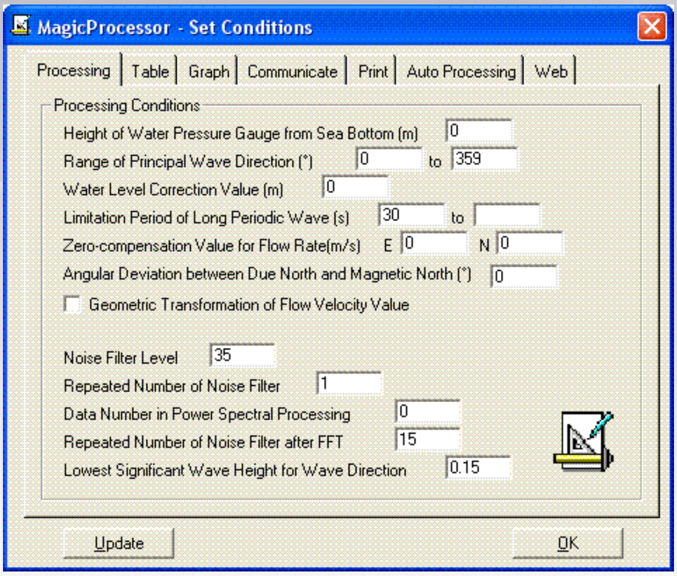
Commnucation and Processing SoftWare

MagicProcessorK 3.0

A few, good change

MagicProcessorK computes and processes data collected from Wave Hunter. It calculates normal wave heights, wave directions, and current velocities to tabulate or plot the results into tables or graphs. It has also a communications function to create real-time systems by using telemeters.


MagicProcessor - Set Conditions
Processing
Table
Graph
Communicate
Print
Auto Processing
Web
Update
OK

Processing Conditions

Height of Water Pressure Gauge from Sea Bottom (m) 0
Range of Principal Wave Direction (°) 0 to 359
Water Level Correction Value (m) 0
Limitation Period of Long Periodic Wave (s) 30 to
Zero-compensation Value for Flow Rate(m/s) E 0 N 0
Angular Deviation between Due North and Magnetic North (°) 0
☐ Geometric Transformation of Flow Velocity Value

Noise Filter Level 35
Repeated Number of Noise Filter 1
Data Number in Power Spectral Processing 0
Repeated Number of Noise Filter after FFT 15
Lowest Significant Wave Height for Wave Direction 0.15

Processing Items

Maximum wave height and period, 1/10 of maximum wave height and period, significant wave height and period, average wave height and period, wave count, water depth, η rms, skewness, Kurtosis, water level, maximum long-period wave height and period, and significant long-period wave height and period,Average wave direction, main wave direction, average angle of dispersion, directional concentration factor, and wave peak length parameter,Average current velocity, average current direction, average E-current velocity, average N-current velocity, and water temperature.

Converted to surface wave height by the FFT method

Display

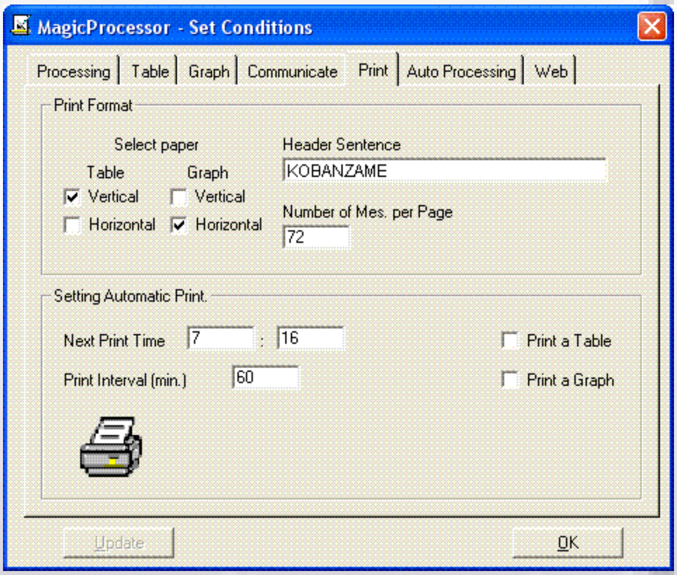
Offers the capacity for producing beautiful, bold displays of tables and graphs that take full advantage of the Windows interface (including colors, selection of fonts, and multiple windows).

