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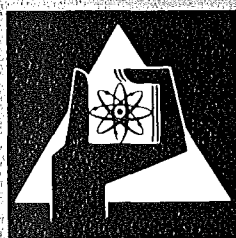
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**Tables of Pion-Nucleon Amplitudes  
I. No-Flip Forward Amplitudes**

G. Höhler, H. P. Jakob, F. Kaiser



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TABLES OF PION-NUCLEON AMPLITUDES

I. NO-FLIP FORWARD AMPLITUDES

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## TABELLEN VON PION-NUKLEON-STREUAMPLITUDEN

### I. NO-FLIP VORWÄRTSSTREUAMPLITUDEN

#### Abstrakt

Die Realteile der Pion-Nukleon-Vorwärtsamplituden werden aus Dispersionsrelationen berechnet, wobei eine Interpolation aller genauen Daten über totale Wirkungsquerschnitte benutzt wird. Die Ergebnisse werden dann mit experimentellen Daten aus Coulomb-Interferenz-Experimenten und Wirkungsquerschnitten für Ladungsaustauschstreueung in Vorwärtsrichtung verglichen. Da sie auch für andere Anwendungen benötigt werden, haben wir Tabellen und Argand-Diagramme der Vorwärtsamplituden beigelegt. Näherungsmethoden werden kritisch diskutiert.

## Abstract

Starting from a critical compilation of pion-nucleon total cross sections we have evaluated the dispersion relations for the forward scattering amplitude in order to determine the real parts. The results are compared with data from Coulomb interference experiments and with charge-exchange forward cross sections at high energies. Real and imaginary parts of the forward amplitudes and our interpolation of the total cross sections are listed in tables.

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## 1. Total Cross Sections

The values listed in the table are a smooth interpolation of the most accurate experimental data. In order to show our choice in cases where there are discrepancies between different data sets, we have plotted in Fig. 1 the ratios of recent data and our interpolation. This figure shows in addition the ratios of total cross sections as reconstructed from phase shift solutions and our interpolation.

In the threshold region  $\sigma_{\pm}$  is consistent with our result for the scattering lengths (Ref. <sup>14</sup>, p. 264). Around the first resonance we follow the interpolation of Carter et al. <sup>2</sup>, who measured and analyzed the most accurate data in this region. The determination of an improved interpolation which takes into account new data <sup>3</sup> and reconsiders the Coulomb effects is not yet completed.

In the large interval 2.5 - 50 GeV/c the decrease of  $\sigma^+$  can be approximated by an ansatz  $\sigma^+ = \text{const} + A/k$ , i.e. the secondary term has  $\alpha_{\text{eff}} = 0$ . The resonances are seen as tiny structures (Fig. 2).

Above 6 GeV/c our interpolation is given by a fit <sup>4</sup> to the data up to 240 GeV/c (Fig. 3) ( $k$  in GeV/c)

$$\sigma^+ = \sigma_0 + \sigma_1 \ln^2(k/k_1) + b k^{\alpha-1}, \quad (1)$$

$$\sigma_0 = 22.25 \text{ mb}, \quad \sigma_1 = 0.39 \text{ mb}, \quad k_1 = 34.8 \text{ GeV/c}, \quad b = 9.31 \text{ mb GeV}^{1-\alpha}, \quad \alpha = 0.50,$$

$$\sigma^- = c k^{\alpha_\rho-1}; \quad c = 2.785 \text{ mb GeV}^{1-\alpha_\rho}, \quad \alpha_\rho = 0.55. \quad (2)$$

Fig. 3 shows the uncertainty of our interpolation at 5-10 GeV/c. - A table of the isospin even and odd combinations of total cross section data at high energies is given at the end.

## 2. Evaluation of the Dispersion Relation

The real parts have been calculated from the dispersion relations

$$\text{Re } C^+(\omega) = C^+(0) + C_N^+(\omega) + \frac{2\omega^2}{\pi} \int_{\mu}^{\infty} \frac{\sigma^+(k')}{\omega'^2 - \omega^2} \frac{k' d\omega'}{\omega'} \quad (3)$$

$$\text{Re } C^-(\omega) = C_N^-(\omega) + \omega \frac{2}{\pi} \int_{\mu}^{\infty} \frac{\sigma^-(k')}{\omega'^2 - \omega^2} k' d\omega' \quad (4)$$

the nucleon pole terms being given by

$$C_N^+(\omega) = -\frac{g^2}{m} \frac{\omega^2}{\omega^2 - \omega_B^2}, \quad C_N^-(\omega) = -\frac{g^2}{m} \frac{\omega \omega_B}{\omega^2 - \omega_B^2}. \quad (5)$$

The notation is the same as in Ref.<sup>5</sup>:  $k$  and  $\omega = \sqrt{\mu^2 + k^2}$  denote the laboratory momentum and energy of the pion.  $\mu = 0.13957$  GeV and  $m = 0.93828$  GeV are the masses of  $\pi^\pm$  and of the proton, which have been used in all kinematical calculations,  $\omega_B = -\mu^2/2m$ ,  $f^2 = 0.079$ ,  $g^2/4\pi = (2m/\mu)^2 f^2 = 14.28$ .

The  $\pi^\pm p \rightarrow \pi^\pm p$  and  $\pi^- p \rightarrow \pi^0 n$  forward amplitudes are denoted by  $C_\pm$  and  $C_0$  respectively. The normalization of  $C \equiv A'$  is given by the expression for the optical theorem

$$\text{Im } C = k\sigma. \quad (6)$$

The forward cross sections follows from

$$\frac{d\sigma}{dt} = \frac{1}{16\pi k^2} |C|^2 = \frac{\pi}{q^2} \frac{d\sigma}{d\Omega}_{\text{c.m.}} \quad (7)$$

where  $q$  is the c.m. momentum. The validity of charge-independence has been assumed throughout. Isospin notation:

$$C^\pm = \frac{1}{2} (C_- \pm C_+), \quad C_0 = -\sqrt{2} C^-. \quad (8)$$

The evaluation of the dispersion relation has been performed by numerical integration up to 10 GeV/c. Contrary to some statements in the literature the evaluation of the principal value integrals is not a "formidable task" (Ref.<sup>6</sup>). Some details of our computer program are given in the appendix (page 8). The program has been tested by inserting a Breit-Wigner function, for which the integral can be calculated exactly. For a width of 50 MeV the errors of the real parts are of the order of 1% or less. The CPU-time for the evaluation of one dispersion integral amounts to 0.1 sec on our UNIVAC 1108. At larger momenta the real parts were calculated from the leading terms of the asymptotic expansions<sup>4</sup> ( $k$  in GeV/c)

$$\begin{aligned} \text{Re } C^+ &= \text{Re } C_{\text{par}}^+ + 8.0 - 1.0 \left(\frac{6}{k}\right)^2 + \dots \text{ GeV}^{-1}, \\ \text{Re } C_{\text{par}}^+ &= \pi k \sigma_1 \ln(k/k_1) - b \cot(\alpha\pi/2) k^\alpha \end{aligned} \quad (9)$$



$$\begin{aligned} \operatorname{Re} C^- &= \operatorname{Re} C_{\text{par}}^- + 4.0/k \text{ GeV}^{-1} \\ \operatorname{Re} C_{\text{par}}^- &= c \tan(\pi\alpha_\rho/2) k^{\alpha_\rho} = 8.374 k^{0.55} \text{ GeV}^{-1} \end{aligned} \tag{10}$$

### 3. Uncertainties of the Real Parts

One has to distinguish 4 kinds of errors:

- a) errors following from systematic errors of the total cross section data,
- b) errors following from statistical errors of total cross section data,
- c) errors following from the high energy assumption,
- d) charge-dependent effects.

There is a systematic discrepancy at 0.4 - 0.9 GeV/c between two accurate total cross section experiments.<sup>7,8</sup> The resulting uncertainty for the real part can be seen by comparing tables HJK 77/1 and 77/3.

A more general estimate of the errors of the real parts from the causes a) and b) follows from an evaluation of the dispersion relation in which below 10 GeV/c experimental total cross section data and their errors were used directly without smoothing. Our parametrization was used at higher momenta. The principal value integral was calculated from a fit of the data points to a second order polynomial only in the vicinity of the singular point. These polynomials were constrained by the condition that the slopes join smoothly at the end points of the intervals.

In the range 0.4 ... 0.8 GeV/c this calculations gives fairly large errors:  $\Delta \operatorname{Re} C_{\pm} = 2 \dots 5 \text{ GeV}^{-1}$ , mainly because of discrepancies between different sets of experimental data. At 0.8 ... 1.5 GeV/c the errors are smaller:  $\Delta \operatorname{Re} C_{\pm} = 1 \dots 2 \text{ GeV}^{-1}$ . Above 1.5 GeV/c it is better to give the relative errors  $\Delta \operatorname{Re} C_{\pm} / \operatorname{Re} C_{\pm}$  which lie in the range 5 ... 8%. The error estimates are compatible with those in Ferrari's table,<sup>9</sup> but the input for this calculation is partially outdated.

In order to show the error from the high energy assumption, we present two additional tables:

- i) The high energy assumption in Table HJK 77/2 is adjusted to fit the NAL charge-exchange forward cross sections<sup>10</sup> instead of the NAL total cross sections<sup>11</sup>, on which table HJK 77/1 is based. The prediction from Table HJK 77/1 disagrees strongly with

the NAL charge-exchange data<sup>10</sup> whereas the total cross sections of Table HJK 77/2 violate the NAL-data only slightly (Fig. 3b). Therefore Table HJK 77/2 gives at present our best prediction for the real parts at high energies.

ii) As discussed in detail in Ref.<sup>4</sup> different parametrizations for  $\sigma^+$  fit the NAL total cross sections equally well. The  $\pi^\pm p$  real part data are not yet accurate enough to favour one of the fits. In order to show the differences in the real parts, we give in Table HJK 77/4 the prediction for another high energy parametrization of  $\sigma^+$ . See Fig. 2 of Ref.<sup>4</sup> for further results.

The present report does not contain an estimate of the charge-dependent corrections. The calculation is based on  $\pi^\pm p$  data and ignores the  $\pi^\pm - \pi^0$  and  $np$  mass differences. At low energies the predictions for the charge-exchange amplitude should not be used without studying the corrections which have been discussed in the literature. (See Refs.<sup>12,13</sup> and the references given there).

#### 4. Comparison with Real Part Data and Forward Cross Sections

Fig. 4 shows an Argand plot of the charge-exchange forward amplitude. The solid and dashed lines are the predictions from Tables HJK 77/1 and 77/2 respectively. Combining the NAL forward cross sections<sup>10</sup> with imaginary parts from these two tables, we obtain the black circles from HJK 77/1 and the open circles from HJK 77/2. The latter table has been made in such a way that the agreement is very good. The corresponding behaviour of  $\sigma^-$  differs systematically but not much from the NAL data<sup>11</sup> (dashed line in Fig. 3b).

The discrepancy is large (black circles and solid line) if the interpolation of the NAL total cross sections<sup>11</sup> is used (HJK 77/1).

The comparison with other charge-exchange data will be discussed elsewhere, because we have not yet studied in detail some new data.

The comparison between our prediction for the real parts of the elastic  $\pi^\pm p$  amplitudes and results from Coulomb interference data is shown in Fig. 5. A systematic deviation in  $\rho_-$  around 30 GeV/c is seen in data of two laboratories. In our opinion it should not be taken seriously, because the uncertainties of the analysis of Coulomb interference data are larger than the errors given by the authors.

### 5. Extrapolation into the Unphysical Region

The evaluation of the dispersion integrals gives not only the real parts in the physical region but also the (real) amplitudes between the s- and u-channel thresholds. Since the nucleon pole terms are rapidly varying in this range, we prefer to consider

$$\tilde{C}^{\pm} \equiv C^{\pm} - C_N^{\pm}, \quad (11)$$

where  $C_N$  is given in eq. (5). Table HJK 77/5 lists  $\tilde{C}^-/\omega$  and  $\tilde{C}^+ - g^2/m$  in the unphysical region in units of  $\mu^{-2}$  and  $\mu^{-1}$  respectively. This table follows from the dispersion relations, using the same input as in table HJK 77/1. At present it is not possible to give reliable estimates of the errors, since the result depends to some extent on total cross sections at low energies, where accurate data do not exist. Moreover, there are still problems with the charge-dependent corrections.<sup>12,13</sup>

The relation between tables HJK 77/1 and HJK 77/5 at threshold is explained by the following equations:

$$\begin{aligned} \text{Re } C^+(\mu) &= - \frac{4\pi f^2}{m(1-\mu^2/4m^2)} + \{ \tilde{C}^+(\mu) - g^2/m \} \\ &= (-0.1485 + 0.010) \mu^{-1} = -0.991 \text{ GeV}^{-1}. \end{aligned} \quad (12)$$

$$\begin{aligned} \text{Re } C^-(\mu) &= \frac{8\pi f^2/\mu}{1-\mu^2/4m^2} + \tilde{C}^-(\mu) \\ &= (1.996 - 0.666)\mu^{-1} = 9.53 \text{ GeV}^{-1}. \end{aligned} \quad (13)$$

The s-wave scattering lengths following from these amplitudes are

$$3a^+ = -0.0288 \mu^{-1}, \quad 3a^- = a_1 - a_3 = 0.276\mu^{-1}. \quad (14)$$

For some applications (Ref.<sup>16</sup>, 2nd paper) it is of interest to know the value of

$$J = \frac{1}{4\pi\mu} \tilde{C}^-(\mu) = \frac{1}{2\pi^2} \int_0^{\infty} \frac{\sigma^-(k)}{\omega} dk = -0.0530\mu^{-2} = -1.06 \text{ mb}. \quad (15)$$

The amplitudes of Table HJK 77/5 are useful for a comparison of  $\pi N$  amplitudes with predictions from current algebra<sup>14</sup>. A detailed discussion of the present status of the  $\pi N$  low energy parameters will be given elsewhere<sup>15</sup>.

## 6. Other Recent Evaluations of Dispersion Relations and Equivalent Methods

a) The table of Carter et al.<sup>2</sup> is based on a subtracted dispersion relation for  $C^-$ . The choice of the subtraction constant leads to a systematic discrepancy with the charge-exchange data which is increasing with energy above 2 GeV/c. (See the discussion in Ref.<sup>16</sup>). Furthermore an internal difficulty of this calculation has not yet been explained.<sup>x)</sup>

b) The evaluation of Hendrick et al.<sup>17</sup> has been criticised in Ref.<sup>4</sup>. In our opinion it is preferable to use a smoothed input in the dispersion integral and to discuss the errors separately. Some structures in the results of Hendrick et al. should not be taken seriously, because they result from poor connections between different sets of total cross section data.

Since one has to use a parametrization of the total cross sections at high energies in any case, it is useful to calculate the corresponding contribution to the real part analytically and to use numerical integration only for the rest as proposed in Ref.<sup>4</sup>. (See also page 8).

One can avoid the evaluation of the dispersion integral and the smoothing of the input, if one uses an expansion method.

c) Pietarinen's expansion method<sup>18</sup> has been checked by comparing the result for the real part with our table. The agreement is satisfactory and does not depend on the number of terms in the expansion, if it is large enough.

d) Other expansion methods use only a few terms ("analytic parametrizations") and fit only the total cross section data at high energies. Then the result for the real part can differ considerably from our table (see the discussion in Ref.<sup>16,4</sup>).

e) Several authors claimed that the analyticity properties which are embodied in dispersion relations can be equally well implemented by writing derivative analyticity relations (Refs.<sup>19,20</sup>). However it has been shown by Eichmann et al.<sup>21</sup> that derivative analyticity relations are equivalent to dispersion relations only for a restricted class of amplitudes which have no resonance poles (and no inelastic thresholds). If the operator

$$\tan \left\{ \frac{\pi}{2} \frac{d}{d(\ln s)} \right\}$$

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<sup>x)</sup> We are grateful to Prof. Bugg for a correspondence.

is defined by the usual expansion and applied to an amplitude with resonance poles the result diverges (see also the 2nd paper, Ref.<sup>16</sup>).

In the most recent paper Sukhatme et al.<sup>20</sup> treated resonant contributions separately, using analytic Breit-Wigner parametrizations fixed by inspection. If one wants accurate and reliable results, the method becomes complicated and it is simpler to use a straight forward evaluation of the dispersion integral or Pietarinen's expansion.<sup>\*)</sup>

At energies above the resonance region the simplest version of the "derivative analyticity method" and "analytic parametrization method" are closely related to the method of Ref.<sup>4</sup> which, however, gives in addition a correction term. This term represents effects "non-local" in energy. It is not necessarily small and, in practice, it can be calculated only if data in the low energy region are available (see also Ref.<sup>16</sup>).

As an example we show in Fig.6 an Argand diagram of  $C^+/k$  according to table HJK 77/1. The dashed and dotted lines belong to the leading terms ( $\text{Re } C_{\text{par}}^+$ ) of two different high energy parametrizations which fit the  $\sigma^+$ -data equally well. It is seen that, for instance at 10 GeV/c, the error can be small or large. The predictive power of derivative analyticity methods is poor. One needs a "non-local" information in order to calculate the correction term.

Another attempt to avoid the evaluation of the dispersion relation was recently made by Gerdt et al.<sup>24,6</sup> who started from a uniformization of the forward scattering amplitude. For practical applications this method has similar shortcomings as the derivative analyticity method to which it is related.

We conclude that derivative analyticity and analytic parametrization methods have no useful application in cases where straightforward evaluation of dispersion relations exist and are presented in such a way that the high energy assumption can easily be changed<sup>4</sup>. A similar criticism was recently published by A. Bujak and O. Dumbrais<sup>25</sup>.

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\*) In  $\pi N$  scattering at  $t \neq 0$  the application of dispersion relations is too complicated. But Pietarinen has shown<sup>23</sup> that his expansion method can be used for a determination of all invariant amplitudes. It will be interesting to see whether this problem can be treated by the derivative analyticity method with a comparable accuracy.

Appendix

Method for Evaluation of Dispersion Integrals

In the evaluation of the dispersion relation it is necessary to calculate integrals of the type

$$\int_0^{\infty} \frac{f(k')}{k'^2 - k^2} dk' \quad (A1)$$

where  $f(k') = \sigma^+(k')$  or  $f(k') = \sigma^-(k') \frac{k'^2}{\omega^2}$ .

First of all, because the computer cannot handle infinite numbers, the integral has to be broken up into two parts

$$\int_0^{k_0} \frac{f(k')}{k'^2 - k^2} dk' + \int_{k_0}^{\infty} \frac{f(k')}{k'^2 - k^2} dk' \quad (A2)$$

In the second integral one uses a parametrization  $f(k') = f_{\text{par}}(k')$ .

The integral from  $k_0$  to infinity

For  $k < k_0$  the integral can be transformed into a sum

$$\int_{k_0}^{\infty} \frac{f(k')}{k'^2 - k^2} dk' = \frac{1}{k^2} \sum_{n=1}^{\infty} a_n \left[ \frac{k}{k_0} \right]^{2n}, \quad (k < k_0) \quad (A3)$$

with 
$$a_n = \int_{k_0}^{\infty} f_{\text{par}}(k') \left[ \frac{k_0}{k'} \right]^{2n} dk'. \quad (A4)$$

There exists an analytic expression for each  $a_n$  and the sum converges rapidly if  $k$  is not very close to  $k_0$ . If  $k > k_0$  a similar transformation is possible but now we have to introduce the function

$$g_{\text{par}}(k) = \int_0^{\infty} \frac{f_{\text{par}}(k')}{k'^2 - k^2} dk' \quad (A5)$$

which can be found in a table of integrals. The integral is then given by

$$\int_{k_0}^{\infty} \frac{f(k')}{k'^2 - k^2} dk' = g_{\text{par}}(k) + \frac{1}{k^2} \sum_{n=0}^{\infty} b_n \left[ \frac{k_0}{k} \right]^{2n} \quad (A6)$$

with 
$$b_n = \int_0^{k_0} f_{\text{par}}(k') \left[ \frac{k'}{k_0} \right]^{2n} dk'.$$

The integral from 0 to  $k_0$

We represent the function  $f(k')$  by a cubic spline function, e.g. the function  $f(k')$  is approximated by cubic parabolas in intervals  $[k_i, k_{i+1}]$  ( $i=1, \dots, N$ ). The parabolas join continuously and with continuous first and second derivatives at the points  $k_i$  ( $i = 2, \dots, N$ ):

$$f(k') = a_i + b_i(k' - k_i) + c_i(k' - k_i)^2 + d_i(k' - k_i)^3; \quad k' \in [k_i, k_{i+1}] \quad (A7)$$

Each integral

$$I_i = \int_{k_i}^{k_{i+1}} \frac{f(k')}{k'^2 - k^2} dk' \quad (A8)$$

can now be calculated analytically from the parameters  $a_i, b_i, c_i, d_i$ . The result diverges logarithmically at  $k = k_i$  and  $k = k_{i+1}$ . If one uses the above mentioned continuity condition and  $f(0) = 0$ , it is possible to show that all divergent terms in the sum

$$\sum_{i=1}^N N_i = \int_0^{k_0} \frac{f(k')}{k'^2 - k^2} dk' \quad (A9)$$

cancel except that at  $k = k_{N+1} = k_0$ . There remain terms  $(k - k_i)^3$  in  $k - k_i$  which can be handled easily.

If  $k > k_0$  it is numerically safer to represent the integral in (A9) by a series

$$\int_0^{k_0} \frac{f(k')}{k'^2 - k^2} dk' = -\frac{1}{k^2} \sum_{n=0}^{\infty} c_n \left[ \frac{k_0}{k} \right]^{2n} \quad (A10)$$

with

$$c_n = \int_0^{k_0} f(k') \left[ \frac{k'}{k_0} \right]^{2n} dk' \quad \text{and} \quad (A11)$$

$$c_n = \sum_{i=1}^N J_i^{(n)}; \quad J_i^{(n)} = \int_{k_i}^{k_{i+1}} f(k') \left[ \frac{k'}{k_0} \right]^{2n} dk'.$$

To avoid difficulties with  $k$ -values around  $k_0$  we take  $k_0 = 10$  GeV/c and calculate the integrals for  $k$ -values up to 8 GeV/c. Then we set  $k_0 = 6$  GeV/c and calculate the remaining part for  $k \gg 8$  GeV/c.

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References

1. J.R. Carter et al., Nucl.Phys. B58 (1973) 378
2. A.A. Carter et al., Rutherford report RL-73-024 (May 1973)
3. E. Pedroni, thesis (ETH Zürich, 1977) and Nucl.Phys. B, to be published
4. G. Höhler, H.P. Jakob and F. Kaiser, Phys.Lett. 58B (1975) 348
5. G. Höhler et al., Collection of Pion-Nucleon Scattering Formulas.  
Handbook of Pion-Nucleon Scattering, Part C, University of Karlsruhe
6. V.A. Matveev, Proceedings of the XVIII International Conference on High  
Energy Physics, p. A5-35
7. D. Davidson et al., Phys.Rev. D6 (1972) 1199
8. A.A. Carter et al., Phys.Rev. 168 (1968) 1457
9. E. Ferrari, Nota Interna No. 382, Univ. of Rome (June 1972)
10. A.V. Barnes et al., Phys.Rev.Lett. 37 (1976) 76, R.A. Johnson, thesis, Berkeley 1975
11. A.S. Carroll et al., Phys.Lett. 61B (1976) 303
12. J. Hamilton, Fortschritte der Physik 23 (1975) 211  
B. Tromborg, S. Waldenström and I. Øverbø, Copenhagen preprint NBI-HE-77-1 (1977)
13. G. Rasche and W.S. Woolcock, Helv.Phys.Acta 49 (1976) 455
14. G. Höhler, H.P. Jakob and R. Strauss, Nucl.Phys. B39 (1972) 237  
G. Höhler and P. Stichel, Zeitschrift f. Physik 245 (1971) 387
15. G. Höhler, R. Koch and E. Pietarinen, to be published
16. G. Höhler, Czechoslovak Journ.of Physics B26 (1976) 55  
G. Höhler in: Hadron Interactions at Low Energies, Ed. D. Krupa and  
J. Pišut, Bratislava 1975, p. 11
17. R.E. Hendrick et al., Phys.Rev. D11 (1975) 529
18. E. Pietarinen, Nuovo Cim. 12A (1972) 522
19. J.B. Bronzan et al., Phys.Lett.49B (1974) 272,  
D.P. Sidhu et al., Phys.Rev. D11 (1975) 1351
20. U. Sukhatme et al., Phys.Rev. D12(1975) 3431
21. G. Eichmann and J. Dronkers, Phys.Lett. 52B (1974) 428
22. J. Heidrich and E. Kazes, Nuovo Cim.Lett. 12 (1975) 365
23. E. Pietarinen, Nucl.Phys. B49 (1972) 315 and B107 (1976)21. Proceedings of the  
Topical Conference on Baryon Resonances, Oxford (1976), page 20



24. V.P. Gerdt, V.I. Inozemtsev and V.A. Meshcheryakov. Dubna preprint and paper submitted to the Tbilisi Conference 1976.
25. A. Bujak and O. Dumbrais, J. Phys. G.: Nucl.Phys. 2 No. 9 (1976)
26. A.A. Carter et al., Nucl.Phys. B26 (1971) 445
27. S. Almeded and C. Lovelace, Nucl.Phys. B40 (1972) 157
28. Private communication (1974). Ayed, thesis (1976). Saclay Report CEA-N-1921
29. A. Citron et al., Phys.Rev. 144 (1966) 1101
30. G. Giacomelli, Progr. Nucl.Phys. 12 (1970) Part 2
31. K.J. Foley et al., Phys.Rev.Lett. 19 (1967) 330
32. S.P. Denisov et al., Nucl.Phys. B65 (1972) 1 and Yu P. Gorin et al., Soviet Journal of Nuclear Physics 14 (1972) 560
33. S. Nurushev, Proceedings of the XVII International Conference on High Energy Physics, London p. I-25, V.D. Apokin et al., Nucl.Phys. B106 (1976) 413, V.D. Apokin et al., mentioned in Kaidalov's report at the Tbilisi Conf. (1976).
34. V.N. Bolotov et al., Nucl.Phys. B73 (1974) 365

### Figure Captions

Fig. 1 Ratio of total cross section data and our interpolation HJK 77/1. Points derived from phase shifts and from HJK 77/3 have been connected by lines. Solid line: CERN 72 (Ref.<sup>25</sup>), dashed line: SACLAY 74 (Ref.<sup>26</sup>), dot-dashed-line: HJK 76/3

Fig. 2  $\sigma^+$  vs  $1/k$ .

Fig. 3 Data for  $\sigma^+$  at high energies and our fits. The data are listed in Tables D1 and 2. Figs. 3c,d show the transition to the asymptotic behaviour: plots of  $\sigma_{\text{data}} - \sigma_{\text{par}}$ , using the parametrizations (1), (2).

Fig. 4 Argand diagram of the charge-exchange forward amplitude. Data points from NAL charge-exchange forward cross sections  $\sigma^0$  and  $\sigma^-$  from table HJK 77/1:  $\bullet$  HJK 77/2:  $\circ$  Data points from Serpuchov charge-exchange forward cross sections  $\sigma^0$  and  $\sigma^-$  from table HJK 77/1:  $\square$  Solid line: prediction from HJK 77/1, Dashed line: prediction from HJK 77/2.

Fig. 5 Coulomb interference data for  $\rho_{\pm} = \text{Re } C_{\pm} / \text{Im } C_{\pm}$  and predictions. The data and their references are given in the data table D3 at the end.

Fig. 6 Plots of forward amplitudes (HJK 77/1). The numbers give pion lab.momenta in GeV/c.

\* Carter 71 (Ref<sup>26</sup>)      From phase shifts:  
△ Carter 68 (Ref<sup>8</sup>)      Carter<sup>1</sup> ▽  
◇ Davidson 72 (Ref<sup>7</sup>)      CERN 72 (Ref<sup>27</sup>) ———  
○ Pedroni 77 (Ref<sup>3</sup>)      Saclay 74 (Ref<sup>28</sup>) - - - -  
Interpolation HJK 77/3 - . - . - .

