

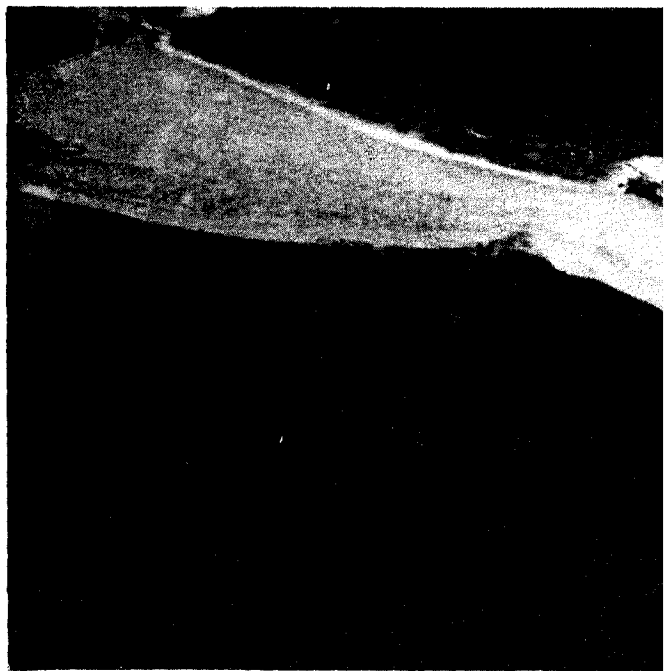
ADMINISTRAÇÃO DOS PORTOS DO D

Hydro-morphologi

Part 3

Tidal current calculations

Annex : computed diagrams



november 1982 / P613

PORT AND WATERWAY ENGINEERS

ADMINISTRAÇÃO DOS PORTOS DO DOURO E LEIXÕES

Hydro-morphological study Douro Estuary

Part 3

Tidal current calculations

Annex: computed diagrams

november 1982 / P613

PORT AND WATERWAY ENGINEERS


hydronamic^{bv}
sliedrecht holland

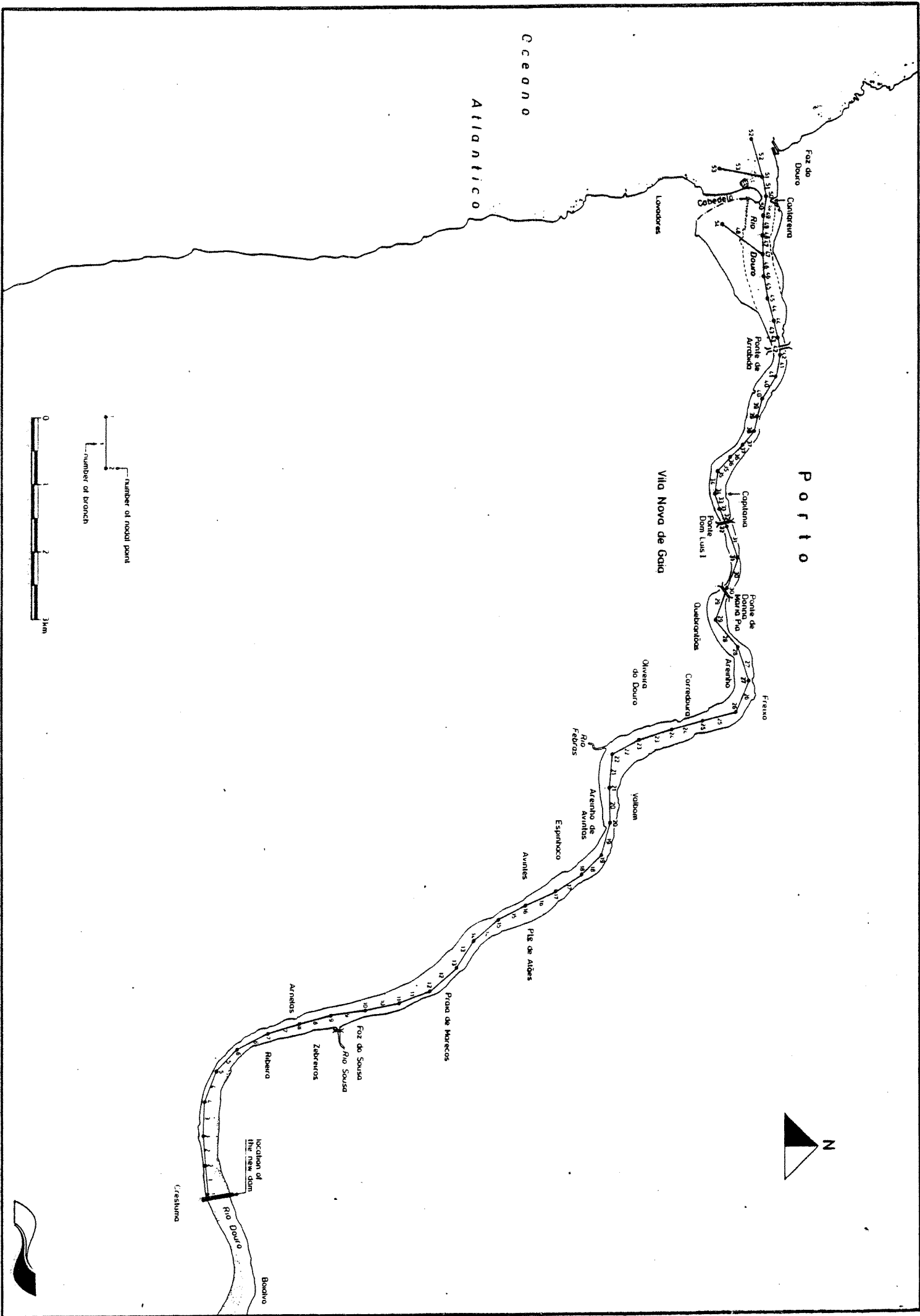


FIGURE 1: NETWORK FOR THE ONE-DIMENSIONAL FLOW MODEL.

WATERLEVEL (m)