Print

You can print tables and graphs by directly taking advantage of Windows print functions (colors, fonts, sheets, selection between horizontal and vertical print directions, transmission to fax, etc.). Graphs and tables can be copied using the mouse and pasted on Word or Excel documents.

Building a real-time system (KOBANZAME Explorer)

Using radio telemeters, telephones, or cables, data automatically collected from the Wave Hunter can be processed in real time every time measurement is completed. The system can be fully automated in every aspect of processing from file management to printing.

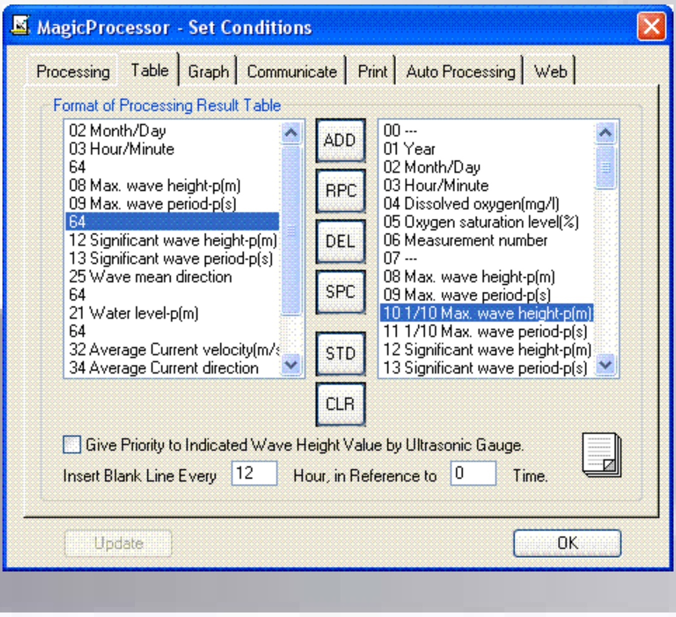

MagicProcessor - Set Conditions
Processing
Table
Graph
Communicate
Print
Auto Processing
Web
Update
OK

Print Format

Select paper
Table: ☑ Vertical ☐ Horizontal
Graph: ☐ Vertical ☑ Horizontal
Header Sentence: KOBANZAME
Number of Mes. per Page: 72

Setting Automatic Print

Next Print Time 7 : 16
Print Interval (min.) 60
☐ Print a Table
☐ Print a Graph

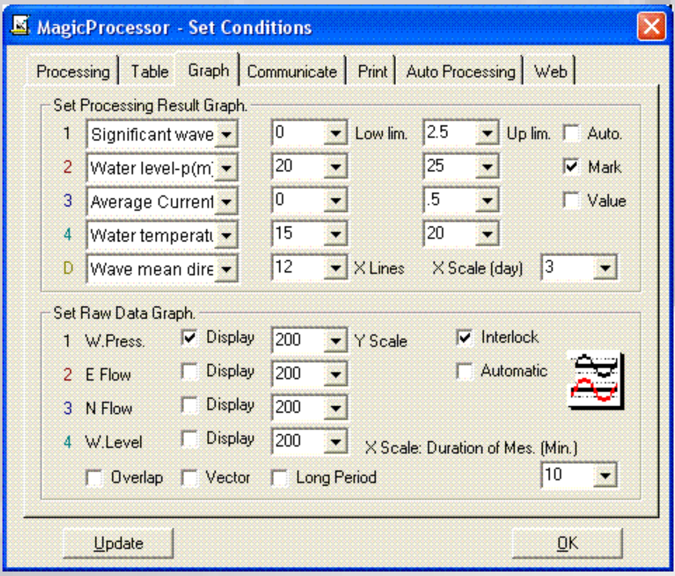

MagicProcessor - Set Conditions
Processing
Table
Graph
Communicate
Print
Auto Processing
Web
ADD
RPC
DEL
SPC
STD
CLR
Update
OK

Format of Processing Result Table

02 Month/Day
03 Hour/Minute
64
08 Max. wave height-p(m)
09 Max. wave period-p(s)
64
12 Significant wave height-p(m)
13 Significant wave period-p(s)
25 Wave mean direction
64
21 Water level-p(m)
64
32 Average Current velocity(m/s
34 Average Current direction

