

BRIEF INTRODUCTION

to

software package

**WINDOBSON**

**WINDOBSON** is a unique software package for operations, data analysis and quality assurance of Dobson spectrophotometer observations. It is applicable for both Total ozone and Umkehr measurements.

**WINDOBSON** was developed by *Mr. Koji Miyagawa*, a Dobson expert of the Aerological Observatory, JMA, based on Observatory's long experience of operational use of Dobson instruments.

The unique function and usefulness of **WINDOBSON** is introduced briefly in the following pages.

# Total Ozone processing: main page

**Total Ozone Observation**

File Modify Graph Help

May 4, 2006

Direct Sun

Wavelength Pair A-D

Kind of Observation 0 Clear

temp 23.9 Qa 49.0 Qd 106.0

#	TIME	RA	RD
41	16:28:30	221.7	
42	16:29:00		86.0
43	16:29:30	223.2	
44	16:30:00		86.5
45	16:30:30	224.5	
ave	16:29:30	223.1	86.3

N value **205.0** **65.1**

dNO **-0.1**

Na-Nd **139.9**

Mue **2.547**

Total Ozone **377** m atm-cm

Routine

Zenith Sky

Wavelength Pair A-D

Kind of Observation 2 Blue Sky

temp 24.0 Qa 49.0 Qd 106.0

#	TIME	RA	RD
46	16:33:30	188.4	
47	16:34:00		53.8
48	16:34:30	189.2	
49	16:35:00		54.1
50	16:35:30	190.1	
ave	16:34:30	189.2	54.0

