

CLIDATA FORUM 2013

Jiří Walder



May 13th -17th 2013, Prague

Automatic Import
-standard messages
(synop,BUFR,temp)
-custom text files
(AWS,...)

Manual Key Entry
-daily
-monthly
-upper air, ...
-CLICOM



INPUT

CLIDATA Database

METADATA
-stations
-elements
-observation

CHECKING
-integrity
-limits

CALCULATIONS
-derived daily
-monthly
-extreme
-normal

TRANSFERS
-email
-ftp

**RIGHTS
ROLES
RESTRICTIONS**

-Software
Oracle server version 10g, 11g
Windows 2008, Linux, Solaris, ...
-Hardware
Small: Intel Dual core 2GHz,32-bit
4GB, 2TB HDD
Middle: Intel Xeon 2.9GHz Quad code,
64-bit, 8 GB, 2TB, RAID 5
Higher: More Ram, More processors
Oracle RAC

INTERACTION



Rich Java Client
-Admin Metadata Tool
-Extract products
monthly, extremes,
normals, Wind roses...
-Key Entry
-Checking formula

GIS
- Spatial Area Control
- Map Viewer
- Spatial Analysis

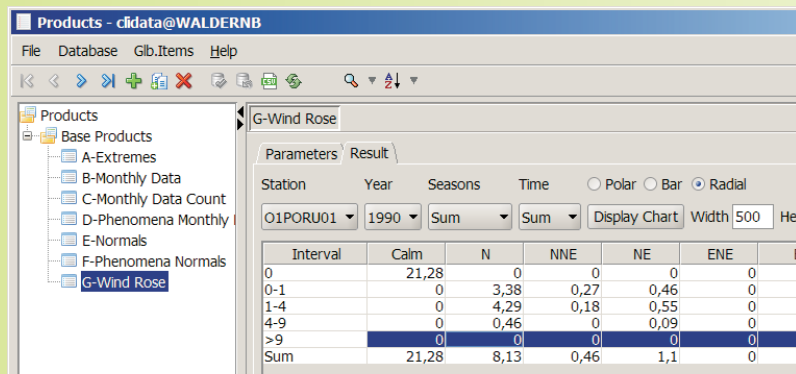
Oracle Discoverer
-Any data
-User data sheets
-Export to excel,...

Web Client
-AWS current data
-Some yearly data
-User timelines
-Monthly,Extremes,Normals

CLIDATA MODEL IS OPEN
- Allow acces in Excel
- Any SQL Client

Rich Java Client

- Thick Java Client, requires installation -> self extracting archive
- Main administration tool
- Very comfortable and fast
- Managing metadata, imports, etc...

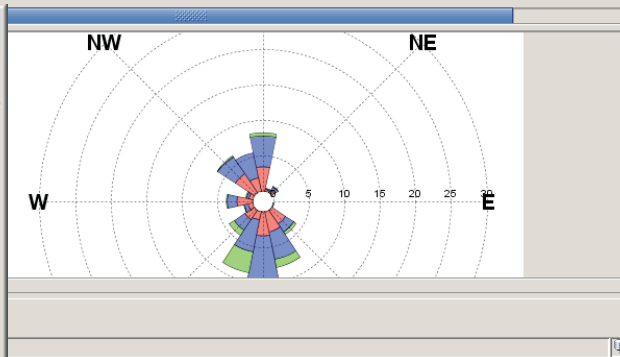


The screenshot shows the 'Station' application window with a form for station O1PORU01. The form contains the following fields:

Field	Value	Field	Value
Station ID	O1PORU01	Geogr EW	18.1594
Icao ID		Longitude	018°09'34"
Wmo ID	11790	EW Hemisphere	East
Hydro ID	2010115920	X	3727318
Clicom ID	20111592	Geogr NS	49.8253
Hst ID	2010131	Latitude	49°49'31"
Begin	01.01.1998	NS Hemisphere	North
End	31.12.9999	Y	5526234
Name	Ostrava	Elevation	238.6
Qual	Poruba	Elevation Barometer	
District	Ostrava-město	Isobaric Level	
Country	Česká republika		
Basin	Odra		

The screenshot shows the 'clidata@WALDERNB 2012.10.03 14:41' application window with a menu of icons:

