

## **Master curves of stiffness modulus versus the reduced frequency**

Unfortunately, the index function doesn't work properly with this document.

Firstly a guide to the interpretation of the statistical tests generated by the programme used for the nonlinear fit, are presented.

Thereafter are the different models presented.

Lastly the master curves and the fitted equations are presented for each sample.

## Guide for interpreting the results

|  |   |
|--|---|
| BestFit  | best fit function   |
| BestFitParameters  | best fit parameter estimates  |
| ANOVATable   | analysis of variance table  |
| EstimatedVariance  | estimated error variance  |
| ParameterTable   | table of parameter information including asymptotic standard errors and test statistics                           |
| ParameterCITable   | table of asymptotic confidence intervals for the parameters   |
| ParameterConfidenceRegion                                      | asymptotic ellipsoidal joint confidence region for the parameters   |
| ParameterConfidenceRegion[{ $parm_{i1}$ , $parm_{i2}$ , ... }] | asymptotic ellipsoidal conditional joint confidence region for the parameters { $parm_{i1}$ , $parm_{i2}$ , ... } |
| FitResiduals   | differences between the observed responses and the predicted responses  |
| PredictedResponse  | fitted values obtained by evaluating the best fit function at the observed values of the independent variables    |
| SinglePredictionCITable  | table of asymptotic confidence intervals for predicting a single observation of the response variable             |
| MeanPredictionCITable  | table of asymptotic confidence intervals for predicting the expected value of the response variable               |
| AsymptoticCovarianceMatrix                                     | asymptotic covariance matrix of the parameters  |
| AsymptoticCorrelationMatrix                                    | asymptotic correlation matrix of the parameters   |

## **Models**

### **Robust model (model r)**

In general a limited sigmoidal model was used to fit to the data in the master curve for the elastic modulus. The model has only two parameters,  $E_{max}$  and  $h$ .

$$E = E_{max} / (1 + \text{Exp}[-0.5 x])^h$$

where  $x$  is the reduced frequency:

$$x = 10920(1/T + 1/283) + \text{LOG}[f]$$

where  $f$  is the frequency and  $T$  the absolute temperature.

More complicated models were also considered like

$$E = E_{max} / (1 + \text{Exp}[-\lambda x])^h \quad (\text{alternative model 1r})$$

and

$$E = E_{min} + (E_{max} - E_{min}) / (1 + \text{Exp}[-\lambda x])^h \quad (\text{alternative model 2r})$$

however these models usually have large correlations between the parameters and didn't substantially improve the corrected total sums of squares to merit their use. Examples of the results obtained with these more extended models are included in some instances.

### **Symmetrical model (model s)**

An attractive model that might be more useful comparing these results with results obtained in the future is:

$$E = E_{max} / (1 + \text{Exp}[-\lambda (x - x_{shift})])$$

This equation has three parameters  $E_{max}$ ,  $x_{shift}$  and  $\lambda$ . This equation is symmetrical (odd) around the coordinates  $(x_{shift}, E_{max}/2)$  and  $\lambda$  dictates how fast the equation changes from the lower to the upper limiting values. A lower  $\lambda$  indicates a slower transition.

**0%RA between tracks (after ALT and low T)**

sample: c58 E, model r

31111.

$$\frac{31111.}{(1 + e^{-0.5 x})^{1.63972}}$$

{BestFitParameters → {Emax → 31111., h → 1.63972},

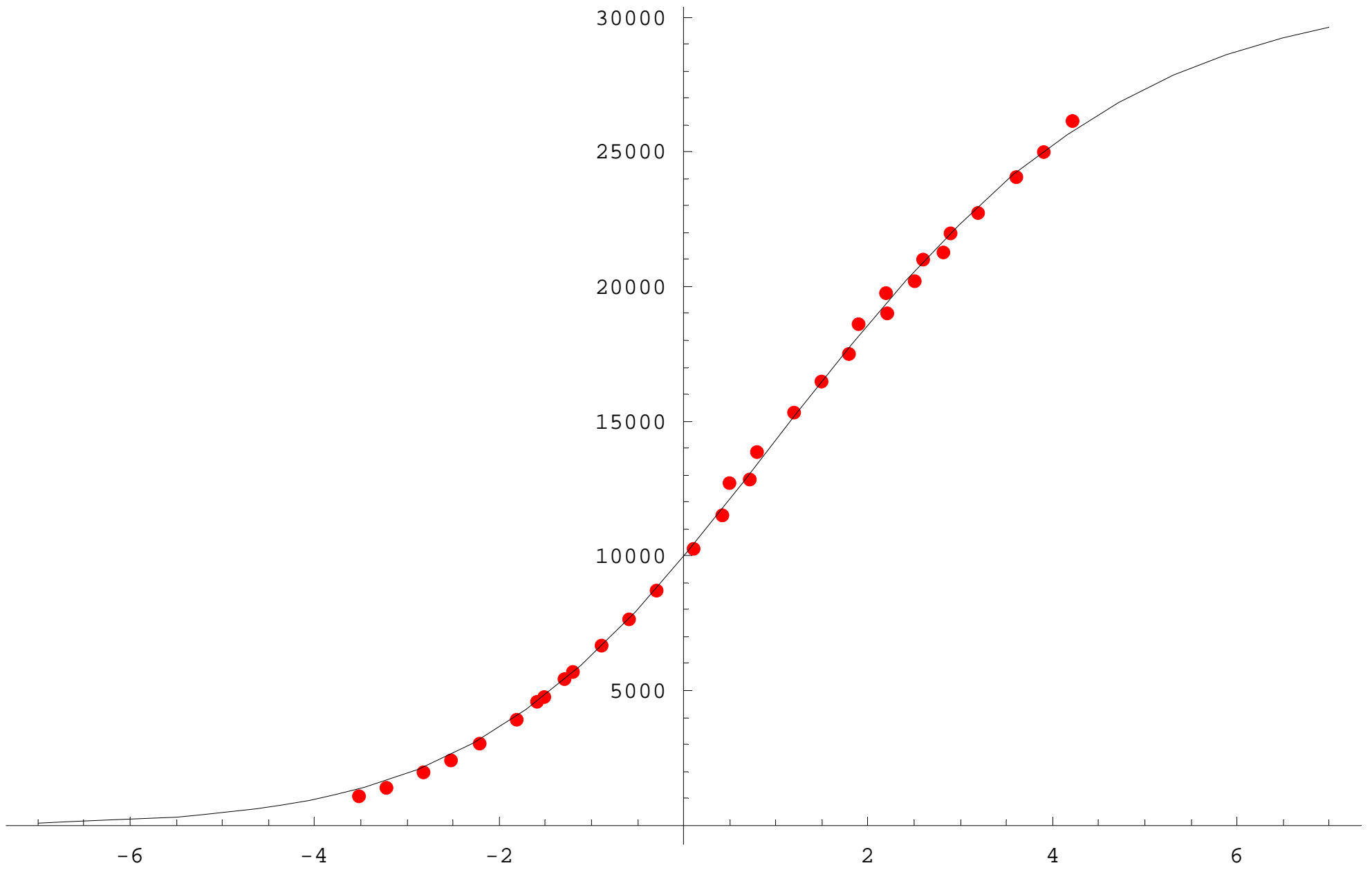
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 31111.   | 173.833       | {30756., 31466.1} , |
| h                       | 1.63972  | 0.0153537     | {1.60836, 1.67107}  |

EstimatedVariance → 72460.3,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $7.18387 \times 10^9$ | $3.59194 \times 10^9$ |
| ANOVATable → Error | 30 | $2.17381 \times 10^6$ | 72460.3 ,             |
| Uncorrected Total  | 32 | $7.18604 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.98731 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.822754 \\ 0.822754 & 1. \end{pmatrix}$ ,

|                                   | Curvature  |
|-----------------------------------|------------|
| FitCurvatureTable → Max Intrinsic | 0.00928826 |
| Max Parameter-Effects             | 0.0126592  |
| 95. % Confidence Region           | 0.549166   |



sample: c58 E model s

28716.2

$$\frac{1}{1 + e^{-0.639103(-1.01162 + x)}}$$

{BestFitParameters → {Emax → 28716.2, λ → 0.639103, xshift → 1.01162},

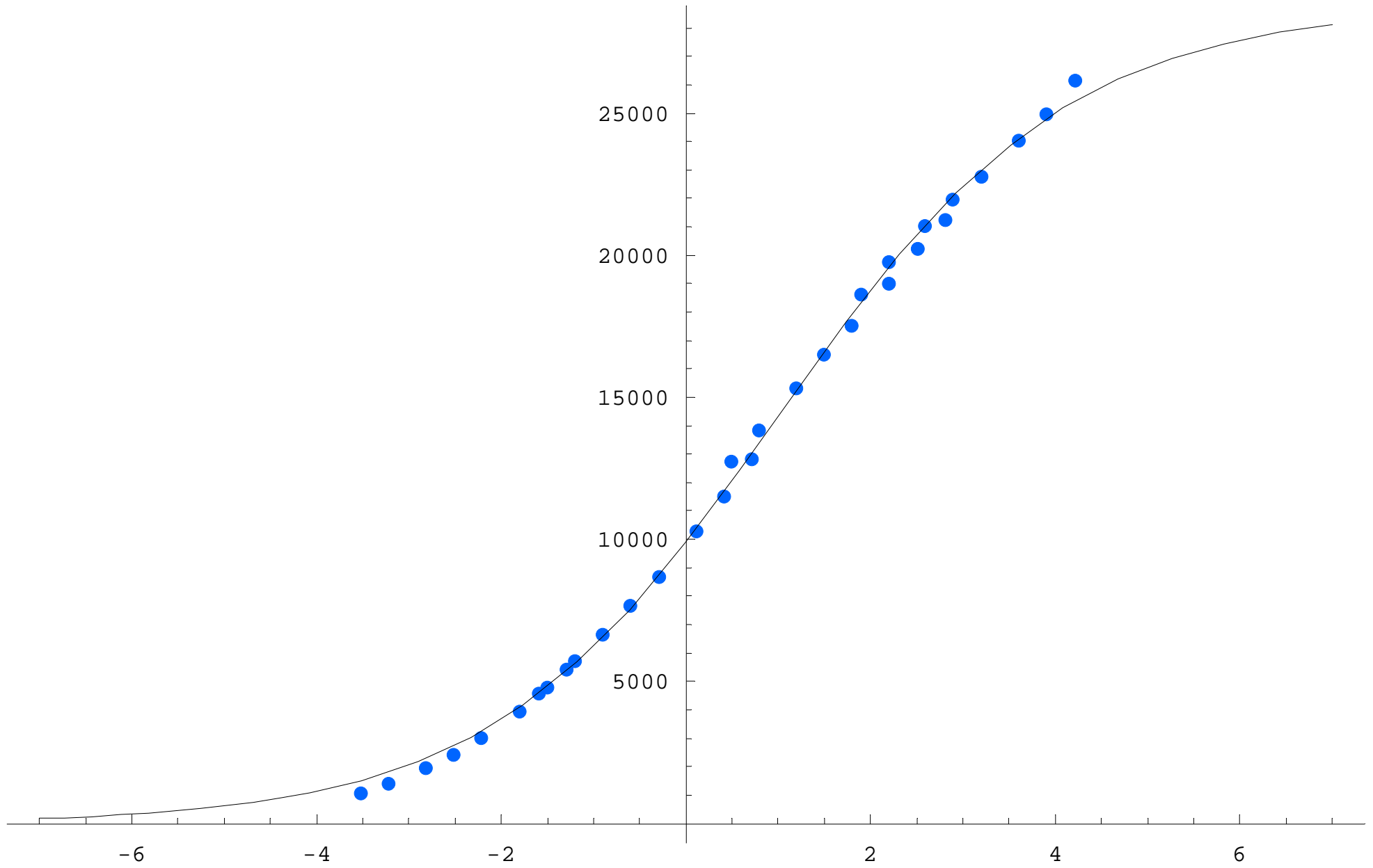
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 28716.2  | 460.268       | {27774.9, 29657.6}   |
|                    | λ      | 0.639103 | 0.0145814     | {0.609281, 0.668926} |
|                    | xshift | 1.01162  | 0.0653043     | {0.878061, 1.14519}  |

EstimatedVariance → 111177.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $7.18282 \times 10^9$ | $2.39427 \times 10^9$ |
| ANOVA Table → Error | 29 | $3.22414 \times 10^6$ | 111177.               |
| Uncorrected Total   | 32 | $7.18604 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.98731 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.861402 & 0.963186 \\ -0.861402 & 1. & -0.831002 \\ 0.963186 & -0.831002 & 1. \end{pmatrix}$ ,

|                     | Curvature               |          |
|---------------------|-------------------------|----------|
| FitCurvatureTable → | Max Intrinsic           | 0.025645 |
|                     | Max Parameter-Effects   | 0.264985 |
|                     | 95. % Confidence Region | 0.583805 |



sample: c58 E alternative model 1 r

30634.4

$$\frac{30634.4}{(1 + e^{-0.512053 x})^{1.61598}}$$

{BestFitParameters → {Emax → 30634.4, lambda → 0.512053, h → 1.61598},

|                    |        | Estimate | Asymptotic SE | CI                  |
|--------------------|--------|----------|---------------|---------------------|
| ParameterCITable → | Emax   | 30634.4  | 555.343       | {29498.6, 31770.2}  |
|                    | lambda | 0.512053 | 0.0138824     | {0.48366, 0.540446} |
|                    | h      | 1.61598  | 0.0305828     | {1.55343, 1.67853}  |

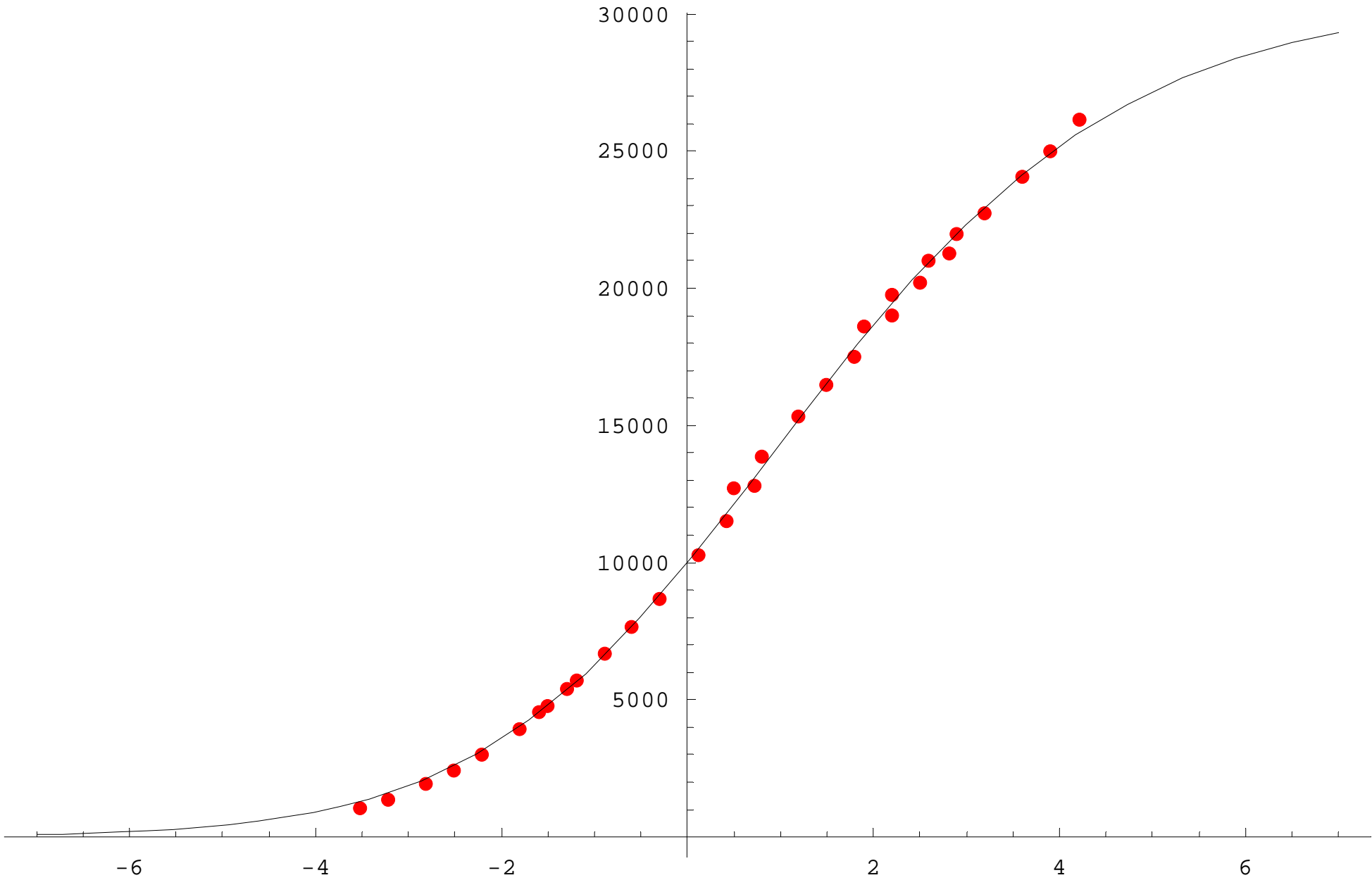
EstimatedVariance → 73072.4,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $7.18393 \times 10^9$ | $2.39464 \times 10^9$ |
| ANOVA Table → Error | 29 | $2.1191 \times 10^6$  | 73072.4               |
| Uncorrected Total   | 32 | $7.18604 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.98731 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.952657 & 0.949162 \\ -0.952657 & 1. & -0.866309 \\ 0.949162 & -0.866309 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0180096 |
| Max Parameter-Effects             | 0.544988  |
| 95. % Confidence Region           | 0.583805  |





**sample: c58 E alternative model 2 r**

$$-688.507 + \frac{32232.2}{(1 + e^{-0.479517 x})^{1.58228}}$$

{BestFitParameters → {Emax → 31543.7, Emin → -688.507, lambda → 0.479517, h → 1.58228},

ParameterCITable →

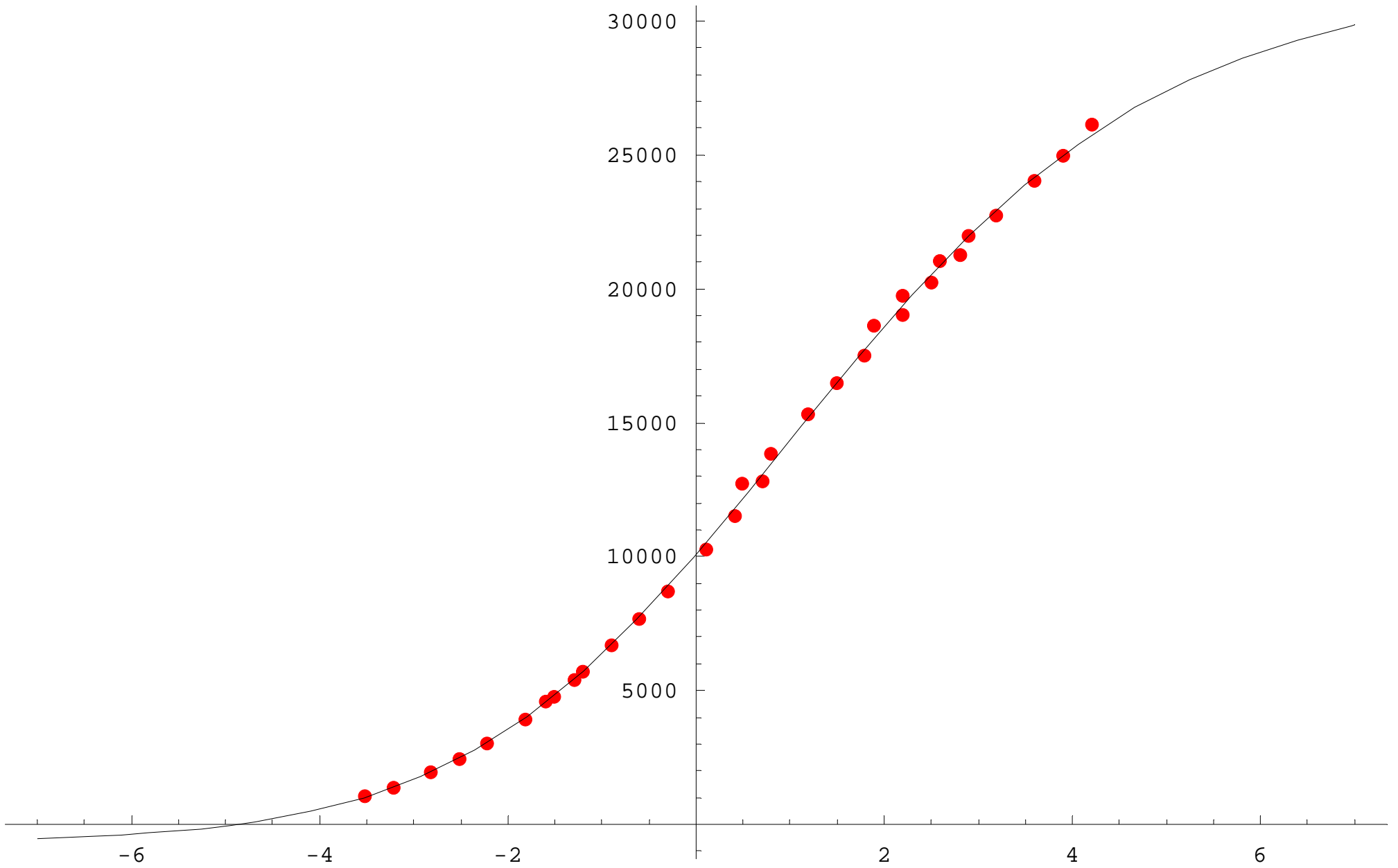
|        | Estimate | Asymptotic SE | CI                   |
|--------|----------|---------------|----------------------|
| Emax   | 31543.7  | 779.78        | {29946.4, 33141.}    |
| Emin   | -688.507 | 374.047       | {-1454.71, 77.694} , |
| lambda | 0.479517 | 0.0210869     | {0.436322, 0.522711} |
| h      | 1.58228  | 0.0347333     | {1.51113, 1.65343}   |

EstimatedVariance → 66282.1,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 4  | $7.18419 \times 10^9$ | $1.79605 \times 10^9$ |
| ANOVA Table → Error | 28 | $1.8559 \times 10^6$  | 66282.1 ,             |
| Uncorrected Total   | 32 | $7.18604 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.98731 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.647274 & -0.958312 & 0.342743 \\ -0.647274 & 1. & 0.79399 & 0.471023 \\ -0.958312 & 0.79399 & 1. & -0.105974 \\ 0.342743 & 0.471023 & -0.105974 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0282526 |
| Max Parameter-Effects             | 1.30559 } |
| 95. % Confidence Region           | 0.607     |



sample: c58v E, model r

$$\frac{31363.}{(1 + e^{-0.5 x})^{1.72551}}$$

{BestFitParameters → {Emax → 31363., h → 1.72551},

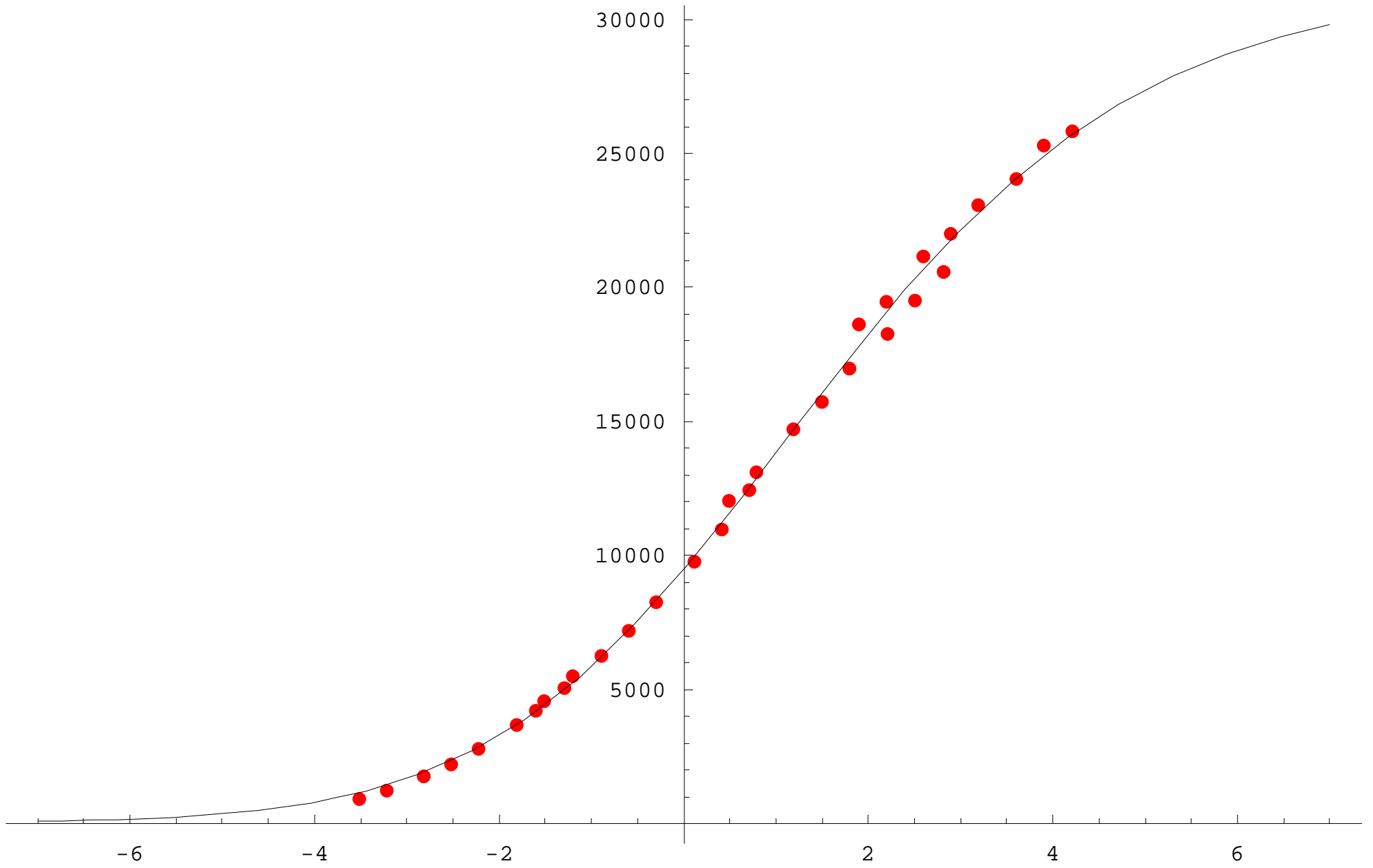
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 31363.   | 256.792       | {30838.6, 31887.5}, |
| h                       | 1.72551  | 0.0231816     | {1.67817, 1.77286}  |

EstimatedVariance → 146415.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $6.93933 \times 10^9$ | $3.46967 \times 10^9$ |
| ANOVATable → Error | 30 | $4.39246 \times 10^6$ | 146415. ,             |
| Uncorrected Total  | 32 | $6.94373 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.00732 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.827809 \\ 0.827809 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.013778  |
| Max Parameter-Effects             | 0.018472  |
| 95. % Confidence Region           | 0.549166  |



**sample: c58v E, model s**

29464.4

$$\frac{1}{1 + e^{-0.631181(-1.2173 + x)}}$$

{BestFitParameters → {Emax → 29464.4, λ → 0.631181, xshift → 1.2173},

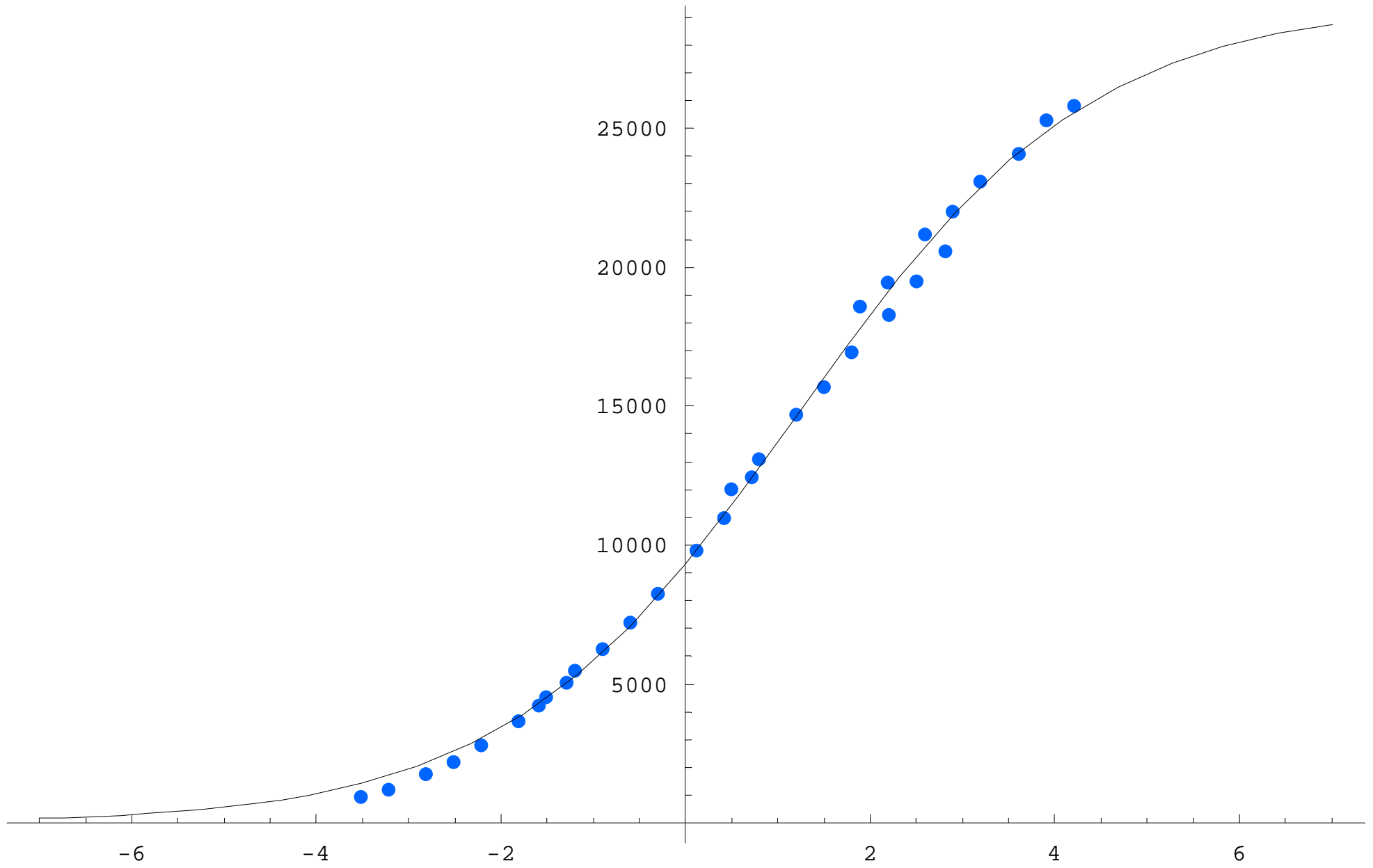
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 29464.4  | 668.276       | {28097.6, 30831.1}   |
|                    | λ      | 0.631181 | 0.018816      | {0.592698, 0.669664} |
|                    | xshift | 1.2173   | 0.091322      | {1.03052, 1.40407}   |

EstimatedVariance → 186731.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $6.93831 \times 10^9$ | $2.31277 \times 10^9$ |
| ANOVA Table → Error | 29 | $5.41519 \times 10^6$ | 186731.               |
| Uncorrected Total   | 32 | $6.94373 \times 10^9$ |                       |
| Corrected Total     | 31 | $2.00732 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.866463 & 0.969531 \\ -0.866463 & 1. & -0.845369 \\ 0.969531 & -0.845369 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0324357 |
|                     | Max Parameter-Effects   | 0.364416  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c61 E, model r

$$\frac{31651.1}{(1 + e^{-0.5 x})^{1.73428}}$$

{BestFitParameters → {Emax → 31651.1, h → 1.73428}, ParameterCITable →

|      | Estimate | Asymptotic SE | CI                  |
|------|----------|---------------|---------------------|
| Emax | 31651.1  | 283.517       | {31072.1, 32230.2}, |
| h    | 1.73428  | 0.0253651     | {1.68248, 1.78608}  |

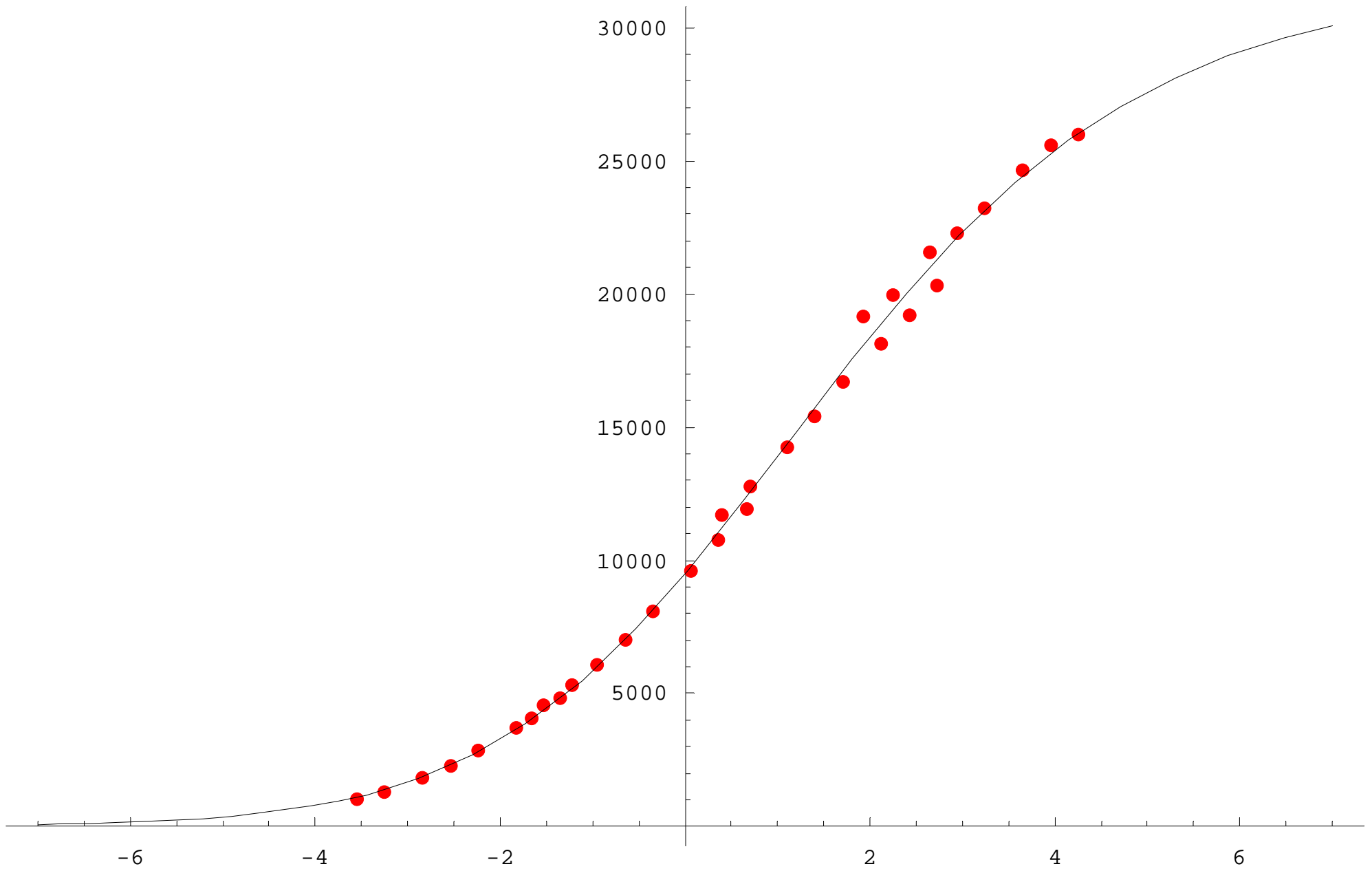
EstimatedVariance → 179700.,

|                     | DF | SumOfSq               | MeanSq               |
|---------------------|----|-----------------------|----------------------|
| Model               | 2  | $6.96279 \times 10^9$ | $3.4814 \times 10^9$ |
| ANOVA Table → Error | 30 | $5.39099 \times 10^6$ | 179700. ,            |
| Uncorrected Total   | 32 | $6.96818 \times 10^9$ |                      |
| Corrected Total     | 31 | $2.0549 \times 10^9$  |                      |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.823619 \\ 0.823619 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0150703 |
| Max Parameter-Effects             | 0.0201334 |
| 95. % Confidence Region           | 0.549166  |





sample: c61 E, model s

29903.7

$$\frac{1}{1 + e^{-0.627856(-1.25299 + x)}}$$

{BestFitParameters → {Emax → 29903.7, λ → 0.627856, xshift → 1.25299},

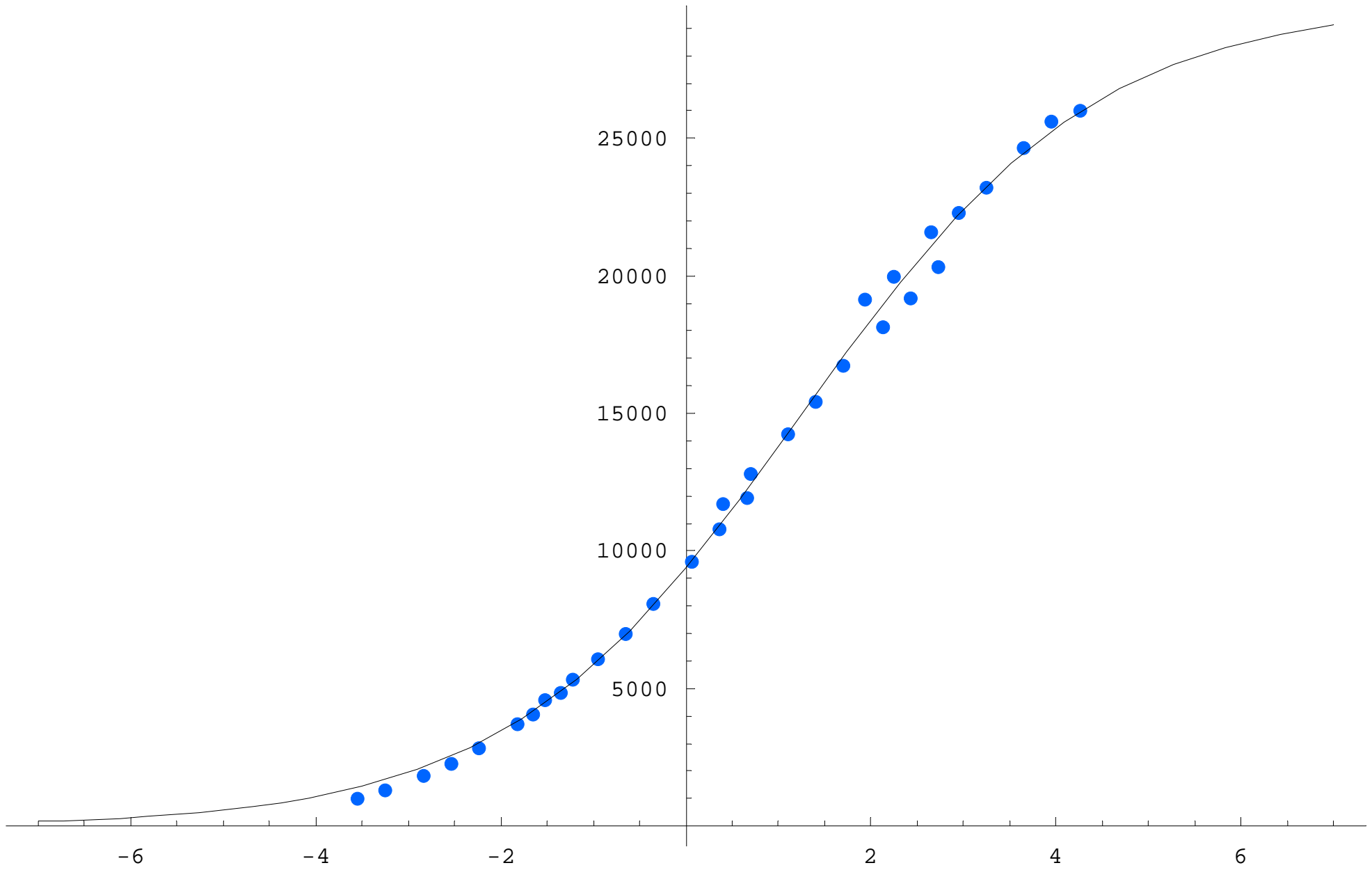
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 29903.7  | 700.484       | {28471.1, 31336.4}    |
|                    | λ      | 0.627856 | 0.0192452     | {0.588495, 0.667217}' |
|                    | xshift | 1.25299  | 0.0948398     | {1.05903, 1.44696}    |

EstimatedVariance → 204604.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 3  | $6.96225 \times 10^9$ | $2.32075 \times 10^9$ |
| ANOVATable → Error | 29 | $5.93352 \times 10^6$ | 204604. ,             |
| Uncorrected Total  | 32 | $6.96818 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.0549 \times 10^9$  |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.864954 & 0.969304 \\ -0.864954 & 1. & -0.846783 \\ 0.969304 & -0.846783 & 1. \end{pmatrix}$ ,

|                     | Curvature               |            |
|---------------------|-------------------------|------------|
| FitCurvatureTable → | Max Intrinsic           | 0.0330407  |
|                     | Max Parameter-Effects   | 0.372238 } |
|                     | 95. % Confidence Region | 0.583805   |





sample: c61v E, model r

33372.4

$$\frac{33372.4}{(1 + e^{-0.5 x})^{1.78507}}$$

{BestFitParameters → {Emax → 33372.4, h → 1.78507}},

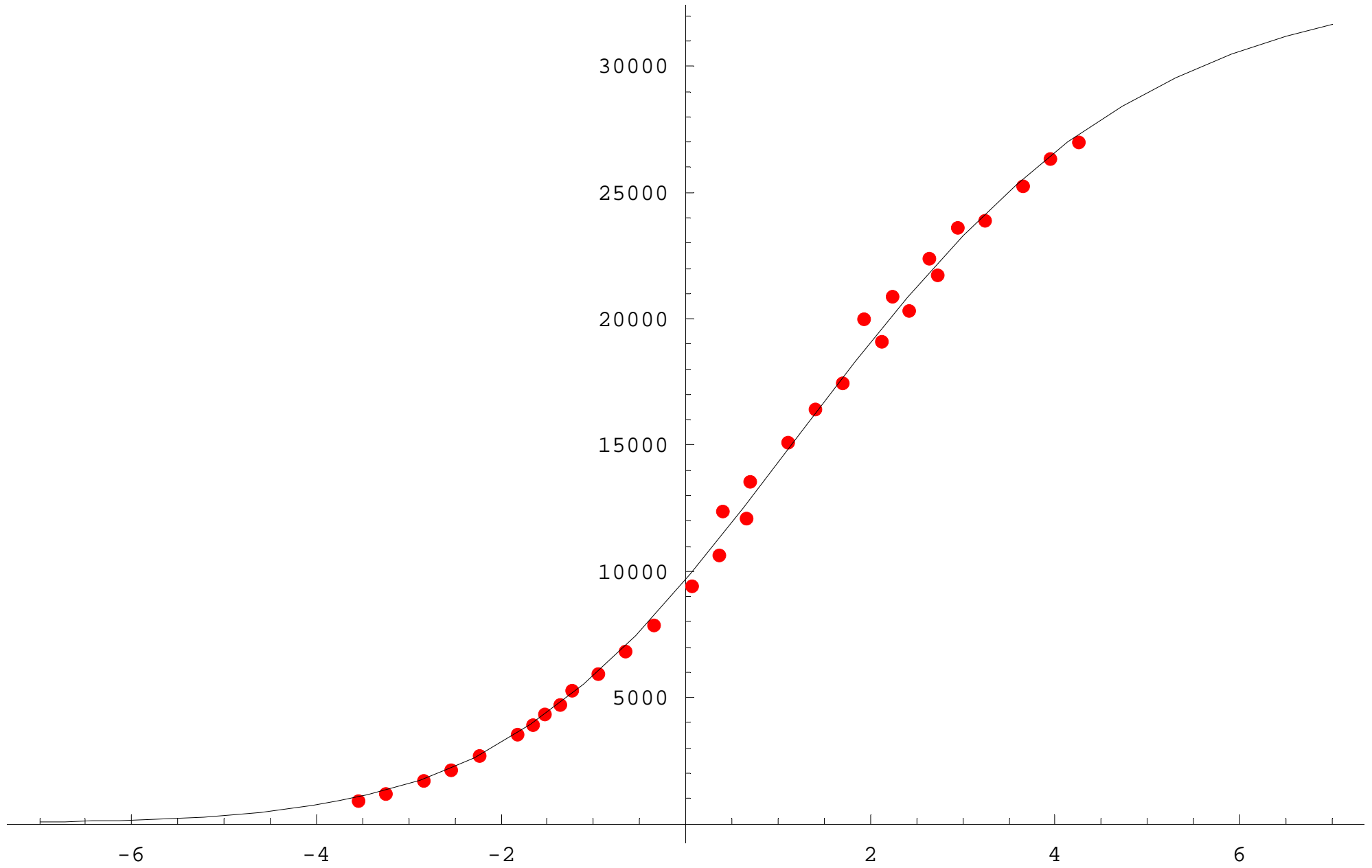
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 33372.4  | 319.112       | {32720.7, 34024.1}, |
| h                       | 1.78507  | 0.0275478     | {1.72881, 1.84133}  |

EstimatedVariance → 217830.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $7.51684 \times 10^9$ | $3.75842 \times 10^9$ |
| ANOVATable → Error | 30 | $6.53491 \times 10^6$ | 217830.,              |
| Uncorrected Total  | 32 | $7.52337 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.30248 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.826477 \\ 0.826477 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0161827 |
| Max Parameter-Effects             | 0.0214237 |
| 95. % Confidence Region           | 0.549166  |



sample: c61v E, model s

29891.1

$$\frac{1}{1 + e^{-0.681186(-1.11551 + x)}}$$

{BestFitParameters → {Emax → 29891.1, λ → 0.681186, xshift → 1.11551},

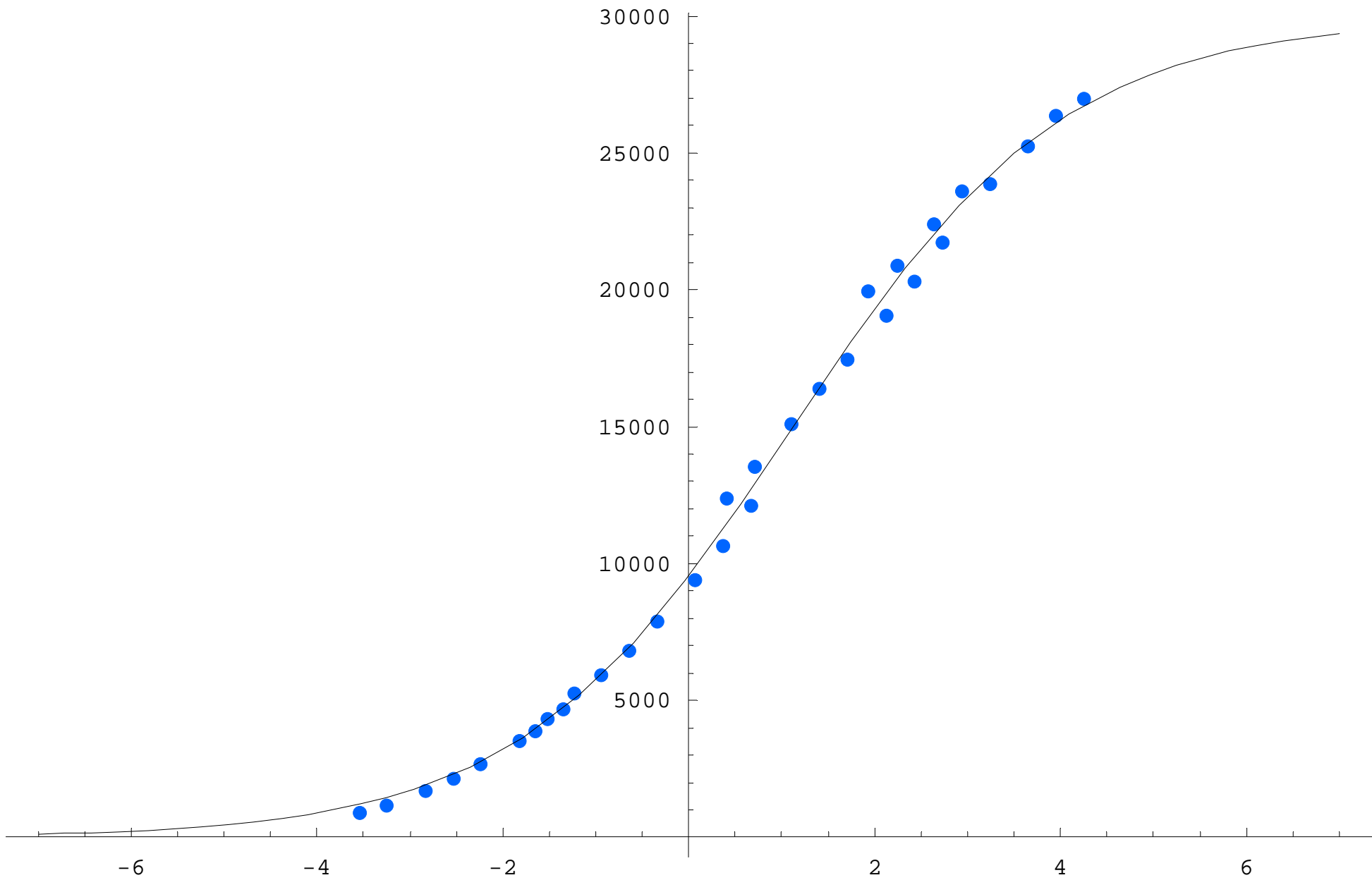
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 29891.1  | 607.837       | {28647.9, 31134.2}   |
|                    | λ      | 0.681186 | 0.020263      | {0.639743, 0.722629} |
|                    | xshift | 1.11551  | 0.0790687     | {0.953799, 1.27723}  |

EstimatedVariance → 218977.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $7.51702 \times 10^9$ | $2.50567 \times 10^9$ |
| ANOVA Table → Error | 29 | $6.35032 \times 10^6$ | 218977.               |
| Uncorrected Total   | 32 | $7.52337 \times 10^9$ |                       |
| Corrected Total     | 31 | $2.30248 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.848289 & 0.957114 \\ -0.848289 & 1. & -0.816196 \\ 0.957114 & -0.816196 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0338198 |
|                     | Max Parameter-Effects   | 0.324699  |
|                     | 95. % Confidence Region | 0.583805  |







sample: c63 E, model r

$$\frac{34229.1}{(1 + e^{-0.5 x})^{1.85255}}$$

{BestFitParameters → {Emax → 34229.1, h → 1.85255}},

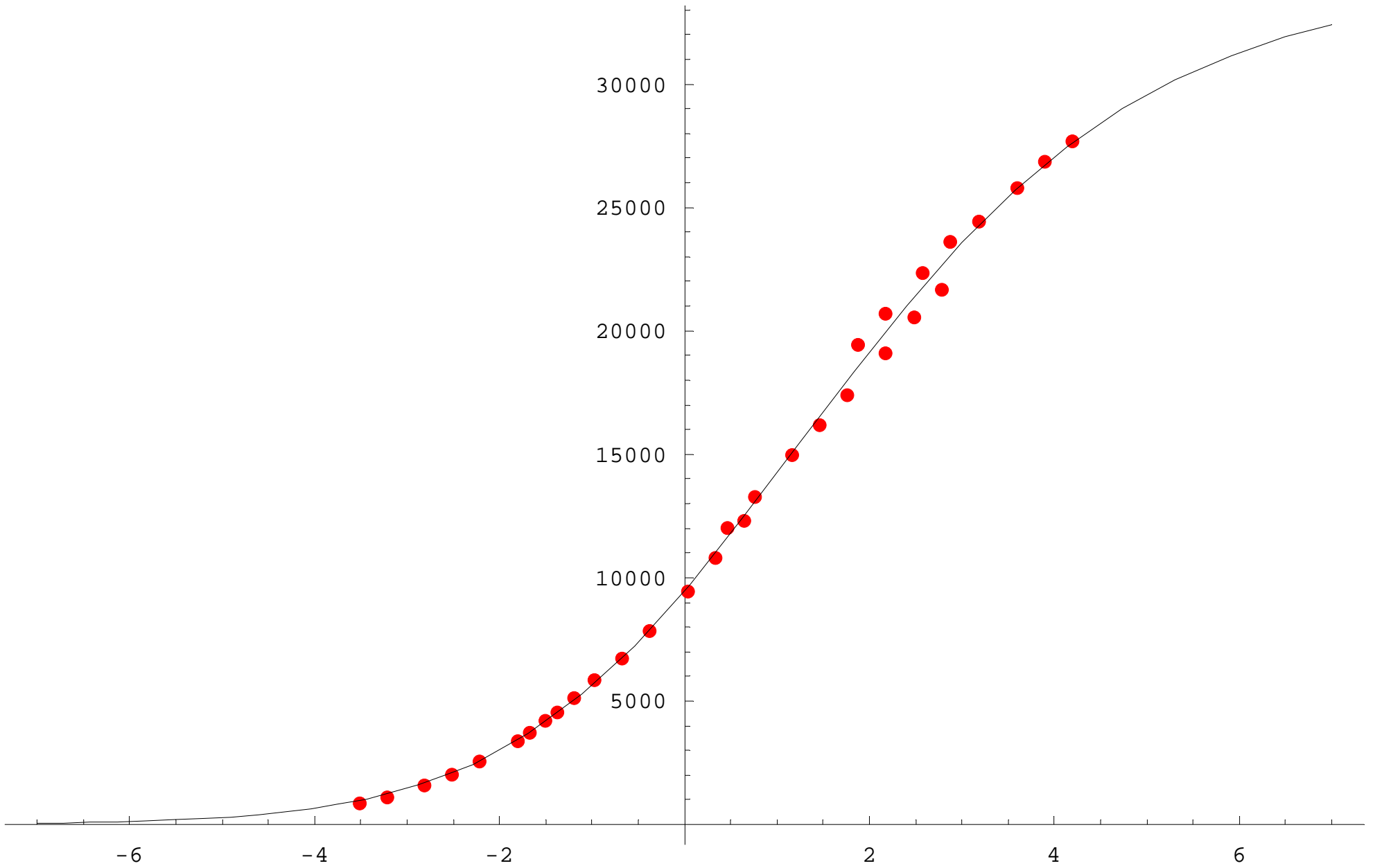
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 34229.1  | 303.671       | {33608.9, 34849.2}, |
| h                       | 1.85255  | 0.0260567     | {1.79934, 1.90577}  |

EstimatedVariance → 181549.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $7.58292 \times 10^9$ | $3.79146 \times 10^9$ |
| ANOVATable → Error | 30 | $5.44647 \times 10^6$ | 181549.,              |
| Uncorrected Total  | 32 | $7.58837 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.37583 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.834154 \\ 0.834154 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0150635 |
| Max Parameter-Effects             | 0.0199874 |
| 95. % Confidence Region           | 0.549166  |





sample: c63 E, model s

31575.6

$$\frac{1}{1 + e^{-0.65716(-1.32817 + x)}}$$

{BestFitParameters → {Emax → 31575.6, λ → 0.65716, xshift → 1.32817},

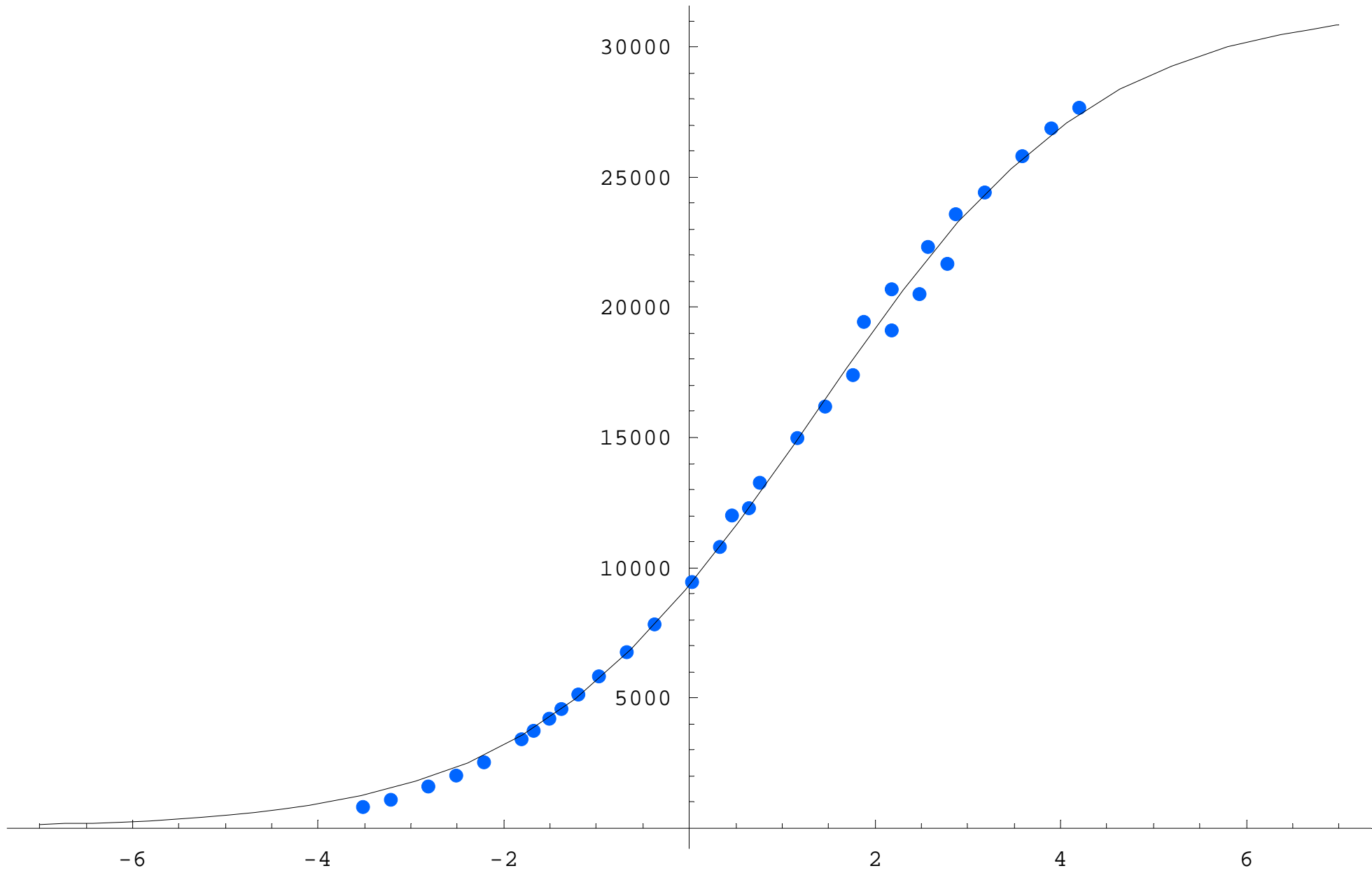
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 31575.6  | 738.294       | {30065.6, 33085.6}   |
|                    | λ      | 0.65716  | 0.0198711     | {0.616519, 0.697801} |
|                    | xshift | 1.32817  | 0.0905931     | {1.14288, 1.51345}   |

EstimatedVariance → 225108.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $7.58184 \times 10^9$ | $2.52728 \times 10^9$ |
| ANOVA Table → Error | 29 | $6.52814 \times 10^6$ | 225108.               |
| Uncorrected Total   | 32 | $7.58837 \times 10^9$ |                       |
| Corrected Total     | 31 | $2.37583 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.86124 & 0.968734 \\ -0.86124 & 1. & -0.841568 \\ 0.968734 & -0.841568 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0328092 |
|                     | Max Parameter-Effects   | 0.3646    |
|                     | 95. % Confidence Region | 0.583805  |



sample: c63v E, model r

33222.3

$$(1 + e^{-0.5 x})^{1.8312}$$

{BestFitParameters → {Emax → 33222.3, h → 1.8312},

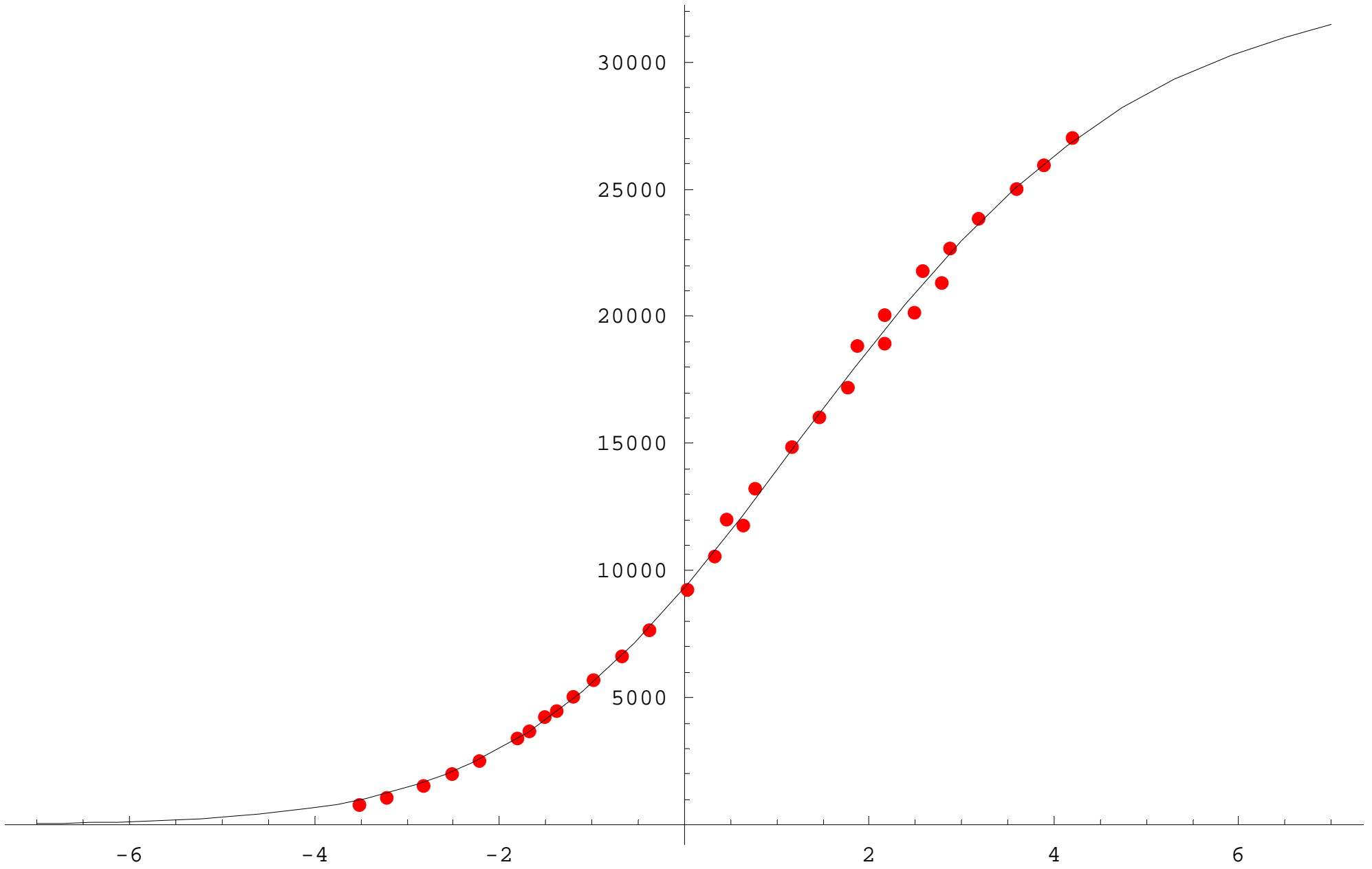
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 33222.3  | 256.187       | {32699.1, 33745.5}, |
| h                       | 1.8312   | 0.0224947     | {1.78526, 1.87715}  |

EstimatedVariance → 131670.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $7.23078 \times 10^9$ | $3.61539 \times 10^9$ |
| ANOVATable → Error | 30 | $3.95011 \times 10^6$ | 131670. ,             |
| Uncorrected Total  | 32 | $7.23473 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.24819 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.832929 \\ 0.832929 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0130642 |
| Max Parameter-Effects             | 0.0173935 |
| 95. % Confidence Region           | 0.549166  |





sample: c63v E, model s

30323.7

$$1 + e^{-0.664676(-1.25692 + x)}$$

{BestFitParameters → {Emax → 30323.7, λ → 0.664676, xshift → 1.25692},

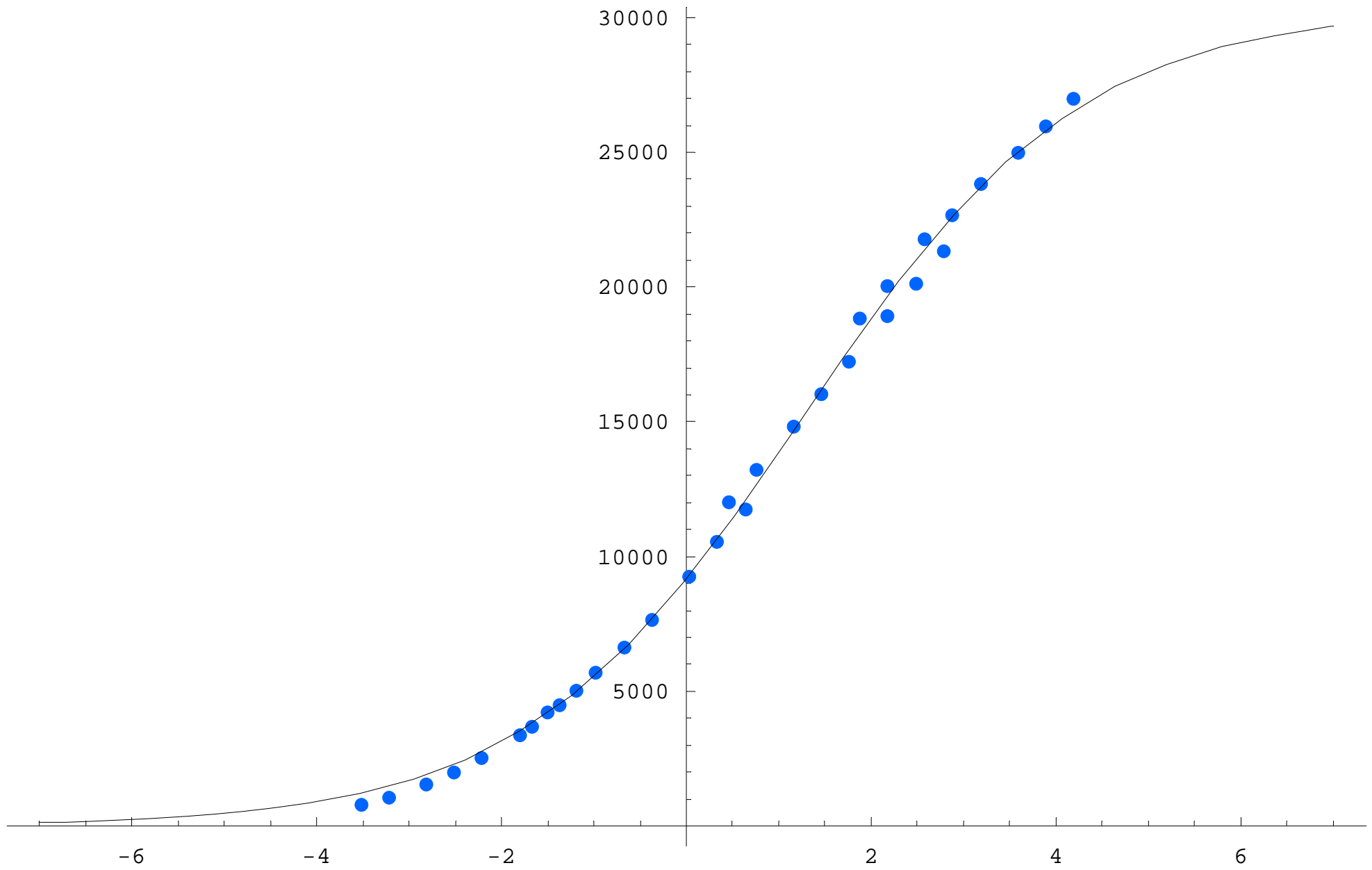
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 30323.7  | 617.253       | {29061.2, 31586.1}   |
|                    | λ      | 0.664676 | 0.0180949     | {0.627668, 0.701684} |
|                    | xshift | 1.25692  | 0.0788568     | {1.09564, 1.4182}    |