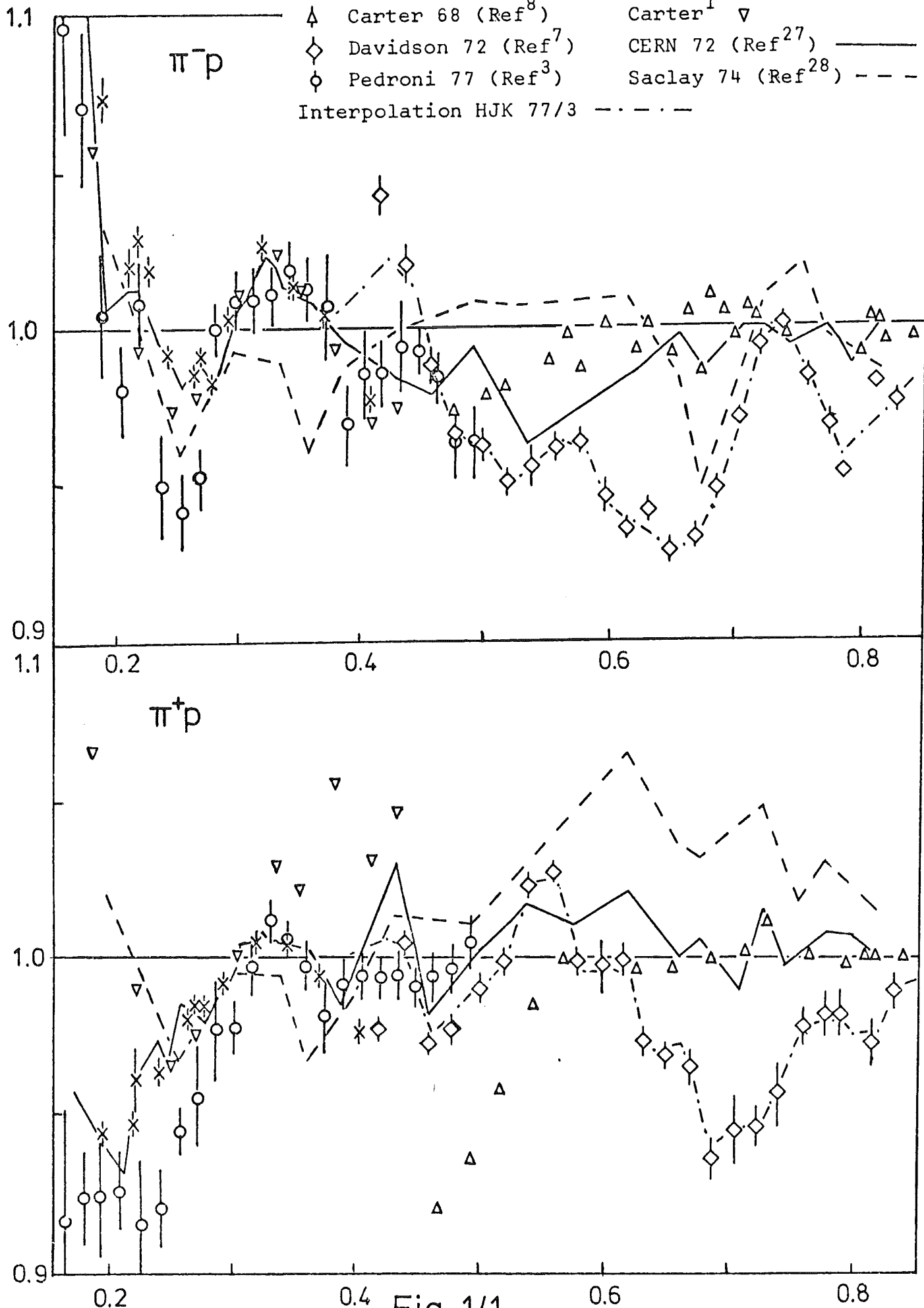


Fig. 1/1

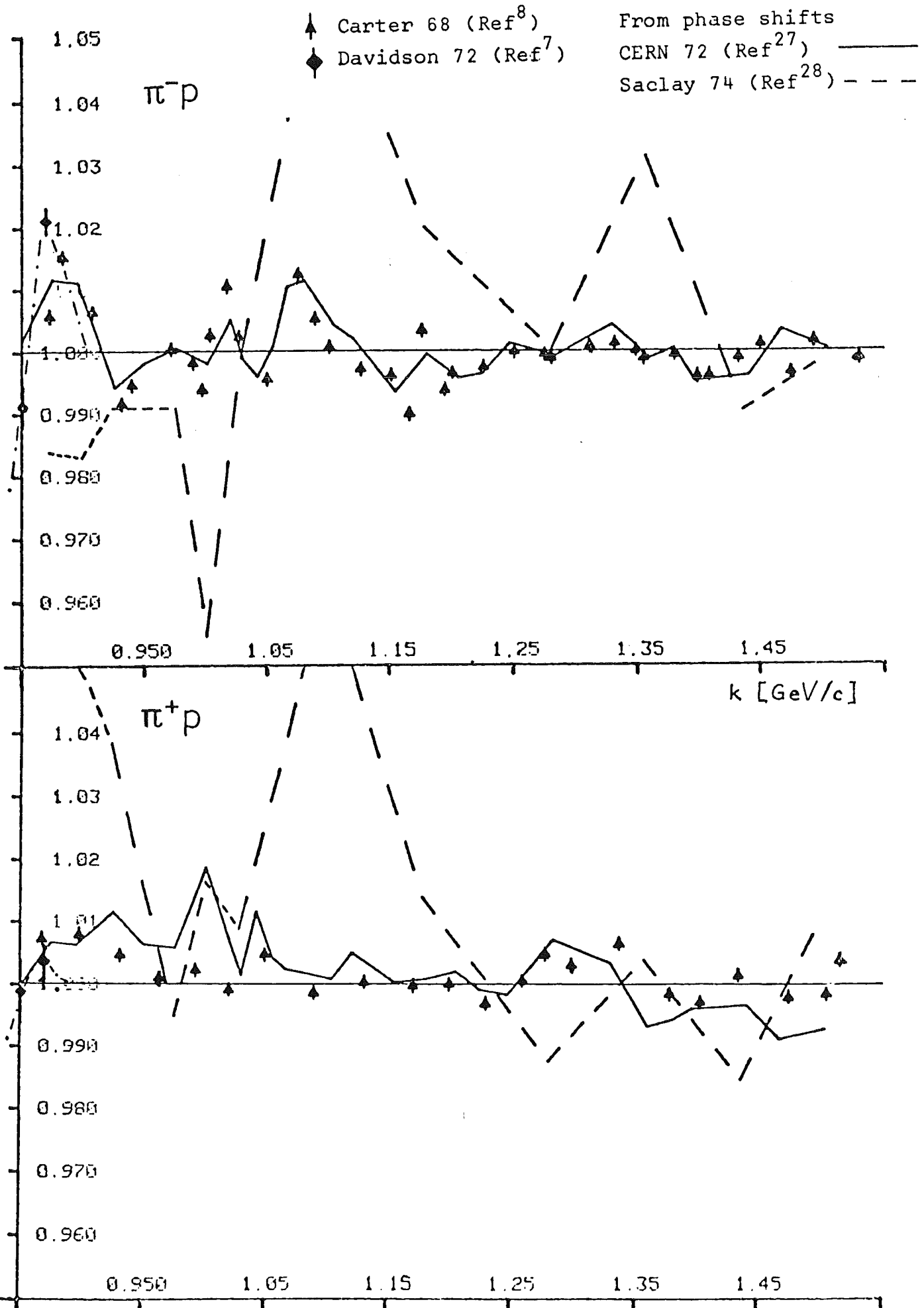


Fig. 1/2

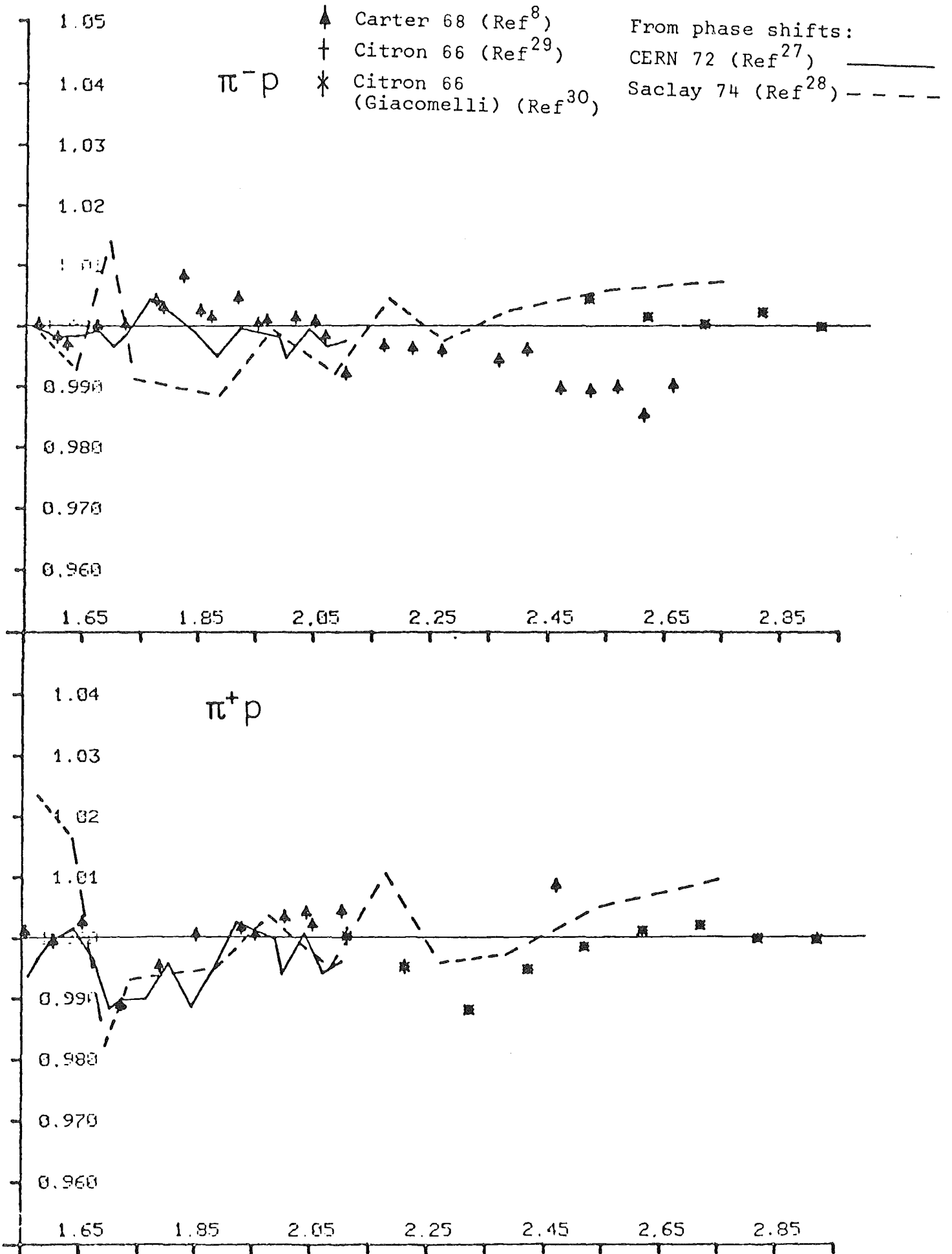


Fig. 1/3

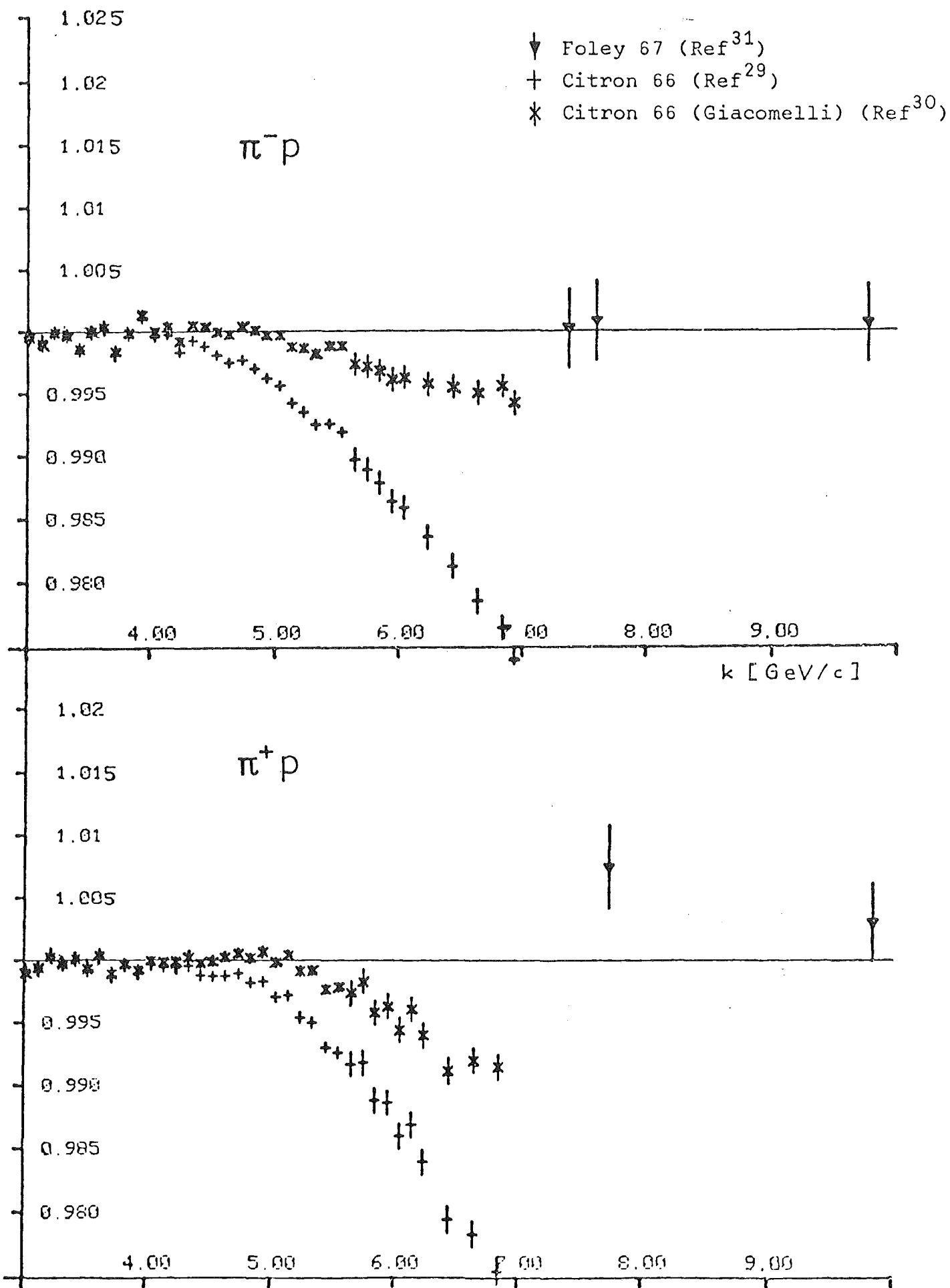


Fig. 1/4

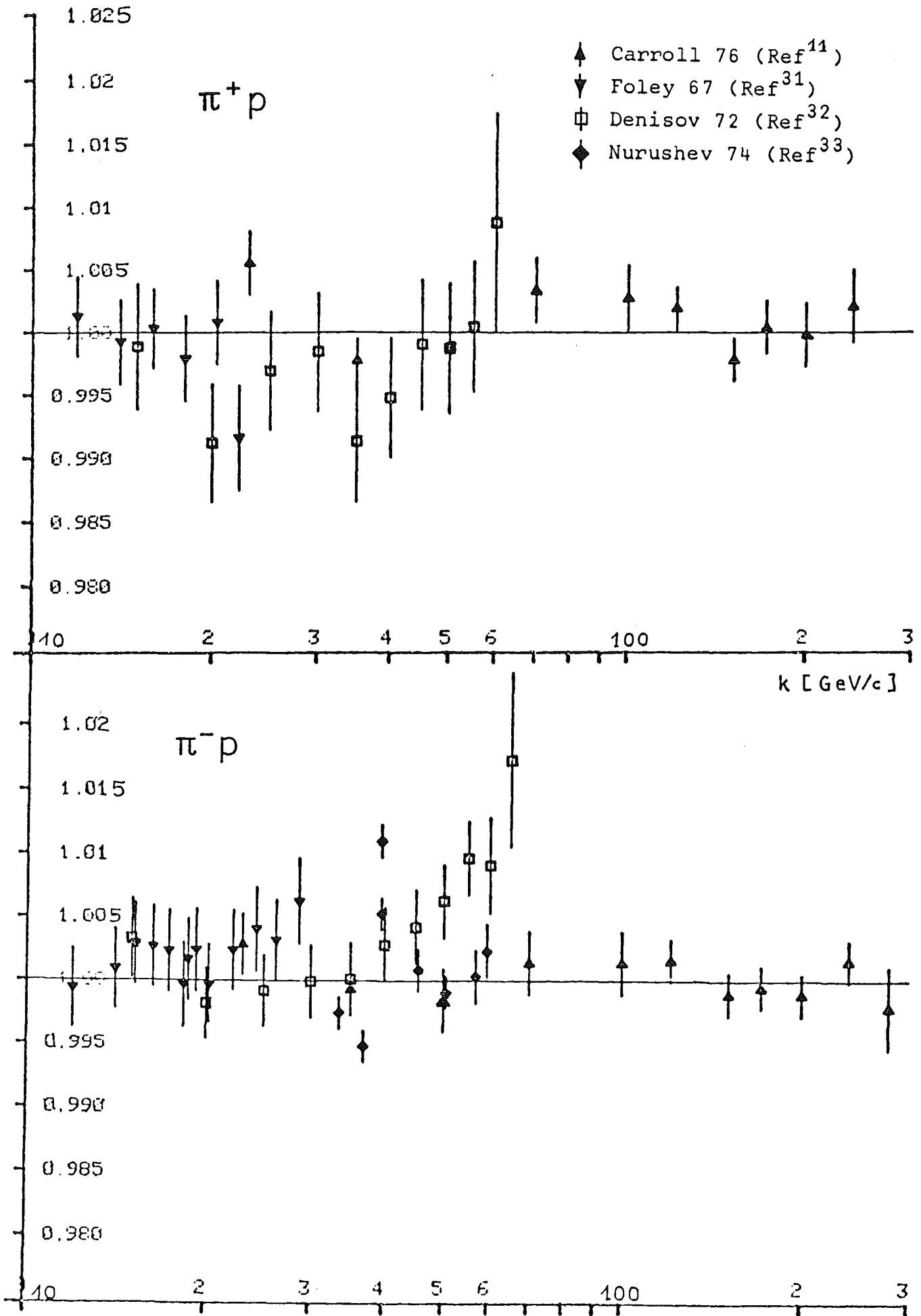


Fig. 1/5

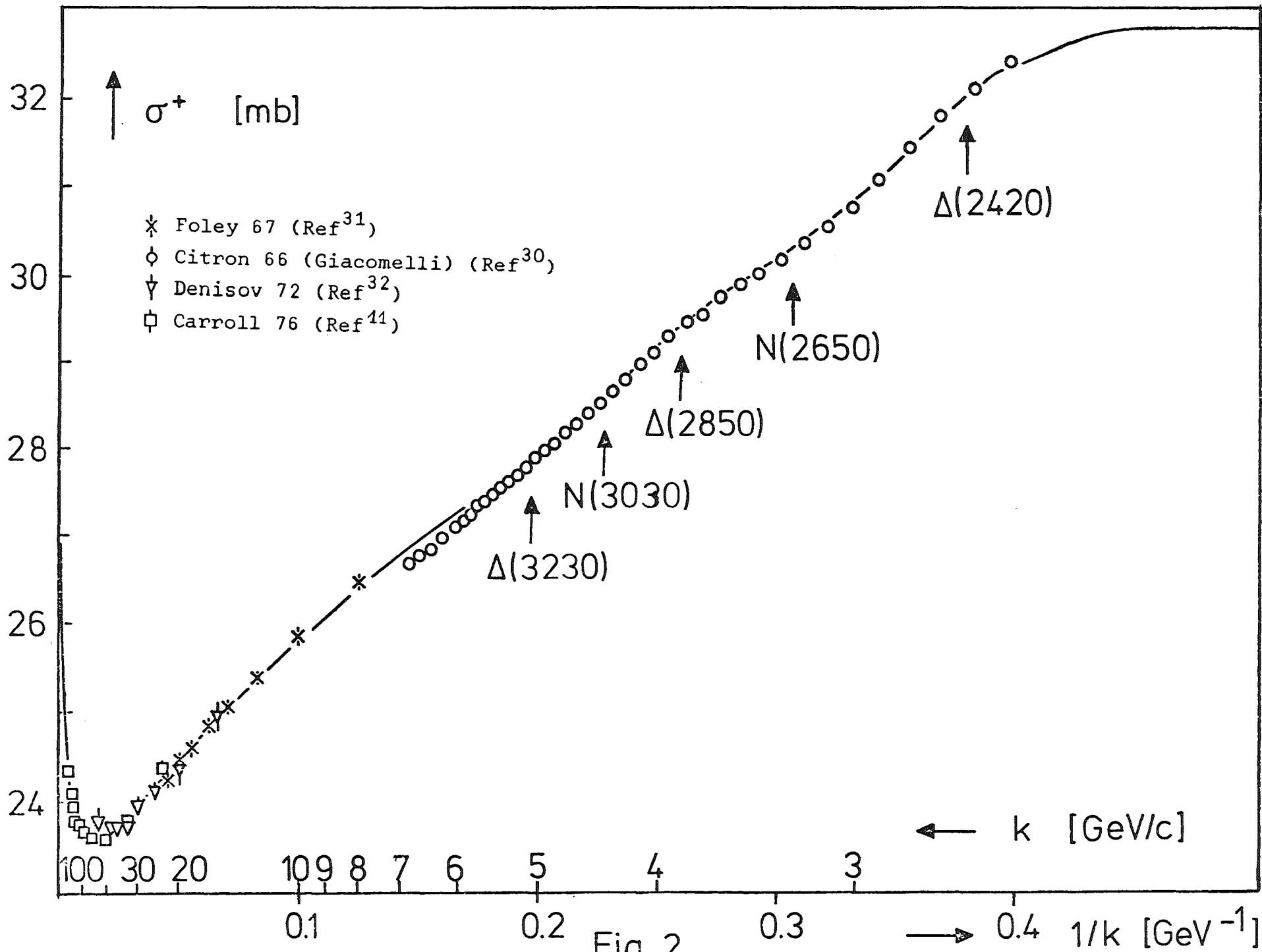


Fig. 2

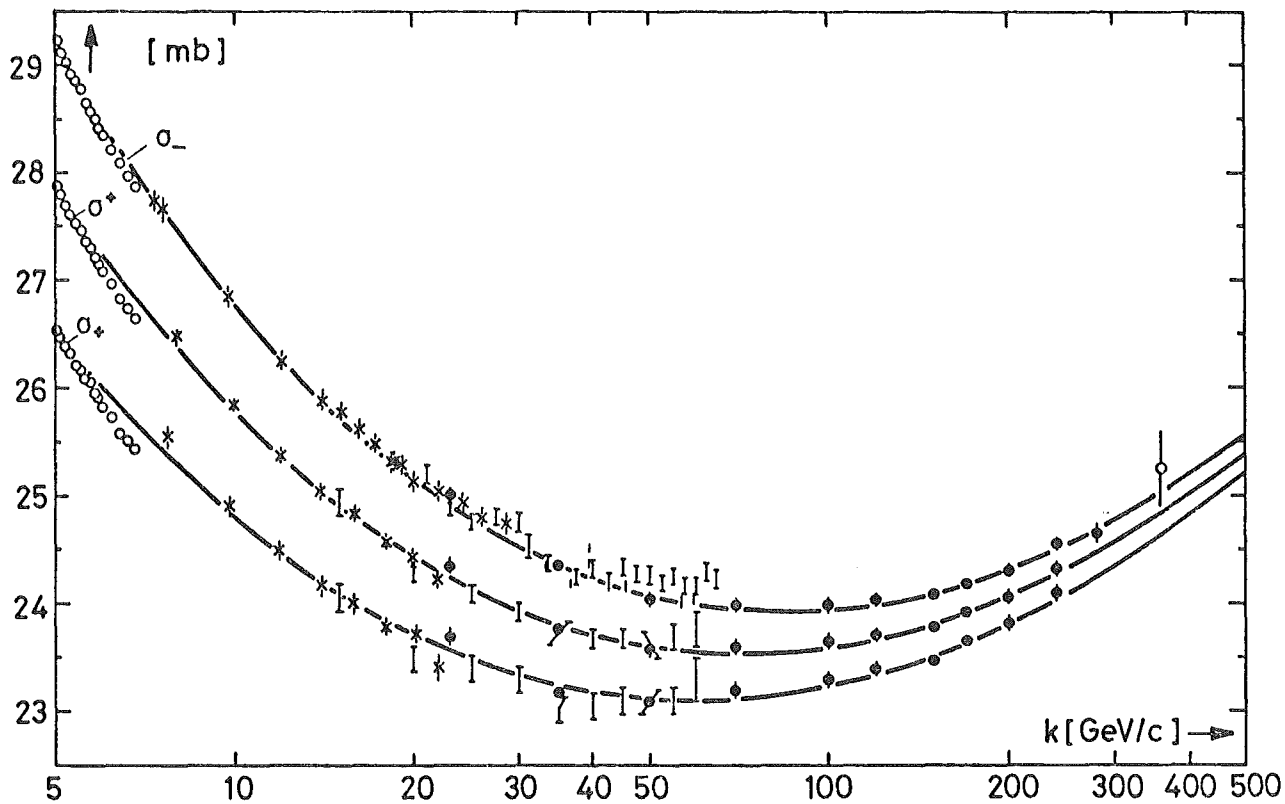


Fig. 3a

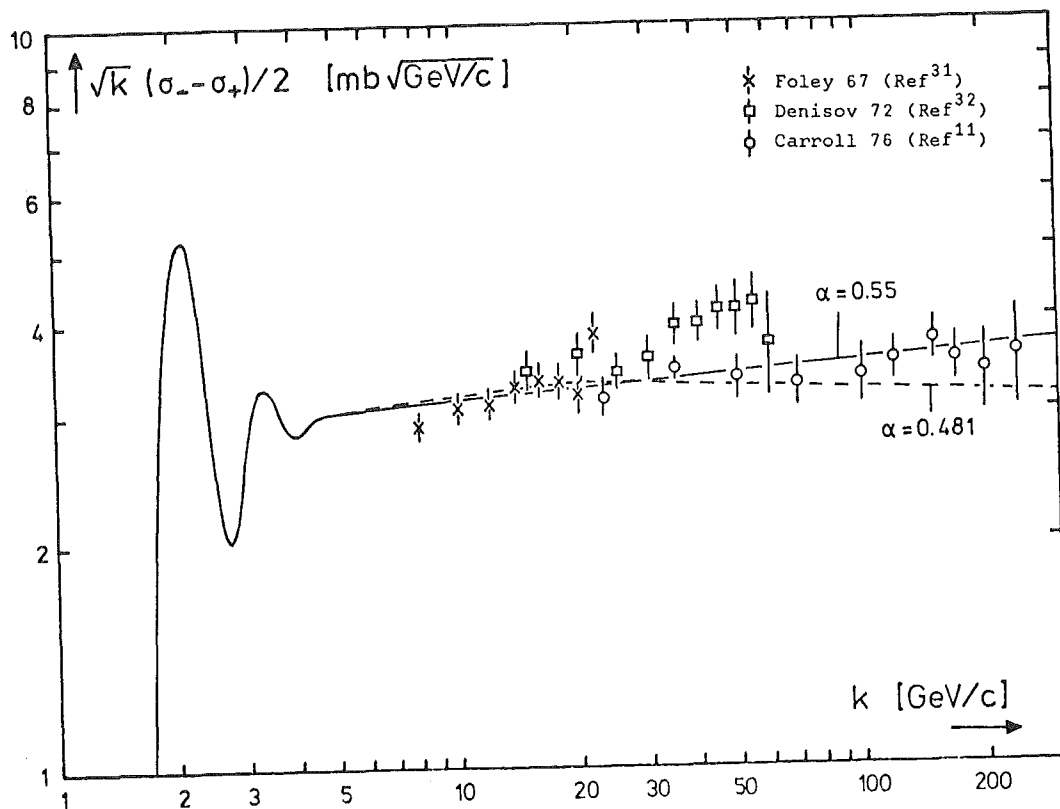


Fig. 3b



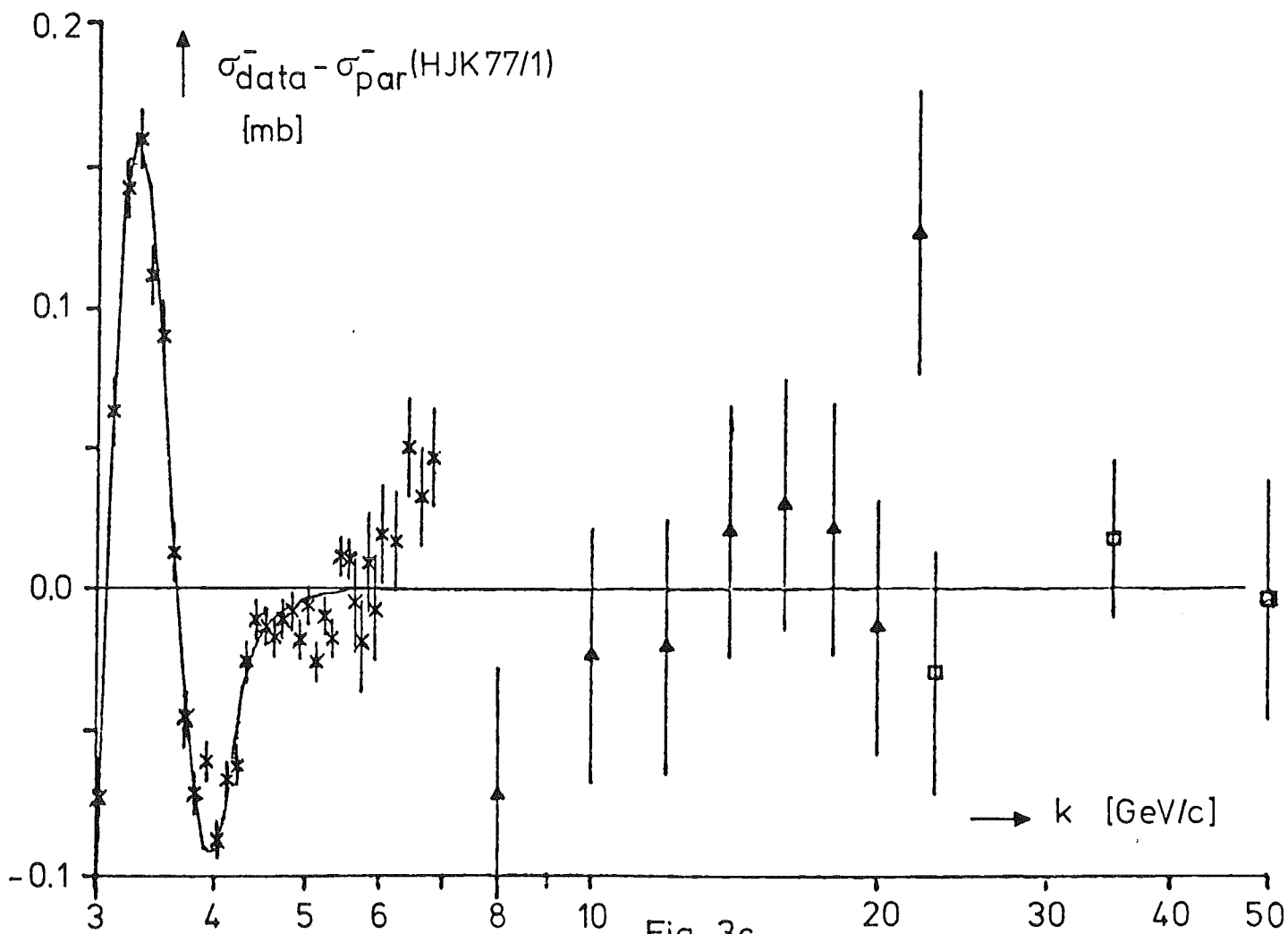
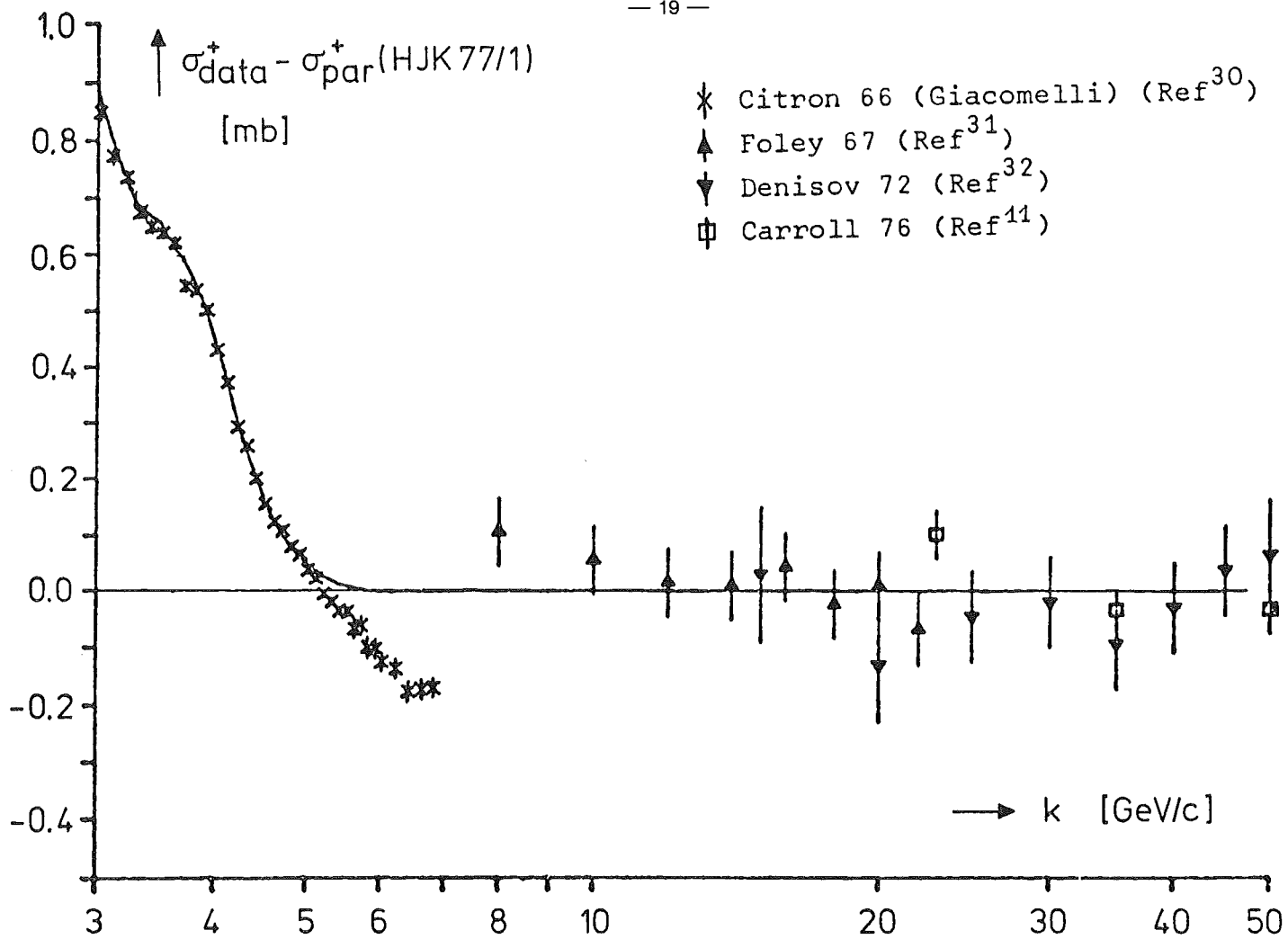


