Hc	BI00-264505	2010
EPI_ISL_786				EPI276915		EPI276914 |	EPI276913 |			A/BRUNEI/5/	A / H1N1	pdm09	Clinical Spec	Asia / Brunei	Human	Naomi Koma	WHO Collabc	1007103	Deng,Y-M; la		R.I.P.A.S. Hc	BI00-052107	2010

Acknowledgement Table

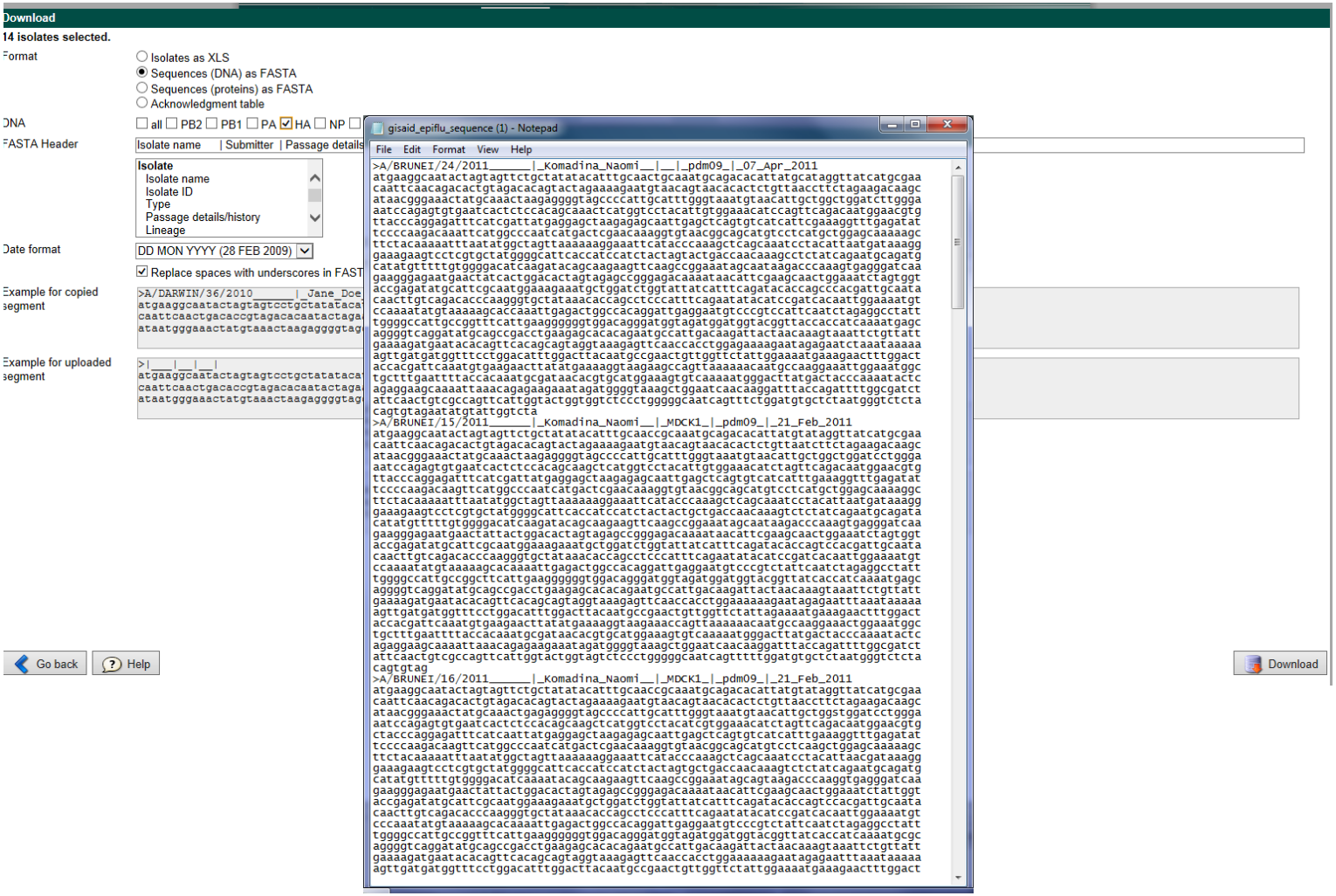


gisaid_acknowledge_table [Compatibility Mode] - Microsoft Excel

We acknowledge the authors, originating and submitting laboratories of the sequences from GISAID's EpiFlu™ Database on which this research is based. The list is detailed below.