EstimatedVariance → 174057.,

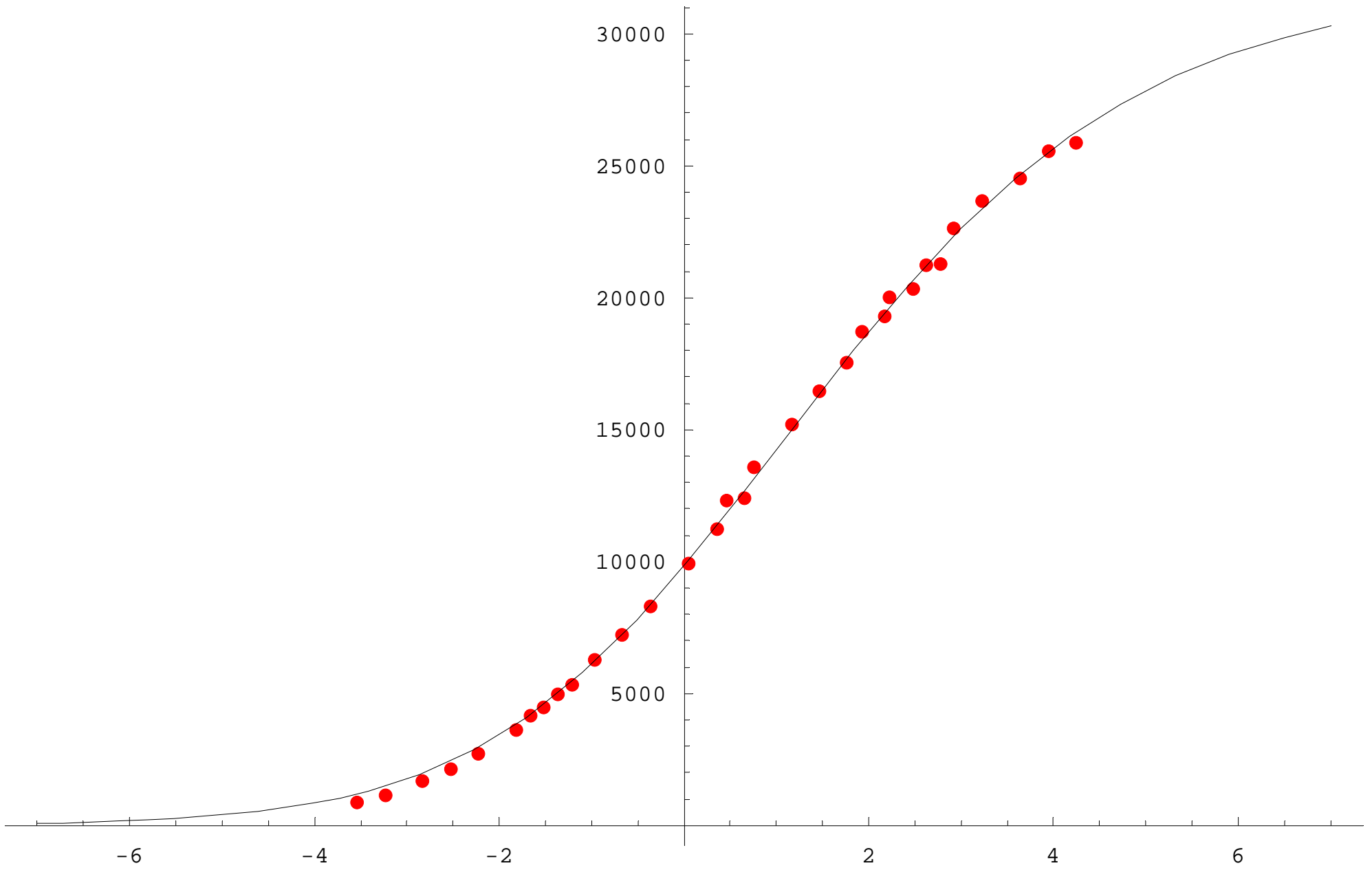
|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $7.22968 \times 10^9$ | $2.40989 \times 10^9$ |
| ANOVA Table → Error | 29 | $5.04764 \times 10^6$ | 174057. ,             |
| Uncorrected Total   | 32 | $7.23473 \times 10^9$ |                       |
| Corrected Total     | 31 | $2.24819 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.858242 & 0.965914 \\ -0.858242 & 1. & -0.834728 \\ 0.965914 & -0.834728 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0300228 |
|                     | Max Parameter-Effects   | 0.320065  |
|                     | 95. % Confidence Region | 0.583805  |







sample: c52 E, model s

28748.3

$$\frac{1}{1 + e^{-0.666529(-1.01267 + x)}}$$

{BestFitParameters → {Emax → 28748.3, λ → 0.666529, xshift → 1.01267},

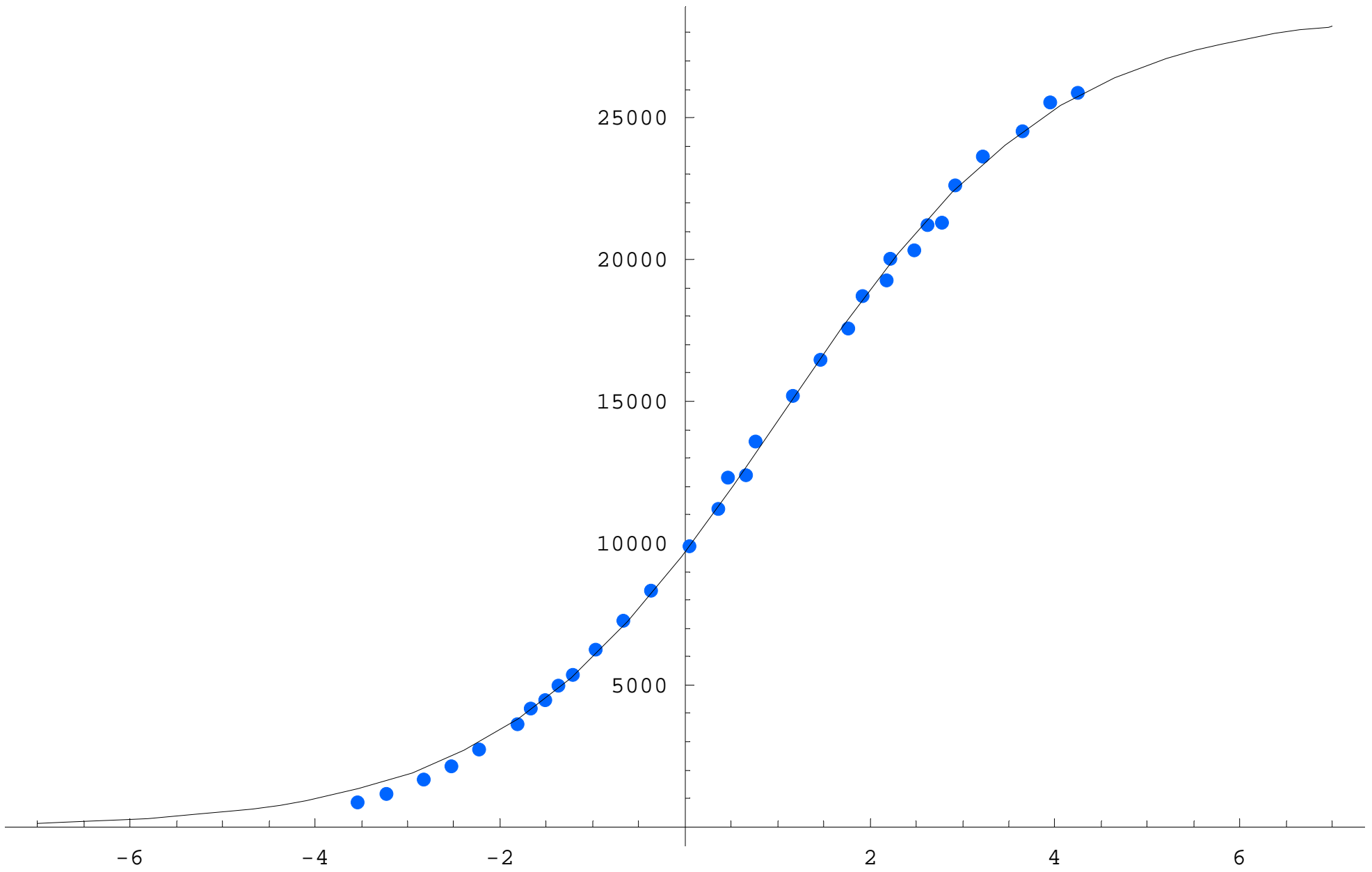
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 28748.3  | 393.858       | {27942.8, 29553.9}   |
|                    | λ      | 0.666529 | 0.0135119     | {0.638894, 0.694163} |
|                    | xshift | 1.01267  | 0.0546507     | {0.900897, 1.12444}  |

EstimatedVariance → 94402.8,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $7.24841 \times 10^9$ | $2.41614 \times 10^9$ |
| ANOVA Table → Error | 29 | $2.73768 \times 10^6$ | 94402.8               |
| Uncorrected Total   | 32 | $7.25115 \times 10^9$ |                       |
| Corrected Total     | 31 | $2.12332 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.851552 & 0.956967 \\ -0.851552 & 1. & -0.816361 \\ 0.956967 & -0.816361 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0234074 |
|                     | Max Parameter-Effects   | 0.223587  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c52v E, model r

31072.1

$$(1 + e^{-0.5 x})^{1.7408}$$

{BestFitParameters → {Emax → 31072.1, h → 1.7408},

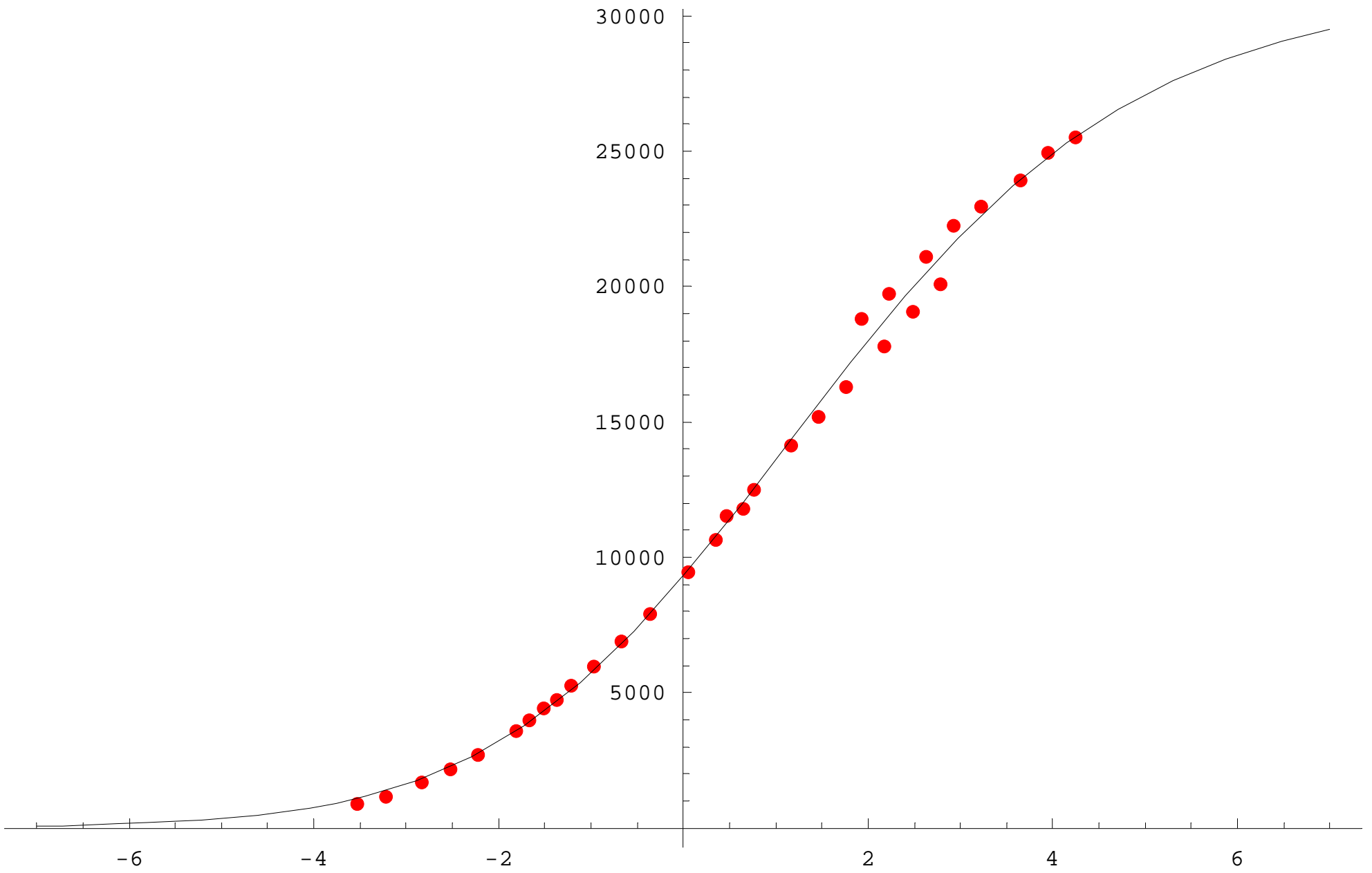
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 31072.1  | 316.868       | {30424.9, 31719.2}, |
| h                       | 1.7408   | 0.0290793     | {1.68142, 1.80019}  |

EstimatedVariance → 223575.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $6.72554 \times 10^9$ | $3.36277 \times 10^9$ |
| ANOVATable → Error | 30 | $6.70724 \times 10^6$ | 223575. ,             |
| Uncorrected Total  | 32 | $6.73225 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.99515 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.824832 \\ 0.824832 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.017256  |
| Max Parameter-Effects             | 0.0232506 |
| 95. % Confidence Region           | 0.549166  |





sample: c52v E, model s

29261.6

$$\frac{1}{1 + e^{-0.631203(-1.25024 + x)}}$$

{BestFitParameters → {Emax → 29261.6, λ → 0.631203, xshift → 1.25024},

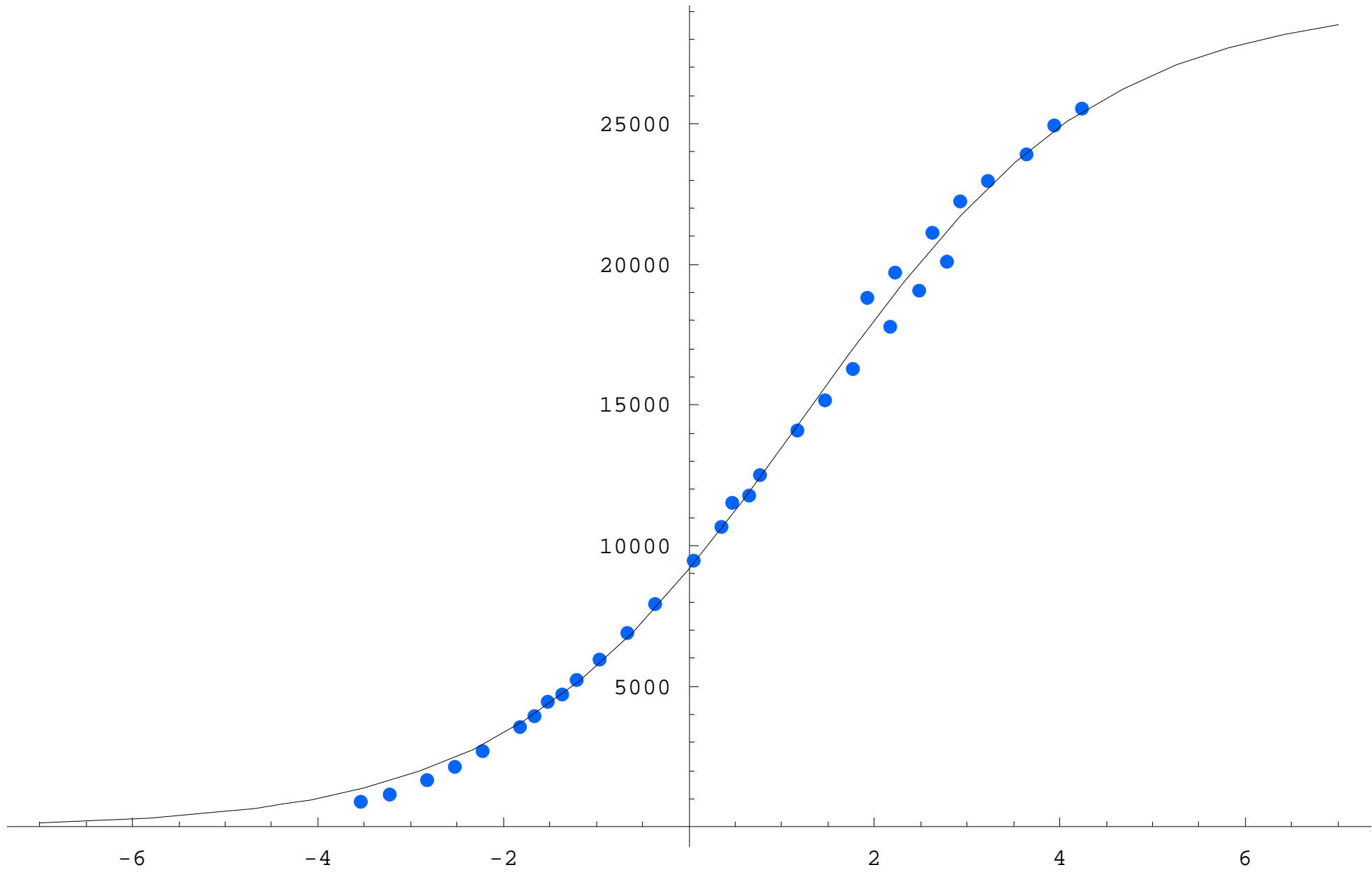
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 29261.6  | 778.697       | {27669., 30854.2}    |
|                    | λ      | 0.631203 | 0.0219667     | {0.586276, 0.67613}' |
|                    | xshift | 1.25024  | 0.107393      | {1.0306, 1.46989}    |

EstimatedVariance → 254455.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 3  | $6.72487 \times 10^9$ | $2.24162 \times 10^9$ |
| ANOVATable → Error | 29 | $7.37921 \times 10^6$ | 254455. ,             |
| Uncorrected Total  | 32 | $6.73225 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.99515 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.864792 & 0.969111 \\ -0.864792 & 1. & -0.844891 \\ 0.969111 & -0.844891 & 1. \end{pmatrix}$ ,

|                     | Curvature               |            |
|---------------------|-------------------------|------------|
| FitCurvatureTable → | Max Intrinsic           | 0.0379116  |
|                     | Max Parameter-Effects   | 0.423429 } |
|                     | 95. % Confidence Region | 0.583805   |



sample: c53 E, model r

29803.4

$$\frac{29803.4}{(1 + e^{-0.5 x})^{1.69765}}$$

{BestFitParameters → {Emax → 29803.4, h → 1.69765}},

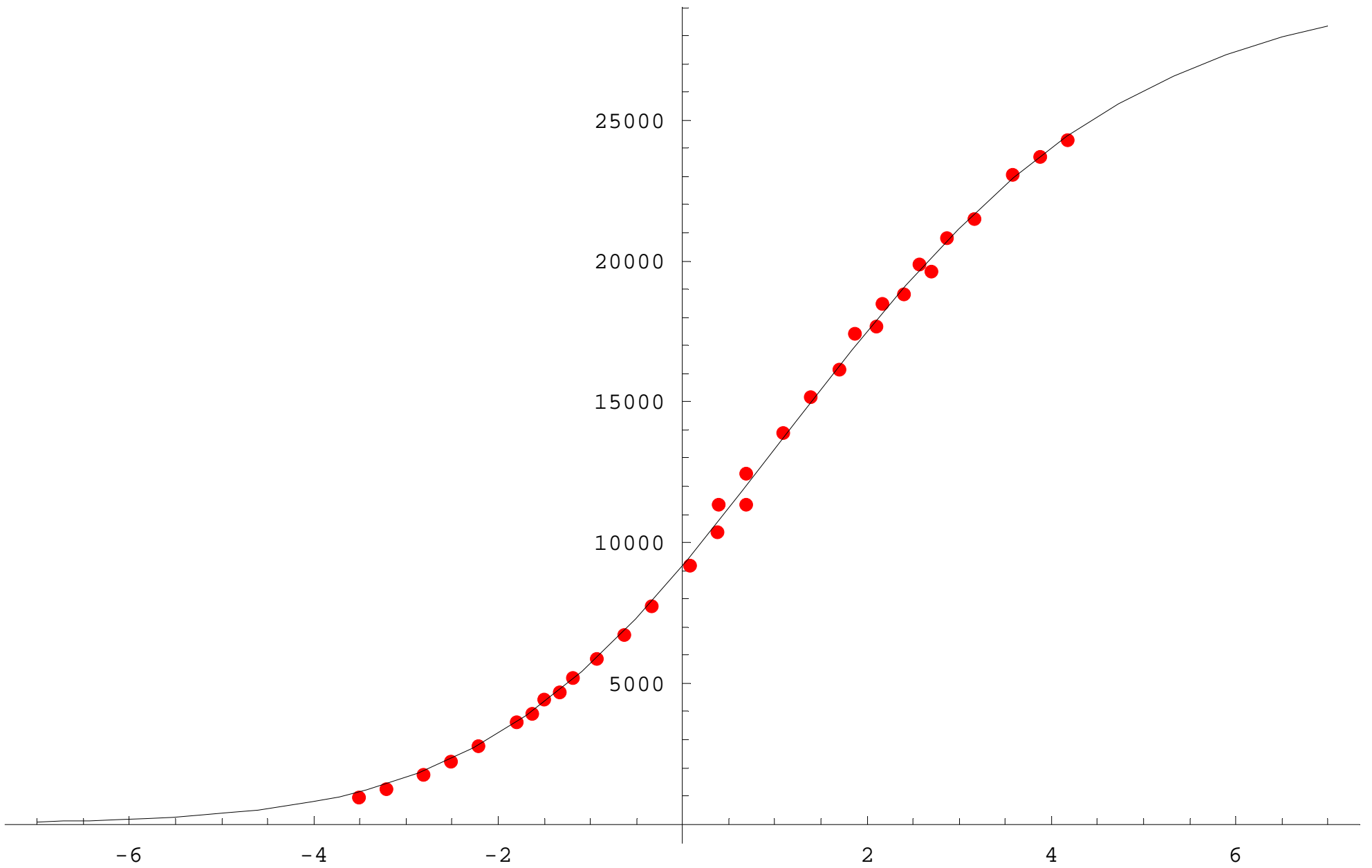
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 29803.4  | 181.106       | {29433.6, 30173.3}, |
| h                       | 1.69765  | 0.0167646     | {1.66342, 1.73189}  |

EstimatedVariance → 72485.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $6.21709 \times 10^9$ | $3.10855 \times 10^9$ |
| ANOVATable → Error | 30 | $2.17455 \times 10^6$ | 72485.,               |
| Uncorrected Total  | 32 | $6.21927 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.7864 \times 10^9$  |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.8272 \\ 0.8272 & 1. \end{pmatrix}$ ,

|                                   | Curvature  |
|-----------------------------------|------------|
| FitCurvatureTable → Max Intrinsic | 0.00999535 |
| Max Parameter-Effects             | 0.0134166  |
| 95. % Confidence Region           | 0.549166   |



sample: c53 E, model s

27339.9

$$\frac{1}{1 + e^{-0.64983(-1.07892 + x)}}$$

{BestFitParameters → {Emax → 27339.9, λ → 0.64983, xshift → 1.07892},

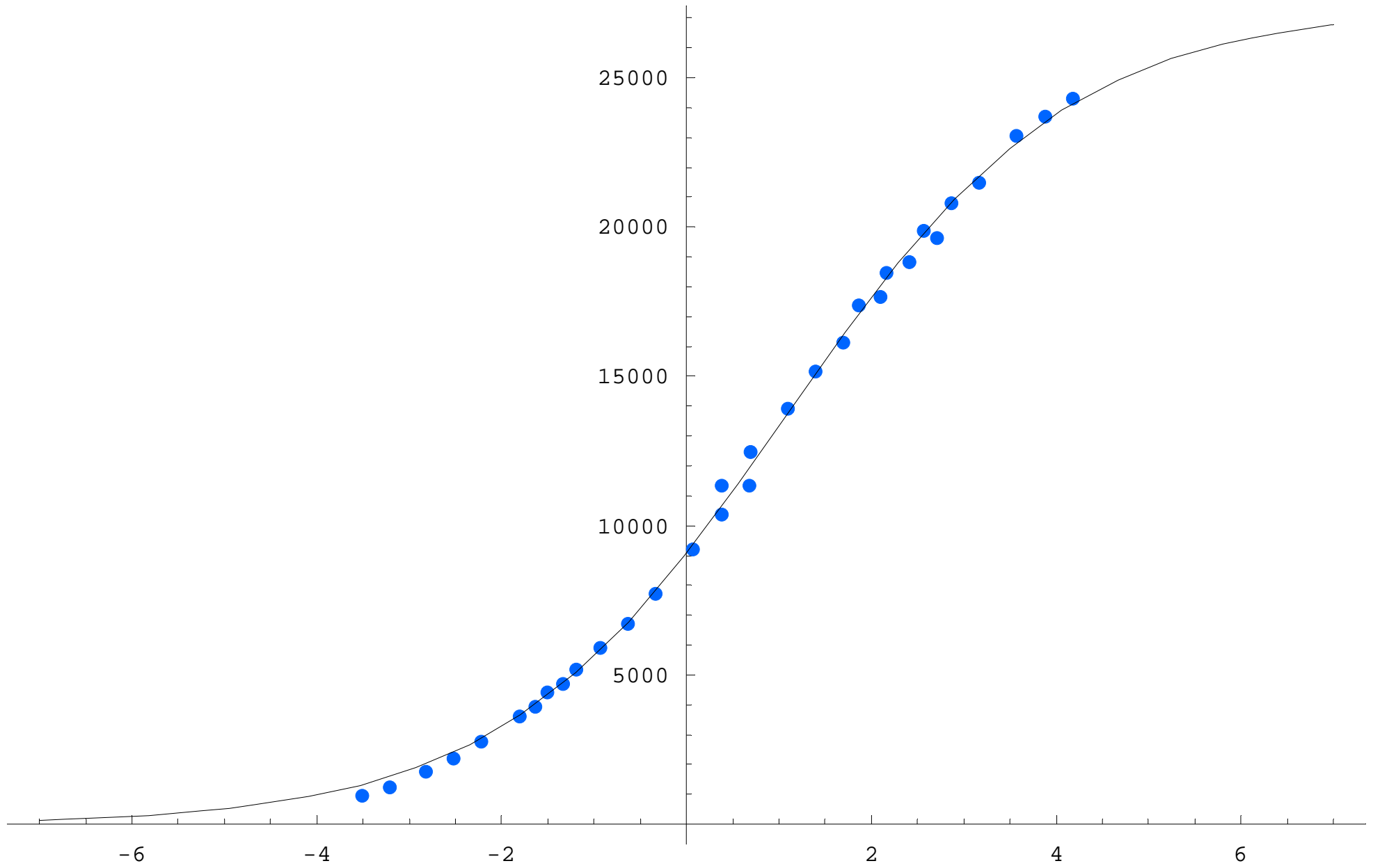
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 27339.9  | 425.875       | {26468.9, 28210.9}   |
|                    | λ      | 0.64983  | 0.0140884     | {0.621016, 0.678644} |
|                    | xshift | 1.07892  | 0.062052      | {0.952006, 1.20583}  |

EstimatedVariance → 90639.6,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $6.21664 \times 10^9$ | $2.07221 \times 10^9$ |
| ANOVA Table → Error | 29 | $2.62855 \times 10^6$ | 90639.6               |
| Uncorrected Total   | 32 | $6.21927 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.7864 \times 10^9$  |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.859455 & 0.964238 \\ -0.859455 & 1. & -0.833597 \\ 0.964238 & -0.833597 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0240717 |
|                     | Max Parameter-Effects   | 0.251258  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c53v E, model r

29729.3

$$(1 + e^{-0.5 x})^{1.7808}$$

{BestFitParameters → {Emax → 29729.3, h → 1.7808},

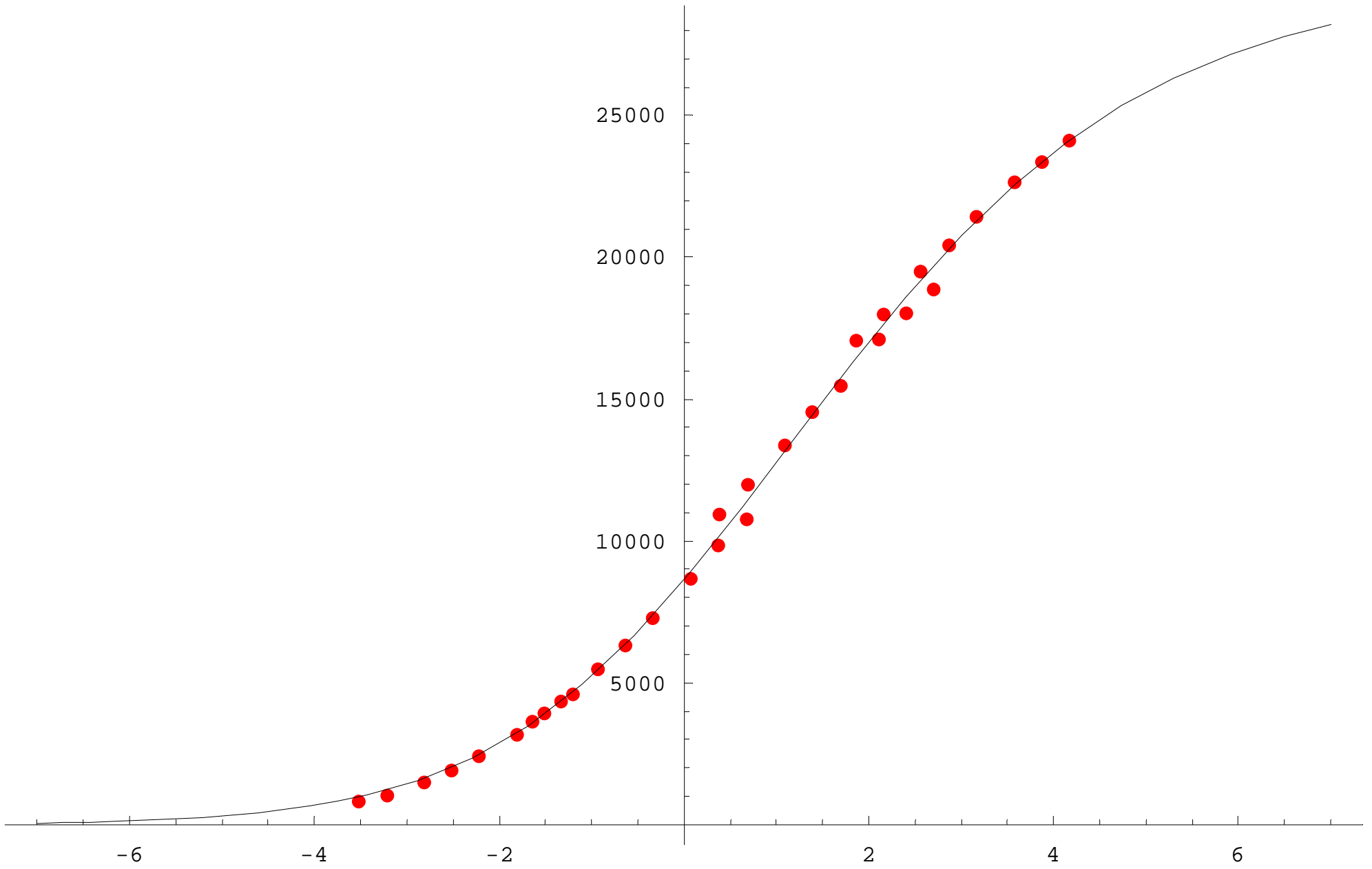
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 29729.3  | 236.098       | {29247.1, 30211.4}, |
| h                       | 1.7808   | 0.0225301     | {1.73478, 1.82681}  |

EstimatedVariance → 114411.,

|                    | DF | SumOfSq               | MeanSq               |
|--------------------|----|-----------------------|----------------------|
| Model              | 2  | $5.8886 \times 10^9$  | $2.9443 \times 10^9$ |
| ANOVATable → Error | 30 | $3.43232 \times 10^6$ | 114411. ,            |
| Uncorrected Total  | 32 | $5.89204 \times 10^9$ |                      |
| Corrected Total    | 31 | $1.77484 \times 10^9$ |                      |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.831827 \\ 0.831827 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0131934 |
| Max Parameter-Effects             | 0.0174607 |
| 95. % Confidence Region           | 0.549166  |





sample: c53v E, model s

27138.5

$$\frac{1}{1 + e^{-0.66039(-1.18442 + x)}}$$

{BestFitParameters → {Emax → 27138.5, λ → 0.66039, xshift → 1.18442},

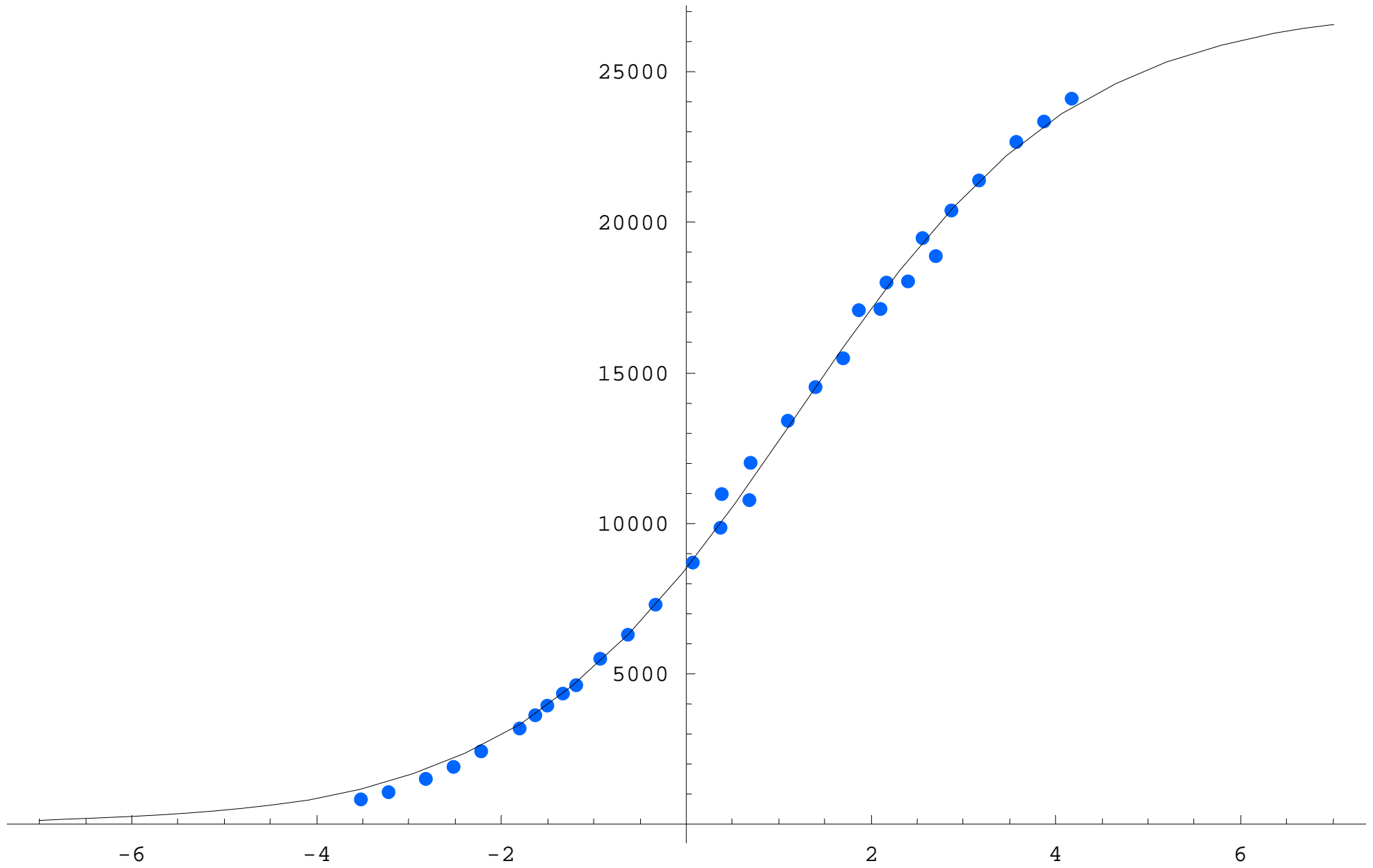
|                    |        | Estimate | Asymptotic SE | CI                 |
|--------------------|--------|----------|---------------|--------------------|
| ParameterCITable → | Emax   | 27138.5  | 560.013       | {25993.1, 28283.8} |
|                    | λ      | 0.66039  | 0.0185261     | {0.6225, 0.69828}  |
|                    | xshift | 1.18442  | 0.0804623     | {1.01986, 1.34899} |

EstimatedVariance → 148085.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $5.88774 \times 10^9$ | $1.96258 \times 10^9$ |
| ANOVA Table → Error | 29 | $4.29447 \times 10^6$ | 148085.               |
| Uncorrected Total   | 32 | $5.89204 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.77484 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.858348 & 0.96536 \\ -0.858348 & 1. & -0.835037 \\ 0.96536 & -0.835037 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0308311 |
|                     | Max Parameter-Effects   | 0.326618  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c56 E, model r

33828.8

$$(1 + e^{-0.5 x})^{1.73955}$$

{BestFitParameters → {Emax → 33828.8, h → 1.73955},

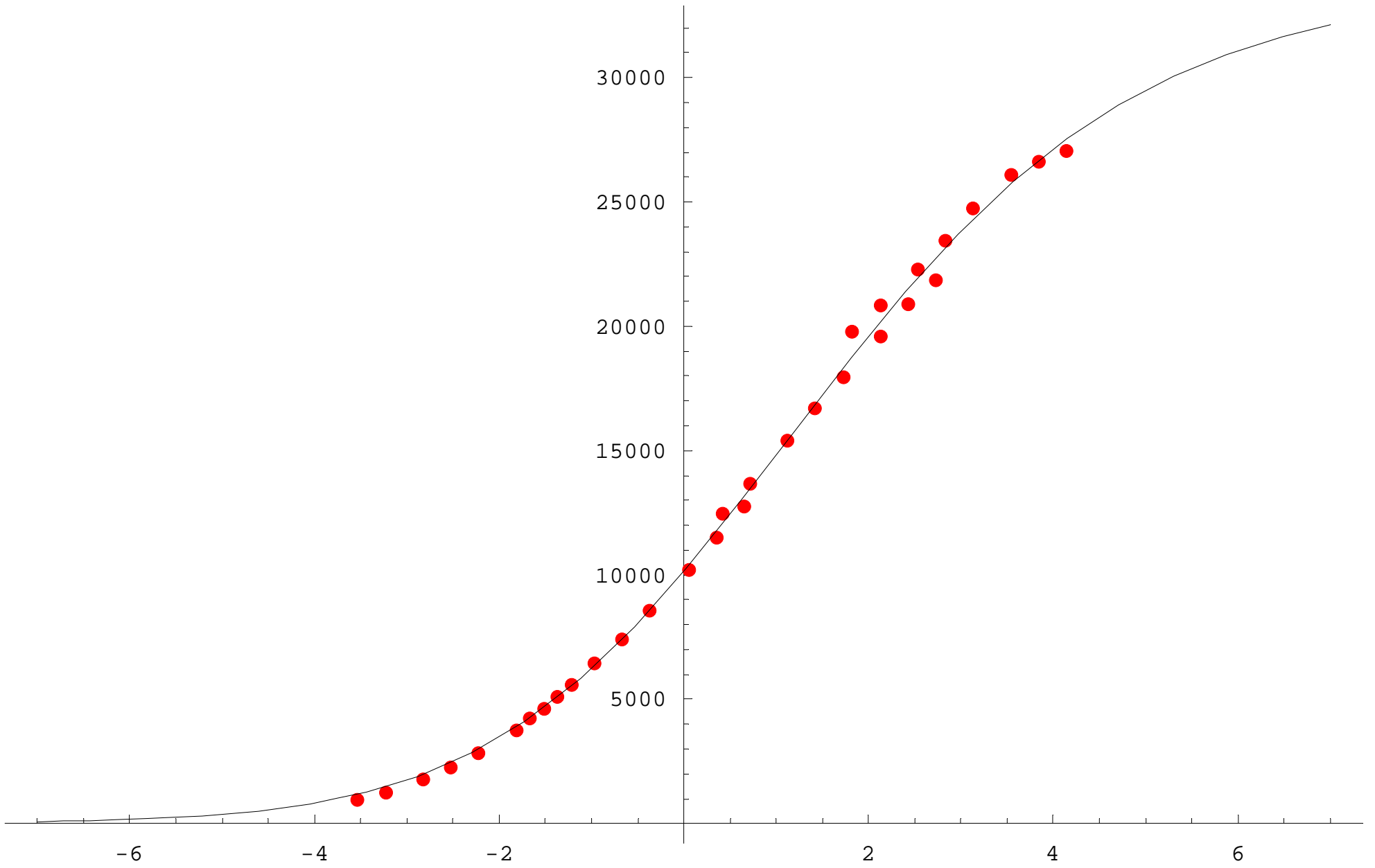
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 33828.8  | 269.171       | {33279.1, 34378.5}, |
| h                       | 1.73955  | 0.0222661     | {1.69407, 1.78502}  |

EstimatedVariance → 152545.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $7.7903 \times 10^9$  | $3.89515 \times 10^9$ |
| ANOVATable → Error | 30 | $4.57635 \times 10^6$ | 152545. ,             |
| Uncorrected Total  | 32 | $7.79488 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.30663 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.831092 \\ 0.831092 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0131959 |
| Max Parameter-Effects             | 0.0177031 |
| 95. % Confidence Region           | 0.549166  |



sample: c56 E, model s

30847.7

$$\frac{1}{1 + e^{-0.658307(-1.12007 + x)}}$$

{BestFitParameters → {Emax → 30847.7, λ → 0.658307, xshift → 1.12007}},

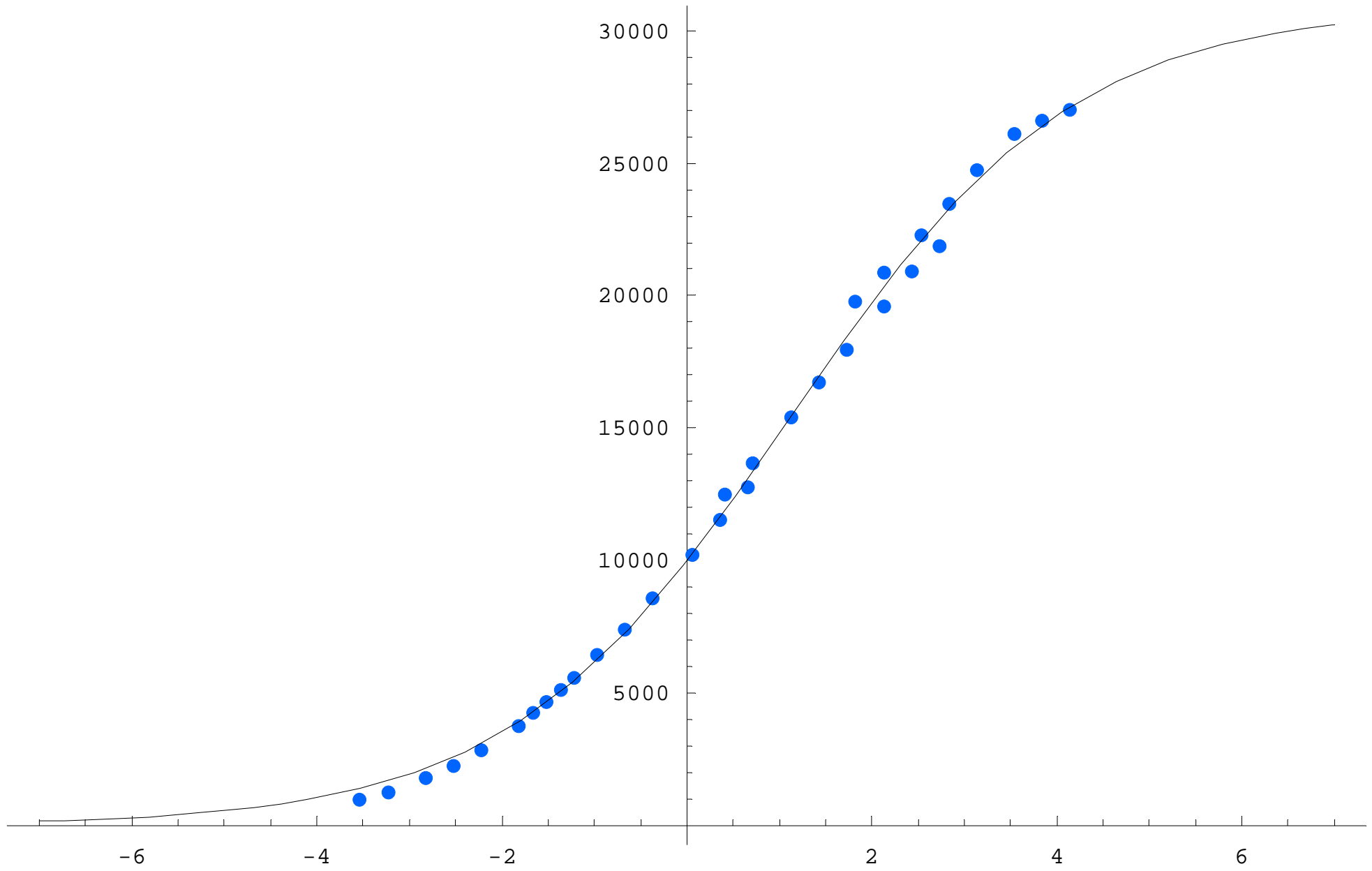
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 30847.7  | 613.157       | {29593.6, 32101.7}   |
|                    | λ      | 0.658307 | 0.0179535     | {0.621588, 0.695026} |
|                    | xshift | 1.12007  | 0.0780638     | {0.960415, 1.27973}  |

EstimatedVariance → 181965.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $7.7896 \times 10^9$  | $2.59653 \times 10^9$ |
| ANOVA Table → Error | 29 | $5.27699 \times 10^6$ | 181965.               |
| Uncorrected Total   | 32 | $7.79488 \times 10^9$ |                       |
| Corrected Total     | 31 | $2.30663 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.859328 & 0.964851 \\ -0.859328 & 1. & -0.833557 \\ 0.964851 & -0.833557 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0303319 |
|                     | Max Parameter-Effects   | 0.318423  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c56v E, model r

34669.9

$$(1 + e^{-0.5 x})^{1.77795}$$

{BestFitParameters → {Emax → 34669.9, h → 1.77795},

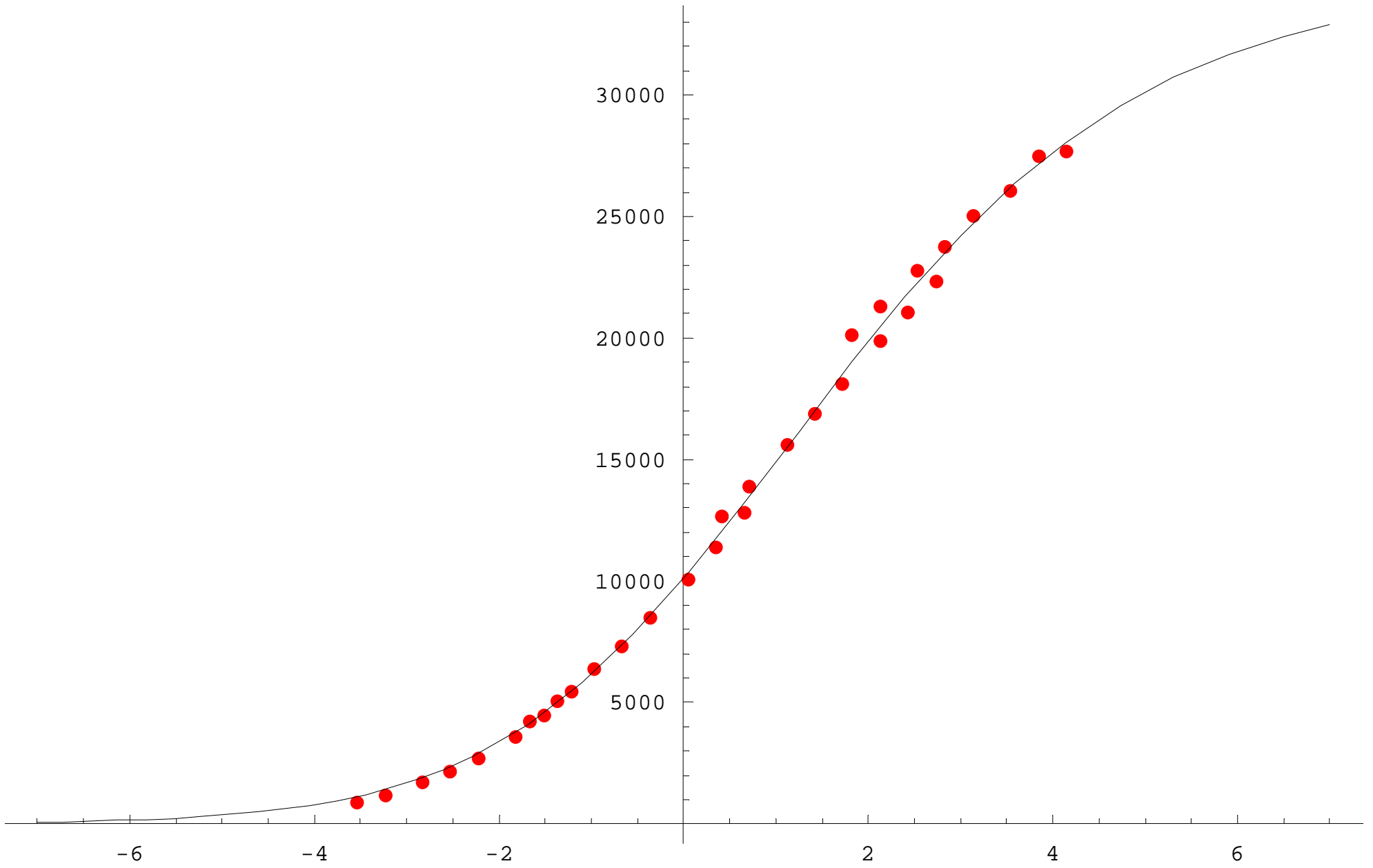
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 34669.9  | 301.955       | {34053.3, 35286.6}, |
| h                       | 1.77795  | 0.0246839     | {1.72754, 1.82837}  |

EstimatedVariance → 185438.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $7.99889 \times 10^9$ | $3.99945 \times 10^9$ |
| ANOVATable → Error | 30 | $5.56313 \times 10^6$ | 185438. ,             |
| Uncorrected Total  | 32 | $8.00446 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.42133 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.833291 \\ 0.833291 & 1. \end{pmatrix}$ ,

|                                   | Curvature  |
|-----------------------------------|------------|
| FitCurvatureTable → Max Intrinsic | 0.0145105  |
| Max Parameter-Effects             | 0.019343 } |
| 95. % Confidence Region           | 0.549166   |





sample: c56v E, model s

31374.9

$$\frac{1}{1 + e^{-0.668098(-1.14733 + x)}}$$

{BestFitParameters → {Emax → 31374.9, λ → 0.668098, xshift → 1.14733},

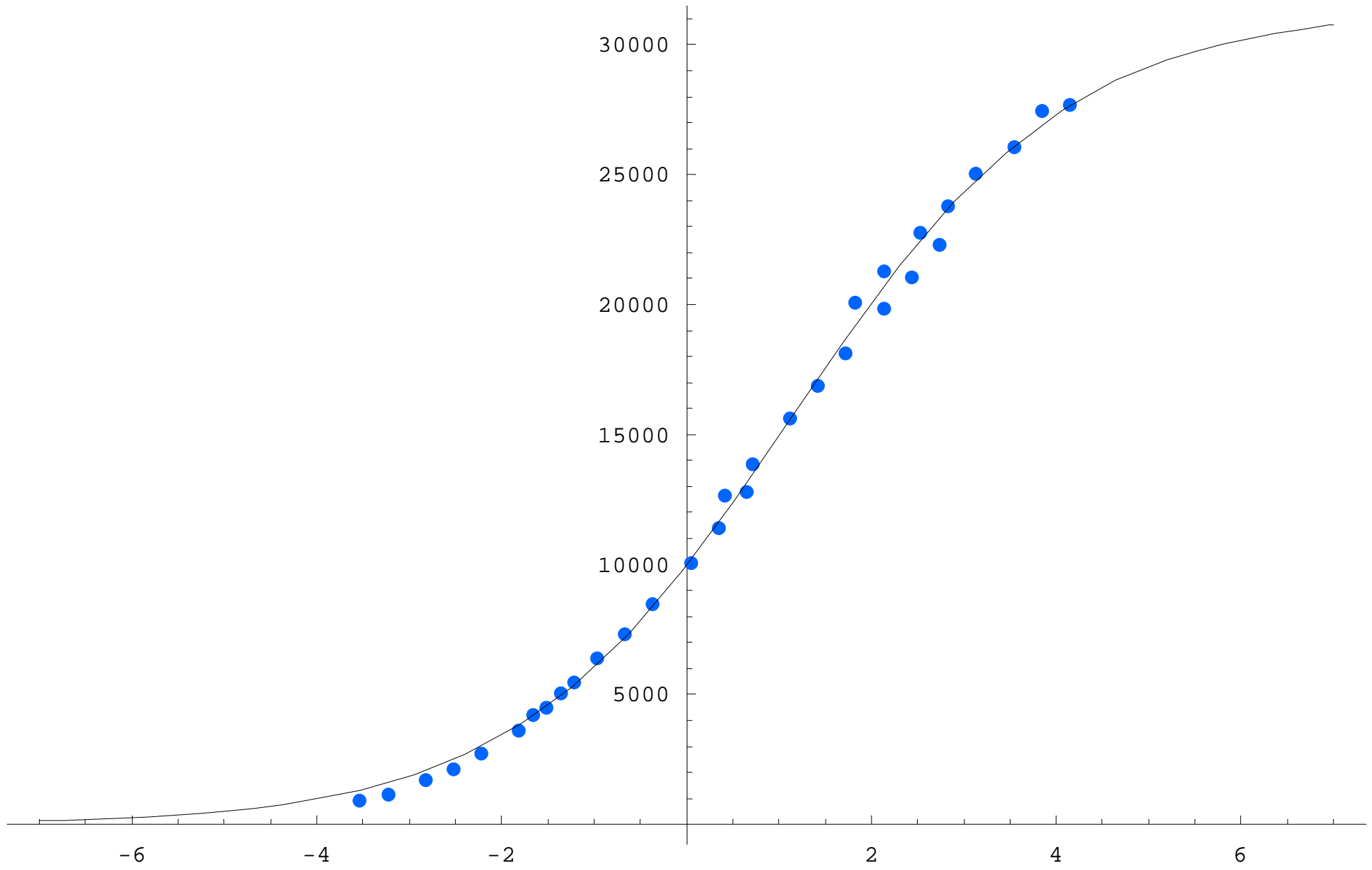
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 31374.9  | 670.352       | {30003.8, 32745.9}   |
|                    | λ      | 0.668098 | 0.0196316     | {0.627947, 0.708249} |
|                    | xshift | 1.14733  | 0.0828486     | {0.977887, 1.31678}  |

EstimatedVariance → 220524.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $7.99806 \times 10^9$ | $2.66602 \times 10^9$ |
| ANOVA Table → Error | 29 | $6.39519 \times 10^6$ | 220524. ,             |
| Uncorrected Total   | 32 | $8.00446 \times 10^9$ |                       |
| Corrected Total     | 31 | $2.42133 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.857182 & 0.964067 \\ -0.857182 & 1. & -0.830912 \\ 0.964067 & -0.830912 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0327212 |
|                     | Max Parameter-Effects   | 0.339887  |
|                     | 95. % Confidence Region | 0.583805  |



**25%RA between tracks (after ALT and low T)**

sample: c70 E, model r

23547.9

$$\frac{23547.9}{(1 + e^{-0.5 x})^{1.85273}}$$

{BestFitParameters → {Emax → 23547.9, h → 1.85273},

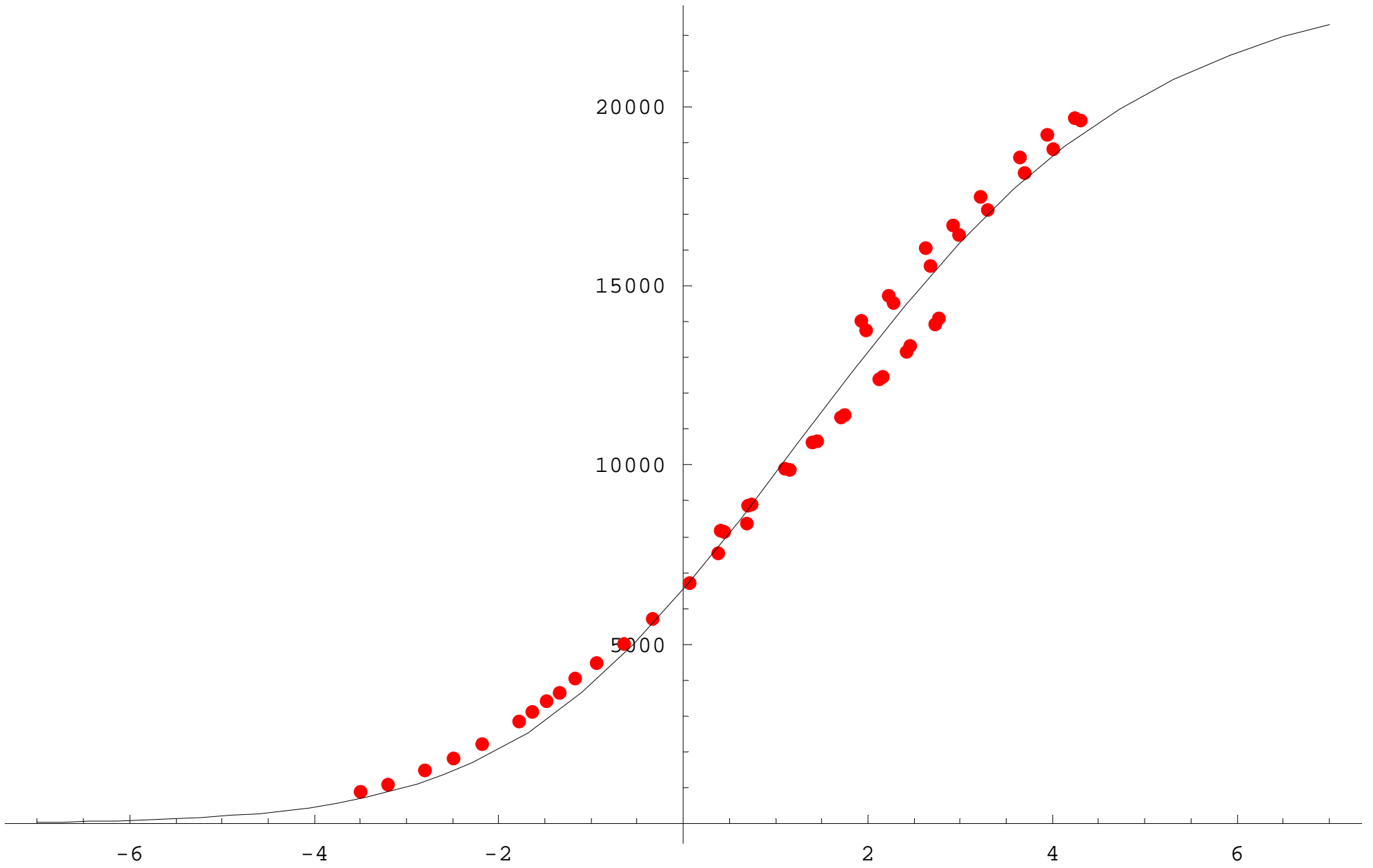
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 23547.9  | 375.933       | {22791.2, 24304.6}, |
| h                       | 1.85273  | 0.0524292     | {1.7472, 1.95827}   |

EstimatedVariance → 477377.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $6.96101 \times 10^9$ | $3.48051 \times 10^9$ |
| ANOVATable → Error | 46 | $2.19593 \times 10^7$ | 477377. ,             |
| Uncorrected Total  | 48 | $6.98297 \times 10^9$ |                       |
| Corrected Total    | 47 | $1.55682 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.854942 \\ 0.854942 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0297804 |
|                     | Max Parameter-Effects   | 0.0364811 |
|                     | 95. % Confidence Region | 0.559054  |



sample: c70 E, model s

25097.4

$$\frac{1}{1 + e^{-0.54885(-1.90377 + x)}}$$

{BestFitParameters → {Emax → 25097.4, λ → 0.54885, xshift → 1.90377},

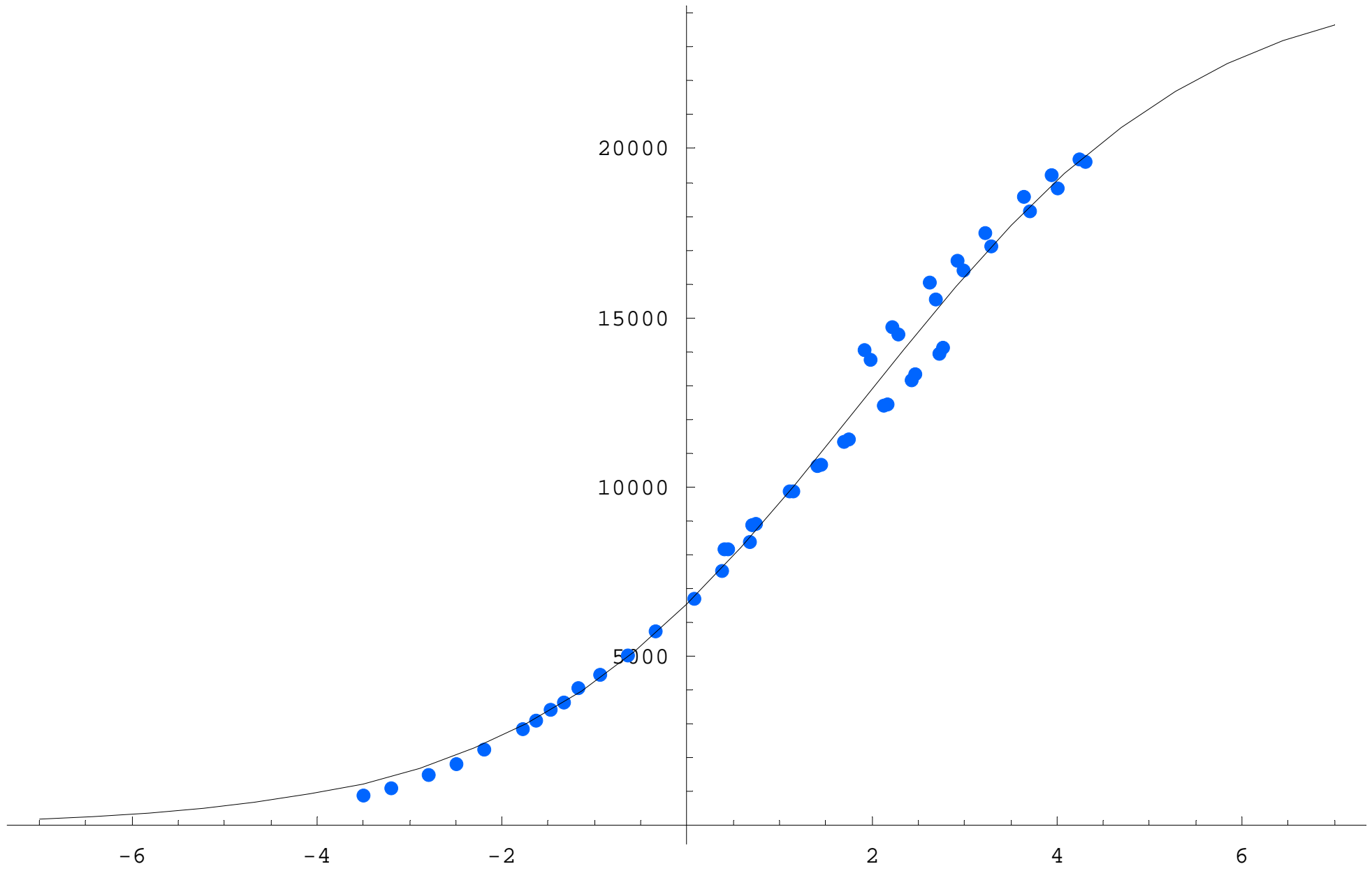
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 25097.4  | 1208.42       | {22663.6, 27531.3}   |
|                    | λ      | 0.54885  | 0.0282925     | {0.491866, 0.605834} |
|                    | xshift | 1.90377  | 0.201297      | {1.49834, 2.30921}   |

EstimatedVariance → 379556.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $6.96589 \times 10^9$ | $2.32196 \times 10^9$ |
| ANOVA Table → Error | 45 | $1.708 \times 10^7$   | 379556.               |
| Uncorrected Total   | 48 | $6.98297 \times 10^9$ |                       |
| Corrected Total     | 47 | $1.55682 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.895807 & 0.987384 \\ -0.895807 & 1. & -0.888866 \\ 0.987384 & -0.888866 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0405871 |
|                     | Max Parameter-Effects   | 0.788727  |
|                     | 95. % Confidence Region | 0.596386  |



sample: c70v E, model r

22553.8

$$(1 + e^{-0.5 x})^{1.84253}$$

{BestFitParameters → {Emax → 22553.8, h → 1.84253},

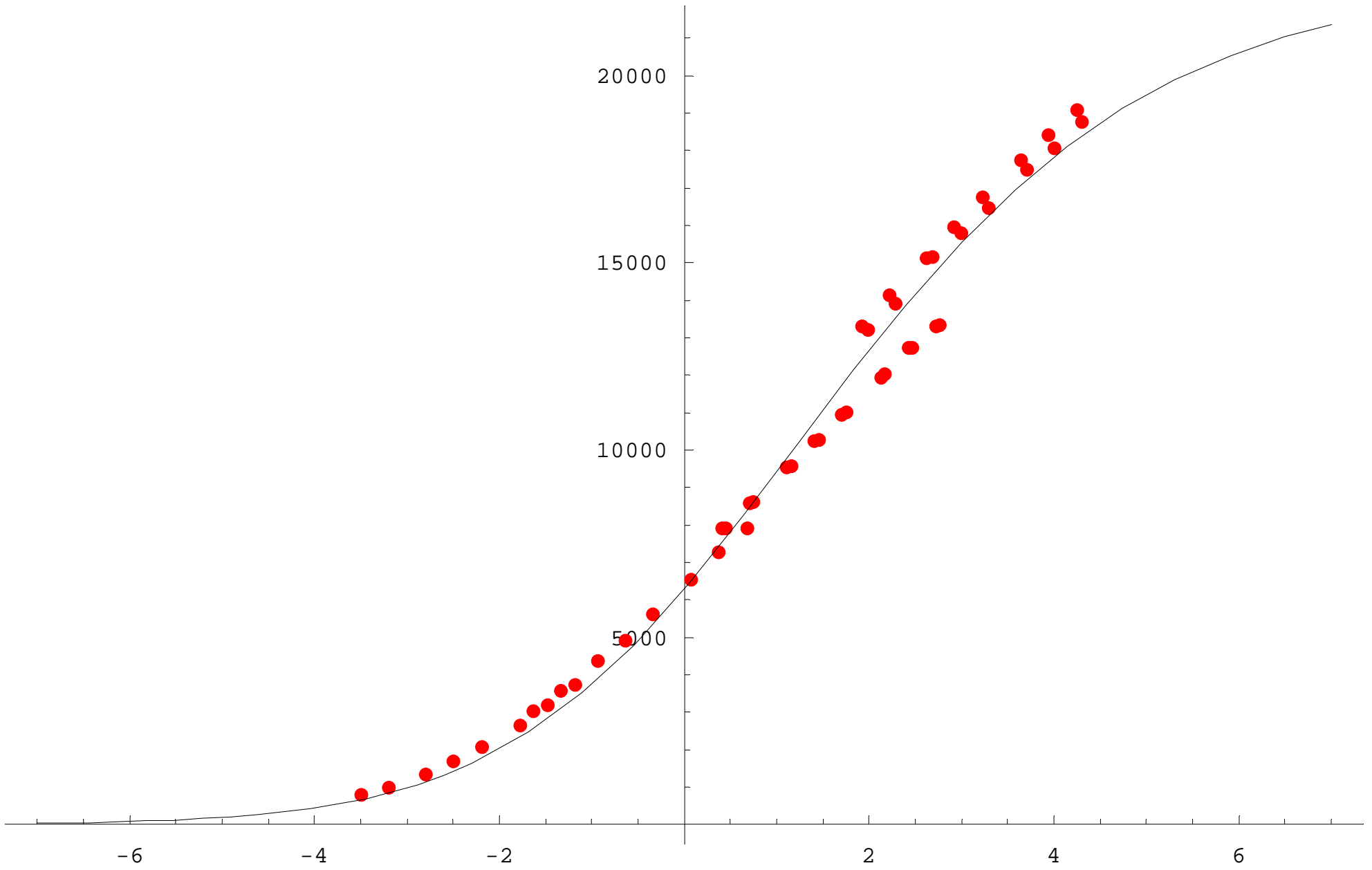
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 22553.8  | 354.969       | {21839.3, 23268.3}, |
| h                       | 1.84253  | 0.0515552     | {1.73876, 1.94631}  |

EstimatedVariance → 429280.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $6.41975 \times 10^9$ | $3.20987 \times 10^9$ |
| ANOVATable → Error | 46 | $1.97469 \times 10^7$ | 429280. ,             |
| Uncorrected Total  | 48 | $6.43949 \times 10^9$ |                       |
| Corrected Total    | 47 | $1.43365 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.85443 \\ 0.85443 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0293774 |
| Max Parameter-Effects             | 0.0359605 |
| 95. % Confidence Region           | 0.559054  |





sample: c70v E, model s

24041.3

$$\frac{1}{1 + e^{-0.547954(-1.89173 + x)}}$$

{BestFitParameters → {Emax → 24041.3, λ → 0.547954, xshift → 1.89173},

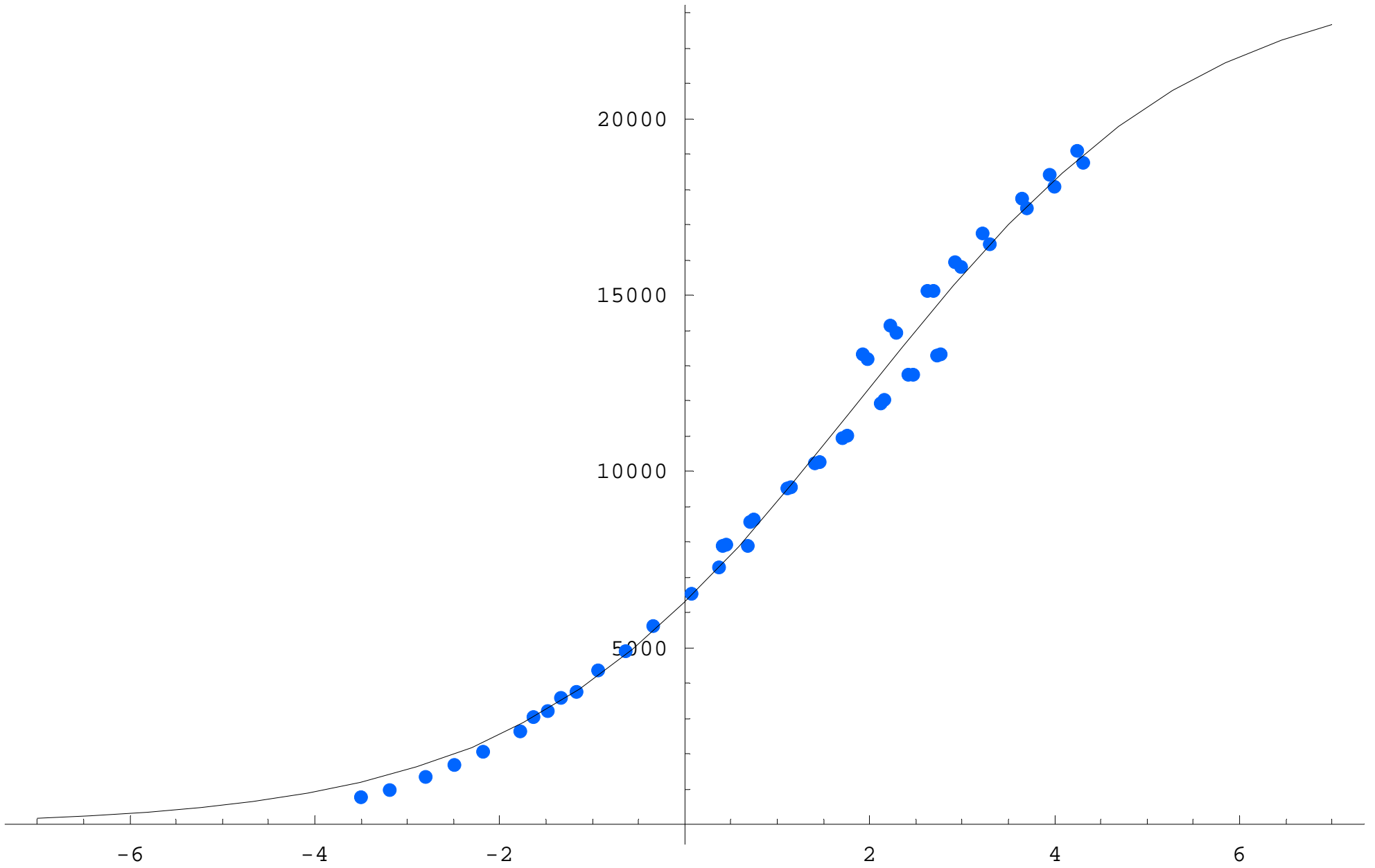
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 24041.3  | 1152.9        | {21719.2, 26363.4}    |
|                    | λ      | 0.547954 | 0.0282189     | {0.491118, 0.604789}' |
|                    | xshift | 1.89173  | 0.200939      | {1.48701, 2.29644}    |

EstimatedVariance → 348342.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 3  | $6.42382 \times 10^9$ | $2.14127 \times 10^9$ |
| ANOVATable → Error | 45 | $1.56754 \times 10^7$ | 348342. ,             |
| Uncorrected Total  | 48 | $6.43949 \times 10^9$ |                       |
| Corrected Total    | 47 | $1.43365 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.895817 & 0.987313 \\ -0.895817 & 1. & -0.888553 \\ 0.987313 & -0.888553 & 1. \end{pmatrix},$

|                     | Curvature               |            |
|---------------------|-------------------------|------------|
| FitCurvatureTable → | Max Intrinsic           | 0.0406209  |
|                     | Max Parameter-Effects   | 0.786871 } |
|                     | 95. % Confidence Region | 0.596386   |



sample: c73 E, model r

27171.

