BAROMETRIC COEFFICIENTS FOR DIFFERENT NEUTRON

MULTIPLICITIES ACCORDING TO ESO NM DATA (ISRAEL) AND DATA
OF UNIVERSITY "ROMA TRE" NM (ITALY)

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On the basis of hourly data obtained by NM of Emilio Segre' Observatory (hight 2025
m above s.l., cut-off rigidity for vertical direction 10.8 GV) and by NM of University
"Roma Tre" (about sea level, cut-off rigidity 6.7 GV) we determine barometric
coefficients both stations for total neutron intensity and for multiplicities $m?1$, $m?2$, $m?3$, $m?4$, $m?5$, $m?6$, $m?7$, and $m?8$, as well as for $m=1$, $m=2$, $m=3$, $m=4$, $m=5$, $m=6$,
and $m=7$. We determine also for each hour the effective multiplicity $<m>$ for $m?8$ and
estimate the barometric coefficient for $<m>$ for both NM. We used hourly data from June 1998 up to April 2001, and we excluded periods when above the NM of Emilio Segre' Observatory was snow. We compare obtained results with expected according to
the theory of meteorological effects for total neutron component and for neutron multiplicities.