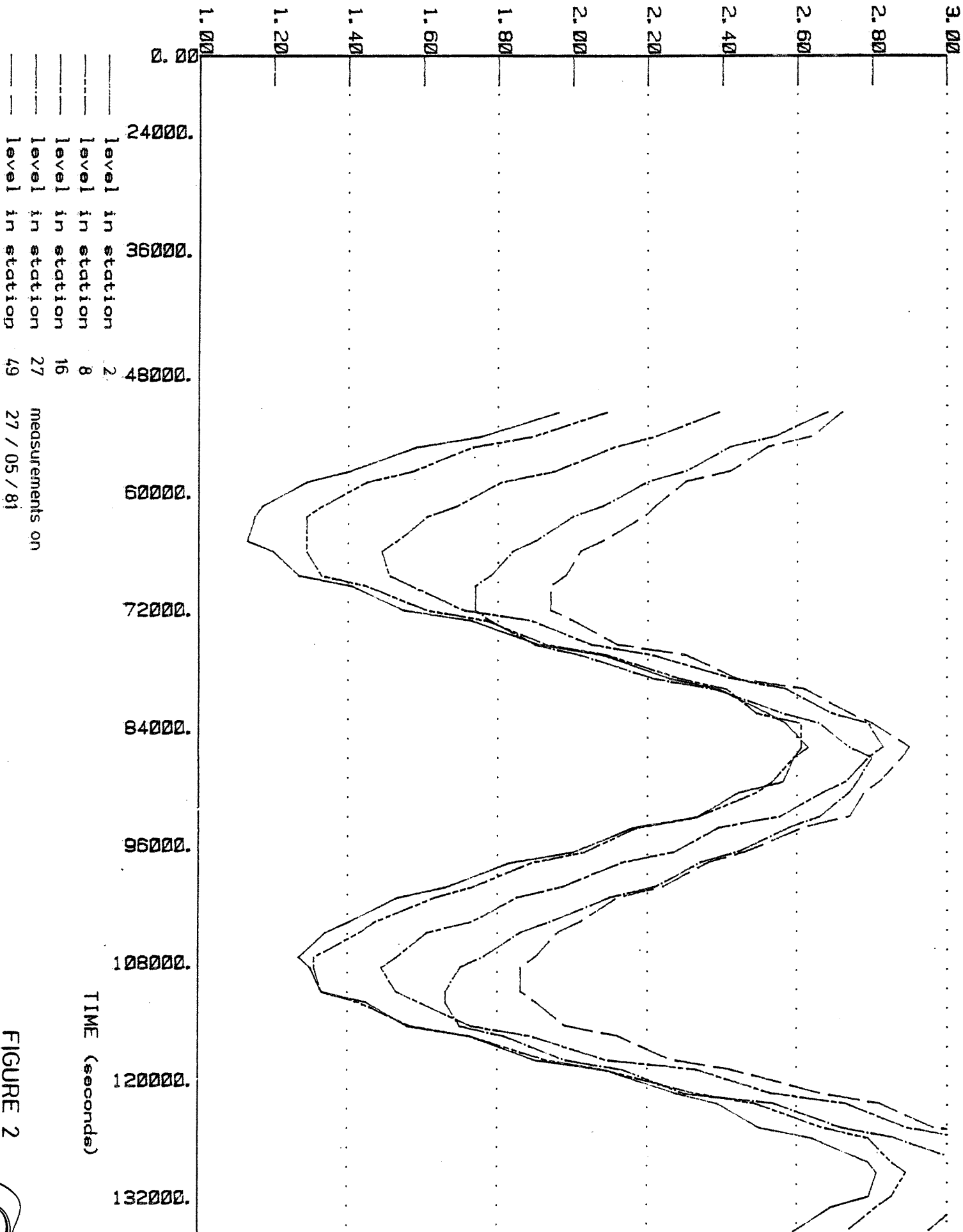


FIGURE 2



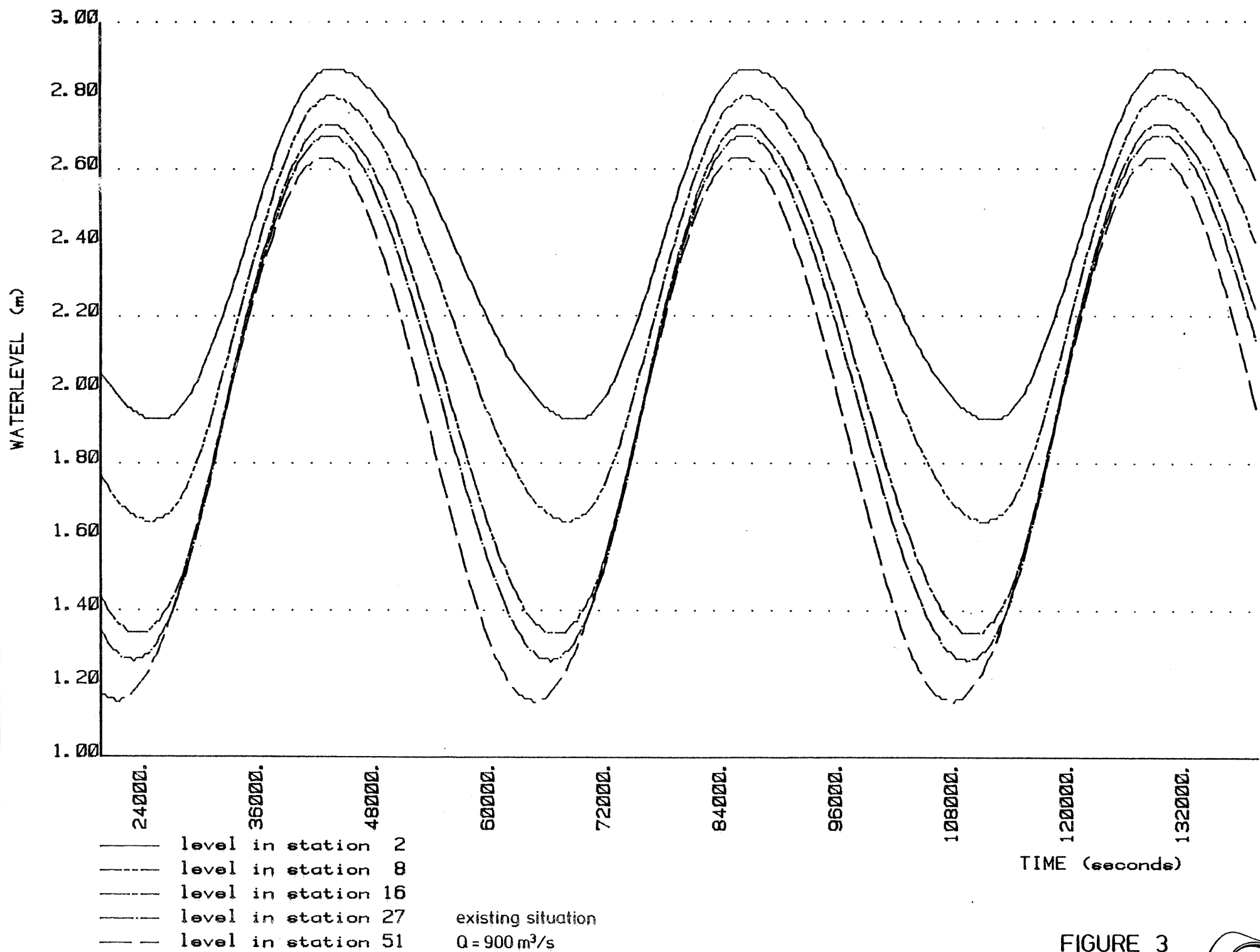


FIGURE 3



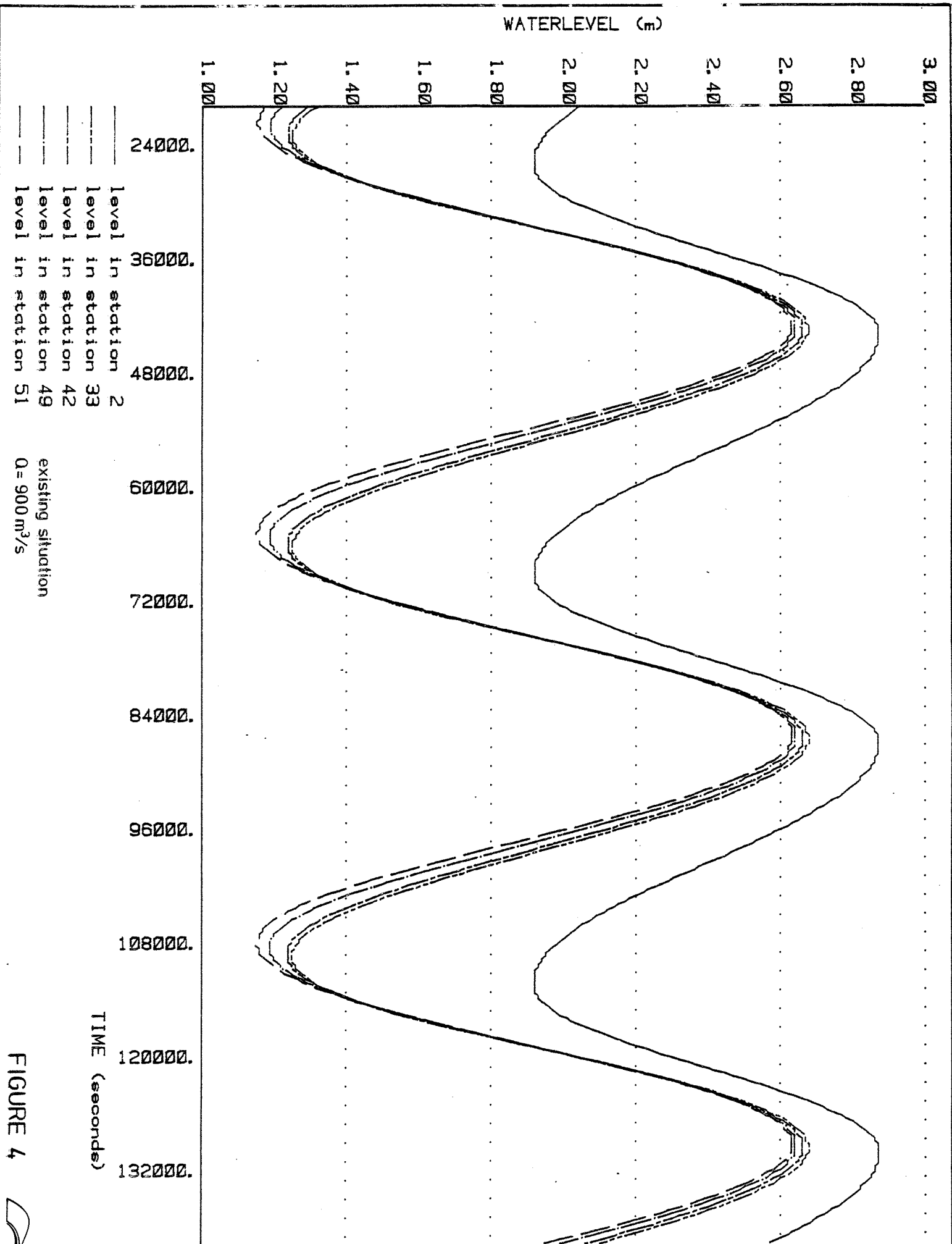


FIGURE 4