$$(1 + e^{-0.5 x})^{1.70229}$$

{BestFitParameters → {Emax → 27171., h → 1.70229},

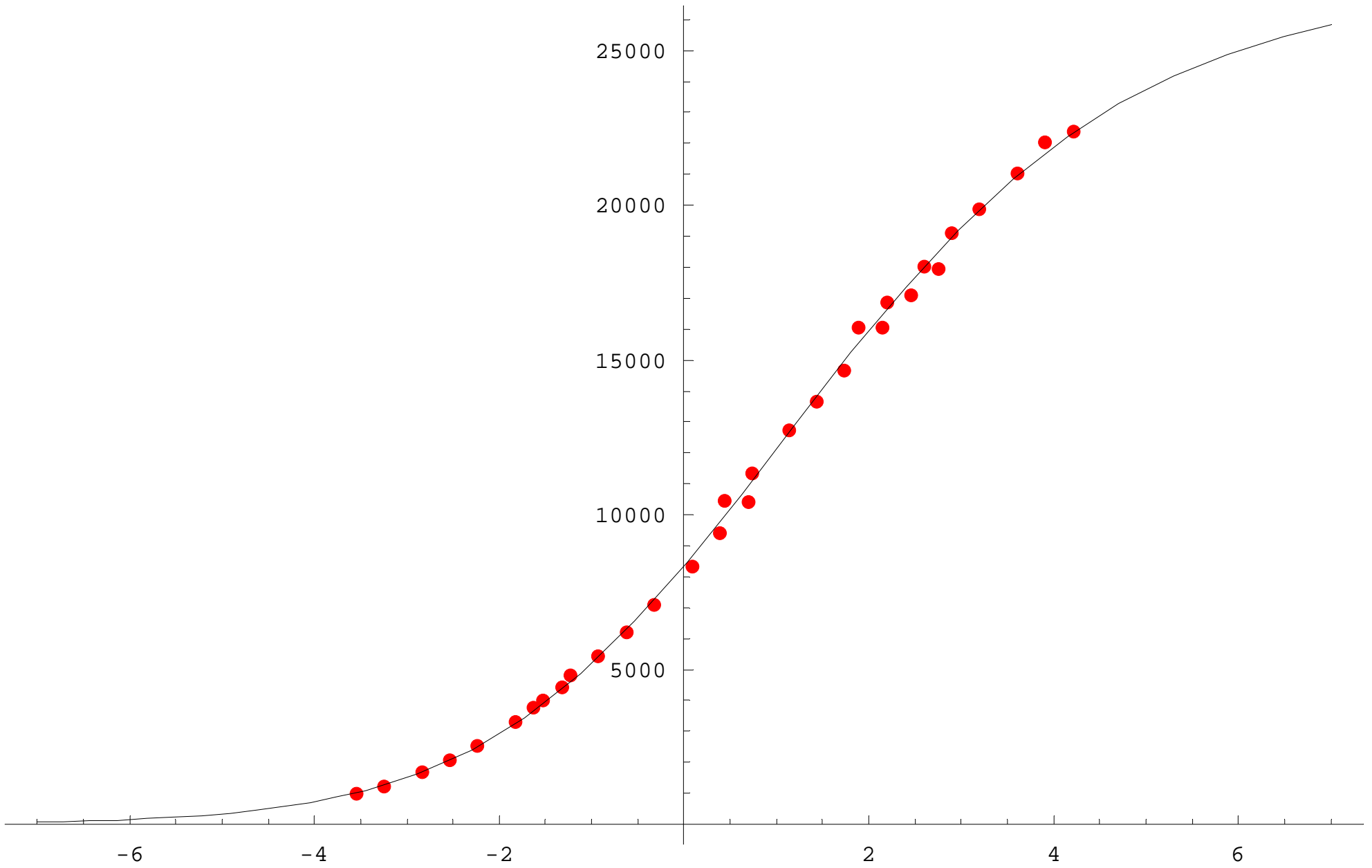
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 27171.   | 182.165       | {26799., 27543.1} , |
| h                       | 1.70229  | 0.0187205     | {1.66405, 1.74052}  |

EstimatedVariance → 74590.5,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $5.2199 \times 10^9$  | $2.60995 \times 10^9$ |
| ANOVATable → Error | 30 | $2.23772 \times 10^6$ | 74590.5 ,             |
| Uncorrected Total  | 32 | $5.22213 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.49475 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.825886 \\ 0.825886 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0112176 |
| Max Parameter-Effects             | 0.0150261 |
| 95. % Confidence Region           | 0.549166  |



sample: c73 E, model s

25809.9

$$\frac{1}{1 + e^{-0.620529(-1.22716 + x)}}$$

{BestFitParameters → {Emax → 25809.9, λ → 0.620529, xshift → 1.22716},

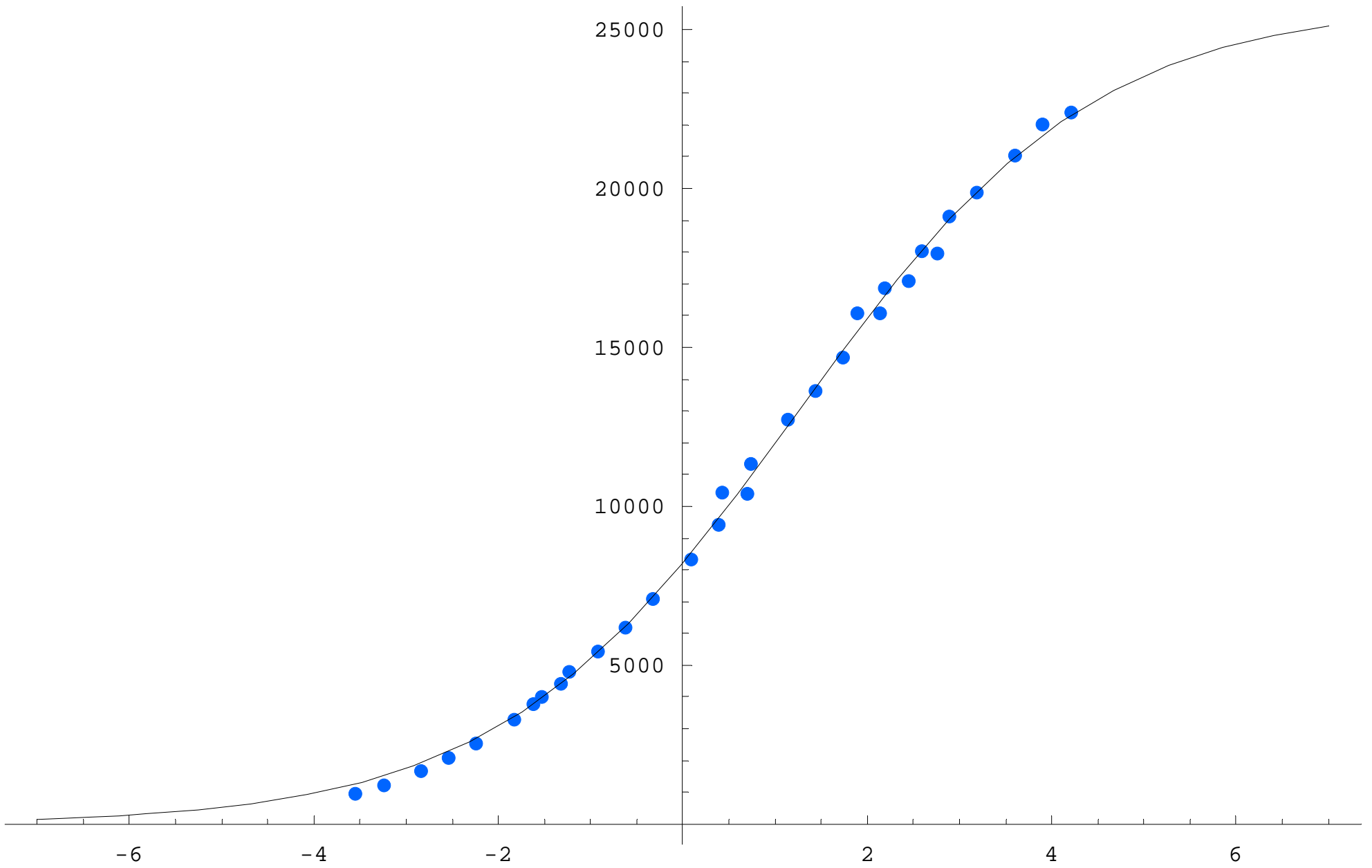
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 25809.9  | 468.508       | {24851.7, 26768.1}   |
|                    | λ      | 0.620529 | 0.0145506     | {0.590769, 0.650288} |
|                    | xshift | 1.22716  | 0.0738473     | {1.07613, 1.3782}    |

EstimatedVariance → 86857.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $5.21961 \times 10^9$ | $1.73987 \times 10^9$ |
| ANOVA Table → Error | 29 | $2.51885 \times 10^6$ | 86857.                |
| Uncorrected Total   | 32 | $5.22213 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.49475 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.86833 & 0.97105 \\ -0.86833 & 1. & -0.850325 \\ 0.97105 & -0.850325 & 1. \end{pmatrix},$

|                     | Curvature               |          |
|---------------------|-------------------------|----------|
| FitCurvatureTable → | Max Intrinsic           | 0.02522  |
|                     | Max Parameter-Effects   | 0.29037  |
|                     | 95. % Confidence Region | 0.583805 |



sample: c73v E, model r

27226.2

$$\frac{27226.2}{(1 + e^{-0.5 x})^{1.71616}}$$

{BestFitParameters → {Emax → 27226.2, h → 1.71616},

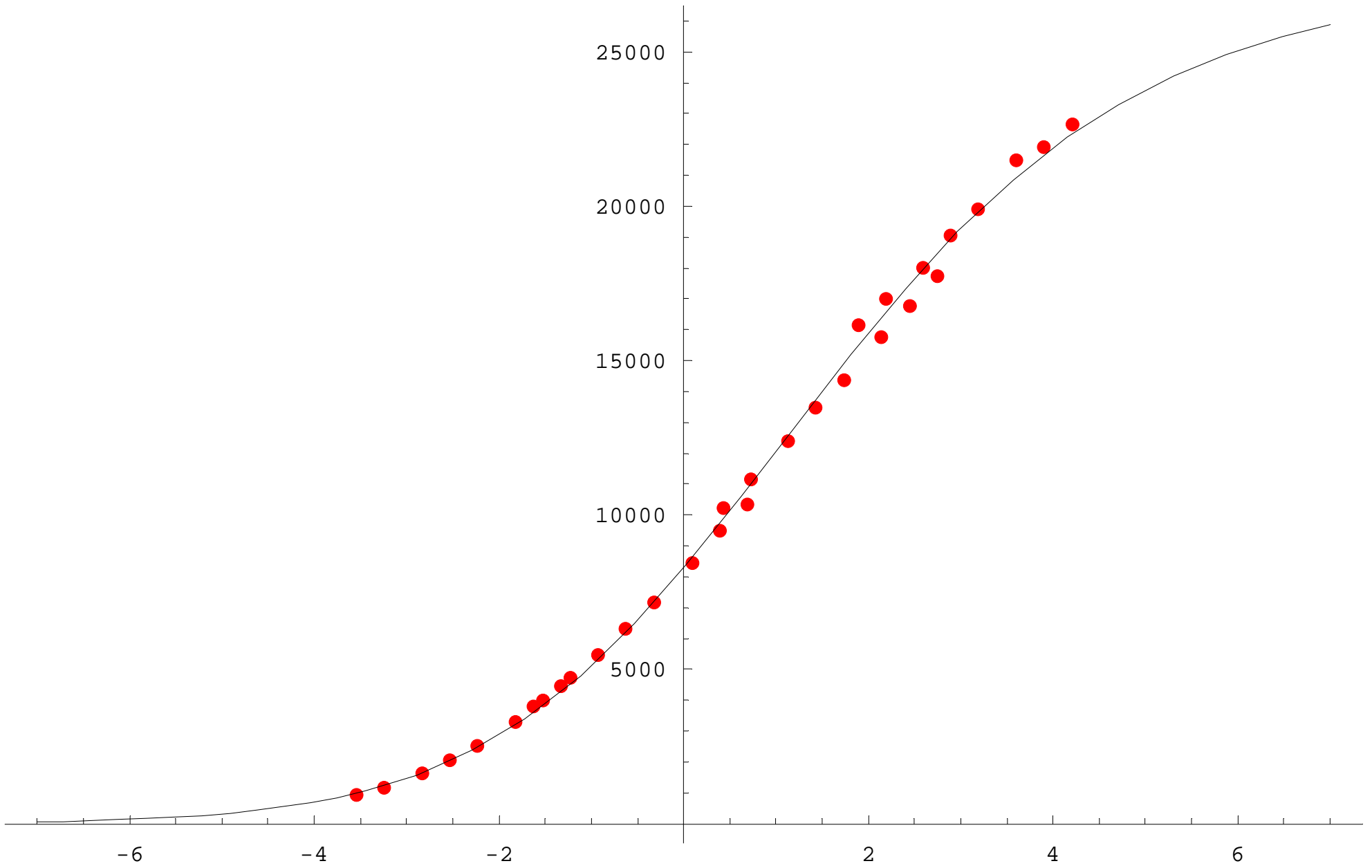
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 27226.2  | 238.787       | {26738.5, 27713.9}, |
| h                       | 1.71616  | 0.0246068     | {1.66591, 1.76642}  |

EstimatedVariance → 126594.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $5.19834 \times 10^9$ | $2.59917 \times 10^9$ |
| ANOVATable → Error | 30 | $3.79781 \times 10^6$ | 126594. ,             |
| Uncorrected Total  | 32 | $5.20214 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.49676 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.826684 \\ 0.826684 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0147008 |
| Max Parameter-Effects             | 0.0196414 |
| 95. % Confidence Region           | 0.549166  |





sample: c73v E, model s

26551.4

$$\frac{1}{1 + e^{-0.601718(-1.35611 + x)}}$$

{BestFitParameters → {Emax → 26551.4, λ → 0.601718, xshift → 1.35611},

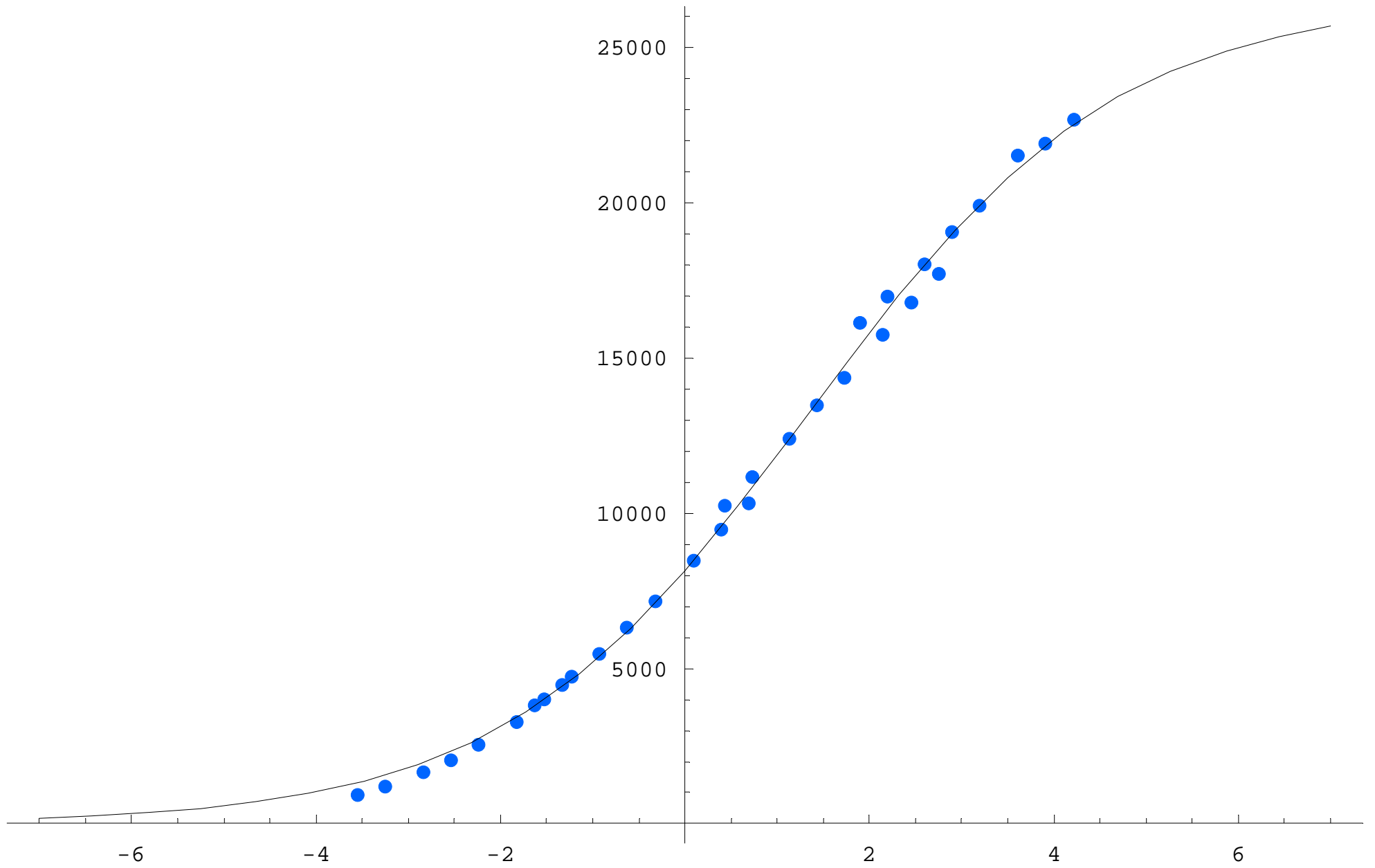
|                    |        | Estimate | Asymptotic SE | CI                  |
|--------------------|--------|----------|---------------|---------------------|
| ParameterCITable → | Emax   | 26551.4  | 641.945       | {25238.5, 27864.4}  |
|                    | λ      | 0.601718 | 0.0175879     | {0.565747, 0.63769} |
|                    | xshift | 1.35611  | 0.0993139     | {1.15299, 1.55923}  |

EstimatedVariance → 132451.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $5.1983 \times 10^9$  | $1.73277 \times 10^9$ |
| ANOVA Table → Error | 29 | $3.84109 \times 10^6$ | 132451. ,             |
| Uncorrected Total   | 32 | $5.20214 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.49676 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.874975 & 0.975879 \\ -0.874975 & 1. & -0.863642 \\ 0.975879 & -0.863642 & 1. \end{pmatrix}$ ,

|                     | Curvature               |            |
|---------------------|-------------------------|------------|
| FitCurvatureTable → | Max Intrinsic           | 0.0304954  |
|                     | Max Parameter-Effects   | 0.382965 } |
|                     | 95. % Confidence Region | 0.583805   |



sample: c75 E, model r

27924.8

$$(1 + e^{-0.5 x})^{1.66729}$$

{BestFitParameters → {Emax → 27924.8, h → 1.66729},

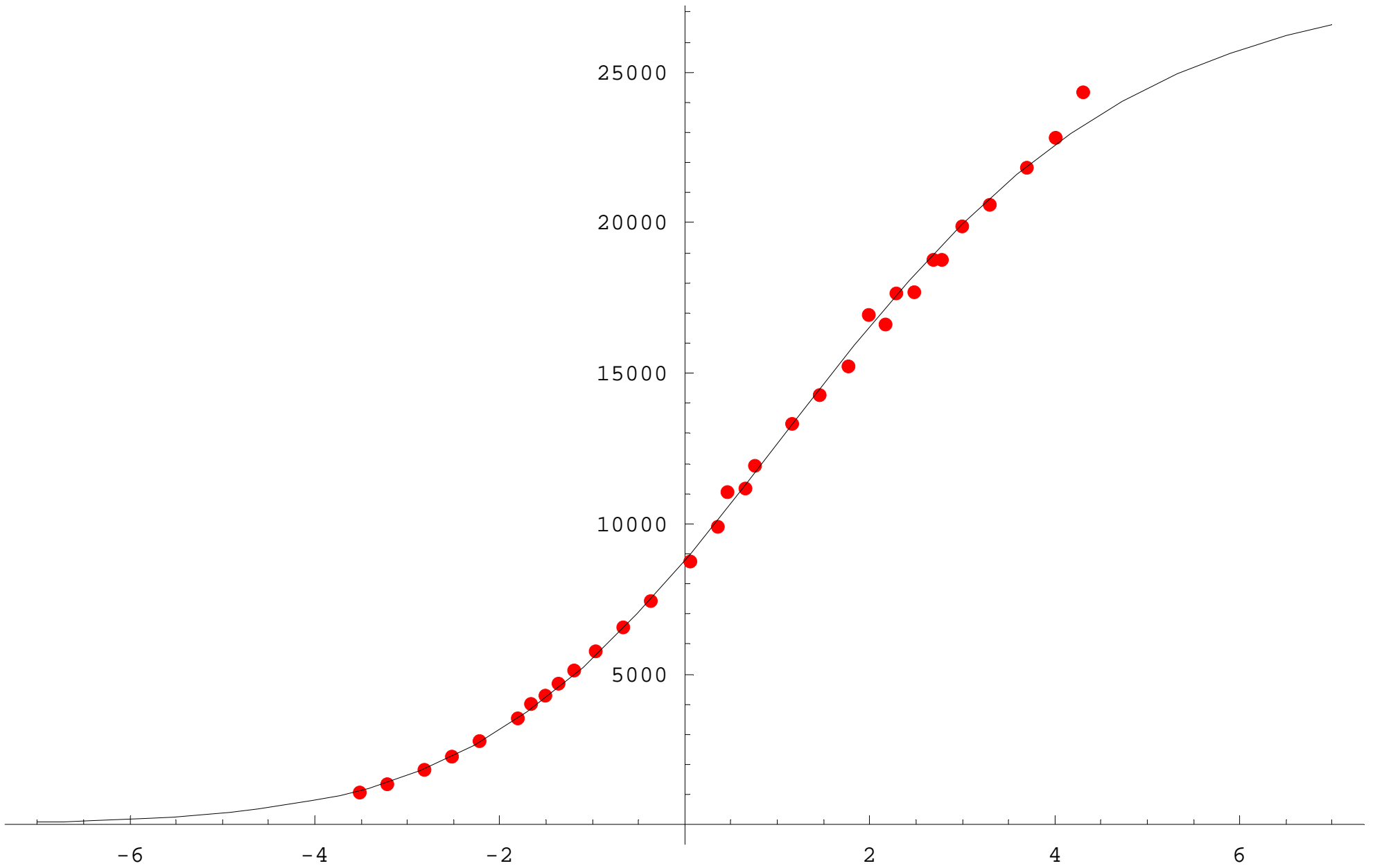
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 27924.8  | 211.57        | {27492.7, 28356.9}, |
| h                       | 1.66729  | 0.0212125     | {1.62397, 1.71061}  |

EstimatedVariance → 109838.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $5.72911 \times 10^9$ | $2.86455 \times 10^9$ |
| ANOVATable → Error | 30 | $3.29513 \times 10^6$ | 109838. ,             |
| Uncorrected Total  | 32 | $5.7324 \times 10^9$  |                       |
| Corrected Total    | 31 | $1.62469 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.816095 \\ 0.816095 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.012746  |
| Max Parameter-Effects             | 0.0174863 |
| 95. % Confidence Region           | 0.549166  |



sample: c75 E, model s

27371.1

$$\frac{1}{1 + e^{-0.592483(-1.30543 + x)}}$$

{BestFitParameters → {Emax → 27371.1, λ → 0.592483, xshift → 1.30543},

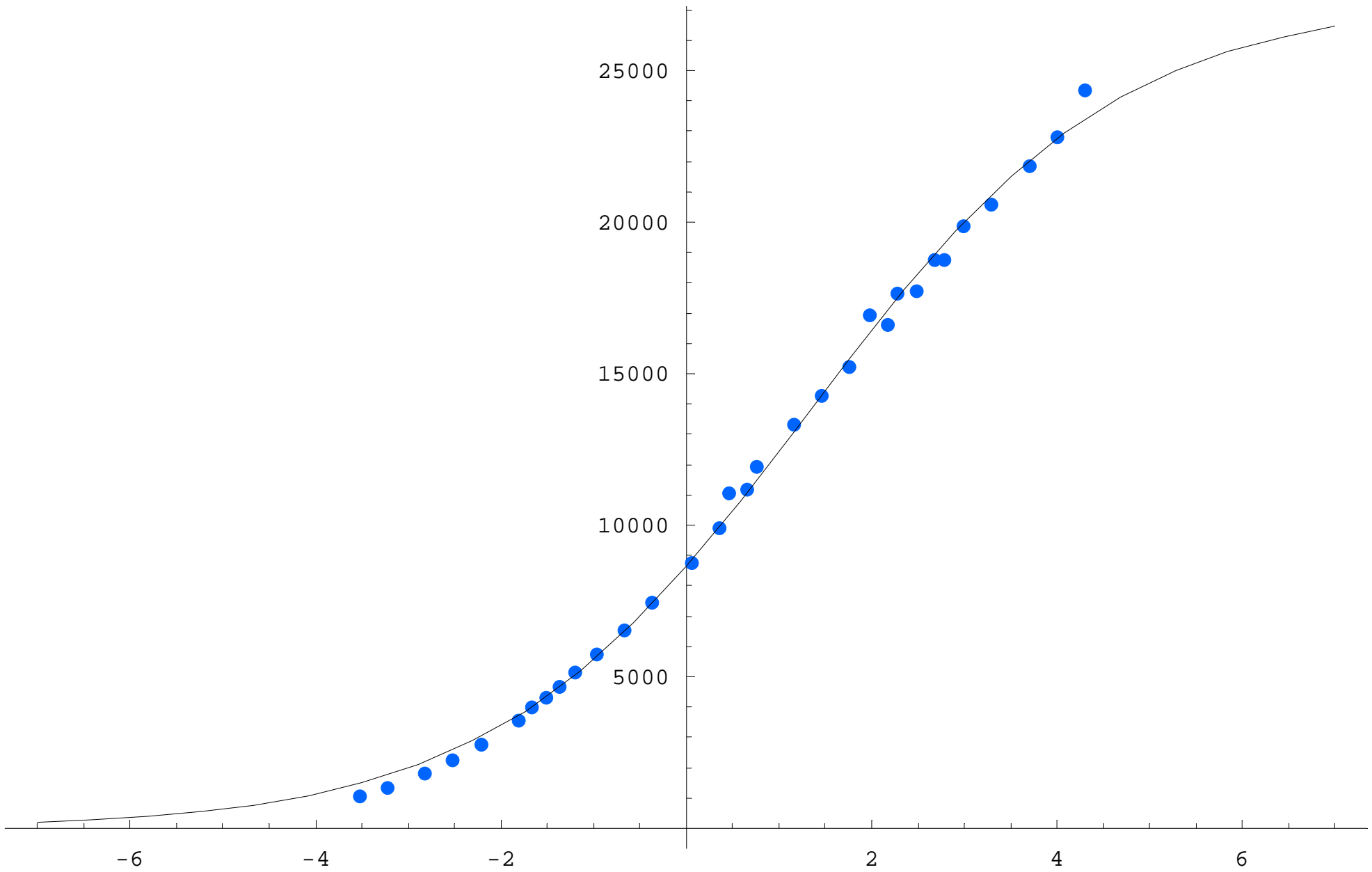
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 27371.1  | 609.053       | {26125.4, 28616.7}    |
|                    | λ      | 0.592483 | 0.0164505     | {0.558838, 0.626128}' |
|                    | xshift | 1.30543  | 0.0939721     | {1.11324, 1.49763}    |

EstimatedVariance → 131723.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $5.72858 \times 10^9$ | $1.90953 \times 10^9$ |
| ANOVA Table → Error | 29 | $3.81996 \times 10^6$ | 131723. ,             |
| Uncorrected Total   | 32 | $5.7324 \times 10^9$  |                       |
| Corrected Total     | 31 | $1.62469 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.874101 & 0.973921 \\ -0.874101 & 1. & -0.86036 \\ 0.973921 & -0.86036 & 1. \end{pmatrix}$ ,

|                     | Curvature               |            |
|---------------------|-------------------------|------------|
| FitCurvatureTable → | Max Intrinsic           | 0.0293929  |
|                     | Max Parameter-Effects   | 0.357943 } |
|                     | 95. % Confidence Region | 0.583805   |



sample: c75v E, model r

27650.

$$(1 + e^{-0.5 x})^{1.66325}$$

{BestFitParameters → {Emax → 27650., h → 1.66325},

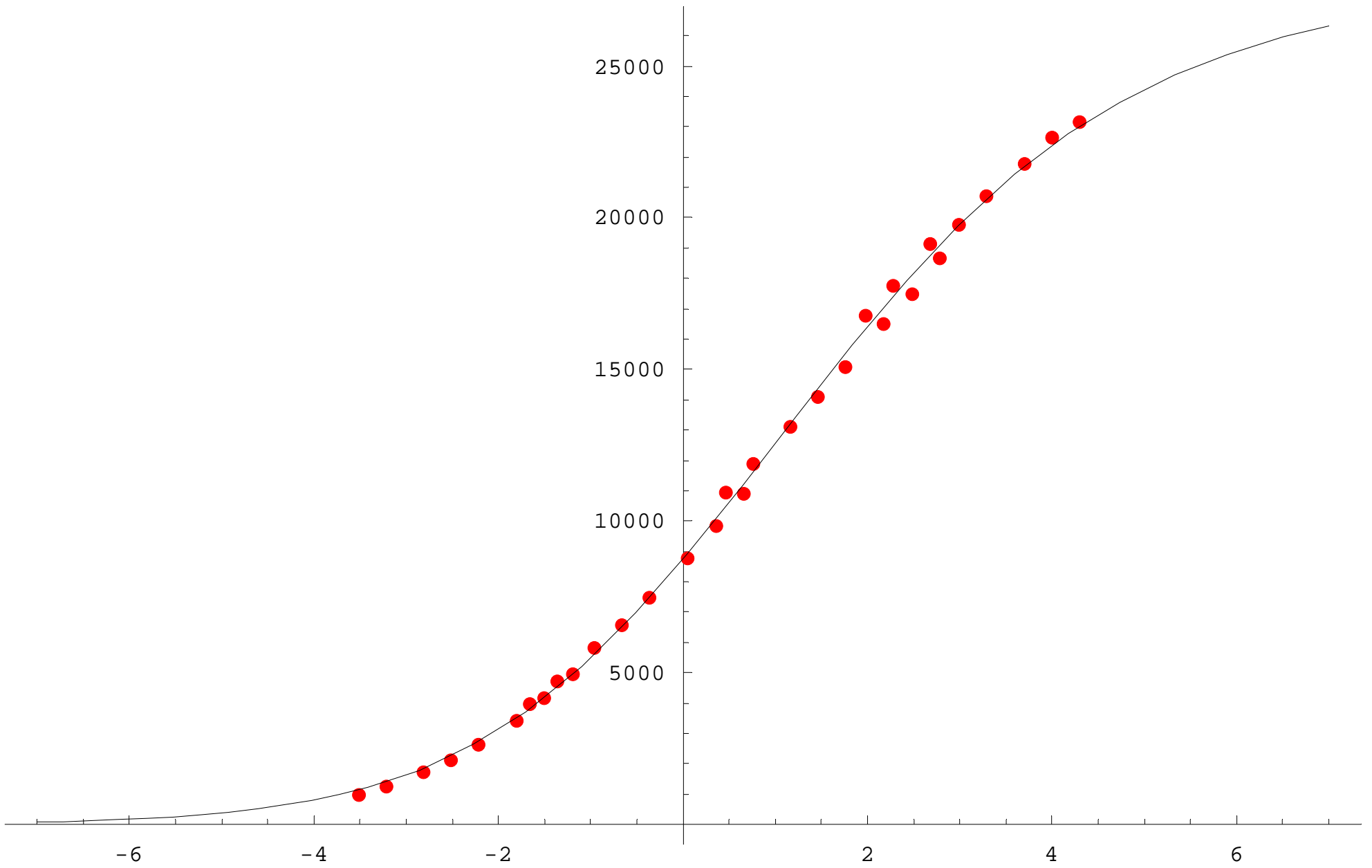
|                         | Estimate | Asymptotic SE | CI                 |
|-------------------------|----------|---------------|--------------------|
| ParameterCITable → Emax | 27650.   | 181.173       | {27280., 28020.} , |
| h                       | 1.66325  | 0.0183183     | {1.62584, 1.70066} |

EstimatedVariance → 80826.9,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $5.63015 \times 10^9$ | $2.81508 \times 10^9$ |
| ANOVATable → Error | 30 | $2.42481 \times 10^6$ | 80826.9 ,             |
| Uncorrected Total  | 32 | $5.63258 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.60184 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.815855 \\ 0.815855 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0110156 |
| Max Parameter-Effects             | 0.0151252 |
| 95. % Confidence Region           | 0.549166  |





sample: c75v E, model s

26306.6

$$\frac{1}{1 + e^{-0.615718(-1.17383 + x)}}$$

{BestFitParameters → {Emax → 27371.1, λ → 0.592483, xshift → 1.30543},

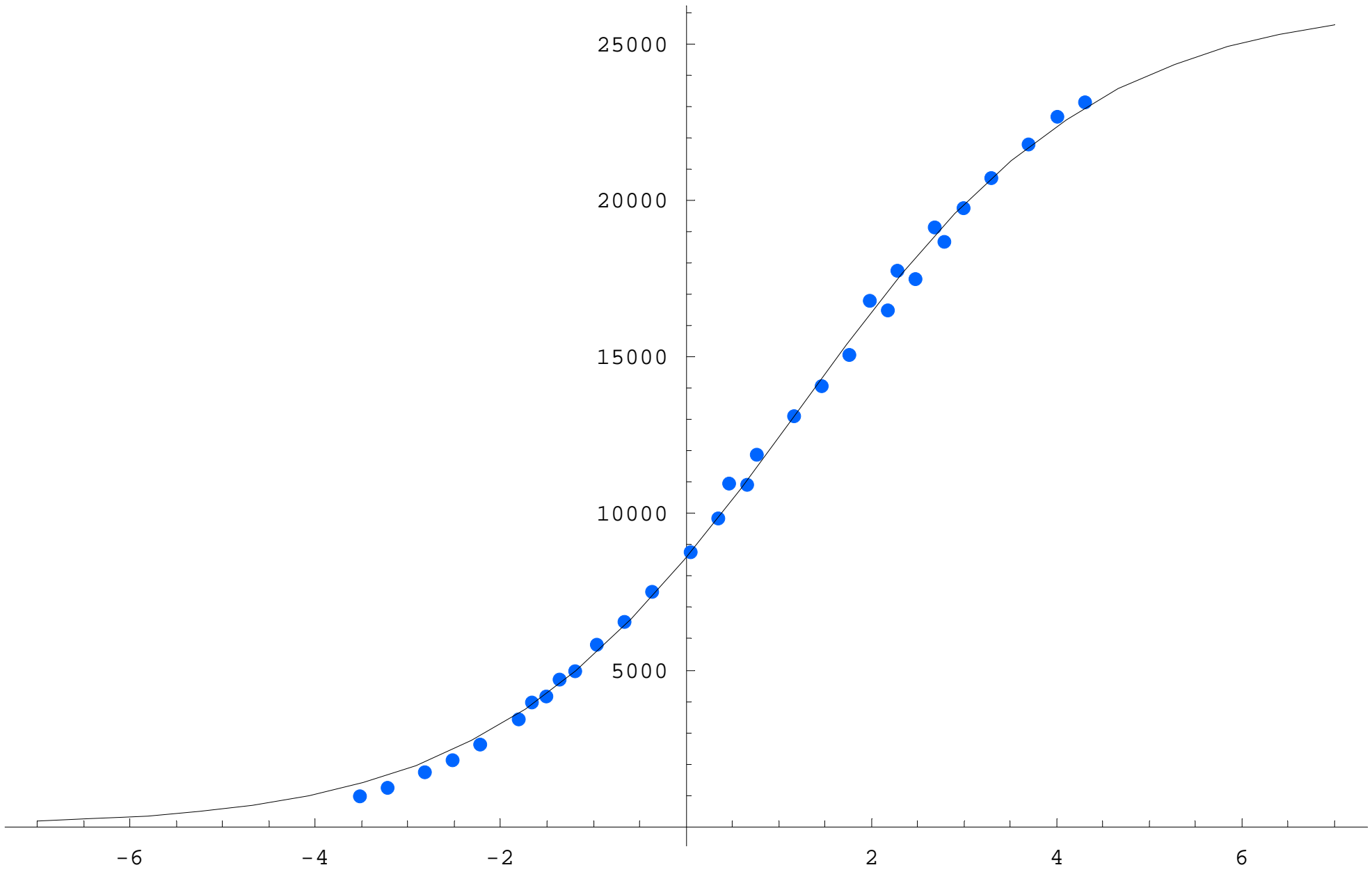
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 27371.1  | 609.053       | {26125.4, 28616.7}    |
|                    | λ      | 0.592483 | 0.0164505     | {0.558838, 0.626128}' |
|                    | xshift | 1.30543  | 0.0939721     | {1.11324, 1.49763}    |

EstimatedVariance → 131723.,

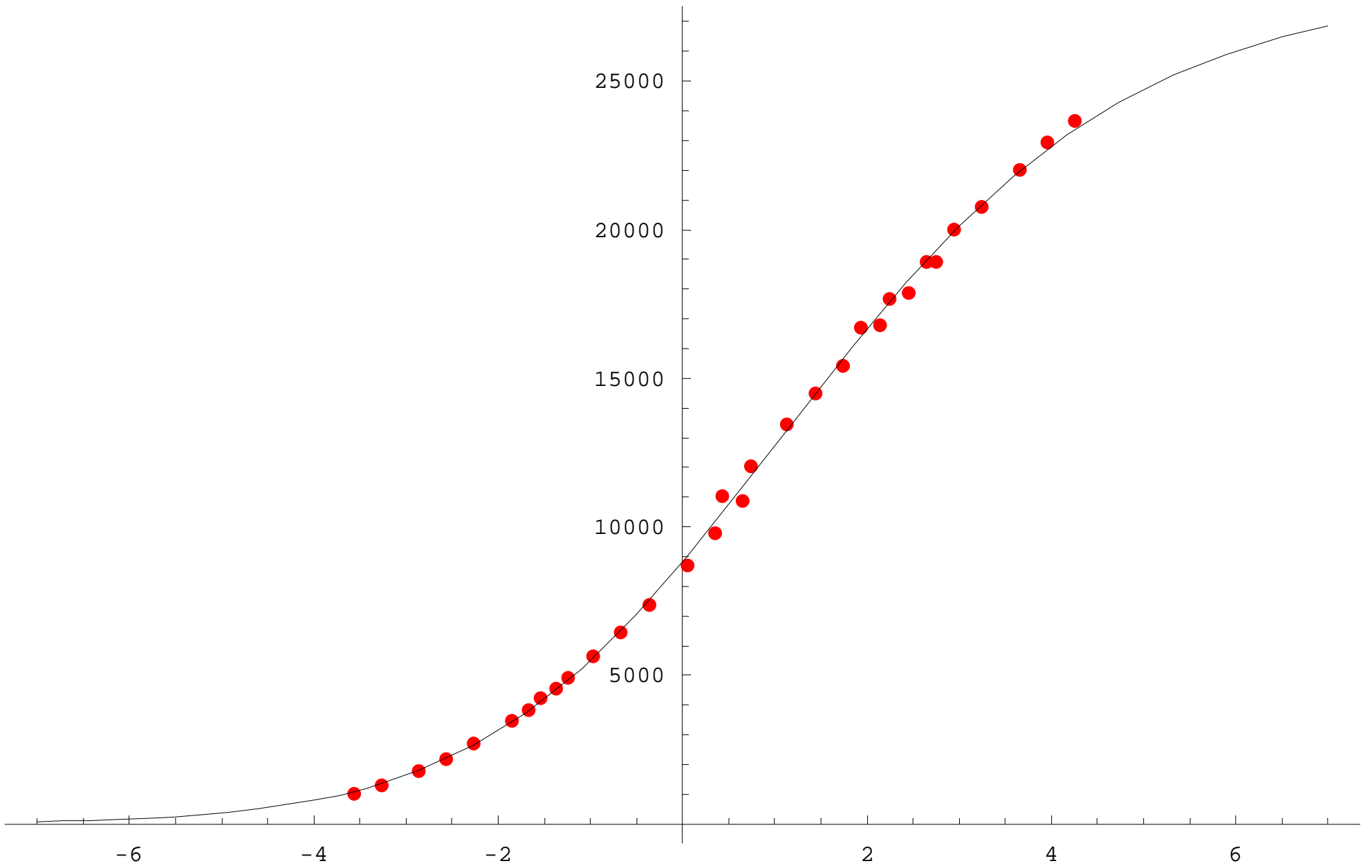
|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $5.72858 \times 10^9$ | $1.90953 \times 10^9$ |
| ANOVA Table → Error | 29 | $3.81996 \times 10^6$ | 131723. ,             |
| Uncorrected Total   | 32 | $5.7324 \times 10^9$  |                       |
| Corrected Total     | 31 | $1.62469 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.874101 & 0.973921 \\ -0.874101 & 1. & -0.86036 \\ 0.973921 & -0.86036 & 1. \end{pmatrix}$ ,

|                     | Curvature               |            |
|---------------------|-------------------------|------------|
| FitCurvatureTable → | Max Intrinsic           | 0.0293929  |
|                     | Max Parameter-Effects   | 0.357943 } |
|                     | 95. % Confidence Region | 0.583805   |







sample: c64 E, model s

26847.6

$$\frac{1}{1 + e^{-0.617358(-1.1976 + x)}}$$

{BestFitParameters → {Emax → 26847.6, λ → 0.617358, xshift → 1.1976},

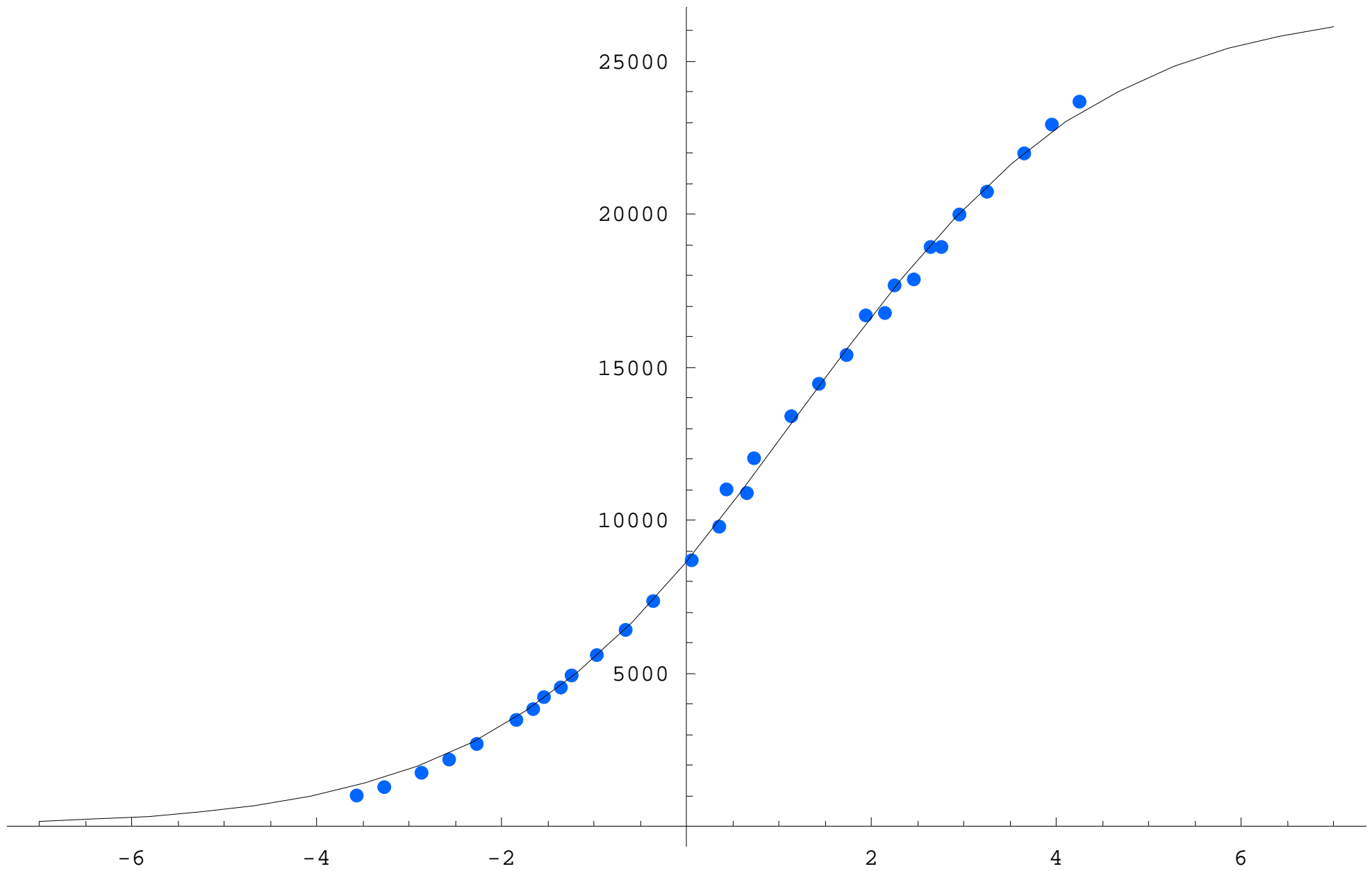
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 26847.6  | 442.885       | {25941.8, 27753.4}   |
|                    | λ      | 0.617358 | 0.013396      | {0.589961, 0.644756} |
|                    | xshift | 1.1976   | 0.0679901     | {1.05855, 1.33666}   |

EstimatedVariance → 82339.7,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $5.73679 \times 10^9$ | $1.91226 \times 10^9$ |
| ANOVA Table → Error | 29 | $2.38785 \times 10^6$ | 82339.7               |
| Uncorrected Total   | 32 | $5.73917 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.64665 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.866968 & 0.969499 \\ -0.866968 & 1. & -0.847353 \\ 0.969499 & -0.847353 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0235048 |
|                     | Max Parameter-Effects   | 0.265548  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c64v E, model r

29923.2

$$(1 + e^{-0.5 x})^{1.77667}$$

{BestFitParameters → {Emax → 29923.2, h → 1.77667},

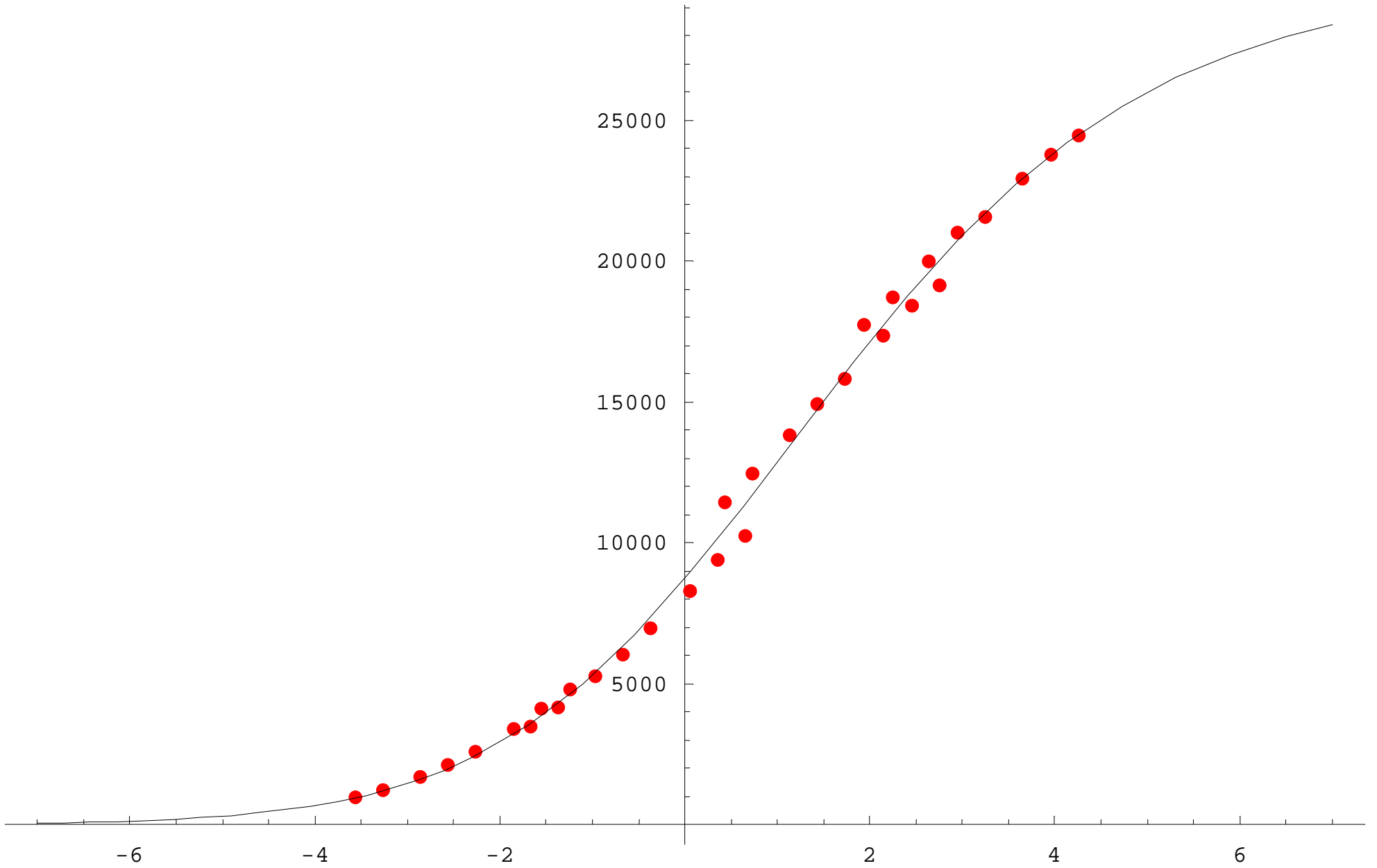
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 29923.2  | 329.09        | {29251.1, 30595.3}, |
| h                       | 1.77667  | 0.0317413     | {1.71185, 1.84149}  |

EstimatedVariance → 234013.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $6.09385 \times 10^9$ | $3.04692 \times 10^9$ |
| ANOVATable → Error | 30 | $7.02038 \times 10^6$ | 234013. ,             |
| Uncorrected Total  | 32 | $6.10087 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.84916 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.82614 \\ 0.82614 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0187825 |
| Max Parameter-Effects             | 0.0249472 |
| 95. % Confidence Region           | 0.549166  |





sample: c64v E, model s

27541.2

$$\frac{1}{1 + e^{-0.654378(-1.21065 + x)}}$$

{BestFitParameters → {Emax → 26847.6, λ → 0.617358, xshift → 1.1976},

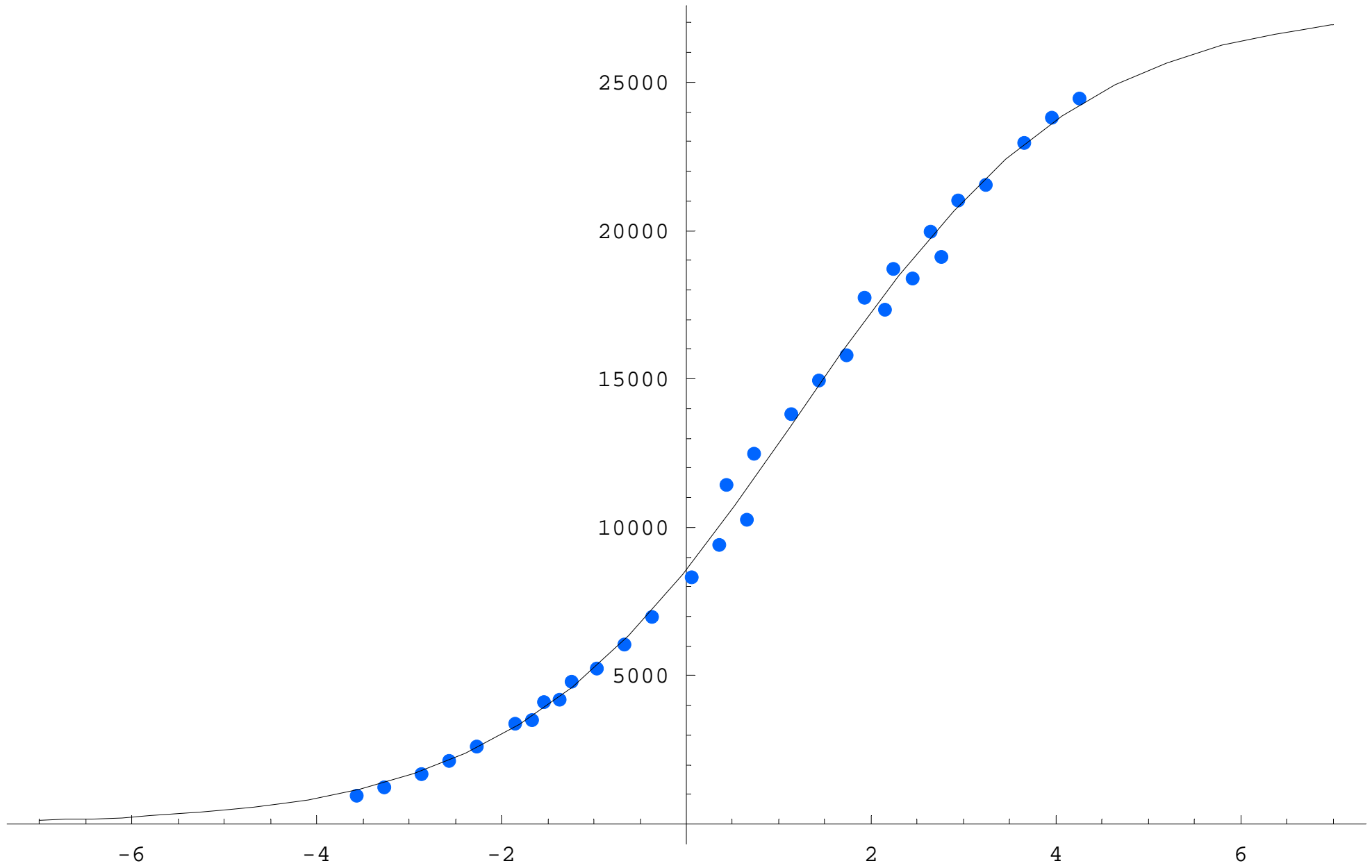
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 26847.6  | 442.885       | {25941.8, 27753.4}   |
|                    | λ      | 0.617358 | 0.013396      | {0.589961, 0.644756} |
|                    | xshift | 1.1976   | 0.0679901     | {1.05855, 1.33666}   |

EstimatedVariance → 82339.7,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $5.73679 \times 10^9$ | $1.91226 \times 10^9$ |
| ANOVA Table → Error | 29 | $2.38785 \times 10^6$ | 82339.7               |
| Uncorrected Total   | 32 | $5.73917 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.64665 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.866968 & 0.969499 \\ -0.866968 & 1. & -0.847353 \\ 0.969499 & -0.847353 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0235048 |
|                     | Max Parameter-Effects   | 0.265548  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c65 E, model r

28436.3

$$\frac{28436.3}{(1 + e^{-0.5 x})^{1.74396}}$$

{BestFitParameters → {Emax → 28436.3, h → 1.74396}},

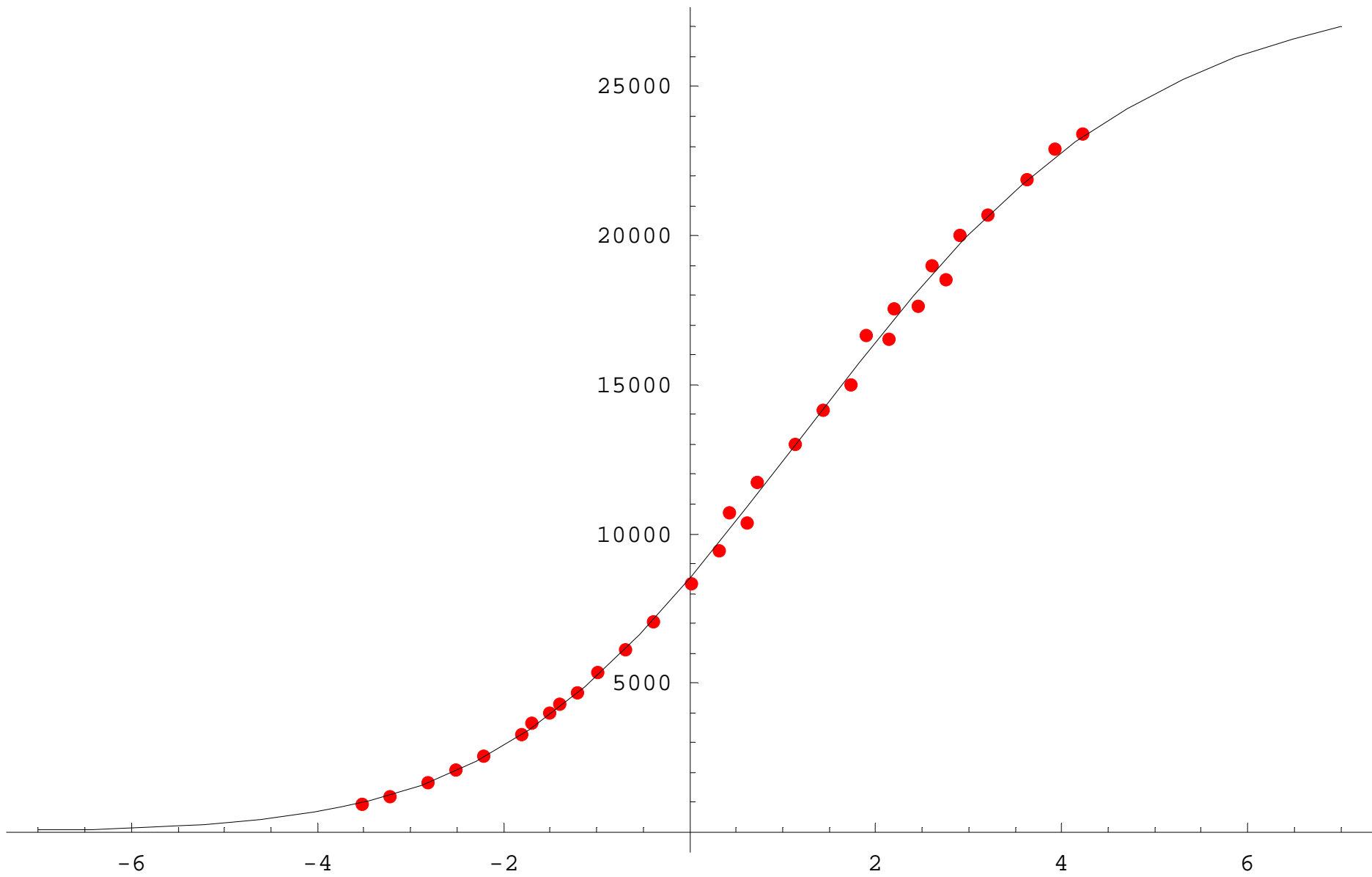
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 28436.3  | 205.978       | {28015.7, 28857.} , |
| h                       | 1.74396  | 0.0205492     | {1.70199, 1.78592}  |

EstimatedVariance → 93216.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $5.5707 \times 10^9$  | $2.78535 \times 10^9$ |
| ANOVATable → Error | 30 | $2.79648 \times 10^6$ | 93216. ,              |
| Uncorrected Total  | 32 | $5.57349 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.65268 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.825273 \\ 0.825273 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0121463 |
| Max Parameter-Effects             | 0.0164088 |
| 95. % Confidence Region           | 0.549166  |



sample: c65 E, model s

26761.8

$$\frac{1}{1 + e^{-0.631783(-1.25201 + x)}}$$

{BestFitParameters → {Emax → 26761.8, λ → 0.631783, xshift → 1.25201},

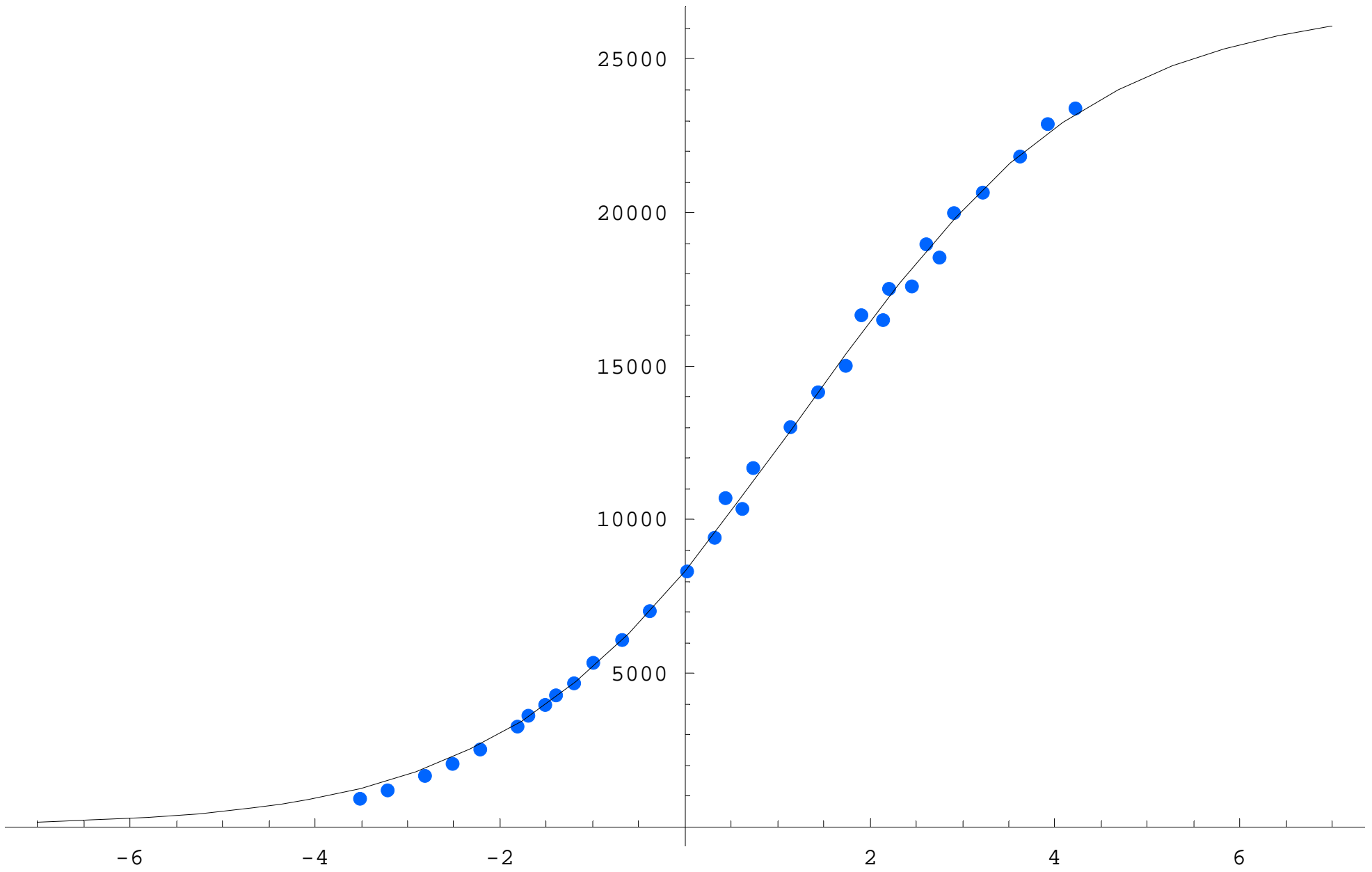
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 26761.8  | 524.836       | {25688.4, 27835.2}   |
|                    | λ      | 0.631783 | 0.0160968     | {0.598861, 0.664705} |
|                    | xshift | 1.25201  | 0.0789686     | {1.0905, 1.41352}    |

EstimatedVariance → 113517.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $5.5702 \times 10^9$  | $1.85673 \times 10^9$ |
| ANOVA Table → Error | 29 | $3.29199 \times 10^6$ | 113517.               |
| Uncorrected Total   | 32 | $5.57349 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.65268 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.865445 & 0.969564 \\ -0.865445 & 1. & -0.846856 \\ 0.969564 & -0.846856 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0276567 |
|                     | Max Parameter-Effects   | 0.311652  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c65v E, model r

27007.5

$$(1 + e^{-0.5 x})^{1.72097}$$

{BestFitParameters → {Emax → 27007.5, h → 1.72097}},

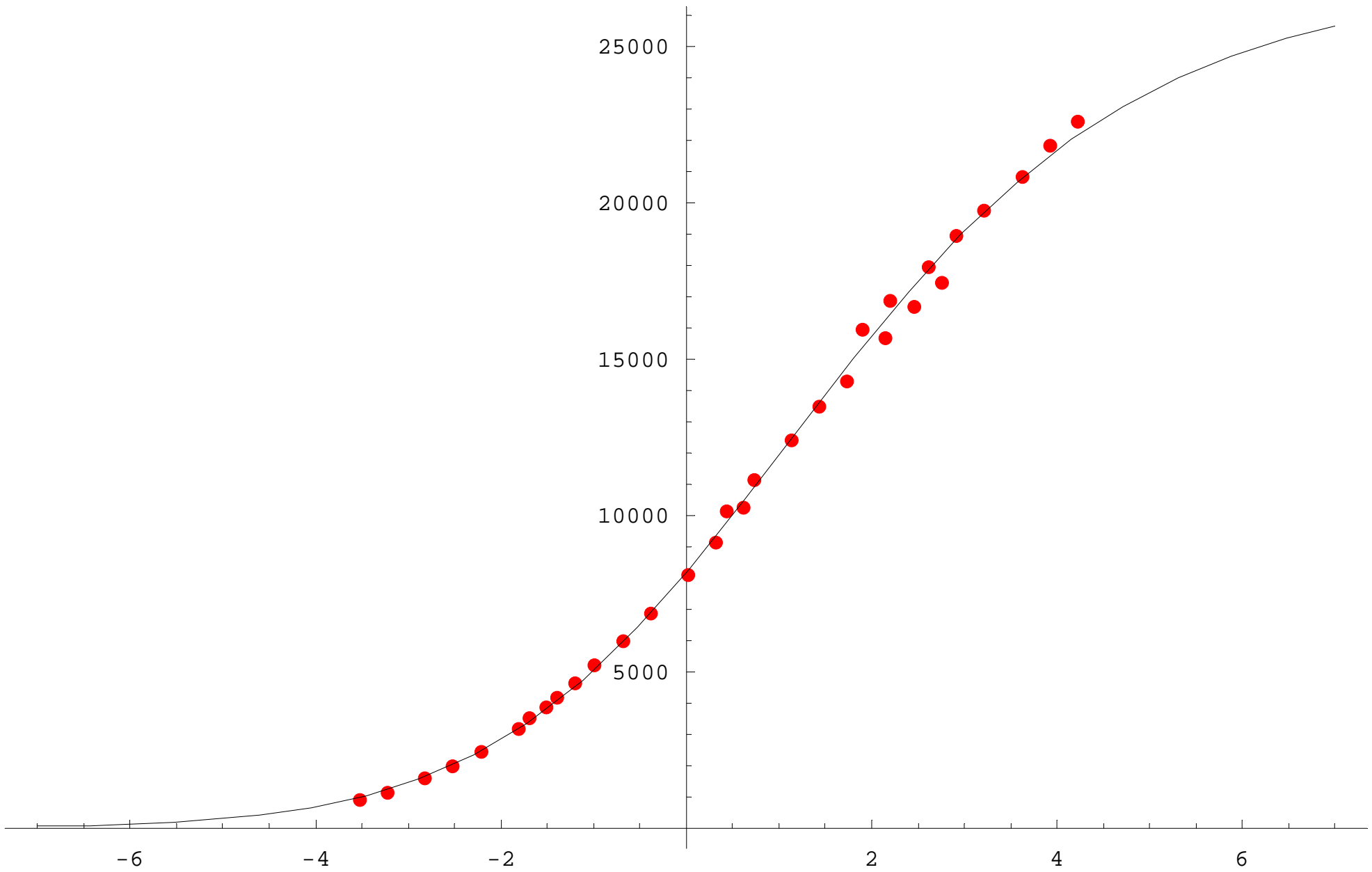
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 27007.5  | 209.273       | {26580.1, 27434.9}, |
| h                       | 1.72097  | 0.0218086     | {1.67643, 1.76551}  |

EstimatedVariance → 98198.4,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $5.09281 \times 10^9$ | $2.54641 \times 10^9$ |
| ANOVATable → Error | 30 | $2.94595 \times 10^6$ | 98198.4 ,             |
| Uncorrected Total  | 32 | $5.09576 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.49184 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.823931 \\ 0.823931 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0129507 |
| Max Parameter-Effects             | 0.0175727 |
| 95. % Confidence Region           | 0.549166  |





sample: c65v E, model s

25803.2

$$\frac{1}{1 + e^{-0.617348(-1.27925 + x)}}$$

{BestFitParameters → {Emax → 25803.2, λ → 0.617348, xshift → 1.27925},

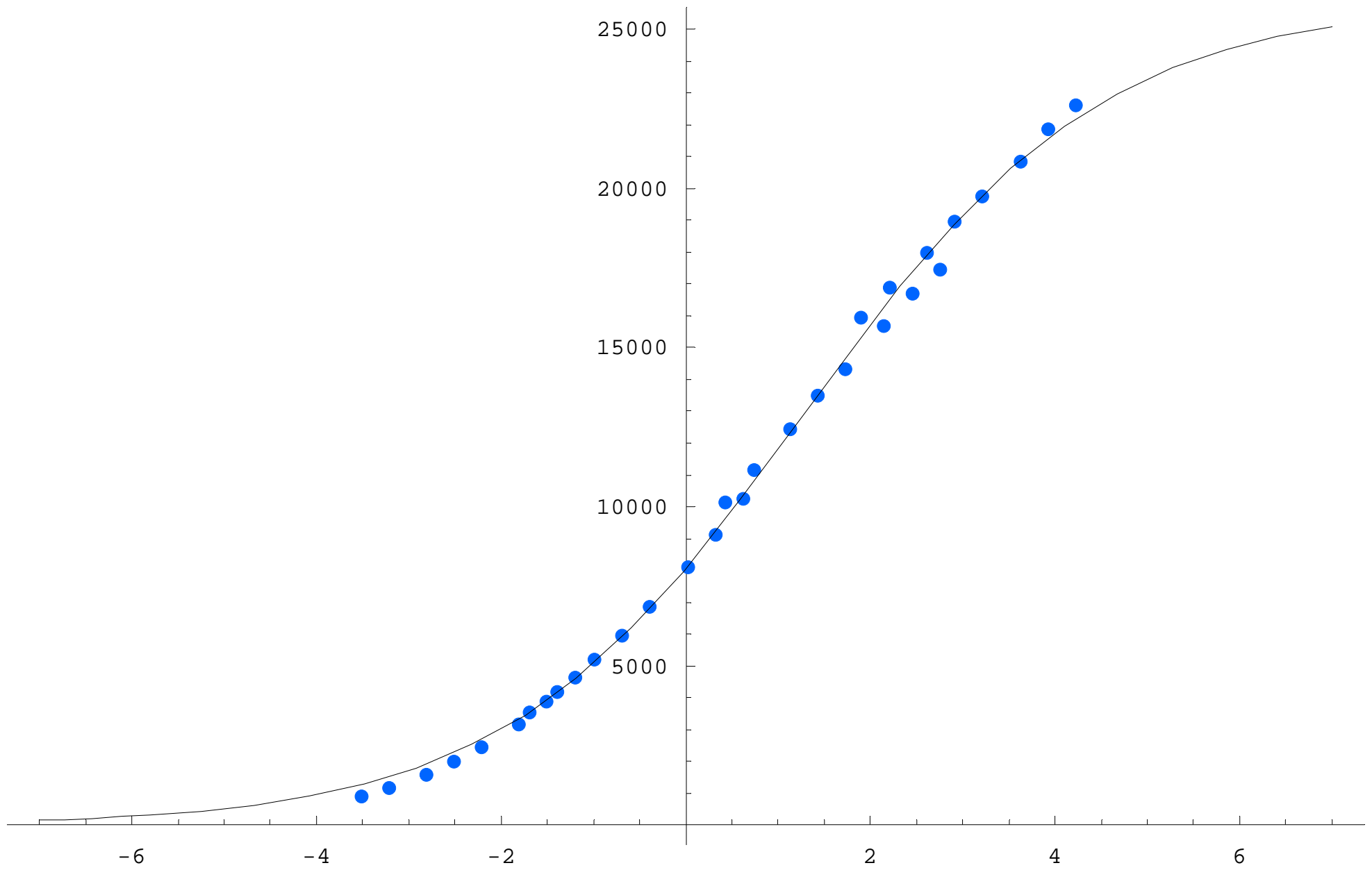
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 25803.2  | 572.496       | {24632.4, 26974.1}   |
|                    | λ      | 0.617348 | 0.0173282     | {0.581908, 0.652788} |
|                    | xshift | 1.27925  | 0.0905361     | {1.09408, 1.46441}   |