Fig. 3c

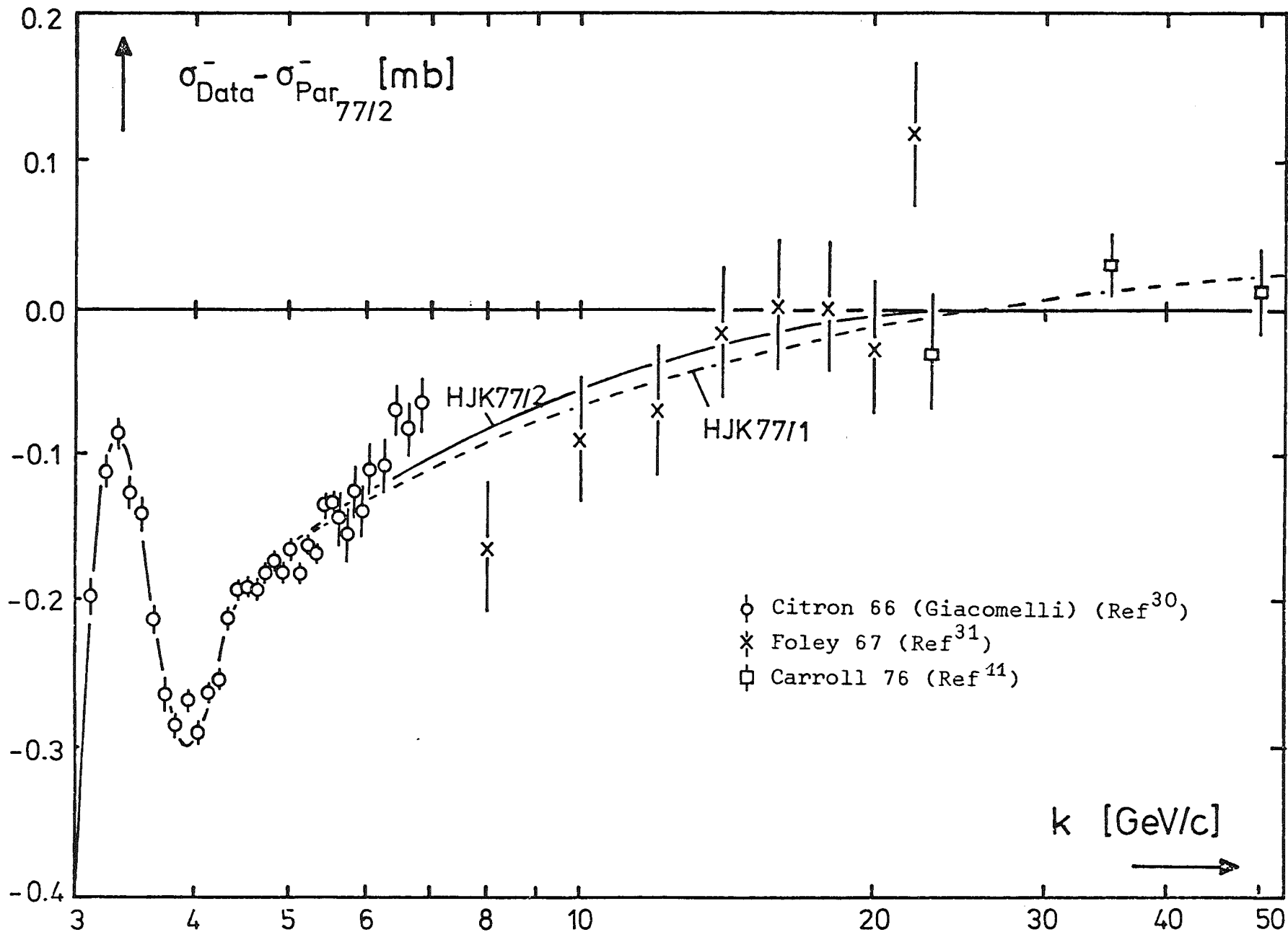


Fig. 3d

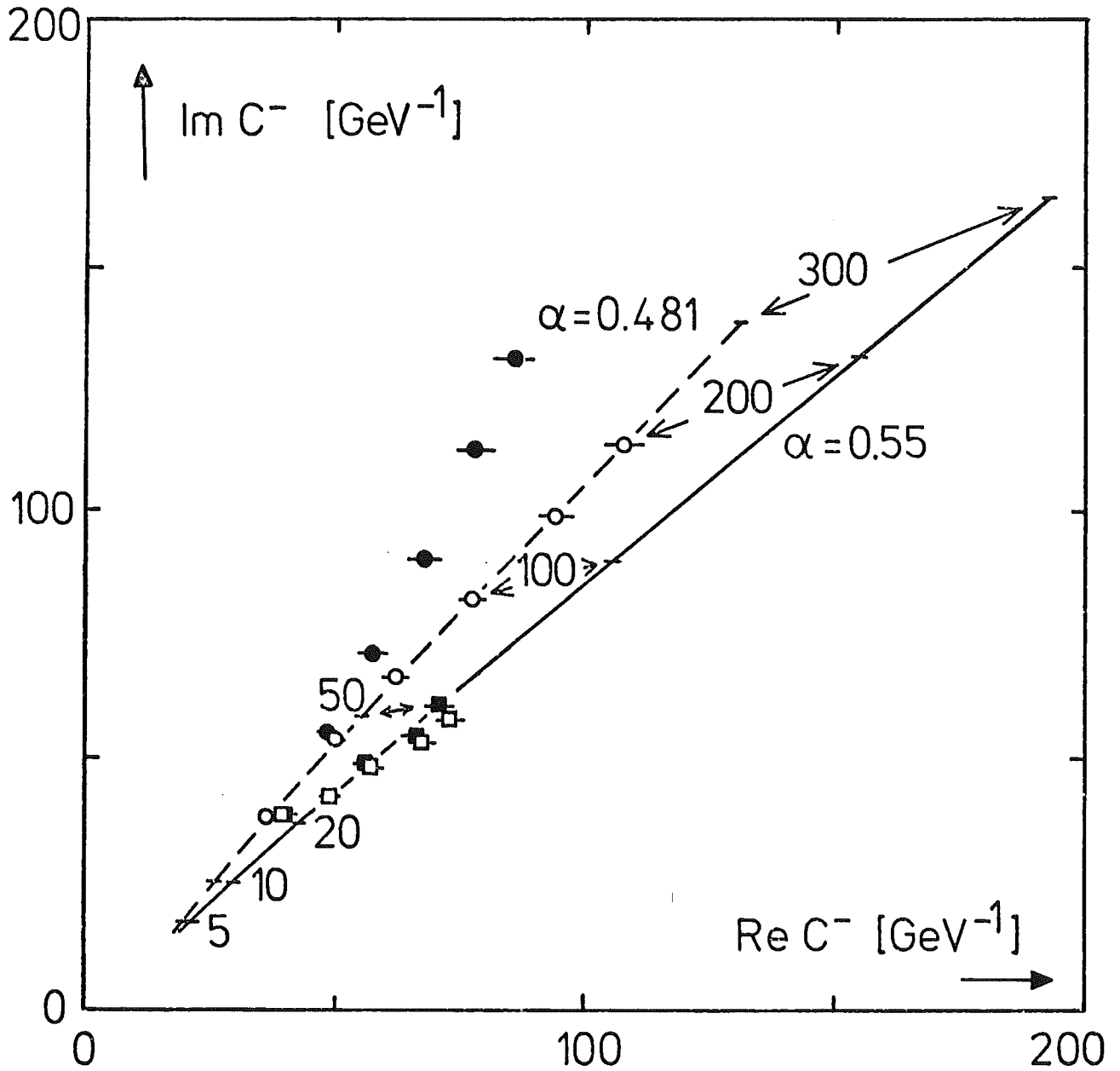


Fig. 4

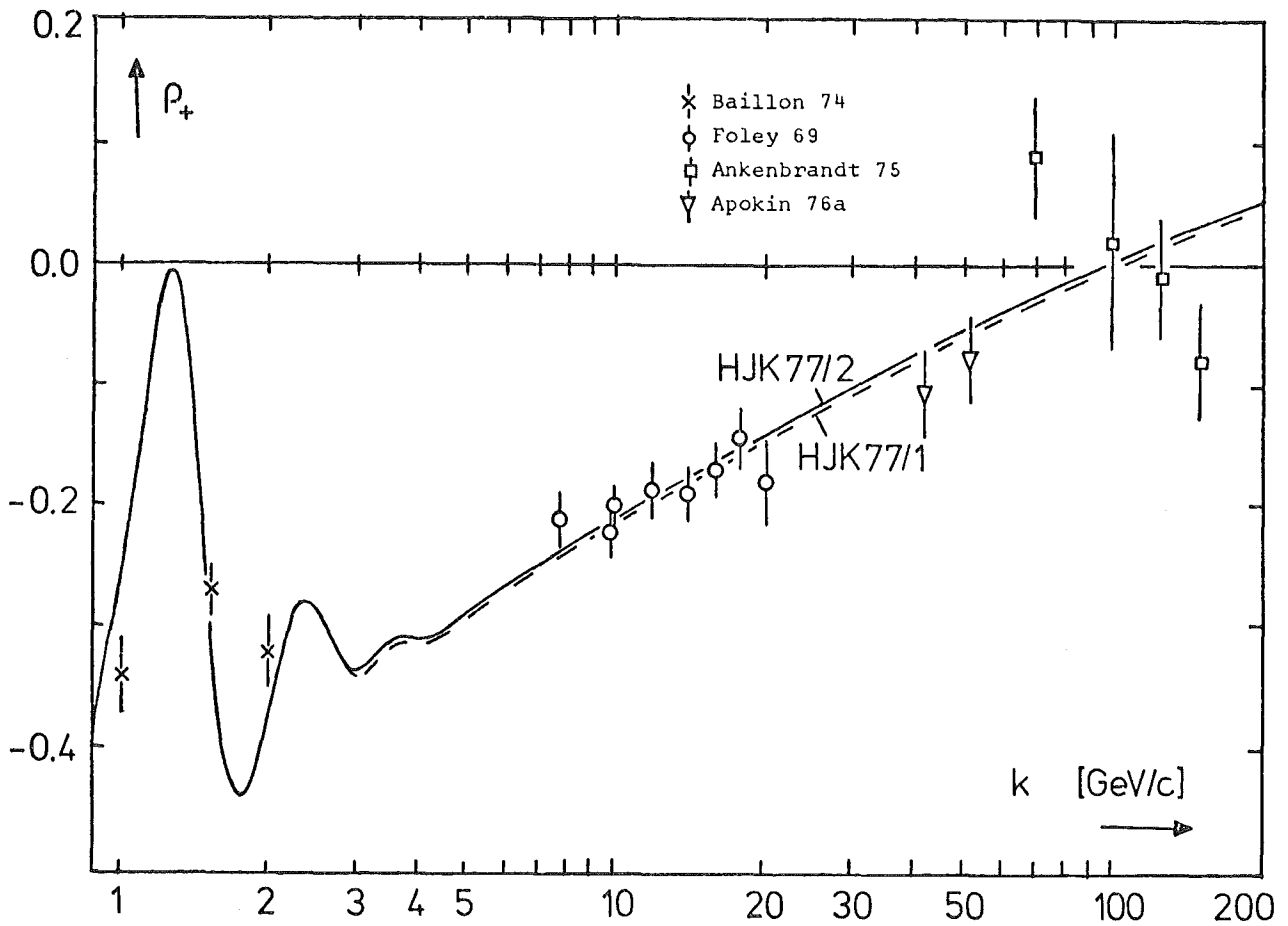


Fig. 5a

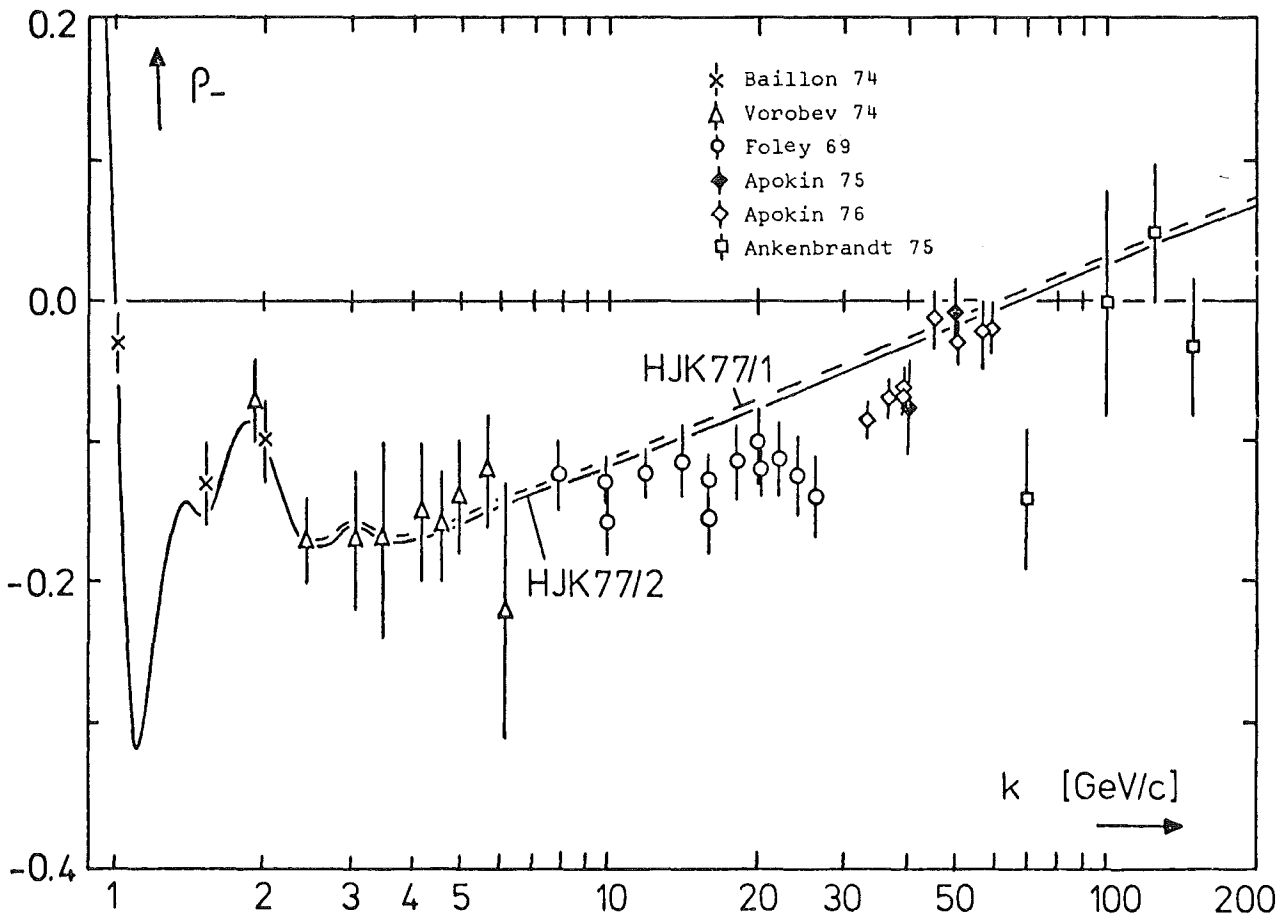


Fig. 5b

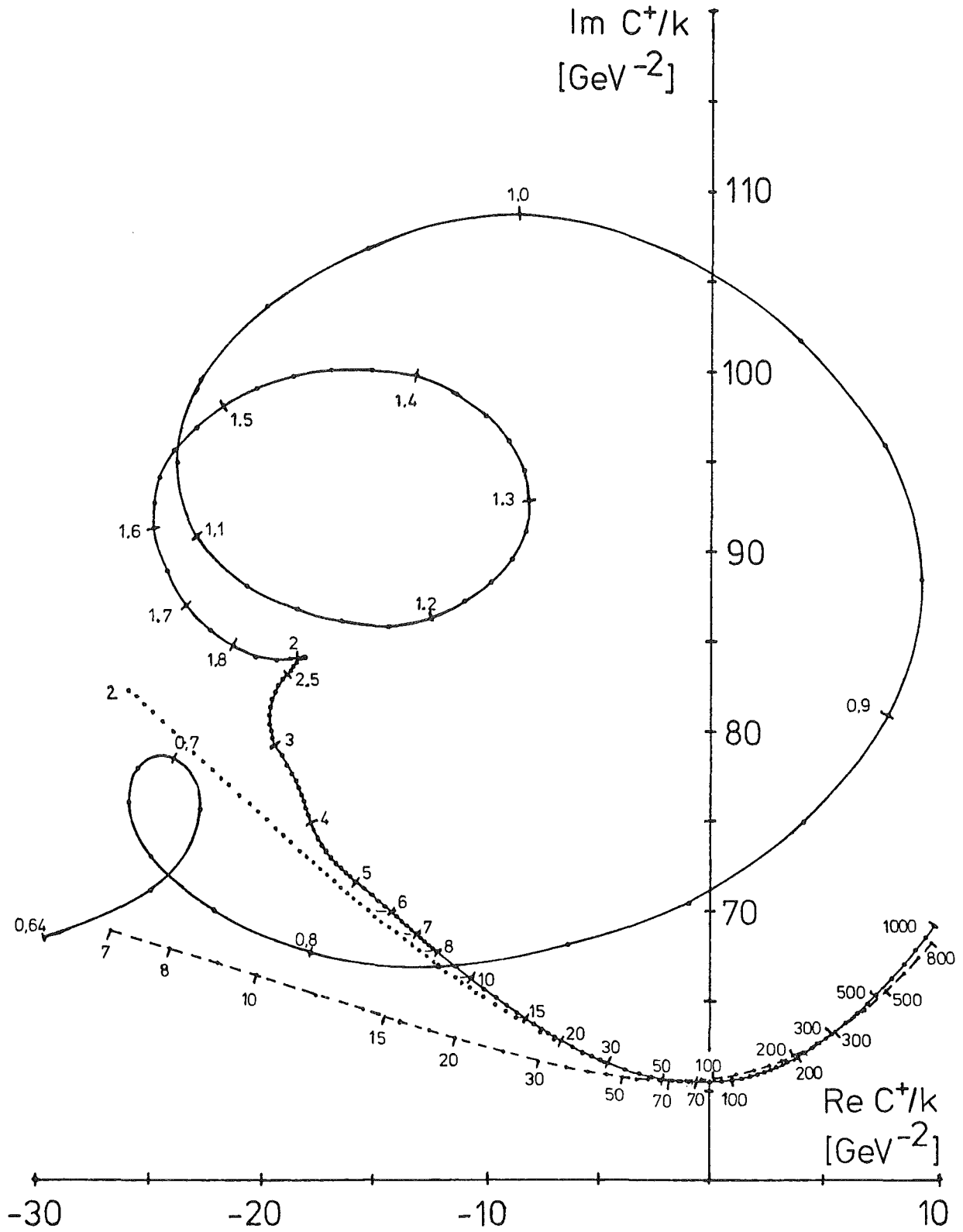


Fig. 6

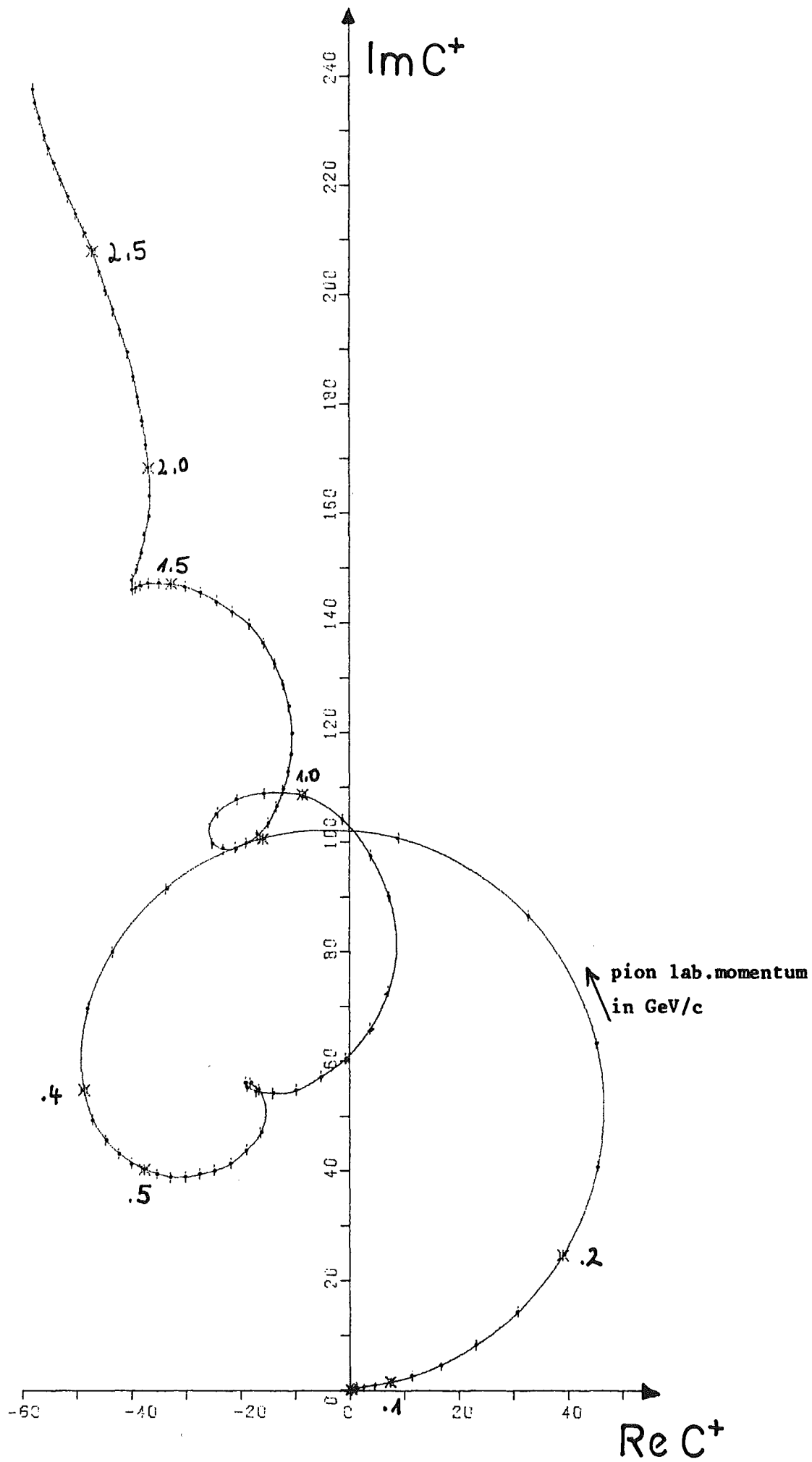


Fig. 7 a

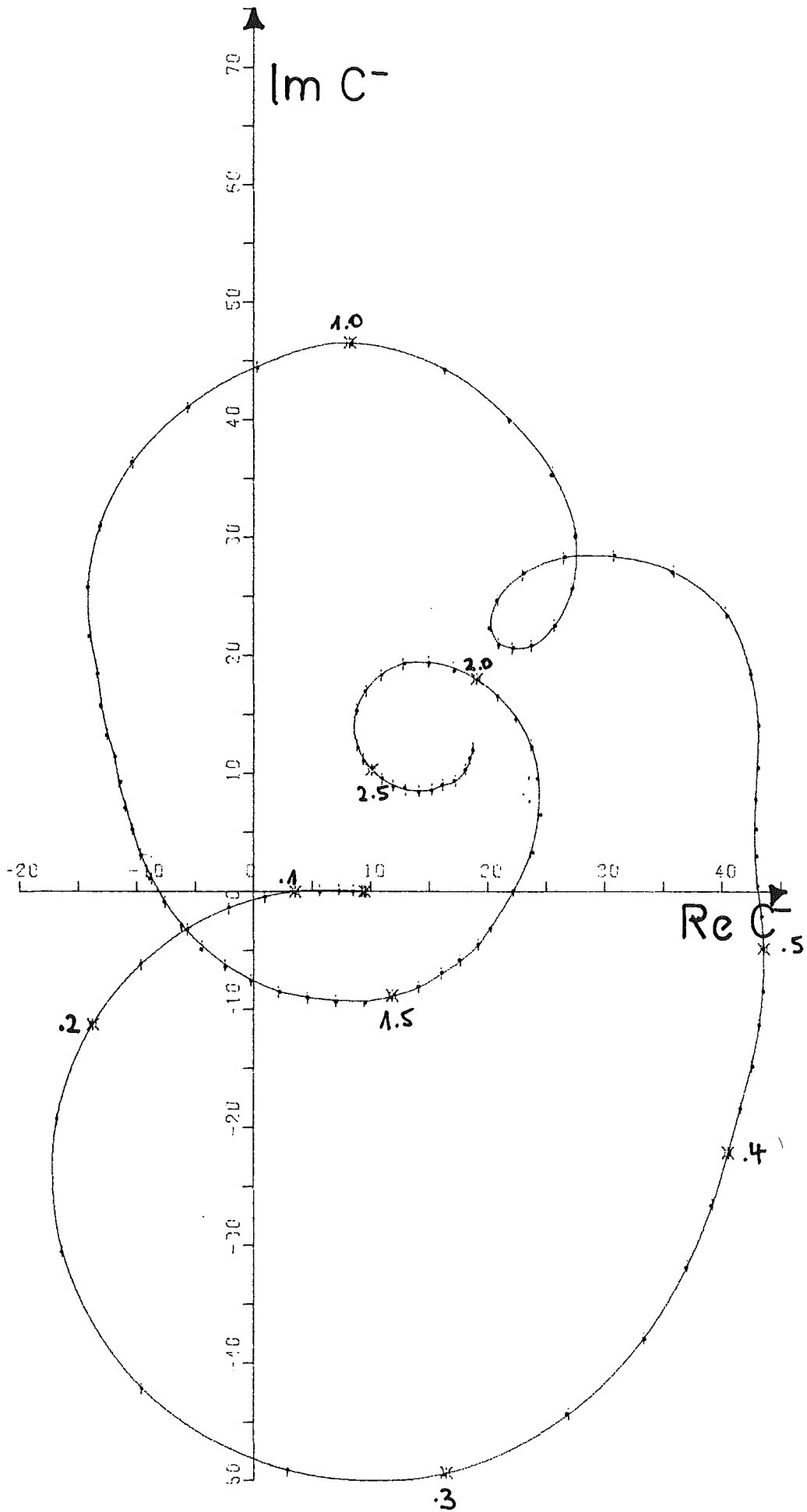


Fig. 7 b

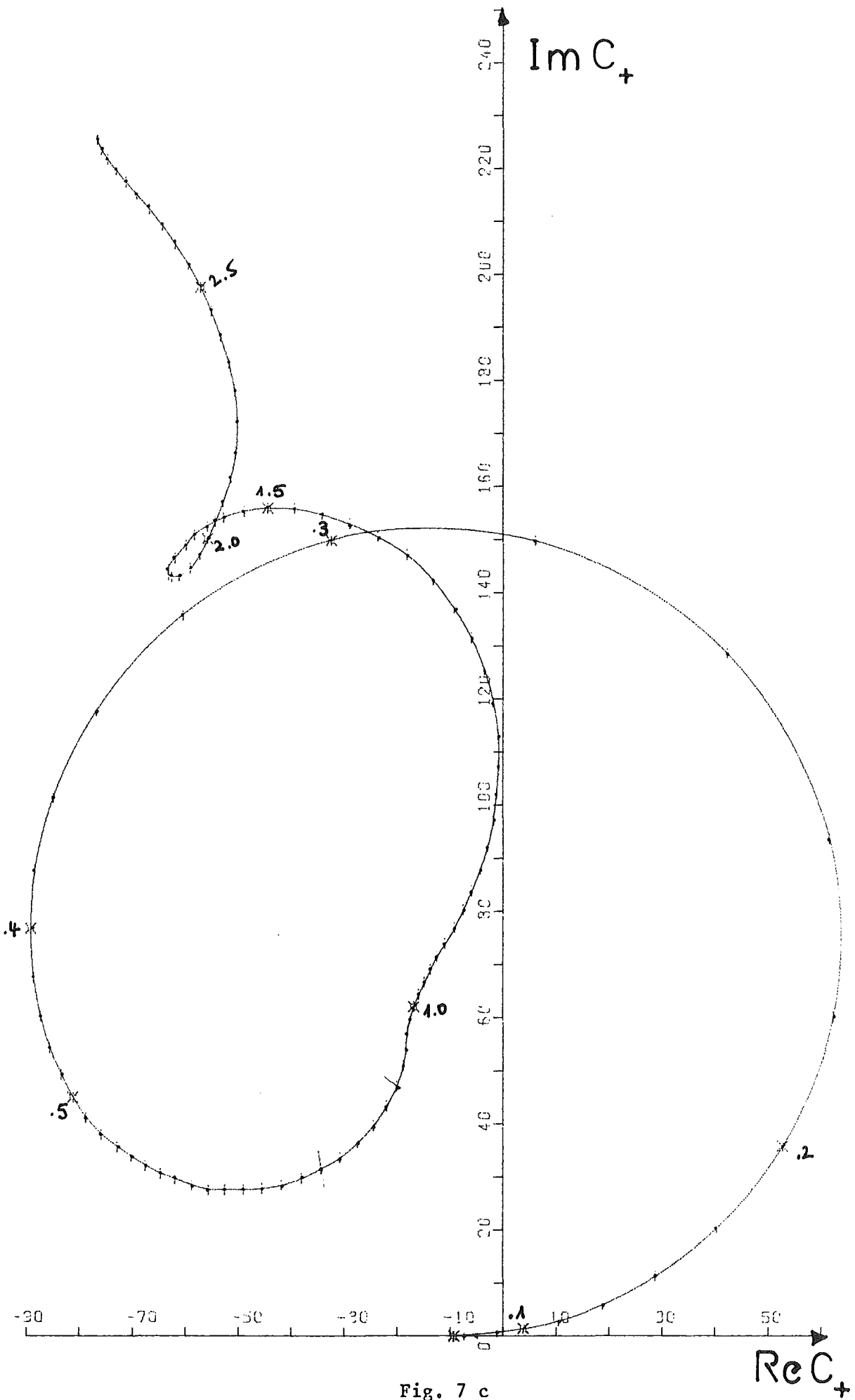


Fig. 7 c



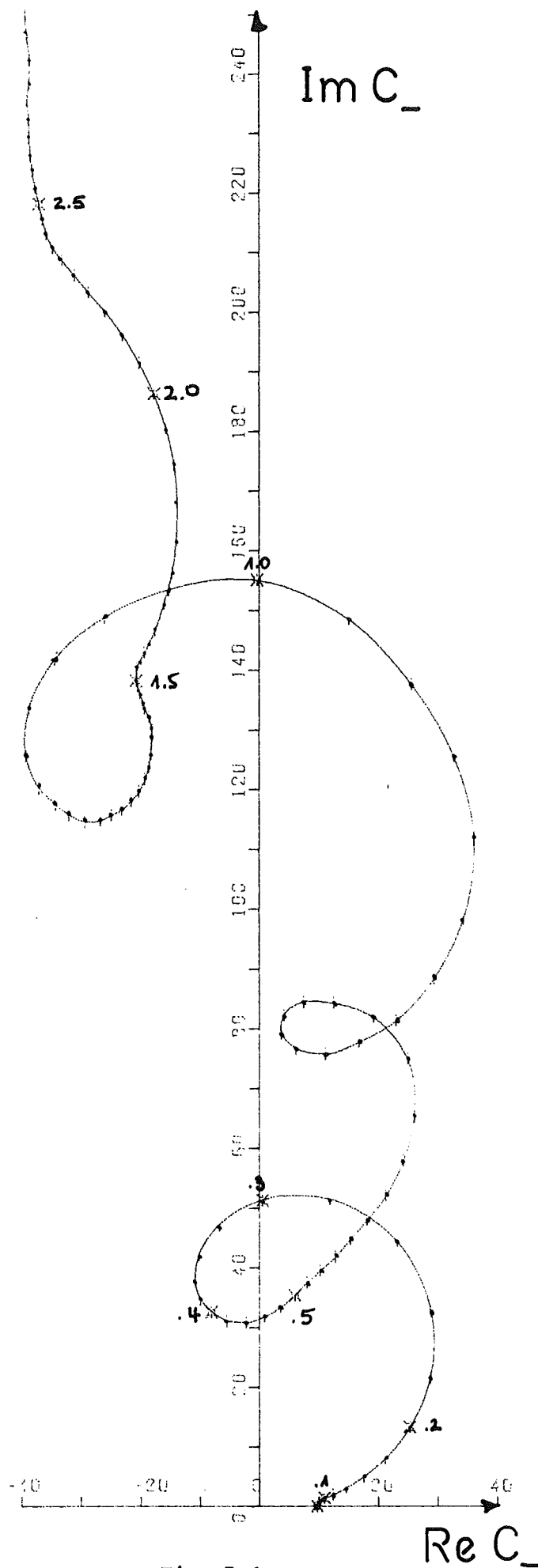


Fig. 7 d

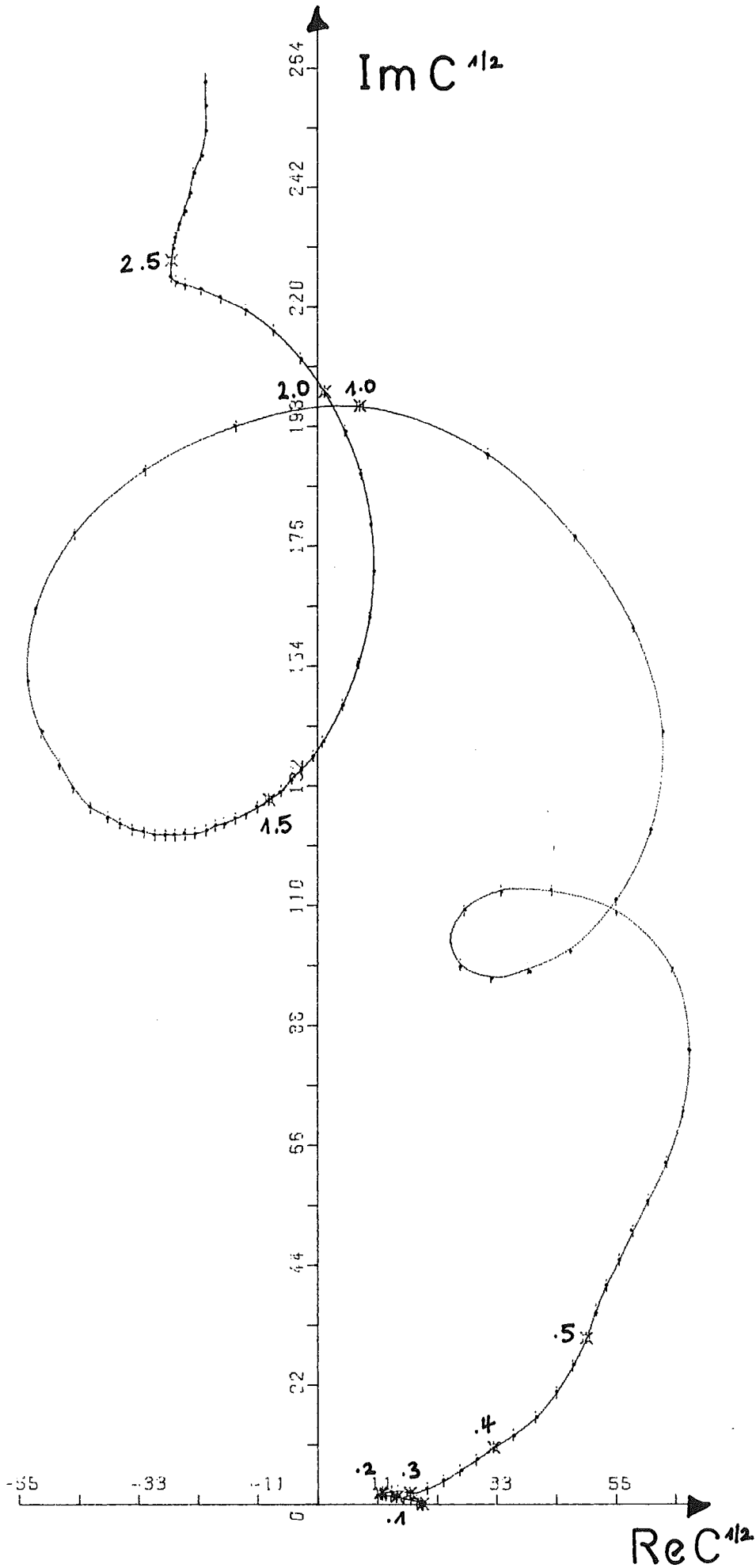


Fig. 7 e

Table Caption

The tables are denoted by HJK 77/n, where n = 1,2,3,4 belongs to different choices for the total cross section input.

HJK 77/1: The high energy assumption corresponds to a best fit to the NAL total cross section data.<sup>11</sup> The parameters are given in eqs. (1) and (2). In the range 0.4 - 0.9 GeV/c the fit follows the Rutherford data<sup>8</sup> and ignores the Arizona data.<sup>7</sup>

HJK 77/2: The same as HJK 77/1 except for the high energy assumption for  $\alpha_\rho$  which is adjusted to fit the NAL charge-exchange forward cross sections.<sup>10</sup> We use eq. (2) with the parameters  $\alpha_\rho = 0.481$ ,  $c = 3.484 \text{ GeV}^{1-\alpha_\rho}$  above 25 GeV/c and the interpolation described by the dashed line in Fig. 3b between 4 and 25 GeV/c. The NAL total cross section data<sup>11</sup> are systematically higher than this fit (Fig. 3b).

HJK 77/3: The same as HJK 77/1 except that the fit prefers the Arizona data<sup>7</sup> instead of the Rutherford data.<sup>8</sup> See the dot-dashed line in Figs. 1/1, 1/2.

HJK 77/4: The same as HJK 77/1 except for the high energy assumption for  $\sigma^+$ . Above 6 GeV/c we have chosen

$$\sigma^+ = \sigma_0 + \sigma_1 \ln(k/k_1) + b k^{\alpha-1}$$

$$\sigma_0 = 26.04 \text{ mb}, \quad \sigma_1 = 3.29 \text{ mb}, \quad k_1 = 4675 \text{ GeV/c}, \quad b = 38.75 \text{ mb GeV}^{1-\alpha}, \quad \alpha = 0.712$$

Other possibilities have been discussed in Ref.<sup>4</sup>

In the first two columns the following kinematical quantities have been listed

k	}	GeV-units	s	}	natural units
$T_\pi = \omega - \mu$			\omega		
W			q	}	GeV-units.
$s = 2m\omega - m^2 - \mu^2$			$2q^2$		

In the 3rd column "PI+" and "PI-" indicates that the lines belong to  $\pi^\pm p \rightarrow \pi^\pm p$  amplitudes and  $\pi^\pm p$  total cross sections. "(±)" denotes the isospin even and odd combinations of amplitudes and total cross sections. For the differential cross sections (+)

denotes the value obtained from  $C^+$  and "CEX" the charge-exchange forward cross section.

Amplitudes are given in  $\text{GeV}^{-1}$  units. The conversion to the quantity  $F = C/4\pi$  in natural units ( $\mu = 1$ ), which had been used in our earlier tables, reads

$$F[\text{n.u.}] = C[\text{GeV}^{-1}]/90.04, \quad \mu^{-1} = 7.1646 \text{ GeV}^{-1}.$$

The differential forward cross sections are given in units of  $\text{mb}/\text{GeV}^2$  for  $d\sigma/dt$  and  $\text{mb}/\text{sr}$  for  $d\sigma/d\Omega$ . Since  $d\sigma/d\Omega$  is mainly used at low and intermediate energies, we have replaced the column " $d\sigma/d\Omega$ " by "rho"

$$\rho = \frac{\text{Re } C}{\text{Im } C}$$

above 2.2  $\text{GeV}/c$ .

Table HJK 77/5 has been obtained from an evaluation of the dispersion integral in the unphysical region below threshold. The input is the same as for table HJK 77/1. In this case it is practical to use the variable  $\omega$  = total pion energy and to list  $\tilde{C}^-/\omega$  and  $\tilde{C}^+ - g^2/m$  in units of  $\mu^{-2}$  and  $\mu^{-1}$  respectively. ( $\tilde{C} \equiv C - C_N$ ,  $C_N$  is the nucleon pole term, eq. (5),  $g^2/m = 26.7\mu^{-1}$ ). The application of this table is explained in sect.5 .

The tables agree with those of the 1976 edition except for the interchange of tables No. 2 and 4. Figs. 7a ... 7e belong to Table HJK 77/1. They show that our interpolation is smooth in all amplitudes.

K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	DS/DO MB/SR	DS/DT MB/GEV**2
0.001	59.63	PI+	-10.52	0.01	2.60	0.21	*****
0.000	1.00	PI-	8.54	0.02	5.90	0.14	*****
1.078	0.001	(+)	-0.99	0.01	4.25	0.00	7612.9
1.162	0.000	(-)	9.53	0.00	1.650	CEX	0.34 *****
0.002	59.63	PI+	-10.52	0.01	2.62	0.21	*****
0.000	1.00	PI-	8.54	0.03	5.91	0.14	*****
1.078	0.002	(+)	-0.99	0.02	4.27	0.00	1883.2
1.162	0.000	(-)	9.53	0.01	1.647	CEX	0.34 *****
0.005	59.64	PI+	-10.48	0.03	2.63	0.21	34026.
0.000	1.00	PI-	8.57	0.08	5.92	0.14	22742.
1.078	0.004	(+)	-0.96	0.05	4.28	0.00	284.2
1.162	0.000	(-)	9.52	0.02	1.647	CEX	0.34 56200.6
0.010	59.67	PI+	-10.36	0.07	2.65	0.20	8313.7
0.000	1.00	PI-	8.61	0.15	5.94	0.14	5750.5
1.078	0.009	(+)	-0.87	0.11	4.29	0.00	59.9
1.162	0.000	(-)	9.49	0.04	1.643	CEX	0.34 13944.3
0.020	59.77	PI+	-9.94	0.14	2.70	0.18	1914.5
0.001	1.01	PI-	8.67	0.30	5.90	0.14	1457.6
1.079	0.017	(+)	-0.64	0.22	4.30	0.00	8.8
1.164	0.001	(-)	9.31	0.08	1.600	CEX	0.32 3354.54
0.040	60.17	PI+	-8.40	0.30	2.90	0.13	342.0
0.006	1.04	PI-	8.65	0.60	5.80	0.14	364.4
1.083	0.035	(+)	0.13	0.45	4.35	0.00	1.0
1.172	0.002	(-)	8.53	0.15	1.450	CEX	0.27 704.30
0.060	60.82	PI+	-5.77	0.49	3.20	0.06	72.1
0.012	1.09	PI-	8.82	0.86	5.60	0.14	169.1
1.089	0.052	(+)	1.53	0.68	4.40	0.01	6.0
1.185	0.005	(-)	7.30	0.18	1.200	CEX	0.20 229.20
0.080	61.68	PI+	-2.00	0.87	4.25	0.01	5.8
0.021	1.15	PI-	9.28	1.16	5.65	0.16	105.9
1.096	0.068	(+)	3.64	1.02	4.95	0.03	17.3
1.202	0.009	(-)	5.64	0.14	0.700	CEX	0.12 77.15
0.100	62.73	PI+	3.07	1.52	5.90	0.02	9.1
0.032	1.23	PI-	10.19	1.52	5.90	0.19	82.3
1.105	0.085	(+)	6.63	1.52	5.90	0.08	35.9
1.222	0.014	(-)	3.56	0.00	0.000	CEX	0.05 19.62
0.120	63.92	PI+	9.80	2.97	9.64	0.18	56.5
0.044	1.32	PI-	11.74	2.12	6.88	0.25	76.6
1.116	0.101	(+)	10.77	2.55	8.26	0.21	65.9
1.245	0.020	(-)	0.97	-0.43	-1.380	CEX	0.00 1.21
0.140	65.23	PI+	18.21	6.03	16.78	0.63	145.4
0.058	1.42	PI-	14.00	3.23	8.99	0.35	81.6
1.127	0.117	(+)	16.11	4.63	12.89	0.48	111.0
1.271	0.027	(-)	-2.10	-1.40	-3.893	CEX	0.02 5.05
0.160	66.64	PI+	28.28	11.43	27.83	1.56	281.6
0.073	1.52	PI-	17.00	5.13	12.48	0.53	95.4
1.139	0.132	(+)	22.64	8.28	20.15	0.97	175.9
1.298	0.035	(-)	-5.64	-3.15	-7.676	CEX	0.14 25.29

K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB		DS/DO MB/SR	DS/DT MB/GEV**2
0.180	68.13	FI+	40.01	20.6	44.60		3.31	484.3
0.088	1.63	FI-	20.73	8.3	17.90		0.81	119.1
1.152	0.147	(+)	30.37	14.4	31.25		1.85	270.4
1.327	0.043	(-)	-9.64	-6.17	-13.350	CEX	0.428	62.640
0.200	69.68	FI+	52.44	35.9	69.94		6.46	782.5
0.104	1.75	FI-	24.90	13.4	26.18		1.28	155.1
1.165	0.161	(+)	38.67	24.7	48.06		3.37	407.6
1.357	0.052	(-)	-13.77	-11.24	-21.880	CEX	1.010	122.365
0.220	71.28	FI+	62.02	60.2	106.61		11.68	1196.3
0.121	1.87	FI-	28.33	21.6	38.27		1.99	203.3
1.178	0.175	(+)	45.18	40.9	72.44		5.81	594.8
1.389	0.061	(-)	-16.85	-19.30	-34.169	CEX	2.052	210.127
0.240	72.93	FI+	61.19	93.8	152.21		19.17	1687.2
0.138	1.99	FI-	28.52	32.9	53.34		2.89	254.8
1.192	0.189	(+)	44.86	63.3	102.77		9.20	810.2
1.421	0.071	(-)	-16.33	-30.47	-49.436	CEX	3.652	321.472
0.260	74.61	FI+	41.87	128.8	192.95		27.41	2102.9
0.156	2.11	FI-	22.79	44.6	66.85		3.75	287.8
1.206	0.202	(+)	32.33	86.7	129.90		12.80	981.9
1.454	0.082	(-)	-9.54	-42.10	-63.050	CEX	5.565	427.046
0.280	76.32	FI+	5.97	150.1	208.72		32.93	2229.1
0.173	2.24	FI-	11.64	51.8	72.04		4.12	278.5
1.219	0.215	(+)	8.80	100.9	140.38		14.99	1014.4
1.487	0.093	(-)	2.84	-49.14	-68.339	CEX	7.074	478.774
0.300	78.06	FI+	-32.38	150.0	194.69		33.61	2026.6
0.191	2.37	FI-	0.38	51.4	66.77		3.78	227.8
1.233	0.228	(+)	-16.00	100.7	130.73		14.84	895.1
1.521	0.104	(-)	16.38	-49.27	-63.959	CEX	7.698	464.152
0.320	79.82	FI+	-60.67	135.9	165.32		30.91	1674.7
0.210	2.50	FI-	-6.92	47.3	57.57		3.19	173.0
1.247	0.241	(+)	-33.80	91.6	111.45		13.30	720.9
1.555	0.116	(-)	26.88	-44.27	-53.873	CEX	7.489	405.836
0.340	81.59	FI+	-76.98	117.9	135.07		27.09	1329.2
0.228	2.63	FI-	-10.34	42.3	48.45		2.59	127.1
1.261	0.253	(+)	-43.66	80.1	91.76		11.37	557.9
1.589	0.128	(-)	33.32	-37.82	-43.312	CEX	6.939	340.464
0.360	83.38	FI+	-85.13	101.6	109.85		23.47	1049.7
0.247	2.77	FI-	-11.06	38.0	41.14		2.10	93.8
1.275	0.265	(+)	-48.10	69.8	75.49		9.60	429.4
1.624	0.140	(-)	37.04	-31.76	-34.356	CEX	6.363	284.587
0.380	85.18	FI+	-88.57	87.8	89.95		20.34	834.2
0.265	2.90	FI-	-10.18	34.8	35.64		1.72	70.5
1.288	0.277	(+)	-49.37	61.3	62.80		8.10	332.2
1.659	0.153	(-)	39.20	-26.50	-27.153	CEX	5.856	240.183
0.400	87.00	FI+	-89.35	76.7	74.67		17.76	671.4
0.284	3.04	FI-	-8.30	32.5	31.68		1.45	54.6
1.302	0.288	(+)	-48.83	54.6	53.18		6.88	259.9
1.695	0.166	(-)	40.52	-22.08	-21.494	CEX	5.456	206.225