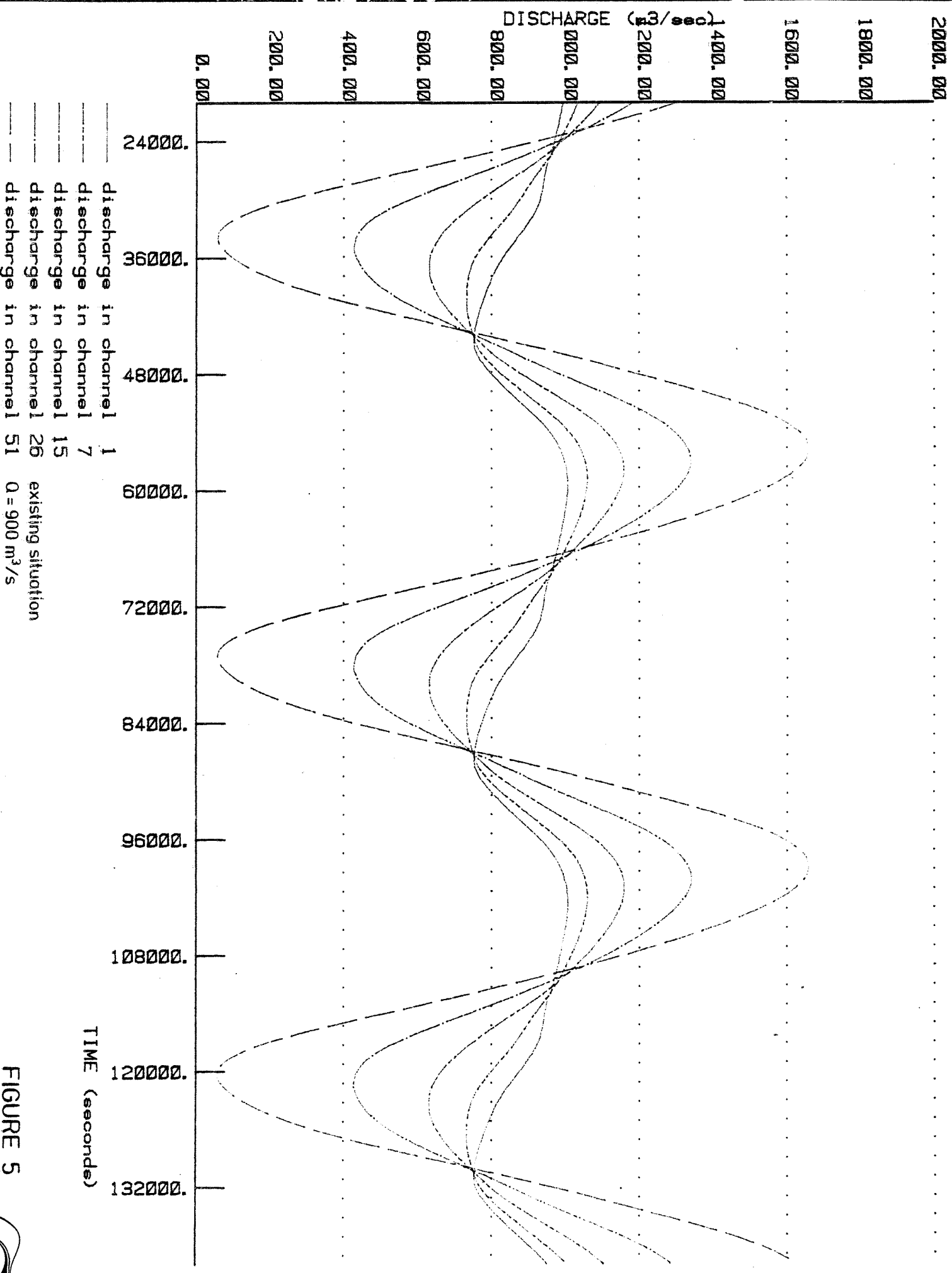


FIGURE 5



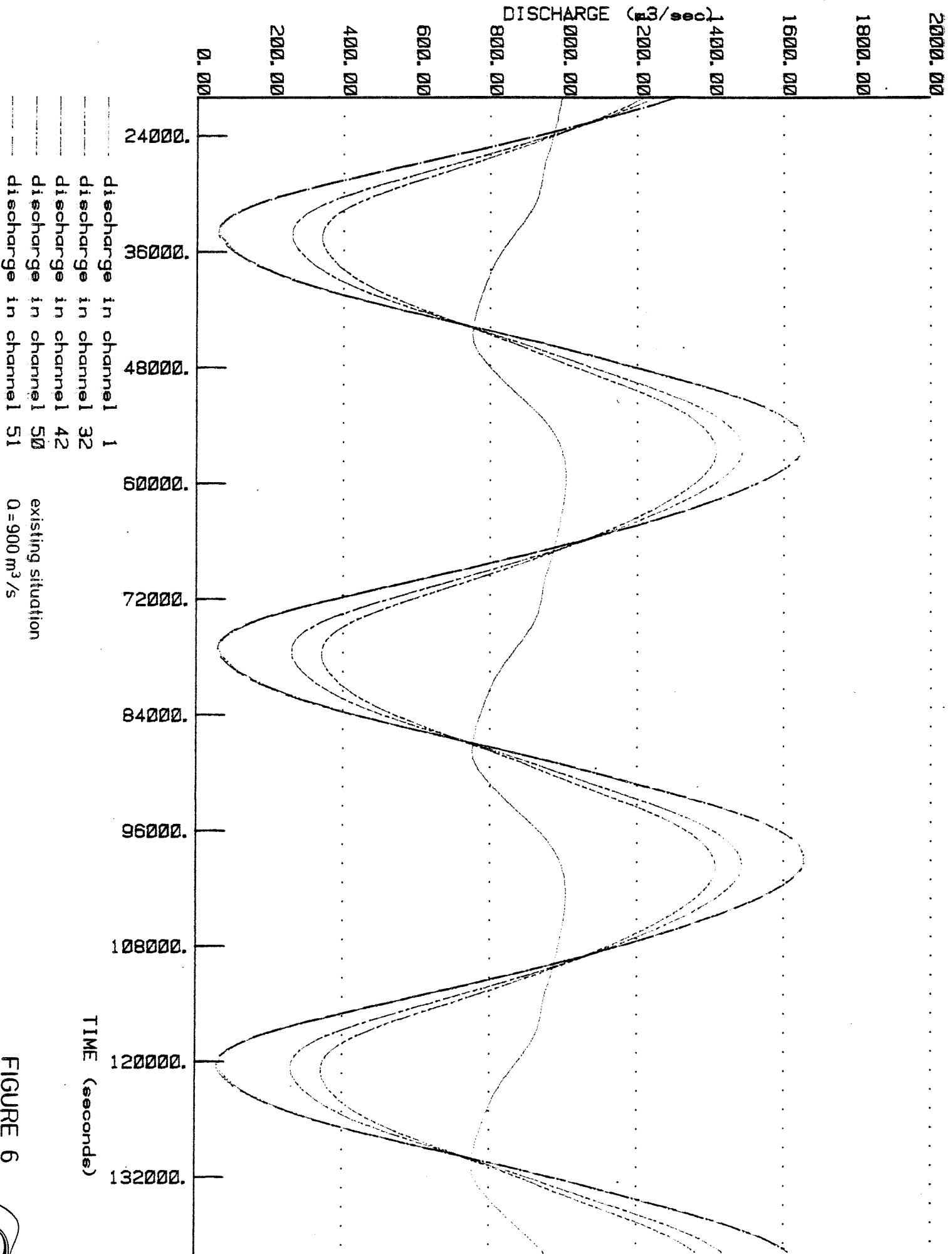


FIGURE 6



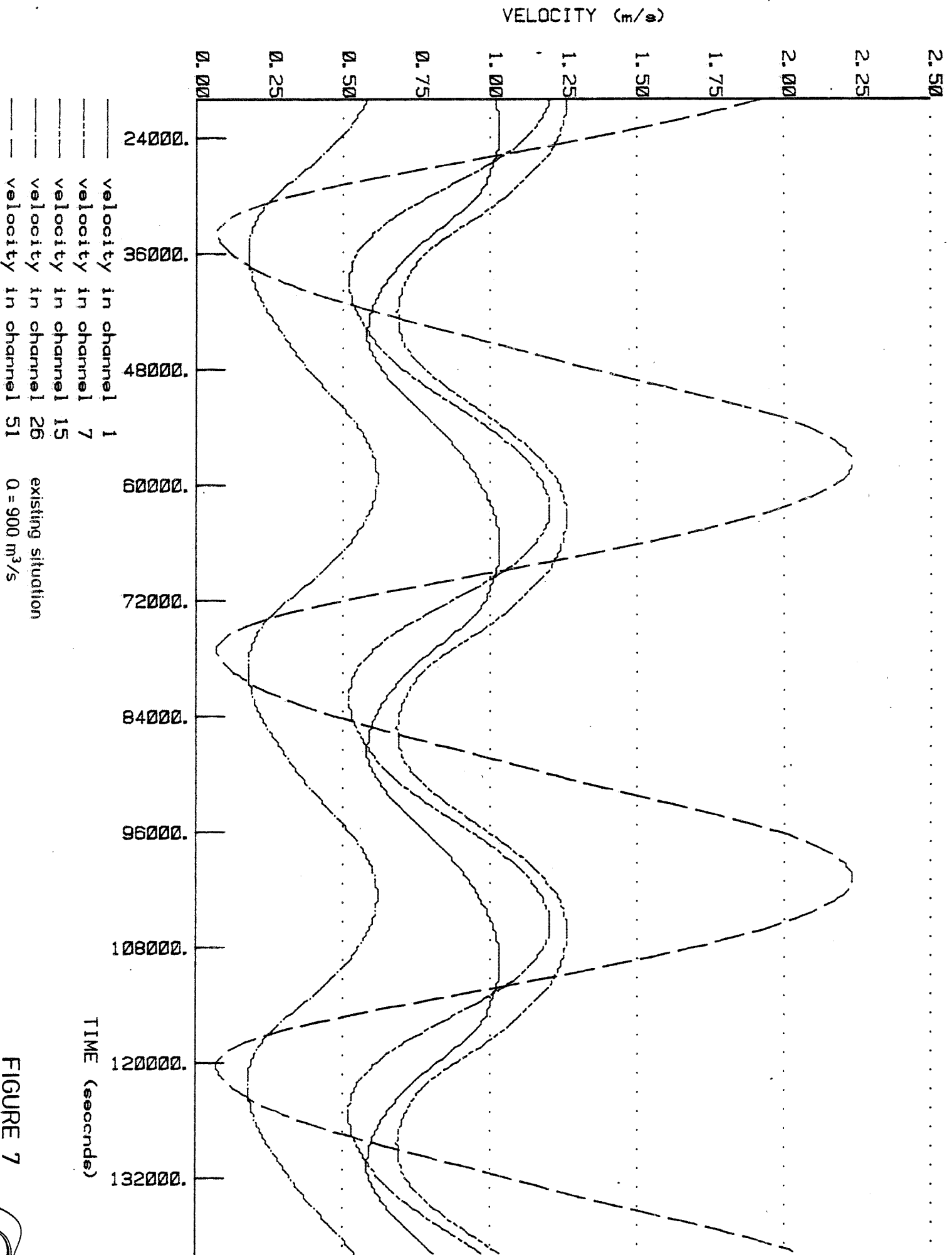


FIGURE 7



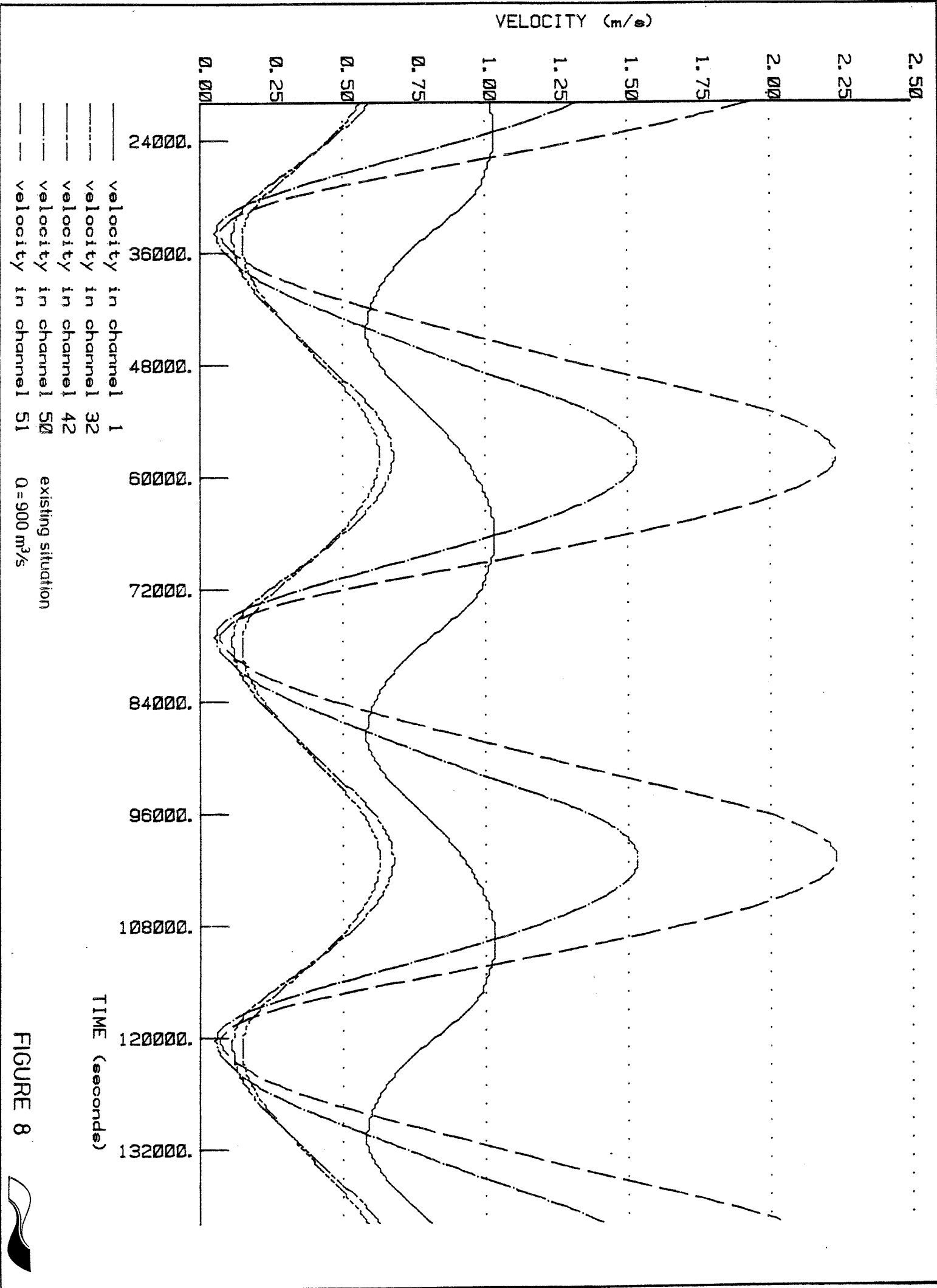


