



Supplement of

Extending the late 1963 to 1964 Mt Agung rescued searchlight aerosol profiles dataset at 32° N, from early 1963 to 1975

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Supplement:

Table S1: Number of individual searchlight aerosol backscattering profiles (ABP) reported to have been measured (Elterman, 1966; 1976; Elterman et al., 1973). The subset of 105 aerosol extinction profiles (AEP) from December 1963 to December 1964 has already been rescued (Antuña-Marrero et al., 2024).

Period	No. AEP	Source
1963-Feb-Mar	3	Elterman et al., 1973; Table 1
1963-Dec 1964-Dec	105	Elterman, 1966b
1963-Apr-Jun	6	Elterman et al., 1973; Table 1
1965-Sep 1966-Jan	50	-----//-----
1970-Oct-Nov	41	-----//-----
1973-Sep	34	Elterman, 1976; Fig. 2
1973-Dec	25	-----//-----
1974-Feb	6	-----//-----
1974-Apr	18	-----//-----
1974-Jul	30	-----//-----
1974-Nov	12	-----//-----
1975-Jan	10	-----//-----
1975-May	19	-----//-----
Total	359	

Table S2: Aerosol turbidity profiles ATP that were not digitized, from L. Elterman, et al., 1973, Figure 2.

AEP Period	No. Profiles	Variable	Motive
1964-December-1965-April	19	Turbidity	Not plotted in figure 2, Elterman et al., 1973
1963-July-1964-March	40	Turbidity	No observations from Jul-Nov 1963, Elterman et al., 1973. ^(*)
1964-April-November	60	Turbidity	Already included in the rescued period Dec-1963 to Dec-1964.

(*) Then the period becomes Dec-1963-Mar-1964, already included in the rescued period Dec-1963 to Dec-1964

10

Table S3: Minimum and maximum altitudes of the AEPc. The profiles identified with an asterisk between parenthesis are the digitized AEP.

Daily Single	Hmin	Hmax
1963-03-28	6.31	25.65
1963-04-20	6.31	25.02
1974-11-11	3.28	35.28
1974-11-11 ^(*)	3.28	35.28

Monthly mean		
1974-Nov	10.22	24.40
1975-Jan	10.70	24.40
1975-May	10.70	24.40
Bi-Monthly mean		
1963-Feb-Mar	10.70	25.02
1970-Oct-Nov	10.70	26.94
1970-Oct-Nov (*)	3.28	26.29
Multi-Monthly mean		
1963-Apr-Jun	10.70	24.40
1965-Sep 1966-Jan	10.22	26.94
1973-Sep 1974-Jul	10.70	24.40

15

References:

- Elterman, L. An Atlas of Aerosol Attenuation and Extinction Profiles for the Troposphere and Stratosphere; Report AFCRL-66-828, AFCRL: Bedford, MA, USA, 128 p. Available online: <https://apps.dtic.mil/sti/pdfs/AD0649778.pdf> (accessed on 5 June 2024), 1966.
- 20 Elterman, L., Toolin, R. B., Essex, J. D., Stratospheric Aerosol Measurements with Implications for Global Climate, Appl. Opt. 12 (2), 1262-1263, <https://doi.org/10.1364/AO.12.000330>, 1973.
- Elterman, L., Aerosol measurements since 1973 for normal and volcanic stratospheres, Appl. Opt. 15 (5), 1113-1114, <https://doi.org/10.1364/AO.15.001113>, 1976.