K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	DS/DO MB/SR	DS/DT MB/GEV**2
0.420	88.82	PI+	-88.77	67.8	62.85	15.65	547.9
0.303	3.17	PI-	-5.67	31.2	28.92	1.26	44.1
1.315	0.300	(+)	-47.22	49.5	45.89	5.87	205.5
1.730	0.179	(-)	41.55	-18.30	-16.968	CEX 5.172	181.045
0.440	90.65	PI+	-87.44	60.5	53.54	13.90	452.4
0.322	3.31	PI-	-2.47	30.9	27.37	1.18	38.5
1.329	0.311	(+)	-44.96	45.7	40.46	5.05	164.5
1.766	0.193	(-)	42.48	-14.78	-13.084	CEX 4.974	161.934
0.460	92.49	PI+	-85.64	54.5	46.11	12.41	377.1
0.341	3.44	PI-	0.66	31.9	27.03	1.23	37.3
1.342	0.322	(+)	-42.49	43.2	36.57	4.42	134.4
1.802	0.207	(-)	43.15	-11.27	-9.538	CEX 4.792	145.627
0.480	94.34	PI+	-83.57	49.4	40.10	11.14	317.0
0.360	3.58	PI-	3.40	33.5	27.19	1.34	38.1
1.356	0.332	(+)	-40.09	41.5	33.64	3.93	111.8
1.838	0.221	(-)	43.49	-7.96	-6.456	CEX 4.617	131.423
0.500	96.19	PI+	-81.33	45.1	35.13	10.02	268.0
0.380	3.72	PI-	5.81	35.5	27.68	1.50	40.2
1.369	0.343	(+)	-37.76	40.3	31.40	3.53	94.6
1.874	0.235	(-)	43.57	-4.78	-3.726	CEX 4.451	119.060
0.520	98.05	PI+	-78.82	41.3	30.95	9.00	226.9
0.399	3.86	PI-	7.88	37.7	28.21	1.68	42.4
1.382	0.353	(+)	-35.47	39.5	29.58	3.20	80.7
1.910	0.249	(-)	43.35	-1.83	-1.368	CEX 4.279	107.864
0.540	99.91	PI+	-75.98	38.2	27.53	8.06	192.1
0.418	4.00	PI-	10.07	39.6	28.58	1.87	44.4
1.395	0.363	(+)	-32.95	38.9	28.05	2.90	69.1
1.946	0.264	(-)	43.02	0.73	0.528	CEX 4.130	98.377
0.560	101.78	PI+	-73.04	35.8	24.92	7.25	163.5
0.438	4.13	PI-	12.63	42.0	29.21	2.11	47.5
1.408	0.373	(+)	-30.21	38.9	27.06	2.66	59.9
1.983	0.278	(-)	42.83	3.08	2.145	CEX 4.038	91.110
0.580	103.65	PI+	-70.37	34.0	22.85	6.57	140.7
0.457	4.27	PI-	15.22	44.9	30.16	2.42	51.8
1.421	0.383	(+)	-27.58	39.5	26.50	2.49	53.4
2.019	0.293	(-)	42.79	5.44	3.654	CEX 4.001	85.708
0.600	105.53	PI+	-67.73	32.2	20.92	5.94	121.1
0.476	4.41	PI-	18.02	48.1	31.22	2.79	56.8
1.434	0.393	(+)	-24.85	40.2	26.07	2.36	48.0
2.056	0.308	(-)	42.87	7.94	5.151	CEX 4.014	81.811
0.620	107.40	PI+	-64.85	30.8	19.34	5.35	103.9
0.496	4.55	PI-	21.18	52.3	32.85	3.30	64.2
1.447	0.402	(+)	-21.83	41.5	26.09	2.29	44.4
2.092	0.323	(-)	43.02	10.75	6.754	CEX 4.080	79.248
0.640	109.28	PI+	-62.04	29.7	18.08	4.82	89.5
0.515	4.69	PI-	24.12	58.0	35.29	4.02	74.6
1.459	0.412	(+)	-18.96	43.9	26.68	2.33	43.2
2.129	0.339	(-)	43.08	14.15	8.608	CEX 4.193	77.768

K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB		DS/DO MB/SR	DS/DT MB/GEV**2
0.660	111.17	PI+	-58.91	28.5	16.84		4.29	76.2
0.535	4.83	PI-	26.01	65.4	38.59		4.97	88.1
1.472	0.421	(+)	-16.45	47.0	27.72		2.48	44.1
2.166	0.354	(-)	42.46	18.44	10.877	CEX	4.295	76.206
0.680	113.05	PI+	-55.74	28.3	16.19		3.85	65.4
0.555	4.97	PI-	24.80	74.6	42.73		6.09	103.6
1.484	0.430	(+)	-15.47	51.4	29.46		2.84	48.3
2.202	0.370	(-)	40.27	23.17	13.271	CEX	4.255	72.333
0.700	114.94	PI+	-52.64	27.7	15.43		3.43	56.0
0.574	5.11	PI-	19.18	82.1	45.68		6.89	112.4
1.496	0.439	(+)	-16.73	54.9	30.55		3.20	52.1
2.239	0.385	(-)	35.91	27.19	15.128	CEX	3.934	64.158
0.720	116.83	PI+	-49.14	27.6	14.95		3.03	47.5
0.594	5.25	PI-	12.45	84.6	45.76		6.98	109.3
1.509	0.448	(+)	-18.34	56.1	30.36		3.33	52.1
2.276	0.401	(-)	30.79	28.49	15.407	CEX	3.357	52.596
0.740	118.72	PI+	-45.59	28.0	14.73		2.69	40.5
0.613	5.40	PI-	7.29	84.6	44.50		6.76	101.9
1.521	0.457	(+)	-19.15	56.3	29.62		3.32	50.0
2.313	0.417	(-)	26.44	28.29	14.885	CEX	2.814	42.418
0.760	120.62	PI+	-41.89	28.6	14.67		2.38	34.5
0.633	5.54	PI-	4.07	82.4	42.23		6.29	91.3
1.533	0.465	(+)	-18.91	55.5	28.45		3.18	46.1
2.350	0.433	(-)	22.98	26.89	13.780	CEX	2.312	33.571
0.780	122.51	PI+	-38.11	29.9	14.92		2.13	29.9
0.653	5.68	PI-	3.60	79.4	39.62		5.74	80.4
1.545	0.474	(+)	-17.25	54.6	27.27		2.98	41.8
2.387	0.449	(-)	20.86	24.74	12.349	CEX	1.904	26.662
0.800	124.41	PI+	-34.45	31.6	15.38		1.96	26.4
0.673	5.82	PI-	6.06	76.7	37.34		5.30	71.7
1.557	0.482	(+)	-14.19	54.2	26.36		2.81	37.9
2.424	0.465	(-)	20.25	22.56	10.979	CEX	1.646	22.247
0.820	126.31	PI+	-30.81	33.8	16.03		1.84	24.1
0.692	5.96	PI-	10.97	75.9	36.04		5.19	67.8
1.569	0.490	(+)	-9.92	54.8	26.04		2.74	35.8
2.461	0.481	(-)	20.89	21.07	10.006	CEX	1.553	20.286
0.840	128.21	PI+	-27.48	36.6	16.99		1.82	23.0
0.712	6.10	PI-	16.68	77.9	36.13		5.52	69.7
1.580	0.499	(+)	-5.40	57.3	26.56		2.88	36.4
2.498	0.497	(-)	22.08	20.65	9.571	CEX	1.588	20.065
0.860	130.11	PI+	-24.54	39.8	18.00		1.87	22.9
0.732	6.24	PI-	22.93	81.5	36.90		6.14	75.1
1.592	0.507	(+)	-0.80	60.6	27.45		3.15	38.5
2.535	0.514	(-)	23.74	20.87	9.450	CEX	1.711	20.928
0.880	132.01	PI+	-22.04	43.4	19.20		2.00	23.7
0.751	6.38	PI-	29.28	88.5	39.18		7.34	87.0
1.604	0.515	(+)	3.62	66.0	29.19		3.68	43.7
2.572	0.530	(-)	25.66	22.58	9.990	CEX	1.972	23.374



K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB		DS/DO MB/SR	DS/DT MB/GEV**2
0.900	133.92	PI+	-20.15	47.1	20.40		2.19	25.1
0.771	6.53	PI-	34.22	98.5	42.60		9.04	103.9
1.615	0.523	(+)	7.04	72.8	31.50		4.45	51.2
2.609	0.547	(-)	27.19	25.65	11.100	CEX	2.325	26.727
0.920	135.82	PI+	-18.91	51.0	21.60		2.43	27.1
0.791	6.67	PI-	36.01	111.7	47.28		11.30	126.1
1.627	0.531	(+)	8.55	81.4	34.44		5.49	61.3
2.646	0.563	(-)	27.46	30.34	12.840	CEX	2.747	30.648
0.940	137.72	PI+	-18.37	54.6	22.60		2.68	29.1
0.811	6.81	PI-	32.74	125.7	52.08		13.65	148.0
1.638	0.538	(+)	7.19	90.1	37.34		6.62	71.7
2.683	0.580	(-)	25.55	35.58	14.740	CEX	3.105	33.650
0.960	139.63	PI+	-18.06	57.4	23.30		2.89	30.5
0.831	6.95	PI-	25.64	137.8	55.90		15.68	165.2
1.649	0.546	(+)	3.79	97.6	39.60		7.62	80.2
2.720	0.597	(-)	21.85	40.18	16.300	CEX	3.339	35.175
0.980	141.54	PI+	-17.62	59.9	23.80		3.07	31.4
0.850	7.09	PI-	14.92	148.7	59.08		17.58	180.1
1.661	0.554	(+)	-1.35	104.3	41.44		8.56	87.7
2.757	0.613	(-)	16.27	44.39	17.640	CEX	3.520	36.064
1.000	143.44	PI+	-16.91	62.1	24.20		3.22	32.1
0.870	7.23	PI-	-0.40	155.3	60.48		18.74	186.9
1.672	0.561	(+)	-8.65	108.7	42.34		9.24	92.2
2.795	0.630	(-)	8.25	46.58	18.140	CEX	3.477	34.677
1.020	145.35	PI+	-15.98	64.4	24.60		3.38	32.8
0.890	7.38	PI-	-15.26	153.5	58.60		18.24	177.2
1.683	0.569	(+)	-15.62	109.0	41.60		9.29	90.2
2.832	0.647	(-)	0.36	44.53	17.000	CEX	3.040	29.531
1.040	147.26	PI+	-14.95	66.8	25.00		3.54	33.5
0.910	7.52	PI-	-26.27	148.9	55.76		17.30	163.8
1.694	0.576	(+)	-20.61	107.8	40.38		9.12	86.3
2.869	0.664	(-)	-5.66	41.08	15.380	CEX	2.602	24.628
1.060	149.17	PI+	-13.80	69.1	25.40		3.71	34.3
0.930	7.66	PI-	-34.47	141.9	52.14		15.93	147.1
1.705	0.583	(+)	-24.14	105.5	38.77		8.75	80.8
2.906	0.681	(-)	-10.33	36.39	13.370	CEX	2.138	19.736
1.080	151.08	PI+	-12.55	71.6	25.81		3.90	35.1
0.949	7.80	PI-	-38.86	133.5	48.15		14.27	128.5
1.716	0.591	(+)	-25.71	102.6	36.98		8.25	74.3
2.943	0.698	(-)	-13.16	30.98	11.170	CEX	1.671	15.048
1.100	152.99	PI+	-11.01	74.1	26.22		4.08	35.9
0.969	7.94	PI-	-39.37	125.8	44.54		12.66	111.3
1.726	0.598	(+)	-25.19	99.9	35.38		7.74	68.0
2.981	0.715	(-)	-14.18	25.88	9.160	CEX	1.268	11.149
1.120	154.90	PI+	-9.26	77.0	26.78		4.33	37.2
0.989	8.09	PI-	-37.18	120.3	41.82		11.40	97.9
1.737	0.605	(+)	-23.22	98.7	34.30		7.39	63.4
3.018	0.732	(-)	-13.96	21.63	7.520	CEX	0.953	8.185

K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	DS/DO MB/SR	DS/DT MB/GEV**2
1.140	156.82	PI+	-7.60	80.4	27.45	4.63	38.8
1.009	8.23	PI-	-34.40	117.5	40.15	10.66	89.4
1.748	0.612	(+)	-21.00	99.0	33.80	7.27	61.0
3.055	0.749	(-)	-13.40	18.59	6.350	CEX 0.746	6.260
1.160	158.73	PI+	-6.02	83.9	28.18	4.97	40.8
1.029	8.37	PI-	-32.12	115.9	38.90	10.15	83.2
1.758	0.619	(+)	-19.07	99.9	33.54	7.26	59.6
3.092	0.766	(-)	-13.05	15.97	5.360	CEX 0.597	4.897
1.180	160.64	PI+	-4.45	87.9	29.00	5.37	43.1
1.049	8.51	PI-	-29.48	114.7	37.84	9.72	78.0
1.769	0.626	(+)	-16.97	101.3	33.42	7.31	58.7
3.130	0.783	(-)	-12.52	13.39	4.420	CEX 0.466	3.739
1.200	162.55	PI+	-3.02	92.3	29.94	5.84	45.8
1.069	8.66	PI-	-26.88	115.0	37.33	9.57	75.1
1.780	0.633	(+)	-14.95	103.6	33.63	7.52	59.0
3.167	0.801	(-)	-11.93	11.39	3.695	CEX 0.373	2.927
1.220	164.47	PI+	-1.93	97.1	31.00	6.39	49.1
1.088	8.80	PI-	-24.99	115.8	36.96	9.51	73.0
1.790	0.639	(+)	-13.46	106.5	33.98	7.80	59.9
3.204	0.818	(-)	-11.53	9.34	2.980	CEX 0.298	2.291
1.240	166.38	PI+	-1.27	102.2	32.10	7.00	52.6
1.108	8.94	PI-	-23.23	116.7	36.66	9.49	71.4
1.800	0.646	(+)	-12.25	109.5	34.38	8.13	61.1
3.241	0.835	(-)	-10.98	7.26	2.280	CEX 0.232	1.746
1.260	168.30	PI+	-0.88	107.6	33.24	7.66	56.5
1.128	9.08	PI-	-21.66	118.2	36.53	9.56	70.5
1.811	0.653	(+)	-11.27	112.9	34.88	8.52	62.8
3.279	0.853	(-)	-10.39	5.32	1.645	CEX 0.180	1.330
1.280	170.21	PI+	-0.97	113.4	34.50	8.42	60.8
1.148	9.22	PI-	-20.36	119.8	36.46	9.67	69.9
1.821	0.660	(+)	-10.66	116.6	35.48	8.98	64.8
3.316	0.870	(-)	-9.70	3.22	0.980	CEX 0.137	0.987
1.300	172.13	PI+	-1.86	119.5	35.80	9.25	65.5
1.168	9.37	PI-	-19.35	121.9	36.50	9.85	69.8
1.831	0.666	(+)	-10.61	120.7	36.15	9.50	67.3
3.353	0.887	(-)	-8.74	1.17	0.350	CEX 0.101	0.714
1.320	174.04	PI+	-3.54	125.6	37.05	10.11	70.2
1.188	9.51	PI-	-18.72	123.9	36.55	10.05	69.8
1.841	0.673	(+)	-11.13	124.7	36.80	10.04	69.7
3.391	0.905	(-)	-7.59	-0.85	-0.250	CEX 0.075	0.519
1.340	175.96	PI+	-6.03	131.6	38.25	10.99	74.9
1.208	9.65	PI-	-18.34	126.0	36.61	10.26	69.9
1.851	0.679	(+)	-12.18	128.8	37.43	10.60	72.2
3.428	0.922	(-)	-6.15	-2.82	-0.820	CEX 0.058	0.396
1.360	177.88	PI+	-9.33	137.3	39.30	11.86	79.3
1.228	9.79	PI-	-18.20	128.0	36.66	10.48	70.0
1.862	0.685	(+)	-13.77	132.6	37.98	11.14	74.5
3.465	0.940	(-)	-4.43	-4.61	-1.320	CEX 0.051	0.342

K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	DS/DO MB/SR	DS/DT MB/GEV**2
1.380	179.79	PI+	-13.27	142.5	40.20	12.69	83.3
1.247	9.94	PI-	-18.16	130.1	36.70	10.69	70.2
1.872	0.692	(+)	-15.72	136.3	38.45	11.66	76.5
3.503	0.957	(-)	-2.44	-6.20	-1.750	CEX 0.055	0.361
1.400	181.71	PI+	-18.16	147.3	40.96	13.50	87.0
1.267	10.08	PI-	-18.64	132.3	36.80	10.95	70.6
1.881	0.698	(+)	-18.40	139.8	38.88	12.19	78.6
3.540	0.975	(-)	-0.24	-7.48	-2.080	CEX 0.069	0.443
1.420	183.63	PI+	-23.61	150.6	41.31	14.11	89.3
1.287	10.22	PI-	-19.35	133.7	36.67	11.08	70.1
1.891	0.704	(+)	-21.48	142.2	38.99	12.55	79.4
3.577	0.992	(-)	2.13	-8.46	-2.320	CEX 0.092	0.585
1.440	185.54	PI+	-28.95	153.1	41.41	14.59	90.7
1.307	10.37	PI-	-19.76	135.1	36.53	11.19	69.6
1.901	0.711	(+)	-24.36	144.1	38.97	12.83	79.8
3.615	1.010	(-)	4.59	-9.02	-2.440	CEX 0.123	0.766
1.460	187.46	PI+	-34.21	154.9	41.31	14.95	91.4
1.327	10.51	PI-	-20.22	136.4	36.37	11.30	69.1
1.911	0.717	(+)	-27.22	145.6	38.84	13.05	79.8
3.652	1.028	(-)	7.00	-9.26	-2.470	CEX 0.160	0.979
1.480	189.38	PI+	-39.45	155.9	41.03	15.22	91.5
1.347	10.65	PI-	-20.58	137.4	36.15	11.36	68.3
1.921	0.723	(+)	-30.02	146.7	38.59	13.19	79.3
3.689	1.045	(-)	9.44	-9.27	-2.440	CEX 0.206	1.239
1.500	191.30	PI+	-44.49	156.0	40.51	15.34	90.7
1.367	10.79	PI-	-20.81	138.4	35.93	11.41	67.4
1.930	0.729	(+)	-32.65	147.2	38.22	13.25	78.3
3.727	1.063	(-)	11.84	-8.82	-2.290	CEX 0.254	1.501
1.520	193.22	PI+	-48.96	155.4	39.81	15.31	89.0
1.387	10.94	PI-	-20.78	139.2	35.67	11.43	66.4
1.940	0.735	(+)	-34.87	147.3	37.74	13.22	76.8
3.764	1.081	(-)	14.09	-8.08	-2.070	CEX 0.304	1.769
1.540	195.13	PI+	-52.82	154.2	39.00	15.18	86.8
1.407	11.08	PI-	-20.86	140.4	35.50	11.50	65.8
1.950	0.741	(+)	-36.84	147.3	37.25	13.17	75.3
3.801	1.098	(-)	15.98	-6.92	-1.750	CEX 0.346	1.981
1.560	197.05	PI+	-55.95	152.6	38.10	14.94	84.1
1.427	11.22	PI-	-20.66	141.0	35.20	11.49	64.7
1.959	0.747	(+)	-38.30	146.8	36.65	13.02	73.3
3.839	1.116	(-)	17.64	-5.81	-1.450	CEX 0.390	2.197
1.580	198.97	PI+	-58.33	150.9	37.20	14.66	81.3
1.447	11.36	PI-	-20.04	142.0	35.00	11.52	63.8
1.969	0.753	(+)	-39.18	146.5	36.10	12.87	71.3
3.876	1.134	(-)	19.14	-4.46	-1.100	CEX 0.433	2.398
1.600	200.89	PI+	-59.98	149.1	36.28	14.32	78.1
1.466	11.51	PI-	-19.42	143.2	34.84	11.58	63.2
1.978	0.759	(+)	-39.70	146.1	35.56	12.72	69.4
3.914	1.152	(-)	20.28	-2.96	-0.720	CEX 0.466	2.542

K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	DS/DO MB/SR	DS/DT MB/GEV**2
1.650	205.69	PI+	-62.12	146.6	34.60	13.73	72.1
1.516	11.86	PI-	-17.69	146.9	34.66	11.85	62.3
2.002	0.773	(+)	-39.91	146.7	34.63	12.53	65.8
4.007	1.196	(-)	22.21	0.13	0.030	CEX 0.535	2.808
1.700	210.49	PI+	-63.40	144.5	33.11	13.19	66.8
1.566	12.22	PI-	-16.13	151.3	34.65	12.25	62.0
2.025	0.788	(+)	-39.77	147.9	33.88	12.42	62.9
4.101	1.241	(-)	23.64	3.36	0.770	CEX 0.603	3.055
1.750	215.29	PI+	-63.39	143.4	31.90	12.72	62.2
1.616	12.58	PI-	-14.78	156.4	34.80	12.77	62.4
2.048	0.802	(+)	-39.08	149.9	33.35	12.42	60.7
4.194	1.286	(-)	24.30	6.52	1.450	CEX 0.655	3.203
1.800	220.09	PI+	-62.72	143.1	30.95	12.35	58.3
1.666	12.93	PI-	-14.03	162.2	35.09	13.42	63.4
2.071	0.816	(+)	-38.37	152.6	33.02	12.54	59.2
4.288	1.330	(-)	24.34	9.57	2.070	CEX 0.693	3.272
1.850	224.89	PI+	-61.29	143.2	30.15	12.03	54.9
1.716	13.29	PI-	-13.88	168.1	35.39	14.10	64.4
2.093	0.829	(+)	-37.58	155.7	32.77	12.71	58.1
4.381	1.375	(-)	23.70	12.45	2.620	CEX 0.710	3.244
1.900	229.69	PI+	-59.23	144.7	29.65	11.85	52.4
1.766	13.65	PI-	-14.39	174.4	35.75	14.86	65.7
2.115	0.843	(+)	-36.81	159.5	32.70	13.01	57.5
4.475	1.420	(-)	22.42	14.88	3.050	CEX 0.702	3.107
1.950	234.50	PI+	-57.39	147.2	29.40	11.86	50.9
1.815	14.01	PI-	-15.76	180.6	36.06	15.61	66.9
2.137	0.856	(+)	-36.58	163.9	32.73	13.40	57.5
4.568	1.465	(-)	20.81	16.68	3.330	CEX 0.676	2.898
2.000	239.30	PI+	-55.90	150.2	29.24	11.96	49.7
1.865	14.36	PI-	-17.78	186.3	36.28	16.31	67.9
2.159	0.869	(+)	-36.84	168.3	32.76	13.81	57.5
4.662	1.511	(-)	19.06	18.08	3.520	CEX 0.643	2.673
2.050	244.11	PI+	-54.46	153.5	29.15	12.10	48.9
1.915	14.72	PI-	-20.25	191.6	36.39	16.94	68.4
2.181	0.882	(+)	-37.36	172.5	32.77	14.22	57.4
4.756	1.556	(-)	17.10	19.06	3.620	CEX 0.599	2.417
2.100	248.91	PI+	-52.99	157.2	29.15	12.32	48.3
1.965	15.08	PI-	-23.05	196.2	36.39	17.48	68.6
2.202	0.895	(+)	-38.02	176.7	32.77	14.63	57.4
4.849	1.601	(-)	14.97	19.52	3.620	CEX 0.542	2.126
2.150	253.72	PI+	-51.58	161.6	29.26	12.63	48.2
2.015	15.44	PI-	-26.02	200.2	36.26	17.90	68.3
2.223	0.907	(+)	-38.80	180.9	32.76	15.03	57.4
4.943	1.647	(-)	12.78	19.32	3.500	CEX 0.471	1.799
2.200	258.52	PI+	-50.57	166.7	29.50	13.07	48.6
2.065	15.79	PI-	-28.74	203.4	36.00	18.19	67.5
2.244	0.920	(+)	-39.66	185.0	32.75	15.43	57.3
5.036	1.692	(-)	10.92	18.36	3.250	CEX 0.393	1.461

K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	RHO	DS/DT MB/GEV**2
2.250	263.33	FI+	-50.3	172.2	29.80	-0.292	49.2
2.115	16.15	FI-	-31.1	206.3	35.70	-0.151	66.6
2.265	0.932	(+)	-40.7	189.2	32.75	-0.215	57.3
5.130	1.737	(-)	9.59	17.05	2.950	CEX 0.563	1.171
2.300	268.14	FI+	-50.8	177.8	30.10	-0.286	50.1
2.165	16.51	FI-	-33.2	208.7	35.34	-0.159	65.4
2.286	0.944	(+)	-42.0	193.3	32.72	-0.217	57.3
5.224	1.783	(-)	8.80	15.47	2.620	CEX 0.569	0.928
2.350	272.95	FI+	-51.9	183.2	30.35	-0.284	50.8
2.215	16.87	FI-	-34.8	210.9	34.95	-0.165	64.1
2.306	0.956	(+)	-43.4	197.0	32.65	-0.220	57.1
5.317	1.829	(-)	8.57	13.88	2.300	CEX 0.618	0.747
2.400	277.75	FI+	-53.5	188.2	30.54	-0.284	51.5
2.264	17.22	FI-	-35.8	213.1	34.58	-0.168	62.8
2.326	0.968	(+)	-44.7	200.7	32.56	-0.223	56.8
5.411	1.874	(-)	8.81	12.45	2.020	CEX 0.707	0.626
2.450	282.56	FI+	-55.2	193.0	30.68	-0.286	52.0
2.314	17.58	FI-	-36.5	215.6	34.26	-0.169	61.7
2.346	0.980	(+)	-45.9	204.3	32.47	-0.225	56.6
5.505	1.920	(-)	9.36	11.26	1.790	CEX 0.831	0.554
2.500	287.37	FI+	-57.3	197.6	30.78	-0.290	52.5
2.364	17.94	FI-	-37.1	218.3	34.00	-0.170	60.8
2.366	0.991	(+)	-47.2	207.9	32.39	-0.227	56.4
5.598	1.966	(-)	10.08	10.34	1.610	CEX 0.975	0.517
2.550	292.18	FI+	-59.6	201.9	30.83	-0.295	52.8
2.414	18.30	FI-	-37.7	221.0	33.75	-0.171	59.9
2.386	1.003	(+)	-48.7	211.4	32.29	-0.230	56.1
5.692	2.011	(-)	10.93	9.56	1.460	CEX 1.143	0.502
2.600	296.99	FI+	-62.1	205.7	30.81	-0.302	52.9
2.464	18.65	FI-	-38.2	223.7	33.51	-0.171	59.0
2.405	1.014	(+)	-50.2	214.7	32.16	-0.234	55.7
5.786	2.057	(-)	11.90	9.01	1.350	CEX 1.321	0.511
2.650	301.80	FI+	-64.5	209.2	30.74	-0.308	52.9
2.514	19.01	FI-	-38.6	226.5	33.28	-0.170	58.2
2.425	1.025	(+)	-51.6	217.8	32.01	-0.237	55.3
5.879	2.103	(-)	12.97	8.64	1.270	CEX 1.501	0.536
2.700	306.61	FI+	-67.0	212.3	30.62	-0.315	52.7
2.564	19.37	FI-	-38.8	229.4	33.08	-0.169	57.5
2.444	1.037	(+)	-52.9	220.8	31.85	-0.239	54.8
5.973	2.149	(-)	14.11	8.53	1.230	CEX 1.654	0.578
2.750	311.42	FI+	-69.3	215.0	30.45	-0.322	52.3
2.614	19.73	FI-	-38.9	232.4	32.91	-0.167	56.9
2.463	1.048	(+)	-54.1	223.7	31.68	-0.242	54.3
6.067	2.195	(-)	15.22	8.69	1.230	CEX 1.752	0.629
2.800	316.23	FI+	-71.4	217.4	30.24	-0.328	51.8
2.664	20.09	FI-	-39.1	235.6	32.76	-0.166	56.3
2.482	1.058	(+)	-55.2	226.5	31.50	-0.244	53.7
6.161	2.241	(-)	16.17	9.06	1.260	CEX 1.785	0.679

K-	-W-S	S-OMEGA		RE C	IM C	S TOT	RHO	DS/DT
	GEV	Q-2*Q**2		1/GEV	1/GEV	MB		MB/GEV**2
2.850		321.04	PI+	-73.3	219.7	30.02	-0.333	51.2
		20.44	PI-	-38.8	238.5	32.59	-0.163	55.7
2.501		1.069	(+)	-56.1	229.1	31.31	-0.245	53.1
6.254		2.287	(-)	17.2	9.4	1.285	CEX 1.830	0.734
2.900		325.85	PI+	-74.9	221.7	29.77	-0.338	50.4
		20.80	PI-	-38.7	242.6	32.57	-0.160	55.6
2.520		1.080	(+)	-56.8	232.1	31.17	-0.245	52.6
6.348		2.333	(-)	18.1	10.4	1.400	CEX 1.733	0.802
2.950		330.66	PI+	-76.1	223.6	29.52	-0.340	49.7
		21.16	PI-	-39.1	246.2	32.50	-0.159	55.3
2.538		1.091	(+)	-57.6	234.9	31.01	-0.245	52.1
6.442		2.379	(-)	18.5	11.3	1.490	CEX 1.637	0.835
3.000		335.47	PI+	-76.9	225.6	29.28	-0.341	48.9
		21.52	PI-	-39.5	249.9	32.44	-0.158	55.1
2.556		1.101	(+)	-58.2	237.7	30.86	-0.245	51.6
6.535		2.425	(-)	18.7	12.2	1.580	CEX 1.538	0.859
3.100		345.09	PI+	-77.9	230.1	28.91	-0.339	47.6
		22.23	PI-	-40.6	257.5	32.35	-0.158	54.8
2.593		1.122	(+)	-59.3	243.8	30.63	-0.243	50.8
6.723		2.517	(-)	18.6	13.7	1.720	CEX 1.361	0.862
3.200		354.71	PI+	-78.6	235.3	28.63	-0.334	46.5
		22.95	PI-	-42.4	264.7	32.21	-0.160	54.4
2.629		1.142	(+)	-60.5	250.0	30.42	-0.242	50.0
6.910		2.609	(-)	18.1	14.7	1.790	CEX 1.231	0.823
3.300		364.34	PI+	-79.0	241.0	28.44	-0.328	45.8
		23.66	PI-	-44.0	271.4	32.02	-0.162	53.8
2.664		1.162	(+)	-61.5	256.2	30.23	-0.240	49.4
7.098		2.701	(-)	17.5	15.2	1.790	CEX 1.153	0.762
3.400		373.96	PI+	-79.6	247.4	28.33	-0.322	45.3
		24.38	PI-	-45.7	277.9	31.83	-0.164	53.2
2.699		1.182	(+)	-62.6	262.6	30.08	-0.239	48.9
7.285		2.794	(-)	17.0	15.3	1.750	CEX 1.112	0.700
3.500		383.59	PI+	-80.7	254.0	28.26	-0.318	44.9
		25.10	PI-	-47.4	284.2	31.62	-0.167	52.5
2.734		1.201	(+)	-64.0	269.1	29.94	-0.238	48.4
7.473		2.886	(-)	16.7	15.1	1.680	CEX 1.103	0.639
3.600		393.21	PI+	-82.0	260.6	28.19	-0.315	44.6
		25.81	PI-	-48.7	290.0	31.37	-0.168	51.7
2.768		1.220	(+)	-65.4	275.3	29.78	-0.237	47.9
7.660		2.979	(-)	16.7	14.7	1.590	CEX 1.134	0.590
3.700		402.84	PI+	-83.7	267.2	28.12	-0.313	44.4
		26.53	PI-	-49.8	296.1	31.16	-0.168	51.0
2.801		1.239	(+)	-66.7	281.6	29.64	-0.237	47.4
7.848		3.071	(-)	17.0	14.4	1.520	CEX 1.175	0.562
3.800		412.46	PI+	-85.6	273.5	28.03	-0.313	44.1
		27.24	PI-	-50.7	302.0	30.95	-0.168	50.3
2.835		1.258	(+)	-68.1	287.8	29.49	-0.237	46.9
8.035		3.164	(-)	17.4	14.2	1.460	CEX 1.222	0.543

K-	-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	RHO	DS/DT MB/GEV**2
3.900		422.09	PI+	-87.6	279.6	27.92	-0.313	43.7
		27.96	PI-	-51.6	308.1	30.76	-0.167	49.7
2.868		1.276	(+)	-69.6	293.8	29.34	-0.237	46.4
8.223		3.257	(-)	18.0	14.2	1.420	CEX 1.266	0.536
4.000		431.71	PI+	-89.5	285.3	27.78	-0.314	43.3
		28.68	PI-	-52.3	314.1	30.58	-0.167	49.1
2.900		1.294	(+)	-70.9	299.7	29.18	-0.237	45.9
8.410		3.349	(-)	18.6	14.4	1.403	CEX 1.291	0.536
4.100		441.34	PI+	-91.3	290.8	27.62	-0.314	42.8
		29.39	PI-	-53.0	320.3	30.42	-0.166	48.6
2.932		1.312	(+)	-72.2	305.5	29.02	-0.236	45.4
8.598		3.442	(-)	19.1	14.7	1.397	CEX 1.301	0.537
4.200		450.97	PI+	-92.8	296.1	27.46	-0.313	42.3
		30.11	PI-	-53.7	326.4	30.26	-0.164	48.1
2.964		1.329	(+)	-73.3	311.3	28.86	-0.235	44.9
8.786		3.535	(-)	19.6	15.1	1.403	CEX 1.293	0.537
4.300		460.60	PI+	-94.0	301.4	27.30	-0.312	41.8
		30.82	PI-	-54.4	332.6	30.12	-0.163	47.6
2.996		1.347	(+)	-74.2	317.0	28.71	-0.234	44.4
8.973		3.628	(-)	19.8	15.6	1.411	CEX 1.273	0.533
4.400		470.22	PI+	-95.0	306.9	27.16	-0.310	41.3
		31.54	PI-	-55.0	338.7	29.98	-0.162	47.1
3.027		1.364	(+)	-75.0	322.8	28.57	-0.232	44.0
9.161		3.721	(-)	20.0	15.9	1.409	CEX 1.256	0.523
4.500		479.85	PI+	-96.0	312.5	27.04	-0.307	40.9
		32.26	PI-	-55.6	344.8	29.84	-0.161	46.7
3.057		1.381	(+)	-75.8	328.7	28.44	-0.231	43.5
9.348		3.814	(-)	20.2	16.2	1.401	CEX 1.245	0.512
4.600		489.48	PI+	-96.8	318.1	26.93	-0.304	40.5
		32.97	PI-	-56.2	351.0	29.71	-0.160	46.3
3.088		1.398	(+)	-76.5	334.5	28.32	-0.229	43.1
9.536		3.907	(-)	20.3	16.4	1.391	CEX 1.238	0.501
4.700		499.11	PI+	-97.7	323.8	26.83	-0.302	40.1
		33.69	PI-	-56.6	357.1	29.59	-0.159	45.9
3.118		1.414	(+)	-77.1	340.5	28.21	-0.227	42.7
9.723		4.000	(-)	20.5	16.7	1.380	CEX 1.233	0.490
4.800		508.73	PI+	-98.5	329.6	26.74	-0.299	39.8
		34.40	PI-	-57.0	363.4	29.48	-0.157	45.5
3.148		1.431	(+)	-77.8	346.5	28.11	-0.224	42.4
9.911		4.093	(-)	20.7	16.9	1.369	CEX 1.228	0.480
4.900		518.36	PI+	-99.3	335.5	26.66	-0.296	39.5
		35.12	PI-	-57.5	369.7	29.38	-0.156	45.2
3.178		1.447	(+)	-78.4	352.6	28.02	-0.222	42.1
10.098		4.186	(-)	20.9	17.1	1.358	CEX 1.224	0.471
5.000		527.99	PI+	-100.2	341.3	26.58	-0.294	39.2
		35.84	PI-	-58.0	375.9	29.28	-0.154	44.8
3.207		1.463	(+)	-79.1	358.6	27.93	-0.220	41.8
10.286		4.279	(-)	21.1	17.3	1.347	CEX 1.221	0.462