FIGURE 8



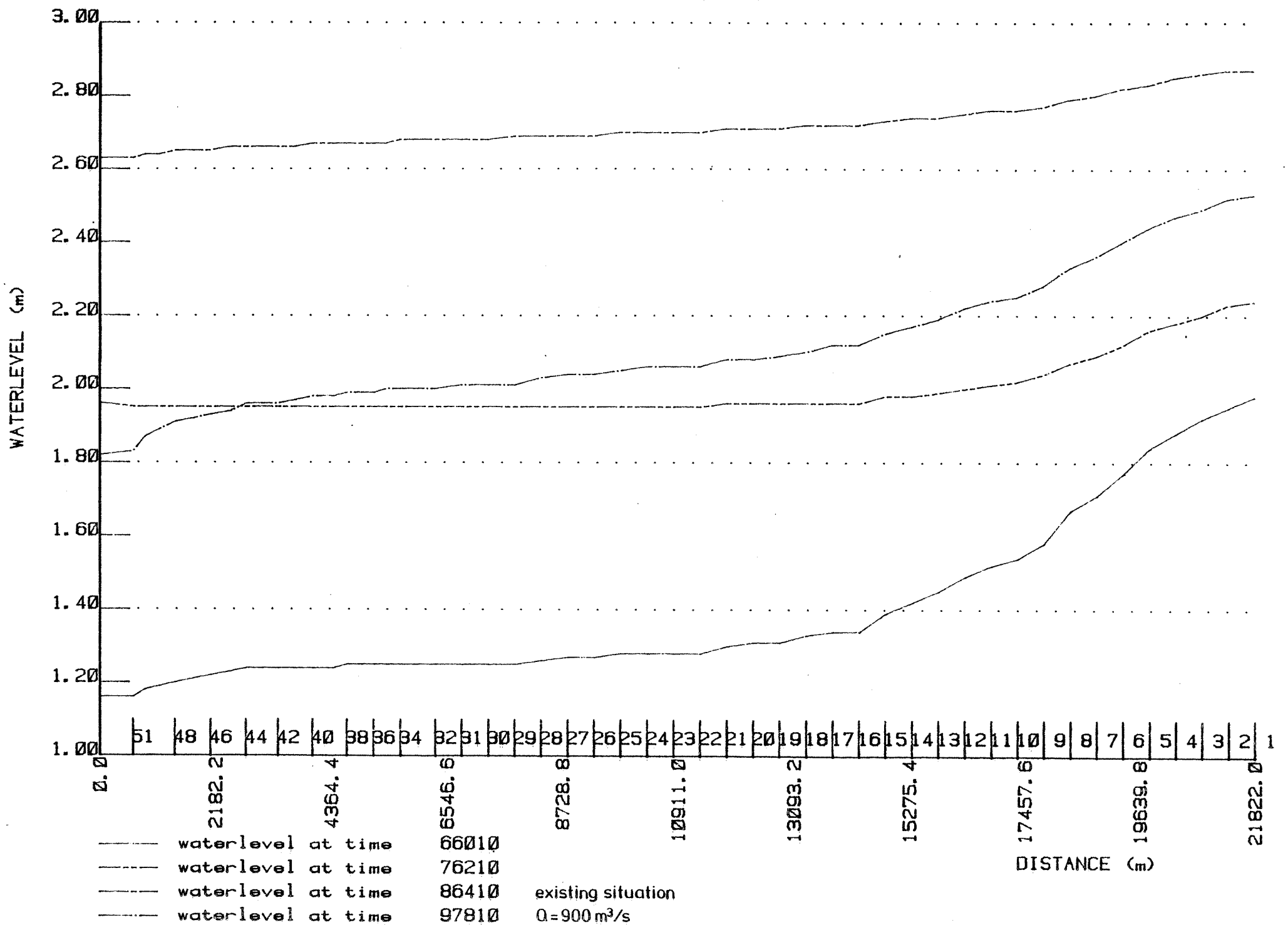


FIGURE 9



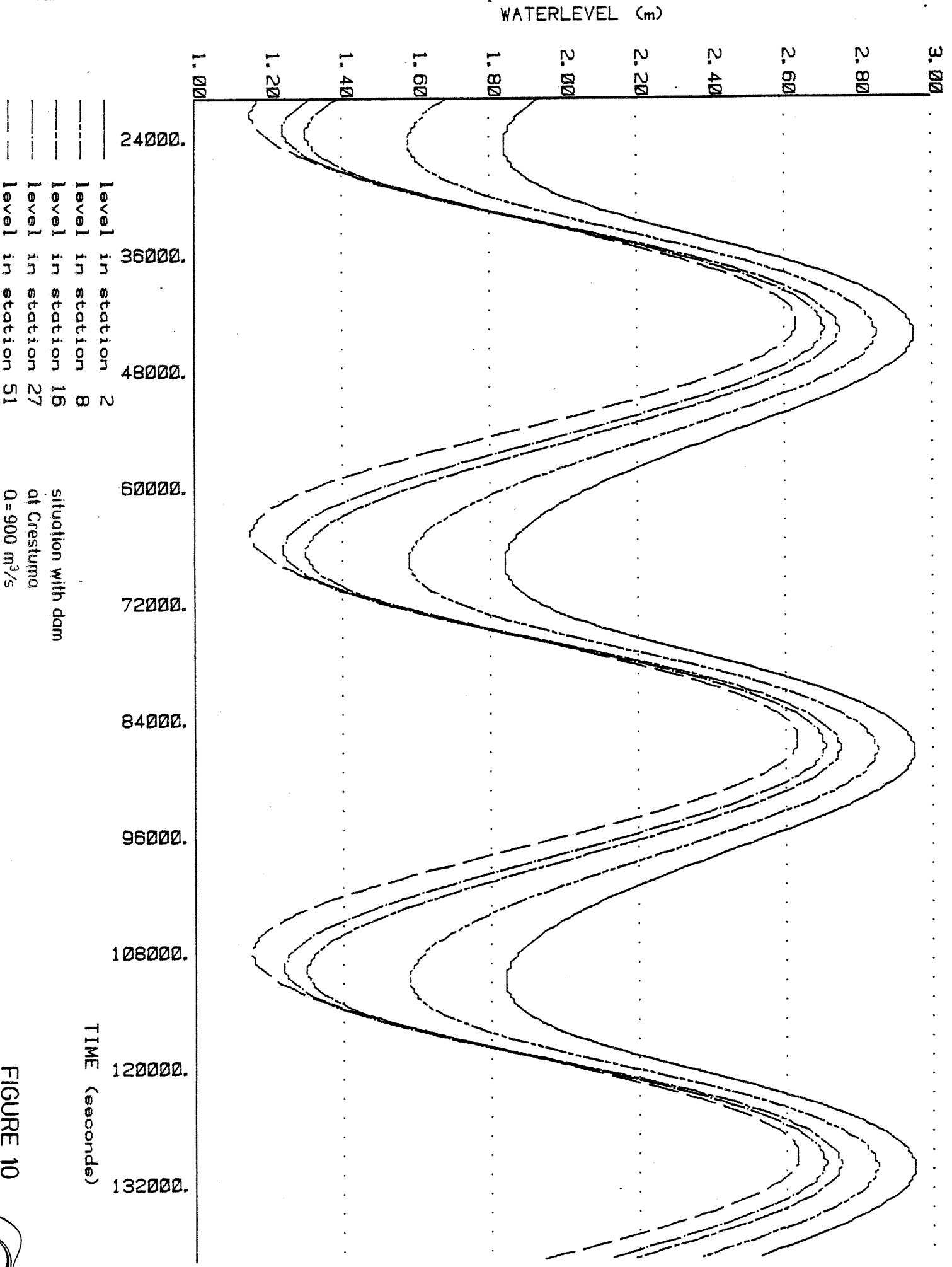


FIGURE 10



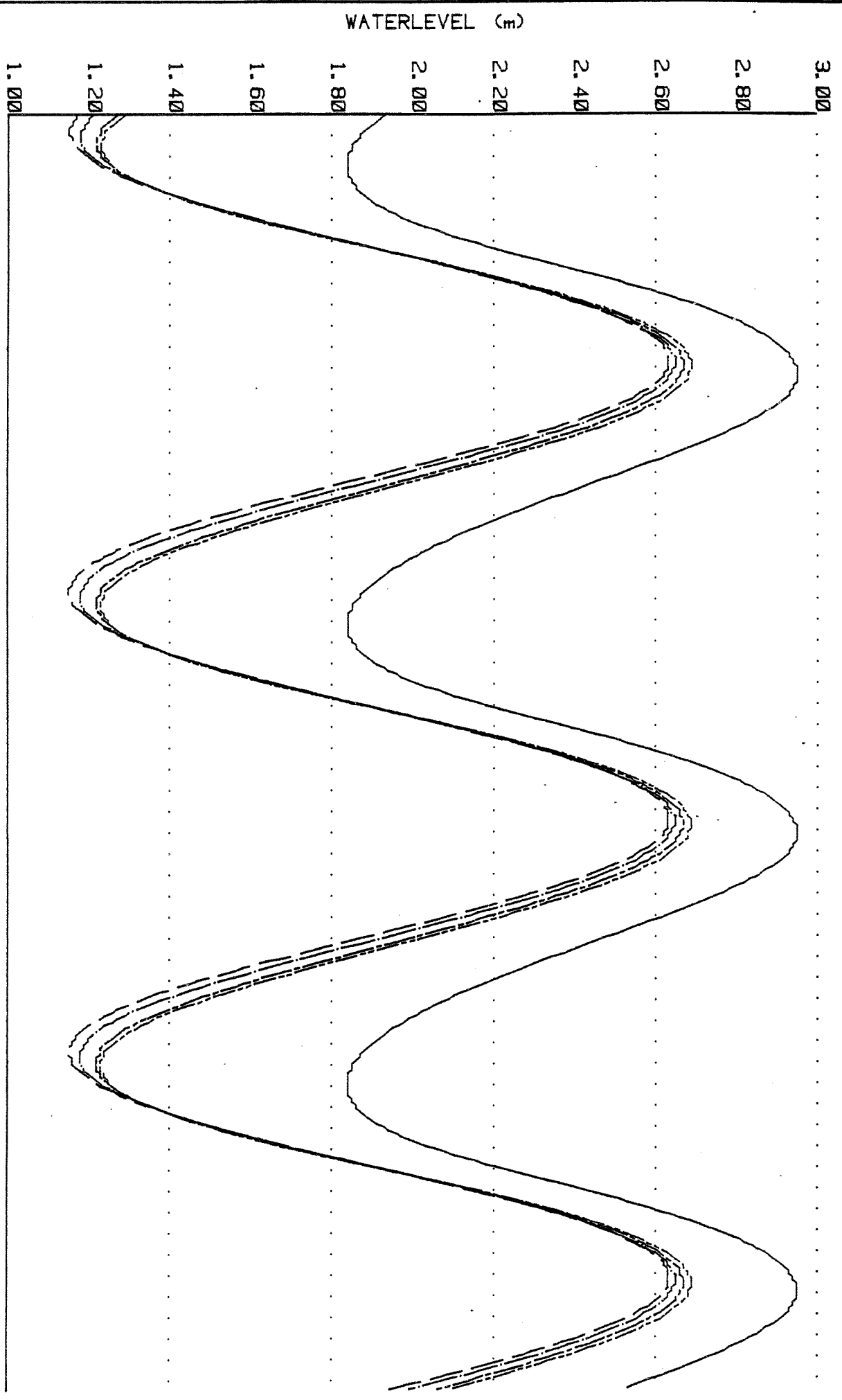