N value **167.4** **31.8**

dNO **-0.1**

Na-Nd **135.6**

Mue **2.654**

Total Ozone **376** m atm-cm

Routine

Information

Station Name TSUKUBA

Inst. Number BECK125

Parameter File PARA0511.125

Humidity 5 %

Distance 30 km

Weather Clear

Total Cloud Amount 0+

Sun Cloud

Zenith Cloud

High Cloud 0+Cl

Middle Cloud

Low Cloud 0+Cl

Observer Osai

Remark

WinDobson#Data\_summary \*\*\* Completed \*\*\*

l:#Data\_tsuk \*\*\* Completed \*\*\*

2006/05/10 13:25:48 TSUKUBA

**Modify**

Direct Sun

Kind of Observation 0 Clear

TIME 16:29:30 Out

	Value
RA1	221.7
RA2	223.2
RA3	224.5
RD1	86.0
RD2	86.5
temp	23.9

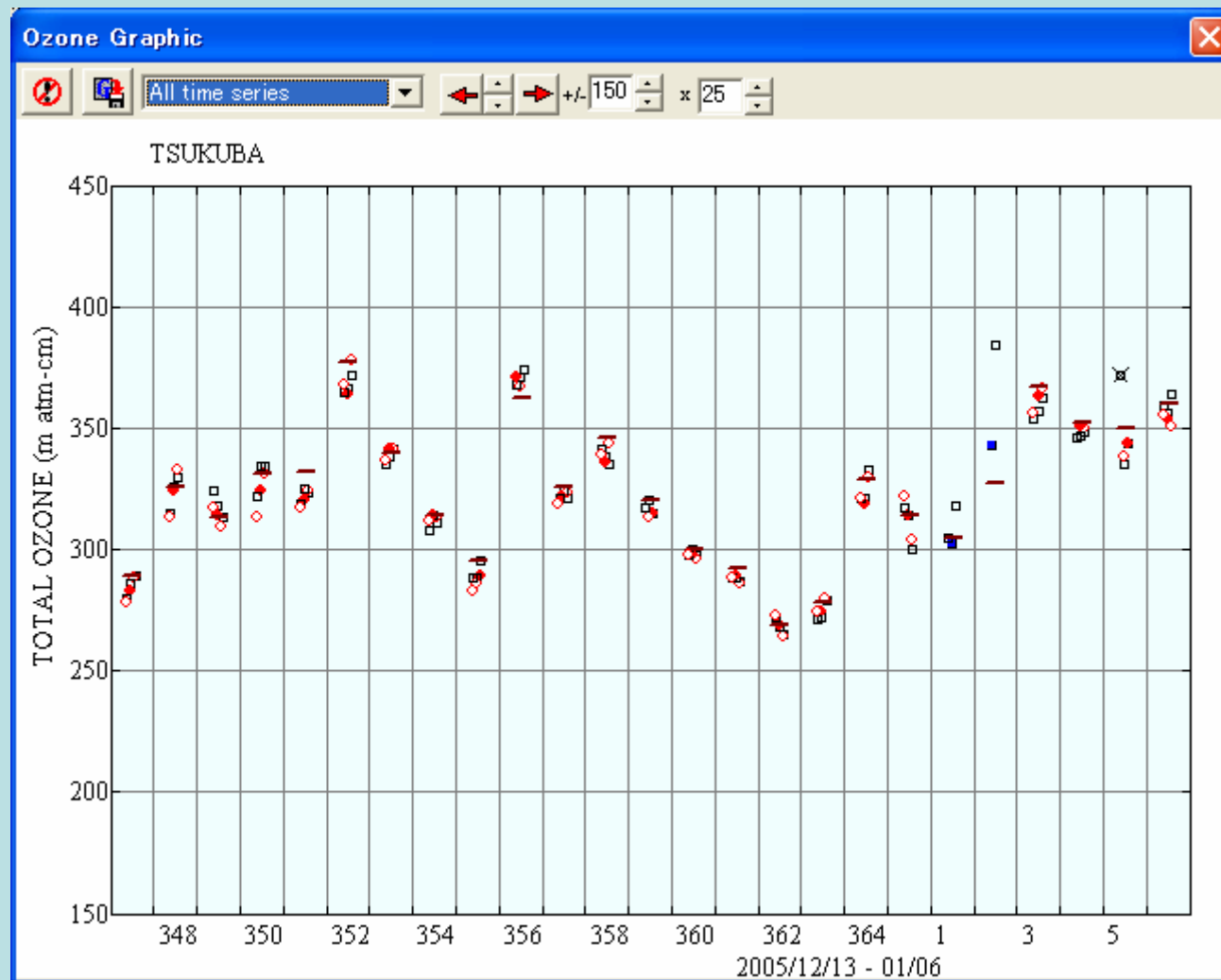
unit up/down

☒ 0.1

☐ 1

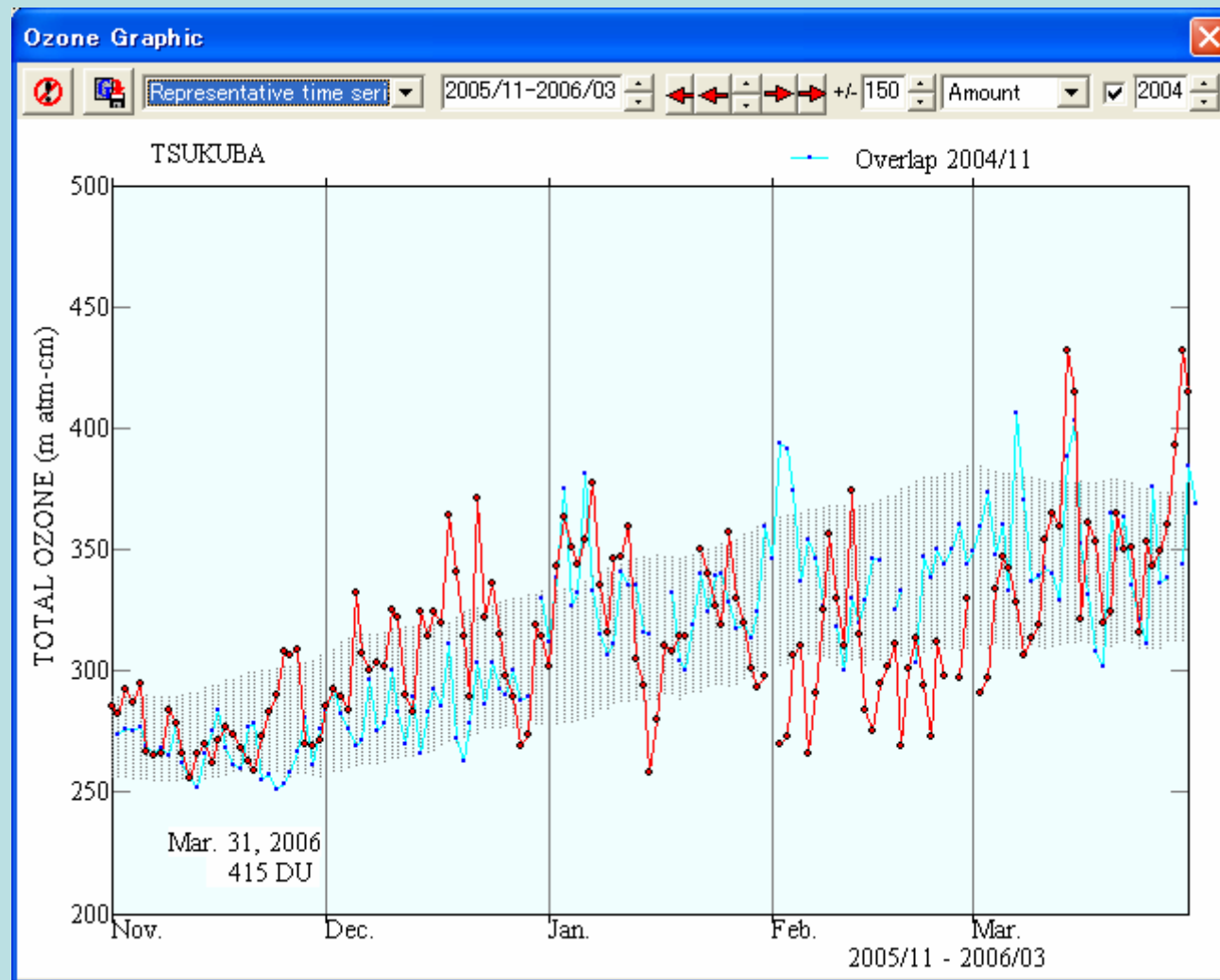
☐ 10

Easy to see measurement results, edit data, print, and save the relevant information.