K-	-W-S	S-OMEGA		RE C	IM C	S TOT	RHO	DS/DT
GEV		Q-2*Q**2		1/GEV	1/GEV	MB		MB/GEV**2
5.200		547.25	PI+	-101.8	353.1	26.44	-0.288	38.7
		37.27	PI-	-58.8	388.5	29.09	-0.151	44.2
3.265		1.494	(+)	-80.3	370.8	27.77	-0.217	41.2
10.661		4.466	(-)	21.5	17.7	1.325 CEX	1.215	0.444
5.400		566.51	PI+	-103.5	365.0	26.32	-0.284	38.2
		38.70	PI-	-59.7	401.1	28.93	-0.149	43.7
3.322		1.525	(+)	-81.6	383.1	27.62	-0.213	40.8
11.036		4.652	(-)	21.9	18.1	1.303 CEX	1.212	0.428
5.600		585.76	PI+	-105.1	376.9	26.21	-0.279	37.8
		40.13	PI-	-60.6	413.8	28.78	-0.146	43.2
3.378		1.555	(+)	-82.8	395.4	27.49	-0.210	40.3
11.412		4.838	(-)	22.3	18.5	1.283 CEX	1.208	0.414
5.800		605.02	PI+	-106.8	388.8	26.11	-0.275	37.4
		41.57	PI-	-61.4	426.5	28.63	-0.144	42.8
3.433		1.585	(+)	-84.1	407.6	27.37	-0.206	39.9
11.787		5.025	(-)	22.7	18.8	1.263 CEX	1.205	0.400
6.000		624.28	PI+	-108.4	400.8	26.01	-0.270	37.1
		43.00	PI-	-62.3	439.1	28.50	-0.142	42.3
3.487		1.614	(+)	-85.4	420.0	27.26	-0.203	39.5
12.162		5.212	(-)	23.0	19.2	1.244 CEX	1.203	0.387
6.200		643.54	PI+	-110.1	412.8	25.92	-0.267	36.8
		44.43	PI-	-63.2	451.8	28.37	-0.140	41.9
3.541		1.643	(+)	-86.6	432.3	27.15	-0.200	39.2
12.537		5.398	(-)	23.4	19.5	1.225 CEX	1.201	0.375
6.400		662.80	PI+	-111.7	424.7	25.84	-0.263	36.5
		45.86	PI-	-64.1	464.4	28.26	-0.138	41.6
3.593		1.671	(+)	-87.9	444.5	27.05	-0.198	38.8
12.912		5.585	(-)	23.8	19.9	1.208 CEX	1.199	0.364
6.600		682.06	PI+	-113.3	436.6	25.76	-0.260	36.2
		47.30	PI-	-65.0	477.0	28.14	-0.136	41.2
3.645		1.699	(+)	-89.1	456.8	26.95	-0.195	38.5
13.288		5.772	(-)	24.2	20.2	1.191 CEX	1.198	0.353
6.800		701.32	PI+	-114.9	448.5	25.68	-0.256	35.9
		48.73	PI-	-65.8	489.6	28.04	-0.134	40.9
3.696		1.726	(+)	-90.4	469.0	26.86	-0.193	38.2
13.663		5.959	(-)	24.6	20.5	1.175 CEX	1.197	0.343
7.000		720.58	PI+	-116.5	460.4	25.61	-0.253	35.7
		50.16	PI-	-66.7	502.1	27.93	-0.133	40.6
3.747		1.753	(+)	-91.6	481.3	26.77	-0.190	37.9
14.038		6.146	(-)	24.9	20.9	1.160 CEX	1.195	0.334
7.200		739.84	PI+	-118.1	472.3	25.54	-0.250	35.4
		51.59	PI-	-67.5	514.6	27.83	-0.131	40.3
3.796		1.779	(+)	-92.8	493.4	26.69	-0.188	37.7
14.413		6.333	(-)	25.3	21.2	1.146 CEX	1.194	0.325
7.400		759.11	PI+	-119.6	484.1	25.48	-0.247	35.2
		53.03	PI-	-68.3	527.1	27.74	-0.130	40.0
3.846		1.805	(+)	-94.0	505.6	26.61	-0.186	37.4
14.788		6.520	(-)	25.7	21.5	1.132 CEX	1.193	0.317



K-	-W-S	S-OMEGA		RE C	IM C	S TOT	RHO	DS/DT
GEV	Q-2*Q**2			1/GEV	1/GEV	MB		MB/GEV**2
7.600	778.37	PI+		-121.2	496.0	25.41	-0.244	35.0
	54.46	PI-		-69.1	539.6	27.65	-0.128	39.7
3.894	1.831	(+)		-95.1	517.8	26.53	-0.184	37.2
15.164	6.707	(-)		26.0	21.8	1.118	CEX 1.192	0.309
7.800	797.63	PI+		-122.6	507.8	25.35	-0.242	34.7
	55.89	PI-		-69.9	552.1	27.56	-0.127	39.4
3.942	1.857	(+)		-96.3	529.9	26.46	-0.182	36.9
15.539	6.894	(-)		26.4	22.1	1.105	CEX 1.191	0.302
8.000	816.89	PI+		-124.1	519.6	25.29	-0.239	34.5
	57.33	PI-		-70.7	564.5	27.48	-0.125	39.2
3.989	1.882	(+)		-97.4	542.0	26.38	-0.180	36.7
15.914	7.081	(-)		26.7	22.4	1.093	CEX 1.191	0.295
9.000	913.20	PI+		-131.0	578.5	25.03	-0.226	33.6
	64.49	PI-		-74.2	626.4	27.10	-0.118	38.1
4.218	2.002	(+)		-102.6	602.5	26.07	-0.170	35.7
17.790	8.016	(-)		28.4	23.9	1.036	CEX 1.187	0.264
10.000	1009.51	PI+		-137.3	637.2	24.81	-0.216	32.9
	71.65	PI-		-77.1	687.9	26.79	-0.112	37.1
4.435	2.116	(+)		-107.2	662.6	25.80	-0.162	34.9
19.667	8.952	(-)		30.1	25.4	0.988	CEX 1.187	0.240
11.000	1105.83	PI+		-143.2	695.7	24.63	-0.206	32.3
	78.82	PI-		-79.8	749.2	26.52	-0.106	36.3
4.641	2.224	(+)		-111.5	722.4	25.57	-0.154	34.2
21.543	9.889	(-)		31.7	26.7	0.947	CEX 1.185	0.220
12.000	1202.14	PI+		-148.5	754.0	24.47	-0.197	31.8
	85.98	PI-		-82.1	810.2	26.29	-0.101	35.7
4.839	2.327	(+)		-115.3	782.1	25.38	-0.147	33.6
23.420	10.826	(-)		33.2	28.1	0.910	CEX 1.183	0.203
13.000	1298.46	PI+		-153.3	812.3	24.33	-0.189	31.3
	93.14	PI-		-84.1	870.9	26.09	-0.097	35.1
5.030	2.425	(+)		-118.7	841.6	25.21	-0.141	33.1
25.296	11.763	(-)		34.6	29.3	0.878	CEX 1.182	0.189
14.000	1394.78	PI+		-157.8	870.5	24.21	-0.181	30.9
	100.31	PI-		-85.7	931.5	25.91	-0.092	34.6
5.213	2.520	(+)		-121.8	901.0	25.06	-0.135	32.7
27.172	12.700	(-)		36.0	30.5	0.849	CEX 1.180	0.176
15.000	1491.10	PI+		-161.9	928.6	24.11	-0.174	30.6
	107.47	PI-		-87.1	992.0	25.75	-0.088	34.1
5.390	2.611	(+)		-124.5	960.3	24.93	-0.130	32.3
29.049	13.637	(-)		37.4	31.7	0.823	CEX 1.179	0.166
16.000	1587.42	PI+		-165.6	986.7	24.01	-0.168	30.3
	114.64	PI-		-88.2	1052.4	25.61	-0.084	33.7
5.561	2.700	(+)		-126.9	1019.5	24.81	-0.124	31.9
30.925	14.575	(-)		38.7	32.9	0.800	CEX 1.179	0.156
17.000	1683.74	PI+		-169.1	1044.7	23.93	-0.162	30.0
	121.80	PI-		-89.0	1112.6	25.49	-0.080	33.4
5.727	2.785	(+)		-129.0	1078.7	24.71	-0.120	31.6
32.802	15.512	(-)		40.0	34.0	0.778	CEX 1.178	0.148

K-	-W-S	S-OMEGA		RE C	IM C	S TOT	RHO	DS/DT
GEV	Q-2*Q**2			1/GEV	1/GEV	MB		MB/GEV**2
18.000	1780.06	PI+		-172.2	1102.7	23.86	-0.156	29.8
	128.97	PI-		-89.6	1172.8	25.37	-0.076	33.1
5.889	2.868	(+)		-130.9	1137.8	24.61	-0.115	31.4
34.678	16.450	(-)		41.3	35.1	0.759 CEX	1.177	0.1403
19.000	1876.38	PI+		-175.0	1160.7	23.79	-0.151	29.6
	136.13	PI-		-90.0	1232.9	25.27	-0.073	32.8
6.046	2.949	(+)		-132.5	1196.8	24.53	-0.111	31.1
36.555	17.388	(-)		42.5	36.1	0.740 CEX	1.177	0.1335
20.000	1972.70	PI+		-177.6	1218.7	23.73	-0.146	29.4
	143.29	PI-		-90.2	1293.0	25.17	-0.070	32.5
6.199	3.027	(+)		-133.9	1255.8	24.45	-0.107	30.9
38.431	18.325	(-)		43.7	37.2	0.723 CEX	1.176	0.1274
22.000	2165.34	PI+		-182.0	1334.7	23.62	-0.136	29.0
	157.62	PI-		-90.0	1413.0	25.01	-0.064	32.1
6.495	3.178	(+)		-136.0	1373.8	24.32	-0.099	30.5
42.184	20.201	(-)		46.0	39.2	0.693 CEX	1.176	0.1169
24.000	2357.98	PI+		-185.5	1450.7	23.54	-0.128	28.8
	171.95	PI-		-89.0	1532.8	24.87	-0.058	31.7
6.778	3.322	(+)		-137.3	1491.8	24.20	-0.092	30.2
45.937	22.077	(-)		48.3	41.1	0.666 CEX	1.175	0.1080
26.000	2550.62	PI+		-188.2	1566.8	23.47	-0.120	28.5
	186.28	PI-		-87.4	1652.6	24.75	-0.053	31.4
7.049	3.461	(+)		-137.8	1609.7	24.11	-0.086	29.9
49.690	23.953	(-)		50.4	42.9	0.643 CEX	1.174	0.1005
28.000	2743.27	PI+		-190.2	1683.0	23.41	-0.113	28.3
	200.61	PI-		-85.3	1772.4	24.65	-0.048	31.1
7.310	3.594	(+)		-137.7	1727.7	24.03	-0.080	29.7
53.443	25.829	(-)		52.5	44.7	0.622 CEX	1.174	0.0939
30.000	2935.91	PI+		-191.5	1799.3	23.36	-0.106	28.2
	214.94	PI-		-82.5	1892.2	24.56	-0.044	30.9
7.563	3.722	(+)		-137.0	1845.8	23.96	-0.074	29.5
57.196	27.705	(-)		54.5	46.4	0.603 CEX	1.174	0.0883
35.000	3417.52	PI+		-192.2	2090.7	23.26	-0.092	27.9
	250.76	PI-		-73.6	2191.8	24.39	-0.034	30.4
8.160	4.025	(+)		-132.9	2141.3	23.82	-0.062	29.1
66.578	32.395	(-)		59.3	50.5	0.562 CEX	1.173	0.0768
40.000	3899.13	PI+		-189.5	2383.1	23.20	-0.080	27.7
	286.58	PI-		-61.9	2491.9	24.26	-0.025	30.1
8.716	4.306	(+)		-125.7	2437.5	23.73	-0.052	28.8
75.961	37.086	(-)		63.8	54.4	0.530 CEX	1.173	0.0681
45.000	4380.75	PI+		-184.1	2676.5	23.16	-0.069	27.5
	322.41	PI-		-48.0	2792.6	24.17	-0.017	29.8
9.238	4.570	(+)		-116.0	2734.6	23.66	-0.042	28.7
85.343	41.776	(-)		68.0	58.0	0.502 CEX	1.172	0.0612
50.000	4862.36	PI+		-176.2	2971.0	23.14	-0.059	27.4
	358.23	PI-		-32.0	3094.0	24.10	-0.010	29.7
9.733	4.820	(+)		-104.1	3032.5	23.62	-0.034	28.5
94.726	46.467	(-)		72.1	61.5	0.479 CEX	1.172	0.0556

K-	-W-S GEV	S-OMEGA R-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	RHO	DS/DT MB/GEV**2
55.000		5343.97	PI+	-166.1	3267.	23.13	-0.051	27.4
		394.05	PI-	-14.2	3396.	24.05	-0.004	29.5
10.203		5.058	(+)	-90.1	3331.	23.59	-0.027	28.4
104.108		51.158	(-)	76.0	64.8	0.459	CEX 1.172	0.0511
60.000		5825.59	PI+	-154.1	3563.	23.13	-0.043	27.4
		429.87	PI-	5.3	3699.	24.01	0.001	29.4
10.653		5.284	(+)	-74.4	3631.	23.57	-0.020	28.4
113.491		55.849	(-)	79.7	68.0	0.441	CEX 1.172	0.0472
65.000		6307.20	PI+	-140.3	3861.	23.13	-0.036	27.4
		465.70	PI-	26.2	4003.	23.98	0.007	29.4
11.085		5.502	(+)	-57.0	3932.	23.56	-0.015	28.4
122.874		60.540	(-)	83.2	71.0	0.426	CEX 1.172	0.0439
70.000		6788.82	PI+	-124.8	4160.	23.14	-0.030	27.4
		501.52	PI-	48.6	4308.	23.96	0.011	29.3
11.500		5.711	(+)	-38.1	4234.	23.55	-0.009	28.3
132.256		65.231	(-)	86.7	74.0	0.412	CEX 1.172	0.0411
80.000		7752.05	PI+	-89.6	4761.	23.17	-0.019	27.4
		573.16	PI-	96.9	4920.	23.95	0.020	29.3
12.289		6.108	(+)	3.6	4840.	23.56	0.001	28.4
151.021		74.614	(-)	93.3	79.6	0.388	CEX 1.171	0.0364
90.000		8715.28	PI+	-49.3	5366.	23.22	-0.009	27.5
		644.81	PI-	149.8	5536.	23.95	0.027	29.3
13.030		6.481	(+)	50.2	5451.	23.58	0.009	28.4
169.786		83.996	(-)	99.5	85.0	0.368	CEX 1.171	0.0328
100.000		9678.50	PI+	-4.5	5974.	23.26	-0.001	27.7
		716.45	PI-	206.5	6155.	23.97	0.034	29.4
13.731		6.833	(+)	101.0	6064.	23.62	0.017	28.5
188.551		93.378	(-)	105.5	90.0	0.351	CEX 1.171	0.0298
110.000		10641.74	PI+	44.4	6587.	23.32	0.007	27.8
		788.10	PI-	266.7	6777.	23.99	0.039	29.4
14.398		7.168	(+)	155.5	6682.	23.65	0.023	28.6
207.317		102.761	(-)	111.1	94.9	0.336	CEX 1.171	0.0273
120.000		11604.96	PI+	96.9	7203.	23.37	0.013	27.9
		859.75	PI-	330.0	7402.	24.02	0.045	29.5
15.036		7.488	(+)	213.4	7303.	23.70	0.029	28.7
226.082		112.143	(-)	116.6	99.5	0.323	CEX 1.171	0.0253
130.000		12568.19	PI+	152.6	7823.	23.43	0.020	28.1
		931.39	PI-	396.3	8031.	24.06	0.049	29.6
15.648		7.795	(+)	274.4	7927.	23.74	0.035	28.8
244.847		121.526	(-)	121.8	104.0	0.312	CEX 1.171	0.0235
140.000		13531.43	PI+	211.4	8446.	23.49	0.025	28.2
		1003.04	PI-	465.1	8662.	24.09	0.054	29.7
16.236		8.090	(+)	338.3	8554.	23.79	0.040	29.0
263.612		130.908	(-)	126.9	108.3	0.301	CEX 1.171	0.0220
150.000		14494.66	PI+	272.9	9072.	23.55	0.030	28.4
		1074.68	PI-	536.5	9297.	24.13	0.058	29.9
16.804		8.375	(+)	404.7	9184.	23.84	0.044	29.1
282.377		140.291	(-)	131.8	112.5	0.292	CEX 1.171	0.0207

K-	-W-S	S-OMEGA	RE C	IM C	S TOT	RHO	DS/DT
GEV	Q-2*Q**2		1/GEV	1/GEV	MB		MB/GEV**2
160.000	15457.89	PI+	337.0	9701.	23.61	0.035	28.5
	1146.33	PI-	610.1	9934.	24.18	0.061	30.0
17.353	8.651	(+)	473.5	9817.	23.89	0.048	29.2
301.142	149.673	(-)	136.5	116.6	0.284	1.171	0.0195
170.000	16421.12	PI+	403.5	10333.	23.67	0.039	28.7
	1217.97	PI-	685.8	10574.	24.22	0.065	30.1
17.886	8.918	(+)	544.7	10454.	23.95	0.052	29.4
319.907	159.056	(-)	141.2	120.6	0.276	1.171	0.0185
180.000	17384.35	PI+	472.2	10968.	23.73	0.043	28.8
	1289.62	PI-	763.6	11217.	24.27	0.068	30.2
18.403	9.177	(+)	617.9	11092.	24.00	0.056	29.5
338.672	168.438	(-)	145.7	124.4	0.269	1.171	0.0175
200.000	19310.81	PI+	615.9	12246.	23.84	0.050	29.1
	1432.91	PI-	924.6	12510.	24.36	0.074	30.5
19.396	9.675	(+)	770.3	12378.	24.10	0.062	29.8
376.203	187.203	(-)	154.4	131.8	0.257	1.171	0.0160
220.000	21237.27	PI+	767.1	13535.	23.96	0.057	29.4
	1576.20	PI-	1092.4	13813.	24.45	0.079	30.7
20.340	10.148	(+)	929.8	13674.	24.20	0.068	30.1
413.733	205.968	(-)	162.7	138.9	0.246	1.171	0.0146
240.000	23163.73	PI+	925.1	14834.	24.07	0.062	29.7
	1719.49	PI-	1266.4	15126.	24.54	0.084	31.0
21.243	10.600	(+)	1095.8	14980.	24.31	0.073	30.3
451.263	224.734	(-)	170.6	145.7	0.236	1.171	0.0135
260.000	25090.19	PI+	1089.3	16142.	24.18	0.067	30.0
	1862.78	PI-	1445.9	16447.	24.63	0.088	31.2
22.109	11.034	(+)	1267.6	16295.	24.40	0.078	30.6
488.794	243.499	(-)	178.3	152.3	0.228	1.171	0.0126
280.000	27016.65	PI+	1259.2	17459.	24.28	0.072	30.3
	2006.07	PI-	1630.6	17777.	24.72	0.092	31.5
22.942	11.451	(+)	1444.9	17618.	24.50	0.082	30.9
526.324	262.264	(-)	185.7	158.6	0.221	1.171	0.0118
300.000	28943.11	PI+	1434.3	18785.	24.38	0.076	30.6
	2149.36	PI-	1820.1	19115.	24.81	0.095	31.7
23.746	11.854	(+)	1627.2	18950.	24.60	0.086	31.1
563.854	281.029	(-)	192.9	164.8	0.214	1.171	0.0111
350.000	33759.27	PI+	1892.7	22134.	24.63	0.086	31.2
	2507.59	PI-	2312.7	22493.	25.03	0.103	32.3
25.645	12.805	(+)	2102.7	22313.	24.83	0.094	31.8
657.680	327.942	(-)	210.0	179.3	0.200	1.171	0.0096
400.000	38575.42	PI+	2377.0	25529.	24.85	0.093	31.8
	2865.82	PI-	2829.0	25915.	25.23	0.109	32.9
27.414	13.690	(+)	2603.0	25722.	25.04	0.101	32.4
751.506	374.855	(-)	226.0	193.0	0.188	1.171	0.0086
450.000	43391.57	PI+	2883.8	28966.	25.07	0.100	32.4
	3224.04	PI-	3366.0	29378.	25.42	0.115	33.5
29.075	14.522	(+)	3124.9	29172.	25.24	0.107	32.9
845.331	421.768	(-)	241.1	205.9	0.178	1.171	0.0077

K-	-W-S	S-OMEGA		RE C	IM C	S TOT	RHO	DS/DT
GEV		Q-2*Q**2		1/GEV	1/GEV	MB		MB/GEV**2
500.000		48207.73	FI+	3410.4	32442.	25.27	0.105	33.0
		3582.27	FI-	3921.4	32878.	25.61	0.119	34.0
30.646		15.308	(+)	3665.9	32660.	25.44	0.112	33.5
939.157		468.681	(-)	255.5	218.2	0.170	CEX 1.171	0.0070
600.000		57840.04	FI+	4515.1	39499.	25.64	0.114	34.0
		4298.72	FI-	5080.0	39981.	25.95	0.127	35.0
33.568		16.771	(+)	4797.6	39740.	25.79	0.121	34.5
1126.808		562.507	(-)	282.4	241.2	0.157	CEX 1.171	0.0059
700.000		67472.34	FI+	5678.6	46682.	25.97	0.122	35.0
		5015.18	FI-	6293.4	47207.	26.26	0.133	35.9
36.255		18.115	(+)	5986.0	46945.	26.12	0.128	35.4
1314.460		656.333	(-)	307.4	262.6	0.146	CEX 1.171	0.0052
800.000		77104.64	FI+	6892.0	53979.	26.27	0.128	35.8
		5731.63	FI-	7553.7	54544.	26.55	0.138	36.7
38.757		19.367	(+)	7222.8	54261.	26.41	0.133	36.3
1502.111		750.159	(-)	330.8	282.6	0.138	CEX 1.171	0.0046
900.000		86736.95	FI+	8148.7	61377.	26.56	0.133	36.7
		6448.09	FI-	8854.7	61980.	26.82	0.143	37.5
41.107		20.542	(+)	8501.7	61678.	26.69	0.138	37.1
1689.763		843.985	(-)	353.0	301.5	0.130	CEX 1.171	0.0041
1000.000		96369.27	FI+	9443.8	68869.	26.82	0.137	37.4
		7164.54	FI-	10191.9	69508.	27.07	0.147	38.2
43.329		21.654	(+)	9817.9	69188.	26.94	0.142	37.8
1877.414		937.811	(-)	374.0	319.5	0.124	CEX 1.171	0.0037



K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	DS/DO MB/SR	DS/DT MB/GEV**2
0.001	59.63	PI+	-10.48	0.01	2.60	0.21	*****
0.000	1.00	PI-	8.50	0.02	5.90	0.13	*****
1.078	0.001	(+)	-0.99	0.01	4.25	0.00	7612.9
1.162	0.000	(-)	9.49	0.00	1.650	CEX	0.34 *****
0.002	59.63	PI+	-10.48	0.01	2.62	0.21	*****
0.000	1.00	PI-	8.50	0.03	5.91	0.14	*****
1.078	0.002	(+)	-0.99	0.02	4.27	0.00	1883.2
1.162	0.000	(-)	9.49	0.01	1.647	CEX	0.34 *****
0.005	59.64	PI+	-10.44	0.03	2.63	0.20	33764.
0.000	1.00	PI-	8.53	0.08	5.92	0.14	22527.
1.078	0.004	(+)	-0.96	0.05	4.28	0.00	284.2
1.162	0.000	(-)	9.48	0.02	1.647	CEX	0.34 55723.4
0.010	59.67	PI+	-10.32	0.07	2.65	0.20	8248.8
0.000	1.00	PI-	8.57	0.15	5.94	0.14	5696.5
1.078	0.009	(+)	-0.87	0.11	4.29	0.00	59.9
1.162	0.000	(-)	9.45	0.04	1.643	CEX	0.33 13825.4
0.020	59.77	PI+	-9.90	0.14	2.70	0.18	1898.9
0.001	1.01	PI-	8.63	0.30	5.90	0.14	1444.1
1.079	0.017	(+)	-0.64	0.22	4.30	0.00	8.8
1.164	0.001	(-)	9.27	0.08	1.600	CEX	0.32 3325.40
0.040	60.17	PI+	-8.36	0.30	2.90	0.13	338.6
0.006	1.04	PI-	8.61	0.60	5.80	0.14	360.9
1.083	0.035	(+)	0.13	0.45	4.35	0.00	1.0
1.172	0.002	(-)	8.48	0.15	1.450	CEX	0.27 697.33
0.060	60.82	PI+	-5.72	0.49	3.20	0.06	71.0
0.012	1.09	PI-	8.78	0.86	5.60	0.14	167.4
1.089	0.052	(+)	1.53	0.68	4.40	0.01	6.0
1.185	0.005	(-)	7.25	0.18	1.200	CEX	0.19 226.44
0.080	61.68	PI+	-1.96	0.87	4.25	0.01	5.6
0.021	1.15	PI-	9.24	1.16	5.65	0.16	104.9
1.096	0.068	(+)	3.64	1.02	4.95	0.03	17.3
1.202	0.009	(-)	5.60	0.14	0.700	CEX	0.11 75.87
0.100	62.73	PI+	3.12	1.52	5.90	0.02	9.3
0.032	1.23	PI-	10.14	1.52	5.90	0.19	81.5
1.105	0.085	(+)	6.63	1.52	5.90	0.08	35.9
1.222	0.014	(-)	3.51	0.00	0.000	CEX	0.04 19.08
0.120	63.92	PI+	9.86	2.97	9.64	0.18	57.0
0.044	1.32	PI-	11.69	2.12	6.88	0.25	75.9
1.116	0.101	(+)	10.77	2.55	8.26	0.21	65.9
1.245	0.020	(-)	0.92	-0.43	-1.380	CEX	0.00 1.10
0.140	65.23	PI+	18.27	6.03	16.78	0.63	146.3
0.058	1.42	PI-	13.94	3.23	8.99	0.35	81.0
1.127	0.117	(+)	16.11	4.63	12.89	0.48	111.0
1.271	0.027	(-)	-2.16	-1.40	-3.893	CEX	0.02 5.24
0.160	66.64	PI+	28.34	11.43	27.83	1.56	282.7
0.073	1.52	PI-	16.94	5.13	12.48	0.52	94.8
1.139	0.132	(+)	22.64	8.28	20.15	0.97	175.9
1.298	0.035	(-)	-5.70	-3.15	-7.676	CEX	0.14 25.71

K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB		DS/DO MB/SR	DS/DT MB/GEV**2
0.180	68.13	PI+	40.07	20.6	44.60		3.32	485.6
0.088	1.63	PI-	20.66	8.3	17.90		0.81	118.5
1.152	0.147	(+)	30.37	14.4	31.25		1.85	270.4
1.327	0.043	(-)	-9.70	-6.17	-13.350	CEX	0.433	63.247
0.200	69.68	PI+	52.51	35.9	69.94		6.47	784.0
0.104	1.75	PI-	24.83	13.4	26.18		1.27	154.4
1.165	0.161	(+)	38.67	24.7	48.06		3.37	407.6
1.357	0.052	(-)	-13.84	-11.24	-21.880	CEX	1.017	123.125
0.220	71.28	PI+	62.10	60.2	106.61		11.70	1197.8
0.121	1.87	PI-	28.26	21.6	38.27		1.98	202.6
1.178	0.175	(+)	45.18	40.9	72.44		5.81	594.8
1.389	0.061	(-)	-16.92	-19.30	-34.169	CEX	2.060	210.944
0.240	72.93	PI+	61.27	93.8	152.21		19.18	1688.5
0.138	1.99	PI-	28.44	32.9	53.34		2.89	254.2
1.192	0.189	(+)	44.86	63.3	102.77		9.20	810.2
1.421	0.071	(-)	-16.41	-30.47	-49.436	CEX	3.660	322.177
0.260	74.61	PI+	41.96	128.8	192.95		27.42	2103.7
0.156	2.11	PI-	22.71	44.6	66.85		3.75	287.4
1.206	0.202	(+)	32.33	86.7	129.90		12.80	981.9
1.454	0.082	(-)	-9.63	-42.10	-63.050	CEX	5.570	427.421
0.280	76.32	PI+	6.06	150.1	208.72		32.94	2229.2
0.173	2.24	PI-	11.55	51.8	72.04		4.11	278.3
1.219	0.215	(+)	8.80	100.9	140.38		14.99	1014.4
1.487	0.093	(-)	2.75	-49.14	-68.339	CEX	7.072	478.674
0.300	78.06	PI+	-32.29	150.0	194.69		33.60	2026.1
0.191	2.37	PI-	0.28	51.4	66.77		3.78	227.8
1.233	0.228	(+)	-16.00	100.7	130.73		14.84	895.1
1.521	0.104	(-)	16.28	-49.27	-63.959	CEX	7.689	463.616
0.320	79.82	PI+	-60.57	135.9	165.32		30.89	1673.8
0.210	2.50	PI-	-7.02	47.3	57.57		3.19	173.1
1.247	0.241	(+)	-33.80	91.6	111.45		13.30	720.9
1.555	0.116	(-)	26.78	-44.27	-53.873	CEX	7.474	405.017
0.340	81.59	PI+	-76.88	117.9	135.07		27.07	1328.1
0.228	2.63	PI-	-10.45	42.3	48.45		2.59	127.2
1.261	0.253	(+)	-43.66	80.1	91.76		11.37	557.9
1.589	0.128	(-)	33.21	-37.82	-43.312	CEX	6.919	339.517
0.360	83.38	PI+	-85.02	101.6	109.85		23.44	1048.5
0.247	2.77	PI-	-11.17	38.0	41.14		2.10	93.9
1.275	0.265	(+)	-48.10	69.8	75.49		9.60	429.4
1.624	0.140	(-)	36.93	-31.76	-34.356	CEX	6.341	283.600
0.380	85.18	PI+	-88.45	87.8	89.95		20.31	833.1
0.265	2.90	PI-	-10.29	34.8	35.64		1.72	70.6
1.288	0.277	(+)	-49.37	61.3	62.80		8.10	332.2
1.659	0.153	(-)	39.08	-26.50	-27.153	CEX	5.833	239.200
0.400	87.00	PI+	-89.23	76.7	74.67		17.73	670.3
0.284	3.04	PI-	-8.42	32.5	31.68		1.45	54.7
1.302	0.288	(+)	-48.83	54.6	53.18		6.88	259.9
1.695	0.166	(-)	40.40	-22.08	-21.494	CEX	5.430	205.266



K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	DS/DO MB/SR	DS/DT MB/GEV**2
0.420	88.82	PI+	-88.65	67.8	62.85	15.62	546.9
0.303	3.17	PI-	-5.80	31.2	28.92	1.26	44.2
1.315	0.300	(+)	-47.22	49.5	45.89	5.87	205.5
1.730	0.179	(-)	41.42	-18.30	-16.968	CEX 5.145	180.113
0.440	90.65	PI+	-87.30	60.5	53.54	13.87	451.5
0.322	3.31	PI-	-2.61	30.9	27.37	1.18	38.6
1.329	0.311	(+)	-44.96	45.7	40.46	5.05	164.5
1.766	0.193	(-)	42.35	-14.78	-13.084	CEX 4.946	161.023
0.460	92.49	PI+	-85.50	54.5	46.11	12.38	376.2
0.341	3.44	PI-	0.52	31.9	27.03	1.23	37.3
1.342	0.322	(+)	-42.49	43.2	36.57	4.42	134.4
1.802	0.207	(-)	43.01	-11.27	-9.538	CEX 4.763	144.747
0.480	94.34	PI+	-83.43	49.4	40.10	11.11	316.2
0.360	3.58	PI-	3.25	33.5	27.19	1.34	38.1
1.356	0.332	(+)	-40.09	41.5	33.64	3.93	111.8
1.838	0.221	(-)	43.34	-7.96	-6.456	CEX 4.587	130.576
0.500	96.19	PI+	-81.18	45.1	35.13	9.99	267.2
0.380	3.72	PI-	5.66	35.5	27.68	1.50	40.1
1.369	0.343	(+)	-37.76	40.3	31.40	3.53	94.6
1.874	0.235	(-)	43.42	-4.78	-3.726	CEX 4.421	118.250
0.520	98.05	PI+	-78.67	41.3	30.95	8.97	226.2
0.399	3.86	PI-	7.72	37.7	28.21	1.68	42.4
1.382	0.353	(+)	-35.47	39.5	29.58	3.20	80.7
1.910	0.249	(-)	43.19	-1.83	-1.368	CEX 4.248	107.091
0.540	99.91	PI+	-75.82	38.2	27.53	8.04	191.4
0.418	4.00	PI-	9.91	39.6	28.58	1.86	44.3
1.395	0.363	(+)	-32.95	38.9	28.05	2.90	69.1
1.946	0.264	(-)	42.86	0.73	0.528	CEX 4.099	97.642
0.560	101.78	PI+	-72.87	35.8	24.92	7.22	162.9
0.438	4.13	PI-	12.46	42.0	29.21	2.10	47.4
1.408	0.373	(+)	-30.21	38.9	27.06	2.66	59.9
1.983	0.278	(-)	42.66	3.08	2.145	CEX 4.007	90.402
0.580	103.65	PI+	-70.20	34.0	22.85	6.54	140.1
0.457	4.27	PI-	15.04	44.9	30.16	2.41	51.7
1.421	0.383	(+)	-27.58	39.5	26.50	2.49	53.4
2.019	0.293	(-)	42.62	5.44	3.654	CEX 3.969	85.028
0.600	105.53	PI+	-67.55	32.2	20.92	5.91	120.5
0.476	4.41	PI-	17.84	48.1	31.22	2.78	56.6
1.434	0.393	(+)	-24.85	40.2	26.07	2.36	48.0
2.056	0.308	(-)	42.69	7.94	5.151	CEX 3.982	81.154
0.620	107.40	PI+	-64.67	30.8	19.34	5.32	103.4
0.496	4.55	PI-	21.00	52.3	32.85	3.29	64.0
1.447	0.402	(+)	-21.83	41.5	26.09	2.29	44.4
2.092	0.323	(-)	42.83	10.75	6.754	CEX 4.047	78.609
0.640	109.28	PI+	-61.85	29.7	18.08	4.80	89.1
0.515	4.69	PI-	23.93	58.0	35.29	4.01	74.5
1.459	0.412	(+)	-18.96	43.9	26.68	2.33	43.2
2.129	0.339	(-)	42.89	14.15	8.608	CEX 4.159	77.150

K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	DS/DO MB/SR	DS/DT MB/GEV**2
0.660	111.17	PI+	-58.71	28.5	16.84	4.27	75.8
0.535	4.83	PI-	25.81	65.4	38.59	4.96	87.9
1.472	0.421	(+)	-16.45	47.0	27.72	2.48	44.1
2.166	0.354	(-)	42.26	18.44	10.877	CEX 4.262	75.618
0.680	113.05	PI+	-55.54	28.3	16.19	3.83	65.1
0.555	4.97	PI-	24.60	74.6	42.73	6.08	103.4
1.484	0.430	(+)	-15.47	51.4	29.46	2.84	48.3
2.202	0.370	(-)	40.07	23.17	13.271	CEX 4.224	71.793
0.700	114.94	PI+	-52.44	27.7	15.43	3.41	55.6
0.574	5.11	PI-	18.97	82.1	45.68	6.89	112.3
1.496	0.439	(+)	-16.73	54.9	30.55	3.20	52.1
2.239	0.385	(-)	35.70	27.19	15.128	CEX 3.905	63.689
0.720	116.83	PI+	-48.93	27.6	14.95	3.01	47.2
0.594	5.25	PI-	12.24	84.6	45.76	6.97	109.2
1.509	0.448	(+)	-18.34	56.1	30.36	3.33	52.1
2.276	0.401	(-)	30.58	28.49	15.407	CEX 3.332	52.206
0.740	118.72	PI+	-45.37	28.0	14.73	2.67	40.2
0.613	5.40	PI-	7.07	84.6	44.50	6.76	101.9
1.521	0.457	(+)	-19.15	56.3	29.62	3.32	50.0
2.313	0.417	(-)	26.22	28.29	14.885	CEX 2.793	42.093
0.760	120.62	PI+	-41.67	28.6	14.67	2.36	34.3
0.633	5.54	PI-	3.84	82.4	42.23	6.29	91.3
1.533	0.465	(+)	-18.91	55.5	28.45	3.18	46.1
2.350	0.433	(-)	22.76	26.89	13.780	CEX 2.293	33.295
0.780	122.51	PI+	-37.88	29.9	14.92	2.12	29.6
0.653	5.68	PI-	3.38	79.4	39.62	5.74	80.3
1.545	0.474	(+)	-17.25	54.6	27.27	2.98	41.8
2.387	0.449	(-)	20.63	24.74	12.349	CEX 1.887	26.419
0.800	124.41	PI+	-34.21	31.6	15.38	1.94	26.3
0.673	5.82	PI-	5.83	76.7	37.34	5.30	71.6
1.557	0.482	(+)	-14.19	54.2	26.36	2.81	37.9
2.424	0.465	(-)	20.02	22.56	10.979	CEX 1.629	22.018
0.820	126.31	PI+	-30.57	33.8	16.03	1.83	23.9
0.692	5.96	PI-	10.73	75.9	36.04	5.18	67.7
1.569	0.490	(+)	-9.92	54.8	26.04	2.74	35.8
2.461	0.481	(-)	20.65	21.07	10.006	CEX 1.536	20.055
0.840	128.21	PI+	-27.23	36.6	16.99	1.81	22.9
0.712	6.10	PI-	16.43	77.9	36.13	5.51	69.6
1.580	0.499	(+)	-5.40	57.3	26.56	2.88	36.4
2.498	0.497	(-)	21.83	20.65	9.571	CEX 1.570	19.827
0.860	130.11	PI+	-24.29	39.8	18.00	1.86	22.7
0.732	6.24	PI-	22.68	81.5	36.90	6.13	74.9
1.592	0.507	(+)	-0.80	60.6	27.45	3.15	38.5
2.535	0.514	(-)	23.48	20.87	9.450	CEX 1.691	20.679
0.880	132.01	PI+	-21.78	43.4	19.20	1.99	23.6
0.751	6.38	PI-	29.03	88.5	39.18	7.33	86.9
1.604	0.515	(+)	3.62	66.0	29.19	3.68	43.7
2.572	0.530	(-)	25.40	22.58	9.990	CEX 1.950	23.110