FIGURE 11



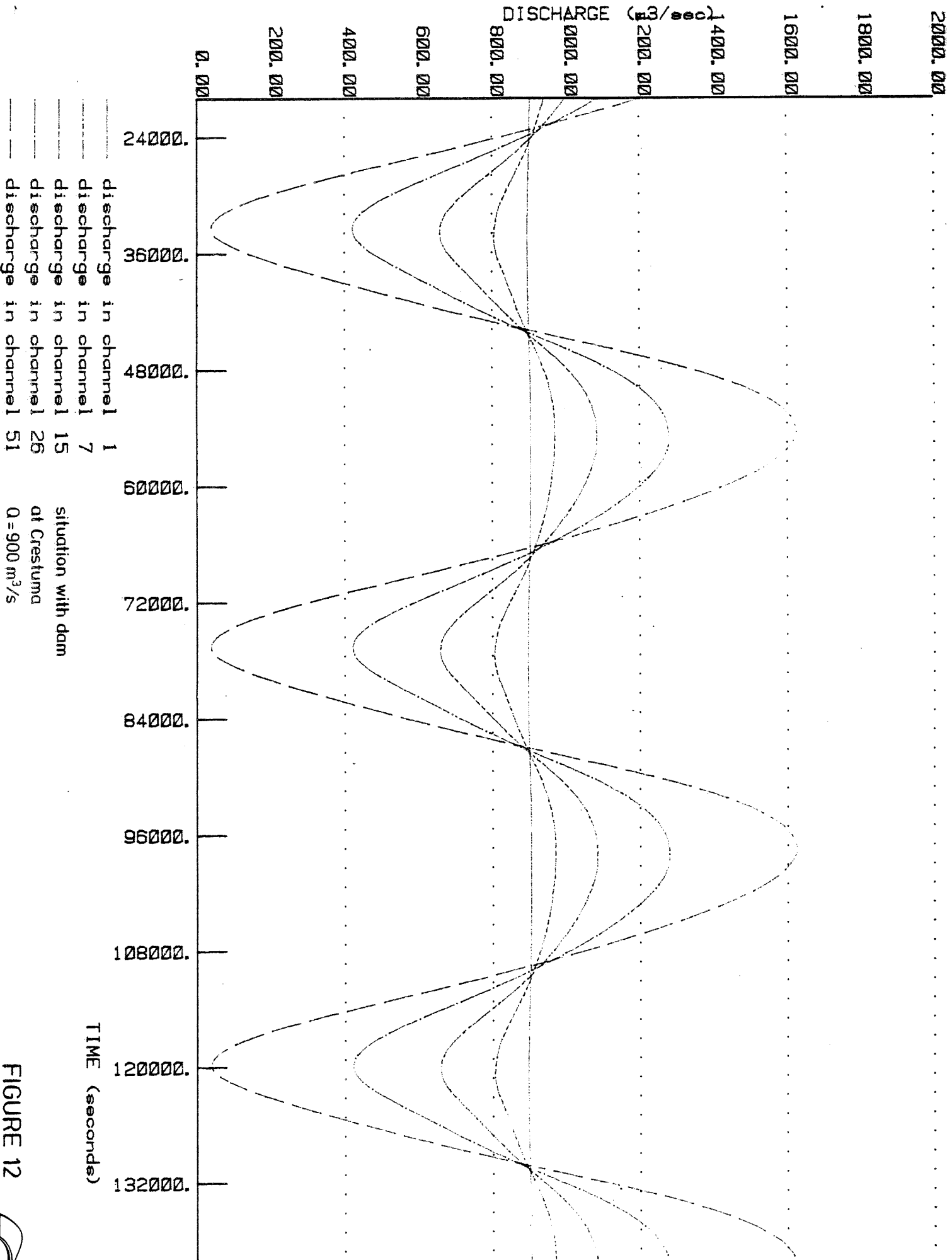


FIGURE 12



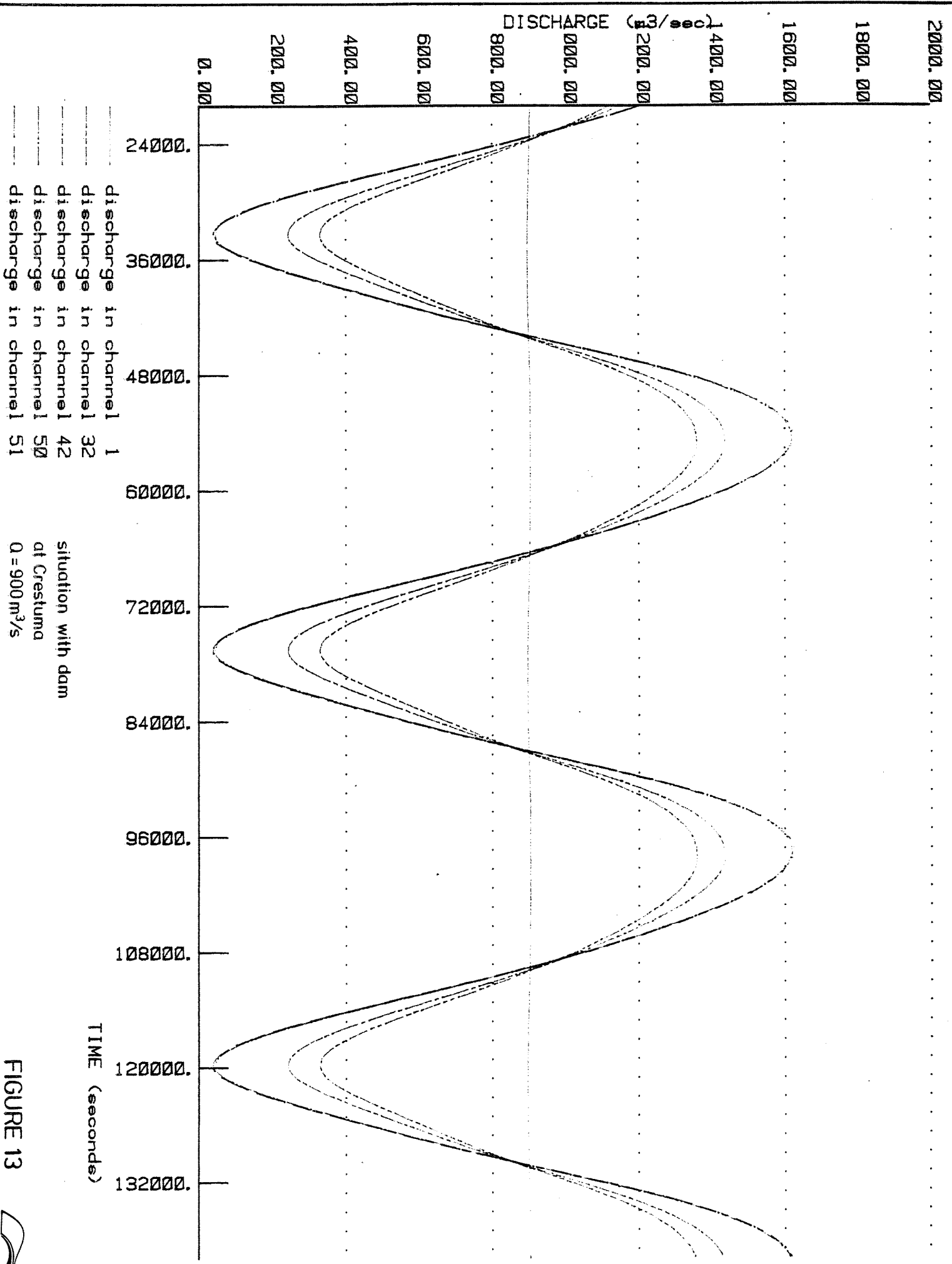


FIGURE 13



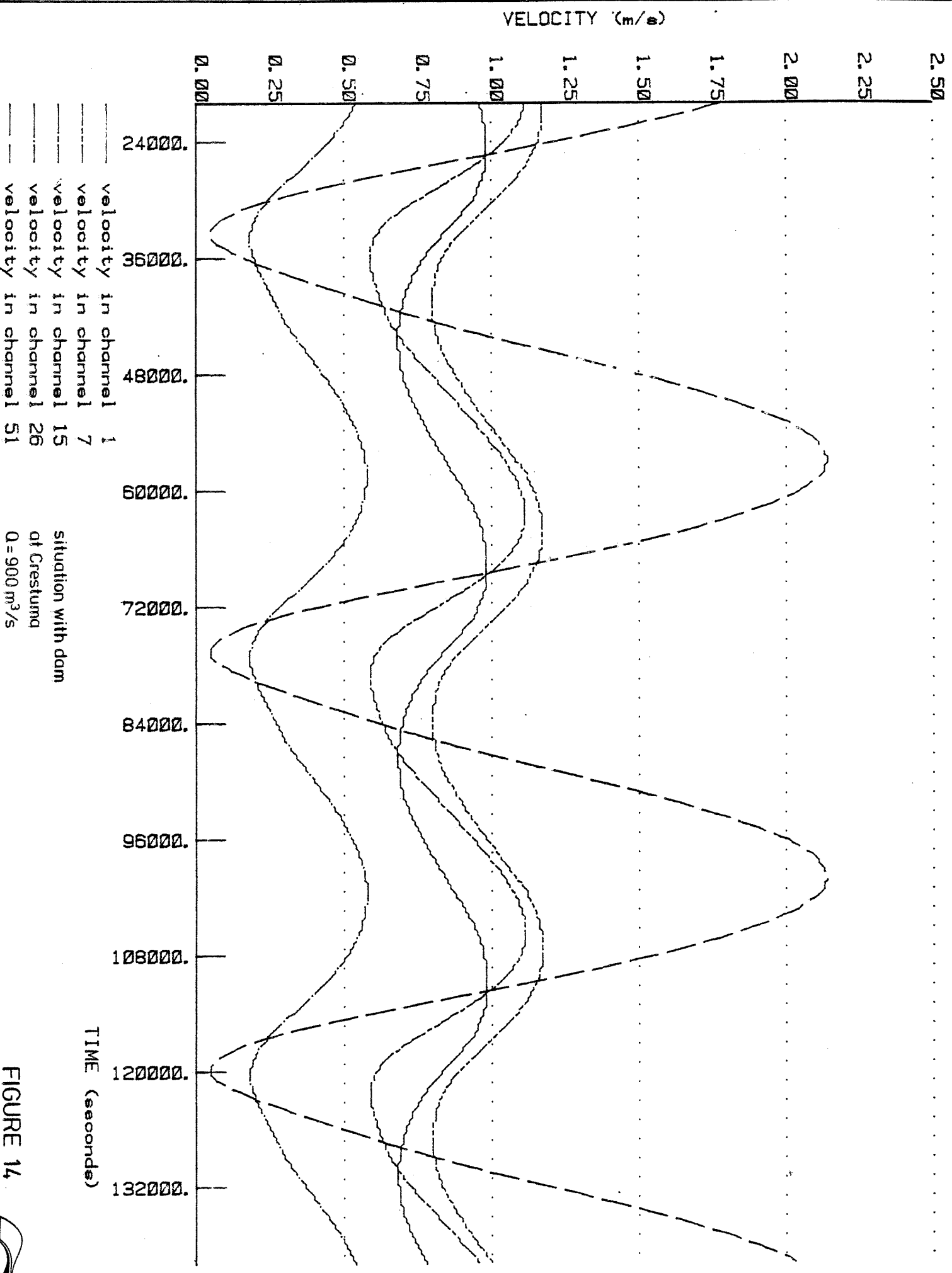


FIGURE 14.