EstimatedVariance → 123515.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $5.09218 \times 10^9$ | $1.69739 \times 10^9$ |
| ANOVA Table → Error | 29 | $3.58194 \times 10^6$ | 123515. ,             |
| Uncorrected Total   | 32 | $5.09576 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.49184 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.869688 & 0.972089 \\ -0.869688 & 1. & -0.854012 \\ 0.972089 & -0.854012 & 1. \end{pmatrix}$ ,

|                     | Curvature               |          |
|---------------------|-------------------------|----------|
| FitCurvatureTable → | Max Intrinsic           | 0.030079 |
|                     | Max Parameter-Effects   | 0.353265 |
|                     | 95. % Confidence Region | 0.583805 |



sample: c68 E, model r

26640.1

$$(1 + e^{-0.5 x})^{1.61194}$$

{BestFitParameters → {Emax → 26640.1, h → 1.61194},

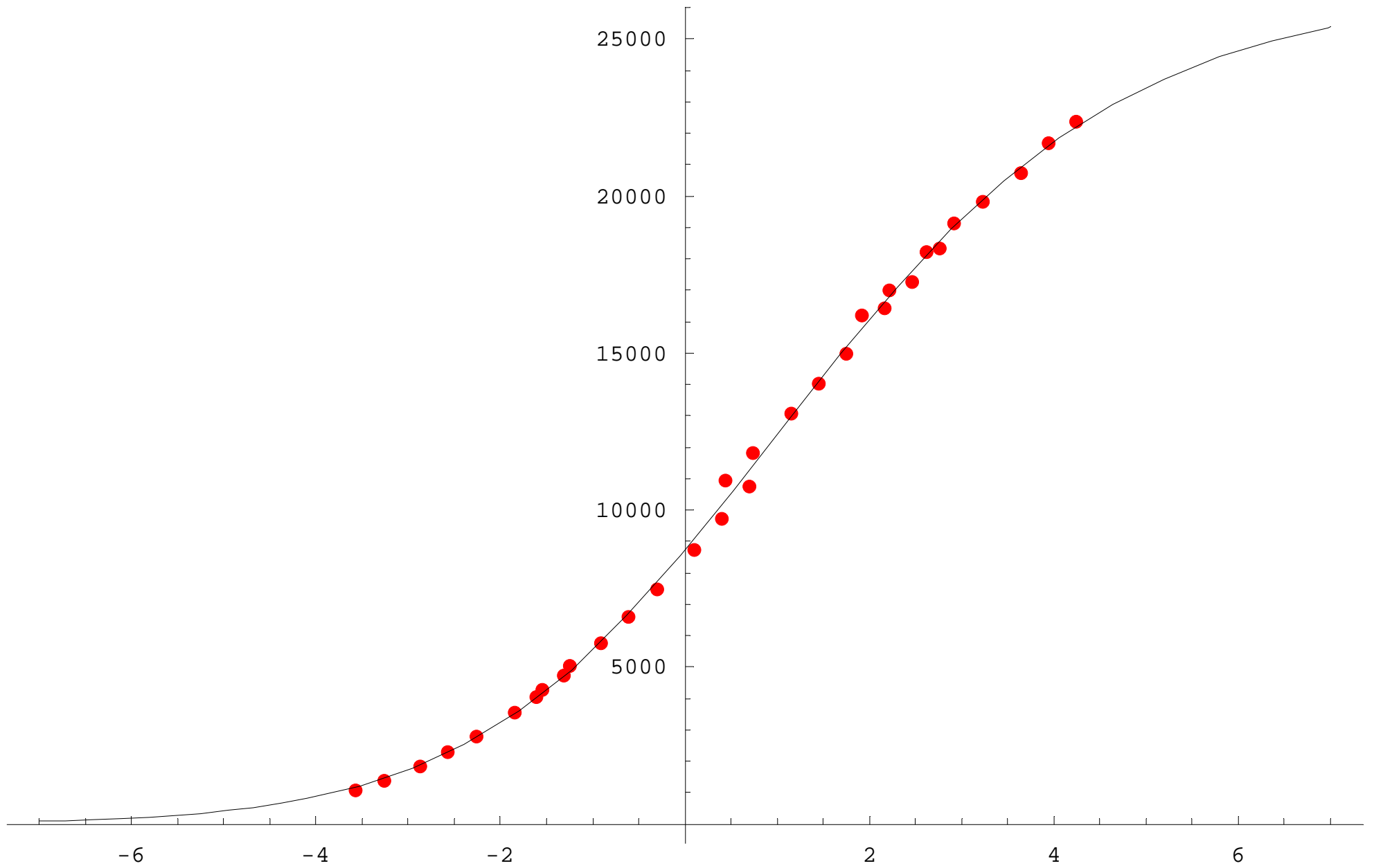
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 26640.1  | 159.501       | {26314.4, 26965.9}, |
| h                       | 1.61194  | 0.0163016     | {1.57864, 1.64523}  |

EstimatedVariance → 63032.4,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $5.33944 \times 10^9$ | $2.66972 \times 10^9$ |
| ANOVATable → Error | 30 | $1.89097 \times 10^6$ | 63032.4 ,             |
| Uncorrected Total  | 32 | $5.34133 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.45733 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.818951 \\ 0.818951 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0100123 |
| Max Parameter-Effects             | 0.0135874 |
| 95. % Confidence Region           | 0.549166  |



sample: c68 E, model s

25203.5

$$\frac{1}{1 + e^{-0.615943(-1.06846 + x)}}$$

{BestFitParameters → {Emax → 25203.5, λ → 0.615943, xshift → 1.06846},

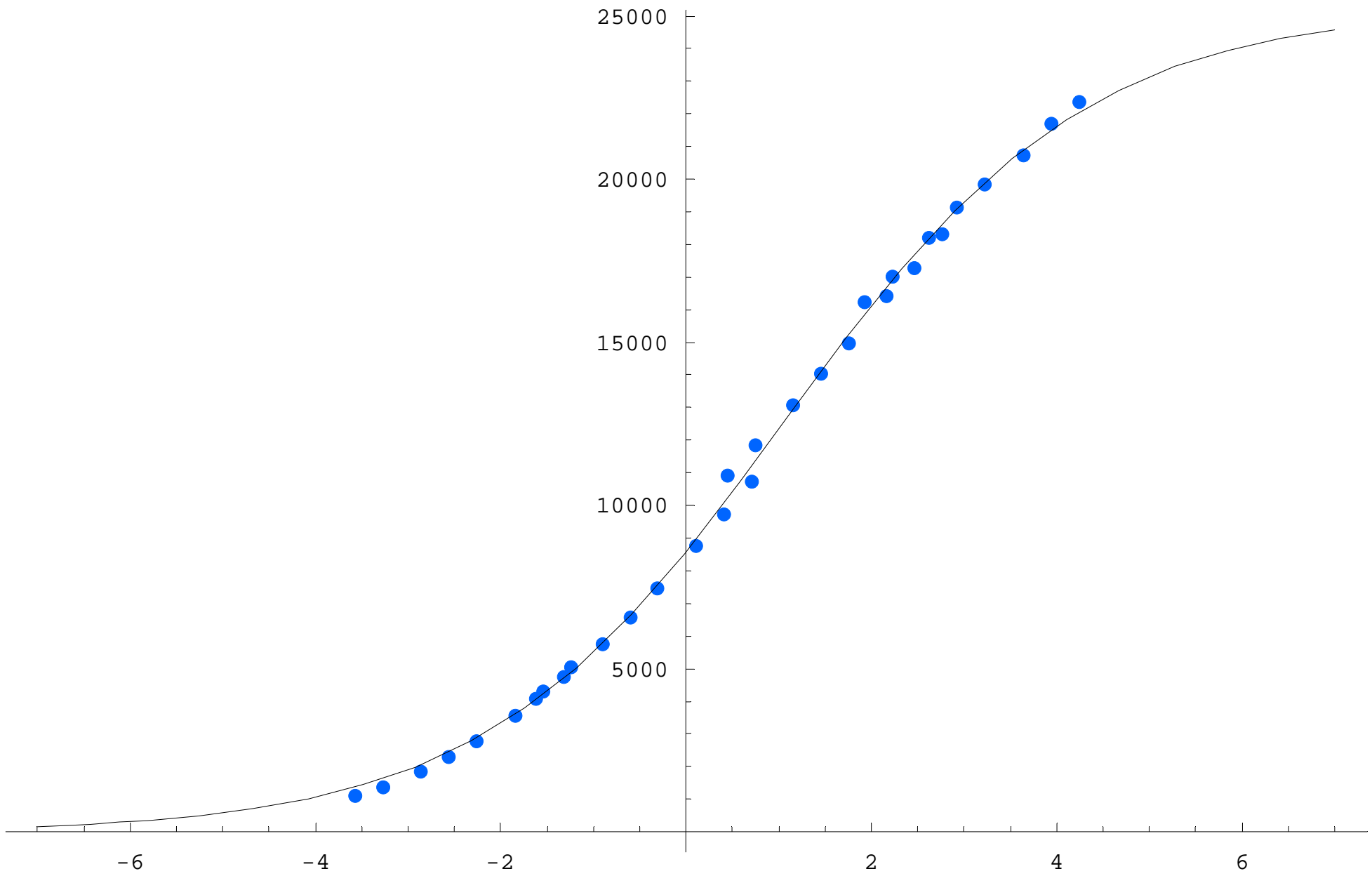
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 25203.5  | 400.81        | {24383.8, 26023.3}   |
|                    | λ      | 0.615943 | 0.0134228     | {0.58849, 0.643395}' |
|                    | xshift | 1.06846  | 0.0662104     | {0.933044, 1.20387}  |

EstimatedVariance → 74662.4,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $5.33916 \times 10^9$ | $1.77972 \times 10^9$ |
| ANOVA Table → Error | 29 | $2.16521 \times 10^6$ | 74662.4 ,             |
| Uncorrected Total   | 32 | $5.34133 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.45733 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.865849 & 0.967168 \\ -0.865849 & 1. & -0.841375 \\ 0.967168 & -0.841375 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0238697 |
|                     | Max Parameter-Effects   | 0.26083 } |
|                     | 95. % Confidence Region | 0.583805  |



sample: c68v E, model r

28335.7

$$(1 + e^{-0.5 x})^{1.74362}$$

{BestFitParameters → {Emax → 28335.7, h → 1.74362},

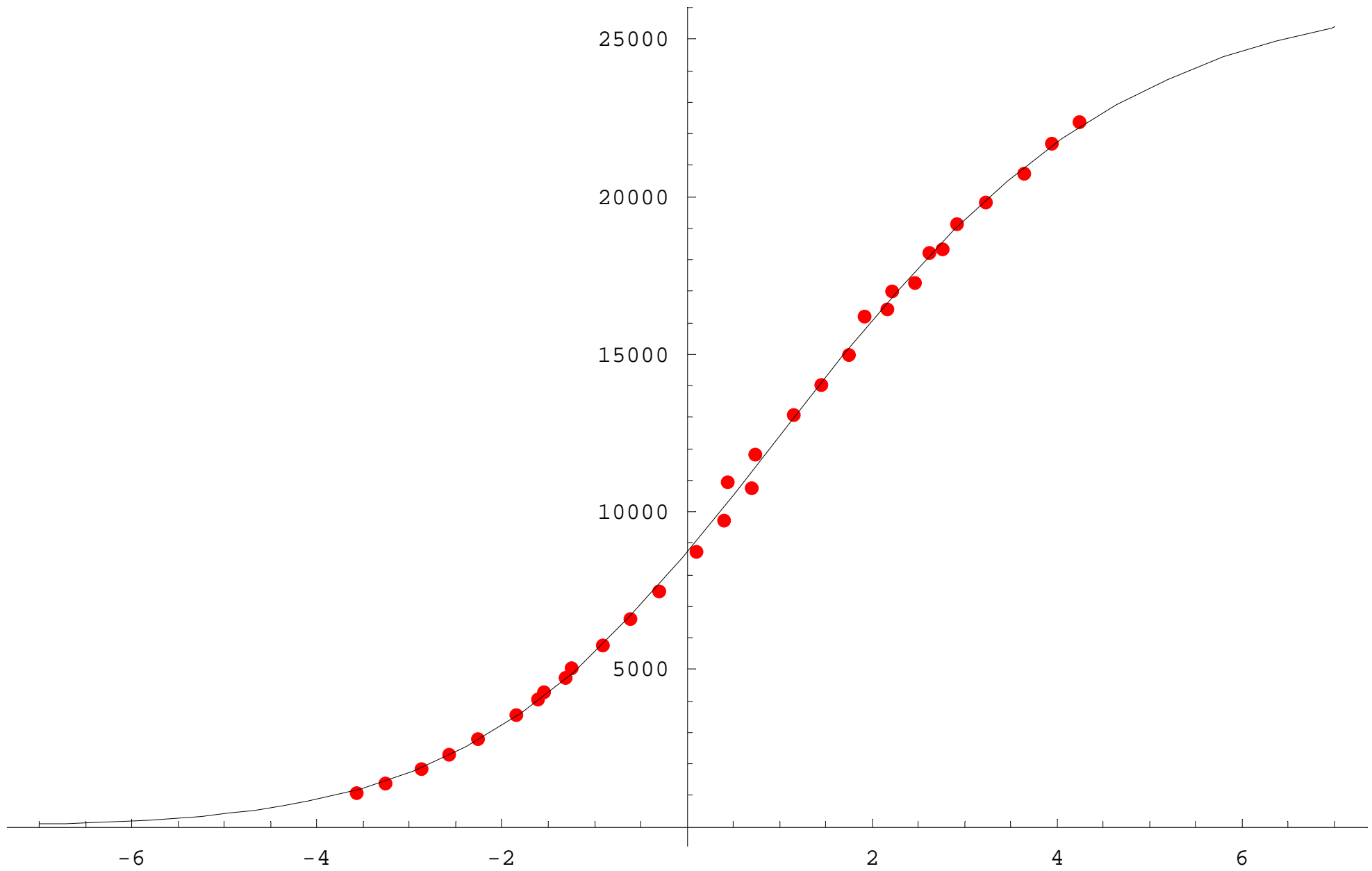
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 28335.7  | 301.056       | {27720.9, 28950.6}, |
| h                       | 1.74362  | 0.0303023     | {1.68174, 1.80551}  |

EstimatedVariance → 199805.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $5.58892 \times 10^9$ | $2.79446 \times 10^9$ |
| ANOVATable → Error | 30 | $5.99414 \times 10^6$ | 199805. ,             |
| Uncorrected Total  | 32 | $5.59492 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.63551 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.826618 \\ 0.826618 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0180831 |
| Max Parameter-Effects             | 0.0239226 |
| 95. % Confidence Region           | 0.549166  |





sample: c68v E, model s

27838.5

$$\frac{1}{1 + e^{-0.598781(-1.42697 + x)}}$$

{BestFitParameters → {Emax → 27838.5, λ → 0.598781, xshift → 1.42697},

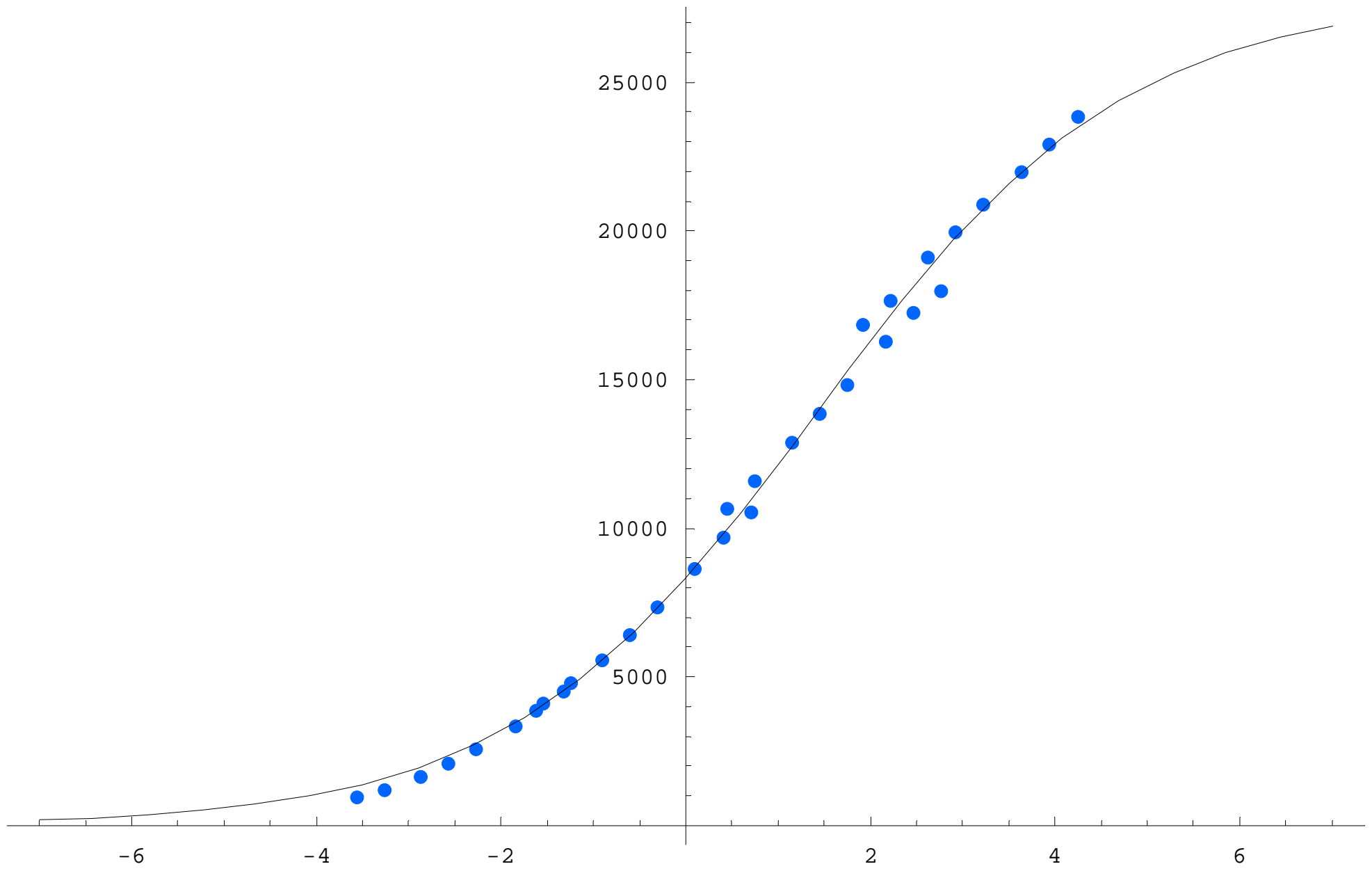
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 27838.5  | 803.237       | {26195.7, 29481.3}   |
|                    | λ      | 0.598781 | 0.0205548     | {0.556742, 0.640821} |
|                    | xshift | 1.42697  | 0.118539      | {1.18453, 1.66941}   |

EstimatedVariance → 197969.,

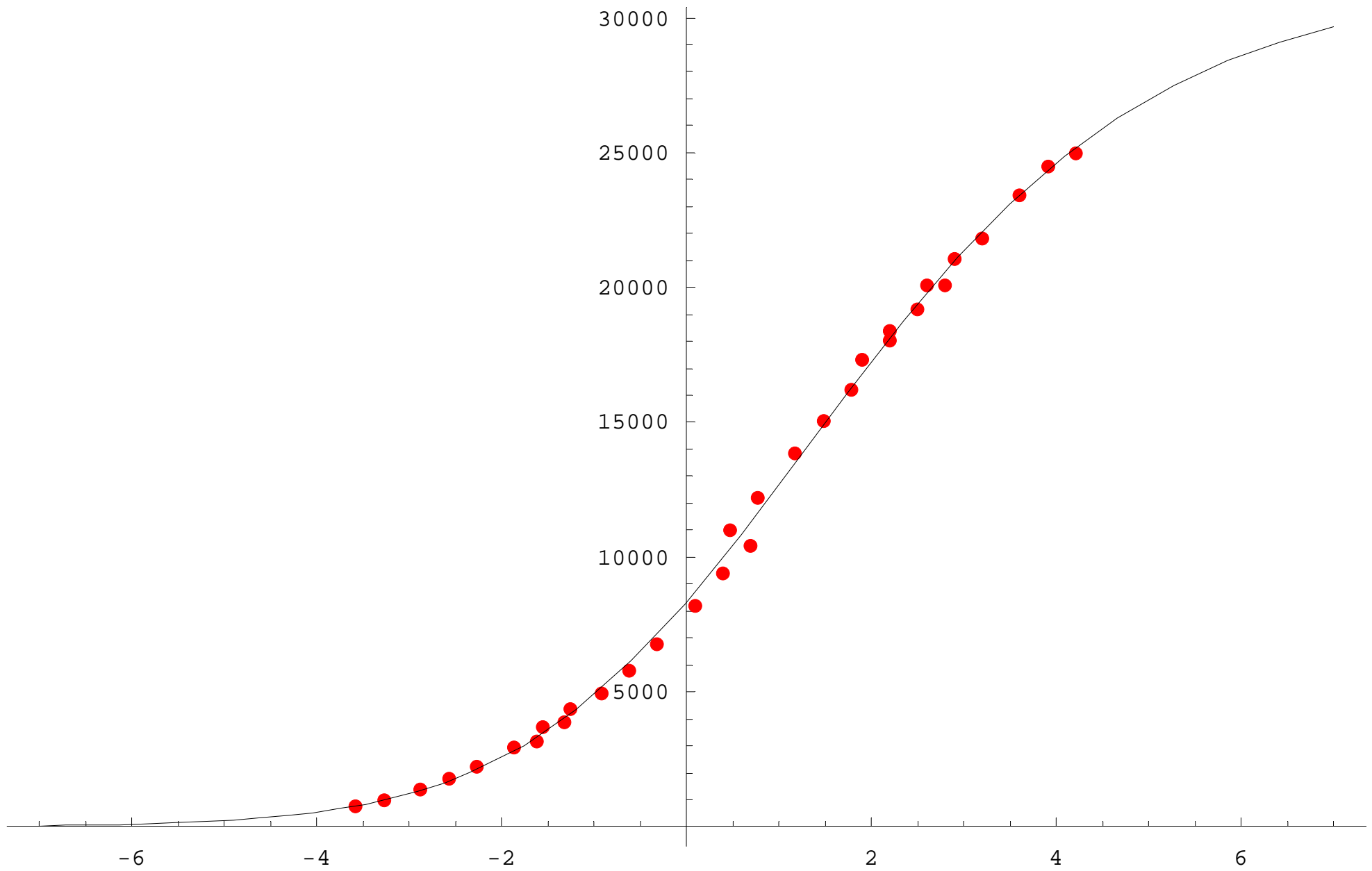
|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 3  | $5.58918 \times 10^9$ | $1.86306 \times 10^9$ |
| ANOVATable → Error | 29 | $5.74109 \times 10^6$ | 197969. ,             |
| Uncorrected Total  | 32 | $5.59492 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.63551 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.875196 & 0.976652 \\ -0.875196 & 1. & -0.865305 \\ 0.976652 & -0.865305 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0353261 |
|                     | Max Parameter-Effects   | 0.453307  |
|                     | 95. % Confidence Region | 0.583805  |







sample: c47 E, model s

28240.6

$$\frac{1}{1 + e^{-0.684603(-1.30996 + x)}}$$

{BestFitParameters → {Emax → 28240.6, λ → 0.684603, xshift → 1.30996},

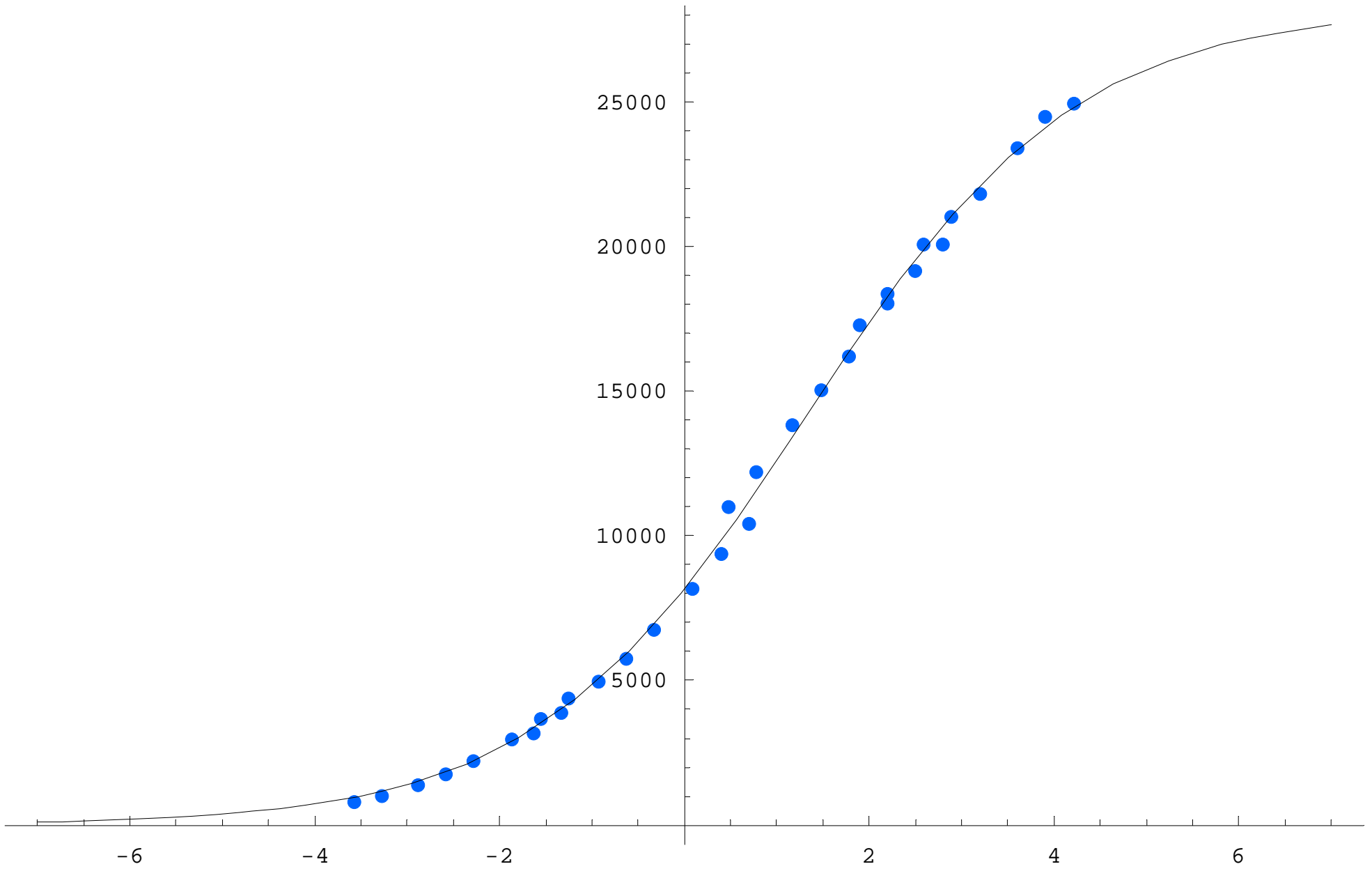
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 28240.6  | 511.322       | {27194.8, 29286.3}   |
|                    | λ      | 0.684603 | 0.0168318     | {0.650178, 0.719028} |
|                    | xshift | 1.30996  | 0.0683176     | {1.17024, 1.44969}   |

EstimatedVariance → 124137.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $6.22796 \times 10^9$ | $2.07599 \times 10^9$ |
| ANOVA Table → Error | 29 | $3.59998 \times 10^6$ | 124137.               |
| Uncorrected Total   | 32 | $6.23156 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.99592 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.853597 & 0.963992 \\ -0.853597 & 1. & -0.827473 \\ 0.963992 & -0.827473 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0270406 |
|                     | Max Parameter-Effects   | 0.281917  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c47v E, model r

31484.2

$$(1 + e^{-0.5 x})^{1.8823}$$

{BestFitParameters → {Emax → 31484.2, h → 1.8823},

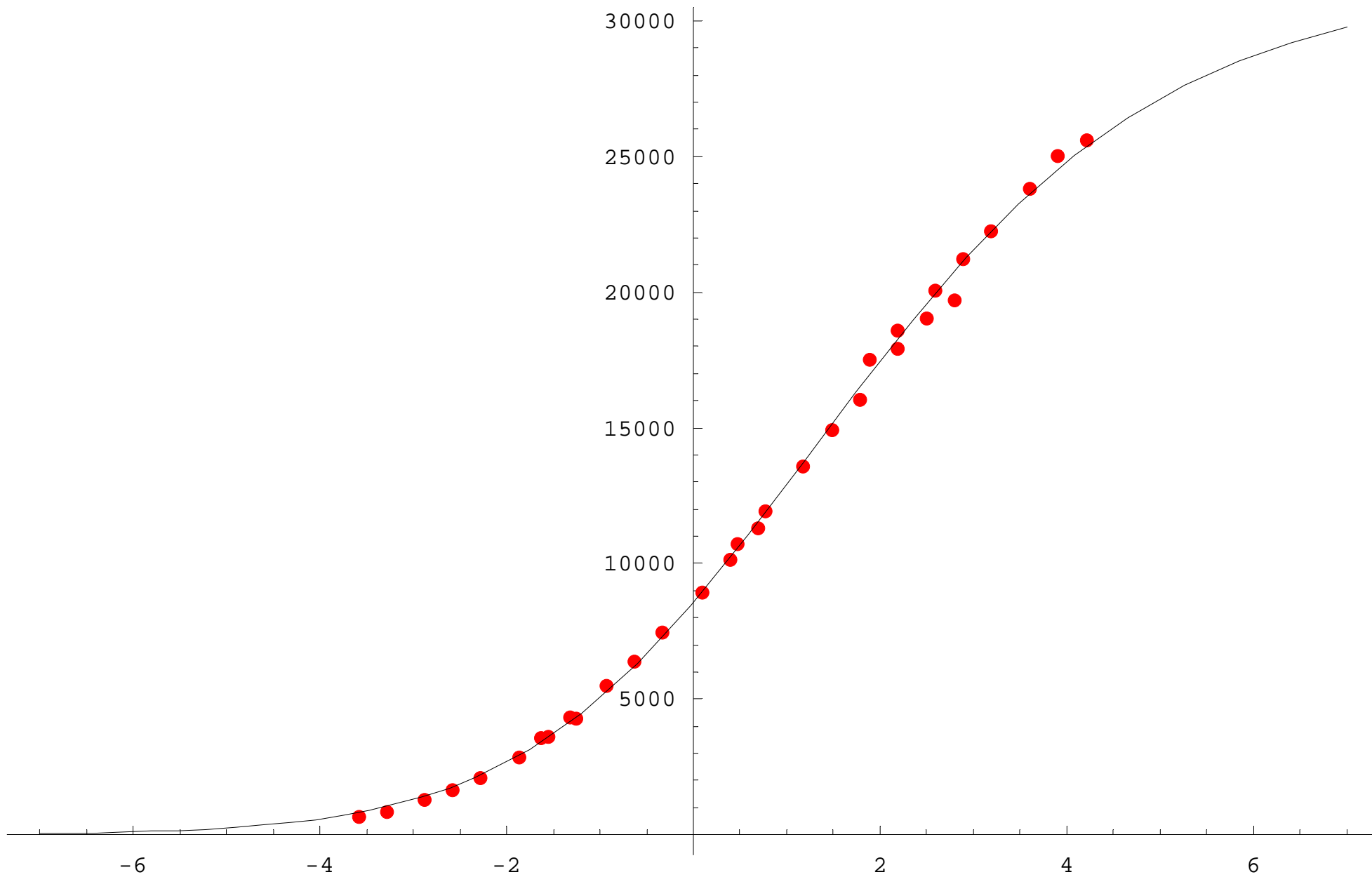
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 31484.2  | 225.047       | {31024.6, 31943.8}, |
| h                       | 1.8823   | 0.0213121     | {1.83878, 1.92583}  |

EstimatedVariance → 97487.9,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $6.36201 \times 10^9$ | $3.18101 \times 10^9$ |
| ANOVATable → Error | 30 | $2.92464 \times 10^6$ | 97487.9 ,             |
| Uncorrected Total  | 32 | $6.36494 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.01671 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.836712 \\ 0.836712 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0123436 |
| Max Parameter-Effects             | 0.0160604 |
| 95. % Confidence Region           | 0.549166  |





sample: c47v E, model s

29484.

$$\frac{1}{1 + e^{-0.646701(-1.42712 + x)}}$$

{BestFitParameters → {Emax → 29484., λ → 0.646701, xshift → 1.42712},

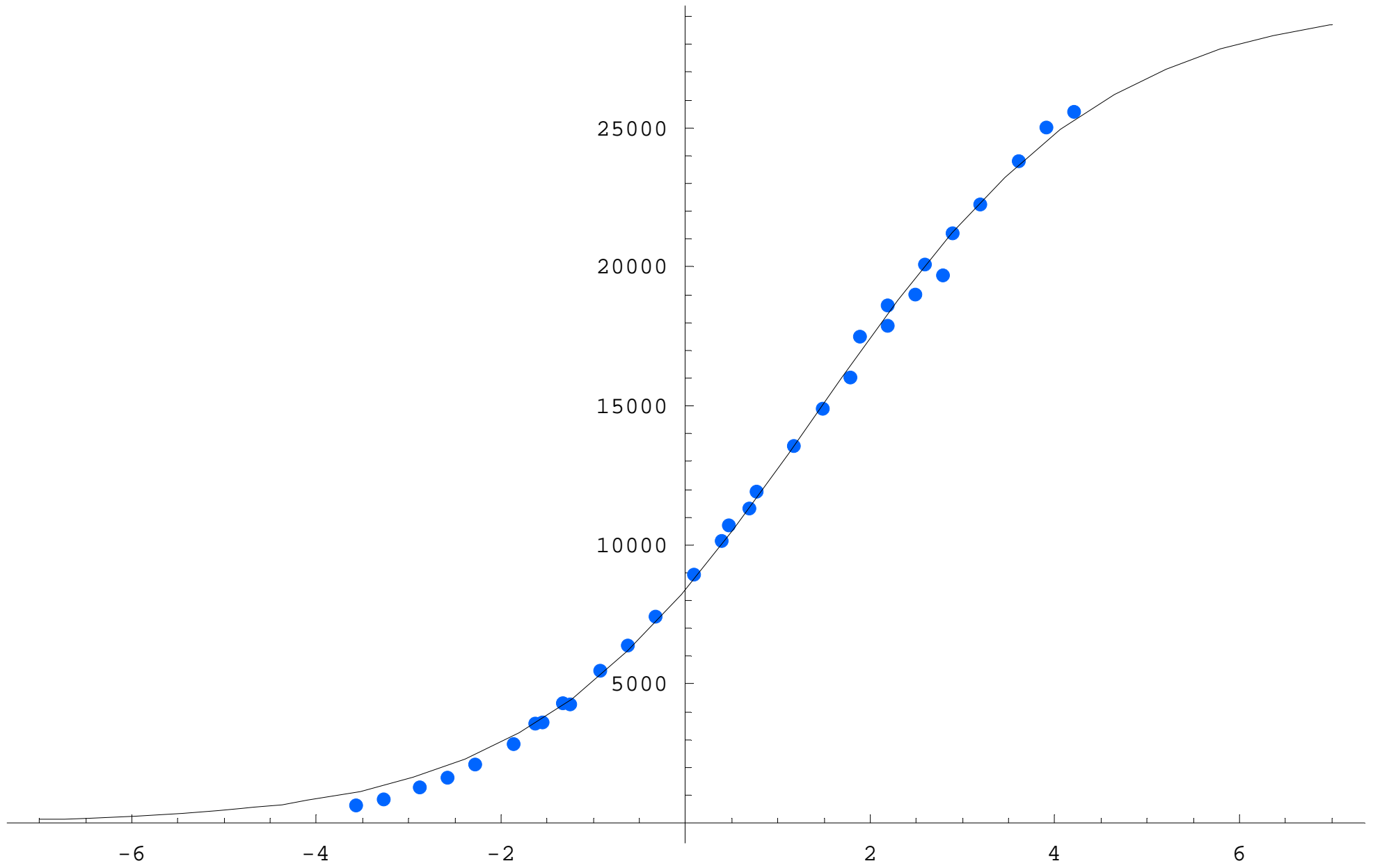
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 29484.   | 637.21        | {28180.8, 30787.2}    |
|                    | λ      | 0.646701 | 0.0174081     | {0.611098, 0.682305}' |
|                    | xshift | 1.42712  | 0.0837841     | {1.25576, 1.59847}    |

EstimatedVariance → 147453.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $6.36066 \times 10^9$ | $2.12022 \times 10^9$ |
| ANOVA Table → Error | 29 | $4.27613 \times 10^6$ | 147453. ,             |
| Uncorrected Total   | 32 | $6.36494 \times 10^9$ |                       |
| Corrected Total     | 31 | $2.01671 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.864785 & 0.97197 \\ -0.864785 & 1. & -0.848869 \\ 0.97197 & -0.848869 & 1. \end{pmatrix}$ ,

|                     | Curvature               |            |
|---------------------|-------------------------|------------|
| FitCurvatureTable → | Max Intrinsic           | 0.0285129  |
|                     | Max Parameter-Effects   | 0.334216 } |
|                     | 95. % Confidence Region | 0.583805   |



sample: c49 E, model r

30933.9

$$(1 + e^{-0.5 x})^{1.82732}$$

{BestFitParameters → {Emax → 30933.9, h → 1.82732},

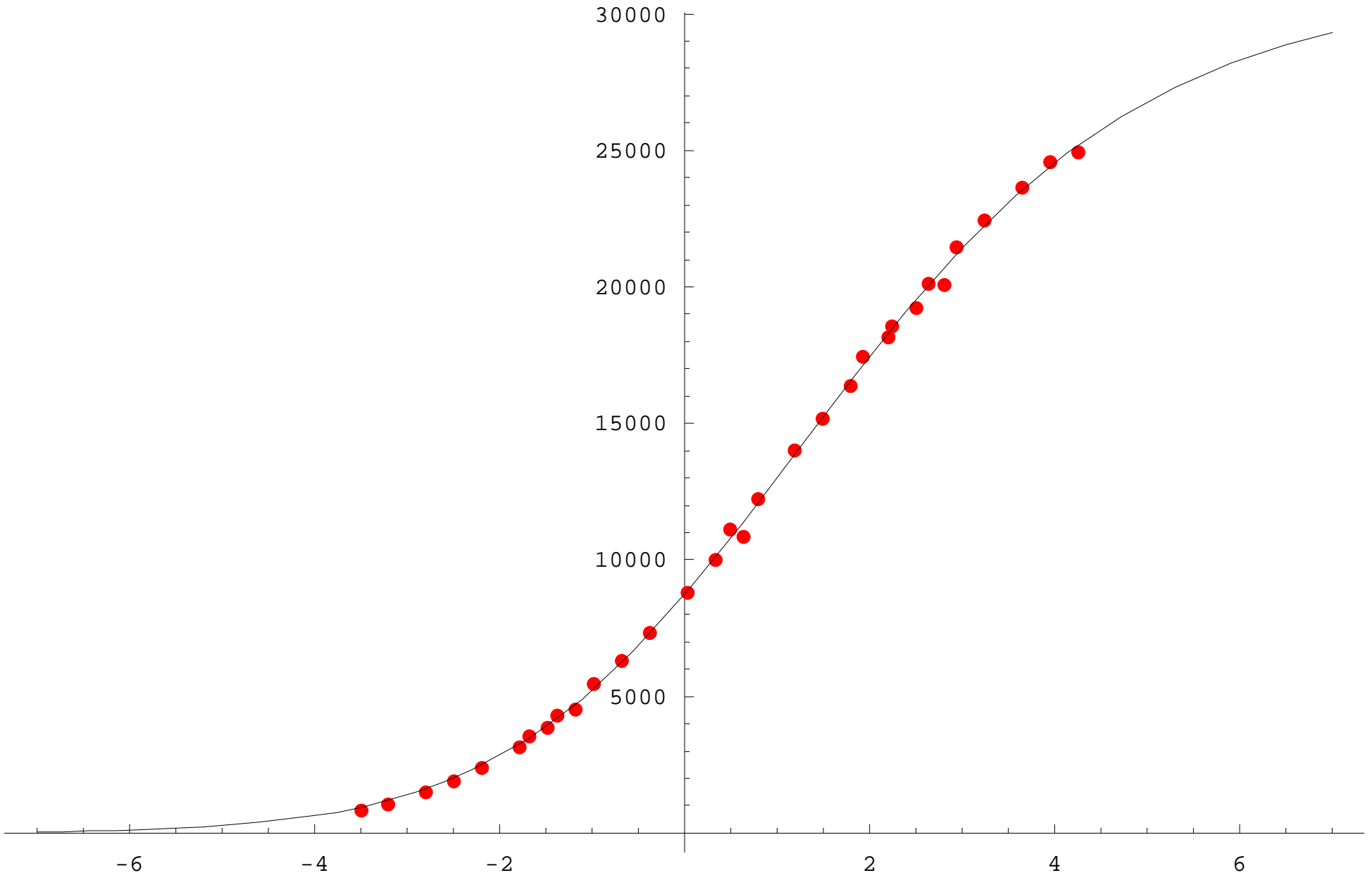
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 30933.9  | 155.503       | {30616.3, 31251.4}, |
| h                       | 1.82732  | 0.0148178     | {1.79706, 1.85758}  |

EstimatedVariance → 50638.1,

|                    | DF | SumOfSq               | MeanSq               |
|--------------------|----|-----------------------|----------------------|
| Model              | 2  | $6.3894 \times 10^9$  | $3.1947 \times 10^9$ |
| ANOVATable → Error | 30 | $1.51914 \times 10^6$ | 50638.1 ,            |
| Uncorrected Total  | 32 | $6.39092 \times 10^9$ |                      |
| Corrected Total    | 31 | $1.98022 \times 10^9$ |                      |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.828478 \\ 0.828478 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0085788 |
| Max Parameter-Effects             | 0.0115149 |
| 95. % Confidence Region           | 0.549166  |



sample: c49 E, model s

28360.9

$$\frac{1}{1 + e^{-0.661154(-1.26835 + x)}}$$

{BestFitParameters → {Emax → 28360.9, λ → 0.661154, xshift → 1.26835},

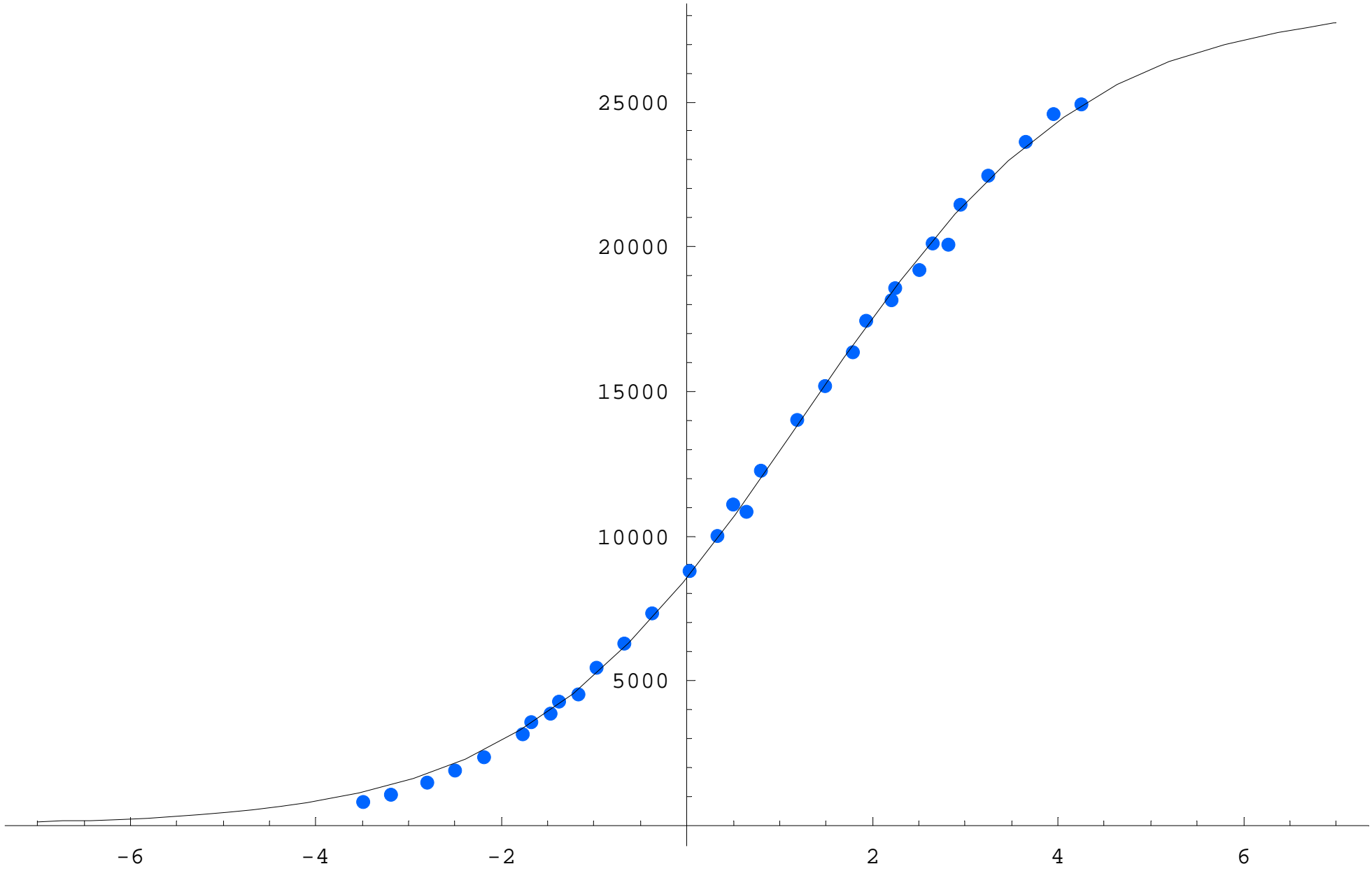
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 28360.9  | 414.889       | {27512.4, 29209.5}    |
|                    | λ      | 0.661154 | 0.013062      | {0.634439, 0.687869}' |
|                    | xshift | 1.26835  | 0.0572776     | {1.1512, 1.38549}     |

EstimatedVariance → 81308.3,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $6.38856 \times 10^9$ | $2.12952 \times 10^9$ |
| ANOVA Table → Error | 29 | $2.35794 \times 10^6$ | 81308.3               |
| Uncorrected Total   | 32 | $6.39092 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.98022 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.85771 & 0.96494 \\ -0.85771 & 1. & -0.833268 \\ 0.96494 & -0.833268 & 1. \end{pmatrix},$

|                     | Curvature               |          |
|---------------------|-------------------------|----------|
| FitCurvatureTable → | Max Intrinsic           | 0.021957 |
|                     | Max Parameter-Effects   | 0.23115  |
|                     | 95. % Confidence Region | 0.583805 |



sample: c49v E, model r

30943.9

$$(1 + e^{-0.5 x})^{1.92087}$$

{BestFitParameters → {Emax → 30943.9, h → 1.92087}},

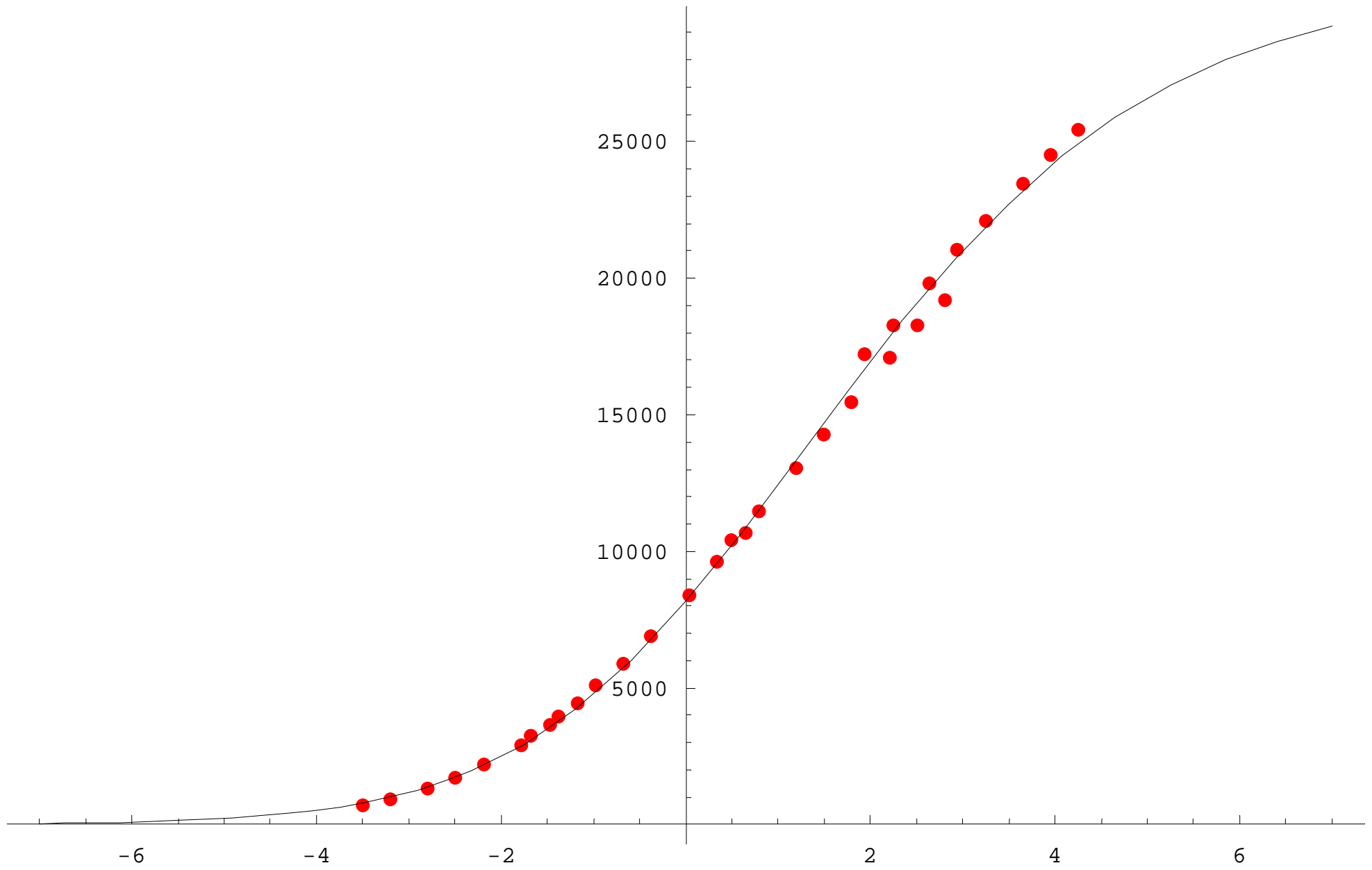
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 30943.9  | 274.068       | {30384.2, 31503.7}, |
| h                       | 1.92087  | 0.0268958     | {1.86594, 1.97579}  |

EstimatedVariance → 145056.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $6.06976 \times 10^9$ | $3.03488 \times 10^9$ |
| ANOVATable → Error | 30 | $4.35167 \times 10^6$ | 145056. ,             |
| Uncorrected Total  | 32 | $6.07411 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.95181 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.833878 \\ 0.833878 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0152644 |
| Max Parameter-Effects             | 0.020171  |
| 95. % Confidence Region           | 0.549166  |





sample: c49v E, model s

29713.

$$\frac{1}{1 + e^{-0.630998(-1.57717 + x)}}$$

{BestFitParameters → {Emax → 29713., λ → 0.630998, xshift → 1.57717},

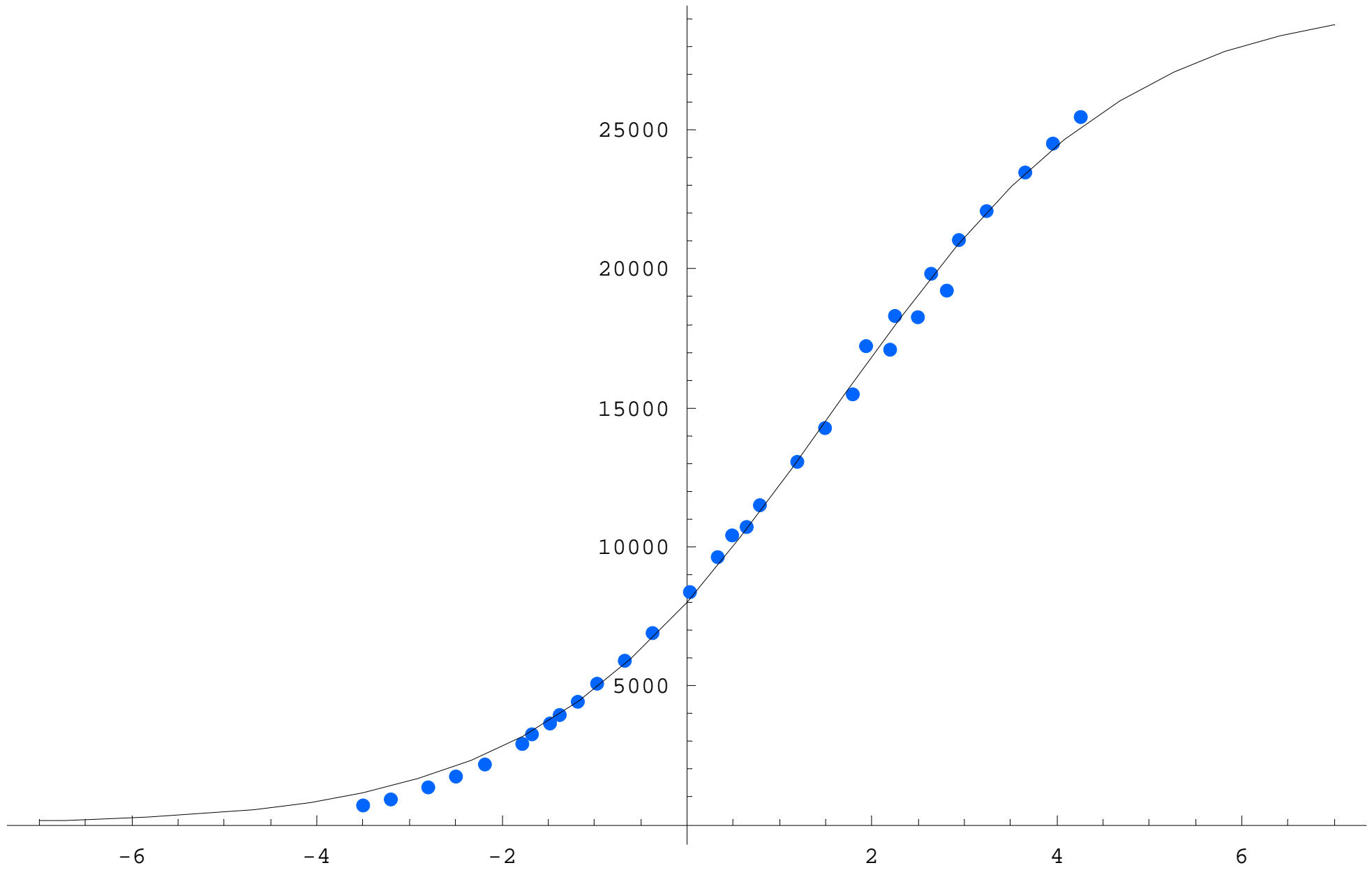
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 29713.   | 747.492       | {28184.2, 31241.8}    |
|                    | λ      | 0.630998 | 0.0185949     | {0.592967, 0.669029}' |
|                    | xshift | 1.57717  | 0.0984961     | {1.37572, 1.77861}    |

EstimatedVariance → 171390.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 3  | $6.06914 \times 10^9$ | $2.02305 \times 10^9$ |
| ANOVATable → Error | 29 | $4.97032 \times 10^6$ | 171390. ,             |
| Uncorrected Total  | 32 | $6.07411 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.95181 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.869685 & 0.975594 \\ -0.869685 & 1. & -0.860083 \\ 0.975594 & -0.860083 & 1. \end{pmatrix}$ ,

|                     | Curvature               |            |
|---------------------|-------------------------|------------|
| FitCurvatureTable → | Max Intrinsic           | 0.0305602  |
|                     | Max Parameter-Effects   | 0.384307 } |
|                     | 95. % Confidence Region | 0.583805   |



sample: c51 E, model r

30589.3

$$(1 + e^{-0.5 x})^{1.90416}$$

{BestFitParameters → {Emax → 30589.3, h → 1.90416},

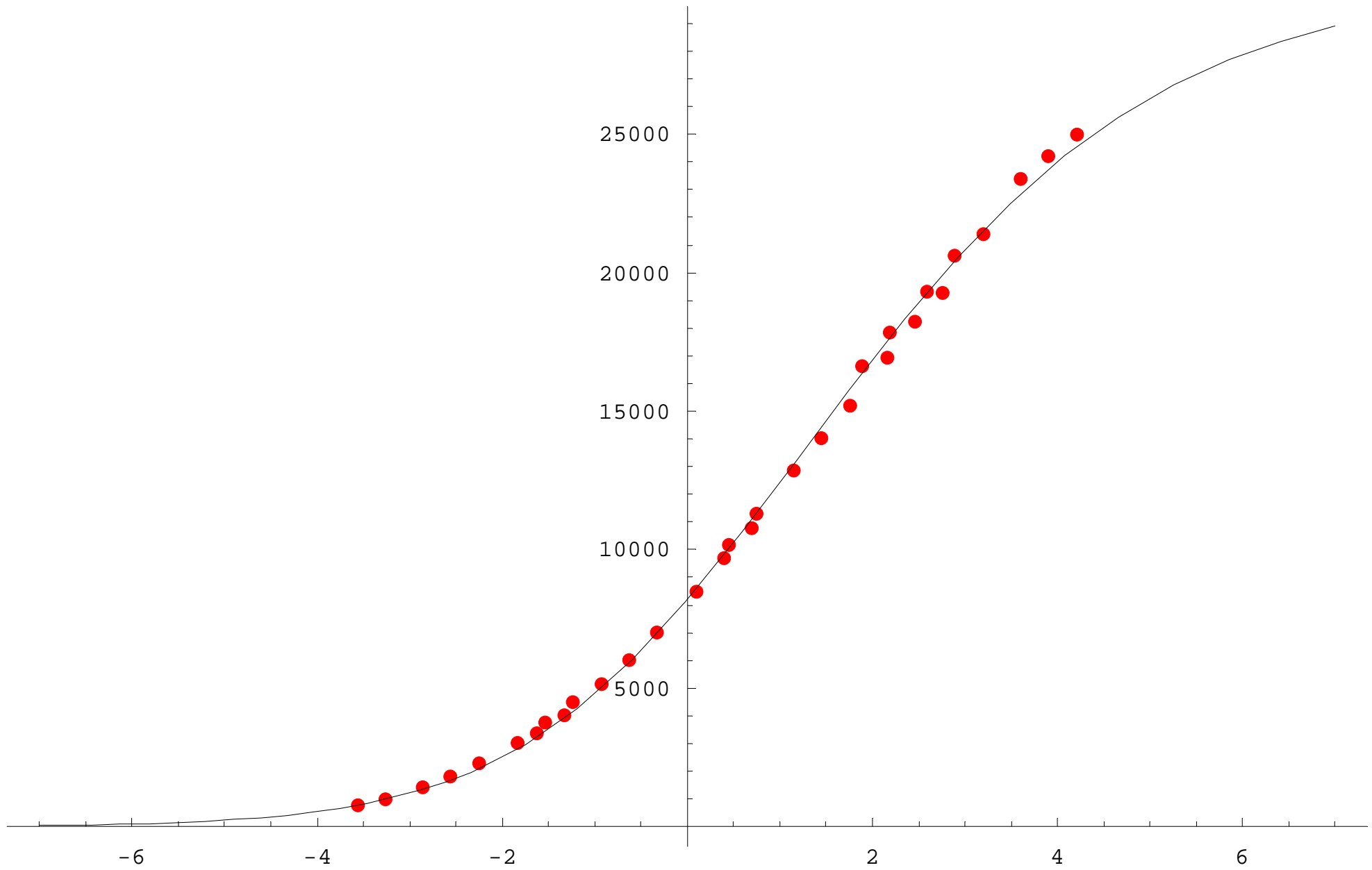
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 30589.3  | 231.31        | {30116.9, 31061.7}, |
| h                       | 1.90416  | 0.0225968     | {1.85802, 1.95031}  |

EstimatedVariance → 100811.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $5.90431 \times 10^9$ | $2.95216 \times 10^9$ |
| ANOVATable → Error | 30 | $3.02434 \times 10^6$ | 100811. ,             |
| Uncorrected Total  | 32 | $5.90734 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.86393 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.837496 \\ 0.837496 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0129595 |
| Max Parameter-Effects             | 0.0168159 |
| 95. % Confidence Region           | 0.549166  |



sample: c51 E, model s

29757.7

$$\frac{1}{1 + e^{-0.620506(-1.60529 + x)}}$$

{BestFitParameters → {Emax → 29757.7, λ → 0.620506, xshift → 1.60529},

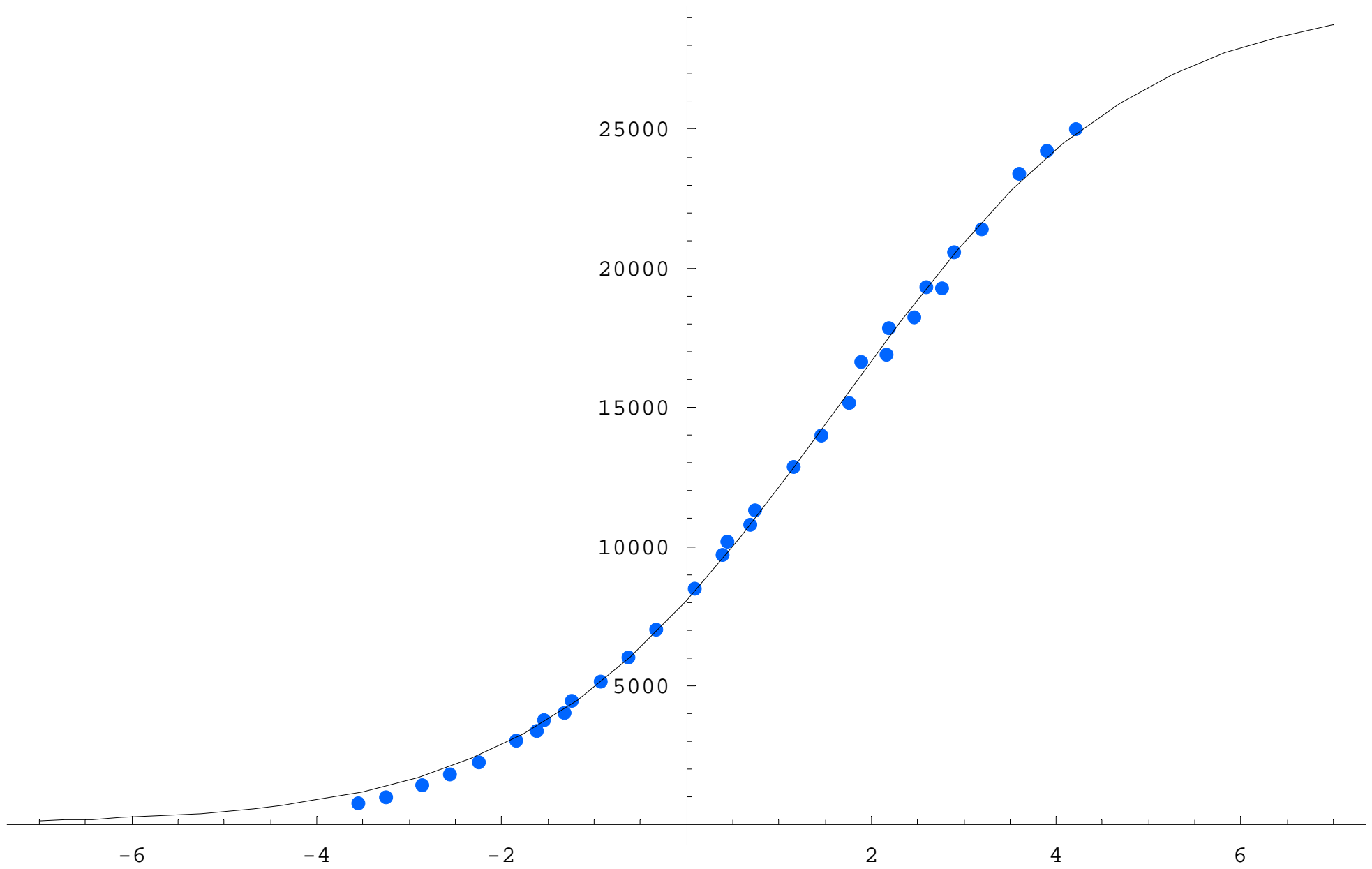
|                    |        | Estimate | Asymptotic SE | CI                  |
|--------------------|--------|----------|---------------|---------------------|
| ParameterCITable → | Emax   | 29757.7  | 588.687       | {28553.7, 30961.7}  |
|                    | λ      | 0.620506 | 0.0139271     | {0.592022, 0.64899} |
|                    | xshift | 1.60529  | 0.0775894     | {1.4466, 1.76398}   |

EstimatedVariance → 94134.5,

|                     | DF | SumOfSq               | MeanSq               |
|---------------------|----|-----------------------|----------------------|
| Model               | 3  | $5.90461 \times 10^9$ | $1.9682 \times 10^9$ |
| ANOVA Table → Error | 29 | $2.7299 \times 10^6$  | 94134.5              |
| Uncorrected Total   | 32 | $5.90734 \times 10^9$ |                      |
| Corrected Total     | 31 | $1.86393 \times 10^9$ |                      |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.87352 & 0.978118 \\ -0.87352 & 1. & -0.867381 \\ 0.978118 & -0.867381 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0227206 |
|                     | Max Parameter-Effects   | 0.301017  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c51v E, model r

32573.8

$$(1 + e^{-0.5 x})^{1.99611}$$

{BestFitParameters → {Emax → 32573.8, h → 1.99611},

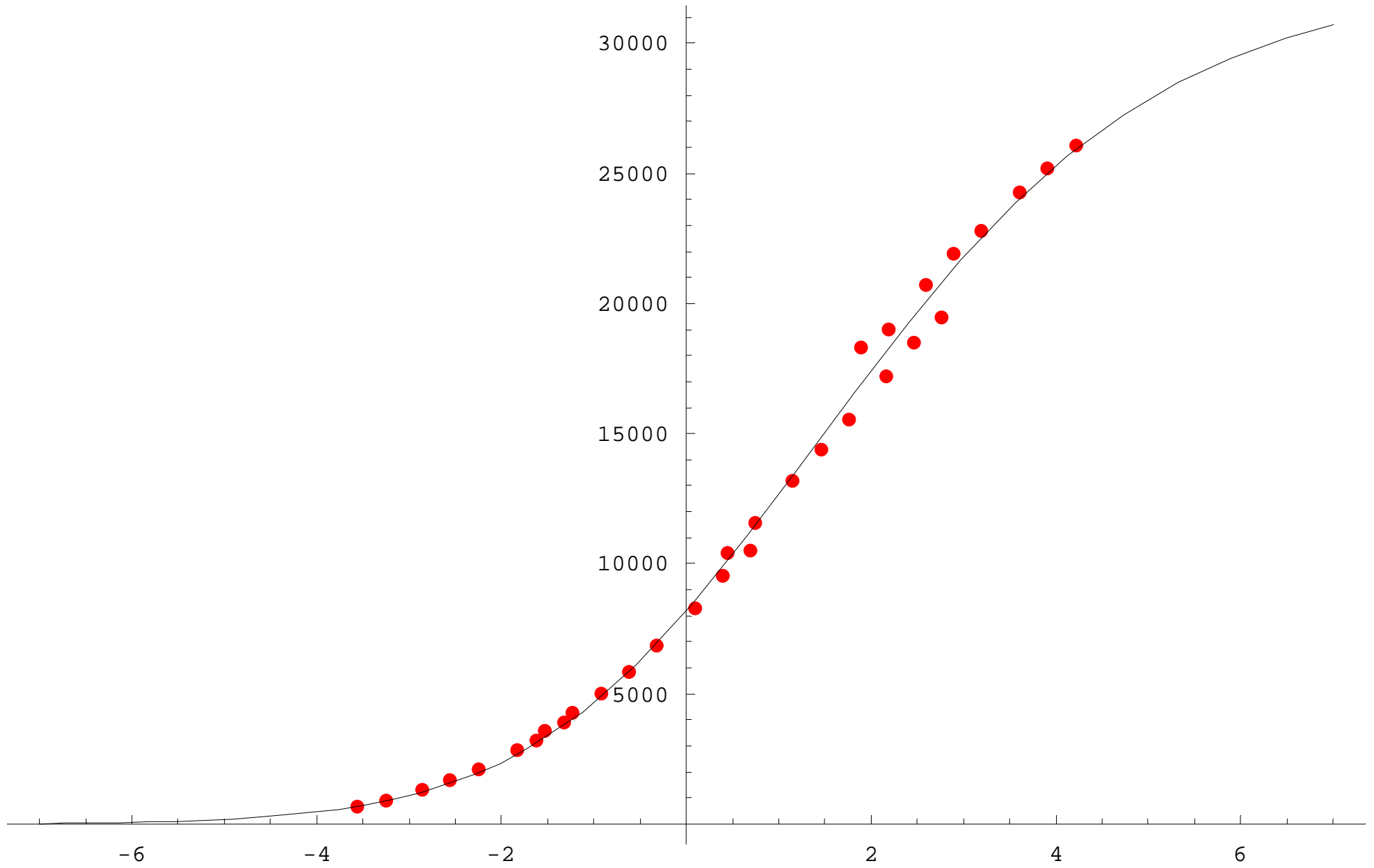
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 32573.8  | 414.104       | {31728.1, 33419.5}, |
| h                       | 1.99611  | 0.0390351     | {1.91639, 2.07583}  |

EstimatedVariance → 298520.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $6.36243 \times 10^9$ | $3.18122 \times 10^9$ |
| ANOVATable → Error | 30 | $8.9556 \times 10^6$  | 298520. ,             |
| Uncorrected Total  | 32 | $6.37139 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.10228 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.842428 \\ 0.842428 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0218815 |
| Max Parameter-Effects             | 0.0281311 |
| 95. % Confidence Region           | 0.549166  |





sample: c51v E, model s

30560.

$$\frac{1}{1 + e^{-0.654774(-1.58075 + x)}}$$

{BestFitParameters → {Emax → 30560., λ → 0.654774, xshift → 1.58075},

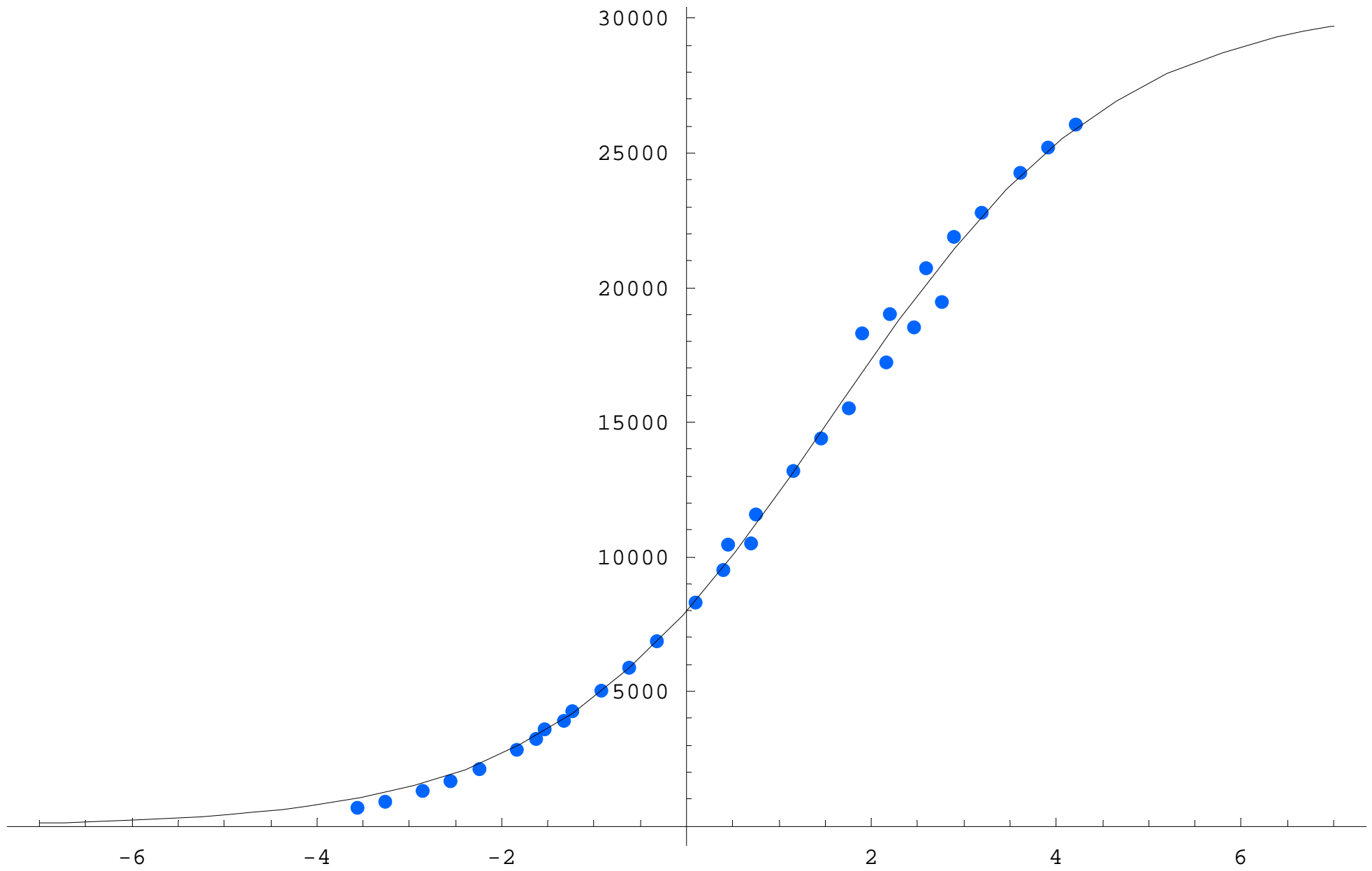
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 30560.   | 978.569       | {28558.6, 32561.3}    |
|                    | λ      | 0.654774 | 0.0249807     | {0.603682, 0.705865}' |
|                    | xshift | 1.58075  | 0.121031      | {1.33322, 1.82829}    |