00 ---
01 Year
02 Month/Day
03 Hour/Minute
04 Dissolved oxygen(mg/l)
05 Oxygen saturation level(%)
06 Measurement number
07 ---
08 Max. wave height-p(m)
09 Max. wave period-p(s)
10 1/10 Max. wave height-p(m)
11 1/10 Max. wave period-p(s)
12 Significant wave height-p(m)
13 Significant wave period-p(s)

☐ Give Priority to Indicated Wave Height Value by Ultrasonic Gauge.
Insert Blank Line Every 12 Hour, in Reference to 0 Time.


MagicProcessor - Set Conditions
Processing
Table
Graph
Communicate
Print
Auto Processing
Web
Update
OK

Set Processing Result Graph.

		Low lim.	Up lim.	
1	Significant wave	0	2.5	☐ Auto.
2	Water level-p(m)	20	25	☑ Mark
3	Average Current	0	.5	☐ Value
4	Water temperatu	15	20	
D	Wave mean dire	12		

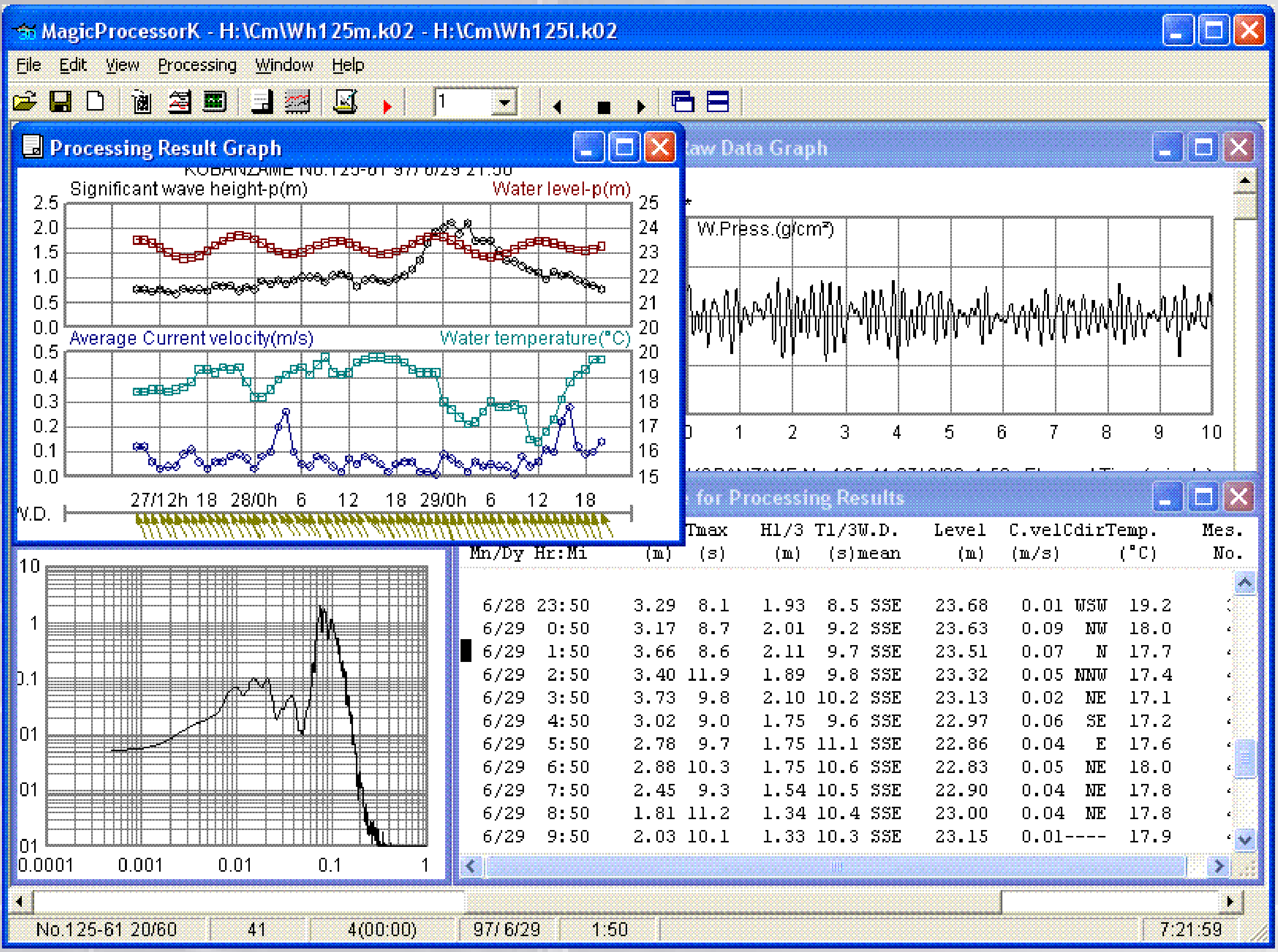
X Lines 12
X Scale (day) 3

Set Raw Data Graph.

			Y Scale
1	W.Press.	☑ Display	200
2	E Flow	☐ Display	200
3	N Flow	☐ Display	200
4	W.Level	☐ Display	200

☑ Interlock
☐ Automatic
☐ Overlap ☐ Vector ☐ Long Period
X Scale: Duration of Mes. (Min.) 10

