

X(1900–3600)

OMITTED FROM SUMMARY TABLE
 A REVIEW GOES HERE – Check our WWW List of Reviews

X(1900–3600) MASSES AND WIDTHS

We do not use the following data for averages, fits, limits, etc.

<u>VALUE (MeV)</u>		<u>DOCUMENT ID</u>			
1900 to 3600 OUR LIMIT					
<u>VALUE (MeV)</u>		<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
1870±40		¹ ALDE	86D	GAM4	0 100 $\pi^- p \rightarrow 2\eta X$
250±30		¹ ALDE	86D	GAM4	0 100 $\pi^- p \rightarrow 2\eta X$
<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
1898±18	100	THOMPSON	74	HBC	+ 13 $\pi^+ p \rightarrow 2\rho X$
108 ⁺⁴¹ ₋₂₇	100	THOMPSON	74	HBC	+ 13 $\pi^+ p \rightarrow 2\rho X$
<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
1900± 40	100	BOESEBECK	68	HBC	+ 8 $\pi^+ p \rightarrow \pi^+ \pi^0 X$
216±105	100	BOESEBECK	68	HBC	+ 8 $\pi^+ p \rightarrow \pi^+ \pi^0 X$
<u>VALUE (MeV)</u>		<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
1929±14		² FOCACCI	66	MMS	- 3-12 $\pi^- p$
22± 2		² FOCACCI	66	MMS	- 3-12 $\pi^- p$
<u>VALUE (MeV)</u>		<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
1970±10		CHLIAPNIK...	80	HBC	0 32 $K^+ p \rightarrow 2K_S^0 2\pi X$
40±20		CHLIAPNIK...	80	HBC	0 32 $K^+ p \rightarrow 2K_S^0 2\pi X$
<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
1973±15	30	CASO	70	HBC	- 11.2 $\pi^- p \rightarrow \rho 2\pi$
80	30	CASO	70	HBC	- 11.2 $\pi^- p \rightarrow \rho 2\pi$
<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
2070	50	TAKAHASHI	72	HBC	8 $\pi^- p \rightarrow N 2\pi$
160	50	TAKAHASHI	72	HBC	8 $\pi^- p \rightarrow N 2\pi$

<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
~ 2104		BUGG	95	MRK3	$J/\psi \rightarrow \gamma \pi^+ \pi^- \pi^+ \pi^-$
2103 ± 50	586	³ BISELLO	89B	DM2	$J/\psi \rightarrow 4\pi\gamma$
187 ± 75	586	³ BISELLO	89B	DM2	$J/\psi \rightarrow 4\pi\gamma$
2100 ± 40		⁴ ALDE	86D	GAM4	0 100 $\pi^- p \rightarrow 2\eta X$
250 ± 40		⁴ ALDE	86D	GAM4	0 100 $\pi^- p \rightarrow 2\eta X$
<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
2141 ± 12	389	GREEN	86	MPSF	400 $pA \rightarrow 4KX$
49 ± 28	389	GREEN	86	MPSF	400 $pA \rightarrow 4KX$
<u>VALUE (MeV)</u>		<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
2190 ± 10		CLAYTON	67	HBC	± 2.5 $\bar{p}p \rightarrow a_2, \omega$
<u>VALUE (MeV)</u>		<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
2195 ± 15		² FOCACCI	66	MMS	- 3-12 $\pi^- p$
39 ± 14		² FOCACCI	66	MMS	- 3-12 $\pi^- p$
<u>VALUE (MeV)</u>		<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
2207 ± 22		⁵ CASO	70	HBC	- 11.2 $\pi^- p$
130		⁵ CASO	70	HBC	- 11.2 $\pi^- p$
<u>VALUE (MeV)</u>		<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
2280 ± 50		ATKINSON	85	OMEG	20-70 $\gamma p \rightarrow \rho\omega\pi^+\pi^-\pi^0$
440 ± 110		ATKINSON	85	OMEG	20-70 $\gamma p \rightarrow \rho\omega\pi^+\pi^-\pi^0$
<u>VALUE (MeV)</u>		<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
2300 ± 100		ATKINSON	84F	OMEG	±0 20-70 $\gamma p \rightarrow \rho f$
~ 250		ATKINSON	84F	OMEG	±0 20-70 $\gamma p \rightarrow \rho f$
<u>VALUE (MeV)</u>		<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
2330 ± 30		ATKINSON	88	OMEG	0 25-50 $\gamma p \rightarrow \rho^\pm \rho^0 \pi^\mp$
435 ± 75		ATKINSON	88	OMEG	0 25-50 $\gamma p \rightarrow \rho^\pm \rho^0 \pi^\mp$
<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
2340 ± 20	126	⁶ BALTAY	75	HBC	+ 15 $\pi^+ p \rightarrow p5\pi$
180 ± 60	126	⁶ BALTAY	75	HBC	+ 15 $\pi^+ p \rightarrow p5\pi$
<u>VALUE (MeV)</u>		<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
2382 ± 24		² FOCACCI	66	MMS	- 3-12 $\pi^- p$
62 ± 6		² FOCACCI	66	MMS	- 3-12 $\pi^- p$
<u>VALUE (MeV)</u>		<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
2500 ± 32		ANDERSON	69	MMS	- 16 $\pi^- p$ backward
87		ANDERSON	69	MMS	- 16 $\pi^- p$ backward