K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	DS/DO MB/SR	DS/DT MB/GEV**2
0.900	133.92	PI+	-19.89	47.1	20.40	2.18	25.0
0.771	6.53	PI-	33.96	98.5	42.60	9.03	103.7
1.615	0.523	(+)	7.04	72.8	31.50	4.45	51.2
2.609	0.547	(-)	26.92	25.65	11.100	CEX 2.302	26.454
0.920	135.82	PI+	-18.64	51.0	21.60	2.42	27.0
0.791	6.67	PI-	35.74	111.7	47.28	11.28	125.9
1.627	0.531	(+)	8.55	81.4	34.44	5.49	61.3
2.646	0.563	(-)	27.19	30.34	12.840	CEX 2.723	30.379
0.940	137.72	PI+	-18.09	54.6	22.60	2.67	29.0
0.811	6.81	PI-	32.47	125.7	52.08	13.64	147.8
1.638	0.538	(+)	7.19	90.1	37.34	6.62	71.7
2.683	0.580	(-)	25.28	35.58	14.740	CEX 3.083	33.404
0.960	139.63	PI+	-17.78	57.4	23.30	2.89	30.4
0.831	6.95	PI-	25.36	137.8	55.90	15.67	165.0
1.649	0.546	(+)	3.79	97.6	39.60	7.62	80.2
2.720	0.597	(-)	21.57	40.18	16.300	CEX 3.320	34.970
0.980	141.54	PI+	-17.33	59.9	23.80	3.06	31.4
0.850	7.09	PI-	14.63	148.7	59.08	17.57	180.0
1.661	0.554	(+)	-1.35	104.3	41.44	8.56	87.7
2.757	0.613	(-)	15.98	44.39	17.640	CEX 3.505	35.915
1.000	143.44	PI+	-16.61	62.1	24.20	3.21	32.1
0.870	7.23	PI-	-0.70	155.3	60.48	18.74	186.9
1.672	0.561	(+)	-8.65	108.7	42.34	9.24	92.2
2.795	0.630	(-)	7.96	46.58	18.140	CEX 3.470	34.603
1.020	145.35	PI+	-15.68	64.4	24.60	3.37	32.7
0.890	7.38	PI-	-15.56	153.5	58.60	18.25	177.2
1.683	0.569	(+)	-15.62	109.0	41.60	9.29	90.2
2.832	0.647	(-)	0.06	44.53	17.000	CEX 3.040	29.529
1.040	147.26	PI+	-14.64	66.8	25.00	3.54	33.5
0.910	7.52	PI-	-26.58	148.9	55.76	17.32	163.9
1.694	0.576	(+)	-20.61	107.8	40.38	9.12	86.3
2.869	0.664	(-)	-5.97	41.08	15.380	CEX 2.607	24.679
1.060	149.17	PI+	-13.49	69.1	25.40	3.71	34.2
0.930	7.66	PI-	-34.78	141.9	52.14	15.95	147.2
1.705	0.583	(+)	-24.14	105.5	38.77	8.75	80.8
2.906	0.681	(-)	-10.64	36.39	13.370	CEX 2.148	19.826
1.080	151.08	PI+	-12.23	71.6	25.81	3.89	35.0
0.949	7.80	PI-	-39.18	133.5	48.15	14.28	128.6
1.716	0.591	(+)	-25.71	102.6	36.98	8.25	74.3
2.943	0.698	(-)	-13.47	30.98	11.170	CEX 1.683	15.160
1.100	152.99	PI+	-10.69	74.1	26.22	4.08	35.9
0.969	7.94	PI-	-39.69	125.8	44.54	12.68	111.4
1.726	0.598	(+)	-25.19	99.9	35.38	7.74	68.0
2.981	0.715	(-)	-14.50	25.88	9.160	CEX 1.282	11.267
1.120	154.90	PI+	-8.94	77.0	26.78	4.33	37.1
0.989	8.09	PI-	-37.51	120.3	41.82	11.42	98.0
1.737	0.605	(+)	-23.22	98.7	34.30	7.39	63.4
3.018	0.732	(-)	-14.29	21.63	7.520	CEX 0.967	8.299

K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	DS/DO MB/SR	DS/DT MB/GEV**2
1.140	156.82	PI+	-7.27	80.4	27.45	4.63	38.8
1.009	8.23	PI-	-34.73	117.5	40.15	10.67	89.5
1.748	0.612	(+)	-21.00	99.0	33.80	7.27	61.0
3.055	0.749	(-)	-13.73	18.59	6.350	CEX 0.759	6.368
1.160	158.73	PI+	-5.68	83.9	28.18	4.97	40.8
1.029	8.37	PI-	-32.46	115.9	38.90	10.17	83.4
1.758	0.619	(+)	-19.07	99.9	33.54	7.26	59.6
3.092	0.766	(-)	-13.39	15.97	5.360	CEX 0.610	5.000
1.180	160.64	PI+	-4.11	87.9	29.00	5.37	43.1
1.049	8.51	PI-	-29.83	114.7	37.84	9.74	78.1
1.769	0.626	(+)	-16.97	101.3	33.42	7.31	58.7
3.130	0.783	(-)	-12.86	13.39	4.420	CEX 0.478	3.836
1.200	162.55	PI+	-2.67	92.3	29.94	5.84	45.8
1.069	8.66	PI-	-27.23	115.0	37.33	9.58	75.2
1.780	0.633	(+)	-14.95	103.6	33.63	7.52	59.0
3.167	0.801	(-)	-12.28	11.39	3.695	CEX 0.385	3.018
1.220	164.47	PI+	-1.58	97.1	31.00	6.39	49.1
1.088	8.80	PI-	-25.34	115.8	36.96	9.52	73.1
1.790	0.639	(+)	-13.46	106.5	33.98	7.80	59.9
3.204	0.818	(-)	-11.88	9.34	2.980	CEX 0.309	2.378
1.240	166.38	PI+	-0.91	102.2	32.10	7.00	52.6
1.108	8.94	PI-	-23.59	116.7	36.66	9.50	71.5
1.800	0.646	(+)	-12.25	109.5	34.38	8.13	61.1
3.241	0.835	(-)	-11.34	7.26	2.280	CEX 0.243	1.828
1.260	168.30	PI+	-0.51	107.6	33.24	7.66	56.4
1.128	9.08	PI-	-22.03	118.2	36.53	9.57	70.5
1.811	0.653	(+)	-11.27	112.9	34.88	8.52	62.8
3.279	0.853	(-)	-10.76	5.32	1.645	CEX 0.191	1.406
1.280	170.21	PI+	-0.60	113.4	34.50	8.42	60.8
1.148	9.22	PI-	-20.73	119.8	36.46	9.68	69.9
1.821	0.660	(+)	-10.66	116.6	35.48	8.98	64.8
3.316	0.870	(-)	-10.07	3.22	0.980	CEX 0.146	1.057
1.300	172.13	PI+	-1.48	119.5	35.80	9.25	65.5
1.168	9.37	PI-	-19.73	121.9	36.50	9.86	69.8
1.831	0.666	(+)	-10.61	120.7	36.15	9.50	67.3
3.353	0.887	(-)	-9.12	1.17	0.350	CEX 0.110	0.776
1.320	174.04	PI+	-3.15	125.6	37.05	10.10	70.2
1.188	9.51	PI-	-19.10	123.9	36.55	10.06	69.9
1.841	0.673	(+)	-11.13	124.7	36.80	10.04	69.7
3.391	0.905	(-)	-7.98	-0.85	-0.250	CEX 0.082	0.572
1.340	175.96	PI+	-5.64	131.6	38.25	10.99	74.9
1.208	9.65	PI-	-18.73	126.0	36.61	10.27	70.0
1.851	0.679	(+)	-12.18	128.8	37.43	10.60	72.2
3.428	0.922	(-)	-6.54	-2.82	-0.820	CEX 0.064	0.438
1.360	177.88	PI+	-8.94	137.3	39.30	11.85	79.2
1.228	9.79	PI-	-18.59	128.0	36.66	10.49	70.1
1.862	0.685	(+)	-13.77	132.6	37.98	11.14	74.5
3.465	0.940	(-)	-4.83	-4.61	-1.320	CEX 0.056	0.373

K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	DS/DO MB/SR	DS/DT MB/GEV**2
1.380	179.79	PI+	-12.87	142.5	40.20	12.68	83.2
1.247	9.94	PI-	-18.56	130.1	36.70	10.70	70.2
1.872	0.692	(+)	-15.72	136.3	38.45	11.66	76.5
3.503	0.957	(-)	-2.85	-6.20	-1.750 CEX	0.058	0.379
1.400	181.71	PI+	-17.76	147.3	40.96	13.49	87.0
1.267	10.08	PI-	-19.05	132.3	36.80	10.96	70.6
1.881	0.698	(+)	-18.40	139.8	38.88	12.19	78.6
3.540	0.975	(-)	-0.65	-7.48	-2.080 CEX	0.069	0.445
1.420	183.63	PI+	-23.20	150.6	41.31	14.10	89.2
1.287	10.22	PI-	-19.76	133.7	36.67	11.09	70.2
1.891	0.704	(+)	-21.48	142.2	38.99	12.55	79.4
3.577	0.992	(-)	1.72	-8.46	-2.320 CEX	0.090	0.573
1.440	185.54	PI+	-28.53	153.1	41.41	14.57	90.6
1.307	10.37	PI-	-20.18	135.1	36.53	11.20	69.7
1.901	0.711	(+)	-24.36	144.1	38.97	12.83	79.8
3.615	1.010	(-)	4.17	-9.02	-2.440 CEX	0.119	0.738
1.460	187.46	PI+	-33.79	154.9	41.31	14.94	91.3
1.327	10.51	PI-	-20.64	136.4	36.37	11.31	69.1
1.911	0.717	(+)	-27.22	145.6	38.84	13.05	79.8
3.652	1.028	(-)	6.57	-9.26	-2.470 CEX	0.153	0.937
1.480	189.38	PI+	-39.02	155.9	41.03	15.20	91.4
1.347	10.65	PI-	-21.01	137.4	36.15	11.37	68.3
1.921	0.723	(+)	-30.02	146.7	38.59	13.19	79.3
3.689	1.045	(-)	9.01	-9.27	-2.440 CEX	0.197	1.182
1.500	191.30	PI+	-44.05	156.0	40.51	15.31	90.5
1.367	10.79	PI-	-21.24	138.4	35.93	11.42	67.5
1.930	0.729	(+)	-32.65	147.2	38.22	13.25	78.3
3.727	1.063	(-)	11.41	-8.82	-2.290 CEX	0.242	1.432
1.520	193.22	PI+	-48.52	155.4	39.81	15.28	88.9
1.387	10.94	PI-	-21.22	139.2	35.67	11.44	66.5
1.940	0.735	(+)	-34.87	147.3	37.74	13.22	76.8
3.764	1.081	(-)	13.65	-8.08	-2.070 CEX	0.290	1.687
1.540	195.13	PI+	-52.37	154.2	39.00	15.15	86.7
1.407	11.08	PI-	-21.31	140.4	35.50	11.51	65.9
1.950	0.741	(+)	-36.84	147.3	37.25	13.17	75.3
3.801	1.098	(-)	15.53	-6.92	-1.750 CEX	0.330	1.889
1.560	197.05	PI+	-55.49	152.6	38.10	14.92	84.0
1.427	11.22	PI-	-21.11	141.0	35.20	11.50	64.7
1.959	0.747	(+)	-38.30	146.8	36.65	13.02	73.3
3.839	1.116	(-)	17.19	-5.81	-1.450 CEX	0.372	2.096
1.580	198.97	PI+	-57.87	150.9	37.20	14.63	81.1
1.447	11.36	PI-	-20.50	142.0	35.00	11.53	63.9
1.969	0.753	(+)	-39.18	146.5	36.10	12.87	71.3
3.876	1.134	(-)	18.68	-4.46	-1.100 CEX	0.413	2.290
1.600	200.89	PI+	-59.51	149.1	36.28	14.29	78.0
1.466	11.51	PI-	-19.88	143.2	34.84	11.59	63.2
1.978	0.759	(+)	-39.70	146.1	35.56	12.72	69.4
3.914	1.152	(-)	19.82	-2.96	-0.720 CEX	0.445	2.430

K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	DS/DO MB/SR	DS/DT MB/GEV**2
1.650	205.69	PI+	-61.64	146.6	34.60	13.70	72.0
1.516	11.86	PI-	-18.17	146.9	34.66	11.86	62.3
2.002	0.773	(+)	-39.91	146.7	34.63	12.53	65.8
4.007	1.196	(-)	21.73	0.13	0.030	CEX 0.512	2.689
1.700	210.49	PI+	-62.91	144.5	33.11	13.16	66.6
1.566	12.22	PI-	-16.63	151.3	34.65	12.26	62.1
2.025	0.788	(+)	-39.77	147.9	33.88	12.42	62.9
4.101	1.241	(-)	23.14	3.36	0.770	CEX 0.579	2.932
1.750	215.29	PI+	-62.88	143.4	31.90	12.68	62.0
1.616	12.58	PI-	-15.29	156.4	34.80	12.78	62.5
2.048	0.802	(+)	-39.08	149.9	33.35	12.42	60.7
4.194	1.286	(-)	23.80	6.52	1.450	CEX 0.630	3.079
1.800	220.09	PI+	-62.20	143.1	30.95	12.32	58.2
1.666	12.93	PI-	-14.55	162.2	35.09	13.43	63.4
2.071	0.816	(+)	-38.37	152.6	33.02	12.54	59.2
4.288	1.330	(-)	23.82	9.57	2.070	CEX 0.667	3.151
1.850	224.89	PI+	-60.75	143.2	30.15	11.99	54.8
1.716	13.29	PI-	-14.42	168.1	35.39	14.11	64.5
2.093	0.829	(+)	-37.58	155.7	32.77	12.71	58.1
4.381	1.375	(-)	23.16	12.45	2.620	CEX 0.685	3.131
1.900	229.69	PI+	-58.68	144.7	29.65	11.82	52.3
1.766	13.65	PI-	-14.94	174.4	35.75	14.87	65.8
2.115	0.843	(+)	-36.81	159.5	32.70	13.01	57.5
4.475	1.420	(-)	21.87	14.88	3.050	CEX 0.679	3.003
1.950	234.50	PI+	-56.82	147.2	29.40	11.83	50.7
1.815	14.01	PI-	-16.33	180.6	36.06	15.62	67.0
2.137	0.856	(+)	-36.58	163.9	32.73	13.40	57.5
4.568	1.465	(-)	20.25	16.68	3.330	CEX 0.654	2.804
2.000	239.30	PI+	-55.32	150.2	29.24	11.93	49.6
1.865	14.36	PI-	-18.36	186.3	36.28	16.32	67.9
2.159	0.869	(+)	-36.84	168.3	32.76	13.81	57.5
4.662	1.511	(-)	18.48	18.08	3.520	CEX 0.623	2.589
2.050	244.11	PI+	-53.87	153.5	29.15	12.07	48.8
1.915	14.72	PI-	-20.85	191.6	36.39	16.95	68.5
2.181	0.882	(+)	-37.36	172.5	32.77	14.22	57.4
4.756	1.556	(-)	16.51	19.06	3.620	CEX 0.580	2.344
2.100	248.91	PI+	-52.38	157.2	29.15	12.29	48.2
1.965	15.08	PI-	-23.66	196.2	36.39	17.49	68.6
2.202	0.895	(+)	-38.02	176.7	32.77	14.63	57.4
4.849	1.601	(-)	14.36	19.52	3.620	CEX 0.526	2.063
2.150	253.72	PI+	-50.96	161.6	29.26	12.60	48.1
2.015	15.44	PI-	-26.64	200.2	36.26	17.91	68.4
2.223	0.907	(+)	-38.80	180.9	32.76	15.03	57.4
4.943	1.647	(-)	12.16	19.32	3.500	CEX 0.458	1.747
2.200	258.52	PI+	-49.94	166.7	29.50	13.05	48.5
2.065	15.79	PI-	-29.37	203.4	36.00	18.20	67.6
2.244	0.920	(+)	-39.66	185.0	32.75	15.43	57.3
5.036	1.692	(-)	10.28	18.36	3.250	CEX 0.382	1.418

K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	RHO	DS/DT MB/GEV**2
2.250	263.33	PI+	-49.7	172.2	29.80	-0.288	49.1
2.115	16.15	PI-	-31.8	206.3	35.70	-0.154	66.7
2.265	0.932	(+)	-40.7	189.2	32.75	-0.215	57.3
5.130	1.737	(-)	8.94	17.05	2.950	CEX 0.525	1.134
2.300	268.14	PI+	-50.1	177.8	30.10	-0.282	50.0
2.165	16.51	PI-	-33.9	208.7	35.34	-0.162	65.5
2.286	0.944	(+)	-42.0	193.3	32.72	-0.217	57.3
5.224	1.783	(-)	8.13	15.47	2.620	CEX 0.526	0.895
2.350	272.95	PI+	-51.3	183.2	30.35	-0.280	50.7
2.215	16.87	PI-	-35.5	210.9	34.95	-0.168	64.2
2.306	0.956	(+)	-43.4	197.0	32.65	-0.220	57.1
5.317	1.829	(-)	7.89	13.88	2.300	CEX 0.569	0.715
2.400	277.75	PI+	-52.8	188.2	30.54	-0.280	51.4
2.264	17.22	PI-	-36.5	213.1	34.58	-0.171	62.9
2.326	0.968	(+)	-44.7	200.7	32.56	-0.223	56.8
5.411	1.874	(-)	8.11	12.45	2.020	CEX 0.652	0.594
2.450	282.56	PI+	-54.5	193.0	30.68	-0.283	51.9
2.314	17.58	PI-	-37.2	215.6	34.26	-0.173	61.8
2.346	0.980	(+)	-45.9	204.3	32.47	-0.225	56.6
5.505	1.920	(-)	8.65	11.26	1.790	CEX 0.768	0.521
2.500	287.37	PI+	-56.6	197.6	30.78	-0.286	52.4
2.364	17.94	PI-	-37.8	218.3	34.00	-0.173	60.8
2.366	0.991	(+)	-47.2	207.9	32.39	-0.227	56.4
5.598	1.966	(-)	9.36	10.34	1.610	CEX 0.905	0.482
2.550	292.18	PI+	-58.9	201.9	30.83	-0.292	52.7
2.414	18.30	PI-	-38.5	221.0	33.75	-0.174	60.0
2.386	1.003	(+)	-48.7	211.4	32.29	-0.230	56.1
5.692	2.011	(-)	10.19	9.56	1.460	CEX 1.066	0.465
2.600	296.99	PI+	-61.3	205.7	30.81	-0.298	52.8
2.464	18.65	PI-	-39.0	223.7	33.51	-0.174	59.1
2.405	1.014	(+)	-50.2	214.7	32.16	-0.234	55.7
5.786	2.057	(-)	11.15	9.01	1.350	CEX 1.237	0.471
2.650	301.80	PI+	-63.8	209.2	30.74	-0.305	52.8
2.514	19.01	PI-	-39.4	226.5	33.28	-0.174	58.3
2.425	1.025	(+)	-51.6	217.8	32.01	-0.237	55.3
5.879	2.103	(-)	12.20	8.64	1.270	CEX 1.412	0.493
2.700	306.61	PI+	-66.2	212.3	30.62	-0.312	52.6
2.564	19.37	PI-	-39.5	229.4	33.08	-0.172	57.6
2.444	1.037	(+)	-52.9	220.8	31.85	-0.239	54.8
5.973	2.149	(-)	13.33	8.53	1.230	CEX 1.563	0.532
2.750	311.42	PI+	-68.5	215.0	30.45	-0.319	52.2
2.614	19.73	PI-	-39.7	232.4	32.91	-0.171	56.9
2.463	1.048	(+)	-54.1	223.7	31.68	-0.242	54.3
6.067	2.195	(-)	14.43	8.69	1.230	CEX 1.661	0.581
2.800	316.23	PI+	-70.6	217.4	30.24	-0.325	51.6
2.664	20.09	PI-	-39.9	235.6	32.76	-0.169	56.4
2.482	1.058	(+)	-55.2	226.5	31.50	-0.244	53.7
6.161	2.241	(-)	15.36	9.06	1.260	CEX 1.696	0.629

K-	-W-S	S-OMEGA		RE C	IM C	S TOT	RHO	DS/DT
GEV	Q-2*Q**2			1/GEV	1/GEV	MB		MB/GEV**2
2.850	321.04	PI+		-72.4	219.7	30.02	-0.330	51.0
	20.44	PI-		-39.7	238.5	32.59	-0.166	55.8
2.501	1.069	(+)		-56.1	229.1	31.31	-0.245	53.1
6.254	2.287	(-)		16.4	9.4	1.285	CEX 1.743	0.681
2.900	325.85	PI+		-74.0	221.7	29.77	-0.334	50.3
	20.80	PI-		-39.6	242.6	32.57	-0.163	55.6
2.520	1.080	(+)		-56.8	232.1	31.17	-0.245	52.6
6.348	2.333	(-)		17.2	10.4	1.400	CEX 1.653	0.748
2.950	330.66	PI+		-75.2	223.6	29.52	-0.336	49.6
	21.16	PI-		-40.0	246.2	32.50	-0.162	55.4
2.538	1.091	(+)		-57.6	234.9	31.01	-0.245	52.1
6.442	2.379	(-)		17.6	11.3	1.490	CEX 1.562	0.780
3.000	335.47	PI+		-76.0	225.6	29.28	-0.337	48.8
	21.52	PI-		-40.3	249.9	32.44	-0.161	55.2
2.556	1.101	(+)		-58.2	237.7	30.86	-0.245	51.6
6.535	2.425	(-)		17.9	12.2	1.580	CEX 1.467	0.804
3.100	345.09	PI+		-77.0	230.1	28.91	-0.335	47.5
	22.23	PI-		-41.5	257.5	32.35	-0.161	54.9
2.593	1.122	(+)		-59.3	243.8	30.63	-0.243	50.8
6.723	2.517	(-)		17.7	13.7	1.720	CEX 1.296	0.810
3.200	354.71	PI+		-77.6	235.3	28.63	-0.330	46.4
	22.95	PI-		-43.3	264.7	32.21	-0.163	54.4
2.629	1.142	(+)		-60.5	250.0	30.42	-0.242	50.0
6.910	2.609	(-)		17.2	14.7	1.790	CEX 1.168	0.774
3.300	364.34	PI+		-78.1	241.0	28.44	-0.324	45.7
	23.66	PI-		-45.0	271.4	32.02	-0.166	53.8
2.664	1.162	(+)		-61.5	256.2	30.23	-0.240	49.4
7.098	2.701	(-)		16.5	15.2	1.790	CEX 1.090	0.717
3.400	373.96	PI+		-78.6	247.4	28.33	-0.318	45.1
	24.38	PI-		-46.6	277.9	31.83	-0.168	53.2
2.699	1.182	(+)		-62.6	262.6	30.08	-0.239	48.9
7.285	2.794	(-)		16.0	15.3	1.750	CEX 1.048	0.656
3.500	383.59	PI+		-79.7	254.0	28.26	-0.314	44.8
	25.10	PI-		-48.4	284.2	31.62	-0.170	52.6
2.734	1.201	(+)		-64.0	269.1	29.94	-0.238	48.4
7.473	2.886	(-)		15.6	15.1	1.680	CEX 1.036	0.598
3.600	393.21	PI+		-81.0	260.6	28.19	-0.311	44.5
	25.81	PI-		-49.7	290.0	31.37	-0.171	51.8
2.768	1.220	(+)		-65.4	275.3	29.78	-0.237	47.9
7.660	2.979	(-)		15.6	14.7	1.590	CEX 1.064	0.551
3.700	402.84	PI+		-82.6	267.2	28.12	-0.309	44.3
	26.53	PI-		-50.8	296.1	31.16	-0.172	51.1
2.801	1.239	(+)		-66.7	281.6	29.64	-0.237	47.4
7.848	3.071	(-)		15.9	14.4	1.520	CEX 1.101	0.522
3.800	412.46	PI+		-84.5	273.5	28.03	-0.309	44.0
	27.24	PI-		-51.8	302.0	30.95	-0.172	50.4
2.835	1.258	(+)		-68.1	287.8	29.49	-0.237	46.9
8.035	3.164	(-)		16.3	14.2	1.460	CEX 1.146	0.504



K-	-W-S	S-OMEGA		RE C	IM C	S TOT	RHO	DS/DT
GEV		Q-2*Q**2		1/GEV	1/GEV	MB		MB/GEV**2
3.900		422.09	PI+	-86.5	279.6	27.92	-0.309	43.6
		27.96	PI-	-52.7	308.1	30.76	-0.171	49.8
2.868		1.276	(+)	-69.6	293.8	29.34	-0.237	46.4
8.223		3.257	(-)	16.9	14.2	1.420	CEX 1.188	0.497
4.000		431.71	PI+	-88.4	285.3	27.78	-0.310	43.2
		28.68	PI-	-53.5	314.1	30.58	-0.170	49.2
2.900		1.294	(+)	-70.9	299.7	29.18	-0.237	45.9
8.410		3.349	(-)	17.5	14.4	1.403	CEX 1.212	0.496
4.100		441.34	PI+	-90.1	290.8	27.62	-0.310	42.7
		29.39	PI-	-54.2	320.3	30.42	-0.169	48.6
2.932		1.312	(+)	-72.2	305.5	29.02	-0.236	45.4
8.598		3.442	(-)	18.0	14.7	1.397	CEX 1.222	0.497
4.200		450.97	PI+	-91.6	296.1	27.46	-0.309	42.2
		30.11	PI-	-54.9	326.4	30.26	-0.168	48.1
2.964		1.329	(+)	-73.3	311.3	28.86	-0.235	44.9
8.786		3.535	(-)	18.4	15.1	1.403	CEX 1.214	0.498
4.300		460.60	PI+	-92.8	301.4	27.30	-0.308	41.7
		30.82	PI-	-55.6	332.6	30.12	-0.167	47.6
2.996		1.347	(+)	-74.2	317.0	28.71	-0.234	44.4
8.973		3.628	(-)	18.6	15.6	1.411	CEX 1.195	0.494
4.400		470.22	PI+	-93.8	306.9	27.16	-0.306	41.2
		31.54	PI-	-56.3	338.7	29.98	-0.166	47.2
3.027		1.364	(+)	-75.0	322.8	28.57	-0.232	44.0
9.161		3.721	(-)	18.8	15.9	1.409	CEX 1.178	0.484
4.500		479.85	PI+	-94.7	312.5	27.04	-0.303	40.8
		32.26	PI-	-56.9	344.8	29.84	-0.165	46.7
3.057		1.381	(+)	-75.8	328.7	28.44	-0.231	43.5
9.348		3.814	(-)	18.9	16.2	1.401	CEX 1.167	0.474
4.600		489.48	PI+	-95.6	318.1	26.93	-0.300	40.4
		32.97	PI-	-57.4	351.0	29.71	-0.164	46.3
3.088		1.398	(+)	-76.5	334.5	28.32	-0.229	43.1
9.536		3.907	(-)	19.1	16.4	1.392	CEX 1.159	0.464
4.700		499.11	PI+	-96.4	323.8	26.83	-0.298	40.0
		33.69	PI-	-57.9	357.1	29.59	-0.162	45.9
3.118		1.414	(+)	-77.1	340.5	28.21	-0.227	42.7
9.723		4.000	(-)	19.2	16.7	1.381	CEX 1.153	0.454
4.800		508.73	PI+	-97.1	329.6	26.74	-0.295	39.7
		34.40	PI-	-58.4	363.4	29.48	-0.161	45.5
3.148		1.431	(+)	-77.8	346.5	28.11	-0.224	42.4
9.911		4.093	(-)	19.4	16.9	1.370	CEX 1.148	0.444
4.900		518.36	PI+	-98.0	335.5	26.66	-0.292	39.4
		35.12	PI-	-58.9	369.7	29.38	-0.159	45.2
3.178		1.447	(+)	-78.4	352.6	28.02	-0.222	42.1
10.098		4.186	(-)	19.6	17.1	1.359	CEX 1.143	0.435
5.000		527.99	PI+	-98.8	341.3	26.58	-0.289	39.1
		35.84	PI-	-59.4	375.9	29.28	-0.158	44.9
3.207		1.463	(+)	-79.1	358.6	27.93	-0.220	41.8
10.286		4.279	(-)	19.7	17.3	1.349	CEX 1.139	0.427

K-	-W-S	S-OMEGA		RE C	IM C	S TOT	RHO	DS/DT
GEV	Q-2*Q**2			1/GEV	1/GEV	MB		MB/GEV**2
5.200	547.25	PI+		-100.4	353.1	26.44	-0.284	38.6
	37.27	PI-		-60.3	388.6	29.10	-0.155	44.3
3.265	1.494	(+)		-80.3	370.8	27.77	-0.217	41.2
10.661	4.466	(-)		20.0	17.7	1.327	CEX 1.131	0.410
5.400	566.51	PI+		-102.0	365.0	26.32	-0.279	38.1
	38.70	PI-		-61.2	401.2	28.93	-0.153	43.8
3.322	1.525	(+)		-81.6	383.1	27.62	-0.213	40.8
11.036	4.652	(-)		20.4	18.1	1.306	CEX 1.126	0.395
5.600	585.76	PI+		-103.6	376.9	26.21	-0.275	37.7
	40.13	PI-		-62.1	413.9	28.78	-0.150	43.3
3.378	1.555	(+)		-82.8	395.4	27.49	-0.210	40.3
11.412	4.838	(-)		20.7	18.5	1.286	CEX 1.120	0.381
5.800	605.02	PI+		-105.1	388.8	26.10	-0.270	37.4
	41.57	PI-		-63.1	426.5	28.64	-0.148	42.8
3.433	1.585	(+)		-84.1	407.6	27.37	-0.206	39.9
11.787	5.025	(-)		21.0	18.9	1.267	CEX 1.116	0.368
6.000	624.28	PI+		-106.7	400.7	26.01	-0.266	37.0
	43.00	PI-		-64.0	439.2	28.50	-0.146	42.4
3.487	1.614	(+)		-85.4	420.0	27.26	-0.203	39.5
12.162	5.212	(-)		21.4	19.2	1.248	CEX 1.112	0.356
6.200	643.54	PI+		-108.3	412.7	25.92	-0.263	36.7
	44.43	PI-		-64.9	451.9	28.38	-0.144	42.0
3.541	1.643	(+)		-86.6	432.3	27.15	-0.200	39.2
12.537	5.398	(-)		21.7	19.6	1.230	CEX 1.108	0.345
6.400	662.80	PI+		-109.9	424.6	25.83	-0.259	36.4
	45.86	PI-		-65.9	464.5	28.26	-0.142	41.6
3.593	1.671	(+)		-87.9	444.5	27.05	-0.198	38.8
12.912	5.585	(-)		22.0	19.9	1.213	CEX 1.105	0.334
6.600	682.06	PI+		-111.5	436.5	25.75	-0.255	36.1
	47.30	PI-		-66.8	477.1	28.15	-0.140	41.3
3.645	1.699	(+)		-89.1	456.8	26.95	-0.195	38.5
13.288	5.772	(-)		22.3	20.3	1.197	CEX 1.101	0.324
6.800	701.32	PI+		-113.0	448.4	25.68	-0.252	35.8
	48.73	PI-		-67.7	489.7	28.04	-0.138	40.9
3.696	1.726	(+)		-90.4	469.0	26.86	-0.193	38.2
13.663	5.959	(-)		22.7	20.6	1.182	CEX 1.098	0.315
7.000	720.58	PI+		-114.6	460.3	25.60	-0.249	35.6
	50.16	PI-		-68.6	502.2	27.94	-0.137	40.6
3.747	1.753	(+)		-91.6	481.3	26.77	-0.190	37.9
14.038	6.146	(-)		23.0	21.0	1.167	CEX 1.095	0.306
7.200	739.84	PI+		-116.1	472.1	25.53	-0.246	35.3
	51.59	PI-		-69.5	514.8	27.84	-0.135	40.3
3.796	1.779	(+)		-92.8	493.4	26.69	-0.188	37.7
14.413	6.333	(-)		23.3	21.3	1.153	CEX 1.092	0.298
7.400	759.11	PI+		-117.6	484.0	25.47	-0.243	35.1
	53.03	PI-		-70.4	527.3	27.75	-0.134	40.0
3.846	1.805	(+)		-94.0	505.6	26.61	-0.186	37.4
14.788	6.520	(-)		23.6	21.7	1.139	CEX 1.089	0.290

K-	-W-S	S-OMEGA		RE C	IM C	S TOT	RHO	DS/DT
GEV	Q-2*Q**2			1/GEV	1/GEV	MB		MB/GEV**2
7.600	778.37	PI+		-119.0	495.8	25.40	-0.240	34.9
	54.46	PI-		-71.3	539.8	27.66	-0.132	39.8
3.894	1.831	(+)		-95.1	517.8	26.53	-0.184	37.2
15.164	6.707	(-)		23.9	22.0	1.126	CEX 1.086	0.282
7.800	797.63	PI+		-120.4	507.6	25.34	-0.237	34.7
	55.89	PI-		-72.1	552.2	27.57	-0.131	39.5
3.942	1.857	(+)		-96.3	529.9	26.46	-0.182	36.9
15.539	6.894	(-)		24.2	22.3	1.114	CEX 1.083	0.275
8.000	816.89	PI+		-121.8	519.4	25.28	-0.235	34.5
	57.33	PI-		-72.9	564.7	27.49	-0.129	39.2
3.989	1.882	(+)		-97.4	542.0	26.38	-0.180	36.7
15.914	7.081	(-)		24.5	22.6	1.101	CEX 1.081	0.269
9.000	913.20	PI+		-128.4	578.3	25.02	-0.222	33.6
	64.49	PI-		-76.8	626.6	27.11	-0.123	38.1
4.218	2.002	(+)		-102.6	602.5	26.07	-0.170	35.7
17.790	8.016	(-)		25.8	24.2	1.046	CEX 1.068	0.240
10.000	1009.51	PI+		-134.4	636.9	24.80	-0.211	32.8
	71.65	PI-		-80.0	688.2	26.80	-0.116	37.2
4.435	2.116	(+)		-107.2	662.6	25.80	-0.162	34.9
19.667	8.952	(-)		27.2	25.7	0.999	CEX 1.059	0.217
11.000	1105.83	PI+		-139.9	695.3	24.62	-0.201	32.2
	78.82	PI-		-83.1	749.5	26.53	-0.111	36.4
4.641	2.224	(+)		-111.5	722.4	25.57	-0.154	34.2
21.543	9.889	(-)		28.4	27.1	0.959	CEX 1.049	0.197
12.000	1202.14	PI+		-144.8	753.7	24.46	-0.192	31.7
	85.98	PI-		-85.7	810.5	26.30	-0.106	35.7
4.839	2.327	(+)		-115.3	782.1	25.38	-0.147	33.6
23.420	10.826	(-)		29.6	28.4	0.922	CEX 1.040	0.181
13.000	1298.46	PI+		-149.4	811.9	24.32	-0.184	31.2
	93.14	PI-		-88.1	871.3	26.10	-0.101	35.2
5.030	2.425	(+)		-118.7	841.6	25.21	-0.141	33.1
25.296	11.763	(-)		30.6	29.7	0.890	CEX 1.031	0.167
14.000	1394.78	PI+		-153.4	870.0	24.20	-0.176	30.9
	100.31	PI-		-90.1	932.0	25.92	-0.097	34.7
5.213	2.520	(+)		-121.8	901.0	25.06	-0.135	32.7
27.172	12.700	(-)		31.7	31.0	0.861	CEX 1.023	0.155
15.000	1491.10	PI+		-157.2	928.1	24.10	-0.169	30.5
	107.47	PI-		-91.8	992.5	25.77	-0.093	34.2
5.390	2.611	(+)		-124.5	960.3	24.93	-0.130	32.3
29.049	13.637	(-)		32.7	32.2	0.835	CEX 1.016	0.145
16.000	1587.42	PI+		-160.5	986.2	24.00	-0.163	30.2
	114.64	PI-		-93.3	1052.8	25.62	-0.089	33.8
5.561	2.700	(+)		-126.9	1019.5	24.81	-0.124	31.9
30.925	14.575	(-)		33.6	33.3	0.811	CEX 1.009	0.136
17.000	1683.74	PI+		-163.6	1044.2	23.92	-0.157	29.9
	121.80	PI-		-94.5	1113.1	25.50	-0.085	33.5
5.727	2.785	(+)		-129.0	1078.7	24.71	-0.120	31.6
32.802	15.512	(-)		34.5	34.4	0.789	CEX 1.002	0.128