All submitters of data may be contacted directly via the GISAID website ***www.gisaid.org***

Segment ID	Segment	Country	Collection date	Isolate name	Originating Lab	Submitting Lab	Authors
EPI331629	HA	Brunei	2011-Apr-07	A/BRUNEI/24/2011	Qasya Diagnostic Services Sdn Bhd	WHO Collaborating Centre for Reference an	Deng,Y-M.; Iannello,P.; Caldwell,N.; Leang,S-K; Komadina,N.
EPI331564	HA	Brunei	2011-Feb-21	A/BRUNEI/15/2011	Qasya Diagnostic Services Sdn Bhd	WHO Collaborating Centre for Reference an	Deng,Y-M.; Iannello,P.; Caldwell,N.; Leang,S-K; Komadina,N.
EPI331561	HA	Brunei	2011-Feb-21	A/BRUNEI/16/2011	Qasya Diagnostic Services Sdn Bhd	WHO Collaborating Centre for Reference an	Deng,Y-M.; Iannello,P.; Caldwell,N.; Leang,S-K; Komadina,N.
EPI331468	HA	Brunei	2011-Jan-29	A/BRUNEI/10/2011	Qasya Diagnostic Services Sdn Bhd	WHO Collaborating Centre for Reference an	Deng,Y-M.; Iannello,P.; Caldwell,N.; Leang,S-K; Komadina,N.
EPI319180	HA	Brunei	2011-Jan-13	A/Brunei/1/2011	Qasya Diagnostic Services Sdn Bhd	WHO Collaborating Centre for Reference an	
EPI302345	HA	Brunei	2010-Jan-01	A/BRUNEI/237/2010	Qasya Diagnostic Services Sdn Bhd	WHO Collaborating Centre for Reference an	Deng,Y-M.; Iannello,P.; Caldwell,N.; Leang,S-Y; Komadina,N.
EPI294405	HA	Brunei	2010-Jan-01	A/BRUNEI/218/2010	Qasya Diagnostic Services Sdn Bhd	WHO Collaborating Centre for Reference an	Deng,Y-M; Iannello,P; Caldwell,N; Leang,S-K; Komadina,N.
EPI215776	HA	Brunei	2009-Jul-27	A/BRUNEI/2010/2009	Qasya Diagnostic Services Sdn Bhd	WHO Collaborating Centre for Reference an	Deng,Yi-Mo; Iannello,Pina; Ernest,Joanne; Caldwell,Natalie; Komadina,Naomi
EPI215770	HA	Brunei	2009-Jul-27	A/BRUNEI/2004/2009	Qasya Diagnostic Services Sdn Bhd	WHO Collaborating Centre for Reference an	Deng,Yi-Mo; Iannello,Pina; Ernest,Joanne; Caldwell,Natalie; Komadina,Naomi
EPI215760	HA	Brunei	2009-Jul-16	A/BRUNEI/2008/2009	Qasya Diagnostic Services Sdn Bhd	WHO Collaborating Centre for Reference an	Deng,Yi-Mo; Iannello,Pina; Ernest,Joanne; Caldwell,Natalie; Komadina,Naomi
EPI276924	HA	Brunei	2010-Jan-01	A/BRUNEI/28/2010	R.I.P.A.S. Hospital, Department of Laboratory Si	WHO Collaborating Centre for Reference an	Deng,Y-M; Iannello,P; Caldwell,N; Leang,S-Y; Komadina,N
EPI276921	HA	Brunei	2010-Jan-01	A/BRUNEI/26/2010	R.I.P.A.S. Hospital, Department of Laboratory Si	WHO Collaborating Centre for Reference an	Deng,Y-M; Iannello,P; Caldwell,N; Leang,S-Y; Komadina,N
EPI276918	HA	Brunei	2010-Jan-01	A/BRUNEI/25/2010	R.I.P.A.S. Hospital, Department of Laboratory Si	WHO Collaborating Centre for Reference an	Deng,Y-M; Iannello,P; Caldwell,N; Leang,S-Y; Komadina,N
EPI276915	HA	Brunei	2010-Jan-01	A/BRUNEI/5/2010	R.I.P.A.S. Hospital, Department of Laboratory Si	WHO Collaborating Centre for Reference an	Deng,Y-M; Iannello,P; Caldwell,N; Leang,S-Y; Komadina,N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14 isolates selected.
Format
Isolates as XLS
Sequences (DNA) as FASTA
Sequences (proteins) as FASTA
Acknowledgment table
DNA
all PB2 PB1 PA HA NP
FASTA Header
Isolate name | Submitter | Passage details
Isolate
Isolate name
Isolate ID
Type
Passage details/history
Lineage
Date format
DD MON YYYY (28 FEB 2009)
Replace spaces with underscores in FAST
Example for copied segment
Example for uploaded segment
gisaid_epiflu_sequence (1) - Notepad
File Edit Format View Help
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>A/BRUNEI/15/2011_____|_Komadina_Naomi__|_MDCK1_|_pdm09_|_21_Feb_2011
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