SOPAC/NIWA REGIONAL TRAINING COURSE
HYDROLOGICAL SOFTWARE - TIDEDA

21 August - 1 September 1995

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SUMMARY

A regional training course in the use of the New Zealand hydrological software, TIDEDA, originally requested by Fiji, was held at the SOPAC Secretariat in Suva from 21 August to 1 September. It was attended by 13 participants from four member countries - Fiji, Solomon Islands, Vanuatu and Western Samoa. It was organised by the SOPAC Water and Sanitation Project with assistance in setting up computing facilities from staff of the Regional Data Centre and logistical support from the Human Resources Development Program.

The course was run in a series of modules covering the basic concepts to advanced programming techniques. An introduction to the Windows version of TIDEDA, which will be released soon, was also given.

Course Instructions were Tom Kerr and Peter Arnold of the National Institute of Water and Atmospheric Research Limited (NIWA), New Zealand.

FUNDING

Funding was provided by the United Nations Development Programme.

INTRODUCTION

TIDEDA is a computer programme for processing time-dependent data, particularly hydrological data.

The objective of the course was to demonstrate the capabilities of TIDEDA from the basic underlying concepts through to advanced programming techniques and batch processing commands.

Each module included demonstration of DOS Command TIDEDA, DOS Menu TIDEDA and TIDEDA for Windows.

Demonstrations of other NIWA software were also included in the workshop. Two of these programmes, "Gauge" and QRA T" were given to participating countries during the course.

COURSE FORMAT

The course was run as a training workshop. Each module involved a detailed explanation of the module topic followed by hands on experience by course participants.

Equipment

TIDEDA processes were demonstrated using a computer linked to a large TV screen. Participants had access to two computers in the training room connected to the SOPAC server. This enabled printing and plotting to a number of network printers.

A further computer was installed in the training room connected to an HP Paint jet printer. Two laptop computers were also available to participants.

TIDEDA was installed on two other computers within SOPAC. One in an adjacent office and one in the Water and Sanitation Office. Participants were reluctant to use these computers, possibly due to the interactive nature of the training workshop and the distance these offices were from the training room.

Acknowledgement

The assistance of Regional Data Centre personnel in setting up computers and printers during the course was greatly appreciated.

Recommendation

It is recommended that for future training workshops a minimum of one PC between two people be available and installed in the training room. Access to a printer for all computers would also be useful for exercises involving hard copy output.

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COURSE PROGRAMME

Monday, 21 August 1995   INTRODUCTION TO TIDEDA

         Familiarisation with TIDEDA terminology
         Explanation of KINDS of data
         Structure of TIDEDA files
         Explanation of LIST, BATCH, ATTRIBUTES and PARAMETER files

Tuesday, 22 August   TIDEDA OPERATION

         Key board commands
         Menu Systems
         Using a mouse
         Special key functions
         Introduction to printing and plotting data

Wednesday, 23 August   DATA RETRIEVAL AND REPORTING

         Selection and printing of stage, flow and rainfall reports

Thursday, 24 August   DATA PLOTTING

         Selection and plotting of stage, flow, rainfall and
         gauging data

Friday, 25 August   DATA ENTRY AND DATA EXPORT

         General overview plus practical exercises

Monday, 28 August   TRANSORMATION AND MANIPULATION OF DATA

Tuesday, 29 August   INTRODUCTION TO SIMULATION PROGRAMMES

Wednesday, 30 August   GAUGING DATA & INTRODUCTION TO RATING CURVES

         Introduction to the NIWA stream gauging programme "Gauge"
         Transferring gauging data from gauge to TIDEDA
         Drawing rating curves

         Entering ratings into TIDEDA

         Plotting rating curves and area/velocity curves
         Introduction to the NIWA programme "QRAT"
         Introduction to the NIWA programme "GENR8"
         Discussion of errors and gauging deviations

Thursday, 31 August   COMPLETION OF RATING MODULES &
                                        AUTOMATING OUTPUTS

Friday, 1 September   QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES
                                        INTRODUCTION TO DATA SECURITY
                                        REVIEW OF TIDEDA FOR WINDOWS
                                        TOPICS REQUESTED BY PARTICIPANTS

COURSE EVALUATION

At the end of the course, participants were asked to complete a course evaluation form. The form used is attached as an Appendix. The results of this evaluation are presented in Table 1 and Figure 1.