K-	-W-S	S-OMEGA		RE C	IM C	S TOT	RHO	DS/DT
GEV	Q-2*Q**2			1/GEV	1/GEV	MB		MB/GEV**2
18.000	1780.06	FI+		-166.3	1102.2	23.85	-0.151	29.7
	128.97	FI-		-95.5	1173.3	25.38	-0.081	33.1
5.889	2.868	(+)		-130.9	1137.8	24.61	-0.115	31.4
34.678	16.450	(-)		35.4	35.5	0.769	CEX 0.996	0.1202
19.000	1876.38	FI+		-168.7	1160.2	23.78	-0.145	29.5
	136.13	FI-		-96.3	1233.4	25.28	-0.078	32.8
6.046	2.949	(+)		-132.5	1196.8	24.53	-0.111	31.1
36.555	17.388	(-)		36.2	36.6	0.750	CEX 0.990	0.1137
20.000	1972.70	FI+		-170.9	1218.2	23.72	-0.140	29.3
	143.29	FI-		-96.9	1293.4	25.18	-0.075	32.6
6.199	3.027	(+)		-133.9	1255.8	24.45	-0.107	30.9
38.431	18.325	(-)		37.0	37.6	0.732	CEX 0.984	0.1078
22.000	2165.34	FI+		-174.5	1334.3	23.62	-0.131	29.0
	157.62	FI-		-97.5	1413.3	25.02	-0.069	32.1
6.495	3.178	(+)		-136.0	1373.8	24.32	-0.099	30.5
42.184	20.201	(-)		38.5	39.5	0.699	CEX 0.974	0.0974
24.000	2357.98	FI+		-177.2	1450.5	23.54	-0.122	28.7
	171.95	FI-		-97.3	1533.0	24.87	-0.064	31.7
6.778	3.322	(+)		-137.3	1491.8	24.20	-0.092	30.2
45.937	22.077	(-)		39.9	41.2	0.669	CEX 0.968	0.0886
26.000	2550.62	FI+		-179.2	1566.8	23.47	-0.114	28.5
	186.28	FI-		-96.5	1652.6	24.75	-0.058	31.4
7.049	3.461	(+)		-137.8	1609.7	24.11	-0.086	29.9
49.690	23.953	(-)		41.3	42.9	0.642	CEX 0.964	0.0813
28.000	2743.27	FI+		-180.4	1683.3	23.41	-0.107	28.3
	200.61	FI-		-95.0	1772.1	24.65	-0.054	31.1
7.310	3.594	(+)		-137.7	1727.7	24.03	-0.080	29.7
53.443	25.829	(-)		42.7	44.4	0.618	CEX 0.961	0.0750
30.000	2935.91	FI+		-181.1	1799.8	23.36	-0.101	28.2
	214.94	FI-		-93.0	1891.7	24.55	-0.049	30.9
7.563	3.722	(+)		-137.0	1845.8	23.96	-0.074	29.5
57.196	27.705	(-)		44.0	45.9	0.596	CEX 0.959	0.0697
35.000	3417.52	FI+		-180.1	2091.8	23.27	-0.086	27.9
	250.76	FI-		-85.6	2190.7	24.37	-0.039	30.4
8.160	4.025	(+)		-132.9	2141.3	23.82	-0.062	29.1
66.578	32.395	(-)		47.2	49.5	0.550	CEX 0.955	0.0592
40.000	3899.13	FI+		-176.0	2384.8	23.22	-0.074	27.7
	286.58	FI-		-75.5	2490.3	24.24	-0.030	30.1
8.716	4.306	(+)		-125.7	2437.5	23.73	-0.052	28.8
75.961	37.086	(-)		50.2	52.7	0.514	CEX 0.952	0.0514
45.000	4380.75	FI+		-169.1	2678.7	23.18	-0.063	27.6
	322.41	FI-		-63.0	2790.4	24.15	-0.023	29.8
9.238	4.570	(+)		-116.0	2734.6	23.66	-0.042	28.7
85.343	41.776	(-)		53.1	55.8	0.483	CEX 0.951	0.0454
50.000	4862.36	FI+		-159.8	2973.8	23.16	-0.054	27.5
	358.23	FI-		-48.3	3091.3	24.08	-0.016	29.6
9.733	4.820	(+)		-104.1	3032.5	23.62	-0.034	28.5
94.726	46.467	(-)		55.7	58.7	0.457	CEX 0.949	0.0406

K-	-W-S	S-OMEGA		RE C	IM C	S TOT	RHO	DS/DT
GEV	Q-2*Q**2			1/GEV	1/GEV	MB		MB/GEV**2
55.000	5343.97	FI+		-148.4	3270.	23.15	-0.045	27.4
	394.05	FI-		-31.8	3393.	24.02	-0.009	29.5
10.203	5.058	(+)		-90.1	3331.	23.59	-0.027	28.4
104.108	51.158	(-)		58.3	61.5	0.435	CEX 0.948	0.0368
60.000	5825.59	FI+		-135.1	3567.	23.15	-0.038	27.4
	429.87	FI-		-13.6	3695.	23.98	-0.004	29.4
10.653	5.284	(+)		-74.4	3631.	23.57	-0.020	28.4
113.491	55.849	(-)		60.7	64.1	0.416	CEX 0.948	0.0336
65.000	6307.20	FI+		-120.1	3866.	23.16	-0.031	27.4
	465.70	FI-		6.1	3999.	23.96	0.002	29.3
11.085	5.502	(+)		-57.0	3932.	23.56	-0.015	28.4
122.874	60.540	(-)		63.1	66.6	0.399	CEX 0.947	0.0309
70.000	6788.82	FI+		-103.5	4165.	23.17	-0.025	27.4
	501.52	FI-		27.2	4303.	23.94	0.006	29.3
11.500	5.711	(+)		-38.1	4234.	23.55	-0.009	28.3
132.256	65.231	(-)		65.3	69.0	0.384	CEX 0.946	0.0286
80.000	7752.05	FI+		-66.0	4767.	23.20	-0.014	27.5
	573.16	FI-		73.3	4914.	23.92	0.015	29.2
12.289	6.108	(+)		3.6	4840.	23.56	0.001	28.4
151.021	74.614	(-)		69.6	73.6	0.358	CEX 0.946	0.0249
90.000	8715.28	FI+		-23.4	5373.	23.25	-0.004	27.6
	644.81	FI-		123.9	5529.	23.92	0.022	29.2
13.030	6.481	(+)		50.2	5451.	23.58	0.009	28.4
169.786	83.996	(-)		73.6	77.9	0.337	CEX 0.945	0.0220
100.000	9678.50	FI+		23.6	5983.	23.30	0.004	27.7
	716.45	FI-		178.4	6146.	23.93	0.029	29.3
13.731	6.833	(+)		101.0	6064.	23.62	0.017	28.5
188.551	93.378	(-)		77.4	82.0	0.319	CEX 0.945	0.0197
110.000	10641.74	FI+		74.5	6596.	23.35	0.011	27.9
	788.10	FI-		236.6	6768.	23.96	0.035	29.4
14.398	7.168	(+)		155.5	6682.	23.65	0.023	28.6
207.317	102.761	(-)		81.0	85.8	0.304	CEX 0.944	0.0178
120.000	11604.96	FI+		129.0	7213.	23.41	0.018	28.0
	859.75	FI-		297.9	7392.	23.99	0.040	29.4
15.036	7.488	(+)		213.4	7303.	23.70	0.029	28.7
226.082	112.143	(-)		84.5	89.5	0.290	CEX 0.944	0.0163
130.000	12568.19	FI+		186.7	7834.	23.47	0.024	28.1
	931.39	FI-		362.2	8020.	24.02	0.045	29.5
15.648	7.795	(+)		274.4	7927.	23.74	0.035	28.8
244.847	121.526	(-)		87.8	93.0	0.279	CEX 0.944	0.0150
140.000	13531.43	FI+		247.3	8458.	23.52	0.029	28.3
	1003.04	FI-		429.2	8650.	24.06	0.050	29.6
16.236	8.090	(+)		338.3	8554.	23.79	0.040	29.0
263.612	130.908	(-)		90.9	96.4	0.268	CEX 0.944	0.0139
150.000	14494.66	FI+		310.7	9085.	23.58	0.034	28.4
	1074.68	FI-		498.7	9284.	24.10	0.054	29.8
16.804	8.375	(+)		404.7	9184.	23.84	0.044	29.1
282.377	140.291	(-)		94.0	99.6	0.259	CEX 0.943	0.0129

K-	-W-S	S-OMEGA		RE C	IM C	S TOT	RHO	DS/DT
GEV	Q-2*Q**2			1/GEV	1/GEV	MB		MB/GEV**2
160.000	15457.89	PI+		376.6	9715.	23.64	0.039	28.6
	1146.33	PI-		570.5	9920.	24.14	0.058	29.9
17.353	8.651	(+)		473.5	9817.	23.89	0.048	29.2
301.142	149.673	(-)		96.9	102.8	0.250	0.943	0.0121
170.000	16421.12	PI+		444.9	10348.	23.70	0.043	28.8
	1217.97	PI-		644.5	10559.	24.19	0.061	30.0
17.886	8.918	(+)		544.7	10454.	23.95	0.052	29.4
319.907	159.056	(-)		99.8	105.8	0.242	0.943	0.0113
180.000	17384.35	PI+		515.3	10984.	23.76	0.047	28.9
	1289.62	PI-		720.5	11201.	24.23	0.064	30.1
18.403	9.177	(+)		617.9	11092.	24.00	0.056	29.5
338.672	168.438	(-)		102.6	108.7	0.235	0.943	0.0107
200.000	19310.81	PI+		662.4	12264.	23.88	0.054	29.2
	1432.91	PI-		878.1	12493.	24.32	0.070	30.4
19.396	9.675	(+)		770.3	12378.	24.10	0.062	29.8
376.203	187.203	(-)		107.9	114.4	0.223	0.943	0.0096
220.000	21237.27	PI+		816.9	13554.	23.99	0.060	29.5
	1576.20	PI-		1042.7	13794.	24.42	0.076	30.6
20.340	10.148	(+)		929.8	13674.	24.20	0.068	30.1
413.733	205.968	(-)		112.9	119.8	0.212	0.943	0.0087
240.000	23163.73	PI+		978.0	14855.	24.10	0.066	29.8
	1719.49	PI-		1213.5	15105.	24.51	0.080	30.9
21.243	10.600	(+)		1095.8	14980.	24.31	0.073	30.3
451.263	224.734	(-)		117.7	124.9	0.203	0.943	0.0079
260.000	25090.19	PI+		1145.3	16165.	24.21	0.071	30.1
	1862.78	PI-		1390.0	16424.	24.60	0.085	31.1
22.109	11.034	(+)		1267.6	16295.	24.40	0.078	30.6
488.794	243.499	(-)		122.3	129.8	0.194	0.943	0.0073
280.000	27016.65	PI+		1318.1	17483.	24.32	0.075	30.4
	2006.07	PI-		1571.7	17752.	24.69	0.089	31.4
22.942	11.451	(+)		1444.9	17618.	24.50	0.082	30.9
526.324	262.264	(-)		126.8	134.5	0.187	0.943	0.0068
300.000	28943.11	PI+		1496.2	18811.	24.42	0.080	30.7
	2149.36	PI-		1758.3	19089.	24.78	0.092	31.6
23.746	11.854	(+)		1627.2	18950.	24.60	0.086	31.1
563.854	281.029	(-)		131.0	139.0	0.180	0.943	0.0063
350.000	33759.27	PI+		1961.6	22164.	24.66	0.089	31.3
	2507.59	PI-		2243.8	22463.	24.99	0.100	32.2
25.645	12.805	(+)		2102.7	22313.	24.83	0.094	31.8
657.680	327.942	(-)		141.1	149.7	0.167	0.942	0.0054
400.000	38575.42	PI+		2452.5	25562.	24.89	0.096	31.9
	2865.82	PI-		2753.5	25882.	25.20	0.106	32.8
27.414	13.690	(+)		2603.0	25722.	25.04	0.101	32.4
751.506	374.855	(-)		150.5	159.7	0.155	0.942	0.0047
450.000	43391.57	PI+		2965.7	29003.	25.10	0.102	32.5
	3224.04	PI-		3284.1	29341.	25.39	0.112	33.3
29.075	14.522	(+)		3124.9	29172.	25.24	0.107	32.9
845.331	421.768	(-)		159.2	169.0	0.146	0.942	0.0041

K-	-W-S	S-OMEGA		RE C	IM C	S TOT	RHO	DS/DT
GEV	Q-2*Q**2			1/GEV	1/GEV	MB		MB/GEV**2
500.000	48207.73	FI+		3498.4	32482.	25.30	0.108	33.1
	3582.27	FI-		3833.4	32838.	25.57	0.117	33.9
30.646	15.308	(+)		3665.9	32660.	25.44	0.112	33.5
939.157	468.681	(-)		167.5	177.8	0.138	CEX 0.942	0.0037
600.000	57840.04	FI+		4614.7	39546.	25.67	0.117	34.1
	4298.72	FI-		4980.4	39934.	25.92	0.125	34.9
33.568	16.771	(+)		4797.6	39740.	25.79	0.121	34.5
1126.808	562.507	(-)		182.8	194.0	0.126	CEX 0.942	0.0031
700.000	67472.34	FI+		5789.1	46736.	26.00	0.124	35.1
	5015.18	FI-		6182.9	47154.	26.23	0.131	35.8
36.255	18.115	(+)		5986.0	46945.	26.12	0.128	35.4
1314.460	656.333	(-)		196.9	209.0	0.116	CEX 0.942	0.0026
800.000	77104.64	FI+		7012.9	54038.	26.30	0.130	35.9
	5731.63	FI-		7432.8	54484.	26.52	0.136	36.6
38.757	19.367	(+)		7222.8	54261.	26.41	0.133	36.3
1502.111	750.159	(-)		210.0	222.9	0.108	CEX 0.942	0.0023
900.000	86736.95	FI+		8279.5	61443.	26.58	0.135	36.8
	6448.09	FI-		8723.9	61914.	26.79	0.141	37.4
41.107	20.542	(+)		8501.7	61678.	26.69	0.138	37.1
1689.763	843.985	(-)		222.2	235.8	0.102	CEX 0.942	0.0020
1000.000	96369.27	FI+		9584.1	68940.	26.85	0.139	37.5
	7164.54	FI-	10051.6	10051.6	69436.	27.04	0.145	38.1
43.329	21.654	(+)		9817.9	69188.	26.94	0.142	37.8
1877.414	937.811	(-)		233.7	248.1	0.097	CEX 0.942	0.0018





K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	DS/DO MB/SR	DS/DT MB/GEV**2
0.001	59.63	PI+	-10.48	0.01	2.60	0.21	*****
0.000	1.00	PI-	8.46	0.02	5.90	0.13	*****
1.078	0.001	(+)	-1.01	0.01	4.25	0.00	7948.4
1.162	0.000	(-)	9.47	0.00	1.650	CEX	0.34 *****
0.002	59.63	PI+	-10.48	0.01	2.62	0.21	*****
0.000	1.00	PI-	8.46	0.03	5.91	0.13	*****
1.078	0.002	(+)	-1.01	0.02	4.27	0.00	1966.7
1.162	0.000	(-)	9.47	0.01	1.647	CEX	0.34 *****
0.005	59.64	PI+	-10.44	0.03	2.63	0.20	33775.
0.000	1.00	PI-	8.48	0.08	5.92	0.13	22309.
1.078	0.004	(+)	-0.98	0.05	4.28	0.00	297.2
1.162	0.000	(-)	9.46	0.02	1.647	CEX	0.33 55490.9
0.010	59.67	PI+	-10.32	0.07	2.65	0.20	8250.2
0.000	1.00	PI-	8.53	0.15	5.94	0.14	5640.4
1.078	0.009	(+)	-0.89	0.11	4.29	0.00	62.9
1.162	0.000	(-)	9.43	0.04	1.643	CEX	0.33 13764.9
0.020	59.77	PI+	-9.90	0.14	2.70	0.18	1899.2
0.001	1.01	PI-	8.59	0.30	5.90	0.14	1429.9
1.079	0.017	(+)	-0.66	0.22	4.30	0.00	9.3
1.164	0.001	(-)	9.24	0.08	1.600	CEX	0.32 3310.55
0.040	60.17	PI+	-8.36	0.30	2.90	0.13	338.8
0.006	1.04	PI-	8.57	0.60	5.80	0.14	357.2
1.083	0.035	(+)	0.10	0.45	4.35	0.00	1.0
1.172	0.002	(-)	8.46	0.15	1.450	CEX	0.27 693.93
0.060	60.82	PI+	-5.73	0.49	3.20	0.06	71.1
0.012	1.09	PI-	8.73	0.86	5.60	0.14	165.6
1.089	0.052	(+)	1.50	0.68	4.40	0.00	5.8
1.185	0.005	(-)	7.23	0.18	1.200	CEX	0.19 225.04
0.080	61.68	PI+	-1.96	0.87	4.25	0.01	5.6
0.021	1.15	PI-	9.18	1.16	5.65	0.15	103.7
1.096	0.068	(+)	3.61	1.02	4.95	0.03	17.0
1.202	0.009	(-)	5.57	0.14	0.700	CEX	0.11 75.22
0.100	62.73	PI+	3.12	1.52	5.90	0.02	9.3
0.032	1.23	PI-	10.08	1.52	5.90	0.18	80.5
1.105	0.085	(+)	6.60	1.52	5.90	0.08	35.5
1.222	0.014	(-)	3.48	0.00	0.000	CEX	0.04 18.79
0.120	63.92	PI+	9.85	2.97	9.64	0.18	56.9
0.044	1.32	PI-	11.62	2.12	6.88	0.24	75.1
1.116	0.101	(+)	10.74	2.55	8.26	0.21	65.5
1.245	0.020	(-)	0.89	-0.43	-1.380	CEX	0.00 1.04
0.140	65.23	PI+	18.25	6.03	16.78	0.63	146.1
0.058	1.42	PI-	13.87	3.23	8.99	0.35	80.1
1.127	0.117	(+)	16.06	4.63	12.89	0.48	110.4
1.271	0.027	(-)	-2.19	-1.40	-3.893	CEX	0.02 5.35
0.160	66.64	PI+	28.33	11.43	27.83	1.56	282.4
0.073	1.52	PI-	16.85	5.13	12.48	0.52	93.9
1.139	0.132	(+)	22.59	8.28	20.15	0.97	175.2
1.298	0.035	(-)	-5.74	-3.15	-7.676	CEX	0.14 25.96

K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	DS/DO MB/SR	DS/DT MB/GEV**2
0.180	68.13	PI+	40.05	20.6	44.60	3.32	485.2
0.088	1.63	PI-	20.56	8.3	17.90	0.80	117.4
1.152	0.147	(+)	30.31	14.4	31.25	1.84	269.5
1.327	0.043	(-)	-9.75	-6.17	-13.350	CEX 0.435	63.633
0.200	69.68	PI+	52.49	35.9	69.94	6.47	783.4
0.104	1.75	PI-	24.71	13.4	26.18	1.27	153.3
1.165	0.161	(+)	38.60	24.7	48.06	3.36	406.5
1.357	0.052	(-)	-13.89	-11.24	-21.880	CEX 1.021	123.619
0.220	71.28	PI+	62.07	60.2	106.61	11.69	1197.2
0.121	1.87	PI-	28.12	21.6	38.27	1.97	201.4
1.178	0.175	(+)	45.09	40.9	72.44	5.80	593.5
1.389	0.061	(-)	-16.97	-19.30	-34.169	CEX 2.066	211.511
0.240	72.93	PI+	61.23	93.8	152.21	19.17	1687.9
0.138	1.99	PI-	28.29	32.9	53.34	2.87	252.9
1.192	0.189	(+)	44.76	63.3	102.77	9.19	809.1
1.421	0.071	(-)	-16.47	-30.47	-49.436	CEX 3.666	322.703
0.260	74.61	PI+	41.91	128.8	192.95	27.41	2103.3
0.156	2.11	PI-	22.52	44.6	66.85	3.73	286.5
1.206	0.202	(+)	32.22	86.7	129.90	12.78	981.0
1.454	0.082	(-)	-9.69	-42.10	-63.050	CEX 5.574	427.716
0.280	76.32	PI+	6.00	150.1	208.72	32.94	2229.1
0.173	2.24	PI-	11.34	51.8	72.04	4.11	277.8
1.219	0.215	(+)	8.67	100.9	140.38	14.98	1014.2
1.487	0.093	(-)	2.67	-49.14	-68.339	CEX 7.071	478.594
0.300	78.06	PI+	-32.35	150.0	194.69	33.61	2026.5
0.191	2.37	PI-	0.05	51.4	66.77	3.78	227.8
1.233	0.228	(+)	-16.15	100.7	130.73	14.85	895.5
1.521	0.104	(-)	16.20	-49.27	-63.959	CEX 7.681	463.143
0.320	79.82	PI+	-60.65	135.9	165.32	30.90	1674.5
0.210	2.50	PI-	-7.29	47.3	57.57	3.20	173.4
1.247	0.241	(+)	-33.97	91.6	111.45	13.32	721.8
1.555	0.116	(-)	26.68	-44.27	-53.873	CEX 7.460	404.252
0.340	81.59	PI+	-76.97	117.9	135.07	27.09	1329.1
0.228	2.63	PI-	-10.74	42.3	48.45	2.60	127.7
1.261	0.253	(+)	-43.85	80.1	91.76	11.39	559.1
1.589	0.128	(-)	33.11	-37.82	-43.312	CEX 6.901	338.605
0.360	83.38	PI+	-85.12	101.6	109.85	23.47	1049.6
0.247	2.77	PI-	-11.44	38.0	41.14	2.11	94.3
1.275	0.265	(+)	-48.28	69.8	75.49	9.62	430.5
1.624	0.140	(-)	36.84	-31.76	-34.356	CEX 6.324	282.878
0.380	85.18	PI+	-88.50	87.8	89.95	20.32	833.5
0.265	2.90	PI-	-10.55	35.0	35.82	1.74	71.5
1.288	0.277	(+)	-49.53	61.4	62.89	8.13	333.6
1.659	0.153	(-)	38.97	-26.41	-27.063	CEX 5.799	237.812
0.400	87.00	PI+	-89.30	76.9	74.90	17.80	672.7
0.284	3.04	PI-	-8.85	33.0	32.10	1.49	56.4
1.302	0.288	(+)	-49.07	55.0	53.50	6.95	262.8
1.695	0.166	(-)	40.23	-21.98	-21.398	CEX 5.383	203.474

K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB		DS/DO MB/SR	DS/DT MB/GEV**2
0.420	88.82	PI+	-89.24	68.2	63.24		15.83	554.1
0.303	3.17	PI-	-6.76	31.9	29.57		1.33	46.7
1.315	0.300	(+)	-48.00	50.0	46.40		6.03	211.2
1.730	0.179	(-)	41.24	-18.16	-16.838	CEX	5.095	178.339
0.440	90.65	PI+	-88.43	60.2	53.28		14.07	458.0
0.322	3.31	PI-	-4.42	31.4	27.75		1.23	40.1
1.329	0.311	(+)	-46.43	45.8	40.52		5.23	170.1
1.766	0.193	(-)	42.00	-14.43	-12.769	CEX	4.849	157.857
0.460	92.49	PI+	-85.90	53.1	44.95		12.29	373.4
0.341	3.44	PI-	-1.60	31.3	26.51		1.18	36.0
1.342	0.322	(+)	-43.75	42.2	35.73		4.45	135.3
1.802	0.207	(-)	42.15	-10.89	-9.222	CEX	4.567	138.775
0.480	94.34	PI+	-82.95	48.7	39.51		10.93	311.1
0.360	3.58	PI-	1.47	32.3	26.22		1.24	35.2
1.356	0.332	(+)	-40.74	40.5	32.86		3.90	111.0
1.838	0.221	(-)	42.21	-8.19	-6.643	CEX	4.367	124.321
0.500	96.19	PI+	-80.55	44.7	34.84		9.83	263.0
0.380	3.72	PI-	4.08	34.1	26.55		1.37	36.5
1.369	0.343	(+)	-38.24	39.4	30.69		3.49	93.4
1.874	0.235	(-)	42.31	-5.32	-4.143	CEX	4.214	112.711
0.520	98.05	PI+	-77.91	41.5	31.08		8.86	223.3
0.399	3.86	PI-	6.49	35.8	26.79		1.50	37.9
1.382	0.353	(+)	-35.71	38.6	28.94		3.15	79.3
1.910	0.249	(-)	42.20	-2.86	-2.143	CEX	4.066	102.510
0.540	99.91	PI+	-75.61	39.1	28.22		8.08	192.6
0.418	4.00	PI-	9.08	37.9	27.32		1.69	40.3
1.395	0.363	(+)	-33.27	38.5	27.77		2.89	68.8
1.946	0.264	(-)	42.34	-0.62	-0.449	CEX	4.000	95.274
0.560	101.78	PI+	-73.68	36.6	25.48		7.41	167.3
0.438	4.13	PI-	11.49	40.5	28.13		1.94	43.7
1.408	0.373	(+)	-31.09	38.5	26.80		2.68	60.6
1.983	0.278	(-)	42.59	1.91	1.326	CEX	3.979	89.778
0.580	103.65	PI+	-71.14	33.9	22.76		6.68	143.0
0.457	4.27	PI-	13.63	43.1	28.93		2.20	47.0
1.421	0.383	(+)	-28.76	38.5	25.84		2.48	53.2
2.019	0.293	(-)	42.39	4.59	3.084	CEX	3.908	83.716
0.600	105.53	PI+	-68.28	32.2	20.88		6.02	122.6
0.476	4.41	PI-	16.45	45.3	29.43		2.46	50.1
1.434	0.393	(+)	-25.92	38.8	25.15		2.30	46.8
2.056	0.308	(-)	42.36	6.59	4.274	CEX	3.882	79.104
0.620	107.40	PI+	-65.72	30.6	19.19		5.45	105.9
0.496	4.55	PI-	20.04	49.0	30.78		2.91	56.5
1.447	0.402	(+)	-22.84	39.8	24.99		2.18	42.4
2.092	0.323	(-)	42.88	9.23	5.795	CEX	3.992	77.542
0.640	109.28	PI+	-62.78	28.8	17.54		4.87	90.3
0.515	4.69	PI-	23.49	54.0	32.88		3.54	65.7
1.459	0.412	(+)	-19.64	41.4	25.21		2.14	39.8
2.129	0.339	(-)	43.13	12.60	7.669	CEX	4.118	76.383

K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	DS/DO MB/SR	DS/DT MB/GEV**2
0.660	111.17	PI+	-59.58	27.8	16.38	4.33	76.8
0.535	4.83	PI-	26.49	60.8	35.87	4.41	78.2
1.472	0.421	(+)	-16.54	44.3	26.12	2.24	39.7
2.166	0.354	(-)	43.04	16.52	9.746	CEX 4.260	75.580
0.680	113.05	PI+	-56.21	26.7	15.29	3.82	64.9
0.555	4.97	PI-	26.95	70.1	40.15	5.56	94.5
1.484	0.430	(+)	-14.63	48.4	27.72	2.52	42.8
2.202	0.370	(-)	41.58	21.70	12.429	CEX 4.337	73.723
0.700	114.94	PI+	-52.47	26.2	14.57	3.33	54.4
0.574	5.11	PI-	22.93	78.9	43.91	6.55	106.8
1.496	0.439	(+)	-14.77	52.6	29.24	2.89	47.1
2.239	0.385	(-)	37.70	26.37	14.669	CEX 4.104	66.923
0.720	116.83	PI+	-48.57	26.2	14.16	2.90	45.5
0.594	5.25	PI-	16.02	84.0	45.44	6.98	109.3
1.509	0.448	(+)	-16.27	55.1	29.80	3.15	49.3
2.276	0.401	(-)	32.30	28.92	15.643	CEX 3.585	56.175
0.740	118.72	PI+	-44.59	26.8	14.09	2.54	38.3
0.613	5.40	PI-	8.70	84.9	44.69	6.84	103.1
1.521	0.457	(+)	-17.95	55.9	29.39	3.23	48.7
2.313	0.417	(-)	26.64	29.07	15.297	CEX 2.919	43.994
0.760	120.62	PI+	-40.86	28.0	14.35	2.27	32.9
0.633	5.54	PI-	4.15	81.2	41.60	6.11	88.6
1.533	0.465	(+)	-18.35	54.6	27.98	3.07	44.5
2.350	0.433	(-)	22.50	26.59	13.625	CEX 2.242	32.553
0.780	122.51	PI+	-37.38	29.4	14.66	2.06	28.8
0.653	5.68	PI-	4.40	76.7	38.29	5.37	75.1
1.545	0.474	(+)	-16.49	53.0	26.47	2.81	39.3
2.387	0.449	(-)	20.89	23.67	11.815	CEX 1.813	25.378
0.800	124.41	PI+	-33.72	30.8	15.01	1.87	25.3
0.673	5.82	PI-	8.46	73.9	35.97	4.96	67.0
1.557	0.482	(+)	-12.63	52.4	25.49	2.60	35.1
2.424	0.465	(-)	21.09	21.53	10.480	CEX 1.627	21.990
0.820	126.31	PI+	-29.72	33.0	15.66	1.74	22.7
0.692	5.96	PI-	13.79	74.5	35.37	5.06	66.1
1.569	0.490	(+)	-7.96	53.7	25.51	2.60	34.0
2.461	0.481	(-)	21.75	20.75	9.854	CEX 1.595	20.825
0.840	128.21	PI+	-26.16	36.3	16.84	1.74	22.0
0.712	6.10	PI-	20.11	76.2	35.33	5.40	68.2
1.580	0.499	(+)	-3.02	56.3	26.08	2.76	34.9
2.498	0.497	(-)	23.13	19.95	9.249	CEX 1.622	20.491
0.860	130.11	PI+	-23.46	39.8	18.04	1.83	22.4
0.732	6.24	PI-	26.62	82.1	37.19	6.38	78.1
1.592	0.507	(+)	1.58	61.0	27.62	3.19	39.0
2.535	0.514	(-)	25.04	21.14	9.574	CEX 1.840	22.501
0.880	132.01	PI+	-21.26	43.5	19.23	1.98	23.4
0.751	6.38	PI-	31.02	89.9	39.79	7.64	90.5
1.604	0.515	(+)	4.88	66.7	29.51	3.77	44.7
2.572	0.530	(-)	26.14	23.24	10.282	CEX 2.065	24.473

K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	DS/DO MB/SR	DS/DT MB/GEV**2
0.900	133.92	PI+	-19.45	47.1	20.40	2.16	24.9
0.771	6.53	PI-	35.24	98.5	42.60	9.10	104.6
1.615	0.523	(+)	7.90	72.8	31.50	4.46	51.3
2.609	0.547	(-)	27.34	25.65	11.100	CEX 2.339	26.890
0.920	135.82	PI+	-18.24	51.0	21.60	2.41	26.9
0.791	6.67	PI-	37.40	111.7	47.28	11.38	127.0
1.627	0.531	(+)	9.58	81.4	34.44	5.51	61.4
2.646	0.563	(-)	27.82	30.34	12.840	CEX 2.780	31.011
0.940	137.72	PI+	-17.73	54.6	22.60	2.66	28.8
0.811	6.81	PI-	34.07	125.7	52.08	13.73	148.7
1.638	0.538	(+)	8.17	90.1	37.34	6.63	71.8
2.683	0.580	(-)	25.90	35.58	14.740	CEX 3.134	33.960
0.960	139.63	PI+	-17.45	57.4	23.30	2.88	30.3
0.831	6.95	PI-	26.91	137.8	55.90	15.73	165.7
1.649	0.546	(+)	4.73	97.6	39.60	7.62	80.3
2.720	0.597	(-)	22.18	40.18	16.300	CEX 3.363	35.420
0.980	141.54	PI+	-17.03	59.9	23.80	3.05	31.3
0.850	7.09	PI-	16.14	148.7	59.08	17.61	180.4
1.661	0.554	(+)	-0.45	104.3	41.44	8.56	87.7
2.757	0.613	(-)	16.58	44.39	17.640	CEX 3.536	36.231
1.000	143.44	PI+	-16.34	62.1	24.20	3.21	32.0
0.870	7.23	PI-	0.77	155.3	60.48	18.74	186.9
1.672	0.561	(+)	-7.79	108.7	42.34	9.23	92.1
2.795	0.630	(-)	8.55	46.58	18.140	CEX 3.485	34.755
1.020	145.35	PI+	-15.43	64.4	24.60	3.37	32.7
0.890	7.38	PI-	-14.14	153.5	58.60	18.22	176.9
1.683	0.569	(+)	-14.78	109.0	41.60	9.27	90.0
2.832	0.647	(-)	0.65	44.53	17.000	CEX 3.041	29.535
1.040	147.26	PI+	-14.41	66.8	25.00	3.53	33.4
0.910	7.52	PI-	-25.18	148.9	55.76	17.26	163.4
1.694	0.576	(+)	-19.80	107.8	40.38	9.10	86.1
2.869	0.664	(-)	-5.39	41.08	15.380	CEX 2.597	24.585
1.060	149.17	PI+	-13.28	69.1	25.40	3.70	34.2
0.930	7.66	PI-	-33.41	141.9	52.14	15.88	146.6
1.705	0.583	(+)	-23.35	105.5	38.77	8.73	80.5
2.906	0.681	(-)	-10.07	36.39	13.370	CEX 2.130	19.662
1.080	151.08	PI+	-12.03	71.6	25.81	3.89	35.0
0.949	7.80	PI-	-37.84	133.5	48.15	14.21	128.0
1.716	0.591	(+)	-24.94	102.6	36.98	8.22	74.0
2.943	0.698	(-)	-12.90	30.98	11.170	CEX 1.661	14.960
1.100	152.99	PI+	-10.50	74.1	26.22	4.08	35.8
0.969	7.94	PI-	-38.38	125.8	44.54	12.60	110.8
1.726	0.598	(+)	-24.44	99.9	35.38	7.71	67.8
2.981	0.715	(-)	-13.94	25.88	9.160	CEX 1.258	11.061
1.120	154.90	PI+	-8.76	77.0	26.78	4.32	37.1
0.989	8.09	PI-	-36.21	120.3	41.82	11.35	97.4
1.737	0.605	(+)	-22.49	98.7	34.30	7.36	63.2
3.018	0.732	(-)	-13.72	21.63	7.520	CEX 0.944	8.104

K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	DS/DO MB/SR	DS/DT MB/GEV**2
1.140	156.82	PI+	-7.11	80.4	27.45	4.62	38.8
1.009	8.23	PI-	-33.46	117.5	40.15	10.61	89.0
1.748	0.612	(+)	-20.29	99.0	33.80	7.25	60.8
3.055	0.749	(-)	-13.17	18.59	6.350	CEX 0.738	6.188
1.160	158.73	PI+	-5.53	83.9	28.18	4.97	40.7
1.029	8.37	PI-	-31.20	115.9	38.90	10.11	82.9
1.758	0.619	(+)	-18.36	99.9	33.54	7.24	59.4
3.092	0.766	(-)	-12.83	15.97	5.360	CEX 0.589	4.832
1.180	160.64	PI+	-3.97	87.9	29.00	5.37	43.1
1.049	8.51	PI-	-28.58	114.7	37.84	9.69	77.7
1.769	0.626	(+)	-16.28	101.3	33.42	7.30	58.5
3.130	0.783	(-)	-12.30	13.39	4.420	CEX 0.459	3.680
1.200	162.55	PI+	-2.54	92.3	29.94	5.84	45.8
1.069	8.66	PI-	-26.00	115.0	37.33	9.53	74.8
1.780	0.633	(+)	-14.27	103.6	33.63	7.50	58.9
3.167	0.801	(-)	-11.73	11.39	3.695	CEX 0.366	2.875
1.220	164.47	PI+	-1.46	97.1	31.00	6.39	49.1
1.088	8.80	PI-	-24.12	115.8	36.96	9.48	72.8
1.790	0.639	(+)	-12.79	106.5	33.98	7.79	59.8
3.204	0.818	(-)	-11.33	9.34	2.980	CEX 0.292	2.243
1.240	166.38	PI+	-0.80	102.2	32.10	7.00	52.6
1.108	8.94	PI-	-22.38	116.7	36.66	9.46	71.2
1.800	0.646	(+)	-11.59	109.5	34.38	8.12	61.1
3.241	0.835	(-)	-10.79	7.26	2.280	CEX 0.226	1.704
1.260	168.30	PI+	-0.42	107.6	33.24	7.66	56.4
1.128	9.08	PI-	-20.82	118.2	36.53	9.54	70.3
1.811	0.653	(+)	-10.62	112.9	34.88	8.51	62.7
3.279	0.853	(-)	-10.20	5.32	1.645	CEX 0.175	1.292
1.280	170.21	PI+	-0.51	113.4	34.50	8.42	60.8
1.148	9.22	PI-	-19.53	119.8	36.46	9.65	69.7
1.821	0.660	(+)	-10.02	116.6	35.48	8.97	64.8
3.316	0.870	(-)	-9.51	3.22	0.980	CEX 0.132	0.954
1.300	172.13	PI+	-1.41	119.5	35.80	9.25	65.5
1.168	9.37	PI-	-18.54	121.9	36.50	9.83	69.6
1.831	0.666	(+)	-9.97	120.7	36.15	9.49	67.2
3.353	0.887	(-)	-8.57	1.17	0.350	CEX 0.097	0.685
1.320	174.04	PI+	-3.08	125.6	37.05	10.10	70.2
1.188	9.51	PI-	-17.91	123.9	36.55	10.03	69.7
1.841	0.673	(+)	-10.50	124.7	36.80	10.03	69.7
3.391	0.905	(-)	-7.42	-0.85	-0.250	CEX 0.071	0.495
1.340	175.96	PI+	-5.58	131.6	38.25	10.99	74.9
1.208	9.65	PI-	-17.55	126.0	36.61	10.25	69.8
1.851	0.679	(+)	-11.56	128.8	37.43	10.59	72.2
3.428	0.922	(-)	-5.98	-2.82	-0.820	CEX 0.055	0.378
1.360	177.88	PI+	-8.89	137.3	39.30	11.85	79.2
1.228	9.79	PI-	-17.41	128.0	36.66	10.46	69.9
1.862	0.685	(+)	-13.15	132.6	37.98	11.13	74.4
3.465	0.940	(-)	-4.26	-4.61	-1.320	CEX 0.049	0.330