<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
2620 ± 20	550	BAUD	69	MMS	– 8–10 $\pi^- p$
85 ± 30	550	BAUD	69	MMS	– 8–10 $\pi^- p$
<u>VALUE (MeV)</u>		<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
2676 ± 27		⁵ CASO	70	HBC	– 11.2 $\pi^- p$
150		⁵ CASO	70	HBC	– 11.2 $\pi^- p$
<u>VALUE (MeV)</u>		<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
2747 ± 32		DENNEY	83	LASS	10 $\pi^+ N$
195 ± 75		DENNEY	83	LASS	10 $\pi^+ N$
<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
2800 ± 20	640	BAUD	69	MMS	– 8–10 $\pi^- p$
46 ± 10	640	BAUD	69	MMS	– 8–10 $\pi^- p$
<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
2820 ± 10	15	⁷ SABAU	71	HBC	+ 8 $\pi^+ p$
50 ± 10	15	⁷ SABAU	71	HBC	+ 8 $\pi^+ p$
<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
2880 ± 20	230	BAUD	69	MMS	– 8–10 $\pi^- p$
< 15	230	BAUD	69	MMS	– 8–10 $\pi^- p$
<u>VALUE (MeV)</u>		<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
3025 ± 20		BAUD	70	MMS	– 10.5–13 $\pi^- p$
~ 25		BAUD	70	MMS	– 10.5–13 $\pi^- p$
<u>VALUE (MeV)</u>		<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
3075 ± 20		BAUD	70	MMS	– 10.5–13 $\pi^- p$
~ 25		BAUD	70	MMS	– 10.5–13 $\pi^- p$
<u>VALUE (MeV)</u>		<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
3145 ± 20		BAUD	70	MMS	– 10.5–15 $\pi^- p$
< 10		BAUD	70	MMS	– 10.5–15 $\pi^- p$
<u>VALUE (MeV)</u>		<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
3475 ± 20		BAUD	70	MMS	– 14–15.5 $\pi^- p$
~ 30		BAUD	70	MMS	– 14–15.5 $\pi^- p$
<u>VALUE (MeV)</u>		<u>DOCUMENT ID</u>	<u>TECN</u>	<u>CHG</u>	<u>COMMENT</u>
3535 ± 20		BAUD	70	MMS	– 14–15.5 $\pi^- p$
~ 30		BAUD	70	MMS	– 14–15.5 $\pi^- p$

¹ Seen in $J = 2$ wave in one of the two ambiguous solutions.