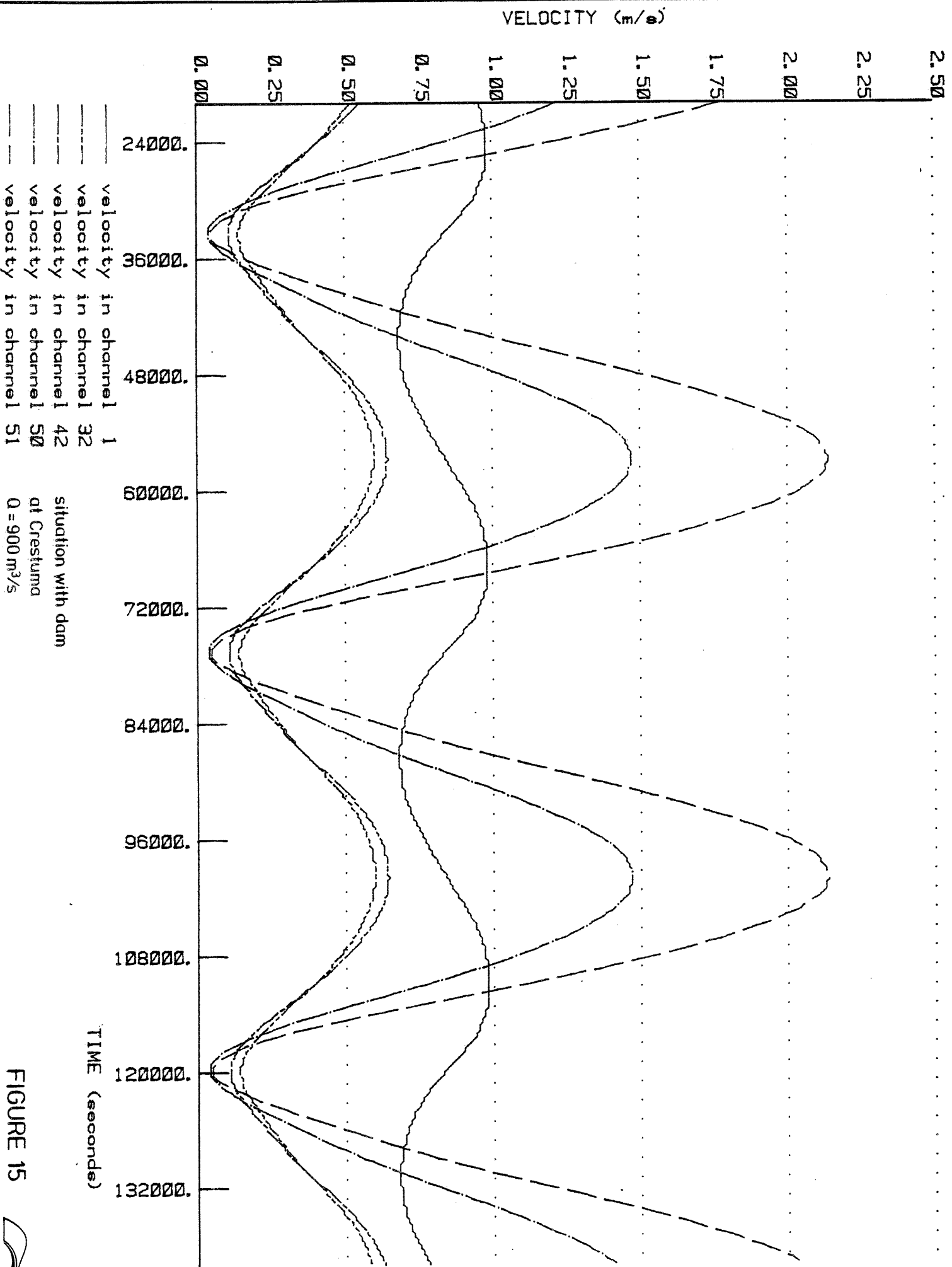


FIGURE 15



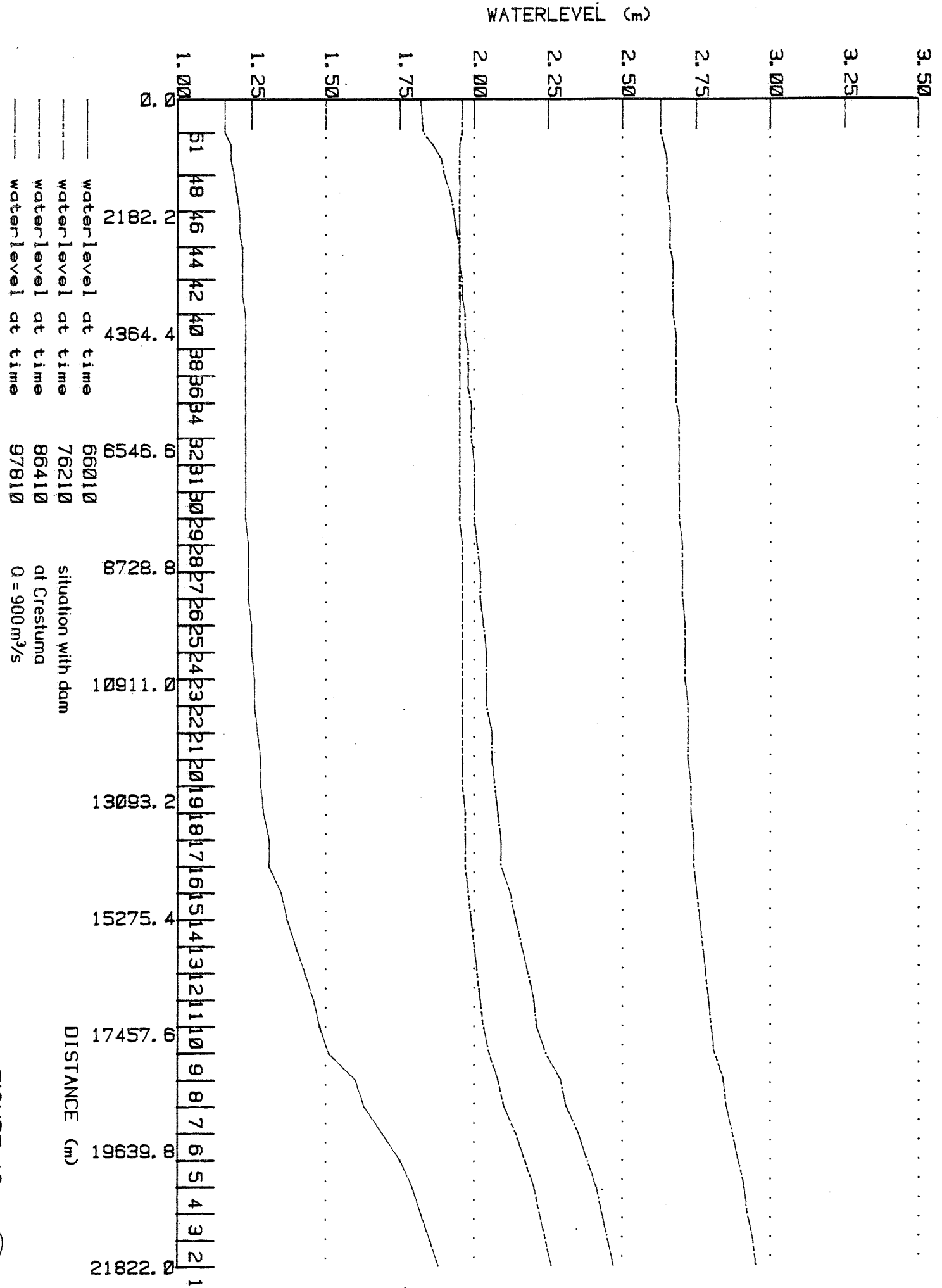
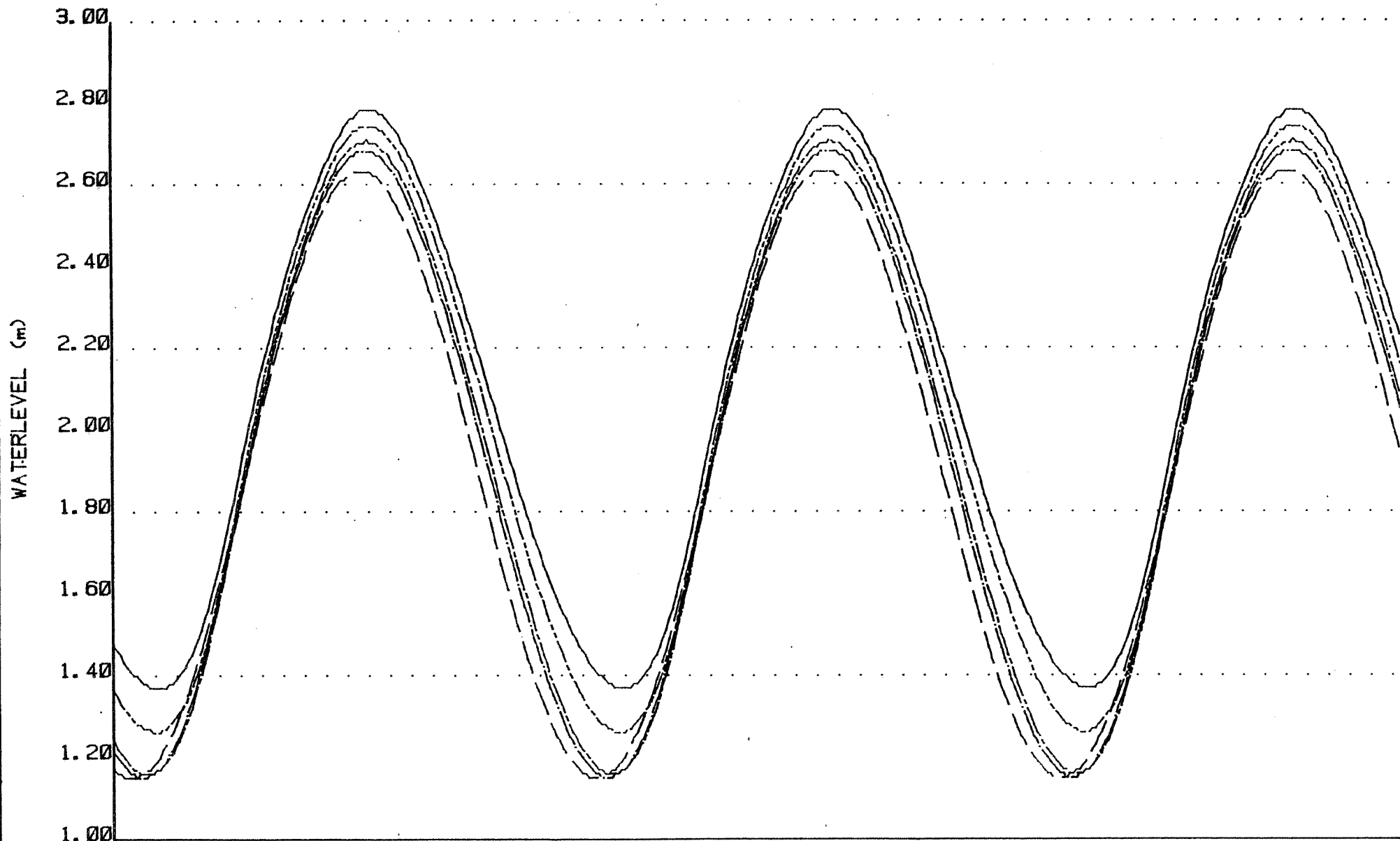


FIGURE 16





- level in station 2
- - - level in station 8
- · - · level in station 16
- · - · level in station 27
- - - level in station 51

situation with dam
at Crestuma
 $Q = 500 \text{ m}^3/\text{s}$

TIME (seconds)