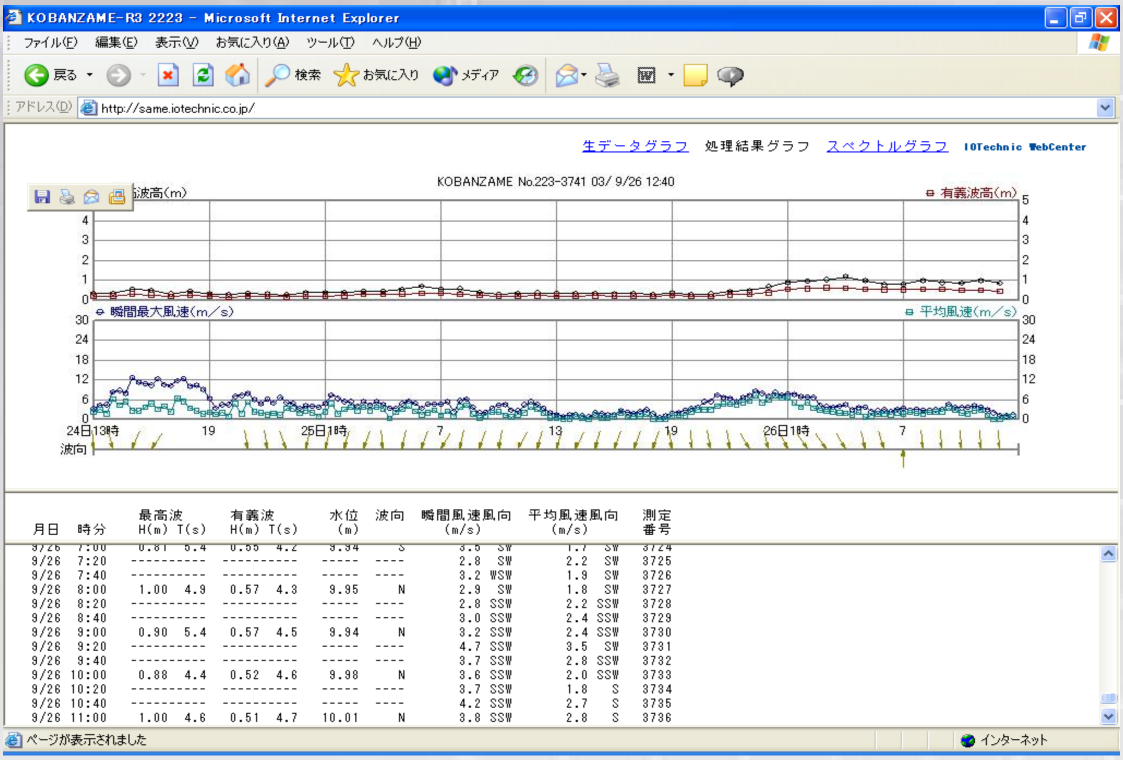
Display of processing result


MagicProcessorK - H:\Cm\Wh125m.k02 - H:\Cm\Wh125l.k02
File
Edit
View
Processing
Window
Help
Processing Result Graph
KOBANZAME No.125-61 97/ 6/29 21:50
Significant wave height-p(m)
Water level-p(m)
Average Current velocity(m/s)
Water temperature(°C)
27/12h 18 28/0h 6 12 18 29/0h 6 12 18
W.D.
Raw Data Graph
W.Press.(g/cm²)
0 1 2 3 4 5 6 7 8 9 10
for Processing Results
10
1
0.1
0.0001 0.001 0.01 0.1 1
No.125-61 20/60
41
4(00:00)
97/ 6/29
1:50
7:21:59

```
         Tmax    H1/3 T1/3W.D.    Level  C.velCdirTemp.     Mes.
Mn/Dy Hr:Mi   (m)   (s)    (m)   (s)mean     (m)  (m/s)      (°C)      No.

 6/28 23:50     3.29   8.1    1.93   8.5 SSE   23.68   0.01 WSW  19.2
 6/29  0:50     3.17   8.7    2.01   9.2 SSE   23.63   0.09  NW  18.0
 6/29  1:50     3.66   8.6    2.11   9.7 SSE   23.51   0.07   N  17.7
 6/29  2:50     3.40  11.9    1.89   9.8 SSE   23.32   0.05 NNW  17.4
 6/29  3:50     3.73   9.8    2.10  10.2 SSE   23.13   0.02  NE  17.1
 6/29  4:50     3.02   9.0    1.75   9.6 SSE   22.97   0.06  SE  17.2
 6/29  5:50     2.78   9.7    1.75  11.1 SSE   22.86   0.04   E  17.6
 6/29  6:50     2.88  10.3    1.75  10.6 SSE   22.83   0.05  NE  18.0
 6/29  7:50     2.45   9.3    1.54  10.5 SSE   22.90   0.04  NE  17.8
 6/29  8:50     1.81  11.2    1.34  10.4 SSE   23.00   0.04  NE  17.8
 6/29  9:50     2.03  10.1    1.33  10.3 SSE   23.15   0.01----  17.9
```

Web example (Japanese)


KOBANZAME-R3 2223 - Microsoft Internet Explorer
ファイル(F)