- Stations
- Metadata
- Kef
- Discoverer
- Products
- Administration



Metadata

STATION

Station - cldata@WALDERNB
TIME:10.10.2012 17:18

Station ID: B1BLAT01
Geogr EW: 17.4611
Icao ID:
Longitude: 017°27'40"
Wmo ID:
EW Hemisphere: East West
Hydro ID: 4130201301
X: 3680268.6877
Clcom ID: 41320131
Geogr NS: 48.9465
Latitude: 48°56'47"
Hist ID: 4130213
Longitude: 48°56'47"
Begin: 01.09.2008 End: 31.12.9999
NS Hemisphere: North South
Name: Blatnice
Elevation: 211
Qual: pod svatým Antonínkem
Elevation Barometer:
District: Hodonín
Country: Česká republika
Basin: Morava

řádek 1/200 Změněno:nepravda Geography

OBSERVATION

Station - cldata@WALDERNB
TIME:10.10.2012 17:19

Element ID	Begin	End	Elem. name	Instrument	Instrument height
SSV	29.05.2008 00:00	31.12.4000 23:59	Sluneční svit	Slunoměr číslo SD5	14.5
SSV1H	29.05.2008 00:00	31.12.4000 23:59	Sluneční svit	Slunoměr číslo SD5	14.5
SSV10M	22.04.2010 00:00	31.12.4000 23:59	Sluneční svit	Slunoměr číslo SD5	14.5
SVH	01.01.1968 00:00	31.12.4000 23:59	Vodní hodnota	Srážkoměr	0
SVHV	01.01.1998 00:00	31.12.4000 23:59	Vodní hodnota	Vypočteno	0
T	01.05.2010 00:00	31.12.4000 23:59	Teplota	Teplotní čidlo	2
Templ	01.05.2010 00:00	31.12.4000 23:59	Denní amplituda	Vypočteno	0
Td	01.05.2010 00:00	31.12.4000 23:59	Rosný bod	Vypočteno	2
TMA	01.05.2010 00:00	31.12.4000 23:59	Teplota max	Teplotní čidlo	2
TMAden	01.01.2010 00:00	31.12.4000 23:59	Teplota max	Teplotní čidlo	2
TMI	01.05.2010 00:00	31.12.4000 23:59	Teplota min	Teplotní čidlo	2
TMinoc	01.01.2010 00:00	31.12.4000 23:59	Teplota min	Teplotní čidlo	2

řádek 1/52 Změněno:nepravda Observation

ELEMENTS

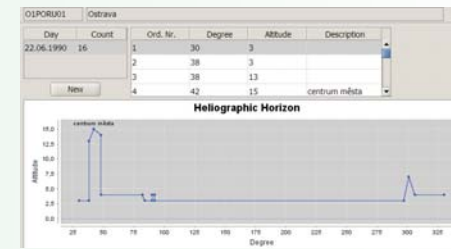
List of Values - cldata@WALDERNB
TIME:10.10.2012 17:20

Element ID: T
Name: Teplota
Description: Teplota vzduchu
Unit: °C
Scale: 0.1
Lower Limit: -45 Upper Limit: 45
Lower Limit KEF: -44 Upper Limit KEF: 44

řádek 1/1 Změněno:nepravda Elements

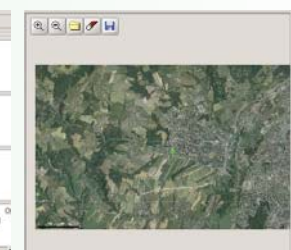
MANY OTHERS....

Station ID: O1PORU01 Name: Ostrava
Begin: 01.01.1998 End: 31.12.9999 Geogr EW: 18.1594 Geogr NS: 49.8253