FIGURE 17



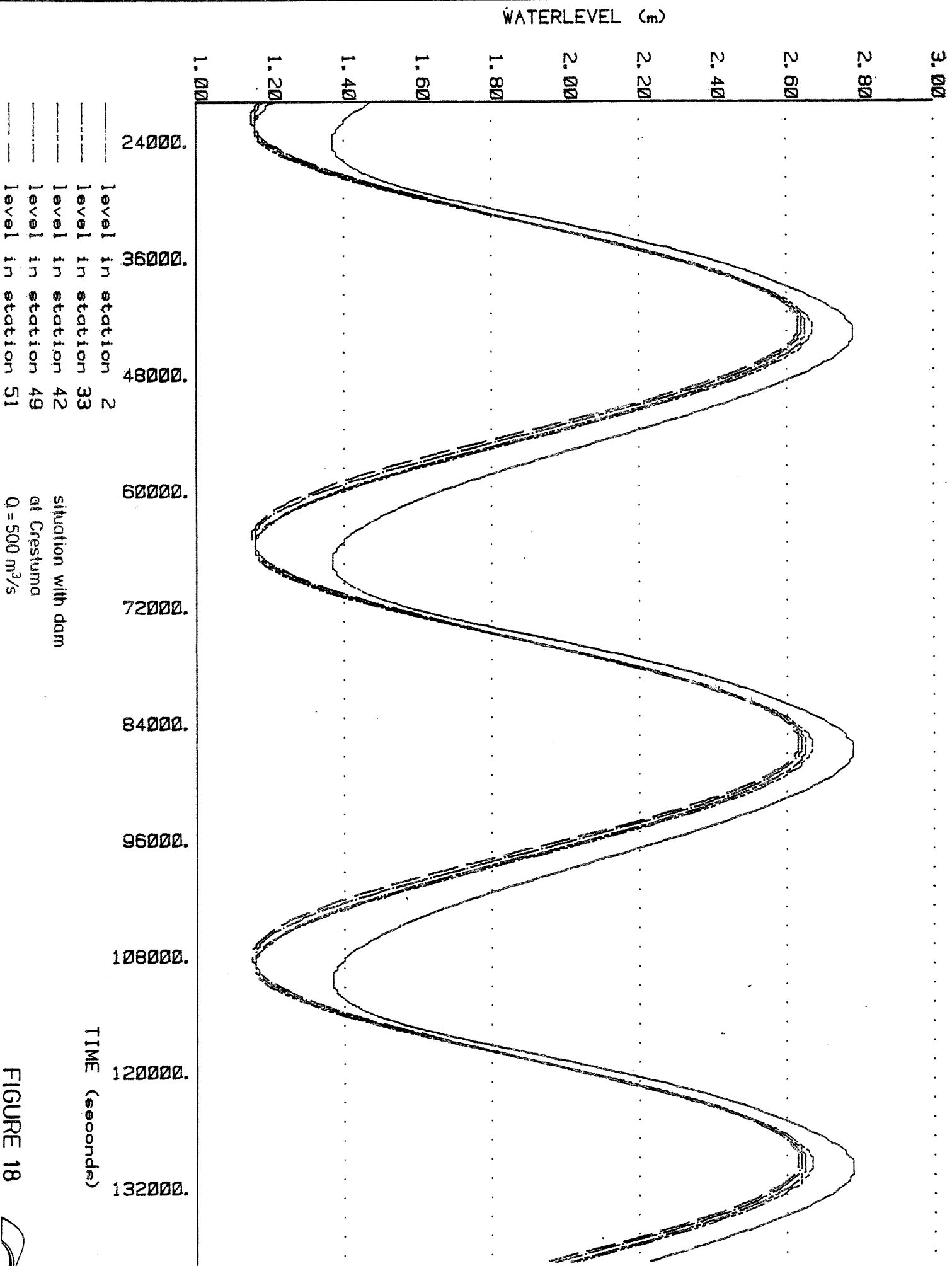


FIGURE 18



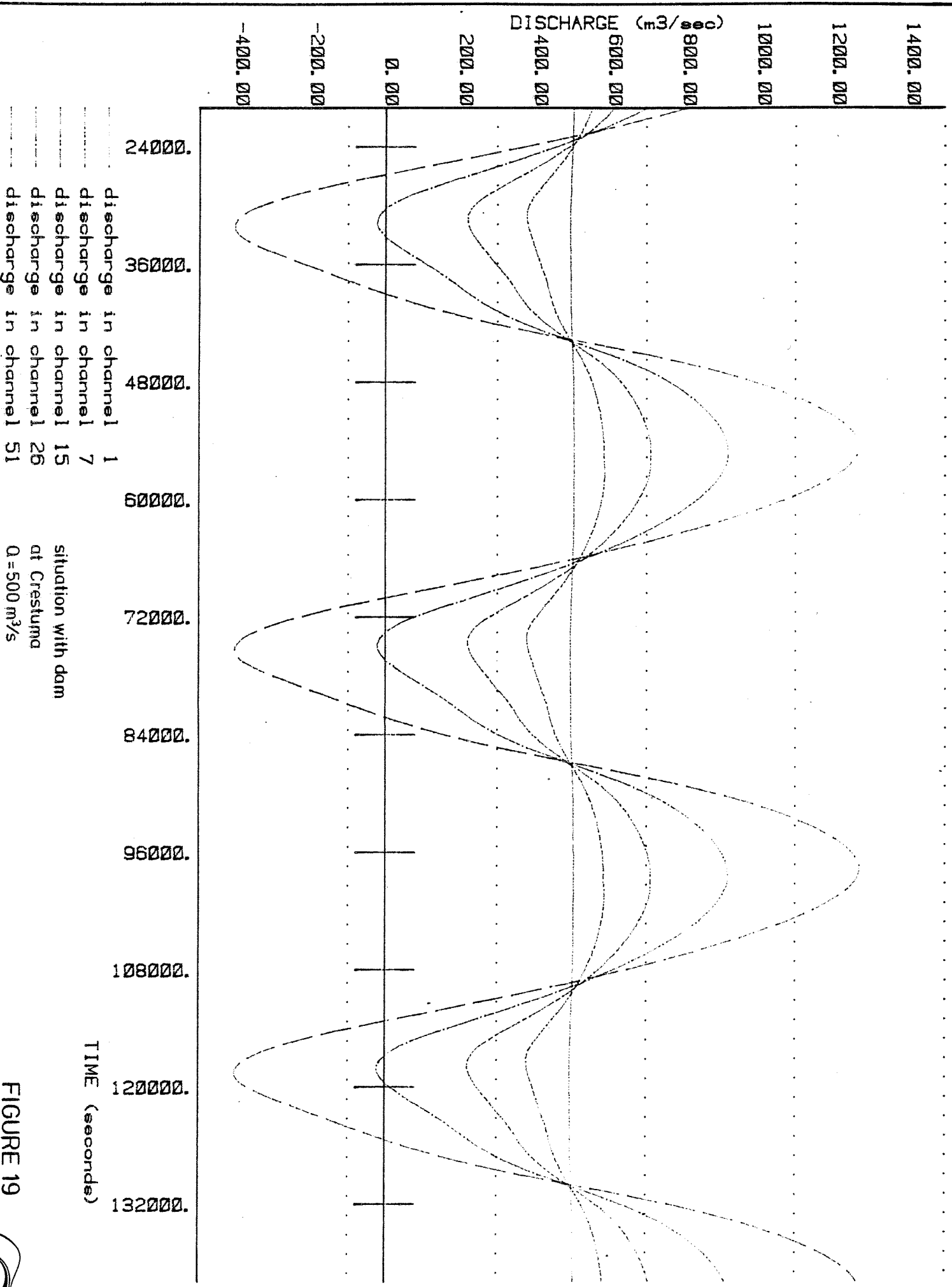


FIGURE 19



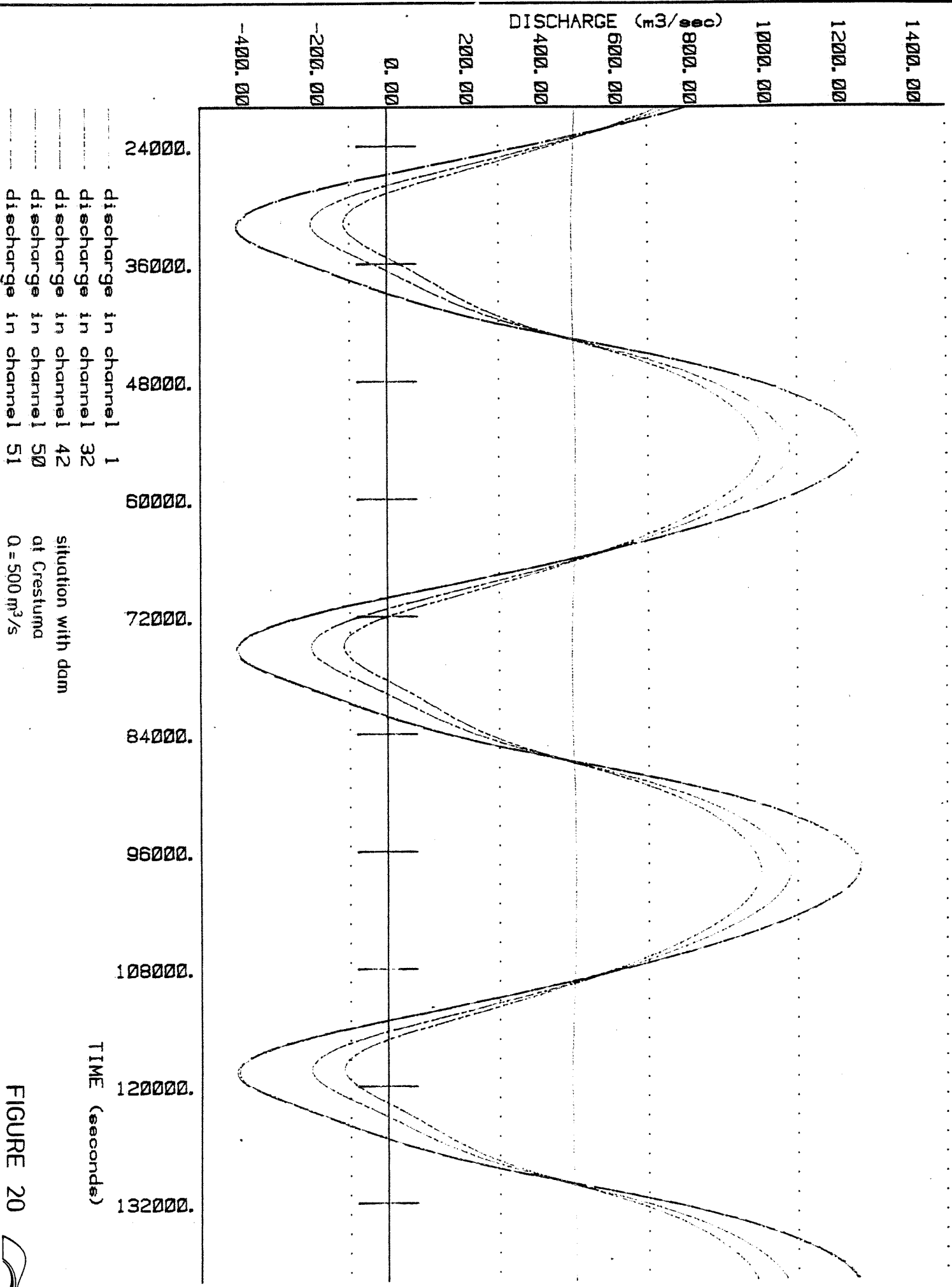


FIGURE 20



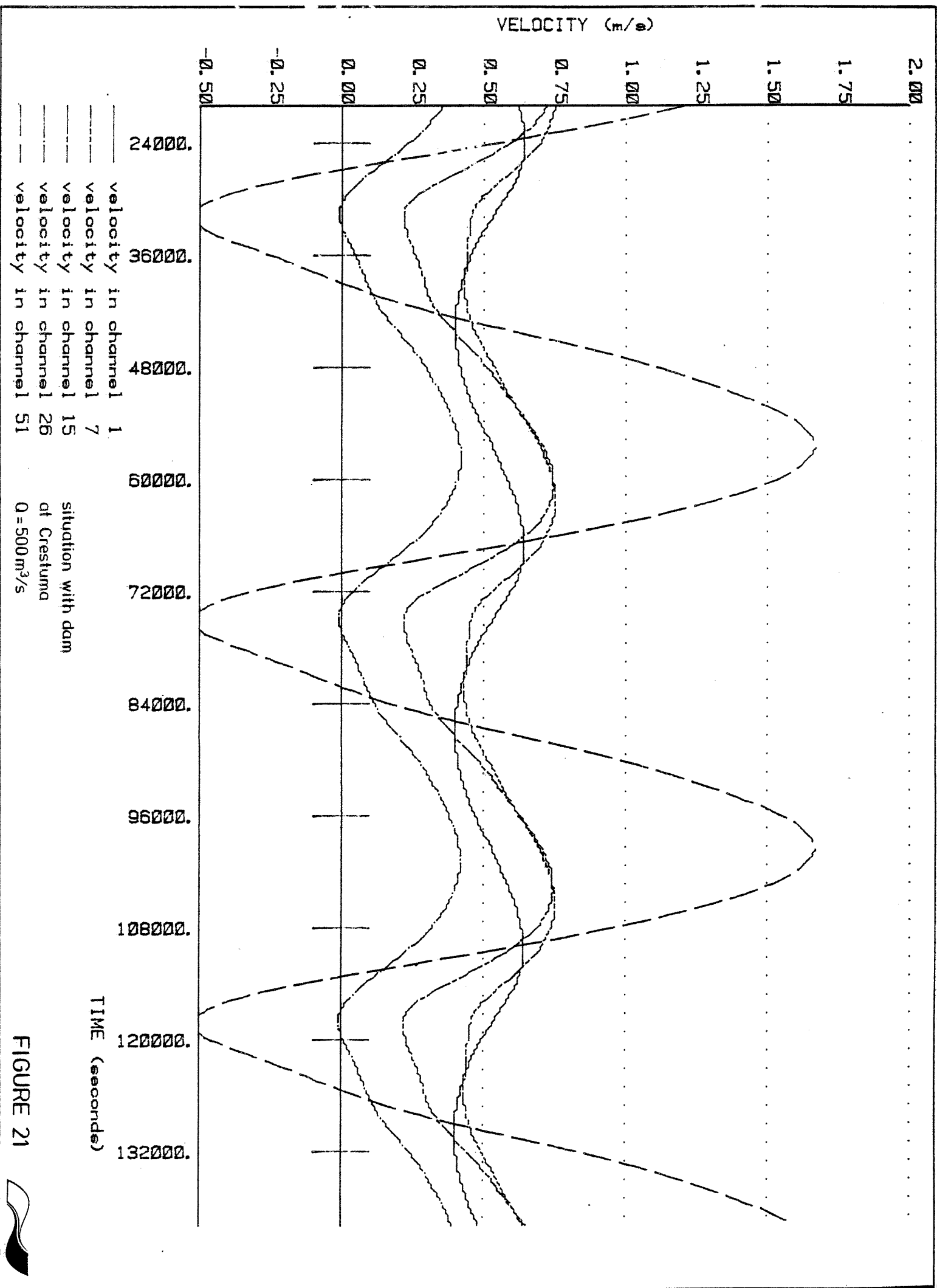


FIGURE 21



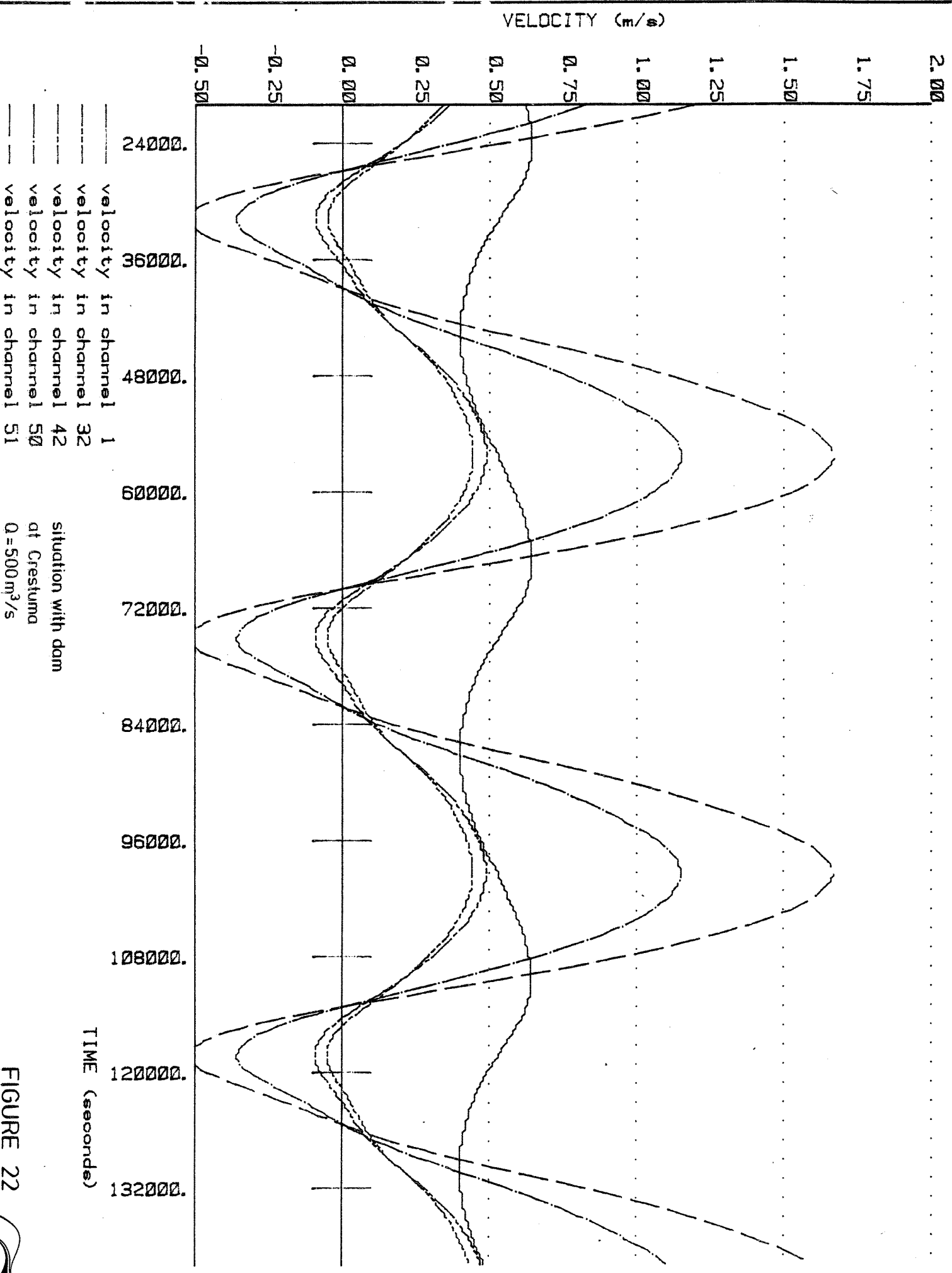


FIGURE 22



WATERLEVEL (m)