EstimatedVariance → 306443.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $6.3625 \times 10^9$  | $2.12083 \times 10^9$ |
| ANOVA Table → Error | 29 | $8.88685 \times 10^6$ | 306443. ,             |
| Uncorrected Total   | 32 | $6.37139 \times 10^9$ |                       |
| Corrected Total     | 31 | $2.10228 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.865103 & 0.974215 \\ -0.865103 & 1. & -0.854569 \\ 0.974215 & -0.854569 & 1. \end{pmatrix}$ ,

|                     | Curvature               |            |
|---------------------|-------------------------|------------|
| FitCurvatureTable → | Max Intrinsic           | 0.0392561  |
|                     | Max Parameter-Effects   | 0.482582 } |
|                     | 95. % Confidence Region | 0.583805   |



**40%RA in tracks (after ALT and low T)**

sample: c40 E, model r

28807.4

$$\frac{28807.4}{(1 + e^{-0.5 x})^{1.82529}}$$

{BestFitParameters → {Emax → 28807.4, h → 1.82529},

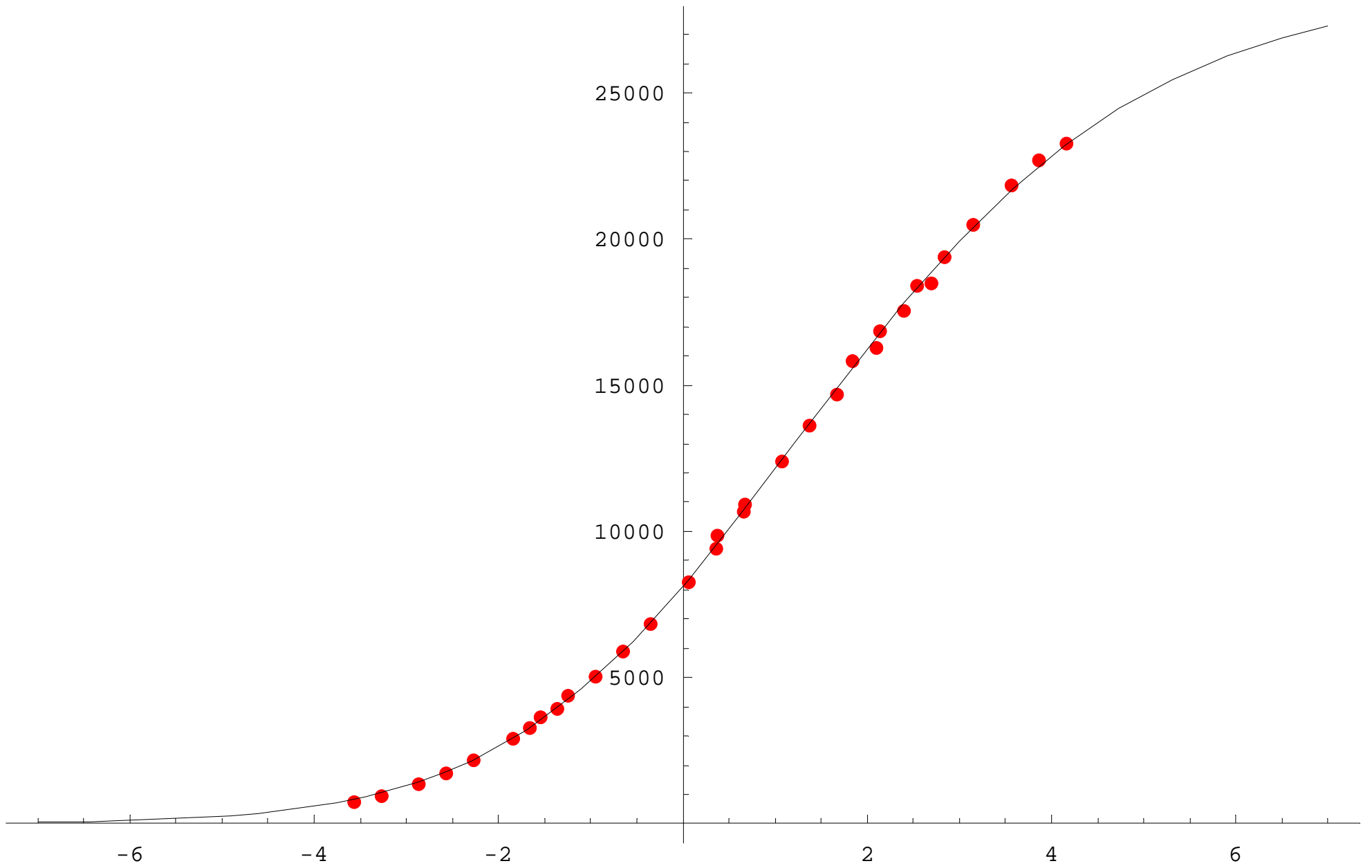
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 28807.4  | 113.264       | {28576.1, 29038.7}, |
| h                       | 1.82529  | 0.011291      | {1.80223, 1.84835}  |

EstimatedVariance → 25017.7,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 2  | $5.34949 \times 10^9$ | $2.67474 \times 10^9$ |
| ANOVA Table → Error | 30 | 750530.               | 25017.7               |
| Uncorrected Total   | 32 | $5.35024 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.65179 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.835151 \\ 0.835151 & 1. \end{pmatrix}$ ,

|                                   | Curvature  |
|-----------------------------------|------------|
| FitCurvatureTable → Max Intrinsic | 0.00659736 |
| Max Parameter-Effects             | 0.00860791 |
| 95. % Confidence Region           | 0.549166   |



sample: c40 E, model s

26735.9

$$\frac{1}{1 + e^{-0.649597(-1.31322 + x)}}$$

{BestFitParameters → {Emax → 26735.9, λ → 0.649597, xshift → 1.31322},

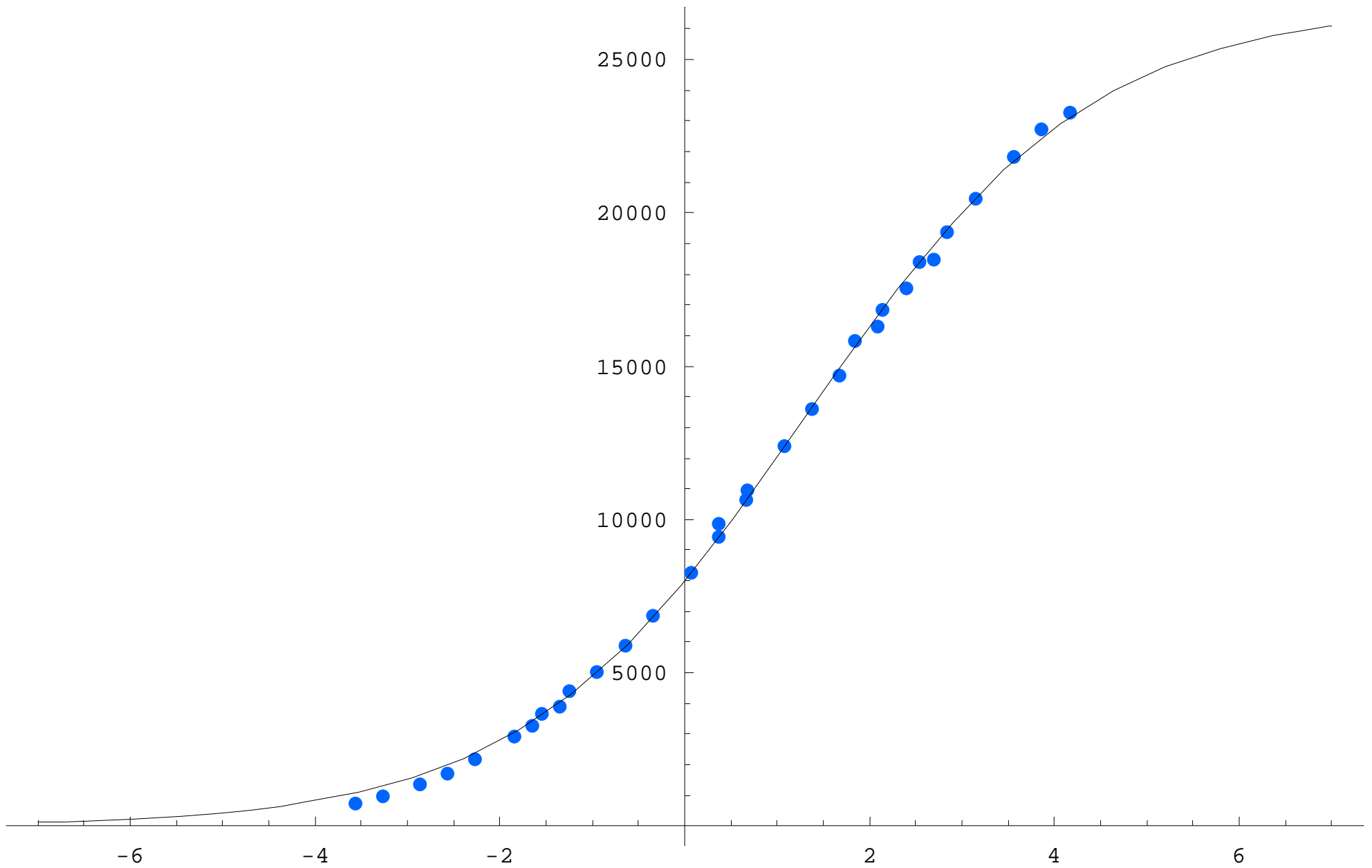
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 26735.9  | 366.628       | {25986., 27485.7}    |
|                    | λ      | 0.649597 | 0.0114034     | {0.626274, 0.67292}' |
|                    | xshift | 1.31322  | 0.0532876     | {1.20424, 1.42221}   |

EstimatedVariance → 52937.5,

|                     | DF | SumOfSq               | MeanSq               |
|---------------------|----|-----------------------|----------------------|
| Model               | 3  | $5.34871 \times 10^9$ | $1.7829 \times 10^9$ |
| ANOVA Table → Error | 29 | $1.53519 \times 10^6$ | 52937.5 ,            |
| Uncorrected Total   | 32 | $5.35024 \times 10^9$ |                      |
| Corrected Total     | 31 | $1.65179 \times 10^9$ |                      |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.862846 & 0.970153 \\ -0.862846 & 1. & -0.846252 \\ 0.970153 & -0.846252 & 1. \end{pmatrix}$ ,

|                     | Curvature               |            |
|---------------------|-------------------------|------------|
| FitCurvatureTable → | Max Intrinsic           | 0.0186941  |
|                     | Max Parameter-Effects   | 0.213007 } |
|                     | 95. % Confidence Region | 0.583805   |



sample: c40v E, model r

28800.7

$$(1 + e^{-0.5 x})^{1.92255}$$

{BestFitParameters → {Emax → 28800.7, h → 1.92255},

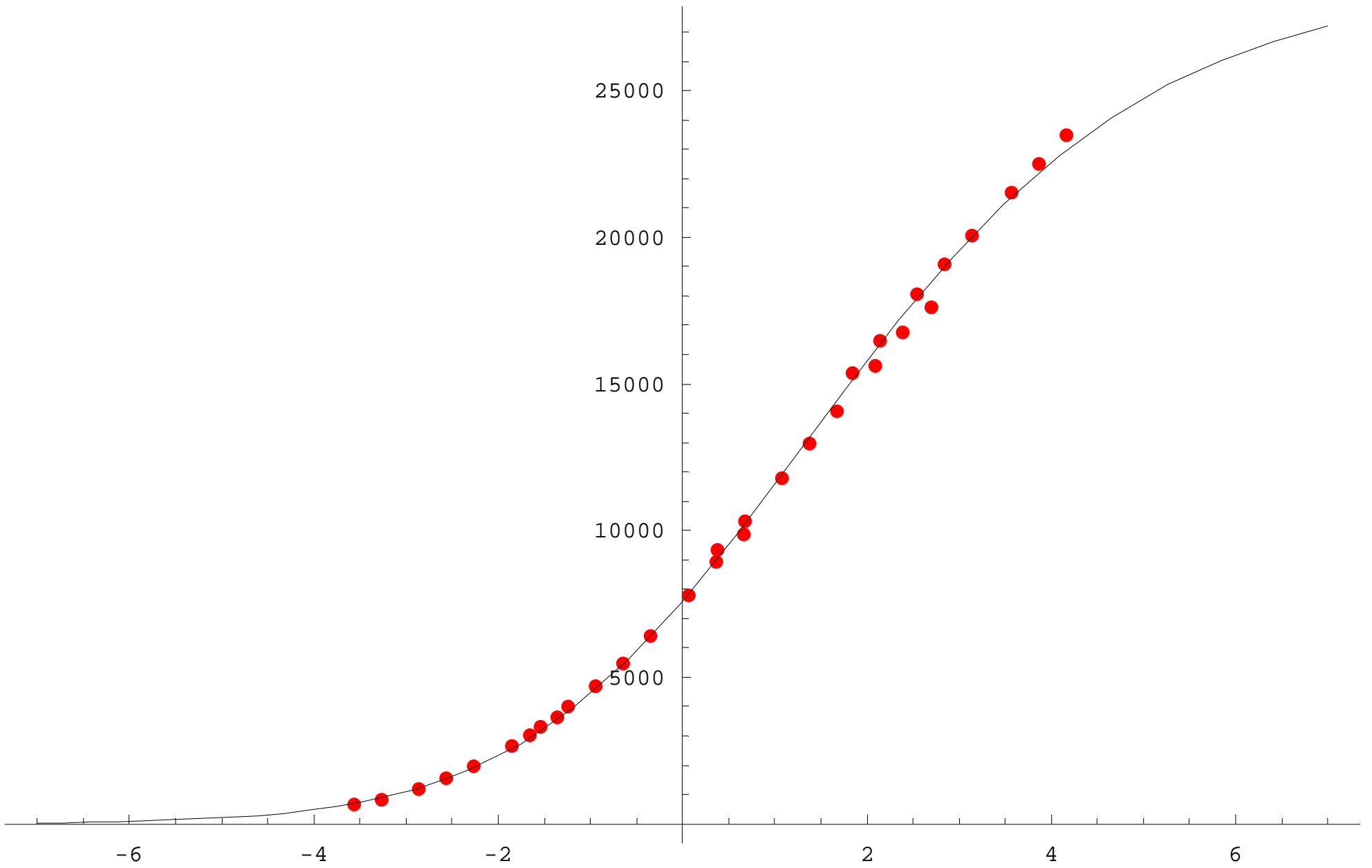
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 28800.7  | 208.599       | {28374.7, 29226.7}, |
| h                       | 1.92255  | 0.0214319     | {1.87878, 1.96632}  |

EstimatedVariance → 77935.2,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $5.05633 \times 10^9$ | $2.52816 \times 10^9$ |
| ANOVATable → Error | 30 | $2.33806 \times 10^6$ | 77935.2 ,             |
| Uncorrected Total  | 32 | $5.05867 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.62663 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.840345 \\ 0.840345 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0122284 |
| Max Parameter-Effects             | 0.0157746 |
| 95. % Confidence Region           | 0.549166  |





sample: c40v E, model s

27436.3

$$\frac{1}{1 + e^{-0.637047(-1.54582 + x)}}$$

{BestFitParameters → {Emax → 27436.3, λ → 0.637047, xshift → 1.54582},

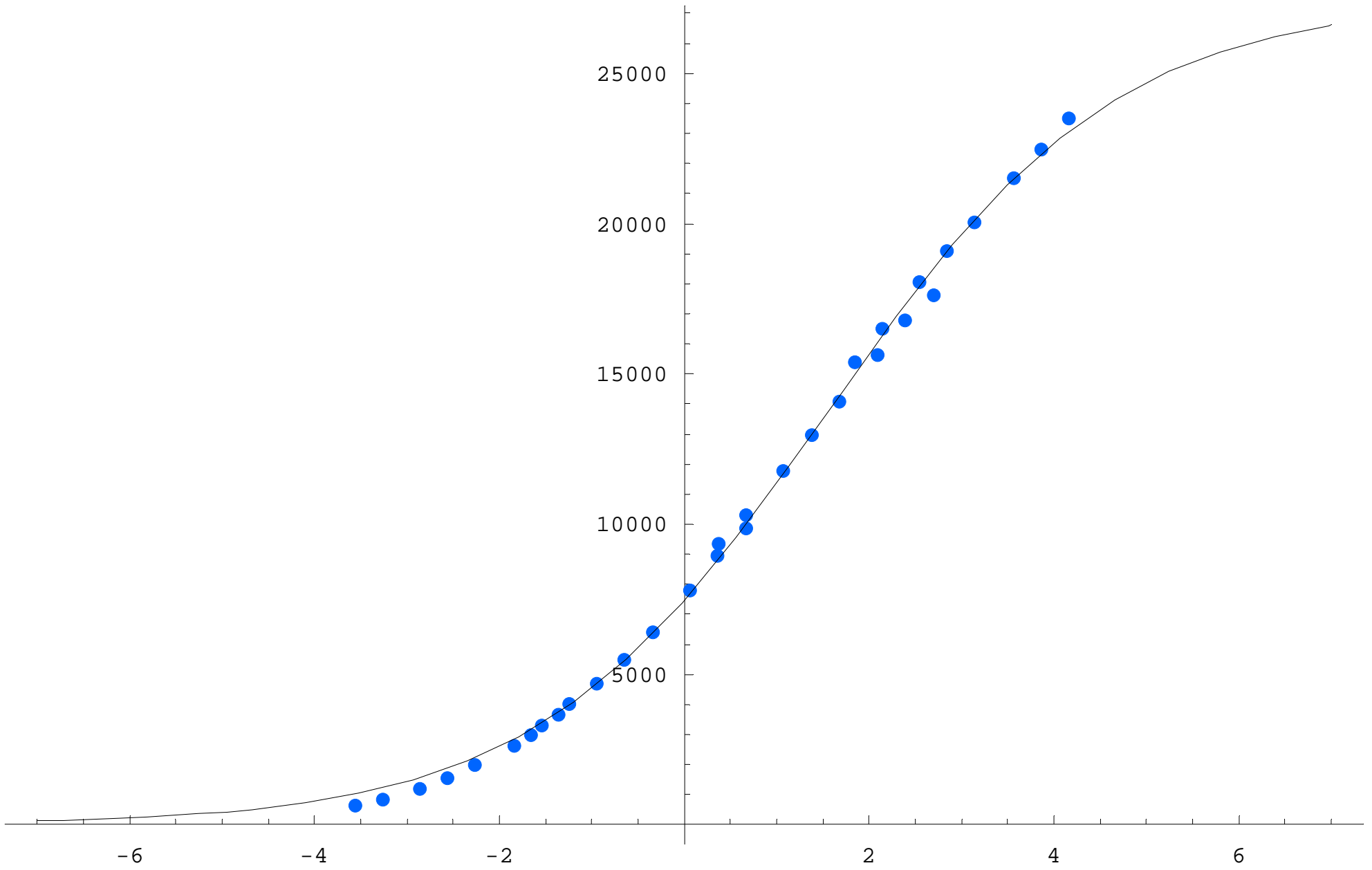
|                    |        | Estimate | Asymptotic SE | CI                 |
|--------------------|--------|----------|---------------|--------------------|
| ParameterCITable → | Emax   | 27436.3  | 578.25        | {26253.7, 28619.}  |
|                    | λ      | 0.637047 | 0.015623      | {0.605095, 0.669}  |
|                    | xshift | 1.54582  | 0.0811382     | {1.37988, 1.71177} |

EstimatedVariance → 98638.6,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $5.05581 \times 10^9$ | $1.68527 \times 10^9$ |
| ANOVA Table → Error | 29 | $2.86052 \times 10^6$ | 98638.6               |
| Uncorrected Total   | 32 | $5.05867 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.62663 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.869617 & 0.976268 \\ -0.869617 & 1. & -0.862458 \\ 0.976268 & -0.862458 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0248826 |
|                     | Max Parameter-Effects   | 0.318906  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c41 E, model r

31383.

$$(1 + e^{-0.5 x})^{1.94454}$$

{BestFitParameters → {Emax → 31383., h → 1.94454},

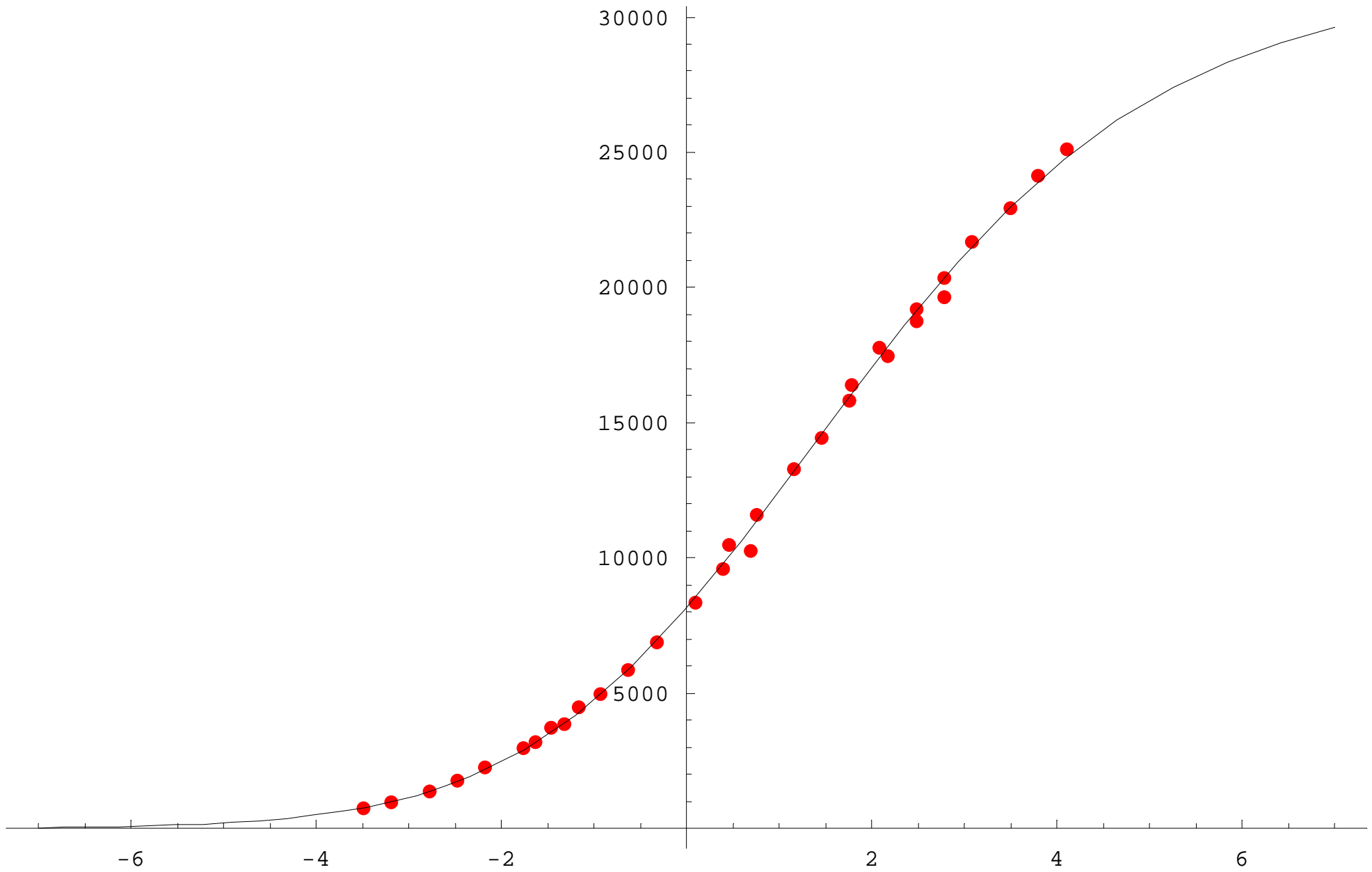
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 31383.   | 214.78        | {30944.3, 31821.6}, |
| h                       | 1.94454  | 0.0203332     | {1.90302, 1.98607}  |

EstimatedVariance → 79283.9,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $5.96327 \times 10^9$ | $2.98163 \times 10^9$ |
| ANOVATable → Error | 30 | $2.37852 \times 10^6$ | 79283.9 ,             |
| Uncorrected Total  | 32 | $5.96564 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.89505 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.846251 \\ 0.846251 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0114401 |
| Max Parameter-Effects             | 0.0150995 |
| 95. % Confidence Region           | 0.549166  |



sample: c41 E, model s

29180.9

$$\frac{1}{1 + e^{-0.657219(-1.48146 + x)}}$$

{BestFitParameters → {Emax → 29180.9, λ → 0.657219, xshift → 1.48146},

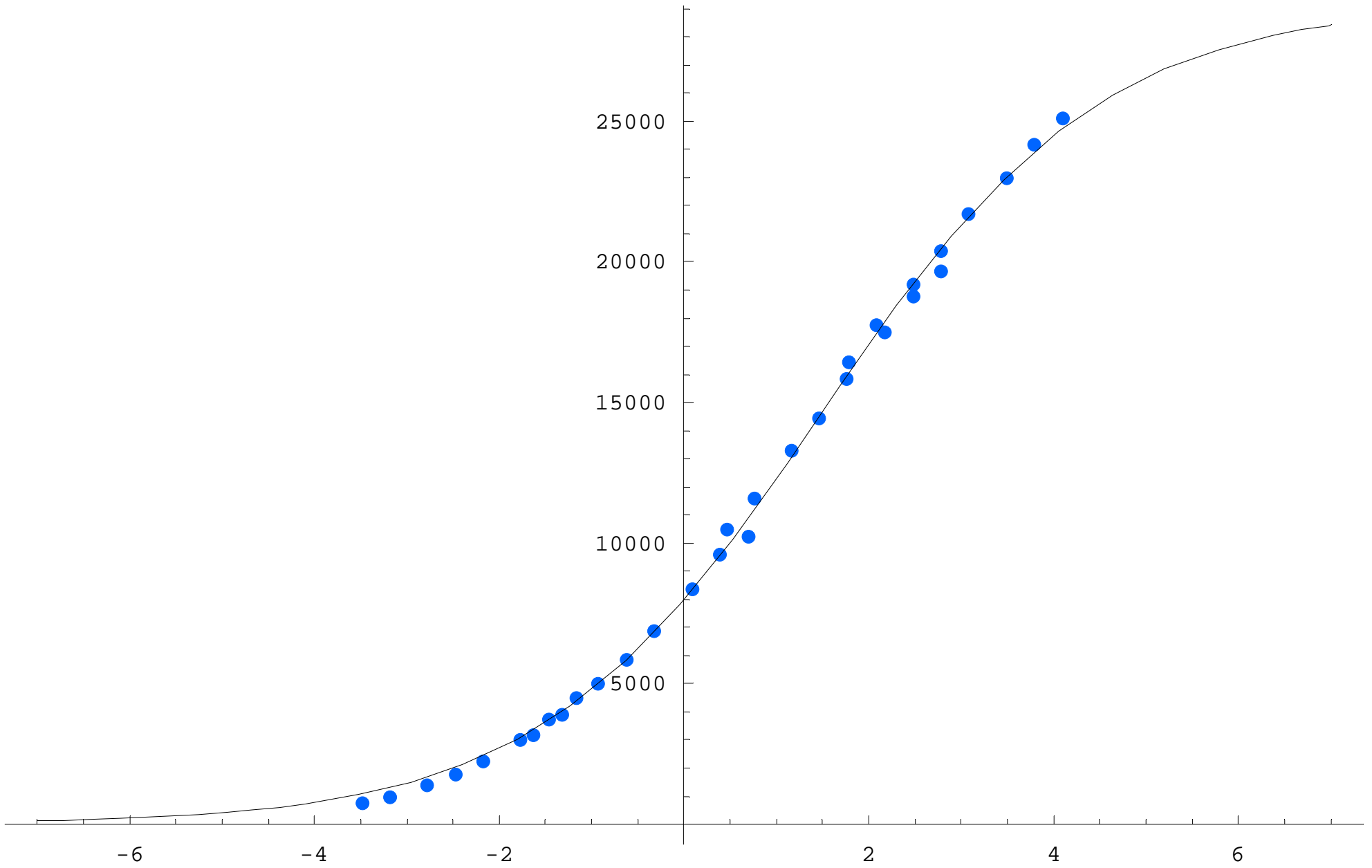
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 29180.9  | 558.325       | {28039., 30322.8}     |
|                    | λ      | 0.657219 | 0.0149944     | {0.626552, 0.687886}' |
|                    | xshift | 1.48146  | 0.0720098     | {1.33418, 1.62873}    |

EstimatedVariance → 99447.7,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $5.96276 \times 10^9$ | $1.98759 \times 10^9$ |
| ANOVA Table → Error | 29 | $2.88398 \times 10^6$ | 99447.7               |
| Uncorrected Total   | 32 | $5.96564 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.89505 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.867939 & 0.974832 \\ -0.867939 & 1. & -0.856236 \\ 0.974832 & -0.856236 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0239122 |
|                     | Max Parameter-Effects   | 0.292513  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c41v E, model r

30429.6

$$(1 + e^{-0.5 x})^{1.98178}$$

{BestFitParameters → {Emax → 30429.6, h → 1.98178},

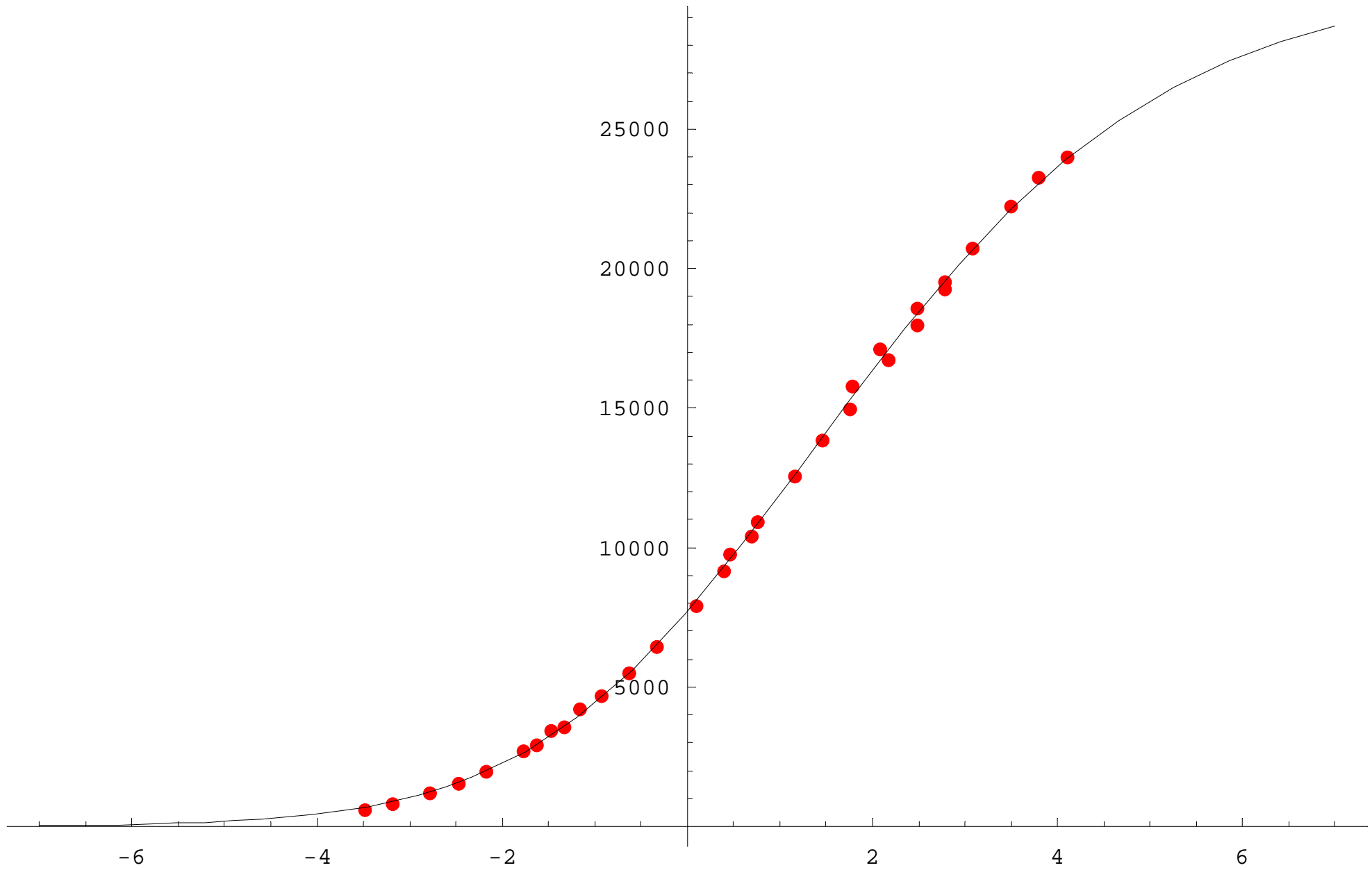
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 30429.6  | 153.737       | {30115.7, 30743.6}, |
| h                       | 1.98178  | 0.0151707     | {1.9508, 2.01277}   |

EstimatedVariance → 39303.5,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $5.48926 \times 10^9$ | $2.74463 \times 10^9$ |
| ANOVATable → Error | 30 | $1.17911 \times 10^6$ | 39303.5 ,             |
| Uncorrected Total  | 32 | $5.49044 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.78245 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.848225 \\ 0.848225 & 1. \end{pmatrix}$ ,

|                                   | Curvature   |
|-----------------------------------|-------------|
| FitCurvatureTable → Max Intrinsic | 0.00846232  |
| Max Parameter-Effects             | 0.0111661 } |
| 95. % Confidence Region           | 0.549166    |





sample: c41v E, model s

27717.2

$$\frac{1}{1 + e^{-0.676615(-1.45172 + x)}}$$

{BestFitParameters → {Emax → 27717.2, λ → 0.676615, xshift → 1.45172},

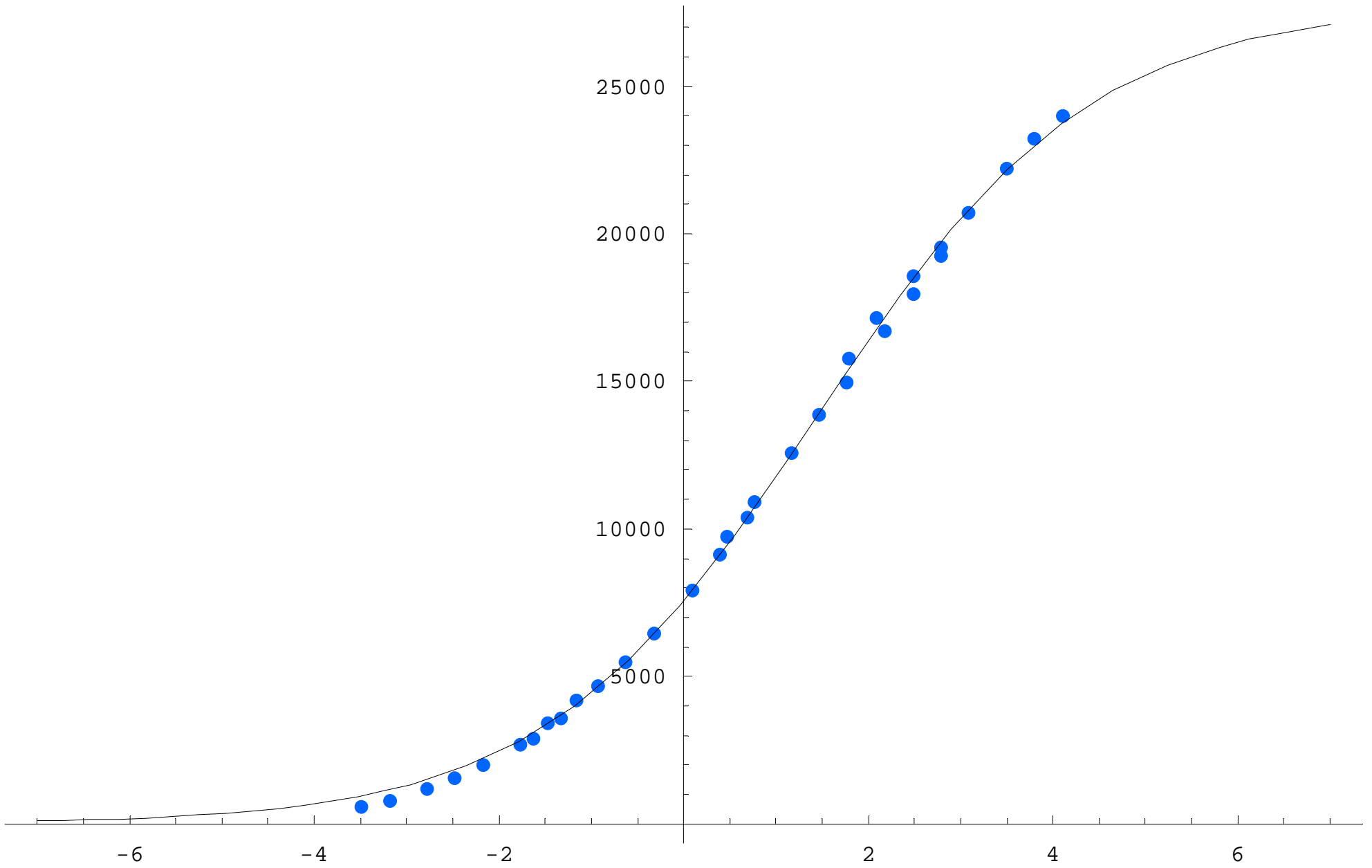
|                    |        | Estimate | Asymptotic SE | CI                  |
|--------------------|--------|----------|---------------|---------------------|
| ParameterCITable → | Emax   | 27717.2  | 438.813       | {26819.8, 28614.7}  |
|                    | λ      | 0.676615 | 0.0132043     | {0.649609, 0.70362} |
|                    | xshift | 1.45172  | 0.0585343     | {1.33201, 1.57144}  |

EstimatedVariance → 68380.4,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $5.48845 \times 10^9$ | $1.82948 \times 10^9$ |
| ANOVA Table → Error | 29 | $1.98303 \times 10^6$ | 68380.4               |
| Uncorrected Total   | 32 | $5.49044 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.78245 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.862971 & 0.97208 \\ -0.862971 & 1. & -0.847848 \\ 0.97208 & -0.847848 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0207161 |
|                     | Max Parameter-Effects   | 0.241529  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c45 E, model r

$$\frac{30857.4}{(1 + e^{-0.5 x})^{1.90082}}$$

{BestFitParameters → {Emax → 30857.4, h → 1.90082}},

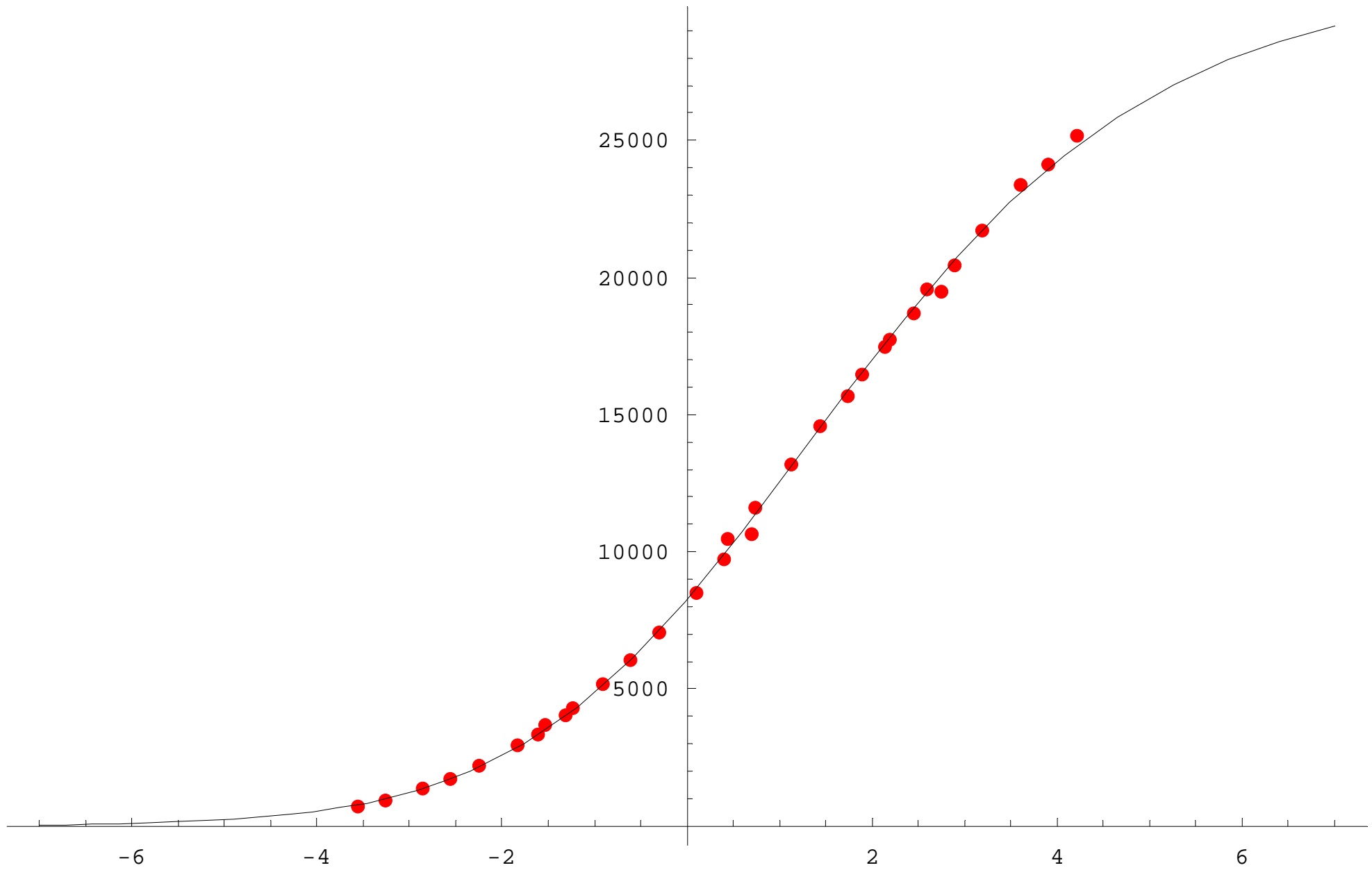
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 30857.4  | 165.583       | {30519.2, 31195.5}, |
| h                       | 1.90082  | 0.015984      | {1.86817, 1.93346}  |

EstimatedVariance → 51692.7,

|                    | DF | SumOfSq               | MeanSq               |
|--------------------|----|-----------------------|----------------------|
| Model              | 2  | $6.009 \times 10^9$   | $3.0045 \times 10^9$ |
| ANOVATable → Error | 30 | $1.55078 \times 10^6$ | 51692.7 ,            |
| Uncorrected Total  | 32 | $6.01055 \times 10^9$ |                      |
| Corrected Total    | 31 | $1.90376 \times 10^9$ |                      |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.837404 \\ 0.837404 & 1. \end{pmatrix}$ ,

|                                   | Curvature   |
|-----------------------------------|-------------|
| FitCurvatureTable → Max Intrinsic | 0.00916505  |
| Max Parameter-Effects             | 0.0118425 } |
| 95. % Confidence Region           | 0.549166    |



sample: c45 E, model s

28914.

$$\frac{1}{1 + e^{-0.647714(-1.45343 + x)}}$$

{BestFitParameters → {Emax → 28914., λ → 0.647714, xshift → 1.45343},

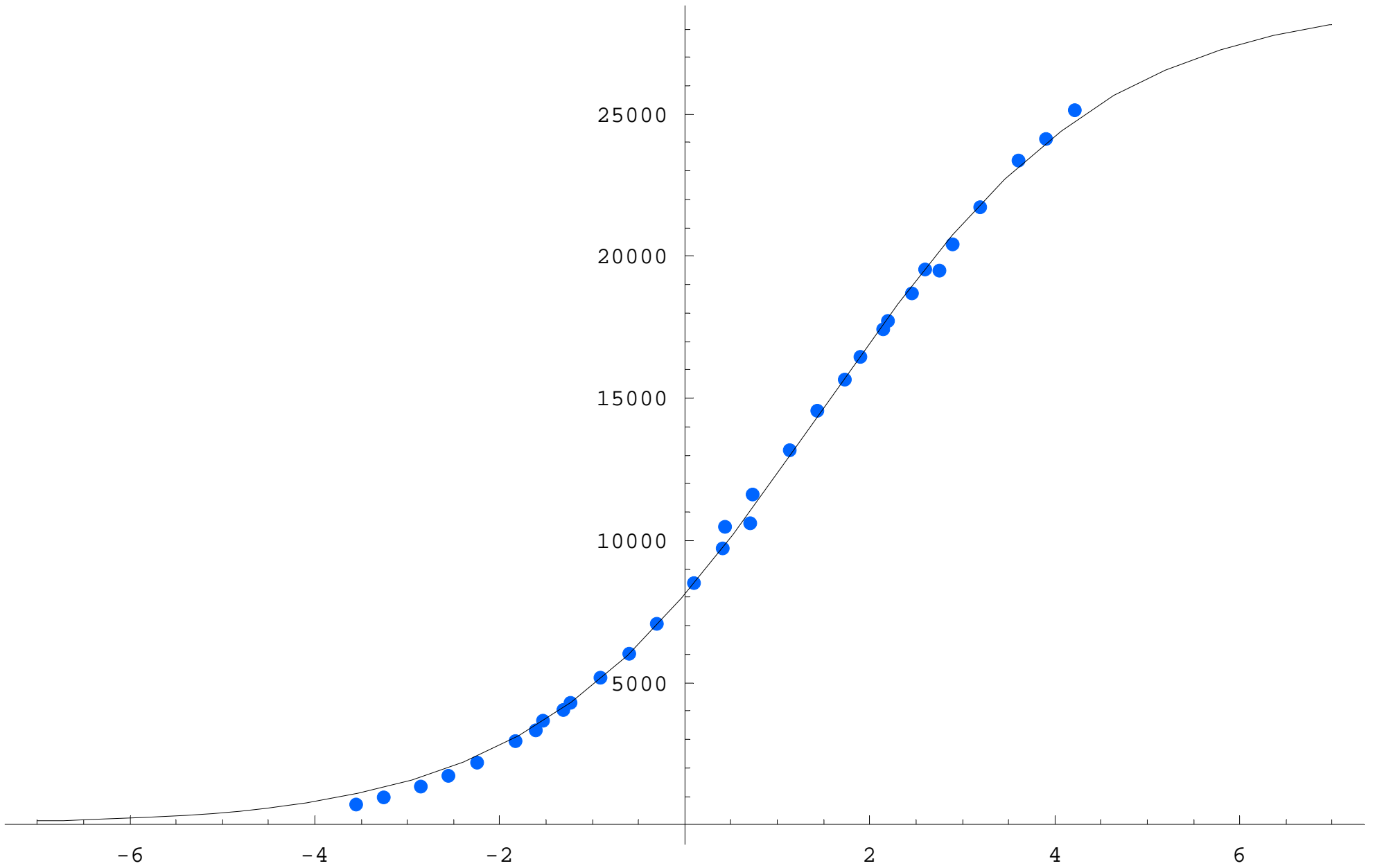
|                    |        | Estimate | Asymptotic SE | CI                  |
|--------------------|--------|----------|---------------|---------------------|
| ParameterCITable → | Emax   | 28914.   | 477.837       | {27936.7, 29891.3}  |
|                    | λ      | 0.647714 | 0.0132387     | {0.620638, 0.67479} |
|                    | xshift | 1.45343  | 0.0637552     | {1.32303, 1.58382}  |

EstimatedVariance → 81060.6,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $6.0082 \times 10^9$  | $2.00273 \times 10^9$ |
| ANOVA Table → Error | 29 | $2.35076 \times 10^6$ | 81060.6               |
| Uncorrected Total   | 32 | $6.01055 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.90376 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.86482 & 0.972416 \\ -0.86482 & 1. & -0.851154 \\ 0.972416 & -0.851154 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0214283 |
|                     | Max Parameter-Effects   | 0.253894  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c45v E, model r

30782.2

$$(1 + e^{-0.5 x})^{1.95335}$$

{BestFitParameters → {Emax → 30782.2, h → 1.95335},

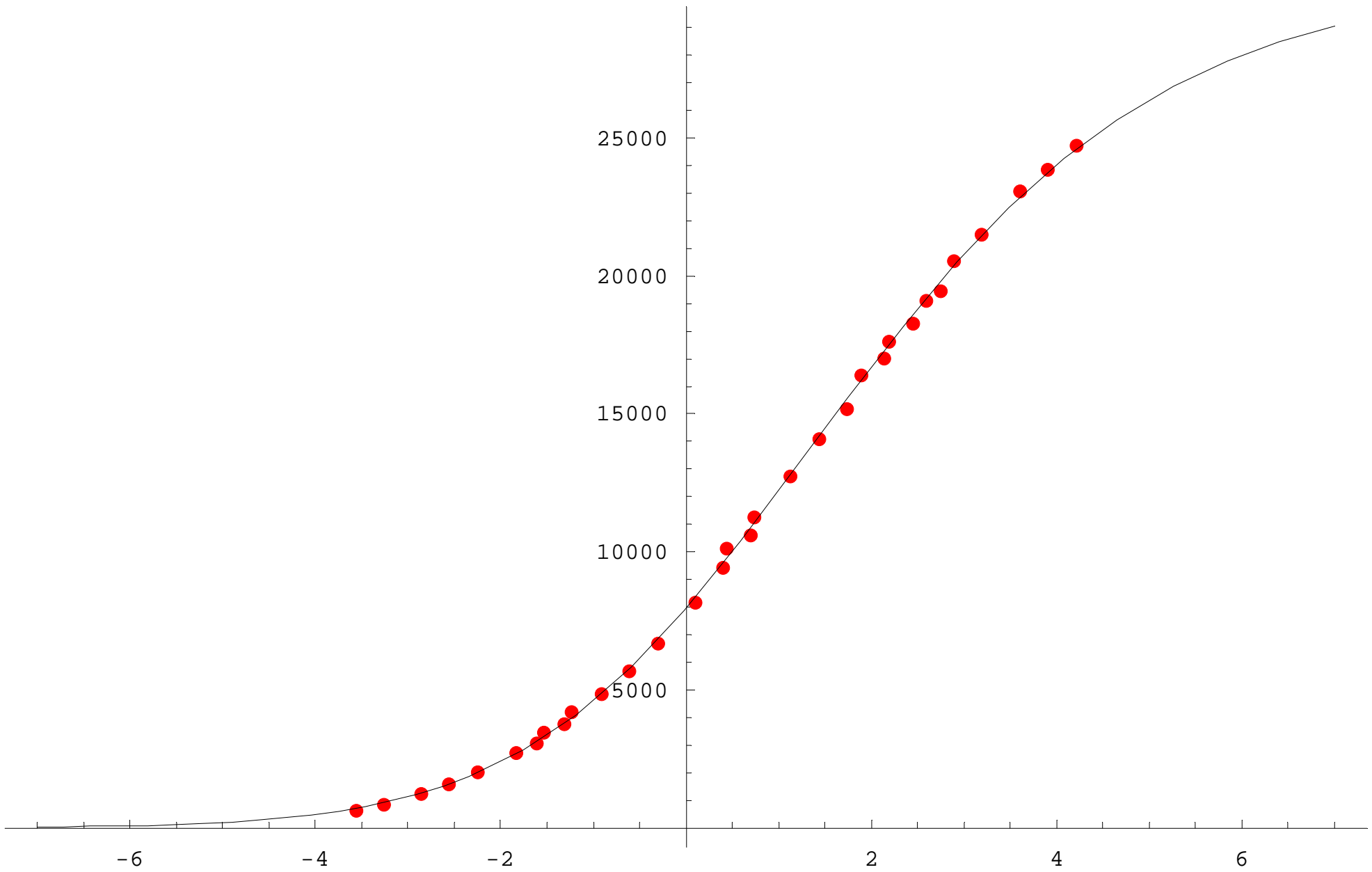
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 30782.2  | 147.812       | {30480.4, 31084.1}, |
| h                       | 1.95335  | 0.0145296     | {1.92367, 1.98302}  |

EstimatedVariance → 39373.1,

|                    | DF | SumOfSq               | MeanSq               |
|--------------------|----|-----------------------|----------------------|
| Model              | 2  | $5.80681 \times 10^9$ | $2.9034 \times 10^9$ |
| ANOVATable → Error | 30 | $1.18119 \times 10^6$ | 39373.1 ,            |
| Uncorrected Total  | 32 | $5.80799 \times 10^9$ |                      |
| Corrected Total    | 31 | $1.88629 \times 10^9$ |                      |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.840198 \\ 0.840198 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0082218 |
| Max Parameter-Effects             | 0.010564  |
| 95. % Confidence Region           | 0.549166  |





sample: c45v E, model s

28461.1

$$\frac{1}{1 + e^{-0.662803(-1.47068 + x)}}$$

{BestFitParameters → {Emax → 28461.1, λ → 0.662803, xshift → 1.47068},

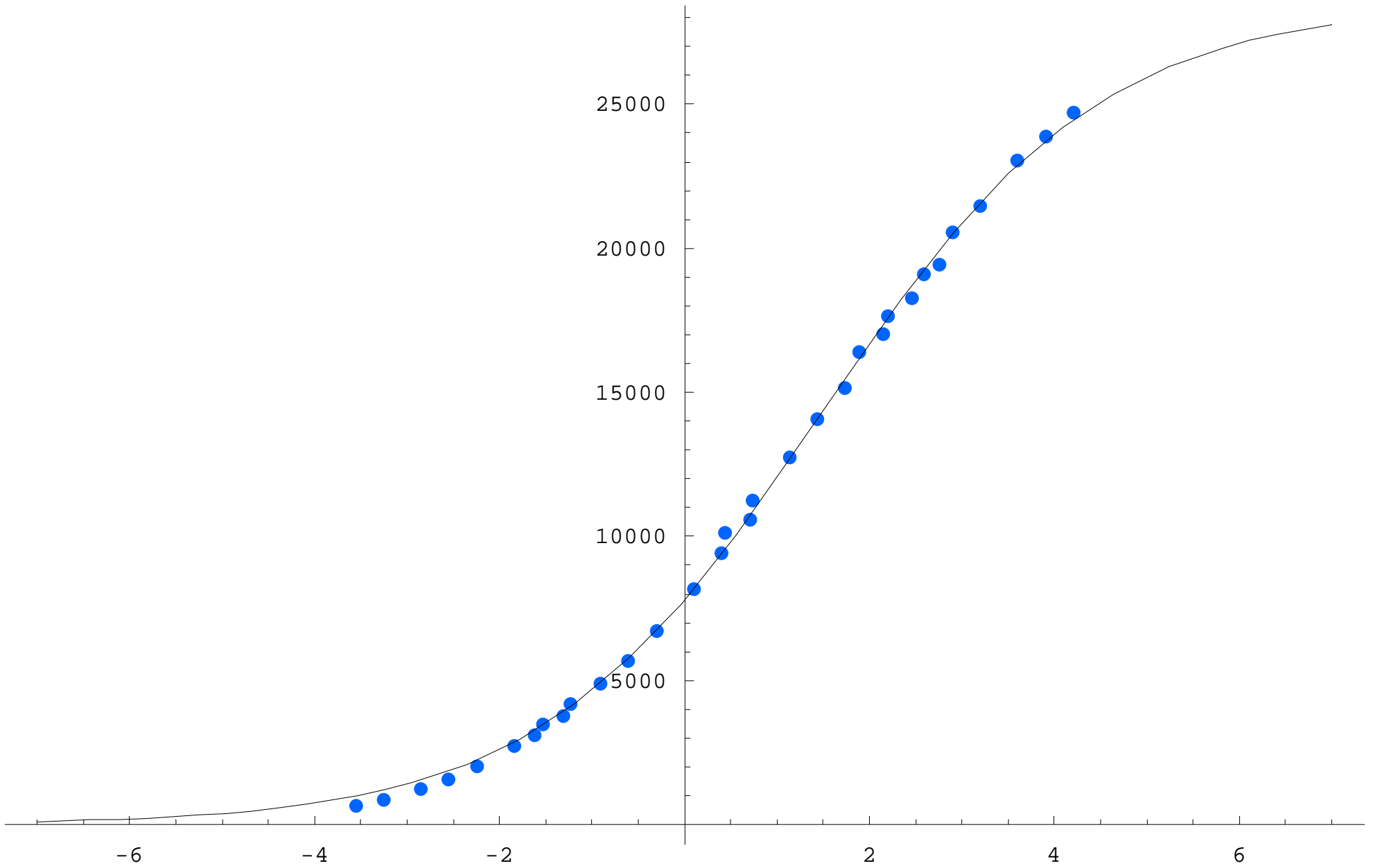
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 28461.1  | 422.874       | {27596.2, 29326.}     |
|                    | λ      | 0.662803 | 0.012327      | {0.637591, 0.688014}' |
|                    | xshift | 1.47068  | 0.0562858     | {1.35556, 1.5858}     |

EstimatedVariance → 66221.8,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $5.80607 \times 10^9$ | $1.93536 \times 10^9$ |
| ANOVA Table → Error | 29 | $1.92043 \times 10^6$ | 66221.8               |
| Uncorrected Total   | 32 | $5.80799 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.88629 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.861508 & 0.970996 \\ -0.861508 & 1. & -0.846582 \\ 0.970996 & -0.846582 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0195482 |
|                     | Max Parameter-Effects   | 0.226738  |
|                     | 95. % Confidence Region | 0.583805  |



**0%RA in tracks (after ALT)**

sample: c36 E, model r

35068.4

$$\frac{35068.4}{(1 + e^{-0.5 x})^{1.70795}}$$

{BestFitParameters → {Emax → 35068.4, h → 1.70795},

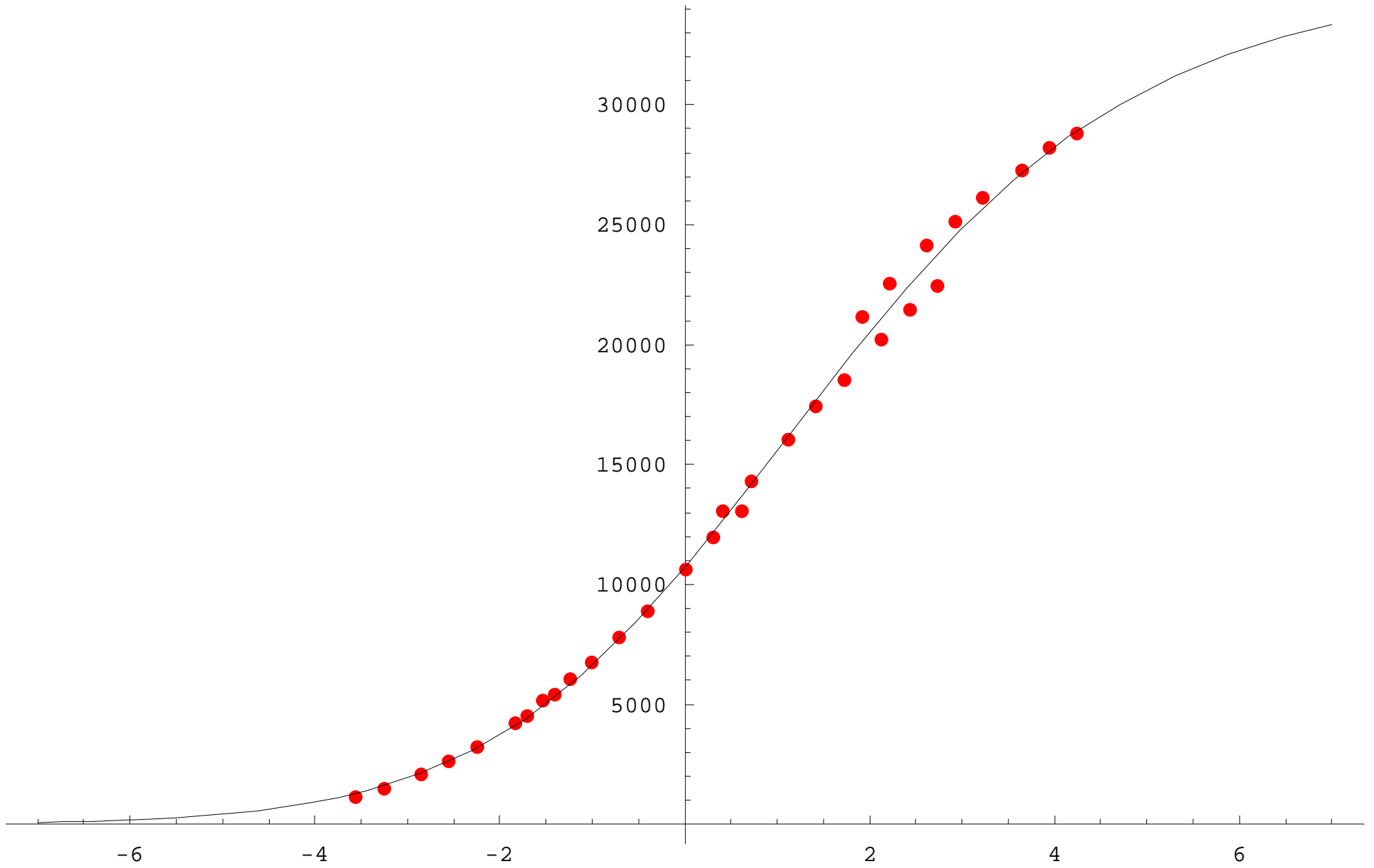
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 35068.4  | 347.5         | {34358.7, 35778.1}, |
| h                       | 1.70795  | 0.0278214     | {1.65113, 1.76477}  |

EstimatedVariance → 275181.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 2  | $8.64557 \times 10^9$ | $4.32279 \times 10^9$ |
| ANOVA Table → Error | 30 | $8.25544 \times 10^6$ | 275181. ,             |
| Uncorrected Total   | 32 | $8.65383 \times 10^9$ |                       |
| Corrected Total     | 31 | $2.539 \times 10^9$   |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.8221 \\ 0.8221 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.016675  |
| Max Parameter-Effects             | 0.0225884 |
| 95. % Confidence Region           | 0.549166  |



sample: c36 E, model s

33180.6

$$\frac{1}{1 + e^{-0.624788(-1.22023 + x)}}$$

{BestFitParameters → {Emax → 33180.6, λ → 0.624788, xshift → 1.22023},

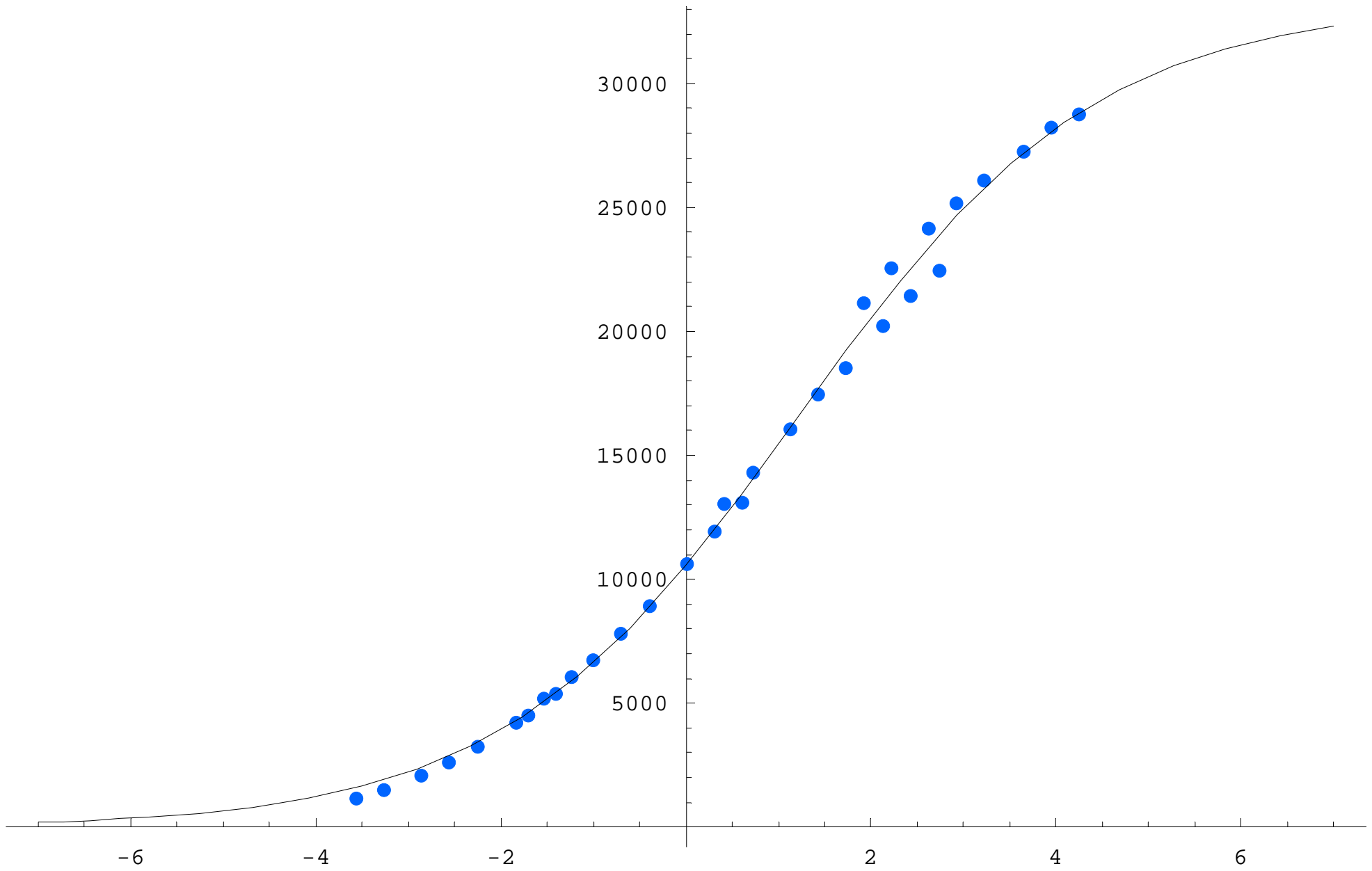
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 33180.6  | 841.581       | {31459.4, 34901.8}    |
|                    | λ      | 0.624788 | 0.0207304     | {0.582389, 0.667186}' |
|                    | xshift | 1.22023  | 0.103411      | {1.00873, 1.43173}    |

EstimatedVariance → 297438.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 3  | $8.6452 \times 10^9$  | $2.88173 \times 10^9$ |
| ANOVATable → Error | 29 | $8.62569 \times 10^6$ | 297438. ,             |
| Uncorrected Total  | 32 | $8.65383 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.539 \times 10^9$   |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.865229 & 0.969189 \\ -0.865229 & 1. & -0.846093 \\ 0.969189 & -0.846093 & 1. \end{pmatrix}$ ,

|                     | Curvature               |            |
|---------------------|-------------------------|------------|
| FitCurvatureTable → | Max Intrinsic           | 0.0360726  |
|                     | Max Parameter-Effects   | 0.404016 } |
|                     | 95. % Confidence Region | 0.583805   |



sample: c36v E, model r

33036.4

$$(1 + e^{-0.5 x})^{1.66137}$$

{BestFitParameters → {Emax → 33036.4, h → 1.66137},

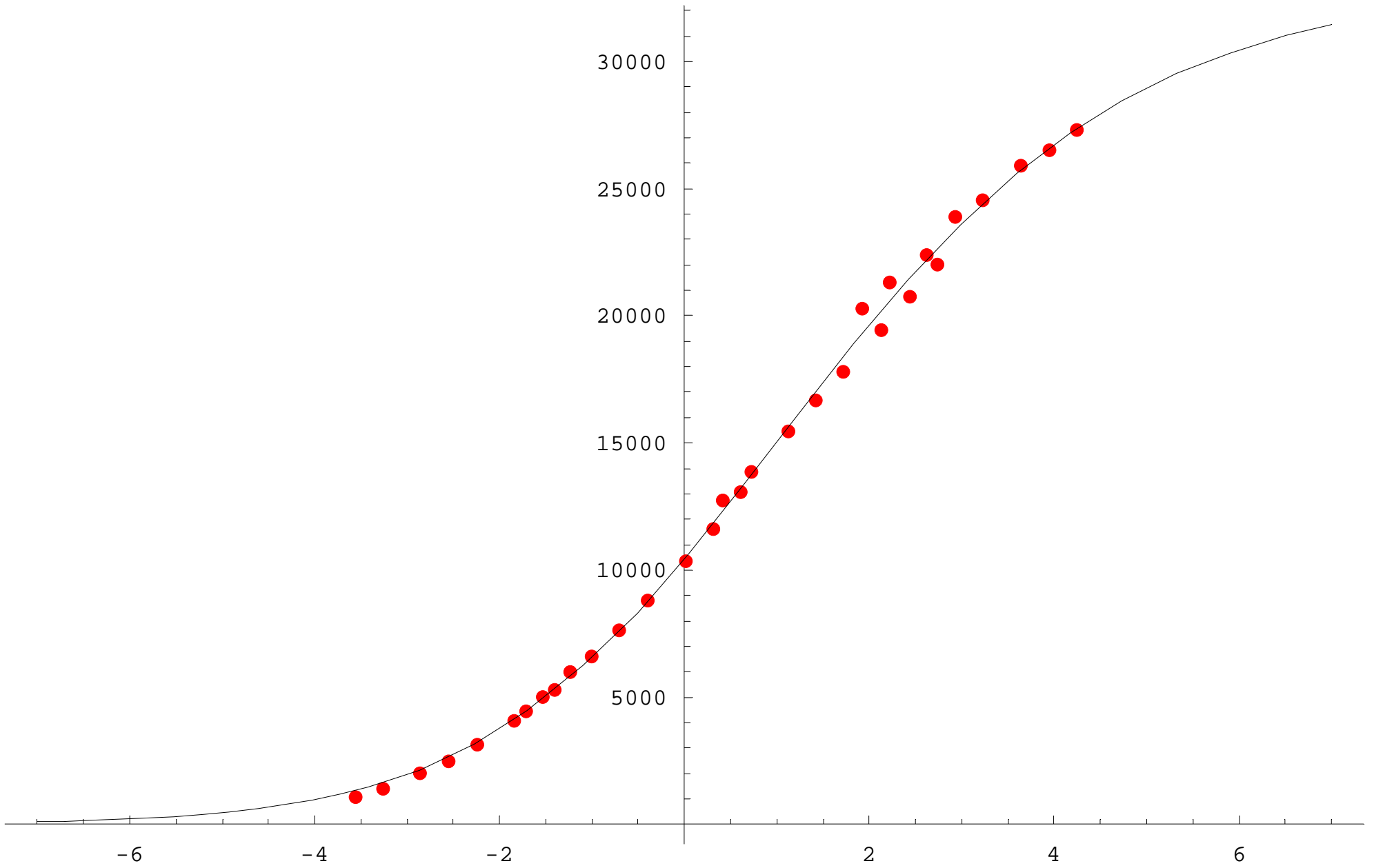
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 33036.4  | 248.938       | {32528., 33544.8} , |
| h                       | 1.66137  | 0.0208065     | {1.61888, 1.70386}  |