Station ... O1PORU01 Ostrava

O1PORU01 01.01.1998 31.12.9999 Ostrava



Manual Key Entry

Paper form



ELECTRONIC KEY ENTRY FORM DEFINITION

Kef description		
T regular	00:05	
T regular	00:15	
T,E	07:00	
TEST		
TMA	21:00	

Column Size		
Ord.Nr.	Element ID	Time
10	TMA	21:00
20	TMI	21:00
30	T	07:00

CLICOM

Import from DBM files into CLIDATA - 2.3.7.22

Directory: c:\clicom Update

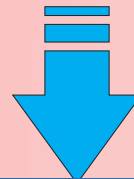
Mask: *.dbm Ridata

Log: *.log Phenomena

Connect to Oracle: clidata senegal HYDRO_ID_CLICOM

0 Time distance

Import Exit



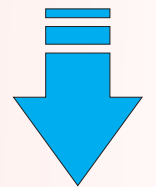
KEY ENTRY DATA

KEF

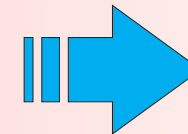
STATION: 01PORU01 YEAR: 2000

	TMA 21:00	TMI 21:00	T 07:00	T 14:00	T 21:00
01	-24	-118	-113	-25	-35
02	-3	-38	-29	-9	-12
03	4	-20	-3	2	-20
04	22	-23	-10	7	1
05	74	00	17	70	10

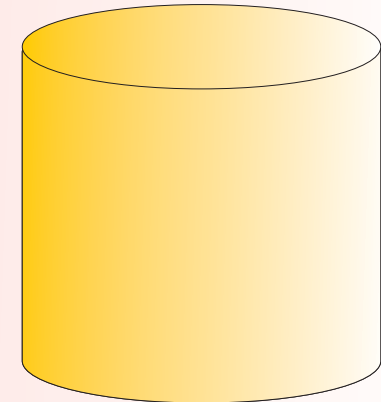
DIRECT IMPORT



CLIDATA DATABASE



INSERT DATA



Automatic Import

DECODE METHOD

Decode params

Method: PILOT Mask: *.PPP

Input Directory: C:\decode_method\PILOT\SOURCE

Output Directory: C:\decode_method\PILOT\DECODED

Archive Directory: C:\decode_method\PILOT\SOURCE\ARCHIVE

Log Directory: C:\decode_method\PILOT\SOURCE\LOG

Additional Param: 2 NOT USED

Interval: 10/1440

Ok Cancel

DECODE
(BUFR,TEMP,...)

INPUT DIRECTORY

Počítač Místní disk (C:)

Název položky ^

- AED
- ISO7168_2
- PILOT
- TEMP
- UA_TYPE1
- UA_TYPE2
- UA_TYPE3
- UA_TYPE4

IMPORT
TEXTFILE

IMPORT
TEXTFILE

IMPORT METHOD

Import Params

Method: UA1 Mask: .TXT.DECODED Station:

Input Directory: C:\decode_method\UA_TYPE1\DECODED Year: me}',1,2),RR'),RRRR')

Log Directory: C:\decode_method\UA_TYPE1\DECODED\LOG Month: substr('{{filename}',3,2)

Archive Directory: \decode_method\UA_TYPE1\DECODED\ARCHIV Day: substr('{{filename}',5,2)

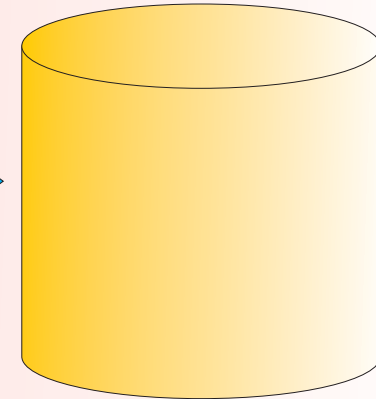
Interval: 10/1440 Type Time: Default Time: '{{filename}',7,2)}|:00'

Postponed

Ok Cancel

IMPORT
DATA

CLIDATA
DATABASE



Method: SNP00 Target Table: RDATA_R

End of Record Type: 1-Number of Lines Missing Value Type: 1-Char

1 /

Description: 27.11.2008 Upraveno s P.Lipinou vyresit S-T a T problem atd.

Ord Nr.	Item	Required	Required p
15	<159&IGNORE>	<input type="checkbox"/>	III%
16	<159&IGNORE>	<input type="checkbox"/>	sss%
20	<3&WMO_ID2>	<input checked="" type="checkbox"/>	

DATA INTEGRITY

- Data Correspond With Station Observation
- Data Is Within Limits, Remove impossible Values

CHECKS

KEY ENTRY

Highlight Exceptional Values

STATION O1PORU01					
	TMA 21:00	TMI 21:00	T 07:00	T 14:00	
01	-24	-118	-113	-25	
02	-3	-38	-29	-9	
03	4	-20	-3	2	
04	22	-23	-10	7	
05	74	-23	17	73	