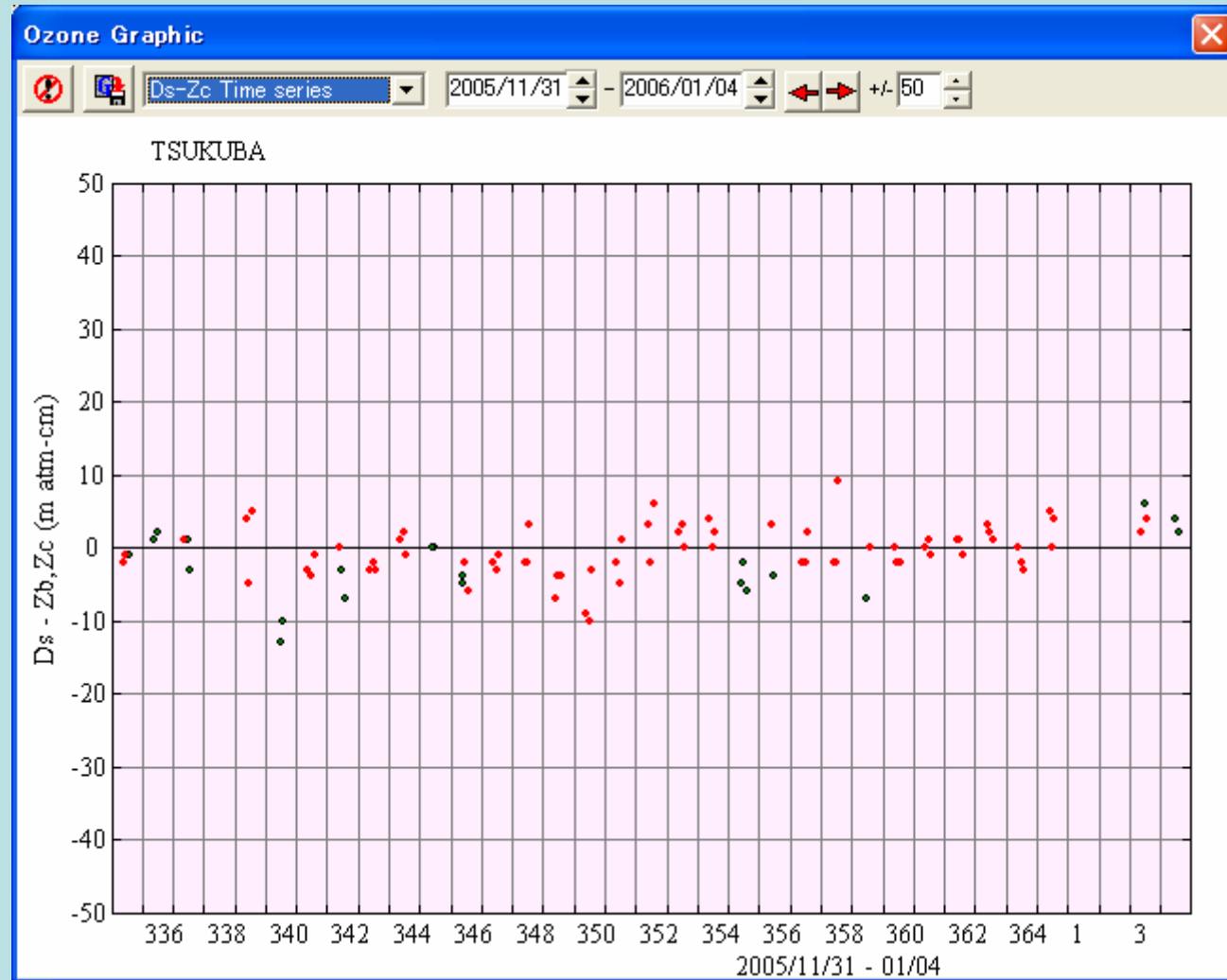


All daily measurement data are displayed in time series.

DS, ZS, daily representative data, and satellite data are shown by respective symbols.