EstimatedVariance → 147178.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $7.88628 \times 10^9$ | $3.94314 \times 10^9$ |
| ANOVATable → Error | 30 | $4.41535 \times 10^6$ | 147178. ,             |
| Uncorrected Total  | 32 | $7.8907 \times 10^9$  |                       |
| Corrected Total    | 31 | $2.26644 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.819342 \\ 0.819342 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0125878 |
| Max Parameter-Effects             | 0.0172138 |
| 95. % Confidence Region           | 0.549166  |





sample: c36v E, model s

30899.6

$$\frac{1}{1 + e^{-0.630189(-1.10062 + x)}}$$

{BestFitParameters → {Emax → 30899.6, λ → 0.630189, xshift → 1.10062},

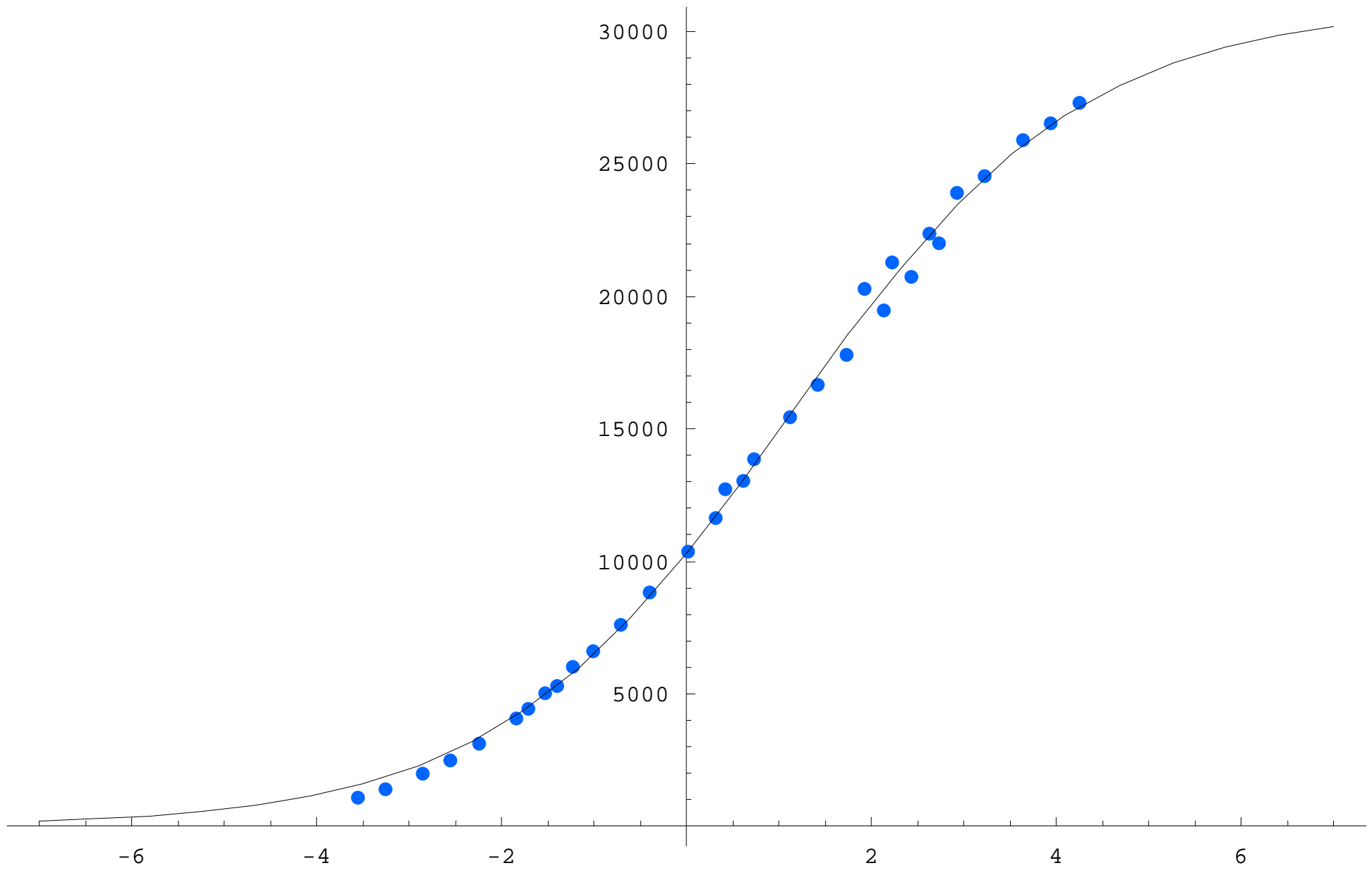
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 30899.6  | 614.079       | {29643.6, 32155.5}   |
|                    | λ      | 0.630189 | 0.0171686     | {0.595075, 0.665302} |
|                    | xshift | 1.10062  | 0.0815018     | {0.933926, 1.26731}  |

EstimatedVariance → 181201.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $7.88544 \times 10^9$ | $2.62848 \times 10^9$ |
| ANOVA Table → Error | 29 | $5.25483 \times 10^6$ | 181201. ,             |
| Uncorrected Total   | 32 | $7.8907 \times 10^9$  |                       |
| Corrected Total     | 31 | $2.26644 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.862143 & 0.965589 \\ -0.862143 & 1. & -0.837902 \\ 0.965589 & -0.837902 & 1. \end{pmatrix}$ ,

|                     | Curvature               |          |
|---------------------|-------------------------|----------|
| FitCurvatureTable → | Max Intrinsic           | 0.030268 |
|                     | Max Parameter-Effects   | 0.321662 |
|                     | 95. % Confidence Region | 0.583805 |



sample: c37 E, model r

31819.9

$$(1 + e^{-0.5 x})^{1.72296}$$

{BestFitParameters → {Emax → 31819.9, h → 1.72296},

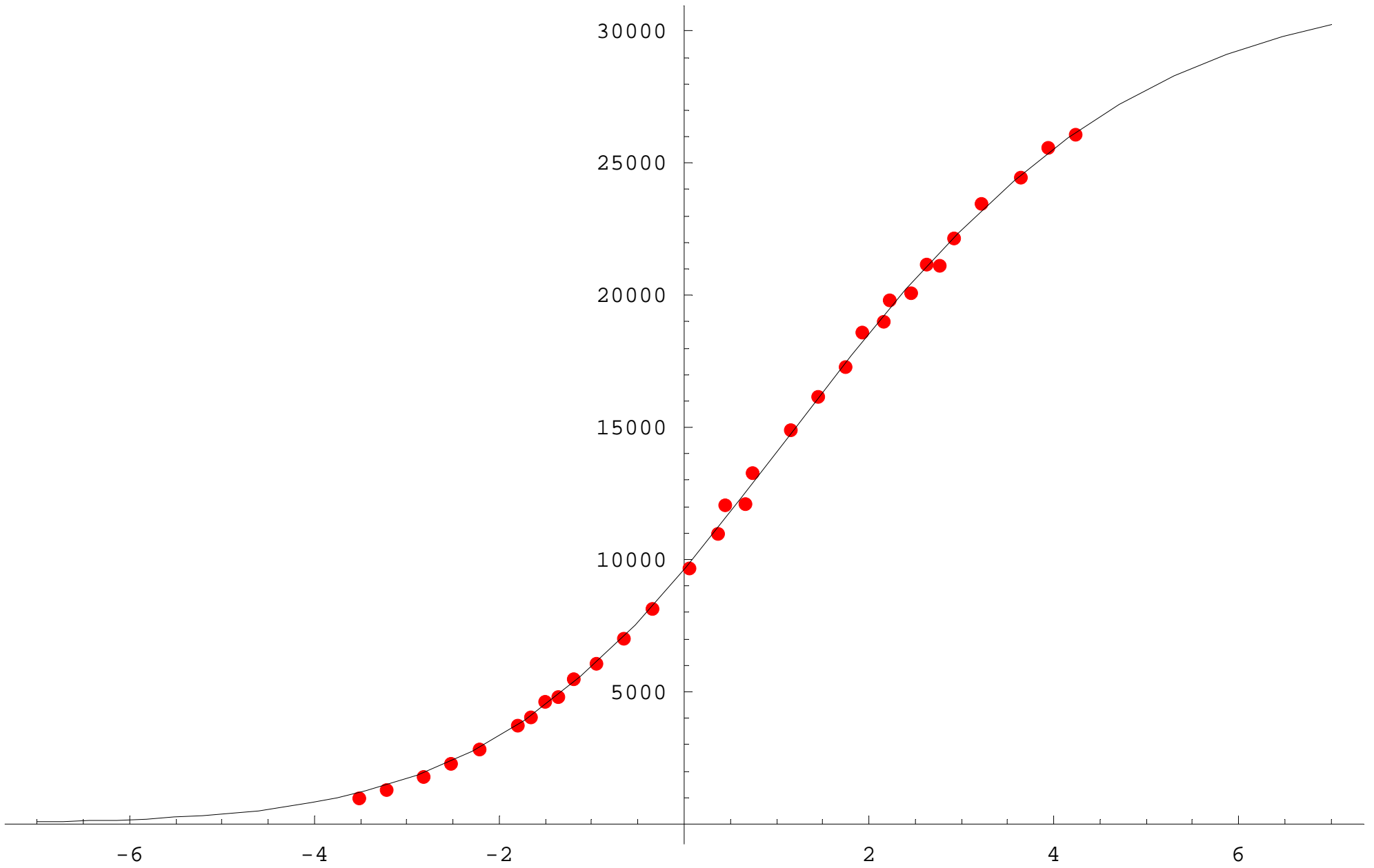
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 31819.9  | 162.936       | {31487.1, 32152.6}, |
| h                       | 1.72296  | 0.0144763     | {1.69339, 1.75252}  |

EstimatedVariance → 59907.6,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $7.11747 \times 10^9$ | $3.55873 \times 10^9$ |
| ANOVATable → Error | 30 | $1.79723 \times 10^6$ | 59907.6 ,             |
| Uncorrected Total  | 32 | $7.11927 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.08704 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.824008 \\ 0.824008 & 1. \end{pmatrix}$ ,

|                                   | Curvature   |
|-----------------------------------|-------------|
| FitCurvatureTable → Max Intrinsic | 0.00860012  |
| Max Parameter-Effects             | 0.0115958 } |
| 95. % Confidence Region           | 0.549166    |



sample: c37 E, model s

29282.3

$$\frac{1}{1 + e^{-0.64956(-1.12978 + x)}}$$

{BestFitParameters → {Emax → 29282.3, λ → 0.64956, xshift → 1.12978},

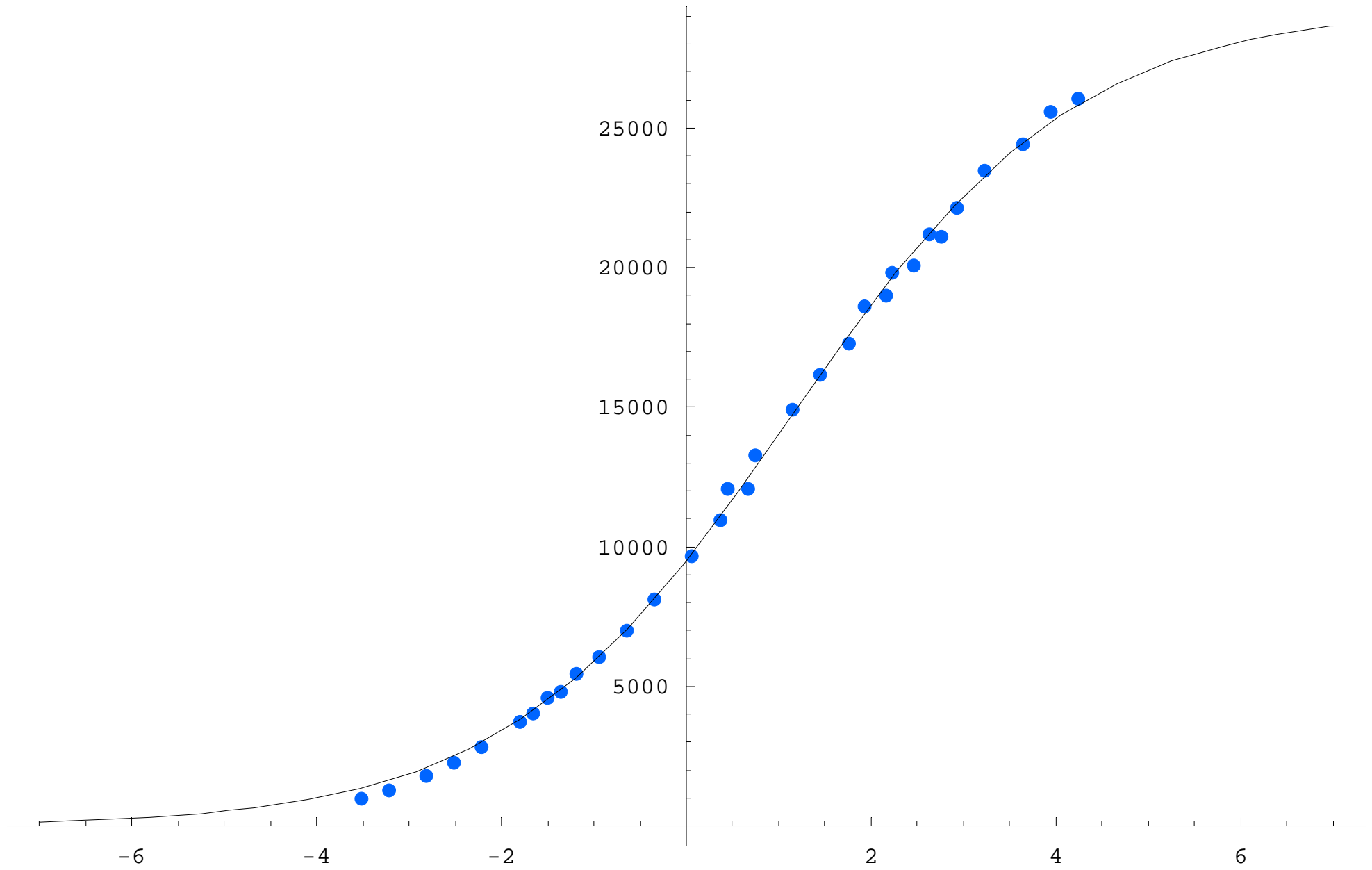
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 29282.3  | 416.          | {28431.4, 30133.1}    |
|                    | λ      | 0.64956  | 0.0128604     | {0.623257, 0.675862}' |
|                    | xshift | 1.12978  | 0.0568663     | {1.01348, 1.24609}    |

EstimatedVariance → 87919.7,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $7.11672 \times 10^9$ | $2.37224 \times 10^9$ |
| ANOVA Table → Error | 29 | $2.54967 \times 10^6$ | 87919.7               |
| Uncorrected Total   | 32 | $7.11927 \times 10^9$ |                       |
| Corrected Total     | 31 | $2.08704 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.858108 & 0.963436 \\ -0.858108 & 1. & -0.831339 \\ 0.963436 & -0.831339 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0221568 |
|                     | Max Parameter-Effects   | 0.228559  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c37v E, model r

31633.2

$$(1 + e^{-0.5 x})^{1.71934}$$

{BestFitParameters → {Emax → 31633.2, h → 1.71934},

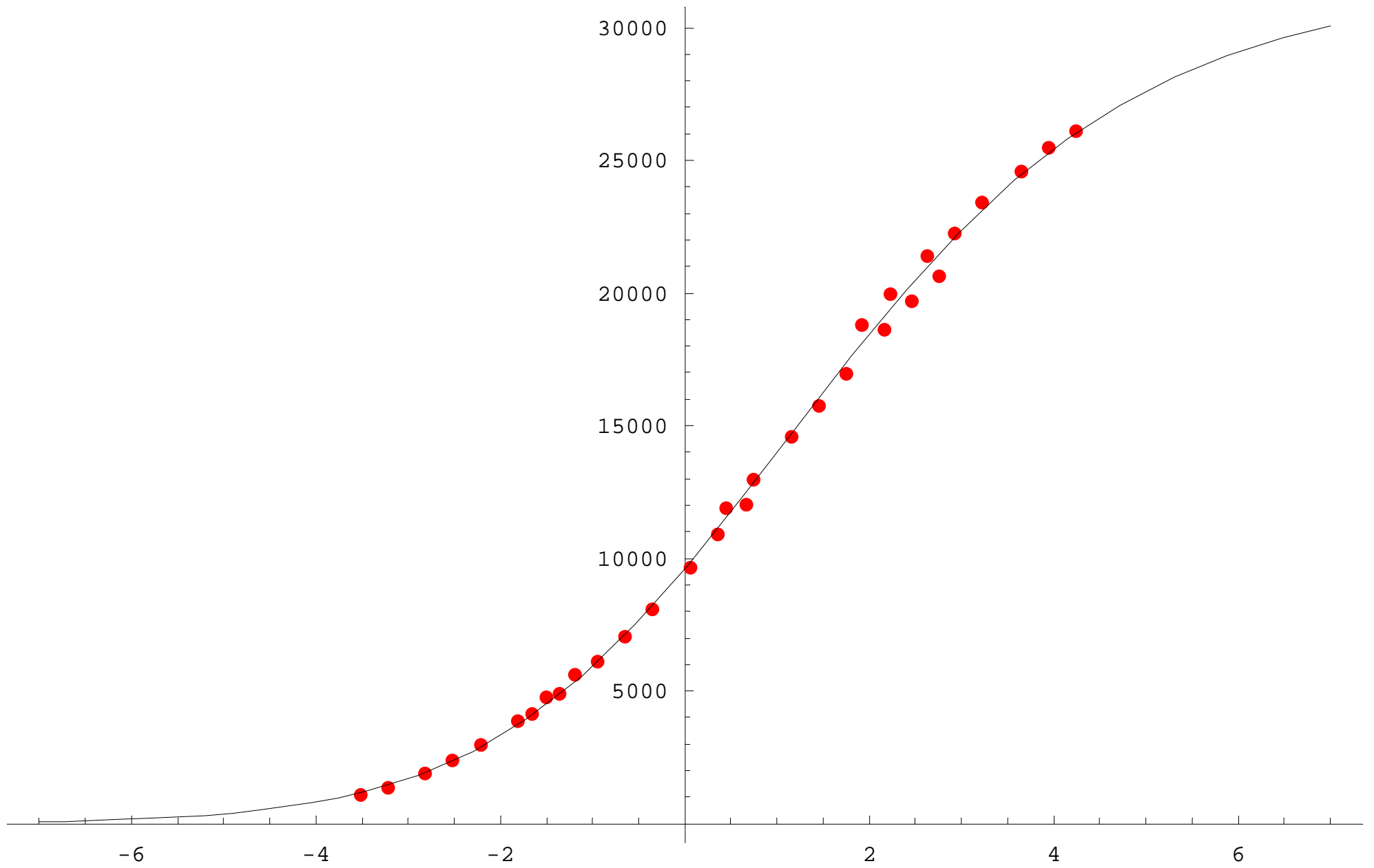
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 31633.2  | 229.338       | {31164.8, 32101.5}, |
| h                       | 1.71934  | 0.0204706     | {1.67753, 1.76114}  |

EstimatedVariance → 119065.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $7.04904 \times 10^9$ | $3.52452 \times 10^9$ |
| ANOVATable → Error | 30 | $3.57196 \times 10^6$ | 119065. ,             |
| Uncorrected Total  | 32 | $7.05262 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.04721 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.823798 \\ 0.823798 & 1. \end{pmatrix}$ ,

|                                   | Curvature  |
|-----------------------------------|------------|
| FitCurvatureTable → Max Intrinsic | 0.0121703  |
| Max Parameter-Effects             | 0.016421 } |
| 95. % Confidence Region           | 0.549166   |





sample: c37v E, model s

30000.8

$$\frac{1}{1 + e^{-0.623516(-1.24665 + x)}}$$

{BestFitParameters → {Emax → 30000.8, λ → 0.623516, xshift → 1.24665},

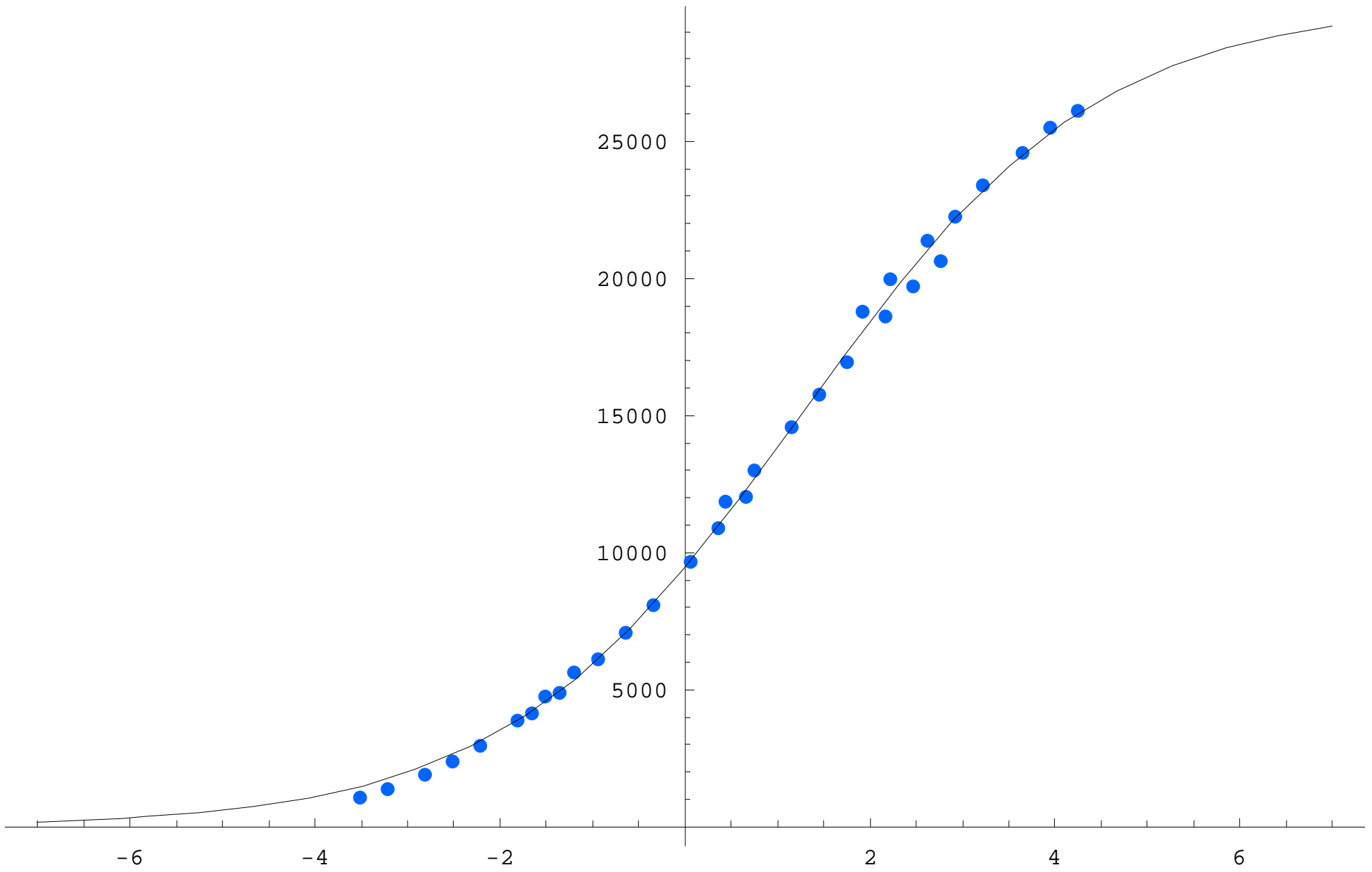
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 30000.8  | 577.773       | {28819.1, 31182.4}   |
|                    | λ      | 0.623516 | 0.0155858     | {0.591639, 0.655393} |
|                    | xshift | 1.24665  | 0.078336      | {1.08643, 1.40686}   |

EstimatedVariance → 135782.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $7.04868 \times 10^9$ | $2.34956 \times 10^9$ |
| ANOVA Table → Error | 29 | $3.93768 \times 10^6$ | 135782. ,             |
| Uncorrected Total   | 32 | $7.05262 \times 10^9$ |                       |
| Corrected Total     | 31 | $2.04721 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.86685 & 0.970175 \\ -0.86685 & 1. & -0.848437 \\ 0.970175 & -0.848437 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0270326 |
|                     | Max Parameter-Effects   | 0.307272  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c38 E, model r

31622.

$$\frac{31622.}{(1 + e^{-0.5 x})^{1.70108}}$$

{BestFitParameters → {Emax → 31622., h → 1.70108},

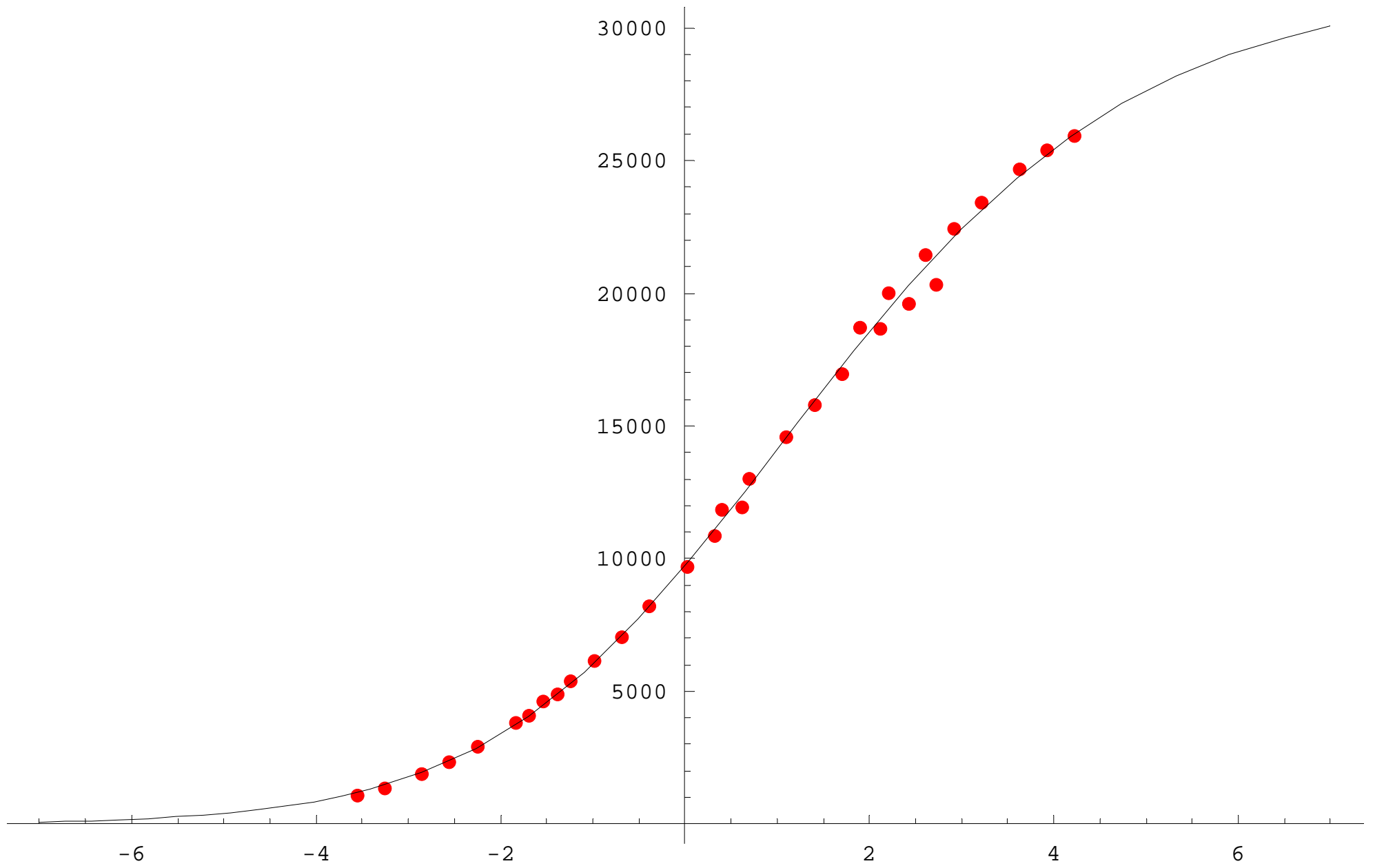
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 31622.   | 234.802       | {31142.5, 32101.5}, |
| h                       | 1.70108  | 0.0207111     | {1.65878, 1.74338}  |

EstimatedVariance → 125080.,

|                    | DF | SumOfSq               | MeanSq               |
|--------------------|----|-----------------------|----------------------|
| Model              | 2  | $7.02839 \times 10^9$ | $3.5142 \times 10^9$ |
| ANOVATable → Error | 30 | $3.75239 \times 10^6$ | 125080. ,            |
| Uncorrected Total  | 32 | $7.03215 \times 10^9$ |                      |
| Corrected Total    | 31 | $2.05317 \times 10^9$ |                      |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.822934 \\ 0.822934 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0124155 |
| Max Parameter-Effects             | 0.0167739 |
| 95. % Confidence Region           | 0.549166  |



sample: c38 E, model s

29584.

$$\frac{1}{1 + e^{-0.633248(-1.16332 + x)}}$$

{BestFitParameters → {Emax → 29584., λ → 0.633248, xshift → 1.16332},

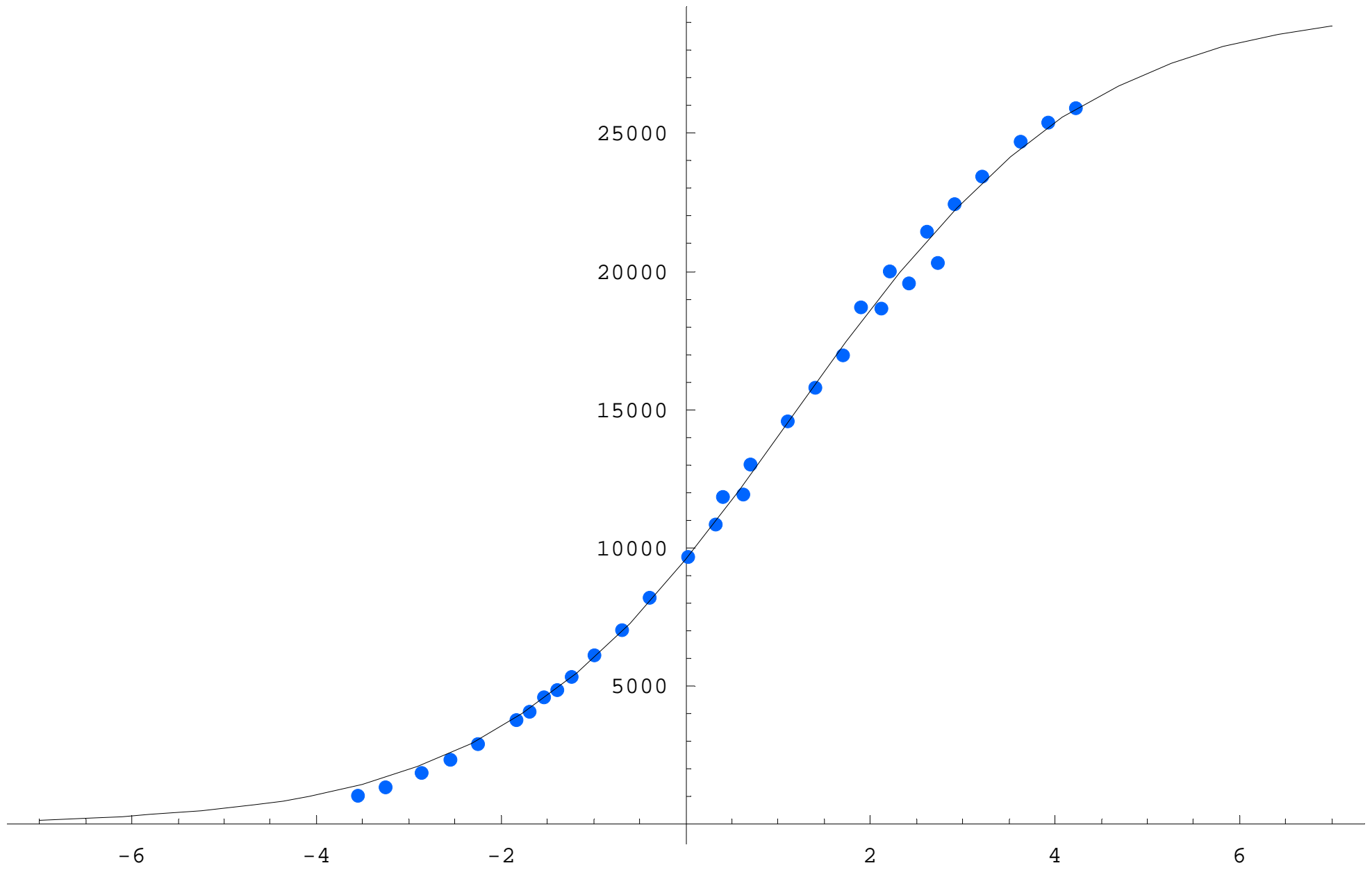
|                    |        | Estimate | Asymptotic SE | CI                  |
|--------------------|--------|----------|---------------|---------------------|
| ParameterCITable → | Emax   | 29584.   | 577.861       | {28402.1, 30765.9}  |
|                    | λ      | 0.633248 | 0.0166055     | {0.599286, 0.66721} |
|                    | xshift | 1.16332  | 0.0791576     | {1.00143, 1.32522}  |

EstimatedVariance → 150698.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $7.02778 \times 10^9$ | $2.34259 \times 10^9$ |
| ANOVA Table → Error | 29 | $4.37025 \times 10^6$ | 150698.               |
| Uncorrected Total   | 32 | $7.03215 \times 10^9$ |                       |
| Corrected Total     | 31 | $2.05317 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.863167 & 0.967214 \\ -0.863167 & 1. & -0.841568 \\ 0.967214 & -0.841568 & 1. \end{pmatrix},$

|                     | Curvature               |          |
|---------------------|-------------------------|----------|
| FitCurvatureTable → | Max Intrinsic           | 0.028753 |
|                     | Max Parameter-Effects   | 0.31335  |
|                     | 95. % Confidence Region | 0.583805 |



sample: c38v E, model r

32599.4

$$(1 + e^{-0.5 x})^{1.80636}$$

{BestFitParameters → {Emax → 32599.4, h → 1.80636},

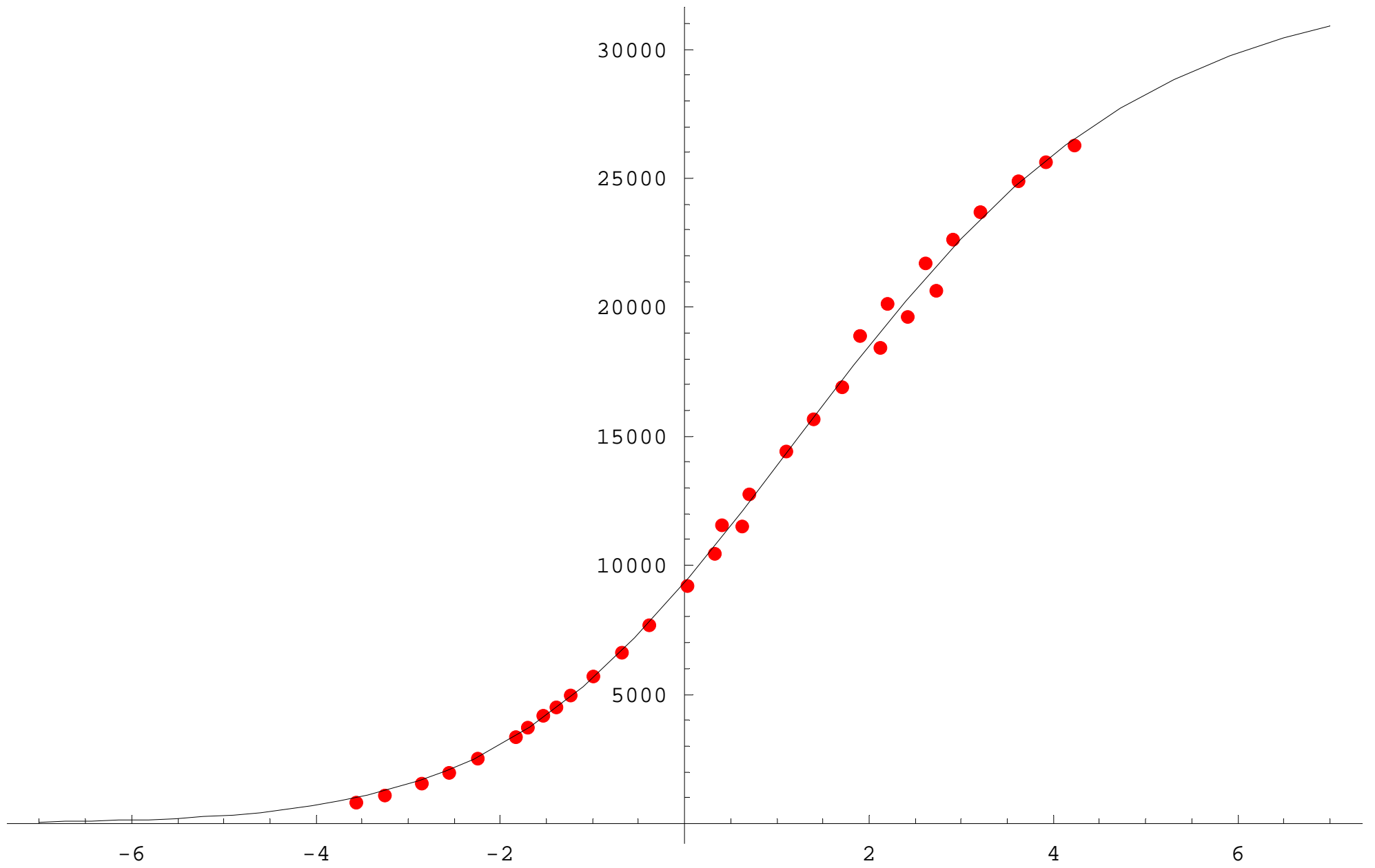
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 32599.4  | 273.054       | {32041.7, 33157.} , |
| h                       | 1.80636  | 0.0242158     | {1.75691, 1.85582}  |

EstimatedVariance → 154183.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $7.0259 \times 10^9$  | $3.51295 \times 10^9$ |
| ANOVATable → Error | 30 | $4.6255 \times 10^6$  | 154183. ,             |
| Uncorrected Total  | 32 | $7.03053 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.18159 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.82898 \\ 0.82898 & 1. \end{pmatrix}$ ,

|                                   | Curvature  |
|-----------------------------------|------------|
| FitCurvatureTable → Max Intrinsic | 0.0141893  |
| Max Parameter-Effects             | 0.018807 } |
| 95. % Confidence Region           | 0.549166   |





sample: c38v E, model s

29711.8

$$\frac{1}{1 + e^{-0.665043(-1.21526 + x)}}$$

{BestFitParameters → {Emax → 29711.8, λ → 0.665043, xshift → 1.21526},

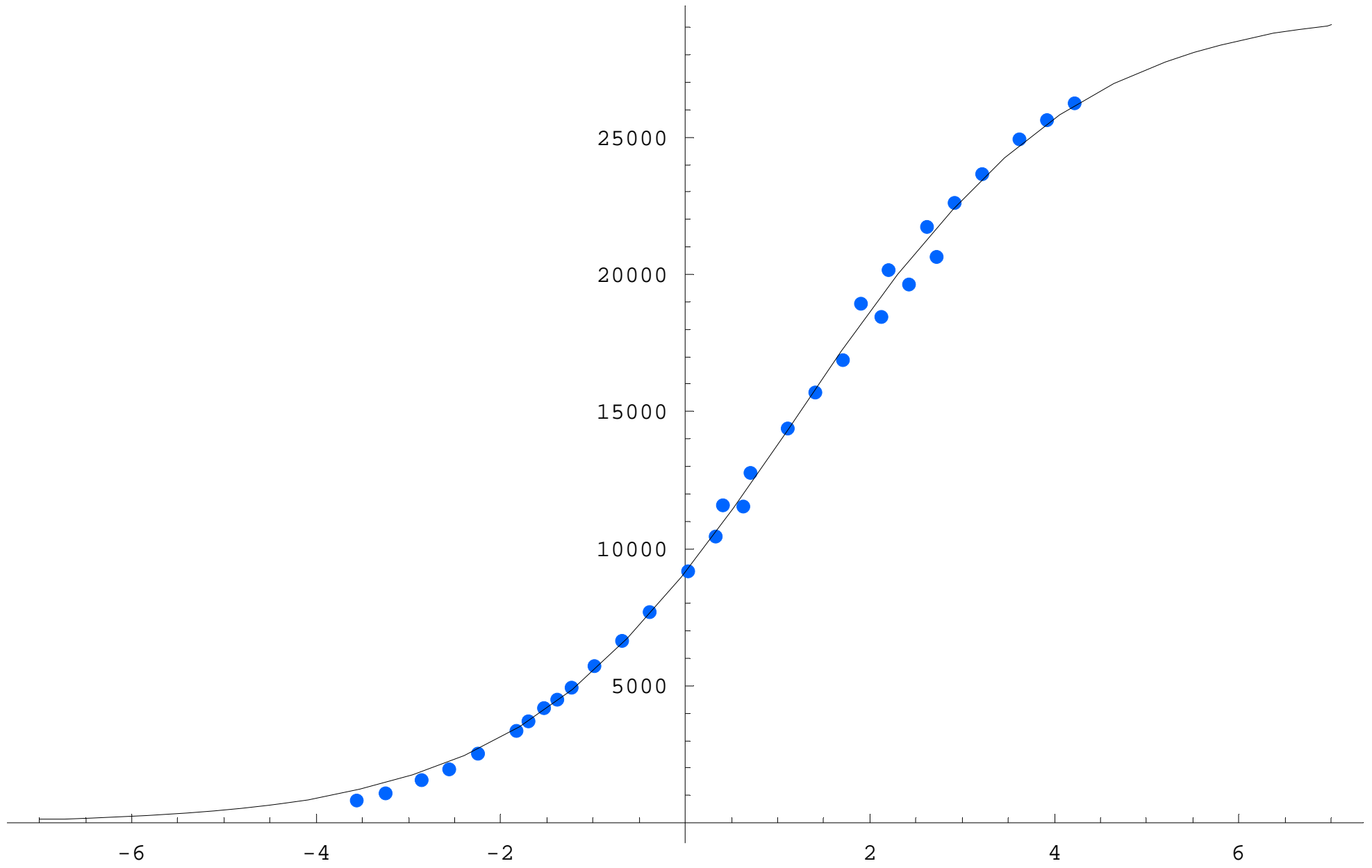
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 29711.8  | 605.613       | {28473.2, 30950.4}   |
|                    | λ      | 0.665043 | 0.0185828     | {0.627037, 0.703049} |
|                    | xshift | 1.21526  | 0.0795081     | {1.05264, 1.37787}   |

EstimatedVariance → 179983.,

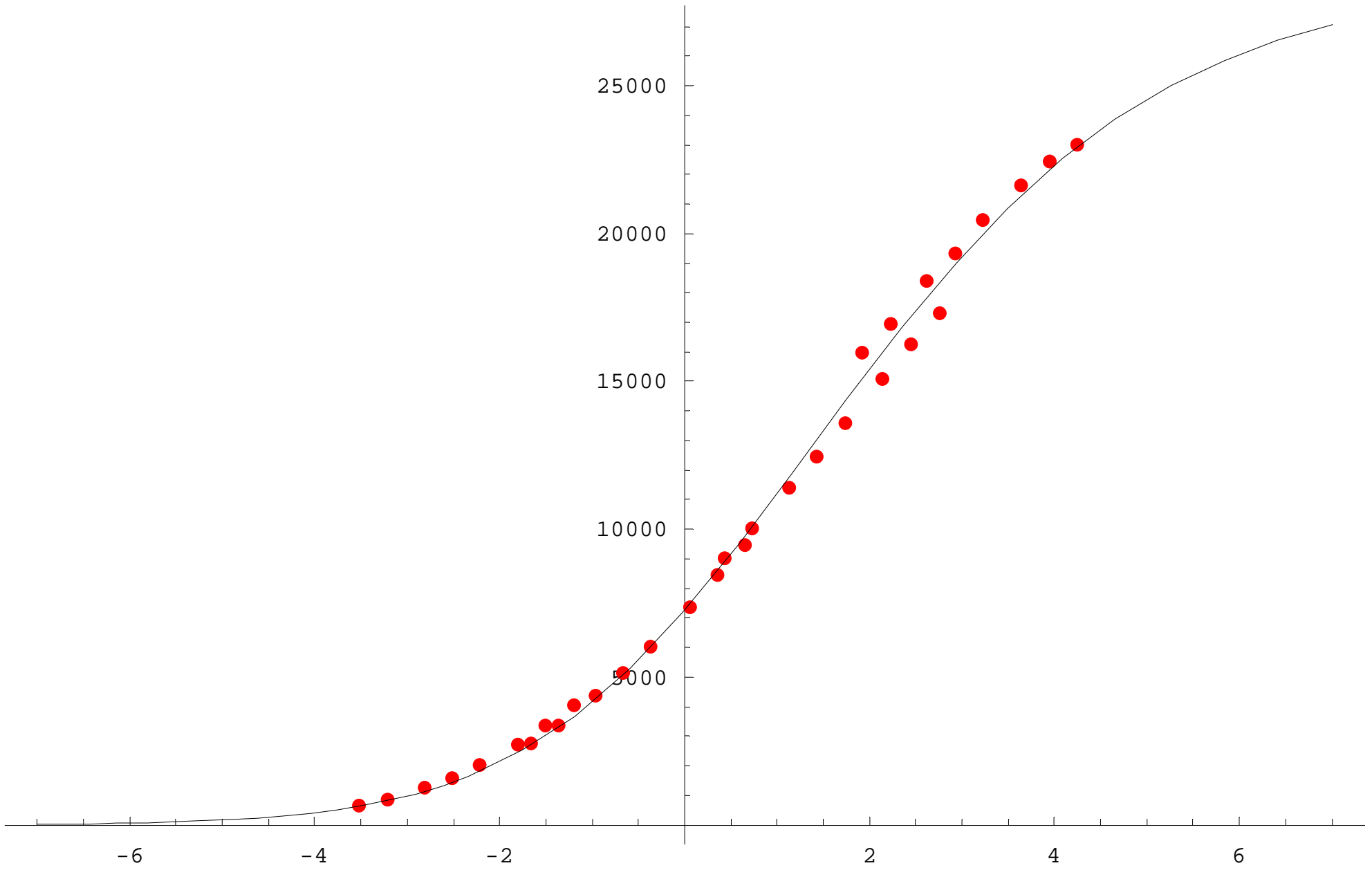
|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $7.02531 \times 10^9$ | $2.34177 \times 10^9$ |
| ANOVA Table → Error | 29 | $5.21951 \times 10^6$ | 179983.               |
| Uncorrected Total   | 32 | $7.03053 \times 10^9$ |                       |
| Corrected Total     | 31 | $2.18159 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.855447 & 0.963661 \\ -0.855447 & 1. & -0.830851 \\ 0.963661 & -0.830851 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0309296 |
|                     | Max Parameter-Effects   | 0.321278  |
|                     | 95. % Confidence Region | 0.583805  |







sample: c29 E, model s

27519.7

$$\frac{1}{1 + e^{-0.637733(-1.65134 + x)}}$$

{BestFitParameters → {Emax → 27519.7, λ → 0.637733, xshift → 1.65134},

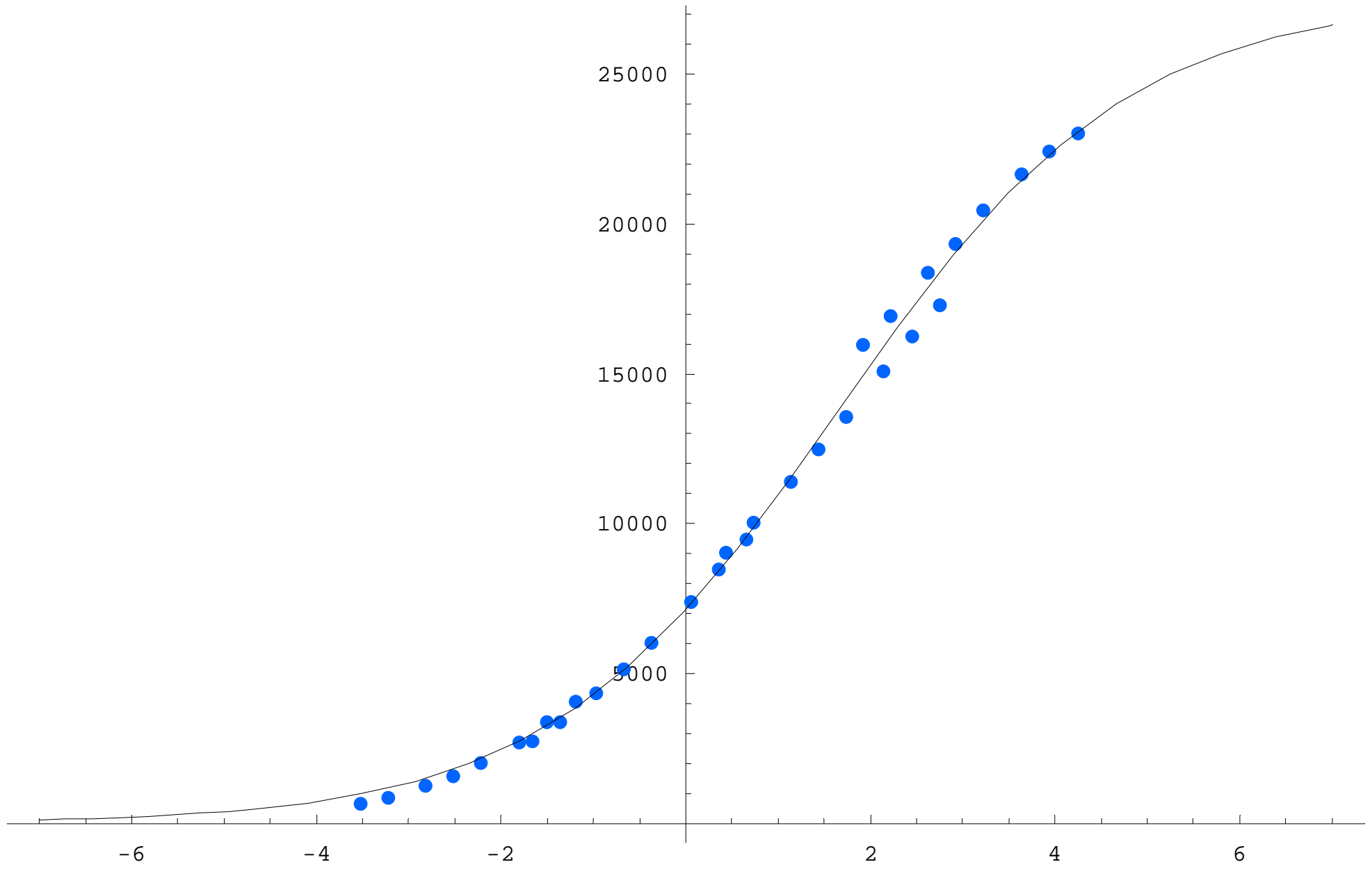
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 27519.7  | 833.948       | {25814.1, 29225.4}    |
|                    | λ      | 0.637733 | 0.0222007     | {0.592327, 0.683138}' |
|                    | xshift | 1.65134  | 0.116519      | {1.41303, 1.88965}    |

EstimatedVariance → 200916.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $4.97875 \times 10^9$ | $1.65958 \times 10^9$ |
| ANOVA Table → Error | 29 | $5.82655 \times 10^6$ | 200916. ,             |
| Uncorrected Total   | 32 | $4.98457 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.64002 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.868614 & 0.976339 \\ -0.868614 & 1. & -0.862112 \\ 0.976339 & -0.862112 & 1. \end{pmatrix}$ ,

|                     | Curvature               |            |
|---------------------|-------------------------|------------|
| FitCurvatureTable → | Max Intrinsic           | 0.0352668  |
|                     | Max Parameter-Effects   | 0.454327 } |
|                     | 95. % Confidence Region | 0.583805   |



sample: c29v E, model r

28444.7

$$(1 + e^{-0.5 x})^{1.91193}$$

{BestFitParameters → {Emax → 28444.7, h → 1.91193},

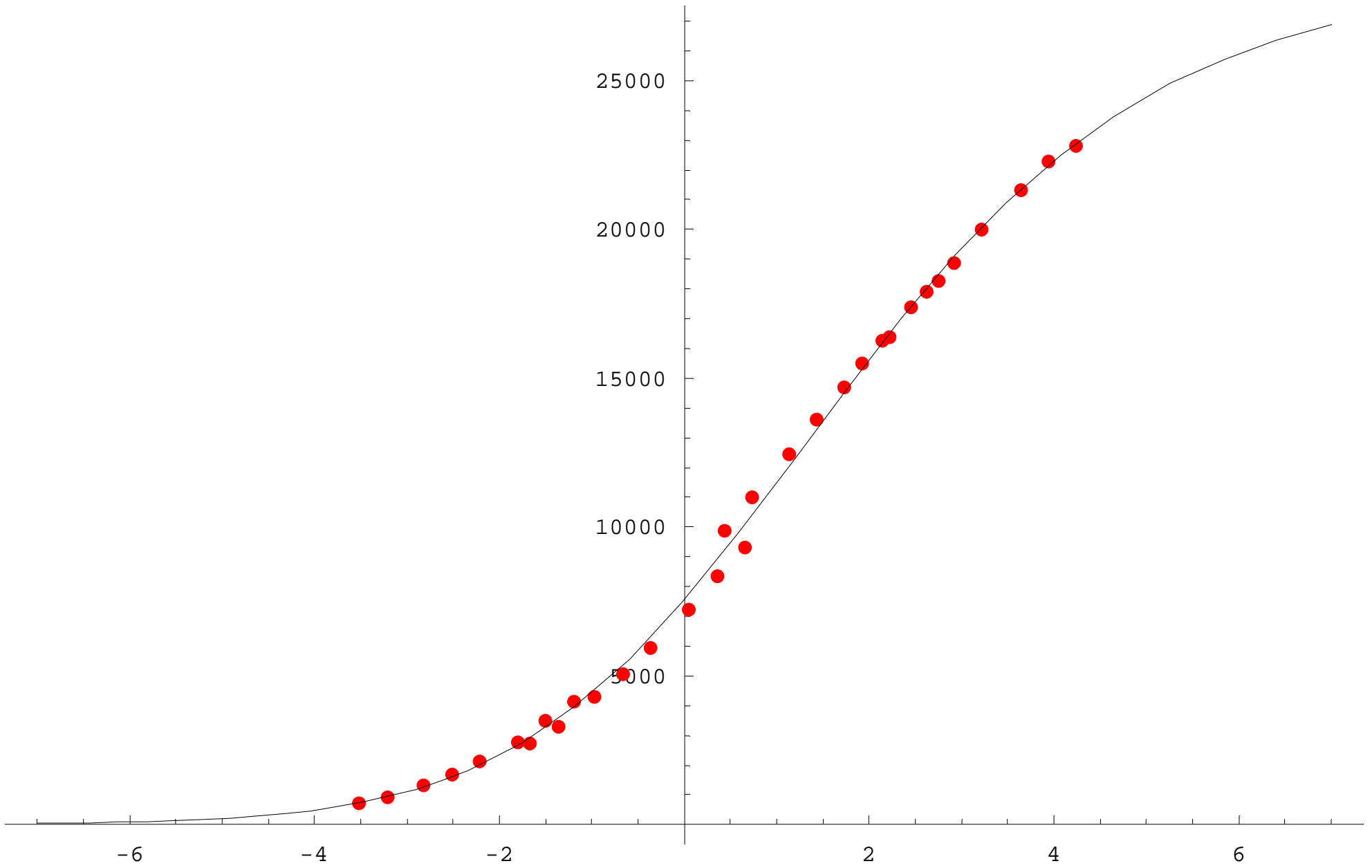
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 28444.7  | 226.745       | {27981.7, 28907.8}, |
| h                       | 1.91193  | 0.0239328     | {1.86305, 1.96081}  |

EstimatedVariance → 98334.4,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $5.09045 \times 10^9$ | $2.54523 \times 10^9$ |
| ANOVATable → Error | 30 | $2.95003 \times 10^6$ | 98334.4 ,             |
| Uncorrected Total  | 32 | $5.0934 \times 10^9$  |                       |
| Corrected Total    | 31 | $1.64141 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.834265 \\ 0.834265 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0136402 |
| Max Parameter-Effects             | 0.0178196 |
| 95. % Confidence Region           | 0.549166  |





sample: c29v E, model s

25637.1

$$\frac{1}{1 + e^{-0.682976(-1.31848 + x)}}$$

{BestFitParameters → {Emax → 25637.1, λ → 0.682976, xshift → 1.31848},

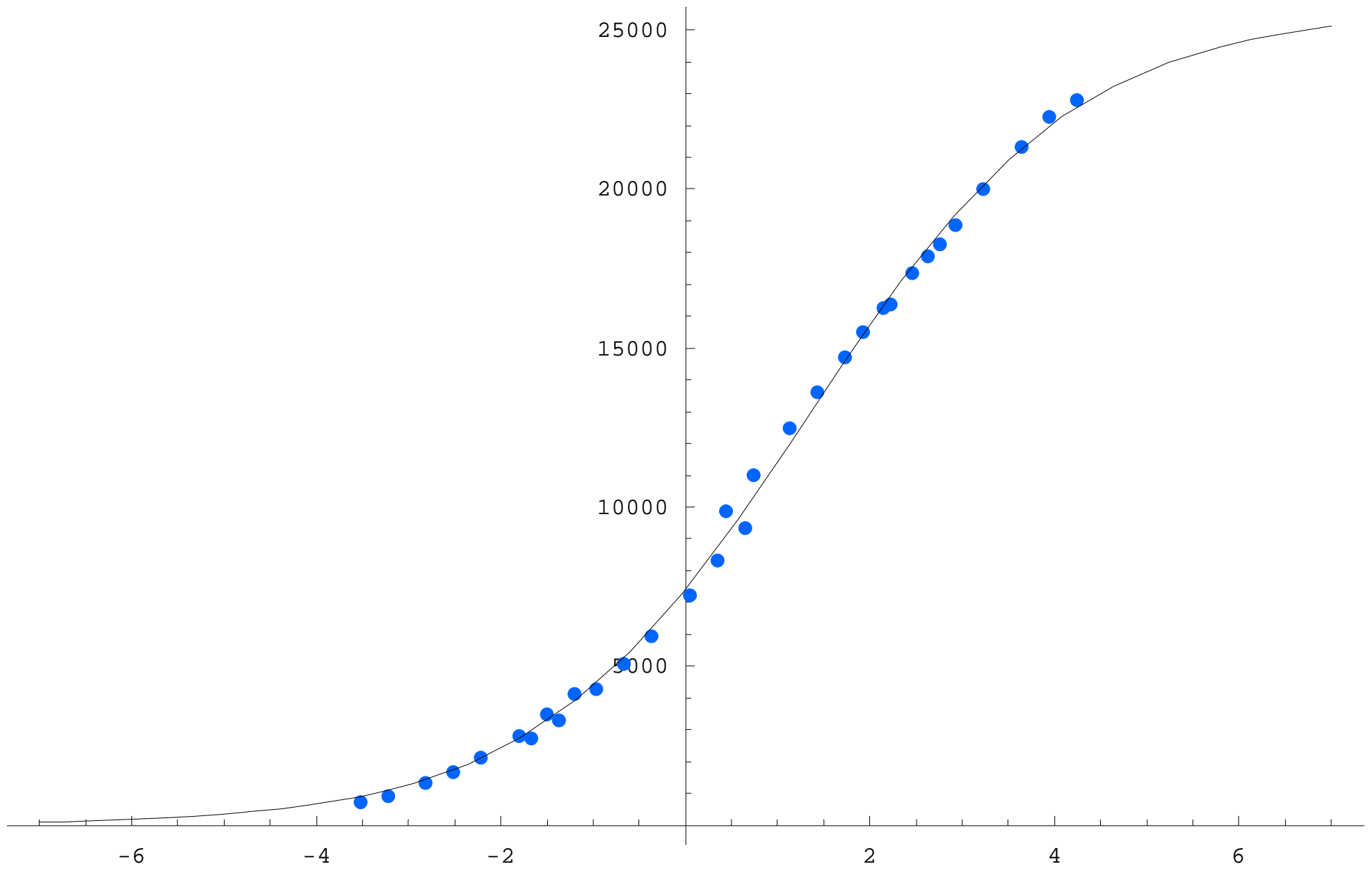
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 25637.1  | 476.171       | {24663.2, 26611.}     |
|                    | λ      | 0.682976 | 0.0172523     | {0.647692, 0.718261}' |
|                    | xshift | 1.31848  | 0.0704916     | {1.17431, 1.46265}    |

EstimatedVariance → 110040.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 3  | $5.09021 \times 10^9$ | $1.69674 \times 10^9$ |
| ANOVATable → Error | 29 | $3.19115 \times 10^6$ | 110040. ,             |
| Uncorrected Total  | 32 | $5.0934 \times 10^9$  |                       |
| Corrected Total    | 31 | $1.64141 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.852048 & 0.963241 \\ -0.852048 & 1. & -0.827791 \\ 0.963241 & -0.827791 & 1. \end{pmatrix}$ ,

|                     | Curvature               |            |
|---------------------|-------------------------|------------|
| FitCurvatureTable → | Max Intrinsic           | 0.0278105  |
|                     | Max Parameter-Effects   | 0.287341 } |
|                     | 95. % Confidence Region | 0.583805   |



sample: c30 E, model r

32360.7

$$(1 + e^{-0.5 x})^{1.94355}$$

{BestFitParameters → {Emax → 32360.7, h → 1.94355},

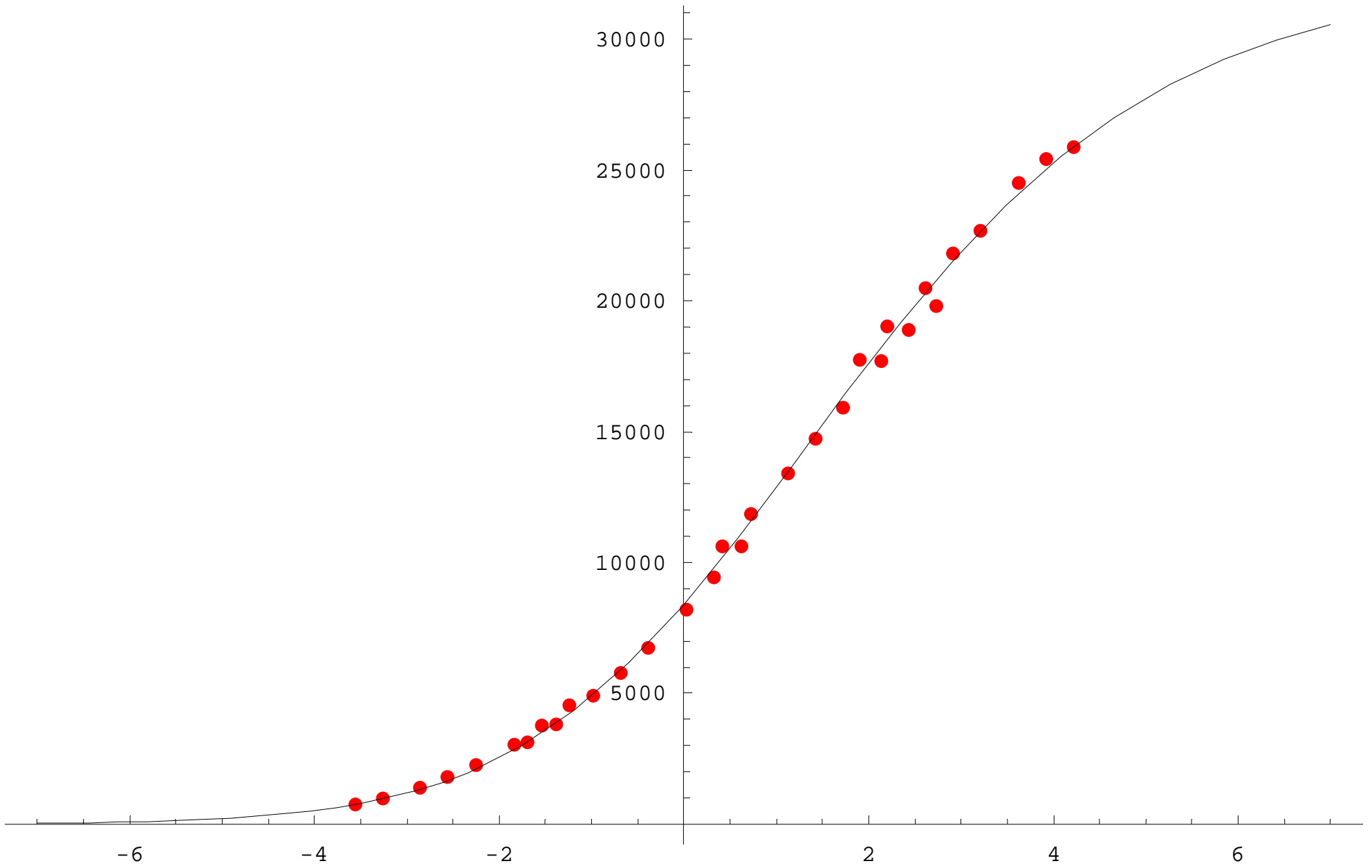
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 32360.7  | 269.384       | {31810.5, 32910.9}, |
| h                       | 1.94355  | 0.0251753     | {1.89213, 1.99496}  |

EstimatedVariance → 133396.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $6.42477 \times 10^9$ | $3.21238 \times 10^9$ |
| ANOVATable → Error | 30 | $4.00187 \times 10^6$ | 133396. ,             |
| Uncorrected Total  | 32 | $6.42877 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.1035 \times 10^9$  |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.836885 \\ 0.836885 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0143043 |
| Max Parameter-Effects             | 0.0185944 |
| 95. % Confidence Region           | 0.549166  |



sample: c30 E, model s

30214.1

$$\frac{1}{1 + e^{-0.654635(-1.49607 + x)}}$$

{BestFitParameters → {Emax → 30214.1, λ → 0.654635, xshift → 1.49607},

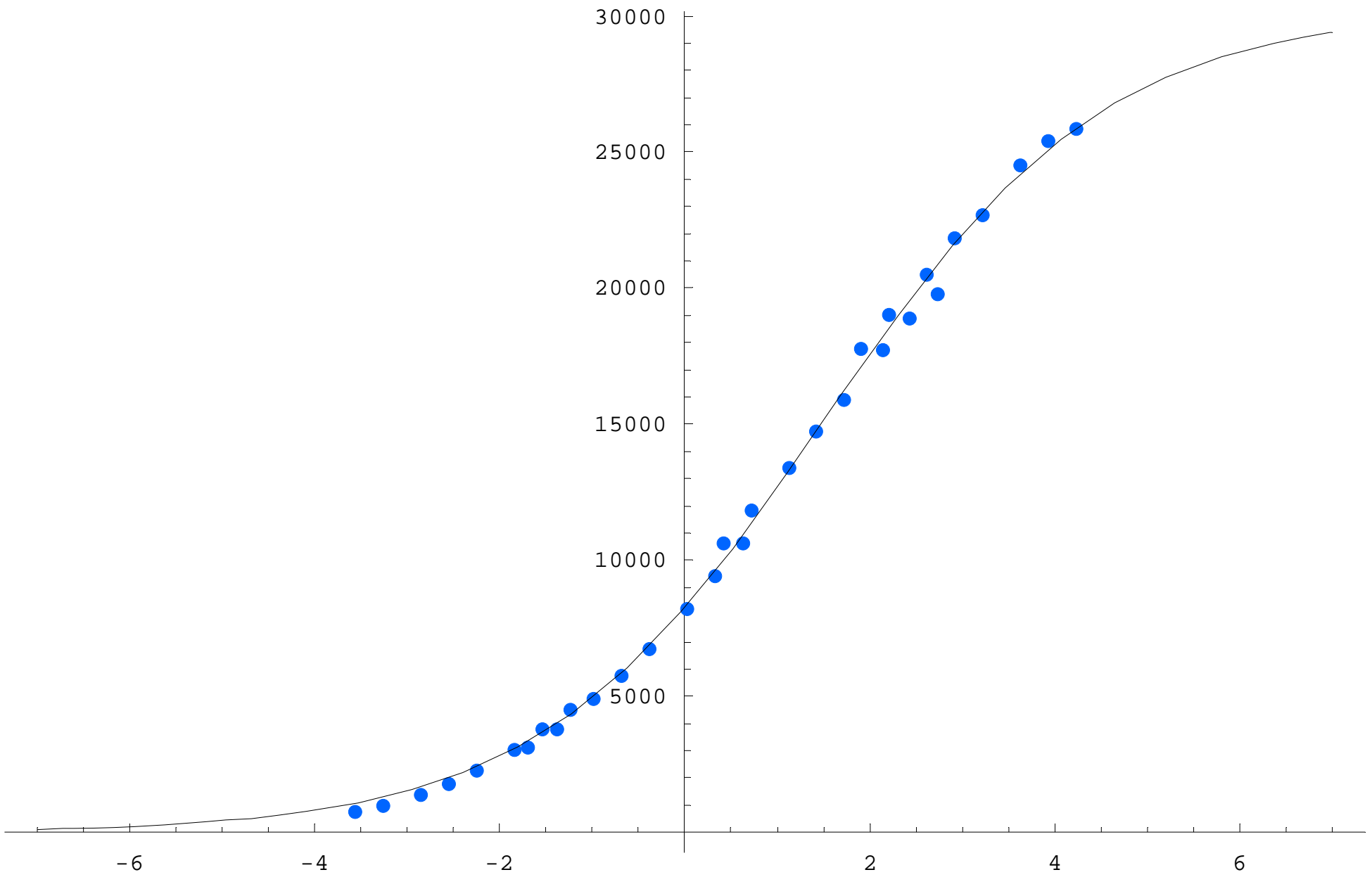
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 30214.1  | 643.675       | {28897.6, 31530.6}   |
|                    | λ      | 0.654635 | 0.0171393     | {0.619581, 0.689688} |
|                    | xshift | 1.49607  | 0.0815601     | {1.32926, 1.66288}   |

EstimatedVariance → 147460.,

|                     | DF | SumOfSq               | MeanSq               |
|---------------------|----|-----------------------|----------------------|
| Model               | 3  | $6.42449 \times 10^9$ | $2.1415 \times 10^9$ |
| ANOVA Table → Error | 29 | $4.27635 \times 10^6$ | 147460. ,            |
| Uncorrected Total   | 32 | $6.42877 \times 10^9$ |                      |
| Corrected Total     | 31 | $2.1035 \times 10^9$  |                      |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.86258 & 0.971845 \\ -0.86258 & 1. & -0.849383 \\ 0.971845 & -0.849383 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0273622 |
|                     | Max Parameter-Effects   | 0.323636  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c30v E, model r

31409.3

$$(1 + e^{-0.5 x})^{1.91774}$$

{BestFitParameters → {Emax → 31409.3, h → 1.91774}},

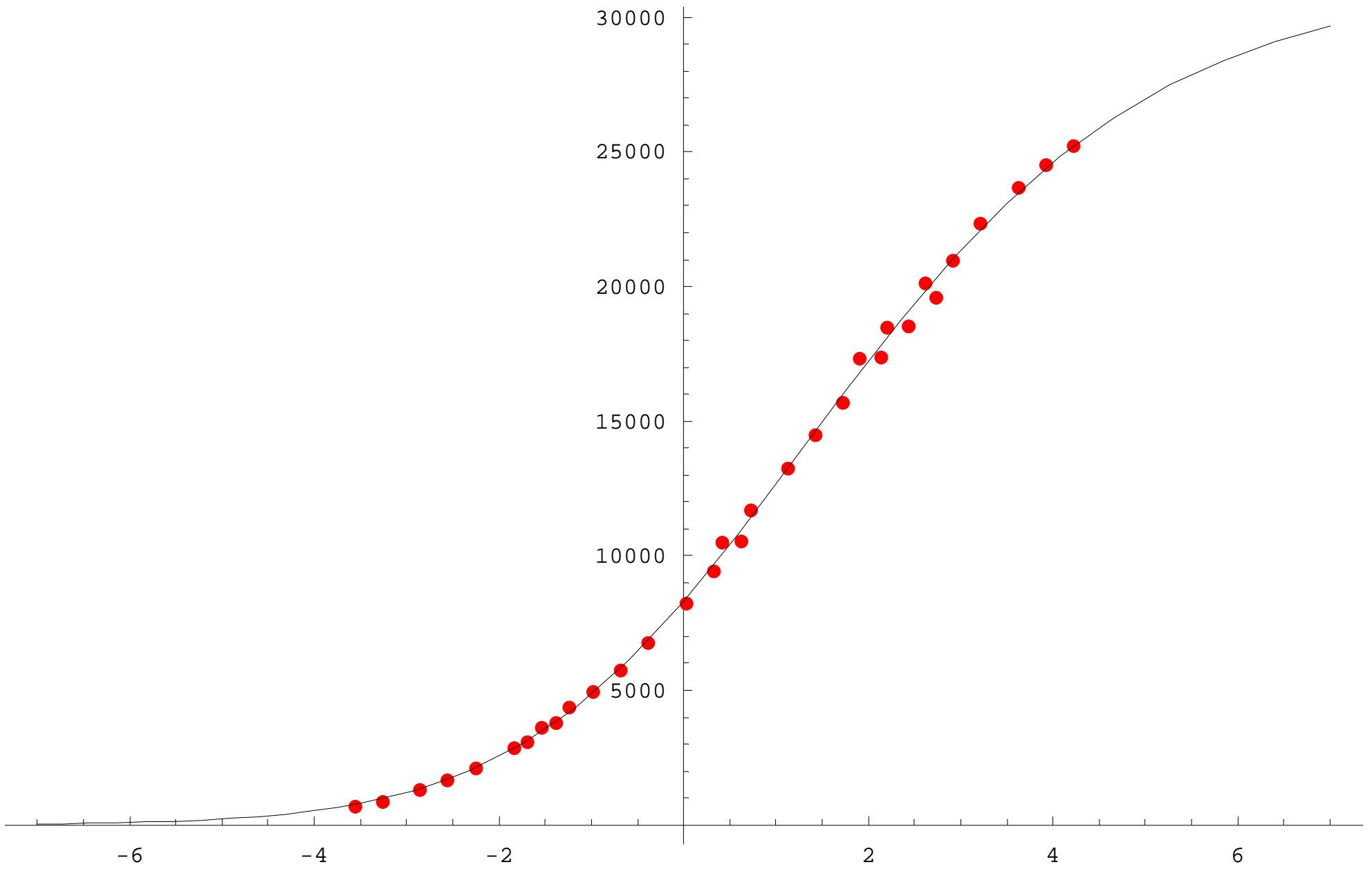
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 31409.3  | 207.326       | {30985.9, 31832.8}, |
| h                       | 1.91774  | 0.0198063     | {1.87729, 1.95819}  |