K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	DS/DO MB/SR	DS/DT MB/GEV**2
1.380	179.79	FI+	-12.83	142.5	40.20	12.68	83.2
1.247	9.94	FI-	-17.39	130.1	36.70	10.67	70.0
1.872	0.692	(+)	-15.11	136.3	38.45	11.65	76.5
3.503	0.957	(-)	-2.28	-6.20	-1.750	CEX 0.054	0.355
1.400	181.71	FI+	-17.72	147.3	40.96	13.49	87.0
1.267	10.08	FI-	-17.88	132.3	36.80	10.93	70.4
1.881	0.698	(+)	-17.80	139.8	38.88	12.18	78.5
3.540	0.975	(-)	-0.08	-7.48	-2.080	CEX 0.069	0.442
1.420	183.63	FI+	-23.17	150.6	41.31	14.10	89.2
1.287	10.22	FI-	-18.59	133.7	36.67	11.06	70.0
1.891	0.704	(+)	-20.88	142.2	38.99	12.53	79.3
3.577	0.992	(-)	2.29	-8.46	-2.320	CEX 0.093	0.590
1.440	185.54	FI+	-28.51	153.1	41.41	14.57	90.6
1.307	10.37	FI-	-19.02	135.1	36.53	11.18	69.5
1.901	0.711	(+)	-23.76	144.1	38.97	12.81	79.7
3.615	1.010	(-)	4.74	-9.02	-2.440	CEX 0.125	0.777
1.460	187.46	FI+	-33.77	154.9	41.31	14.94	91.3
1.327	10.51	FI-	-19.48	136.4	36.37	11.28	69.0
1.911	0.717	(+)	-26.63	145.6	38.84	13.03	79.6
3.652	1.028	(-)	7.15	-9.26	-2.470	CEX 0.163	0.995
1.480	189.38	FI+	-39.02	155.9	41.03	15.20	91.4
1.347	10.65	FI-	-19.85	137.4	36.15	11.34	68.2
1.921	0.723	(+)	-29.43	146.7	38.59	13.17	79.1
3.689	1.045	(-)	9.58	-9.27	-2.440	CEX 0.209	1.258
1.500	191.30	FI+	-44.05	156.0	40.51	15.31	90.5
1.367	10.79	FI-	-20.08	138.4	35.93	11.39	67.3
1.930	0.729	(+)	-32.07	147.2	38.22	13.22	78.2
3.727	1.063	(-)	11.98	-8.82	-2.290	CEX 0.258	1.525
1.520	193.22	FI+	-48.53	155.4	39.81	15.28	88.9
1.387	10.94	FI-	-20.07	139.2	35.67	11.41	66.4
1.940	0.735	(+)	-34.30	147.3	37.74	13.19	76.7
3.764	1.081	(-)	14.23	-8.08	-2.070	CEX 0.309	1.796
1.540	195.13	FI+	-52.39	154.2	39.00	15.15	86.7
1.407	11.08	FI-	-20.15	140.4	35.50	11.49	65.7
1.950	0.741	(+)	-36.27	147.3	37.25	13.14	75.2
3.801	1.098	(-)	16.12	-6.92	-1.750	CEX 0.351	2.010
1.560	197.05	FI+	-55.51	152.6	38.10	14.92	84.0
1.427	11.22	FI-	-19.96	141.0	35.20	11.47	64.6
1.959	0.747	(+)	-37.74	146.8	36.65	13.00	73.2
3.839	1.116	(-)	17.78	-5.81	-1.450	CEX 0.396	2.227
1.580	198.97	FI+	-57.89	150.9	37.20	14.64	81.1
1.447	11.36	FI-	-19.35	142.0	35.00	11.50	63.7
1.969	0.753	(+)	-38.62	146.5	36.10	12.85	71.2
3.876	1.134	(-)	19.27	-4.46	-1.100	CEX 0.438	2.429
1.600	200.89	FI+	-59.55	149.1	36.28	14.29	78.0
1.466	11.51	FI-	-18.72	143.2	34.84	11.56	63.1
1.978	0.759	(+)	-39.14	146.1	35.56	12.69	69.2
3.914	1.152	(-)	20.41	-2.96	-0.720	CEX 0.472	2.574

K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB		DS/DO MB/SR	DS/DT MB/GEV**2
1.650	205.69	PI+	-61.69	146.6	34.60		13.71	72.0
1.516	11.86	PI-	-17.01	146.9	34.66		11.84	62.2
2.002	0.773	(+)	-39.35	146.7	34.63		12.50	65.7
4.007	1.196	(-)	22.34	0.13	0.030	CEX	0.541	2.840
1.700	210.49	PI+	-62.98	144.5	33.11		13.16	66.6
1.566	12.22	PI-	-15.46	151.3	34.65		12.24	62.0
2.025	0.788	(+)	-39.22	147.9	33.88		12.40	62.8
4.101	1.241	(-)	23.76	3.36	0.770	CEX	0.609	3.086
1.750	215.29	PI+	-62.96	143.4	31.90		12.69	62.0
1.616	12.58	PI-	-14.12	156.4	34.80		12.76	62.4
2.048	0.802	(+)	-38.54	149.9	33.35		12.40	60.6
4.194	1.286	(-)	24.42	6.52	1.450	CEX	0.661	3.231
1.800	220.09	PI+	-62.29	143.1	30.95		12.33	58.2
1.666	12.93	PI-	-13.38	162.2	35.09		13.41	63.3
2.071	0.816	(+)	-37.84	152.6	33.02		12.52	59.1
4.288	1.330	(-)	24.45	9.57	2.070	CEX	0.698	3.298
1.850	224.89	PI+	-60.86	143.2	30.15		12.00	54.8
1.716	13.29	PI-	-13.24	168.1	35.39		14.09	64.4
2.093	0.829	(+)	-37.05	155.7	32.77		12.69	58.0
4.381	1.375	(-)	23.81	12.45	2.620	CEX	0.715	3.268
1.900	229.69	PI+	-58.80	144.7	29.65		11.83	52.3
1.766	13.65	PI-	-13.76	174.4	35.75		14.85	65.7
2.115	0.843	(+)	-36.28	159.5	32.70		12.99	57.5
4.475	1.420	(-)	22.52	14.88	3.050	CEX	0.707	3.127
1.950	234.50	PI+	-56.97	147.2	29.40		11.84	50.8
1.815	14.01	PI-	-15.14	180.6	36.06		15.60	66.9
2.137	0.856	(+)	-36.05	163.9	32.73		13.38	57.4
4.568	1.465	(-)	20.91	16.68	3.330	CEX	0.680	2.915
2.000	239.30	PI+	-55.48	150.2	29.24		11.93	49.6
1.865	14.36	PI-	-17.16	186.3	36.28		16.30	67.8
2.159	0.869	(+)	-36.32	168.3	32.76		13.80	57.4
4.662	1.511	(-)	19.16	18.08	3.520	CEX	0.646	2.688
2.050	244.11	PI+	-54.04	153.5	29.15		12.08	48.8
1.915	14.72	PI-	-19.64	191.6	36.39		16.93	68.4
2.181	0.882	(+)	-36.84	172.5	32.77		14.20	57.4
4.756	1.556	(-)	17.20	19.06	3.620	CEX	0.602	2.429
2.100	248.91	PI+	-52.57	157.2	29.15		12.30	48.3
1.965	15.08	PI-	-22.45	196.2	36.39		17.47	68.5
2.202	0.895	(+)	-37.51	176.7	32.77		14.61	57.3
4.849	1.601	(-)	15.06	19.52	3.620	CEX	0.544	2.136
2.150	253.72	PI+	-51.16	161.6	29.26		12.61	48.1
2.015	15.44	PI-	-25.42	200.2	36.26		17.89	68.3
2.223	0.907	(+)	-38.29	180.9	32.76		15.01	57.3
4.943	1.647	(-)	12.87	19.32	3.500	CEX	0.473	1.807
2.200	258.52	PI+	-50.15	166.7	29.50		13.06	48.5
2.065	15.79	PI-	-28.14	203.4	36.00		18.17	67.5
2.244	0.920	(+)	-39.15	185.0	32.75		15.42	57.2
5.036	1.692	(-)	11.00	18.36	3.250	CEX	0.395	1.467



K-TPI-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	RHO	DS/DT MB/GEV**2
2.250	263.33	PI+	-49.9	172.2	29.80	-0.290	49.2
2.115	16.15	PI-	-30.5	206.3	35.70	-0.148	66.5
2.265	0.932	(+)	-40.2	169.2	32.75	-0.212	57.3
5.130	1.737	(-)	9.68	17.05	2.950	CEX 0.568	1.176
2.300	268.14	PI+	-50.4	177.8	30.10	-0.283	50.0
2.165	16.51	PI-	-32.6	208.7	35.34	-0.156	65.4
2.286	0.944	(+)	-41.5	193.3	32.72	-0.215	57.2
5.224	1.783	(-)	8.88	15.47	2.620	CEX 0.574	0.932
2.350	272.95	PI+	-51.5	183.2	30.35	-0.281	50.8
2.215	16.87	PI-	-34.2	210.9	34.95	-0.162	64.0
2.306	0.956	(+)	-42.9	197.0	32.65	-0.218	57.0
5.317	1.829	(-)	8.65	13.88	2.300	CEX 0.623	0.751
2.400	277.75	PI+	-53.0	188.2	30.54	-0.282	51.4
2.264	17.22	PI-	-35.3	213.1	34.58	-0.165	62.8
2.326	0.968	(+)	-44.2	200.7	32.56	-0.220	56.8
5.411	1.874	(-)	8.89	12.45	2.020	CEX 0.714	0.629
2.450	282.56	PI+	-54.8	193.0	30.68	-0.284	52.0
2.314	17.58	PI-	-36.0	215.6	34.26	-0.167	61.6
2.346	0.980	(+)	-45.4	204.3	32.47	-0.222	56.5
5.505	1.920	(-)	9.44	11.26	1.790	CEX 0.838	0.557
2.500	287.37	PI+	-56.9	197.6	30.78	-0.288	52.4
2.364	17.94	PI-	-36.6	218.3	34.00	-0.167	60.7
2.366	0.991	(+)	-46.7	207.9	32.39	-0.225	56.3
5.598	1.966	(-)	10.15	10.34	1.610	CEX 0.982	0.520
2.550	292.18	PI+	-59.2	201.9	30.83	-0.293	52.7
2.414	18.30	PI-	-37.2	221.0	33.75	-0.168	59.8
2.386	1.003	(+)	-48.2	211.4	32.29	-0.228	56.0
5.692	2.011	(-)	11.00	9.56	1.460	CEX 1.151	0.506
2.600	296.99	PI+	-61.6	205.7	30.81	-0.300	52.8
2.464	18.65	PI-	-37.7	223.7	33.51	-0.168	59.0
2.405	1.014	(+)	-49.7	214.7	32.16	-0.231	55.7
5.786	2.057	(-)	11.98	9.01	1.350	CEX 1.329	0.515
2.650	301.80	PI+	-64.1	209.2	30.74	-0.306	52.8
2.514	19.01	PI-	-38.0	226.5	33.28	-0.168	58.2
2.425	1.025	(+)	-51.1	217.8	32.01	-0.234	55.2
5.879	2.103	(-)	13.04	8.64	1.270	CEX 1.509	0.540
2.700	306.61	PI+	-66.6	212.3	30.62	-0.313	52.6
2.564	19.37	PI-	-38.2	229.4	33.08	-0.167	57.5
2.444	1.037	(+)	-52.4	220.8	31.85	-0.237	54.7
5.973	2.149	(-)	14.18	8.53	1.230	CEX 1.662	0.582
2.750	311.42	PI+	-68.9	215.0	30.45	-0.320	52.2
2.614	19.73	PI-	-38.3	232.4	32.91	-0.165	56.8
2.463	1.048	(+)	-53.6	223.7	31.68	-0.240	54.2
6.067	2.195	(-)	15.29	8.69	1.230	CEX 1.760	0.633
2.800	316.23	PI+	-71.0	217.4	30.24	-0.326	51.7
2.664	20.09	PI-	-38.5	235.6	32.76	-0.163	56.3
2.482	1.058	(+)	-54.7	226.5	31.50	-0.242	53.7
6.161	2.241	(-)	16.24	9.06	1.260	CEX 1.792	0.683

K-	-W-S	S-OMEGA		RE C	IM C	S TOT	RHO	DS/DT
	GEV	Q-2*Q**2		1/GEV	1/GEV	MB		MB/GEV**2
2.850		321.04	PI+	-72.8	219.7	30.02	-0.332	51.1
		20.44	PI-	-38.3	238.5	32.59	-0.161	55.7
2.501		1.069	(+)	-55.6	229.1	31.31	-0.243	53.0
6.254		2.287	(-)	17.3	9.4	1.285 CEX	1.837	0.738
2.900		325.85	PI+	-74.4	221.7	29.77	-0.336	50.4
		20.80	PI-	-38.2	242.6	32.57	-0.157	55.5
2.520		1.080	(+)	-56.3	232.1	31.17	-0.243	52.6
6.348		2.333	(-)	18.1	10.4	1.400 CEX	1.740	0.806
2.950		330.66	PI+	-75.7	223.6	29.52	-0.338	49.6
		21.16	PI-	-38.6	246.2	32.50	-0.157	55.3
2.538		1.091	(+)	-57.1	234.9	31.01	-0.243	52.0
6.442		2.379	(-)	18.5	11.3	1.490 CEX	1.643	0.839
3.000		335.47	PI+	-76.5	225.6	29.28	-0.339	48.8
		21.52	PI-	-38.9	249.9	32.44	-0.156	55.1
2.556		1.101	(+)	-57.7	237.7	30.86	-0.243	51.5
6.535		2.425	(-)	18.8	12.2	1.580 CEX	1.543	0.863
3.100		345.09	PI+	-77.5	230.1	28.91	-0.337	47.5
		22.23	PI-	-40.1	257.5	32.35	-0.156	54.8
2.593		1.122	(+)	-58.8	243.8	30.63	-0.241	50.7
6.723		2.517	(-)	18.7	13.7	1.720 CEX	1.365	0.866
3.200		354.71	PI+	-78.1	235.3	28.63	-0.332	46.5
		22.95	PI-	-41.8	264.7	32.21	-0.158	54.3
2.629		1.142	(+)	-60.0	250.0	30.42	-0.240	50.0
6.910		2.609	(-)	18.2	14.7	1.790 CEX	1.235	0.826
3.300		364.34	PI+	-78.6	241.0	28.44	-0.326	45.7
		23.66	PI-	-43.5	271.4	32.02	-0.160	53.7
2.664		1.162	(+)	-61.0	256.2	30.23	-0.238	49.3
7.098		2.701	(-)	17.5	15.2	1.790 CEX	1.156	0.765
3.400		373.96	PI+	-79.2	247.4	28.33	-0.320	45.2
		24.38	PI-	-45.1	277.9	31.83	-0.162	53.1
2.699		1.182	(+)	-62.2	262.6	30.08	-0.237	48.8
7.285		2.794	(-)	17.0	15.3	1.750 CEX	1.115	0.702
3.500		383.59	PI+	-80.2	254.0	28.26	-0.316	44.9
		25.10	PI-	-46.8	284.2	31.62	-0.165	52.5
2.734		1.201	(+)	-63.5	269.1	29.94	-0.236	48.3
7.473		2.886	(-)	16.7	15.1	1.680 CEX	1.106	0.641
3.600		393.21	PI+	-81.6	260.6	28.19	-0.313	44.6
		25.81	PI-	-48.2	290.0	31.37	-0.166	51.7
2.768		1.220	(+)	-64.9	275.3	29.78	-0.236	47.8
7.660		2.979	(-)	16.7	14.7	1.590 CEX	1.137	0.592
3.700		402.84	PI+	-83.3	267.2	28.12	-0.312	44.3
		26.53	PI-	-49.2	296.1	31.16	-0.166	51.0
2.801		1.239	(+)	-66.2	281.6	29.64	-0.235	47.4
7.848		3.071	(-)	17.0	14.4	1.520 CEX	1.178	0.564
3.800		412.46	PI+	-85.1	273.5	28.03	-0.311	44.0
		27.24	PI-	-50.2	302.0	30.95	-0.166	50.3
2.835		1.258	(+)	-67.7	287.8	29.49	-0.235	46.9
8.035		3.164	(-)	17.5	14.2	1.460 CEX	1.226	0.545

K-	-W-S	S-OMEGA		RE C	IM C	S TOT	RHO	DS/DT
GEV	Q-2*Q**2			1/GEV	1/GEV	MB		MB/GEV**2
30.000	2935.91	PI+		-192.1	1800.9	23.38	-0.107	28.2
	214.94	PI-		-83.1	1893.8	24.58	-0.044	30.9
7.563	3.722	(+)		-137.6	1847.4	23.98	-0.075	29.5
57.196	27.705	(-)		54.5	46.4	0.603	CEX 1.174	0.0883
35.000	3417.52	PI+		-193.8	2093.5	23.29	-0.093	28.0
	250.76	PI-		-75.2	2194.6	24.42	-0.034	30.5
8.160	4.025	(+)		-134.5	2144.1	23.85	-0.063	29.2
66.578	32.395	(-)		59.3	50.5	0.562	CEX 1.173	0.0768
40.000	3899.13	PI+		-192.5	2387.2	23.24	-0.081	27.8
	286.58	PI-		-65.0	2495.9	24.30	-0.026	30.2
8.716	4.306	(+)		-128.7	2441.5	23.77	-0.053	28.9
75.961	37.086	(-)		63.8	54.4	0.530	CEX 1.173	0.0681
45.000	4380.75	PI+		-188.9	2681.9	23.21	-0.070	27.7
	322.41	PI-		-52.8	2797.9	24.21	-0.019	30.0
9.238	4.570	(+)		-120.9	2739.9	23.71	-0.044	28.8
85.343	41.776	(-)		68.0	58.0	0.502	CEX 1.172	0.0612
50.000	4862.36	PI+		-183.2	2977.7	23.19	-0.062	27.6
	358.23	PI-		-39.1	3100.7	24.15	-0.013	29.8
9.733	4.820	(+)		-111.2	3039.2	23.67	-0.037	28.7
94.726	46.467	(-)		72.1	61.5	0.479	CEX 1.172	0.0556
55.000	5343.97	PI+		-175.8	3275.	23.18	-0.054	27.5
	394.05	PI-		-23.9	3404.	24.10	-0.007	29.7
10.203	5.058	(+)		-99.8	3339.	23.64	-0.030	28.6
104.108	51.158	(-)		76.0	64.8	0.459	CEX 1.172	0.0511
60.000	5825.59	PI+		-166.7	3572.	23.19	-0.047	27.5
	429.87	PI-		-7.4	3708.	24.07	-0.002	29.6
10.653	5.284	(+)		-87.1	3640.	23.63	-0.024	28.5
113.491	55.849	(-)		79.7	68.0	0.441	CEX 1.172	0.0472
65.000	6307.20	PI+		-156.3	3871.	23.19	-0.040	27.5
	465.70	PI-		10.2	4013.	24.04	0.003	29.5
11.085	5.502	(+)		-73.1	3942.	23.62	-0.019	28.5
122.874	60.540	(-)		83.2	71.0	0.426	CEX 1.172	0.0439
70.000	6788.82	PI+		-144.6	4171.	23.20	-0.035	27.5
	501.52	PI-		28.8	4319.	24.03	0.007	29.5
11.500	5.711	(+)		-57.9	4245.	23.62	-0.014	28.5
132.256	65.231	(-)		86.7	74.0	0.412	CEX 1.172	0.0411
80.000	7752.05	PI+		-117.8	4774.	23.24	-0.025	27.6
	573.16	PI-		68.8	4933.	24.01	0.014	29.5
12.289	6.108	(+)		-24.5	4854.	23.63	-0.005	28.5
151.021	74.614	(-)		93.3	79.6	0.388	CEX 1.171	0.0364
90.000	8715.28	PI+		-87.1	5380.	23.28	-0.016	27.7
	644.81	PI-		111.9	5550.	24.02	0.020	29.5
13.030	6.481	(+)		12.4	5465.	23.65	0.002	28.6
169.786	83.996	(-)		99.5	85.0	0.368	CEX 1.171	0.0328
100.000	9678.50	PI+		-53.1	5990.	23.33	-0.009	27.8
	716.45	PI-		157.8	6170.	24.03	0.026	29.5
13.731	6.833	(+)		52.3	6080.	23.68	0.009	28.6
188.551	93.378	(-)		105.5	90.0	0.351	CEX 1.171	0.0298

K-	-W-S	S-OMEGA	RE C	IM C	S TOT	RHO	DS/DT
GEV	Q-2*Q**2		1/GEV	1/GEV	MB		MB/GEV**2
110.000	10641.74	PI+	-16.2	6603.	23.38	-0.002	27.9
	788.10	PI-	206.0	6793.	24.05	0.030	29.6
14.398	7.168	(+)	94.9	6698.	23.71	0.014	28.7
207.317	102.761	(-)	111.1	94.9	0.336	CEX 1.171	0.0273
120.000	11604.96	PI+	23.2	7220.	23.43	0.003	28.0
	859.75	PI-	256.4	7419.	24.07	0.035	29.6
15.036	7.488	(+)	139.8	7319.	23.75	0.019	28.8
226.082	112.143	(-)	116.6	99.5	0.323	CEX 1.171	0.0253
130.000	12568.19	PI+	65.0	7839.	23.48	0.008	28.2
	931.39	PI-	308.6	8047.	24.10	0.038	29.7
15.648	7.795	(+)	186.8	7943.	23.79	0.024	28.9
244.847	121.526	(-)	121.8	104.0	0.312	CEX 1.171	0.0235
140.000	13531.43	PI+	108.8	8460.	23.53	0.013	28.3
	1003.04	PI-	362.5	8677.	24.14	0.042	29.8
16.236	8.090	(+)	235.6	8569.	23.83	0.028	29.0
263.612	130.908	(-)	126.9	108.3	0.301	CEX 1.171	0.0220
150.000	14494.66	PI+	154.4	9085.	23.59	0.017	28.4
	1074.68	PI-	418.0	9310.	24.17	0.045	29.9
16.804	8.375	(+)	286.2	9198.	23.88	0.031	29.2
282.377	140.291	(-)	131.8	112.5	0.292	CEX 1.171	0.0207
160.000	15457.89	PI+	201.8	9712.	23.64	0.021	28.6
	1146.33	PI-	474.9	9945.	24.20	0.048	30.0
17.353	8.651	(+)	338.4	9829.	23.92	0.034	29.3
301.142	149.673	(-)	136.5	116.6	0.284	CEX 1.171	0.0195
170.000	16421.12	PI+	250.8	10342.	23.69	0.024	28.7
	1217.97	PI-	533.1	10583.	24.24	0.050	30.1
17.886	8.918	(+)	391.9	10462.	23.97	0.037	29.4
319.907	159.056	(-)	141.2	120.6	0.276	CEX 1.171	0.0185
180.000	17384.35	PI+	301.2	10974.	23.74	0.027	28.8
	1289.62	PI-	592.5	11222.	24.28	0.053	30.2
18.403	9.177	(+)	446.8	11098.	24.01	0.040	29.5
338.672	168.438	(-)	145.7	124.4	0.269	CEX 1.171	0.0175
200.000	19310.81	PI+	405.9	12244.	23.84	0.033	29.1
	1432.91	PI-	714.6	12508.	24.35	0.057	30.4
19.396	9.675	(+)	560.3	12376.	24.10	0.045	29.7
376.203	187.203	(-)	154.4	131.8	0.257	CEX 1.171	0.0160
220.000	21237.27	PI+	515.4	13523.	23.94	0.038	29.3
	1576.20	PI-	840.7	13801.	24.43	0.061	30.6
20.340	10.148	(+)	678.0	13662.	24.18	0.050	29.9
413.733	205.968	(-)	162.7	138.9	0.246	CEX 1.171	0.0146
240.000	23163.73	PI+	629.0	14809.	24.03	0.042	29.5
	1719.49	PI-	970.3	15101.	24.50	0.064	30.8
21.243	10.600	(+)	799.6	14955.	24.26	0.053	30.2
451.263	224.734	(-)	170.6	145.7	0.236	CEX 1.171	0.0135
260.000	25090.19	PI+	746.3	16103.	24.12	0.046	29.8
	1862.78	PI-	1102.9	16408.	24.57	0.067	31.0
22.109	11.034	(+)	924.6	16255.	24.35	0.057	30.4
488.794	243.499	(-)	178.3	152.3	0.228	CEX 1.171	0.0126

K-	-W-S GEV	S-OMEGA Q-2*Q**2		RE C 1/GEV	IM C 1/GEV	S TOT MB	RHO	DS/DT MB/GEV**2
280.000	27016.65	PI+		867.0	17404.	24.20	0.050	30.0
	2006.07	PI-		1238.4	17721.	24.65	0.070	31.2
22.942	11.451	(+)		1052.7	17563.	24.42	0.060	30.6
526.324	262.264	(-)		185.7	158.6	0.221	CEX 1.171	0.0118
300.000	28943.11	PI+		990.6	18711.	24.29	0.053	30.2
	2149.36	PI-		1376.5	19041.	24.72	0.072	31.4
23.746	11.854	(+)		1183.6	18876.	24.50	0.063	30.8
563.854	281.029	(-)		192.9	164.8	0.214	CEX 1.171	0.0111
350.000	33759.27	PI+		1311.5	22006.	24.48	0.060	30.7
	2507.59	PI-		1731.5	22365.	24.88	0.077	31.8
25.645	12.805	(+)		1521.5	22185.	24.68	0.069	31.3
657.680	327.942	(-)		210.0	179.3	0.200	CEX 1.171	0.0096
400.000	38575.42	PI+		1646.7	25335.	24.66	0.065	31.2
	2865.82	PI-		2098.6	25721.	25.04	0.082	32.2
27.414	13.690	(+)		1872.6	25528.	24.85	0.073	31.7
751.506	374.855	(-)		226.0	193.0	0.188	CEX 1.171	0.0086
450.000	43391.57	PI+		1993.7	28695.	24.83	0.069	31.7
	3224.04	PI-		2476.0	29107.	25.19	0.085	32.6
29.075	14.522	(+)		2234.9	28901.	25.01	0.077	32.1
845.331	421.768	(-)		241.1	205.9	0.178	CEX 1.171	0.0077
500.000	48207.73	PI+		2351.1	32083.	24.99	0.073	32.1
	3582.27	PI-		2862.1	32519.	25.33	0.088	33.0
30.646	15.308	(+)		2606.6	32301.	25.16	0.081	32.5
939.157	468.681	(-)		255.5	218.2	0.170	CEX 1.171	0.0070
600.000	57840.04	PI+		3091.5	38934.	25.27	0.079	32.8
	4298.72	PI-		3656.4	39417.	25.58	0.093	33.7
33.568	16.771	(+)		3374.0	39175.	25.43	0.086	33.3
1126.808	562.507	(-)		282.4	241.2	0.157	CEX 1.171	0.0059
700.000	67472.34	PI+		3860.3	45875.	25.52	0.084	33.5
	5015.18	PI-		4475.1	46400.	25.81	0.096	34.4
36.255	18.115	(+)		4167.7	46137.	25.67	0.090	33.9
1314.460	656.333	(-)		307.4	262.6	0.146	CEX 1.171	0.0052
800.000	77104.64	PI+		4652.2	52893.	25.75	0.088	34.1
	5731.63	PI-		5313.9	53458.	26.02	0.099	34.9
38.757	19.367	(+)		4983.0	53175.	25.88	0.094	34.5
1502.111	750.159	(-)		330.8	282.6	0.138	CEX 1.171	0.0046
900.000	86736.95	PI+		5463.5	59981.	25.95	0.091	34.7
	6448.09	PI-		6169.5	60584.	26.21	0.102	35.5
41.107	20.542	(+)		5816.5	60282.	26.08	0.096	35.1
1689.763	843.985	(-)		353.0	301.5	0.130	CEX 1.171	0.0041
1000.000	96369.27	PI+		6291.5	67132.	26.14	0.094	35.2
	7164.54	PI-		7039.6	67771.	26.39	0.104	36.0
43.329	21.654	(+)		6665.6	67451.	26.27	0.099	35.6
1877.414	937.811	(-)		374.0	319.5	0.124	CEX 1.171	0.0037

$\omega^2 [\mu^2]$	$\tilde{C}^-/\omega [\mu^{-2}]$	$\tilde{C}^+ - g^2/m [\mu^{-1}]$
0.00	-0.460	-1.460
0.10	-0.477	-1.345
0.20	-0.495	-1.226
0.30	-0.514	-1.101
0.40	-0.534	-0.972
0.50	-0.555	-0.836
0.60	-0.577	-0.693
0.70	-0.600	-0.542
0.80	-0.624	-0.381
0.81	-0.626	-0.364
0.82	-0.629	-0.347
0.83	-0.631	-0.330
0.84	-0.634	-0.313
0.85	-0.636	-0.296
0.86	-0.639	-0.278
0.87	-0.641	-0.260
0.88	-0.644	-0.242
0.89	-0.646	-0.224
0.90	-0.649	-0.206
0.91	-0.651	-0.187
0.92	-0.653	-0.168
0.93	-0.656	-0.148
0.94	-0.658	-0.129
0.95	-0.660	-0.109
0.96	-0.662	-0.088
0.97	-0.664	-0.066
0.98	-0.666	-0.043
0.99	-0.666	-0.019
1.00	-0.666	0.010

DATA TABLES- TOTAL CROSS SECTIONS

CITRON, A. - 1966, CORR. BY GIACOMELLI, PROG. NUC. PHYS 12(2)  
 CALCULATED FROM P1+- DATA

K (GEV/C)	SIGMA(+) (MB)	SIGMA(-) (MB)
2.52	32.409 +- 0.014	1.646 +- 0.014
2.62	32.146 +- 0.014	1.322 +- 0.014
2.72	31.817 +- 0.014	1.199 +- 0.014
2.82	31.454 +- 0.014	1.304 +- 0.014
2.92	31.104 +- 0.014	1.442 +- 0.014
3.02	30.789 +- 0.014	1.622 +- 0.014
3.12	30.565 +- 0.013	1.734 +- 0.013
3.22	30.384 +- 0.011	1.790 +- 0.011
3.32	30.188 +- 0.011	1.785 +- 0.011
3.42	30.032 +- 0.011	1.715 +- 0.011
3.52	29.899 +- 0.011	1.673 +- 0.011
3.62	29.762 +- 0.011	1.575 +- 0.011
3.72	29.571 +- 0.011	1.498 +- 0.011
3.82	29.455 +- 0.007	1.453 +- 0.007
3.93	29.303 +- 0.007	1.444 +- 0.007
4.03	29.132 +- 0.007	1.401 +- 0.007
4.13	28.976 +- 0.007	1.405 +- 0.007
4.23	28.802 +- 0.007	1.395 +- 0.007
4.33	28.677 +- 0.007	1.416 +- 0.007
4.43	28.531 +- 0.007	1.416 +- 0.007
4.53	28.401 +- 0.007	1.399 +- 0.007
4.63	28.286 +- 0.007	1.381 +- 0.007
4.73	28.192 +- 0.007	1.374 +- 0.007
4.83	28.087 +- 0.007	1.364 +- 0.007
4.93	27.998 +- 0.007	1.341 +- 0.007
5.03	27.898 +- 0.007	1.341 +- 0.007
5.13	27.812 +- 0.007	1.309 +- 0.007
5.23	27.716 +- 0.007	1.314 +- 0.007
5.33	27.636 +- 0.007	1.294 +- 0.007
5.44	27.549 +- 0.007	1.311 +- 0.007
5.54	27.486 +- 0.007	1.300 +- 0.007
5.64	27.396 +- 0.018	1.275 +- 0.018
5.74	27.343 +- 0.018	1.250 +- 0.018
5.84	27.246 +- 0.018	1.268 +- 0.018
5.94	27.186 +- 0.019	1.242 +- 0.018
6.04	27.110 +- 0.018	1.260 +- 0.018
6.24	26.991 +- 0.018	1.239 +- 0.018
6.44	26.851 +- 0.018	1.255 +- 0.018
6.64	26.760 +- 0.018	1.222 +- 0.018
6.84	26.670 +- 0.018	1.219 +- 0.018

DATA TABLES    TOTAL CROSS SECTIONS

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 CARROLL, A. S. (Ref. <sup>11</sup>)  
 CALCULATED FROM  $\pi^+ p$  DATA

K (GEV/C)	SIGMA(+) (MB)	SIGMA(-) (MB)
23.00	24.360 +- 0.042	0.655 +- 0.040
35.00	23.790 +- 0.028	0.580 +- 0.020
50.00	23.585 +- 0.042	0.470 +- 0.030
70.00	23.610 +- 0.042	0.390 +- 0.030
100.00	23.665 +- 0.042	0.335 +- 0.030
120.00	23.740 +- 0.028	0.320 +- 0.020
150.00	23.805 +- 0.028	0.305 +- 0.020
170.00	23.945 +- 0.032	0.270 +- 0.020
200.00	24.085 +- 0.036	0.240 +- 0.030
240.00	24.350 +- 0.040	0.230 +- 0.035

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 DENISOV, S. P. NUCL. PHYS. B65, 1 AND YAD. FIZ 14, 998 - 1972  
 (+-) DATA GIVEN BY AUTHOR

K (GEV/C)	SIGMA(+) (MB)	SIGMA(-) (MB)
15.00	24.960 +- 0.120	0.880 +- 0.060
20.00	24.320 +- 0.100	0.805 +- 0.050
25.00	24.110 +- 0.080	0.580 +- 0.040
30.00	23.940 +- 0.080	0.650 +- 0.040
35.00	23.730 +- 0.080	0.665 +- 0.040
40.00	23.700 +- 0.080	0.625 +- 0.040
45.00	23.700 +- 0.080	0.615 +- 0.040
50.00	23.680 +- 0.100	0.585 +- 0.050
55.00	23.710 +- 0.100	0.570 +- 0.050
60.00	23.780 +- 0.150	0.480 +- 0.075

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 FOLEY, K. J. PHYS. REV. LETT. 19, 330 - 1967  
 (+-) DATA GIVEN BY AUTHOR

K (GEV/C)	SIGMA(+) (MB)	SIGMA(-) (MB)
8.00	26.490 +- 0.060	1.020 +- 0.045
10.00	25.855 +- 0.060	0.965 +- 0.045
12.00	25.395 +- 0.060	0.890 +- 0.045
14.00	25.070 +- 0.060	0.870 +- 0.045
16.00	24.855 +- 0.060	0.830 +- 0.045
18.00	24.590 +- 0.060	0.780 +- 0.045
20.00	24.460 +- 0.060	0.710 +- 0.045
22.00	24.250 +- 0.065	0.820 +- 0.050

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 FIRESTONE ET AL., PHYS. REV. D 14 (1976)2902

TOTAL  $\pi^- p$  CROSS SECTION AT 360 GEV/C:     $25.25 \pm 0.35$  mb



$\rho_-$				$\rho_+$			
k GeV/c	exp.	Error	HJK 77/2	k GeV/c	exp.	Error	HJK 77/2
BAILLON 74 Phys.Lett. 50B,387 and CERN Report 75-10 (Sept. 1975)				BAILLON 74 l.c.			
1.015	-0.030	0.020	-0.082	0.619	-2.030	0.040	-1.940
1.527	-0.130	0.030	-0.159	1.009	-0.340	0.030	-0.261
2.004	-0.100	0.030	-0.096	1.521	-0.270	0.020	-0.314
VOROBEV 74 Sov.J.Nucl.Phys.19,433				1.999 -0.320 0.030 -0.367			
1.910	-0.070	0.030	-0.086	FOLEY 69 l.c.			
2.440	-0.170	0.030	-0.172	7.760	-0.212	0.023	-0.238
3.060	-0.170	0.050	-0.158	9.860	-0.221	0.022	-0.212
3.480	-0.170	0.070	-0.172	10.020	-0.201	0.014	-0.211
4.170	-0.150	0.050	-0.168	11.950	-0.187	0.024	-0.193
4.560	-0.160	0.040	-0.165	14.000	-0.190	0.023	-0.176
4.950	-0.140	0.040	-0.158	16.020	-0.170	0.022	-0.163
5.650	-0.120	0.040	-0.150	17.960	-0.143	0.026	-0.151
6.130	-0.220	0.090	-0.144	20.190	-0.180	0.036	-0.139
FOLEY 69 Phys.Rev. 181, 1775				ANKENBRANDT 75 l.c.			
7.890	-0.123	0.026	-0.131	70.000	0.090	0.050	-0.025
9.840	-0.128	0.019	-0.117	100.00	0.020	0.090	0.004
9.890	-0.157	0.024	-0.117	125.00	-0.010	0.050	0.021
11.890	-0.122	0.018	-0.106	150.00	-0.080	0.050	0.034
14.160	-0.113	0.025	-0.096	APOKIN 76A, Tbilisi Conf.			
15.990	-0.127	0.019	-0.089	42.000	-0.106	0.036	-0.069
16.000	-0.154	0.025	-0.089	52.000	-0.077	0.034	-0.050
18.190	-0.113	0.027	-0.081	(taken from graph)			
20.150	-0.100	0.026	-0.074	Data for the ratio $\rho = \text{Re } C / \text{Im } C$			
20.380	-0.119	0.019	-0.074				
22.130	-0.111	0.027	-0.069				
24.220	-0.123	0.029	-0.063				
26.230	-0.139	0.029	-0.058				
APOKIN 75 Phys.Lett. 56B, 391							
40.000	-0.074	0.033	-0.030				
50.000	-0.006	0.026	-0.016				
APOKIN 76 Nucl.Phys.B106 (1976)413							
33.520	-0.084	0.013	-0.042				
36.800	-0.067	0.014	-0.036				
39.480	-0.067	0.016	-0.031				
39.490	-0.061	0.016	-0.031				
45.470	-0.011	0.020	-0.022				
50.480	-0.027	0.016	-0.015				
56.710	-0.021	0.024	-0.007				
59.400	-0.018	0.018	-0.004				
ANKENBRANDT 75 Fermilab-Conf-75/61-Exp							
70.000	-0.140	0.050	0.006				
100.00	0.000	0.080	0.029				
125.00	0.050	0.050	0.043				
150.00	-0.030	0.050	0.054				