FORMULA CHECK

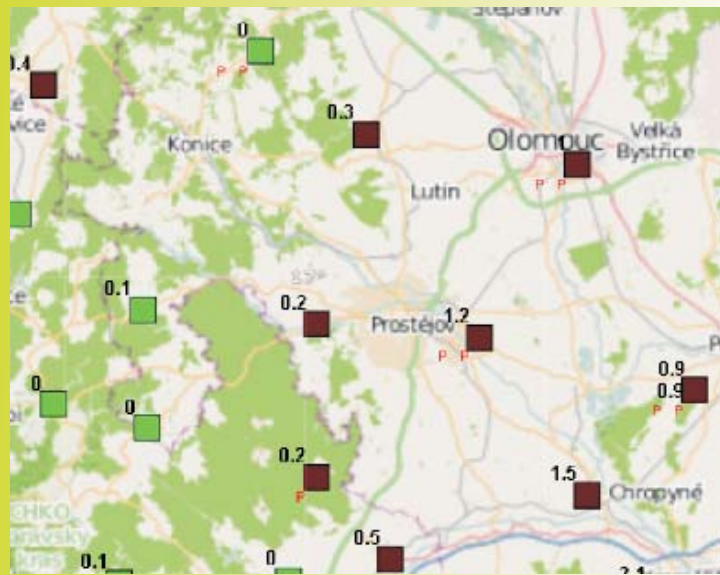
Highlight Suspicious And Error Values
(Manually, Batch, Regular By Scheduler)

	TMA 21:00	TMI 21:00	T 07:00	T 14:00	T 21:00
01	-24	-118	-113	-25	-35
02	-3	-38	-29	-9	-12
03	4	-19	-3	2	-20
04	22	-23	-10	7	1
05	74	-23	17	73	-13
06	25	-53	-49	18	-23



Regular	Station ID	Element ID	Formula	Date	Time	Value	V Fl	
N	O1PORU01	T	-69	01.01.1968	14:00	-0.8		-1.5<{TV.XX:XX} and {TV.XX:XX}<0 and {TV.XX:XX}>{T.X
N	O1PORU01	T	-24	09.01.1968	21:00	-11.4		-1.5< -0.6 and -0.6<0 and -0.6> -0.8
N	O1PORU01	T	-24	10.01.1968	07:00	-21.1		Value -0.8 V Flag
N	O1PORU01	T	-16	10.01.1968	21:00	-17.1		
N	O1PORU01	T	-18	10.01.1968	21:00	-17.1		
N	O1PORU01	T	2	10.01.1968	21:00	-17.1		
N	O1PORU01	T	16	11.01.1968	07:00	-17.1		

SPATIAL CHECK IN GIS



CALCULATIONS

- SIMPLE DEFINITION
- PROCESSED AUTOMATICALLY NEARLY IN REALTIME

DAILY DERIVED DATA

- according formula
- formula is connected to observation

Formul...	Description	Function	Formula
110	Prům. denní RV	AVG	$(\{RV.06:00\}+\{RV.13:00\}+\{RV.21:00\})/3$
111	Prům. denní E	AVG	$(\{E.06:00\}+\{E.13:00\}+\{E.21:00\})/3$
112	Prům. denní F	AVG	$(\{F.06:00\}+\{F.13:00\}+\{F.21:00\})/3$
113	Prům. denní O	AVG	$(\{O.06:00\}+\{O.13:00\}+\{O.21:00\})/3$