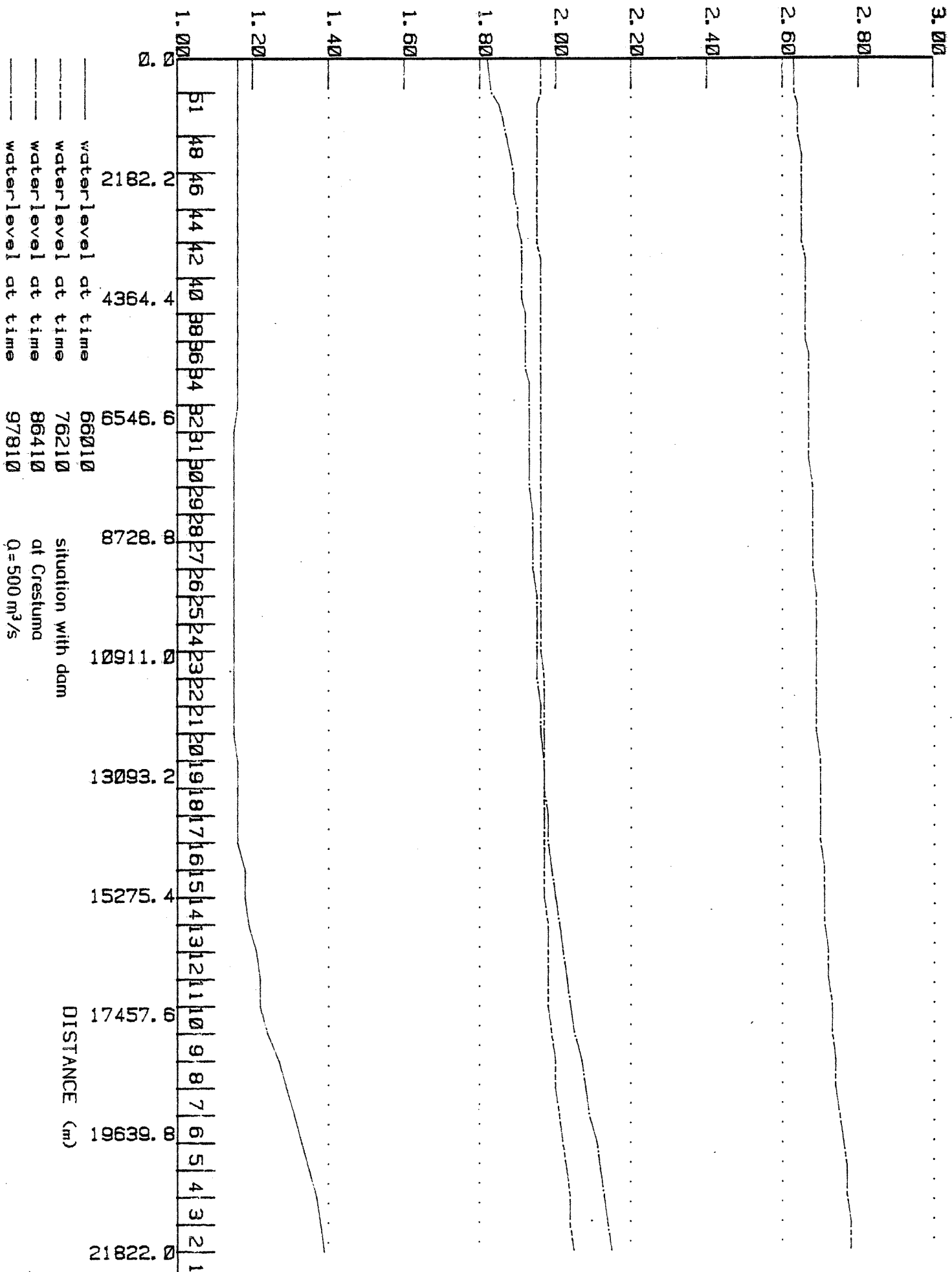
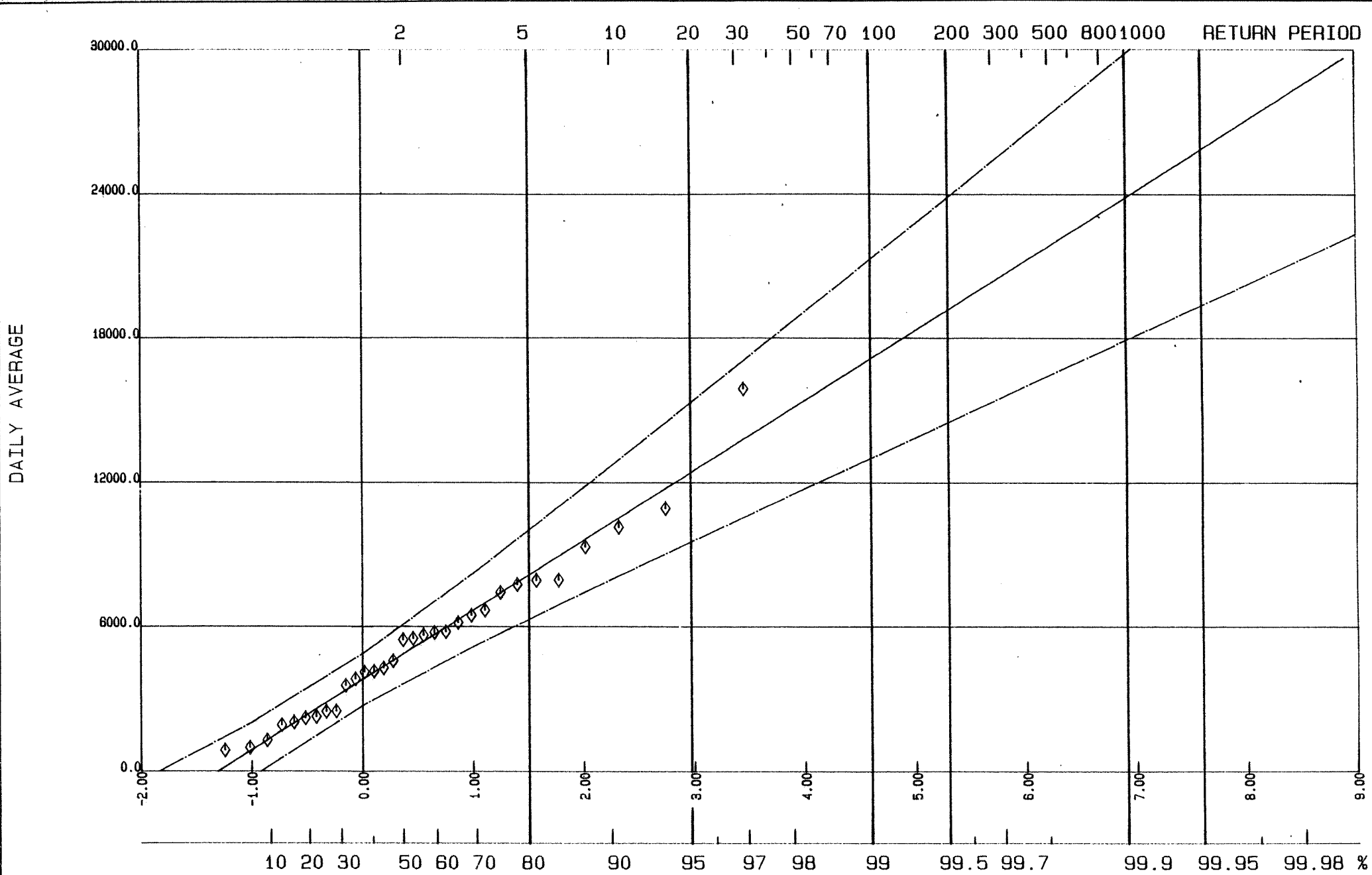


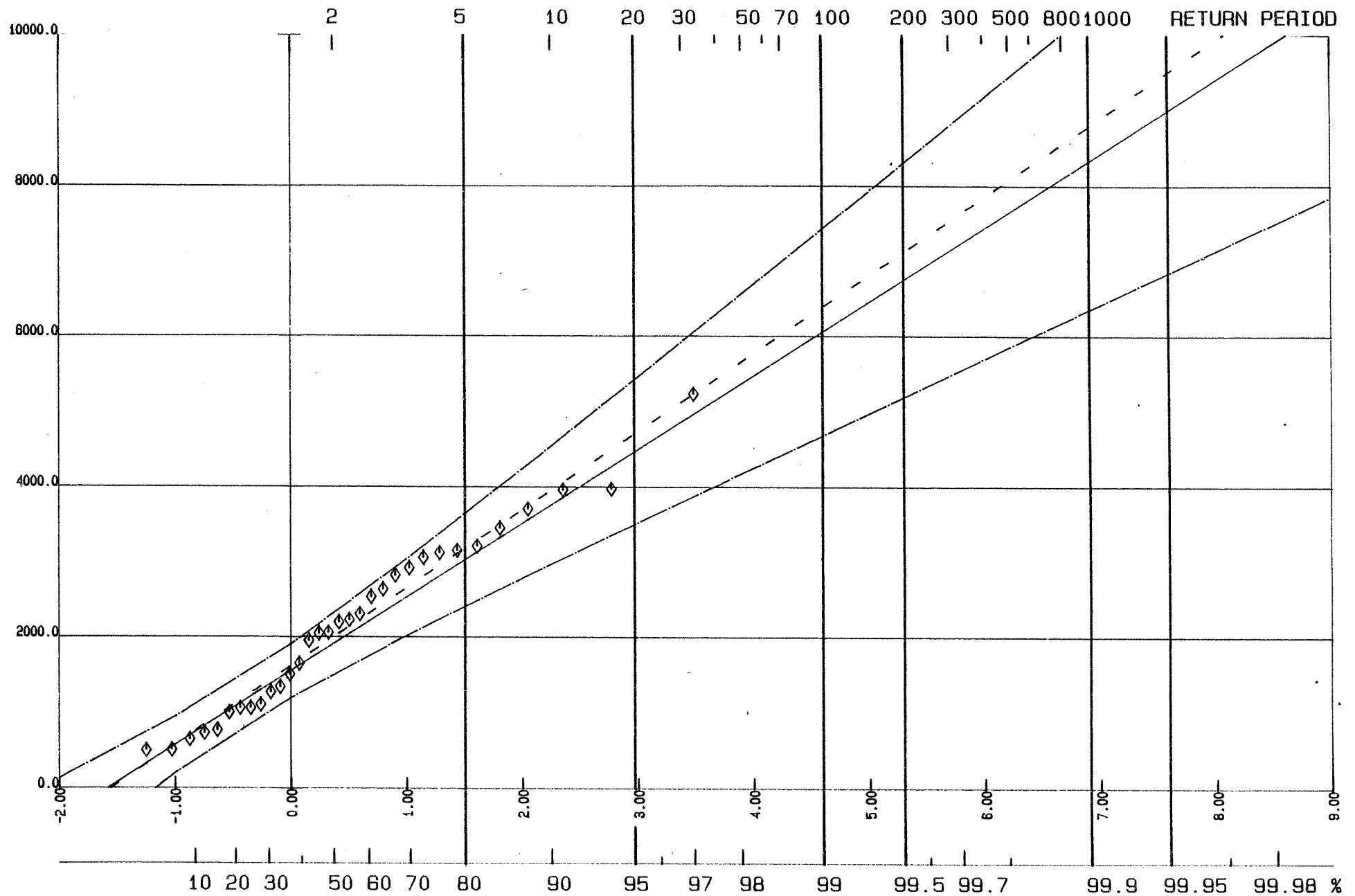
FIGURE 23





Gumbel distribution of the average discharge during the day with the highest discharge of the year

MONTHLY AVERAGE



Gumbel distribution of the average discharge during the month with the highest discharge of the year

FIGURE 25