編集(E)
表示(V)
お気に入り(A)
ツール(T)
ヘルプ(H)
戻る
検索
お気に入り
メディア
アドレス(D)
http://same.iotechnic.co.jp/
生データグラフ
処理結果グラフ
スペクトルグラフ
IOTechnic WebCenter
KOBANZAME No.223-3741 03/ 9/26 12:40
波高(m)
有義波高(m)
瞬間最大風速(m/s)
平均風速(m/s)
24日13時 19 25日1時 7 13 19 26日1時 7
波向
ページが表示されました
インターネット

```
                最高波       有義波       水位   波向   瞬間風速風向   平均風速風向   測定
月日   時分    H(m)  T(s)   H(m)  T(s)    (m)          (m/s)         (m/s)       番号
9/26   7:00    0.81   5.4   0.55   4.2    9.94    S    3.5  SW       1.7  SW    3724
9/26   7:20   ----------   ----------   -----   ----   2.8  SW       2.2  SW    3725
9/26   7:40   ----------   ----------   -----   ----   3.2 WSW       1.9  SW    3726
9/26   8:00    1.00   4.9   0.57   4.3    9.95    N    2.9  SW       1.8  SW    3727
9/26   8:20   ----------   ----------   -----   ----   2.8 SSW       2.2 SSW    3728
9/26   8:40   ----------   ----------   -----   ----   3.0 SSW       2.4 SSW    3729
9/26   9:00    0.90   5.4   0.57   4.5    9.94    N    3.2 SSW       2.4 SSW    3730
9/26   9:20   ----------   ----------   -----   ----   4.7 SSW       3.5  SW    3731
9/26   9:40   ----------   ----------   -----   ----   3.7 SSW       2.8 SSW    3732
9/26  10:00    0.88   4.4   0.52   4.6    9.98    N    3.6 SSW       2.0 SSW    3733
9/26  10:20   ----------   ----------   -----   ----   3.7 SSW       1.8   S    3734
9/26  10:40   ----------   ----------   -----   ----   4.2 SSW       2.7   S    3735
9/26  11:00    1.00   4.6   0.51   4.7   10.01    N    3.8 SSW       2.8   S    3736
```