Table 1

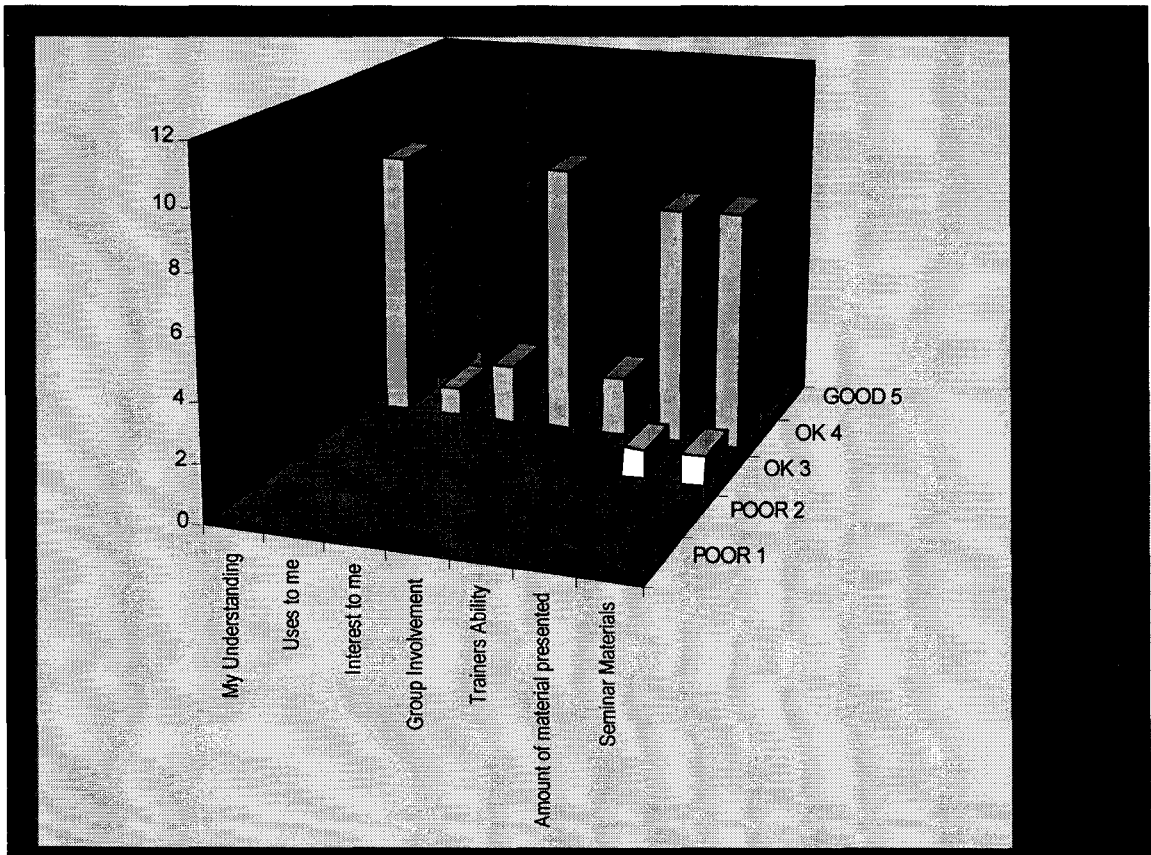|	POOR		OK		GOOD
	1	2	3	4	5
My Understanding				9	5
Uses to me				1	12
Interest to me				2	12
Group Involvement				9	4
Trainers Ability				2	12
Amount of material presented			1	8	5
Seminar Materials			1	8	5

Figure 1

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In answer to two further course evaluation questions, all participants thought the time was well spent and would like to see follow-up sessions and/or refresher courses.