² Not seen by ANTIPOV 72, who performed a similar experiment at 25 and 40 GeV/c.

³ ASTON 81B sees no peak, has 850 events in Ajinenko+Barth bins. ARESTOV 80 sees no peak.

⁴ Seen in $J = 0$ wave in one of the two ambiguous solutions.

⁵ Seen in $\rho^- \pi^+ \pi^-$ (ω and η antiselected in 4π system).

⁶ Dominant decay into $\rho^0 \rho^0 \pi^+$. BALTAY 78 finds confirmation in $2\pi^+ \pi^- 2\pi^0$ events which contain $\rho^+ \rho^0 \pi^0$ and $2\rho^+ \pi^-$.

⁷ Seen in ($K \bar{K} \pi \pi$) mass distribution.

X(1900–3600) REFERENCES

BUGG	95	PL B353 378	D.V. Bugg <i>et al.</i>	(LOQM, PNPI, WASH)
BISELLO	89B	PR D39 701	G. Busetto <i>et al.</i>	(DM2 Collab.)
ATKINSON	88	ZPHY C38 535	M. Atkinson <i>et al.</i>	(BONN, CERN, GLAS+)
ALDE	86D	NP B269 485	D.M. Alde <i>et al.</i>	(BELG, LAPP, SERP, CERN+)
GREEN	86	PRL 56 1639	D.R. Green <i>et al.</i>	(FNAL, ARIZ, FSU+)
ATKINSON	85	ZPHY C29 333	M. Atkinson <i>et al.</i>	(BONN, CERN, GLAS+)
ATKINSON	84F	NP B239 1	M. Atkinson <i>et al.</i>	(BONN, CERN, GLAS+)
DENNEY	83	PR D28 2726	D.L. Denney <i>et al.</i>	(IOWA, MICH) J
ASTON	81B	NP B189 205	D. Aston <i>et al.</i>	(BONN, CERN, EPOL, GLAS+)
ARESTOV	80	IHEP 80-165	Y.I. Arestov <i>et al.</i>	(SERP)
CHLIAPNIK...	80	ZPHY C3 285	P.V. Chliapnikov <i>et al.</i>	(SERP, BRUX, MONS)
BALTAY	78	PR D17 52	C. Baltay <i>et al.</i>	(COLU, BING)
BALTAY	75	PRL 35 891	C. Baltay <i>et al.</i>	(COLU, BING)
THOMPSON	74	NP B69 220	G. Thompson <i>et al.</i>	(PURD)
ANTIPOV	72	PL 40 147	Y.M. Antipov <i>et al.</i>	(SERP)
TAKAHASHI	72	PR D6 1266	K. Takahashi <i>et al.</i>	(TOHOK, PENN, NDAM+)
SABAU	71	LNC 1 514	M. Sabeu, J.L. Uretsky	(BUCH, ANL)
BAUD	70	PL 31B 549	R. Baud <i>et al.</i>	
CASO	70	LNC 3 707	C. Caso <i>et al.</i>	(GENO, HAMB, MILA, SACL)
ANDERSON	69	PRL 22 1390	E.W. Anderson <i>et al.</i>	(BNL, CMU)
BAUD	69	PL 30B 129	R. Baud <i>et al.</i>	
BOESEBECK	68	NP B4 501	K. Boesebeck <i>et al.</i>	(AACH, BERL, CERN)
CLAYTON	67	Heidelberg Conf. 57	J.C. Clayton <i>et al.</i>	(LIVP, ATHU)
FOCACCI	66	PRL 17 890	M.N. Focacci <i>et al.</i>	(CERN)

OTHER RELATED PAPERS

BOLONKIN	00	JETPL 72 166	B.V. Bolonkin <i>et al.</i>	
		Translated from ZETFP 72 240.		
ANTIPOV	72	PL 40 147	Y.M. Antipov <i>et al.</i>	(SERP)
CHIKOVANI	66	PL 22 233	G.E. Chikovani <i>et al.</i>	(SERP)