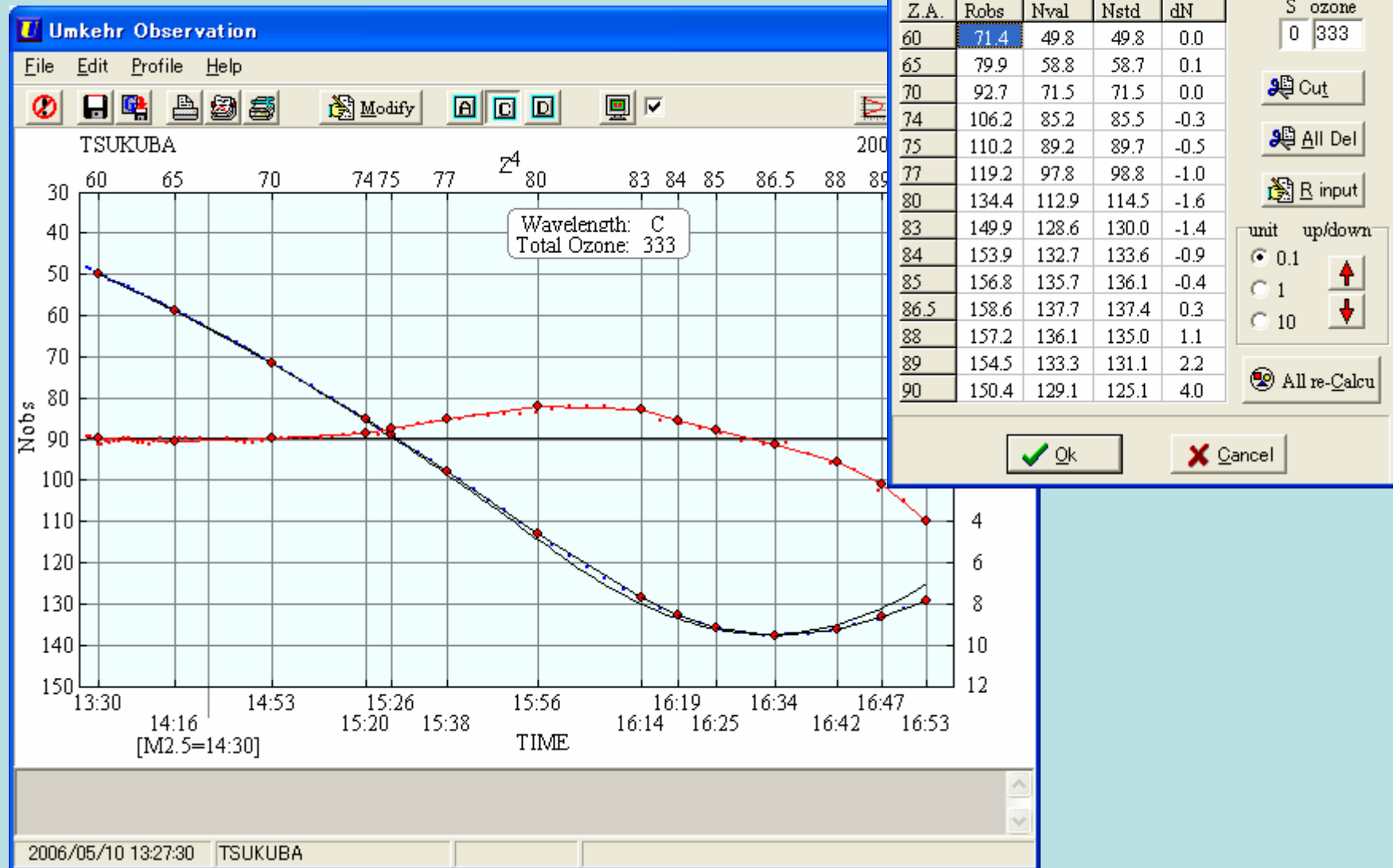


Submitted data to WOUDC can be easily displayed in time series with other reference data.

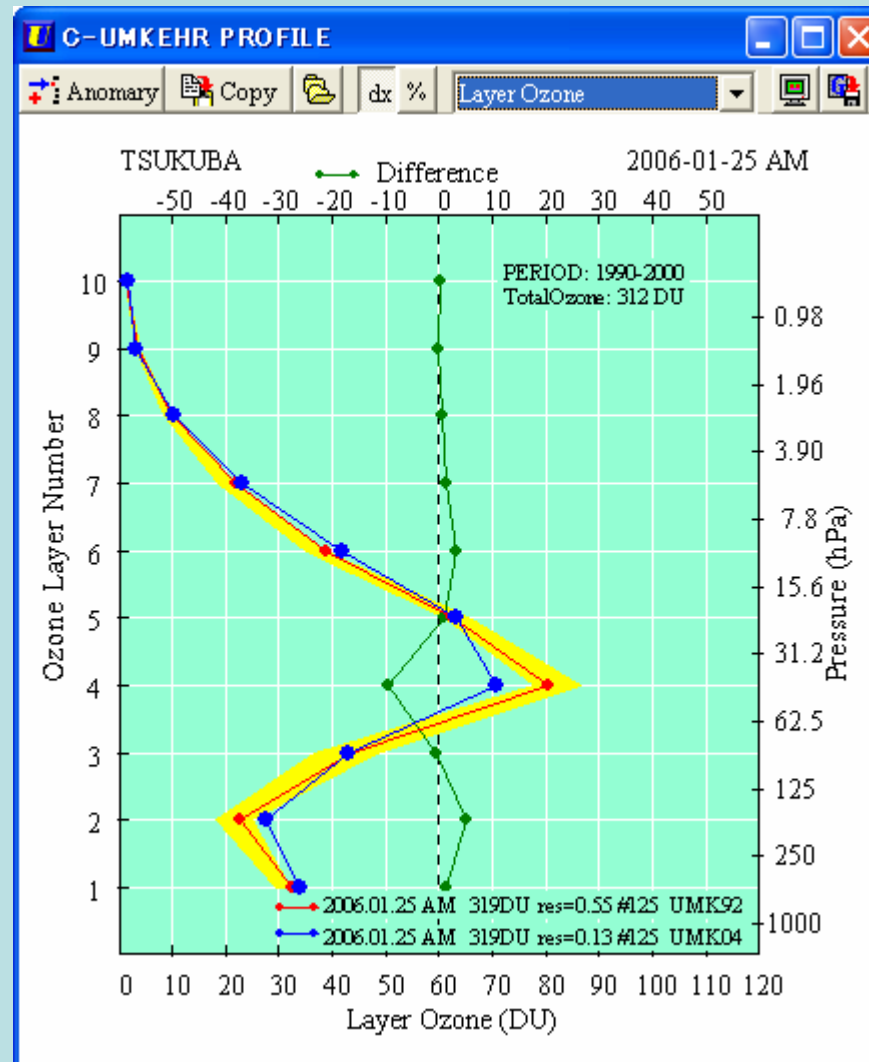


Deviation of results by Direct Sun (DS) and Zenith Sky (ZS) measurements.

# Umkehr processing:main page



Measured values are compared with reference data for standard N value that corresponds to measured total ozone values.



Ozone profile is easily calculated from the former main page for umkehr data. Profile can be derived through both algorithm (UMK92 and UMK04).