Course participants were also asked to comment on which they thought were the three most important topics covered. Figure 2 displays a summary of the results of this survey. The score in Figure 2 represents the number of participants who thought the topic was among the three most important covered.
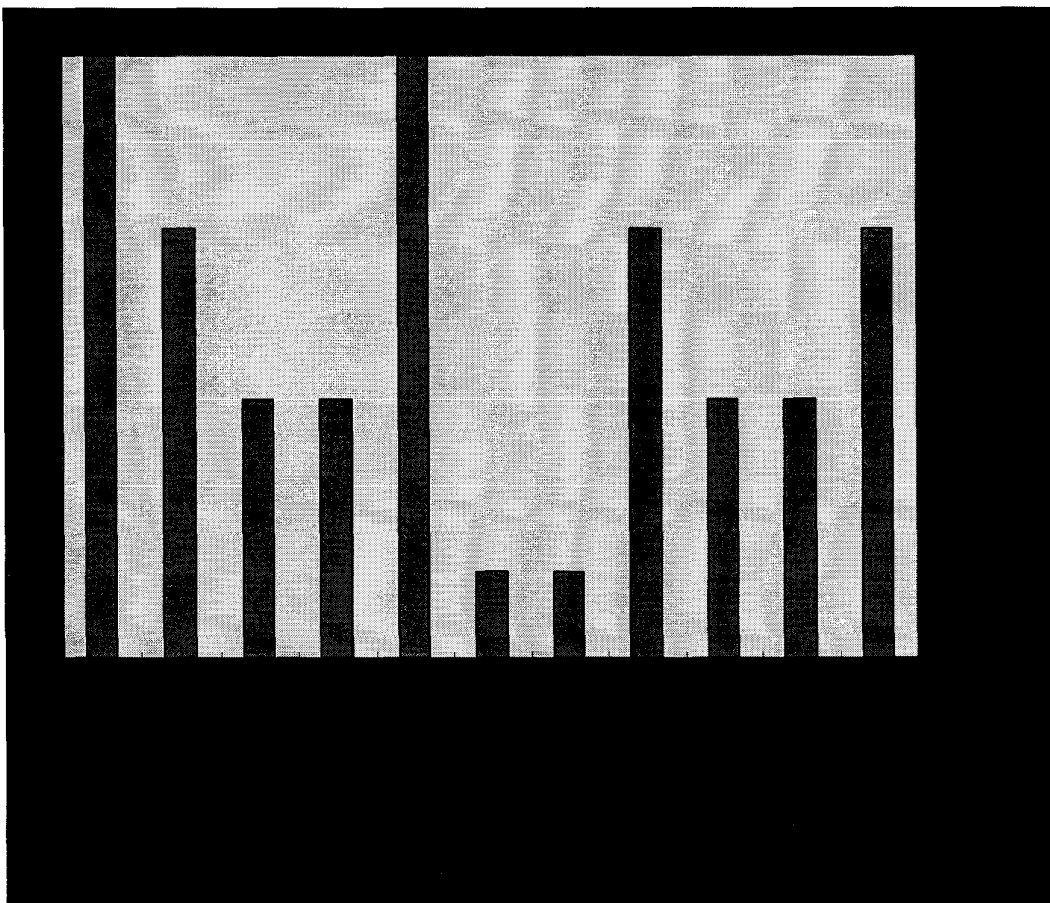
TOPICS CONSIDERED MOST IMPORTANT

Figure 2. The three most important topics raised as ranked by course participants

COMMENTS BY THE COURSE INSTRUCTORS

Participants were enthusiastic and very keen to expand their knowledge of TIDEDA.

The experience of participants as users of TIDEDA ranged from greater than 5 years to first time users. The two first time users, (both from Western Samoa), quickly caught up to the more experienced participants in most aspects of the programme.

APPENDIX

HYDROLOGICAL SOFTWARE - TIDEDA
WORKSHOP EVALUATION

Please circle your choice in the box below

	POOR		OK		GOOD
	1	2	3	4	5
My understanding					
Use to me					
Interest to me					
Group Involvement					
Trainers Ability					
Amount of material presented					
Seminar Materials					

ANY OTHER COMMENTS:

What did you see as the three (3) most important topics raised:

_____

_____

_____

Do you consider the time well spent

YES   NO

Would you like to see follow-up by similar sessions/refresher courses?
YES   NO

Please note below any general or specific topics you consider important for follow up work activities by SOPAC, your department, government or others.

_____

_____

_____

_____

Name (optional): _____   *Position:* _____

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