EstimatedVariance → 80788.4,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $6.13991 \times 10^9$ | $3.06995 \times 10^9$ |
| ANOVATable → Error | 30 | $2.42365 \times 10^6$ | 80788.4 ,             |
| Uncorrected Total  | 32 | $6.14233 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.00117 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.835468 \\ 0.835468 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0113229 |
| Max Parameter-Effects             | 0.0147694 |
| 95. % Confidence Region           | 0.549166  |





sample: c30v E, model s

28827.8

$$\frac{1}{1 + e^{-0.666722(-1.39627 + x)}}$$

{BestFitParameters → {Emax → 28827.8, λ → 0.666722, xshift → 1.39627},

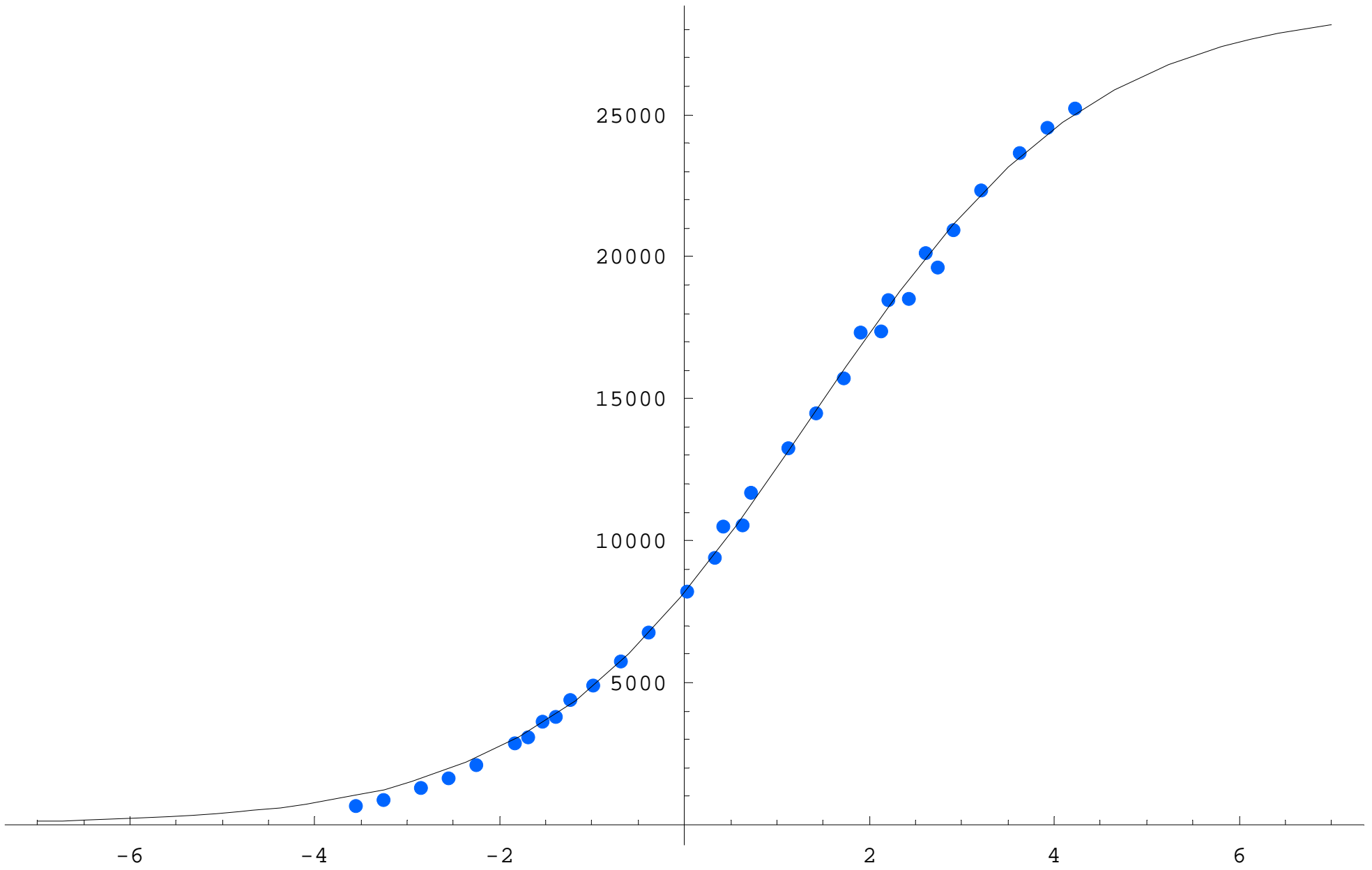
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 28827.8  | 528.124       | {27747.7, 29908.}     |
|                    | λ      | 0.666722 | 0.0157632     | {0.634483, 0.698961}' |
|                    | xshift | 1.39627  | 0.069981      | {1.25314, 1.5394}     |

EstimatedVariance → 115275.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $6.13899 \times 10^9$ | $2.04633 \times 10^9$ |
| ANOVA Table → Error | 29 | $3.34297 \times 10^6$ | 115275. ,             |
| Uncorrected Total   | 32 | $6.14233 \times 10^9$ |                       |
| Corrected Total     | 31 | $2.00117 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.857979 & 0.968049 \\ -0.857979 & 1. & -0.839573 \\ 0.968049 & -0.839573 & 1. \end{pmatrix}$ ,

|                     | Curvature               |            |
|---------------------|-------------------------|------------|
| FitCurvatureTable → | Max Intrinsic           | 0.0253183  |
|                     | Max Parameter-Effects   | 0.281136 } |
|                     | 95. % Confidence Region | 0.583805   |



sample: c33 E, model r

31107.6

$$\frac{31107.6}{(1 + e^{-0.5 x})^{1.83575}}$$

{BestFitParameters → {Emax → 31107.6, h → 1.83575},

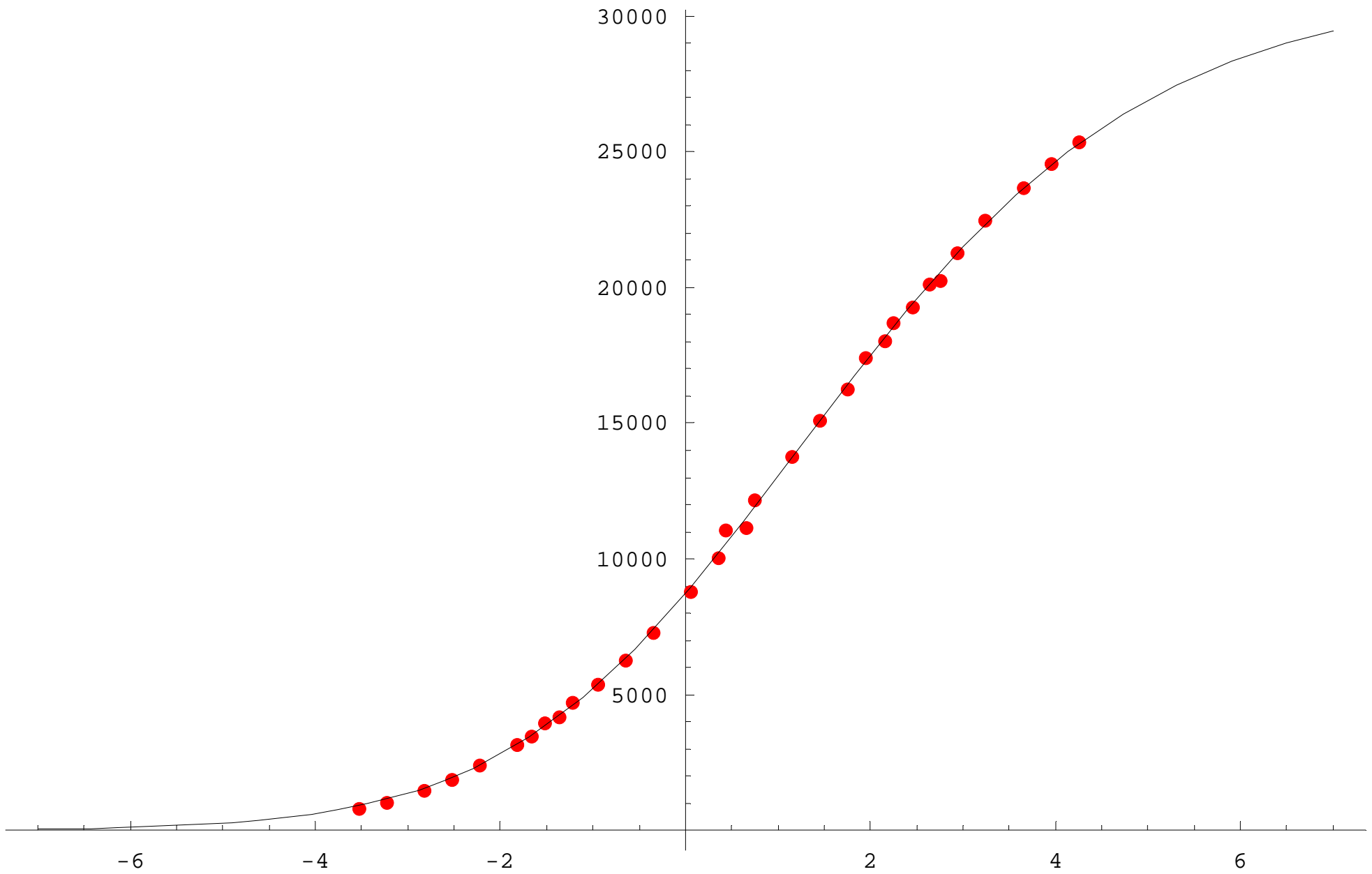
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 31107.6  | 120.008       | {30862.5, 31352.7}, |
| h                       | 1.83575  | 0.011358      | {1.81255, 1.85894}  |

EstimatedVariance → 29669.9,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $6.39416 \times 10^9$ | $3.19708 \times 10^9$ |
| ANOVATable → Error | 30 | 890098.               | 29669.9               |
| Uncorrected Total  | 32 | $6.39505 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.9891 \times 10^9$  |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.829593 \\ 0.829593 & 1. \end{pmatrix}$ ,

|                                   | Curvature  |
|-----------------------------------|------------|
| FitCurvatureTable → Max Intrinsic | 0.00659475 |
| Max Parameter-Effects             | 0.0087142  |
| 95. % Confidence Region           | 0.549166   |



sample: c33 E, model s

28610.6

$$\frac{1}{1 + e^{-0.658907(-1.29221 + x)}}$$

{BestFitParameters → {Emax → 28610.6, λ → 0.658907, xshift → 1.29221},

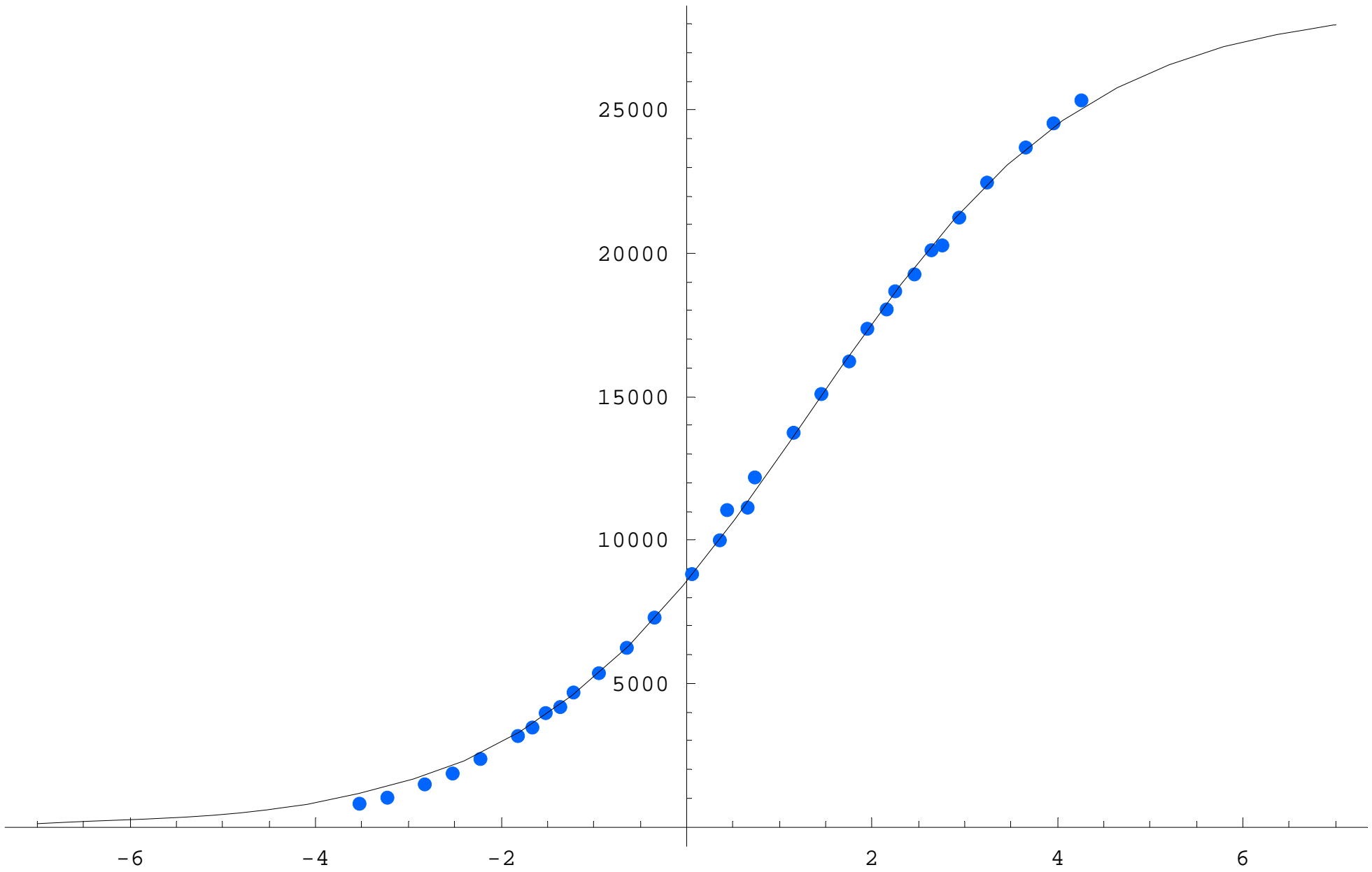
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 28610.6  | 362.422       | {27869.3, 29351.8}   |
|                    | λ      | 0.658907 | 0.0111778     | {0.636046, 0.681768} |
|                    | xshift | 1.29221  | 0.049476      | {1.19102, 1.3934}    |

EstimatedVariance → 60055.8,

|                     | DF | SumOfSq               | MeanSq               |
|---------------------|----|-----------------------|----------------------|
| Model               | 3  | $6.39331 \times 10^9$ | $2.1311 \times 10^9$ |
| ANOVA Table → Error | 29 | $1.74162 \times 10^6$ | 60055.8              |
| Uncorrected Total   | 32 | $6.39505 \times 10^9$ |                      |
| Corrected Total     | 31 | $1.9891 \times 10^9$  |                      |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.857931 & 0.965845 \\ -0.857931 & 1. & -0.835498 \\ 0.965845 & -0.835498 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0185802 |
|                     | Max Parameter-Effects   | 0.198815  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c33v E, model r

32836.7

$$(1 + e^{-0.5 x})^{1.9545}$$

{BestFitParameters → {Emax → 32836.7, h → 1.9545},

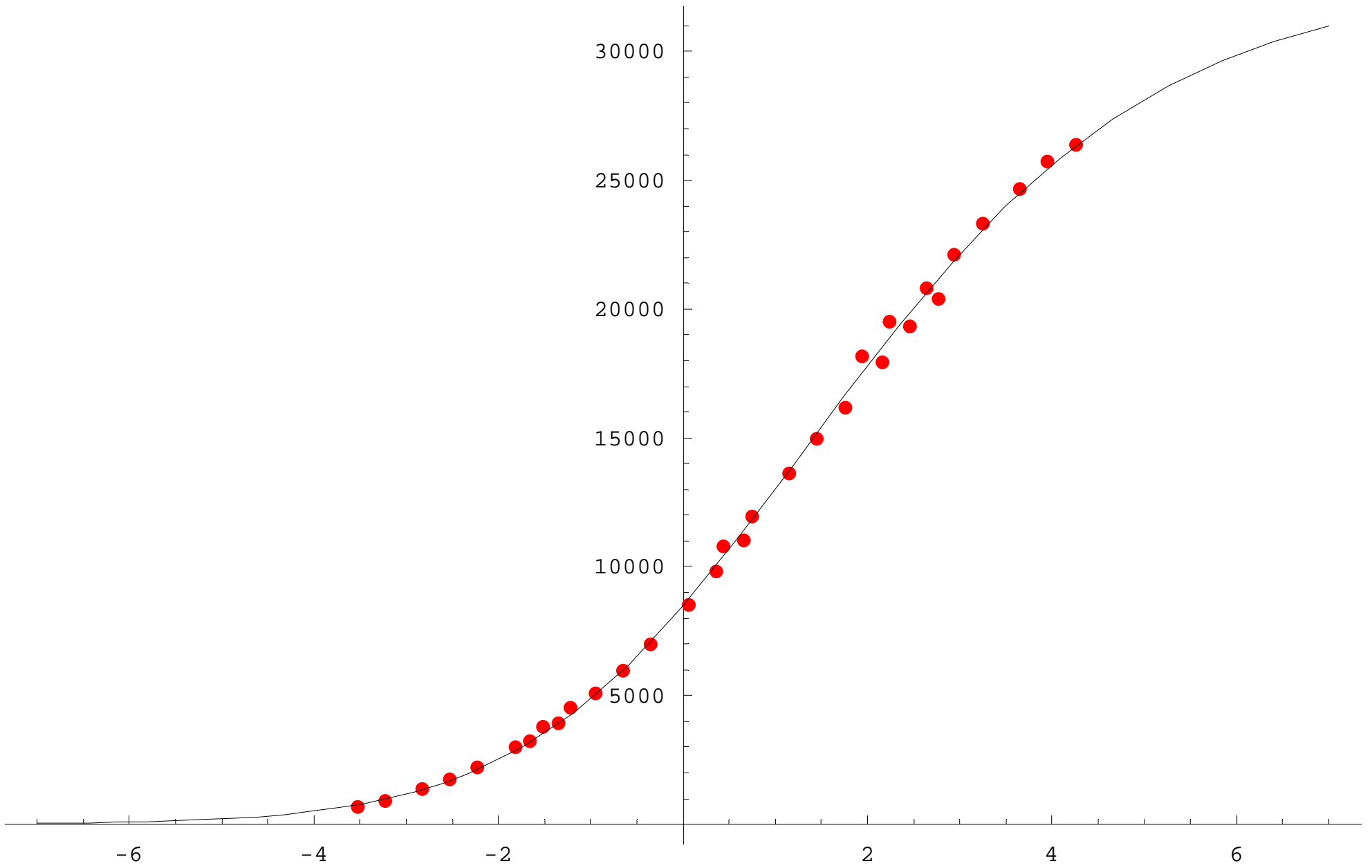
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 32836.7  | 237.296       | {32352.1, 33321.3}, |
| h                       | 1.9545   | 0.0220787     | {1.90941, 1.99959}  |

EstimatedVariance → 104772.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $6.67008 \times 10^9$ | $3.33504 \times 10^9$ |
| ANOVATable → Error | 30 | $3.14315 \times 10^6$ | 104772. ,             |
| Uncorrected Total  | 32 | $6.67322 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.18268 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.836192 \\ 0.836192 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0124705 |
| Max Parameter-Effects             | 0.0161872 |
| 95. % Confidence Region           | 0.549166  |





sample: c33v E, model s

30476.2

$$\frac{1}{1 + e^{-0.66028(-1.48716 + x)}}$$

{BestFitParameters → {Emax → 30476.2, λ → 0.66028, xshift → 1.48716},

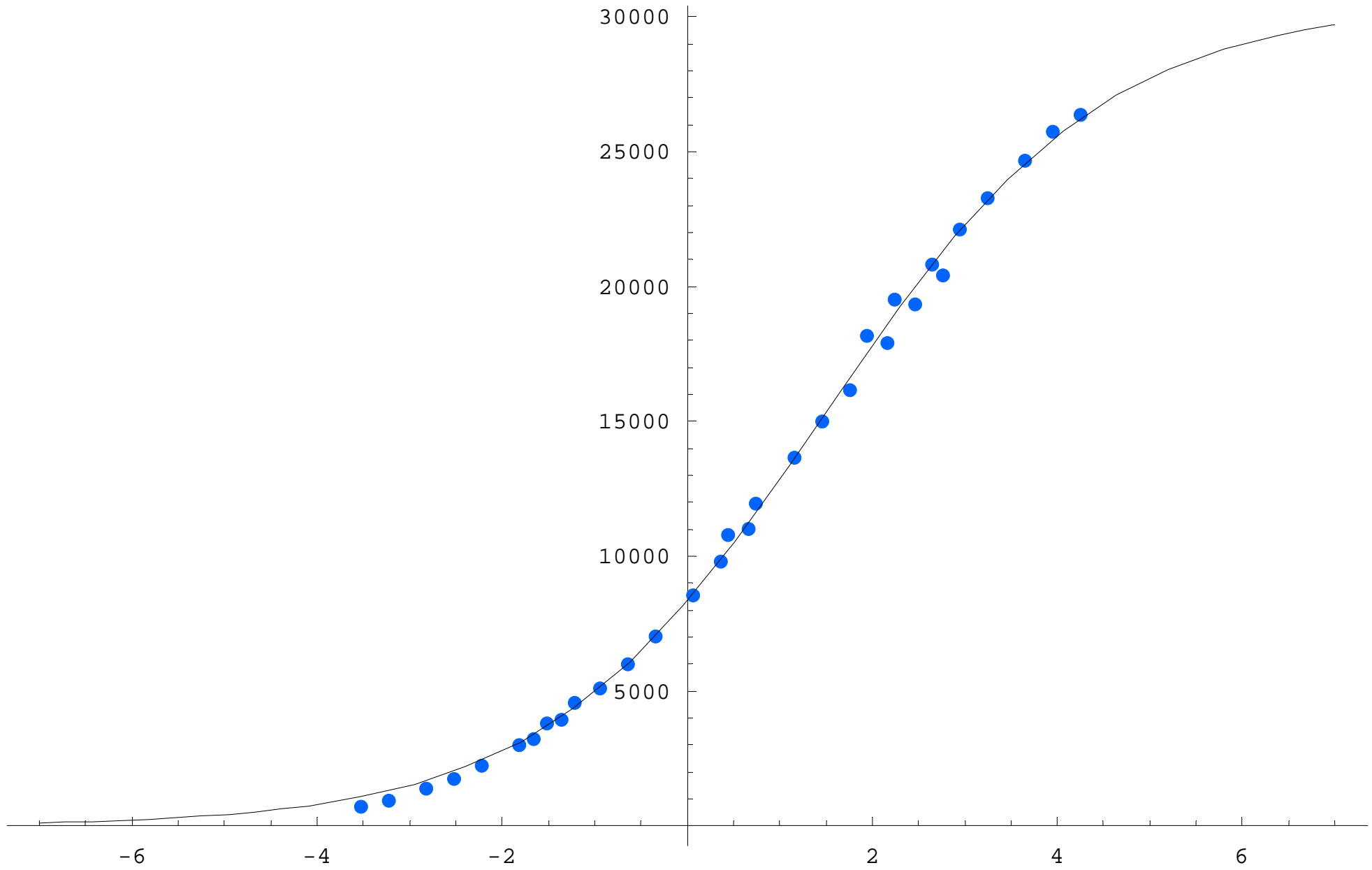
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 30476.2  | 582.305       | {29285.2, 31667.1}    |
|                    | λ      | 0.66028  | 0.0158277     | {0.627909, 0.692651}' |
|                    | xshift | 1.48716  | 0.0729968     | {1.33786, 1.63645}    |

EstimatedVariance → 128332.,

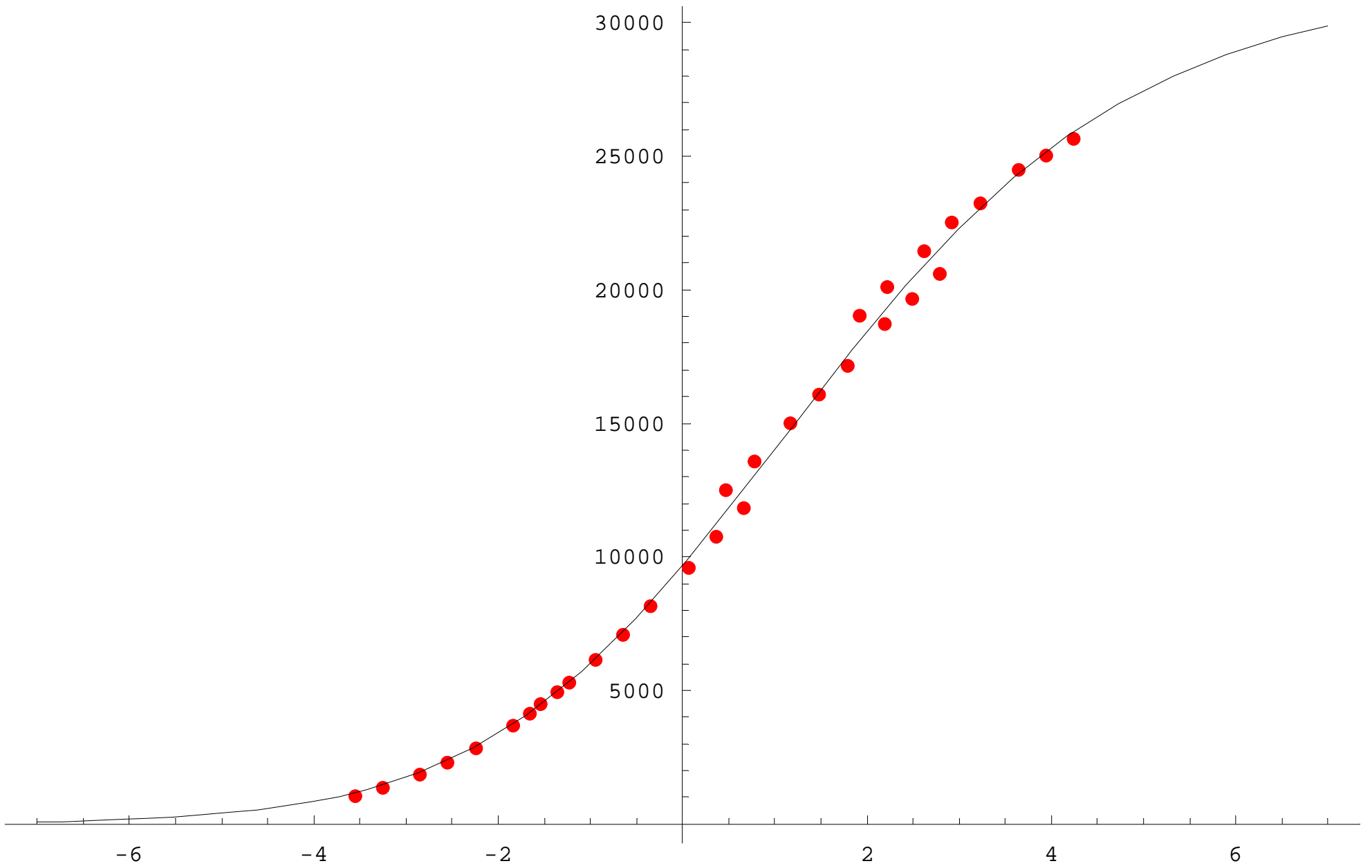
|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $6.6695 \times 10^9$  | $2.22317 \times 10^9$ |
| ANOVA Table → Error | 29 | $3.72164 \times 10^6$ | 128332. ,             |
| Uncorrected Total   | 32 | $6.67322 \times 10^9$ |                       |
| Corrected Total     | 31 | $2.18268 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.860724 & 0.970339 \\ -0.860724 & 1. & -0.845335 \\ 0.970339 & -0.845335 & 1. \end{pmatrix}$ ,

|                     | Curvature               |            |
|---------------------|-------------------------|------------|
| FitCurvatureTable → | Max Intrinsic           | 0.0253004  |
|                     | Max Parameter-Effects   | 0.291566 } |
|                     | 95. % Confidence Region | 0.583805   |







sample: c13 E, model s

28845.2

$$\frac{1}{1 + e^{-0.650346(-1.08317 + x)}}$$

{BestFitParameters → {Emax → 28845.2, λ → 0.650346, xshift → 1.08317},

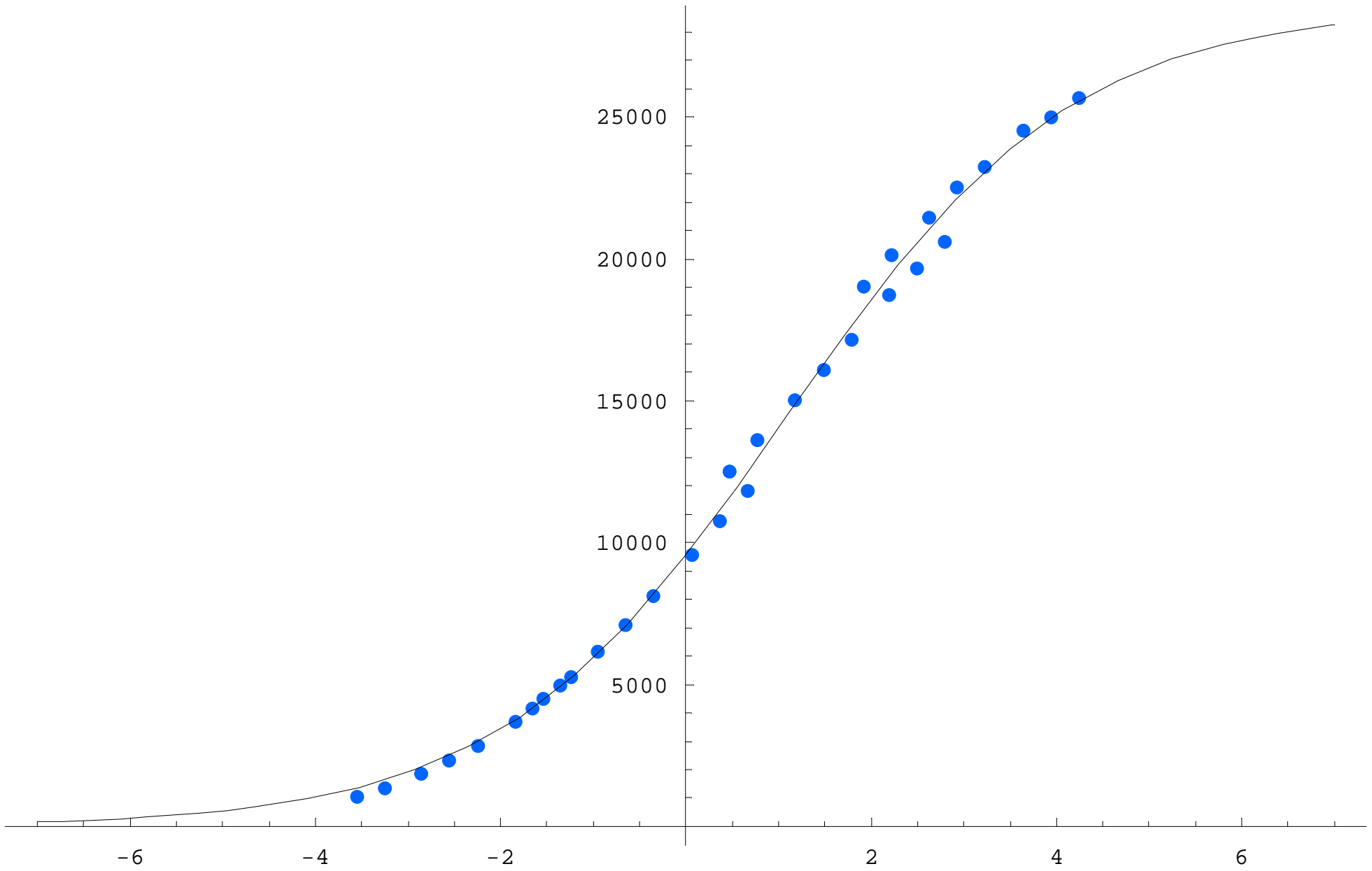
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 28845.2  | 634.28        | {27547.9, 30142.4}   |
|                    | λ      | 0.650346 | 0.0202848     | {0.608859, 0.691833} |
|                    | xshift | 1.08317  | 0.0884383     | {0.902289, 1.26404}  |

EstimatedVariance → 214259.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $7.0682 \times 10^9$  | $2.35607 \times 10^9$ |
| ANOVA Table → Error | 29 | $6.21351 \times 10^6$ | 214259.               |
| Uncorrected Total   | 32 | $7.07442 \times 10^9$ |                       |
| Corrected Total     | 31 | $2.05512 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.857327 & 0.961929 \\ -0.857327 & 1. & -0.827283 \\ 0.961929 & -0.827283 & 1. \end{pmatrix},$

|                     | Curvature               |          |
|---------------------|-------------------------|----------|
| FitCurvatureTable → | Max Intrinsic           | 0.03523  |
|                     | Max Parameter-Effects   | 0.357207 |
|                     | 95. % Confidence Region | 0.583805 |



sample: c13v E, model r

30621.4

$$(1 + e^{-0.5 x})^{1.67572}$$

{BestFitParameters → {Emax → 30621.4, h → 1.67572},

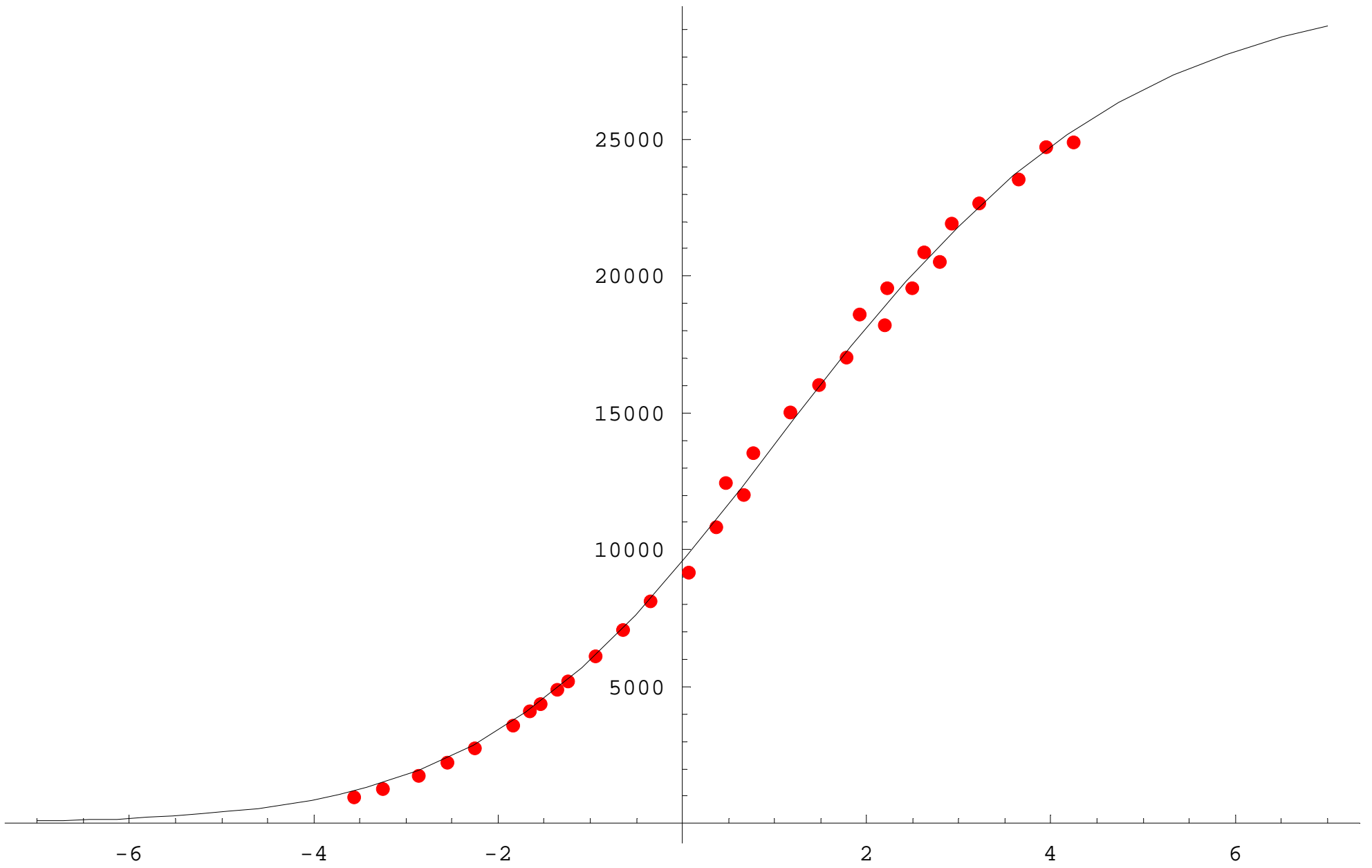
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 30621.4  | 266.304       | {30077.6, 31165.3}, |
| h                       | 1.67572  | 0.0243032     | {1.62609, 1.72535}  |

EstimatedVariance → 167293.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $6.80391 \times 10^9$ | $3.40195 \times 10^9$ |
| ANOVATable → Error | 30 | $5.01878 \times 10^6$ | 167293. ,             |
| Uncorrected Total  | 32 | $6.80892 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.96656 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.821525 \\ 0.821525 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0146805 |
| Max Parameter-Effects             | 0.0199463 |
| 95. % Confidence Region           | 0.549166  |





sample: c13v E, model s

27589.4

$$\frac{1}{1 + e^{-0.666629(-0.971563 + x)}}$$

{BestFitParameters → {Emax → 27589.4, λ → 0.666629, xshift → 0.971563},

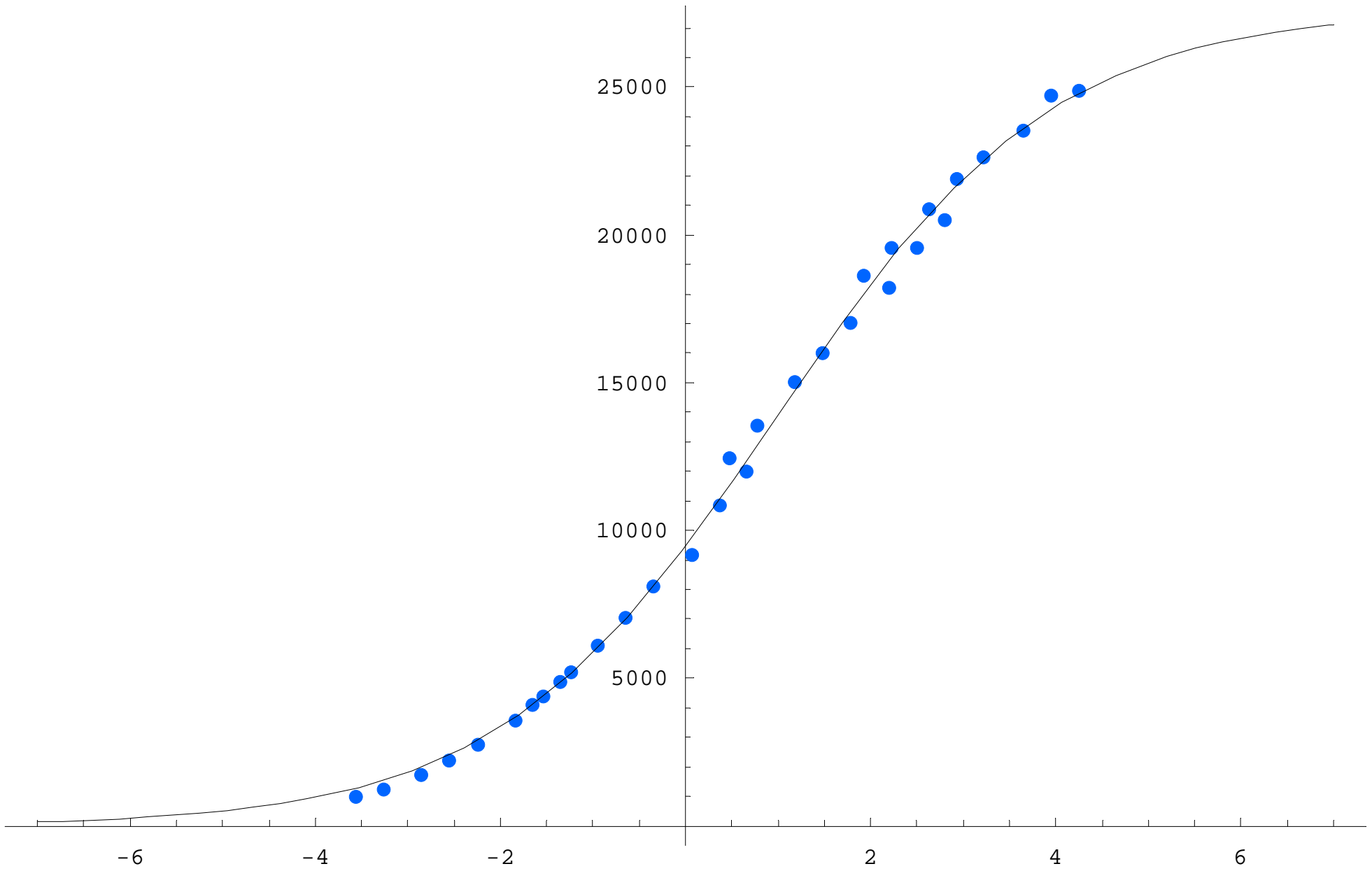
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 27589.4  | 527.602       | {26510.3, 28668.5}   |
|                    | λ      | 0.666629 | 0.0191581     | {0.627446, 0.705812} |
|                    | xshift | 0.971563 | 0.0765881     | {0.814923, 1.1282}   |

EstimatedVariance → 175857.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $6.80382 \times 10^9$ | $2.26794 \times 10^9$ |
| ANOVA Table → Error | 29 | $5.09984 \times 10^6$ | 175857.               |
| Uncorrected Total   | 32 | $6.80892 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.96656 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.851017 & 0.95561 \\ -0.851017 & 1. & -0.813195 \\ 0.95561 & -0.813195 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0333421 |
|                     | Max Parameter-Effects   | 0.314773  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c16 E, model r

34210.

$$(1 + e^{-0.5 x})^{1.79405}$$

{BestFitParameters → {Emax → 34210., h → 1.79405},

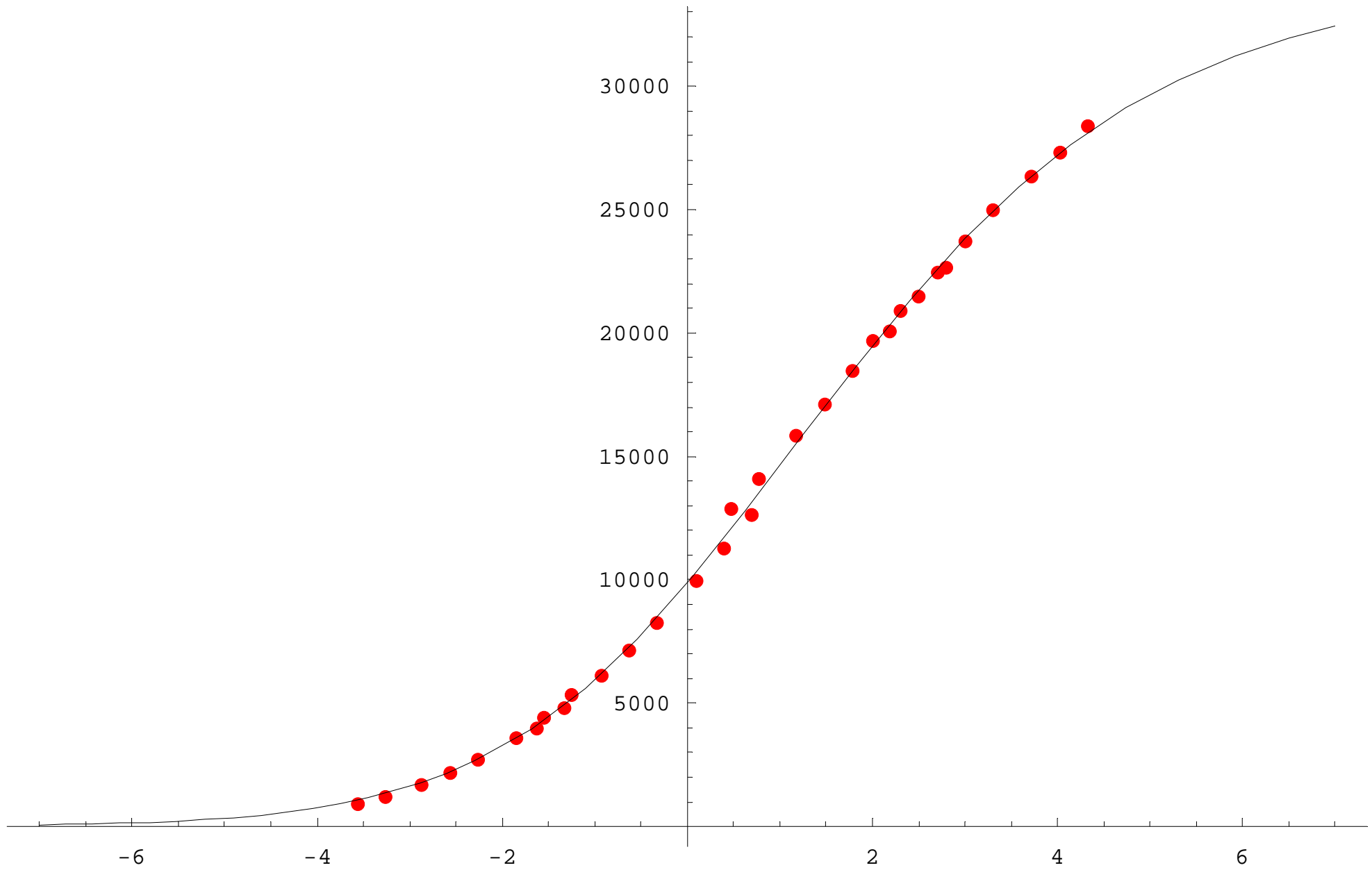
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 34210.   | 182.431       | {33837.4, 34582.6}, |
| h                       | 1.79405  | 0.0156953     | {1.762, 1.82611}    |

EstimatedVariance → 73555.7,

|                    | DF | SumOfSq               | MeanSq               |
|--------------------|----|-----------------------|----------------------|
| Model              | 2  | $8.05439 \times 10^9$ | $4.0272 \times 10^9$ |
| ANOVATable → Error | 30 | $2.20667 \times 10^6$ | 73555.7 ,            |
| Uncorrected Total  | 32 | $8.0566 \times 10^9$  |                      |
| Corrected Total    | 31 | $2.46628 \times 10^9$ |                      |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.823931 \\ 0.823931 & 1. \end{pmatrix}$ ,

|                                   | Curvature   |
|-----------------------------------|-------------|
| FitCurvatureTable → Max Intrinsic | 0.00926034  |
| Max Parameter-Effects             | 0.0122366 } |
| 95. % Confidence Region           | 0.549166    |



sample: c16 E, model s

31501.7

$$\frac{1}{1 + e^{-0.655003(-1.23667 + x)}}$$

{BestFitParameters → {Emax → 31501.7, λ → 0.655003, xshift → 1.23667},

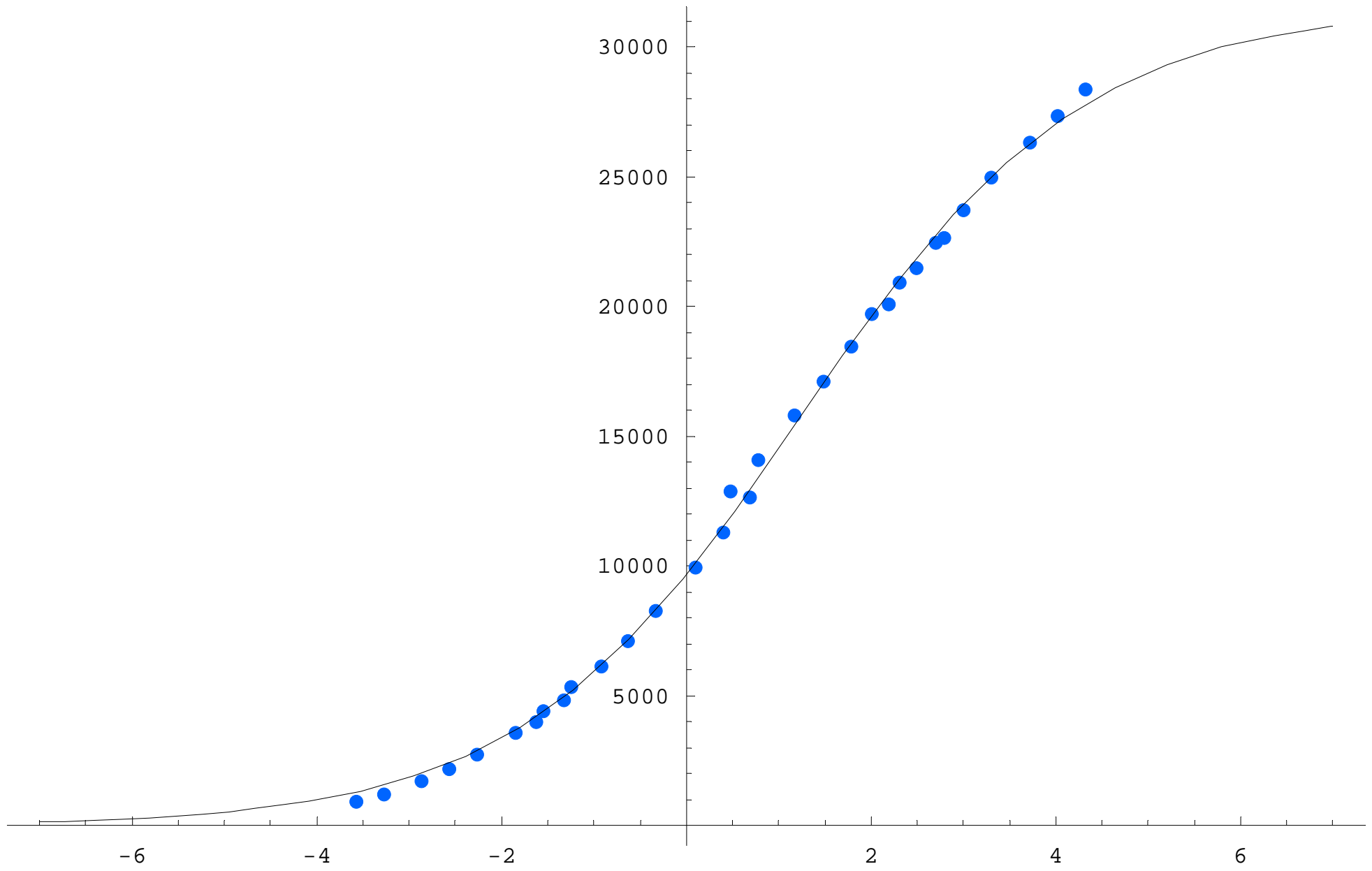
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 31501.7  | 483.891       | {30512., 32491.4}     |
|                    | λ      | 0.655003 | 0.0139752     | {0.626421, 0.683586}' |
|                    | xshift | 1.23667  | 0.0609967     | {1.11192, 1.36143}    |

EstimatedVariance → 118643.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 3  | $8.05316 \times 10^9$ | $2.68439 \times 10^9$ |
| ANOVATable → Error | 29 | $3.44064 \times 10^6$ | 118643. ,             |
| Uncorrected Total  | 32 | $8.0566 \times 10^9$  |                       |
| Corrected Total    | 31 | $2.46628 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.855116 & 0.962815 \\ -0.855116 & 1. & -0.828388 \\ 0.962815 & -0.828388 & 1. \end{pmatrix}$ ,

|                     | Curvature               |            |
|---------------------|-------------------------|------------|
| FitCurvatureTable → | Max Intrinsic           | 0.0237228  |
|                     | Max Parameter-Effects   | 0.243786 } |
|                     | 95. % Confidence Region | 0.583805   |



sample: c16v E, model r

34917.2

$$(1 + e^{-0.5 x})^{1.9191}$$

{BestFitParameters → {Emax → 34917.2, h → 1.9191},

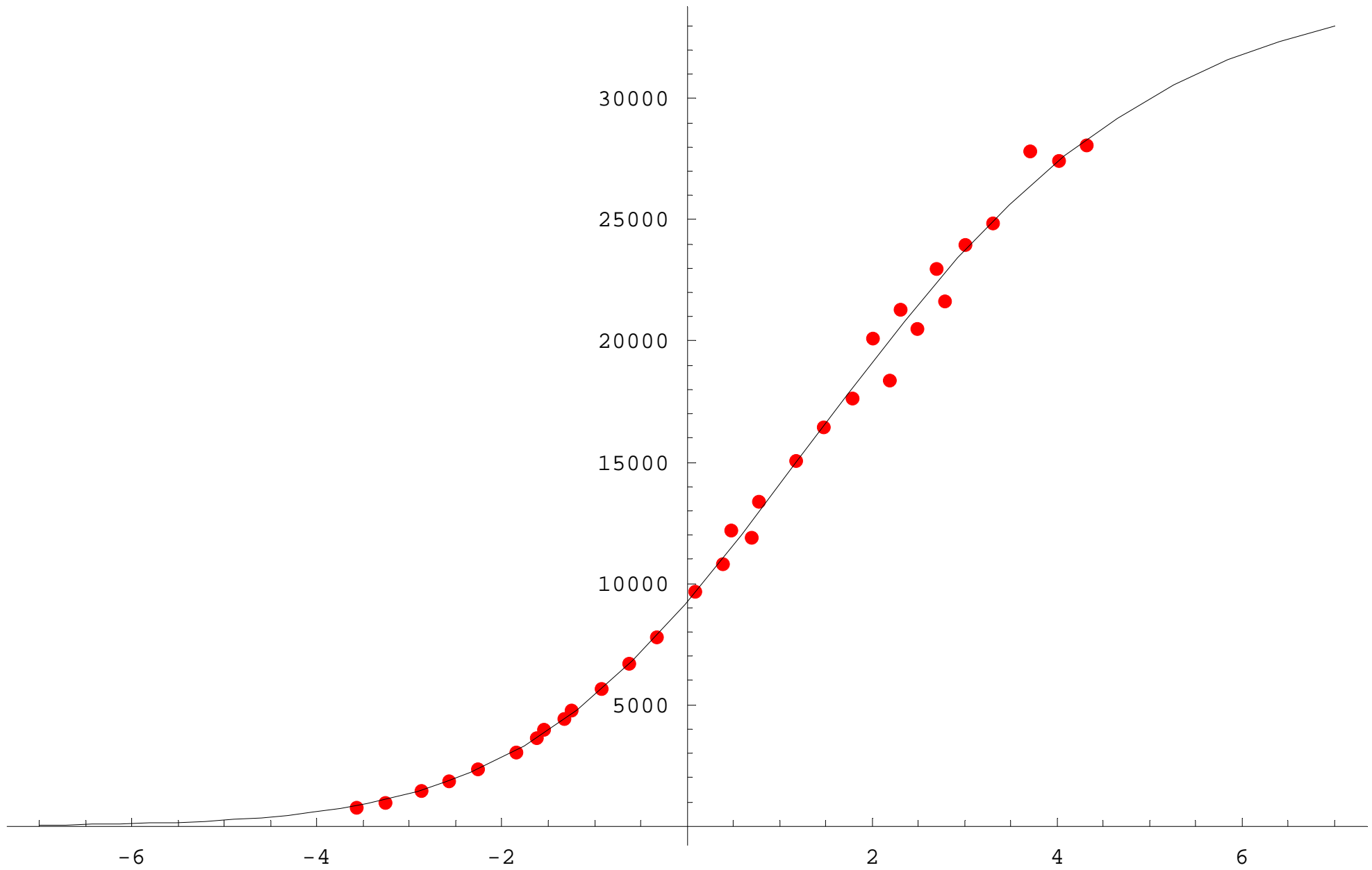
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 34917.2  | 421.011       | {34057.3, 35777.} , |
| h                       | 1.9191   | 0.0369467     | {1.84364, 1.99455}  |

EstimatedVariance → 352305.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $7.83219 \times 10^9$ | $3.91609 \times 10^9$ |
| ANOVATable → Error | 30 | $1.05692 \times 10^7$ | 352305. ,             |
| Uncorrected Total  | 32 | $7.84276 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.54752 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.831021 \\ 0.831021 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.021156  |
| Max Parameter-Effects             | 0.0273723 |
| 95. % Confidence Region           | 0.549166  |





sample: c16v E, model s

32479.4

$$\frac{1}{1 + e^{-0.655623(-1.44934 + x)}}$$

{BestFitParameters → {Emax → 32479.4, λ → 0.655623, xshift → 1.44934},

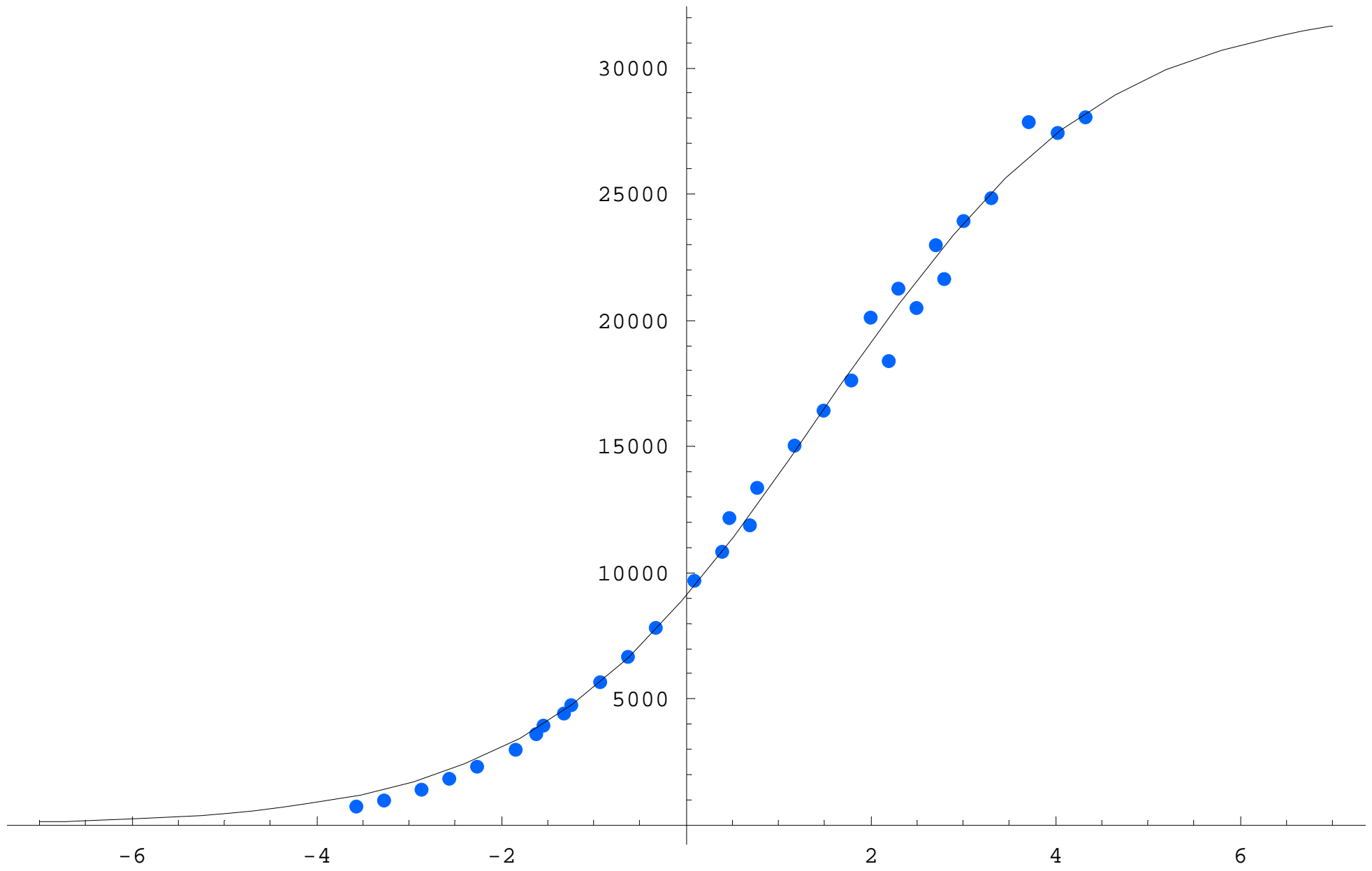
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 32479.4  | 1001.53       | {30431., 34527.7}     |
|                    | λ      | 0.655623 | 0.0261559     | {0.602128, 0.709117}' |
|                    | xshift | 1.44934  | 0.119683      | {1.20456, 1.69412}    |

EstimatedVariance → 414525.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 3  | $7.83074 \times 10^9$ | $2.61025 \times 10^9$ |
| ANOVATable → Error | 29 | $1.20212 \times 10^7$ | 414525. ,             |
| Uncorrected Total  | 32 | $7.84276 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.54752 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.858503 & 0.968168 \\ -0.858503 & 1. & -0.839895 \\ 0.968168 & -0.839895 & 1. \end{pmatrix}$ ,

|                     | Curvature               |            |
|---------------------|-------------------------|------------|
| FitCurvatureTable → | Max Intrinsic           | 0.0426464  |
|                     | Max Parameter-Effects   | 0.474695 } |
|                     | 95. % Confidence Region | 0.583805   |



sample: c18 E, model r

31634.5

$$(1 + e^{-0.5 x})^{1.70256}$$

{BestFitParameters → {Emax → 31634.5, h → 1.70256},

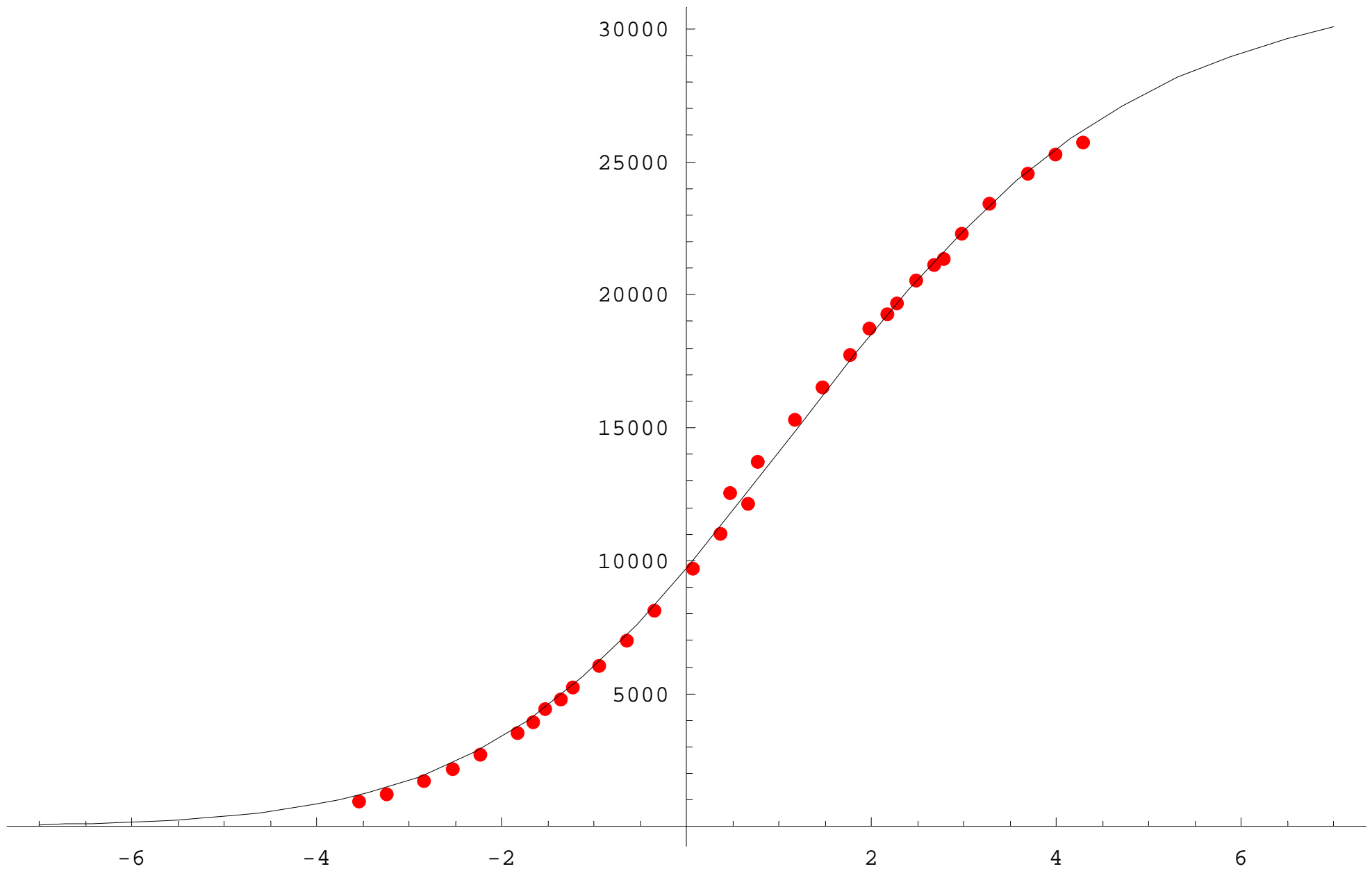
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 31634.5  | 200.269       | {31225.5, 32043.5}, |
| h                       | 1.70256  | 0.0179298     | {1.66594, 1.73918}  |

EstimatedVariance → 94401.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $7.18874 \times 10^9$ | $3.59437 \times 10^9$ |
| ANOVATable → Error | 30 | $2.83203 \times 10^6$ | 94401.,               |
| Uncorrected Total  | 32 | $7.19158 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.11781 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.819966 \\ 0.819966 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0107395 |
| Max Parameter-Effects             | 0.0145434 |
| 95. % Confidence Region           | 0.549166  |



sample: c18 E, model s

28195.5

$$\frac{1}{1 + e^{-0.680762(-0.969534 + x)}}$$

{BestFitParameters → {Emax → 28195.5, λ → 0.680762, xshift → 0.969534},

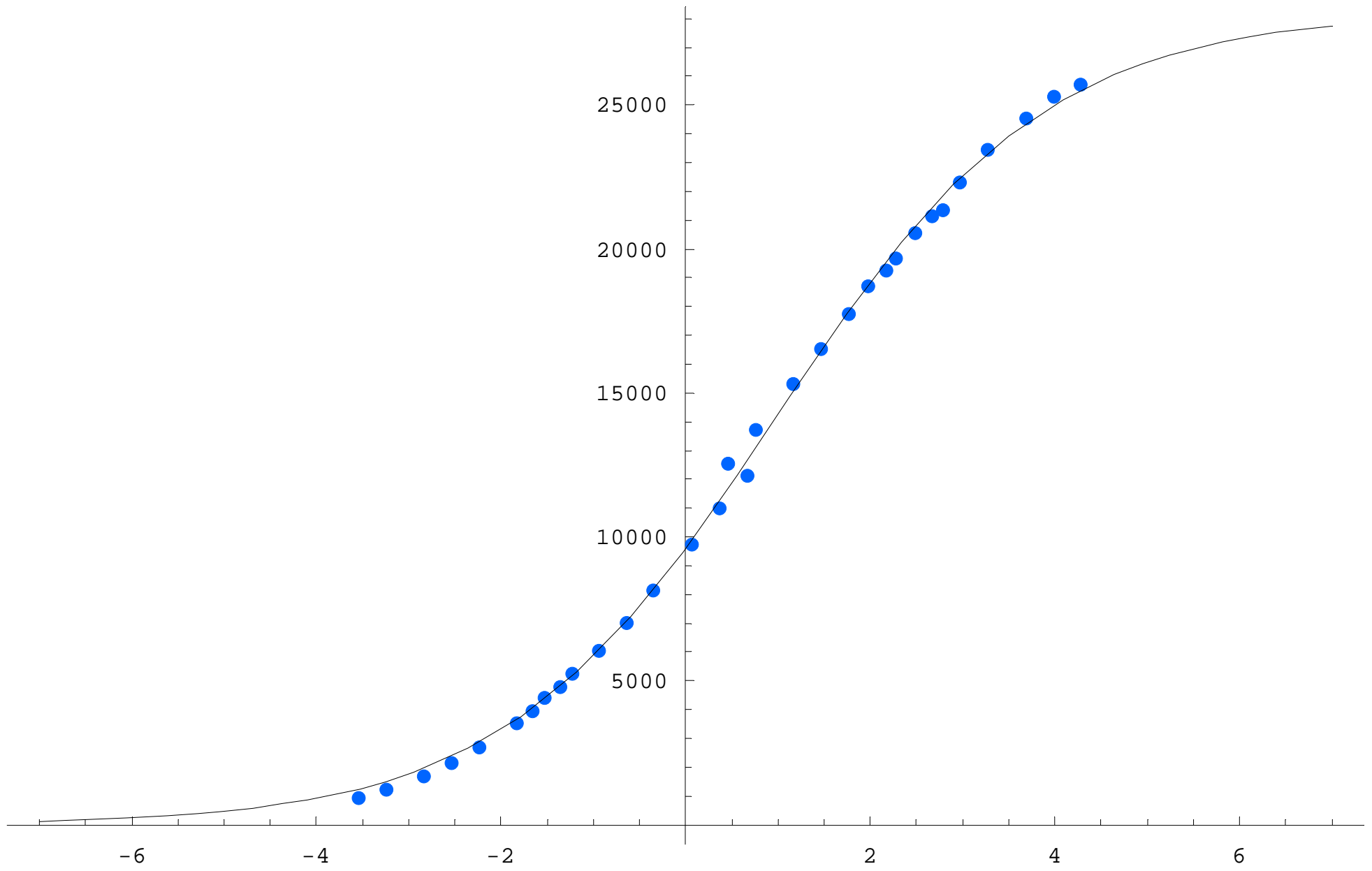
|                    |        | Estimate | Asymptotic SE | CI                  |
|--------------------|--------|----------|---------------|---------------------|
| ParameterCITable → | Emax   | 28195.5  | 359.384       | {27460.5, 28930.5}  |
|                    | λ      | 0.680762 | 0.013445      | {0.653263, 0.70826} |
|                    | xshift | 0.969534 | 0.0506441     | {0.865955, 1.07311} |

EstimatedVariance → 89964.9,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $7.18897 \times 10^9$ | $2.39632 \times 10^9$ |
| ANOVA Table → Error | 29 | $2.60898 \times 10^6$ | 89964.9               |
| Uncorrected Total   | 32 | $7.19158 \times 10^9$ |                       |
| Corrected Total     | 31 | $2.11781 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.845233 & 0.951138 \\ -0.845233 & 1. & -0.804077 \\ 0.951138 & -0.804077 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0232066 |
|                     | Max Parameter-Effects   | 0.209494  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c18v E, model r