5-DAYS,10-DAYS, MONTH, YEAR DATA

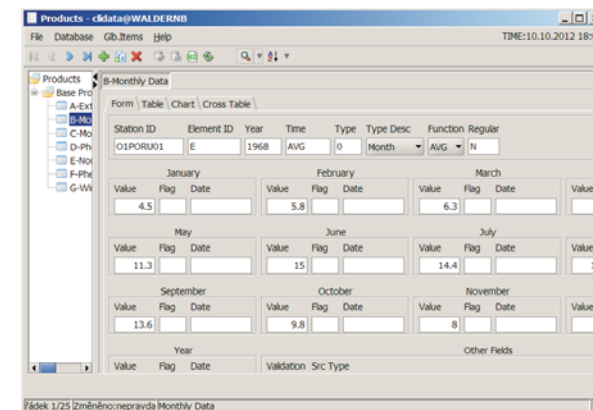
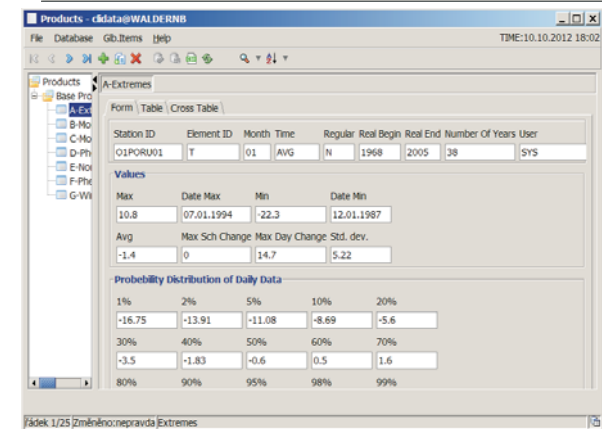
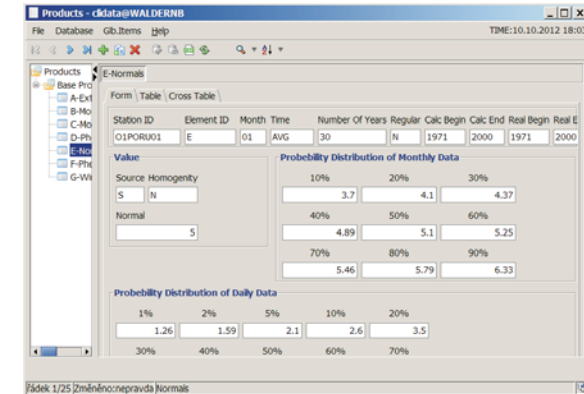
- Simple definition
- yearly, avg,max,min,sum

EXTREMES

- MAX, MIN, AVG, STANDARD DEVIATION
- for whole data and predefined period

NORMALS

- user defined periods
- long monthly averages or sums



TRANSFER

- EMAIL OR FTP AUTOMATIC TRANSMISSION

Administration - chmu@Praha
File Database Glb.Items Help
TIME:10.10.2012 18:08

Administration
Users And Rights
A-ClidataUsers
B-Restriction
C-Objects
D-Rights
E-Roles
F-Grant Right
G-Grant Role
System
H-Global Settings
I-Jobs
J-Import Methods
K-Manual Import
Sending
L-Query
M-Files
N-Ftp
Localization
O-Translation Mod

Table Form
ID: 308
Next Date: 10.10.2012 17:20
Interval: 1/24
 Spec. Job
Host: por.chmi.cz
User: os
Password: radim64
Mask/File: O2PASE01-R.TXT
Local Directory: /clidata/ora_logs
Remote Directory: /docs/poboc/OS/KW
Query: select RRRR,MM,DD,
,min(decode(element
,min(decode(element
,min(decode(element

řádek 1/25 | Změněno:nepravda | Glb.AsendftpSpec

Administration - chmu@Praha
File Database Glb.Items Help
TIME:10.10.2012 18:09

Administration
Users And Rights
A-ClidataUsers
B-Restriction
C-Objects
D-Rights
E-Roles
F-Grant Right
G-Grant Role
System
H-Global Settings
I-Jobs
J-Import Methods
K-Manual Import
Sending
L-Query
M-Files
N-Ftp
Localization
O-Translation Mod

Table Form
ID: 6
Next Date: 19.10.2012 09:00
Interval: 20
 Spec. Job
 In text
 Cut
 Empty
 Header
Test
Subject: Extremy-MIN (RDATA_N)
Emails: clidata@chmi.cz
Body: Seznam absolutnich MIN hodnot pro jednotlivé prvky a pobočky. Stoji za zamysleni.
Query: from clidata
where source='F'
and substr(eg_gh_id,1,1) not in ('X','T')
group by decode(substr(eg_gh_id,1,2),'C7','C7',substr(eg_gh_id,1,1)),eg_el_abbreviation
order by pobočka,eg_el_abbreviation

řádek 12/25 | Změněno:nepravda | Glb.AquerySpec

Web Client

- Thin Java Client, only Web browser necessary
- Limited usage
- Real data
- Custom user daily data
- Yearly data