33661.9

$$(1 + e^{-0.5 x})^{1.8546}$$

{BestFitParameters → {Emax → 33661.9, h → 1.8546},

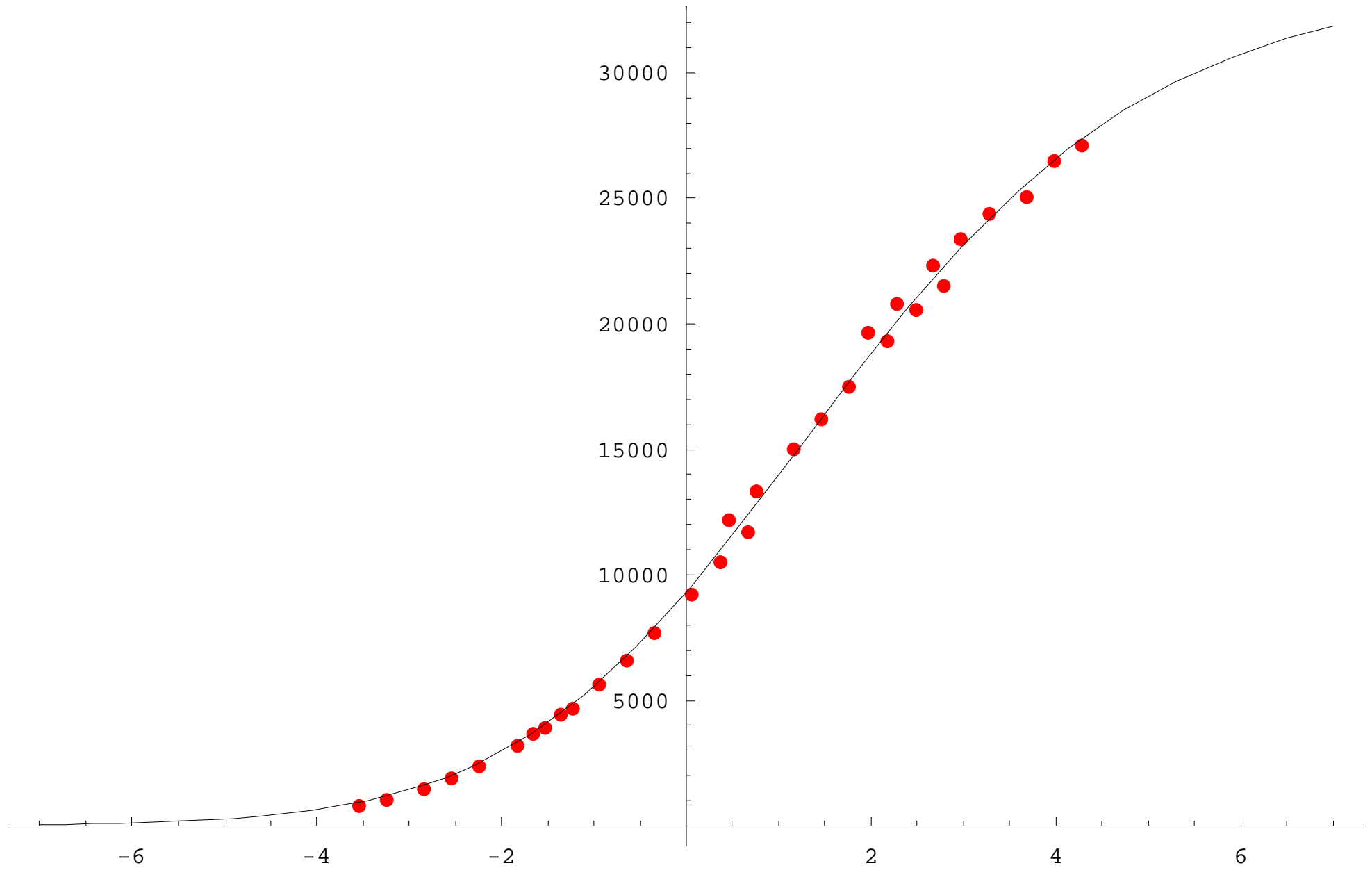
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 33661.9  | 285.415       | {33079.1, 34244.8}, |
| h                       | 1.8546   | 0.0252797     | {1.80298, 1.90623}  |

EstimatedVariance → 168078.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $7.46718 \times 10^9$ | $3.73359 \times 10^9$ |
| ANOVATable → Error | 30 | $5.04234 \times 10^6$ | 168078. ,             |
| Uncorrected Total  | 32 | $7.47222 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.37086 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.828796 \\ 0.828796 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.014645  |
| Max Parameter-Effects             | 0.0192833 |
| 95. % Confidence Region           | 0.549166  |





sample: c18v E, model s

29947.1

$$\frac{1}{1 + e^{-0.693018(-1.18916 + x)}}$$

{BestFitParameters → {Emax → 29947.1, λ → 0.693018, xshift → 1.18916},

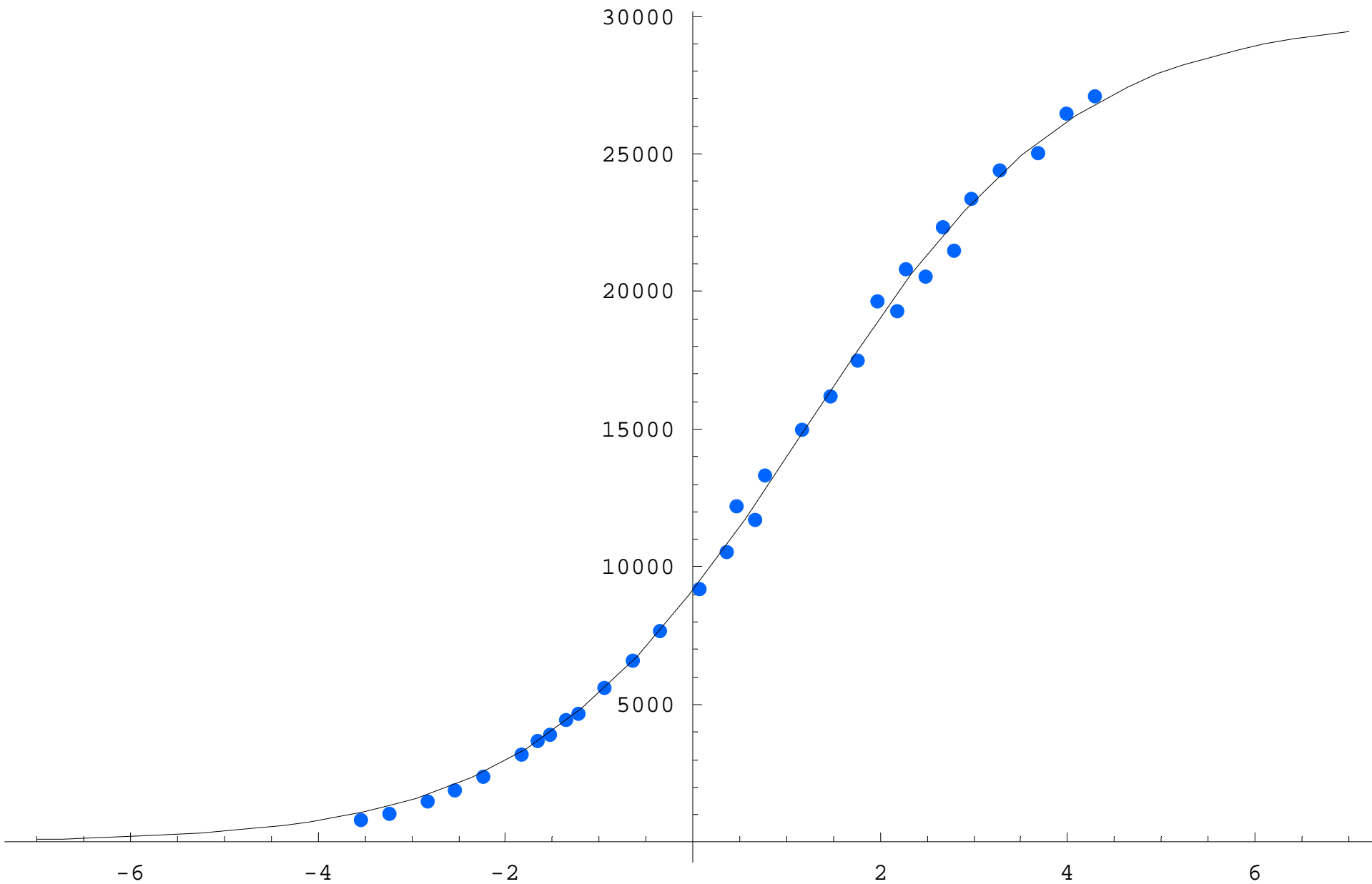
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 29947.1  | 544.087       | {28834.3, 31059.9}   |
|                    | λ      | 0.693018 | 0.0183893     | {0.655407, 0.730628} |
|                    | xshift | 1.18916  | 0.0696763     | {1.04666, 1.33167}   |

EstimatedVariance → 176242.,

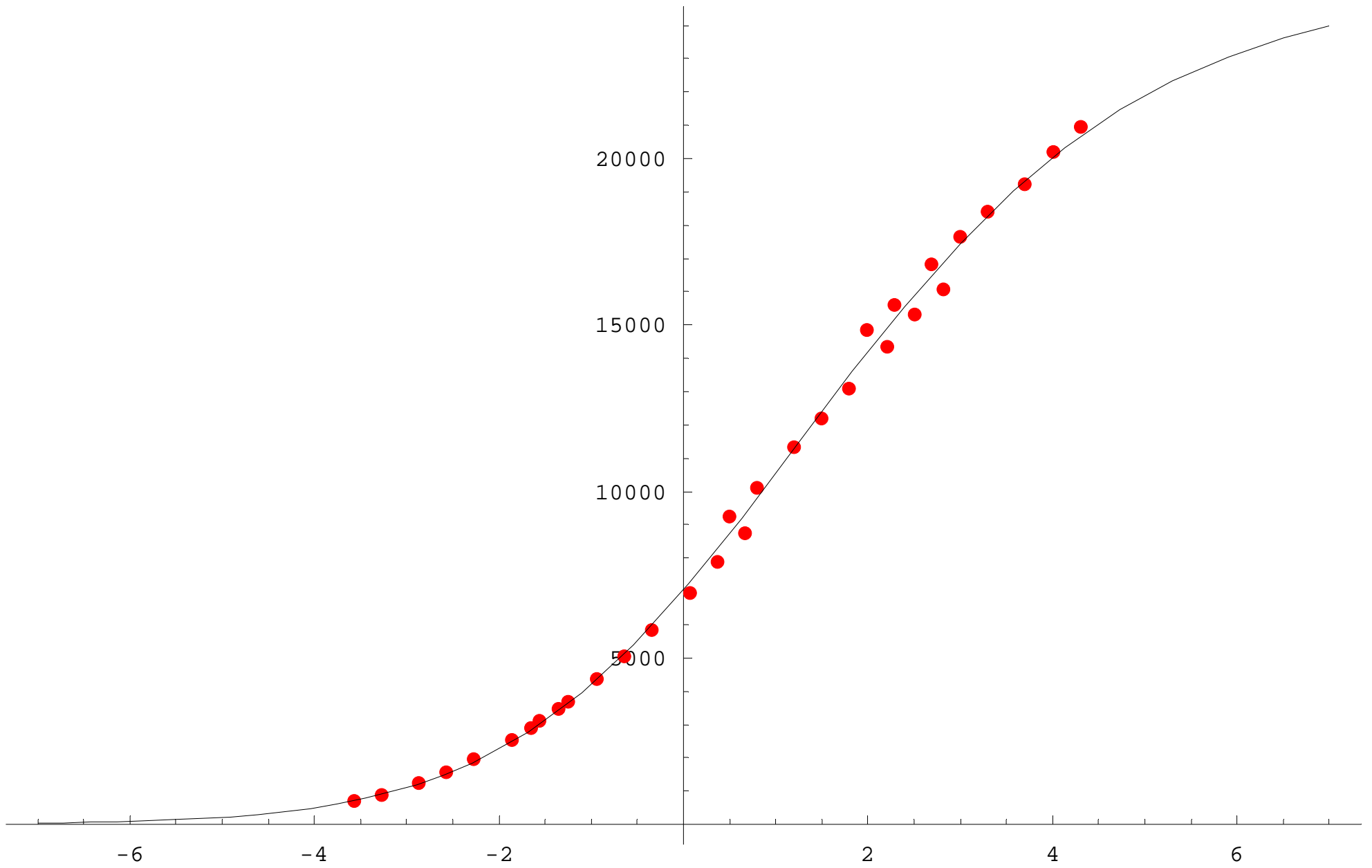
|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $7.46711 \times 10^9$ | $2.48904 \times 10^9$ |
| ANOVA Table → Error | 29 | $5.11101 \times 10^6$ | 176242. ,             |
| Uncorrected Total   | 32 | $7.47222 \times 10^9$ |                       |
| Corrected Total     | 31 | $2.37086 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.846089 & 0.956227 \\ -0.846089 & 1. & -0.812333 \\ 0.956227 & -0.812333 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0302426 |
|                     | Max Parameter-Effects   | 0.288033  |
|                     | 95. % Confidence Region | 0.583805  |







sample: c23 E, model s

23795.2

$$\frac{1}{1 + e^{-0.642177(-1.39222 + x)}}$$

{BestFitParameters → {Emax → 23795.2, λ → 0.642177, xshift → 1.39222},

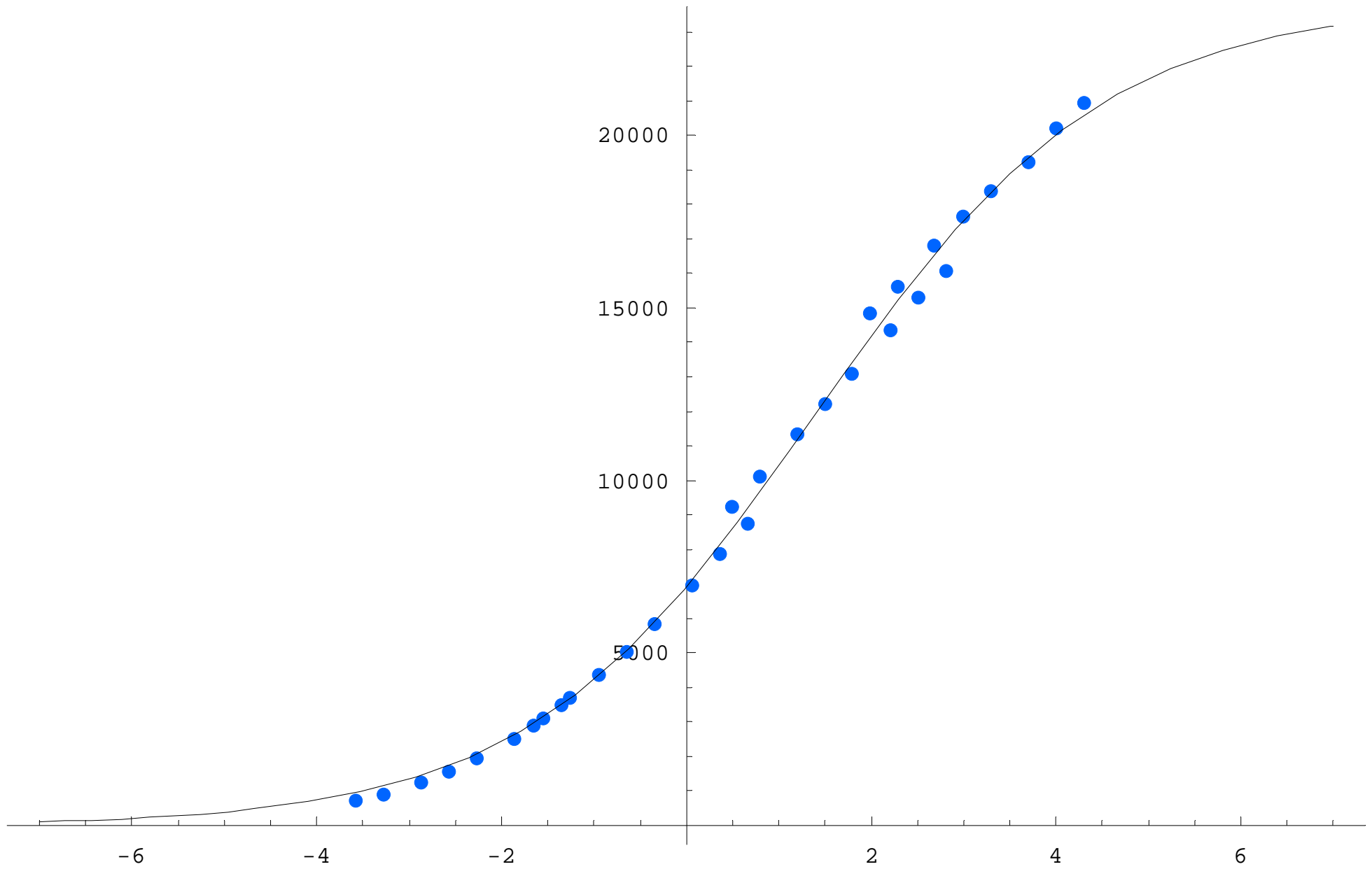
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 23795.2  | 564.364       | {22641., 24949.5}    |
|                    | λ      | 0.642177 | 0.0196472     | {0.601994, 0.68236}' |
|                    | xshift | 1.39222  | 0.0938717     | {1.20023, 1.5842}    |

EstimatedVariance → 129776.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 3  | $4.27599 \times 10^9$ | $1.42533 \times 10^9$ |
| ANOVATable → Error | 29 | $3.76349 \times 10^6$ | 129776. ,             |
| Uncorrected Total  | 32 | $4.27976 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.34075 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.861625 & 0.969049 \\ -0.861625 & 1. & -0.842689 \\ 0.969049 & -0.842689 & 1. \end{pmatrix}$ ,

|                     | Curvature               |            |
|---------------------|-------------------------|------------|
| FitCurvatureTable → | Max Intrinsic           | 0.0327863  |
|                     | Max Parameter-Effects   | 0.369725 } |
|                     | 95. % Confidence Region | 0.583805   |



sample: c23v E, model r

25626.7

$$(1 + e^{-0.5 x})^{1.86605}$$

{BestFitParameters → {Emax → 25626.7, h → 1.86605},

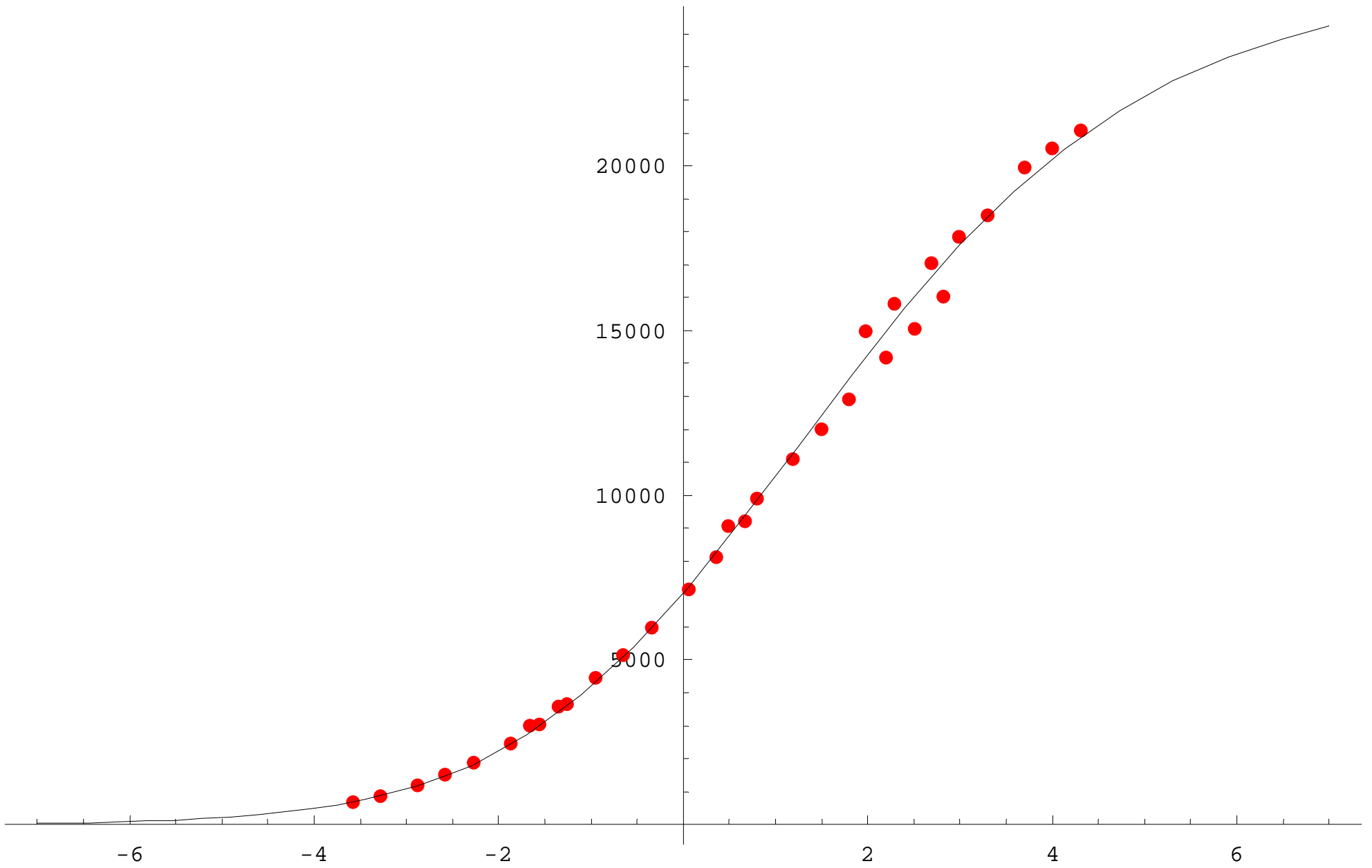
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 25626.7  | 280.857       | {25053.1, 26200.3}, |
| h                       | 1.86605  | 0.0330319     | {1.79859, 1.93351}  |

EstimatedVariance → 162892.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $4.33224 \times 10^9$ | $2.16612 \times 10^9$ |
| ANOVATable → Error | 30 | $4.88676 \times 10^6$ | 162892. ,             |
| Uncorrected Total  | 32 | $4.33713 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.36924 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.828829 \\ 0.828829 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0192221 |
| Max Parameter-Effects             | 0.0251643 |
| 95. % Confidence Region           | 0.549166  |





sample: c23v E, model s

24638.

$$\frac{1}{1 + e^{-0.625296(-1.51019 + x)}}$$

{BestFitParameters → {Emax → 24638., λ → 0.625296, xshift → 1.51019},

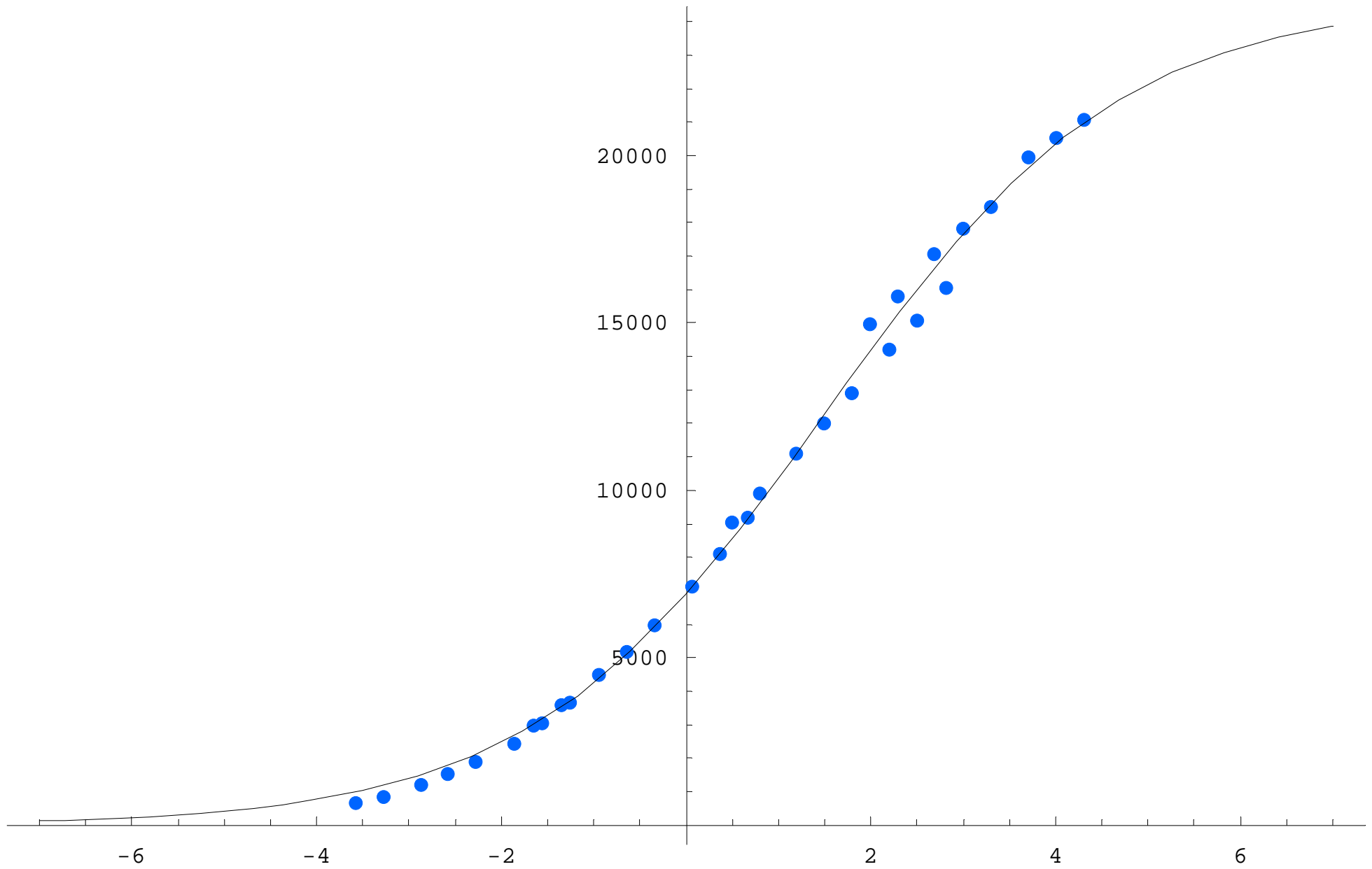
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 24638.   | 720.743       | {23164., 26112.1}     |
|                    | λ      | 0.625296 | 0.0222092     | {0.579873, 0.670719}' |
|                    | xshift | 1.51019  | 0.116566      | {1.27178, 1.74859}    |

EstimatedVariance → 175530.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 3  | $4.33204 \times 10^9$ | $1.44401 \times 10^9$ |
| ANOVATable → Error | 29 | $5.09037 \times 10^6$ | 175530. ,             |
| Uncorrected Total  | 32 | $4.33713 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.36924 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.867663 & 0.97369 \\ -0.867663 & 1. & -0.855073 \\ 0.97369 & -0.855073 & 1. \end{pmatrix}$ ,

|                     | Curvature               |            |
|---------------------|-------------------------|------------|
| FitCurvatureTable → | Max Intrinsic           | 0.0369795  |
|                     | Max Parameter-Effects   | 0.451377 } |
|                     | 95. % Confidence Region | 0.583805   |



sample: c24 E, model r

28752.2

$$(1 + e^{-0.5 x})^{1.72252}$$

{BestFitParameters → {Emax → 28752.2, h → 1.72252},

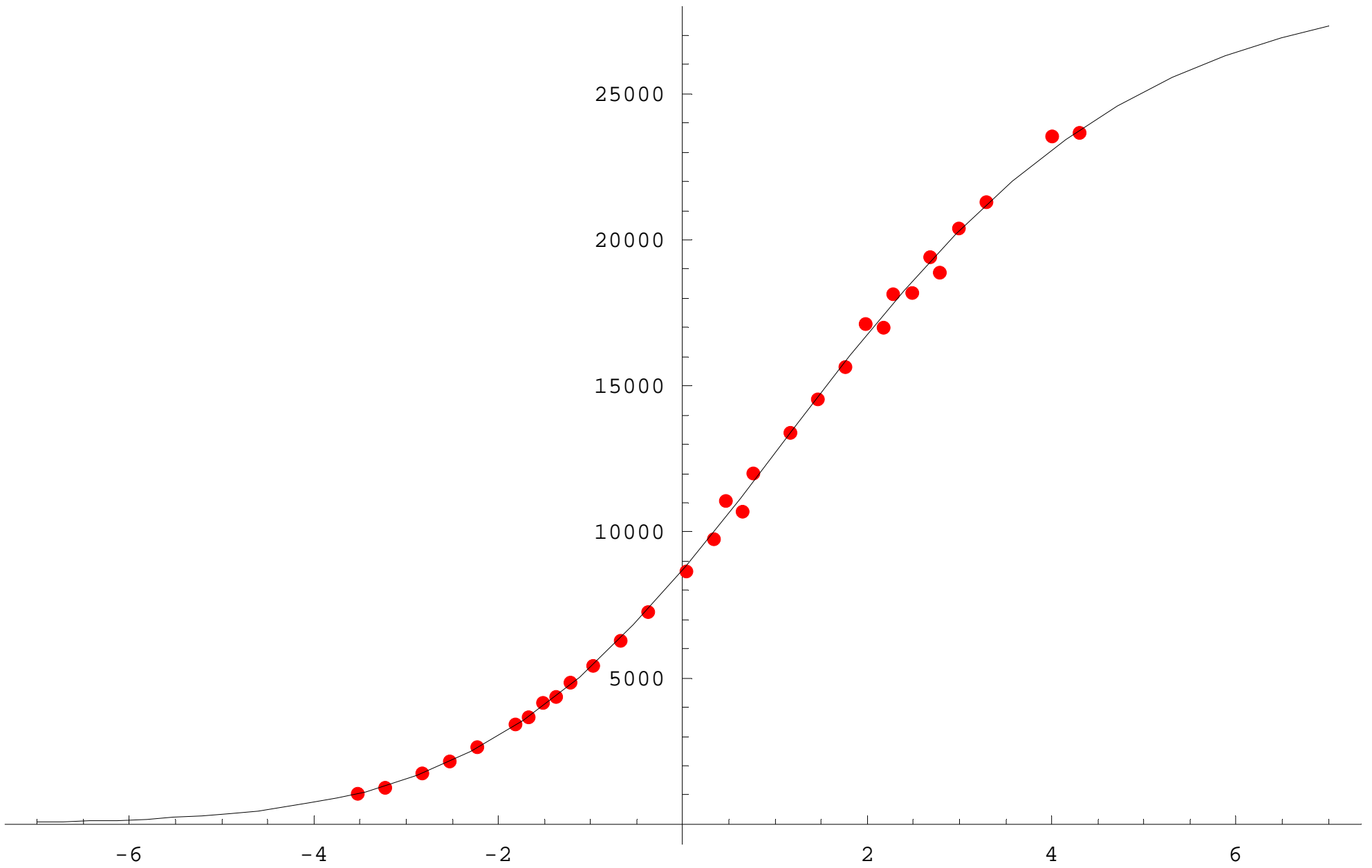
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 28752.2  | 195.81        | {28351.8, 29152.7}, |
| h                       | 1.72252  | 0.0187517     | {1.68417, 1.76087}  |

EstimatedVariance → 79502.4,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $5.37634 \times 10^9$ | $2.68817 \times 10^9$ |
| ANOVATable → Error | 29 | $2.30557 \times 10^6$ | 79502.4 ,             |
| Uncorrected Total  | 31 | $5.37865 \times 10^9$ |                       |
| Corrected Total    | 30 | $1.60654 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.825328 \\ 0.825328 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0112278 |
| Max Parameter-Effects             | 0.0150257 |
| 95. % Confidence Region           | 0.54819   |



sample: c24 E, model s

27017.2

$$\frac{1}{1 + e^{-0.631711(-1.21335 + x)}}$$

{BestFitParameters → {Emax → 27017.2, λ → 0.631711, xshift → 1.21335},

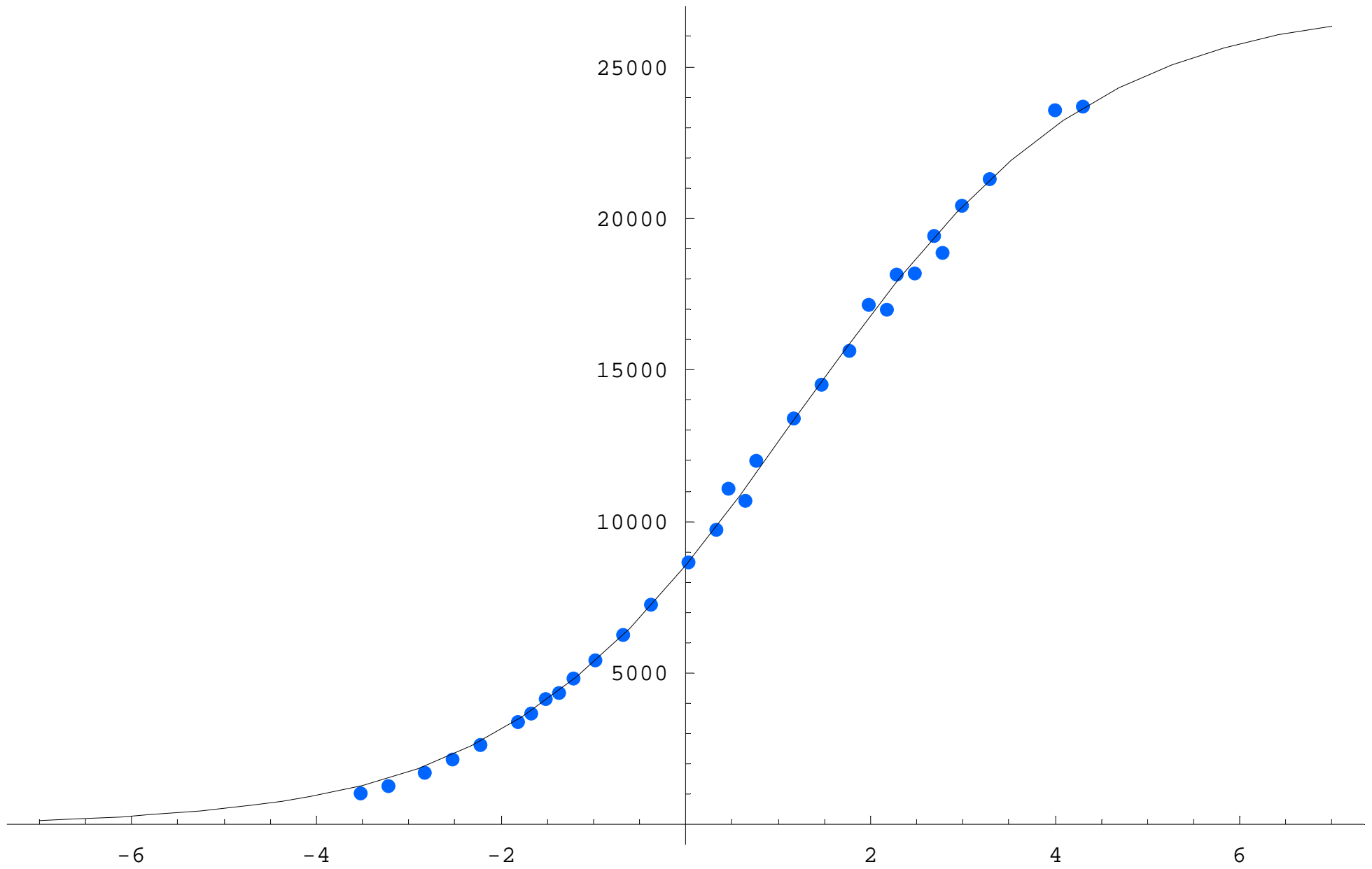
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 27017.2  | 490.351       | {26012.8, 28021.6}   |
|                    | λ      | 0.631711 | 0.0148238     | {0.601346, 0.662076} |
|                    | xshift | 1.21335  | 0.0728948     | {1.06403, 1.36266}   |

EstimatedVariance → 99323.6,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $5.37587 \times 10^9$ | $1.79196 \times 10^9$ |
| ANOVA Table → Error | 28 | $2.78106 \times 10^6$ | 99323.6               |
| Uncorrected Total   | 31 | $5.37865 \times 10^9$ |                       |
| Corrected Total     | 30 | $1.60654 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.85756 & 0.968281 \\ -0.85756 & 1. & -0.841173 \\ 0.968281 & -0.841173 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0277342 |
|                     | Max Parameter-Effects   | 0.275024  |
|                     | 95. % Confidence Region | 0.58255   |



sample: c24v E, model r

31985.6

$$(1 + e^{-0.5 x})^{1.88243}$$

{BestFitParameters → {Emax → 31985.6, h → 1.88243},

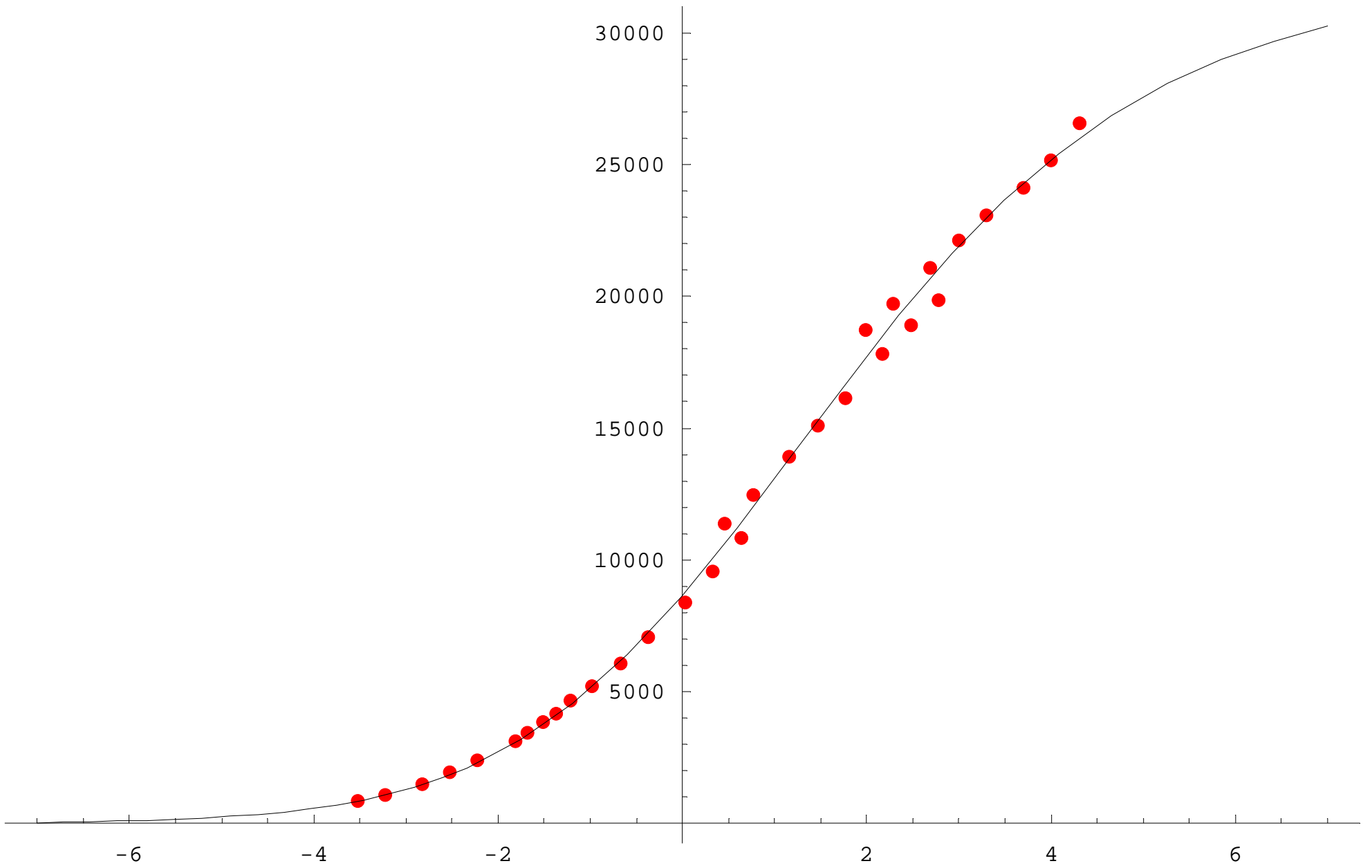
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 31985.6  | 340.107       | {31291., 32680.2} , |
| h                       | 1.88243  | 0.0320607     | {1.81695, 1.94791}  |

EstimatedVariance → 235863.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $6.64808 \times 10^9$ | $3.32404 \times 10^9$ |
| ANOVATable → Error | 30 | $7.07588 \times 10^6$ | 235863. ,             |
| Uncorrected Total  | 32 | $6.65516 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.12426 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.828377 \\ 0.828377 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0184387 |
| Max Parameter-Effects             | 0.0243085 |
| 95. % Confidence Region           | 0.549166  |





sample: c24v E, model s

29871.8

$$\frac{1}{1 + e^{-0.649609(-1.41646 + x)}}$$

{BestFitParameters → {Emax → 29871.8, λ → 0.649609, xshift → 1.41646},

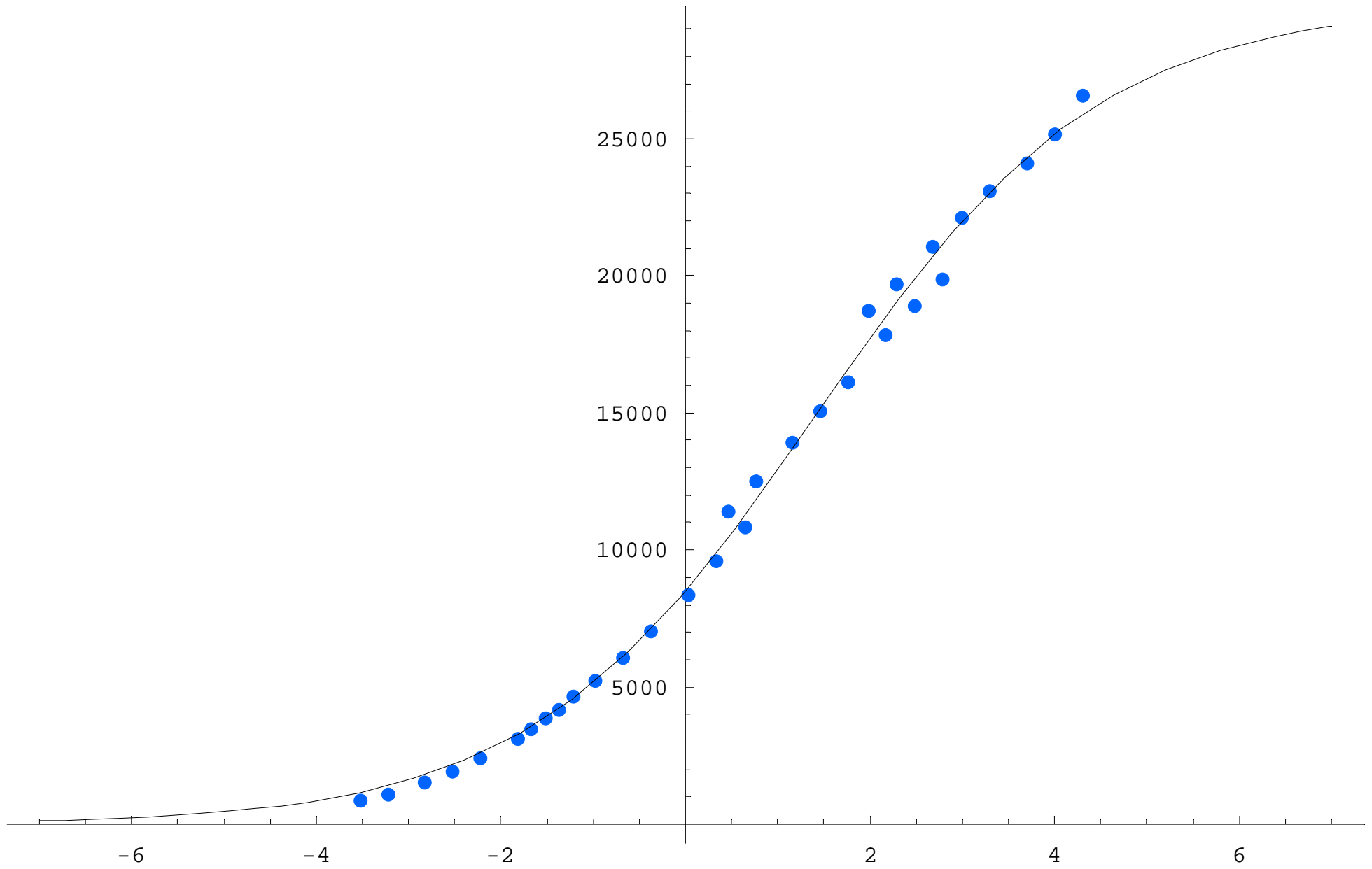
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 29871.8  | 806.843       | {28221.7, 31522.}     |
|                    | λ      | 0.649609 | 0.0225829     | {0.603422, 0.695796}' |
|                    | xshift | 1.41646  | 0.105886      | {1.1999, 1.63303}     |

EstimatedVariance → 267111.,

|                    | DF | SumOfSq               | MeanSq               |
|--------------------|----|-----------------------|----------------------|
| Model              | 3  | $6.64741 \times 10^9$ | $2.2158 \times 10^9$ |
| ANOVATable → Error | 29 | $7.74622 \times 10^6$ | 267111. ,            |
| Uncorrected Total  | 32 | $6.65516 \times 10^9$ |                      |
| Corrected Total    | 31 | $2.12426 \times 10^9$ |                      |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.860075 & 0.968586 \\ -0.860075 & 1. & -0.842191 \\ 0.968586 & -0.842191 & 1. \end{pmatrix}$ ,

|                     | Curvature               |            |
|---------------------|-------------------------|------------|
| FitCurvatureTable → | Max Intrinsic           | 0.0373311  |
|                     | Max Parameter-Effects   | 0.417673 } |
|                     | 95. % Confidence Region | 0.583805   |



sample: c27 E, model r

27372.

$$\frac{27372.}{(1 + e^{-0.5 x})^{1.72523}}$$

{BestFitParameters → {Emax → 27372., h → 1.72523},

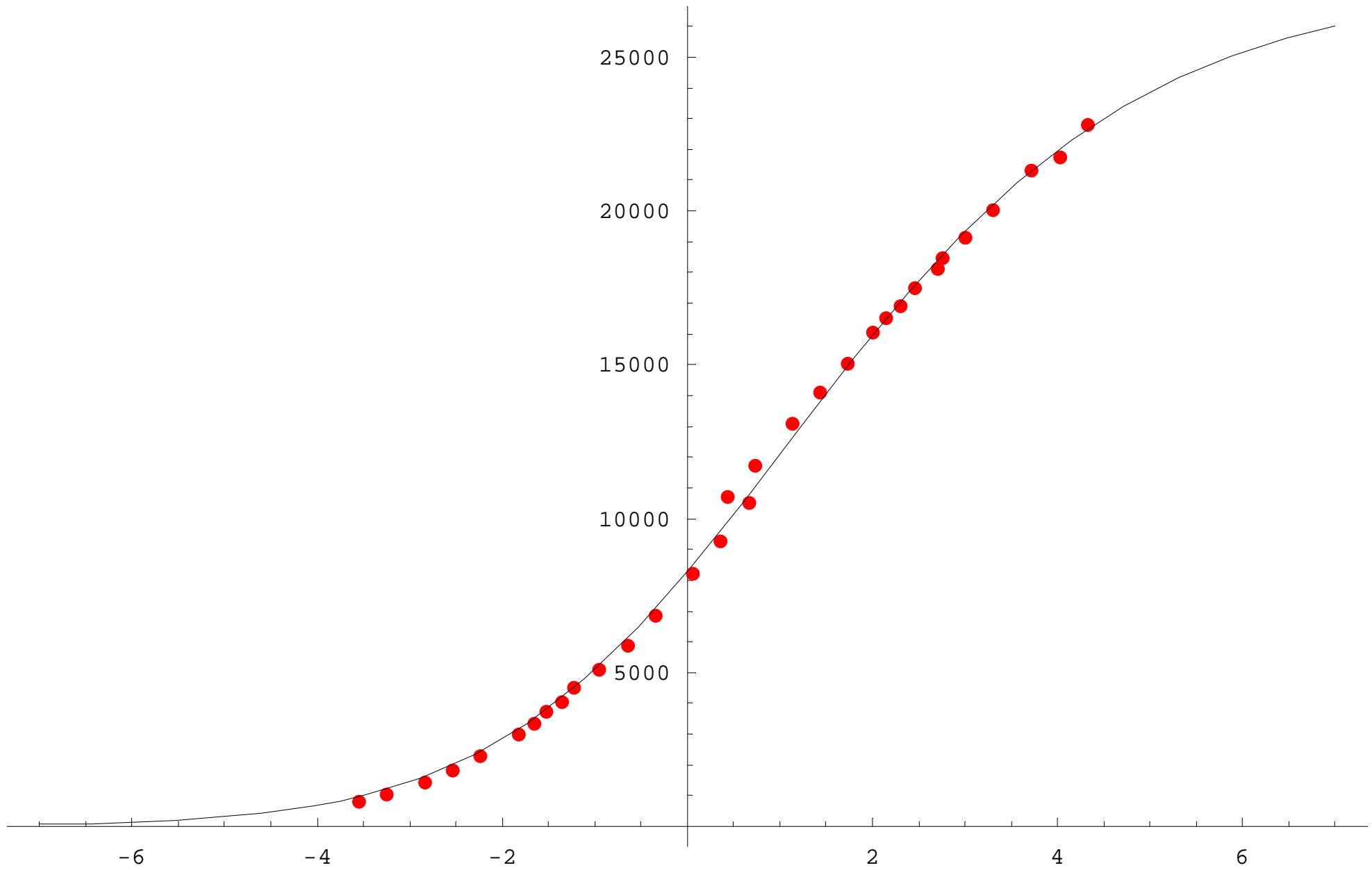
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 27372.   | 184.503       | {26995.2, 27748.8}, |
| h                       | 1.72523  | 0.0192549     | {1.6859, 1.76455}   |

EstimatedVariance → 79577.4,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $5.31531 \times 10^9$ | $2.65766 \times 10^9$ |
| ANOVATable → Error | 30 | $2.38732 \times 10^6$ | 79577.4 ,             |
| Uncorrected Total  | 32 | $5.3177 \times 10^9$  |                       |
| Corrected Total    | 31 | $1.58833 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.818834 \\ 0.818834 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0114745 |
| Max Parameter-Effects             | 0.0154176 |
| 95. % Confidence Region           | 0.549166  |



sample: c27 E, model s

24625.4

$$\frac{1}{1 + e^{-0.672547(-1.0404 + x)}}$$

{BestFitParameters → {Emax → 24625.4, λ → 0.672547, xshift → 1.0404},

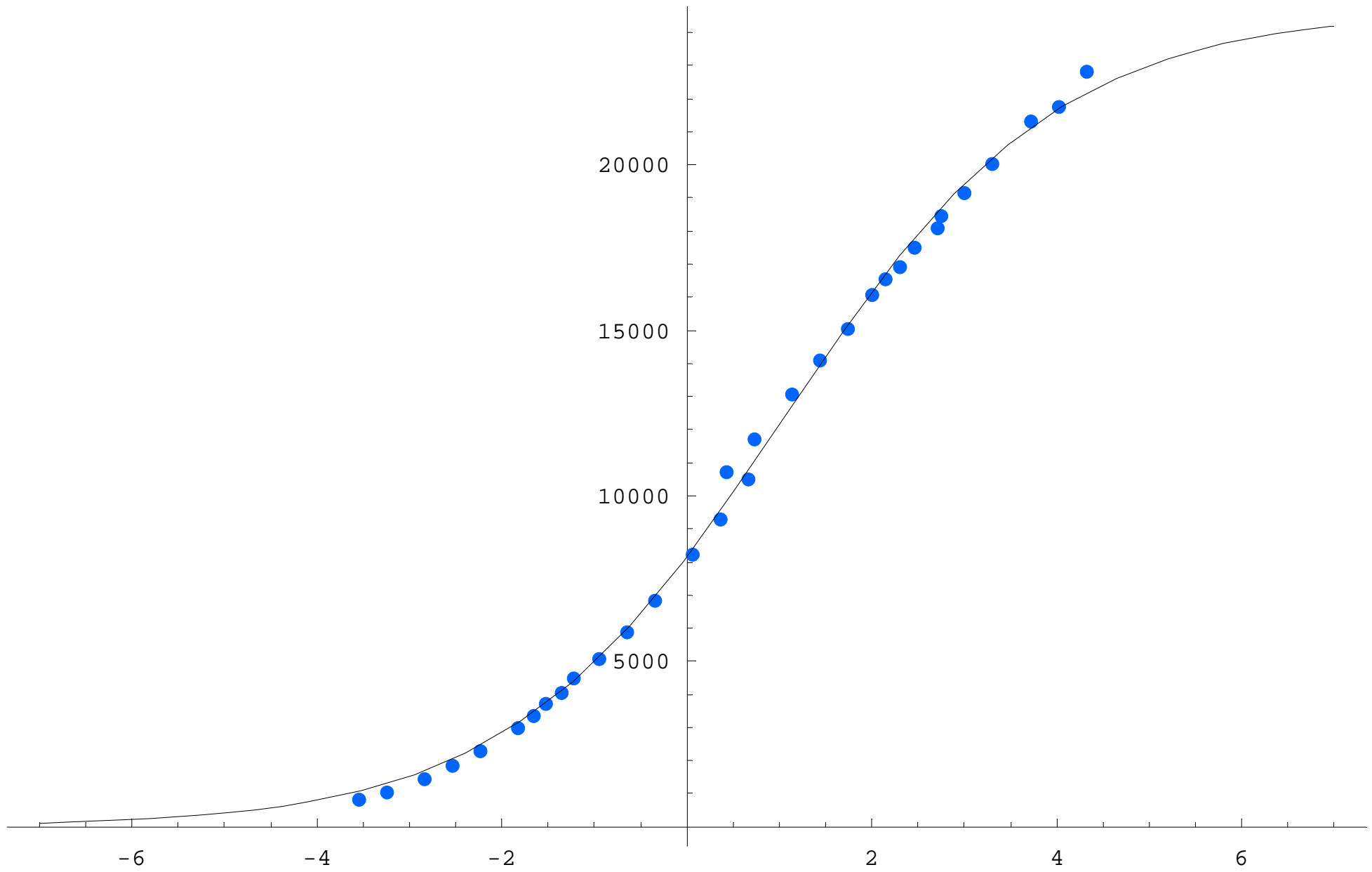
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 24625.4  | 390.072       | {23827.6, 25423.1}   |
|                    | λ      | 0.672547 | 0.0161185     | {0.639581, 0.705513} |
|                    | xshift | 1.0404   | 0.0631176     | {0.911314, 1.16949}  |

EstimatedVariance → 99370.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $5.31482 \times 10^9$ | $1.77161 \times 10^9$ |
| ANOVA Table → Error | 29 | $2.88173 \times 10^6$ | 99370.                |
| Uncorrected Total   | 32 | $5.3177 \times 10^9$  |                       |
| Corrected Total     | 31 | $1.58833 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.846389 & 0.953773 \\ -0.846389 & 1. & -0.810148 \\ 0.953773 & -0.810148 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0277804 |
|                     | Max Parameter-Effects   | 0.256813  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c27v E, model r

27517.3

$$(1 + e^{-0.5 x})^{1.82018}$$

{BestFitParameters → {Emax → 27517.3, h → 1.82018},

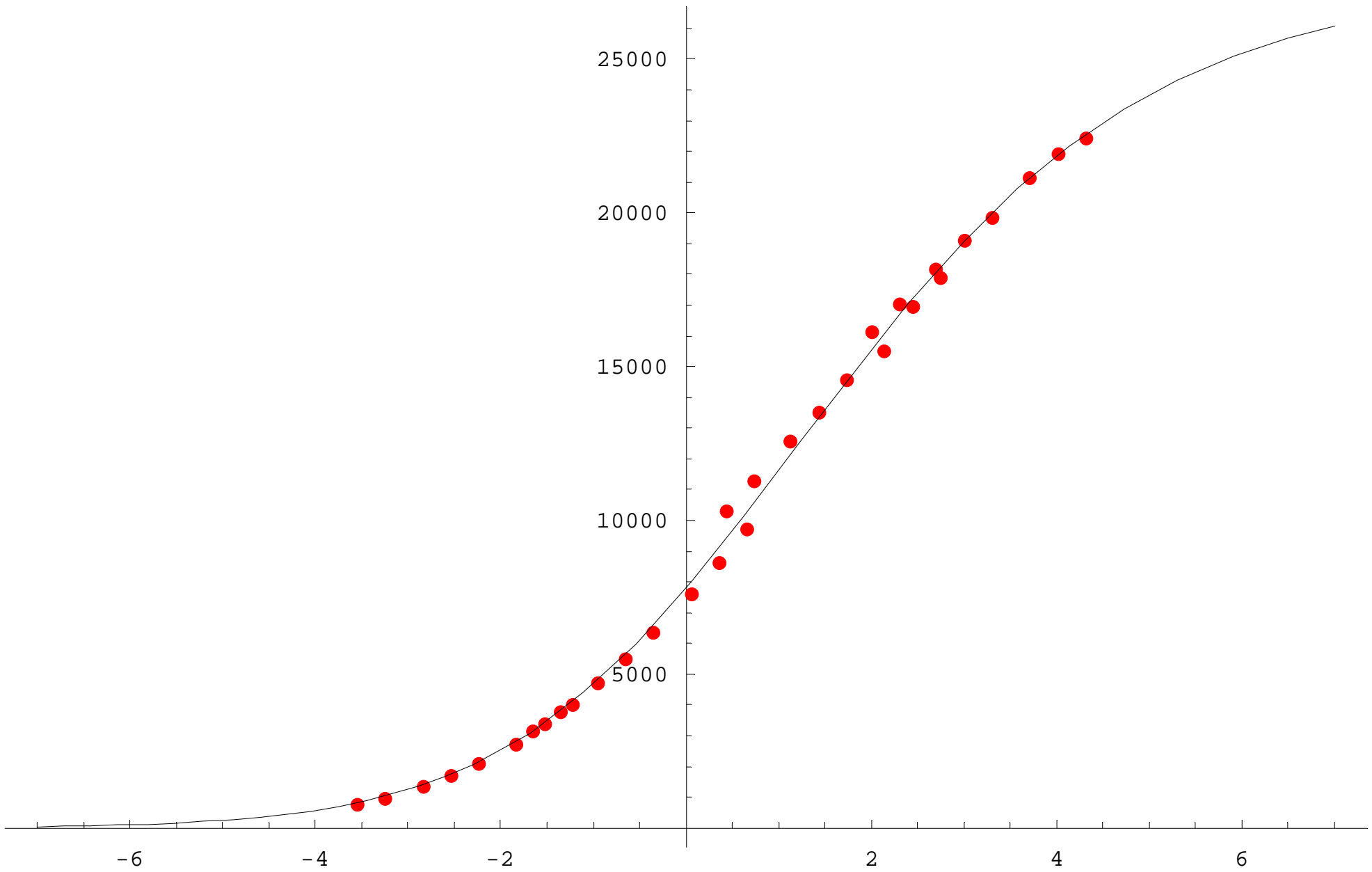
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 27517.3  | 233.95        | {27039.5, 27995.1}, |
| h                       | 1.82018  | 0.0250876     | {1.76894, 1.87142}  |

EstimatedVariance → 117987.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $5.09087 \times 10^9$ | $2.54544 \times 10^9$ |
| ANOVATable → Error | 30 | $3.53961 \times 10^6$ | 117987. ,             |
| Uncorrected Total  | 32 | $5.09441 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.59138 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.824237 \\ 0.824237 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.014637  |
| Max Parameter-Effects             | 0.0193214 |
| 95. % Confidence Region           | 0.549166  |





sample: c27v E, model s

24814.5

$$\frac{1}{1 + e^{-0.677173(-1.19132 + x)}}$$

{BestFitParameters → {Emax → 24814.5, λ → 0.677173, xshift → 1.19132},

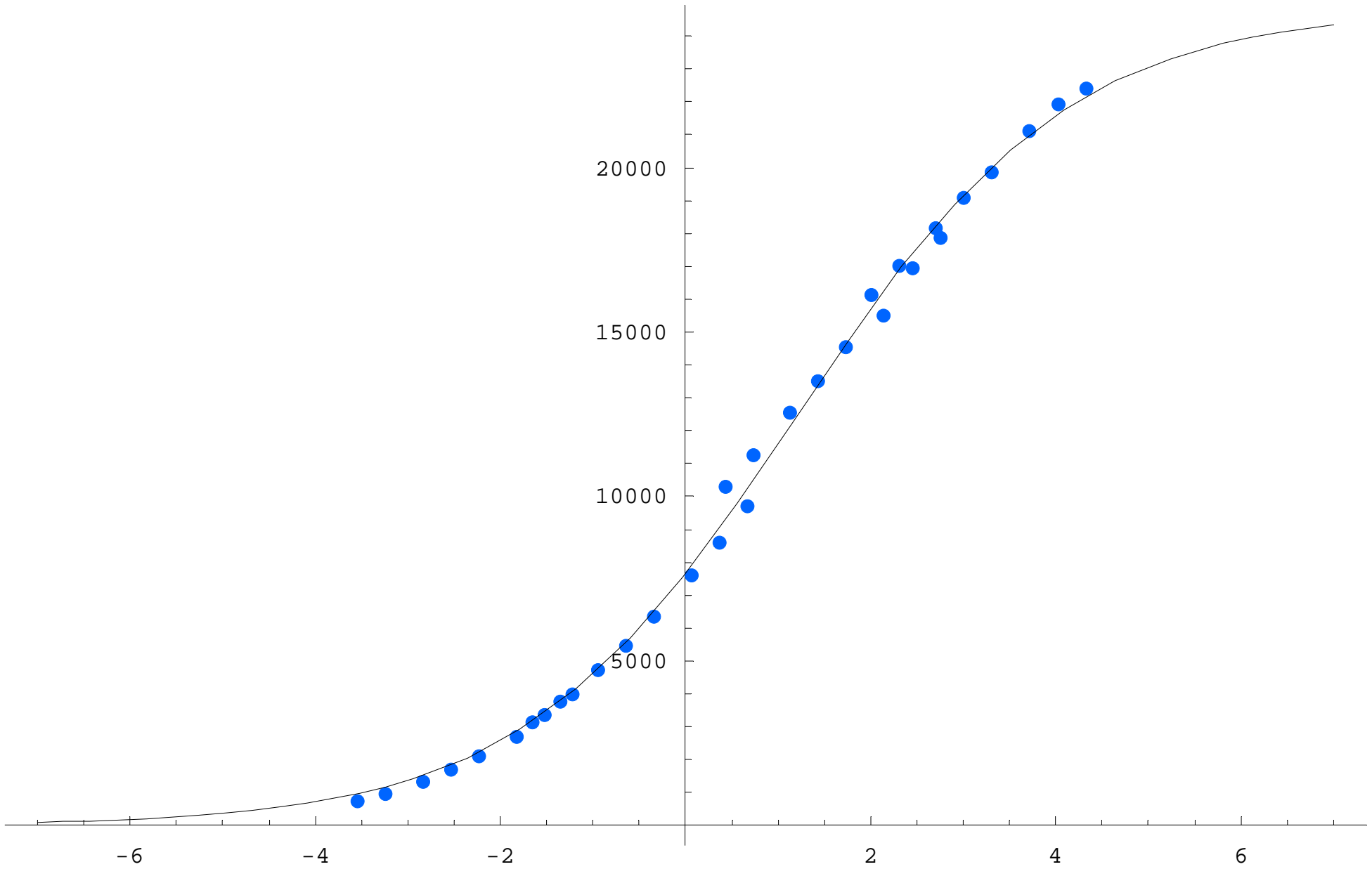
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 24814.5  | 487.075       | {23818.3, 25810.7}   |
|                    | λ      | 0.677173 | 0.0192295     | {0.637844, 0.716502} |
|                    | xshift | 1.19132  | 0.0766429     | {1.03456, 1.34807}   |

EstimatedVariance → 137246.,

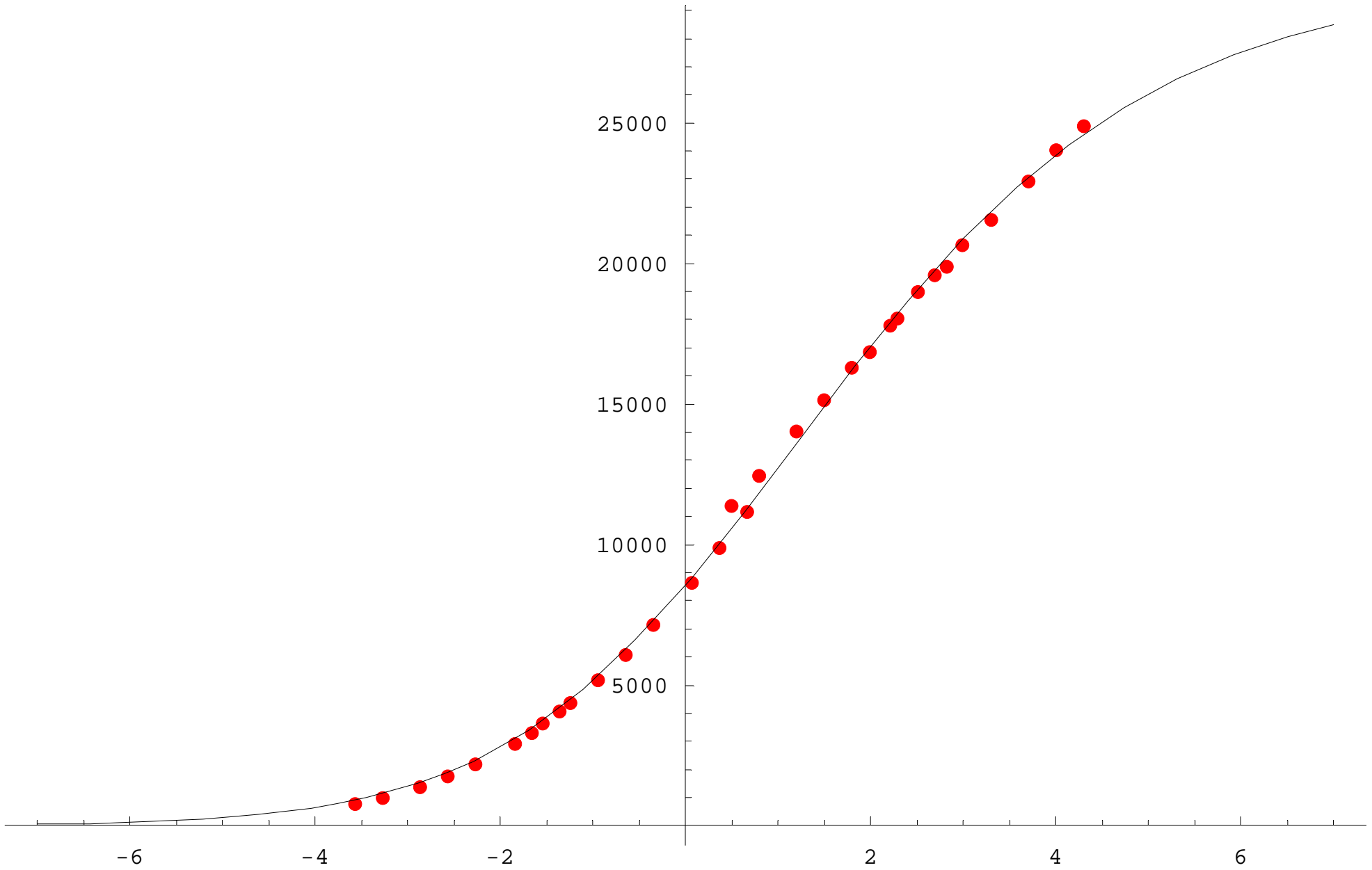
|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $5.09043 \times 10^9$ | $1.69681 \times 10^9$ |
| ANOVA Table → Error | 29 | $3.98014 \times 10^6$ | 137246.               |
| Uncorrected Total   | 32 | $5.09441 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.59138 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.847947 & 0.957718 \\ -0.847947 & 1. & -0.817324 \\ 0.957718 & -0.817324 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0321547 |
|                     | Max Parameter-Effects   | 0.310825  |
|                     | 95. % Confidence Region | 0.583805  |







sample: c2 E, model s

27167.6

$$\frac{1}{1 + e^{-0.673038(-1.18543 + x)}}$$

{BestFitParameters → {Emax → 27167.6, λ → 0.673038, xshift → 1.18543},

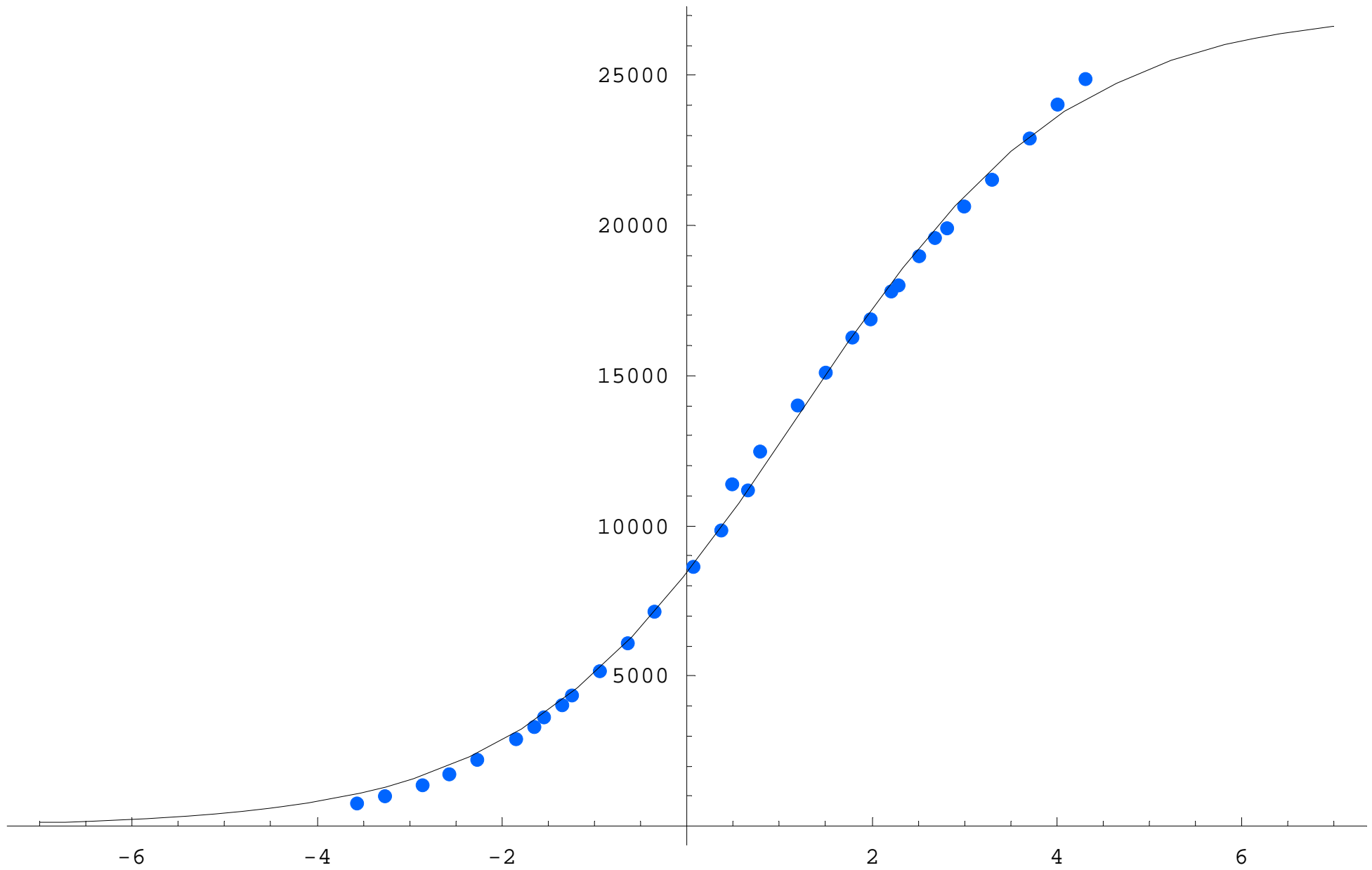
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 27167.6  | 457.915       | {26231., 28104.1}     |
|                    | λ      | 0.673038 | 0.0162948     | {0.639711, 0.706364}' |
|                    | xshift | 1.18543  | 0.066076      | {1.05029, 1.32058}    |

EstimatedVariance → 118213.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 3  | $6.14862 \times 10^9$ | $2.04954 \times 10^9$ |
| ANOVATable → Error | 29 | $3.42818 \times 10^6$ | 118213. ,             |
| Uncorrected Total  | 32 | $6.15205 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.91676 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.850244 & 0.958778 \\ -0.850244 & 1. & -0.818249 \\ 0.958778 & -0.818249 & 1. \end{pmatrix}$ ,

|                     | Curvature               |            |
|---------------------|-------------------------|------------|
| FitCurvatureTable → | Max Intrinsic           | 0.0273625  |
|                     | Max Parameter-Effects   | 0.268629 } |
|                     | 95. % Confidence Region | 0.583805   |



sample: c2v E, model r

31137.2

$$(1 + e^{-0.5 x})^{1.95788}$$

{BestFitParameters → {Emax → 31137.2, h → 1.95788},

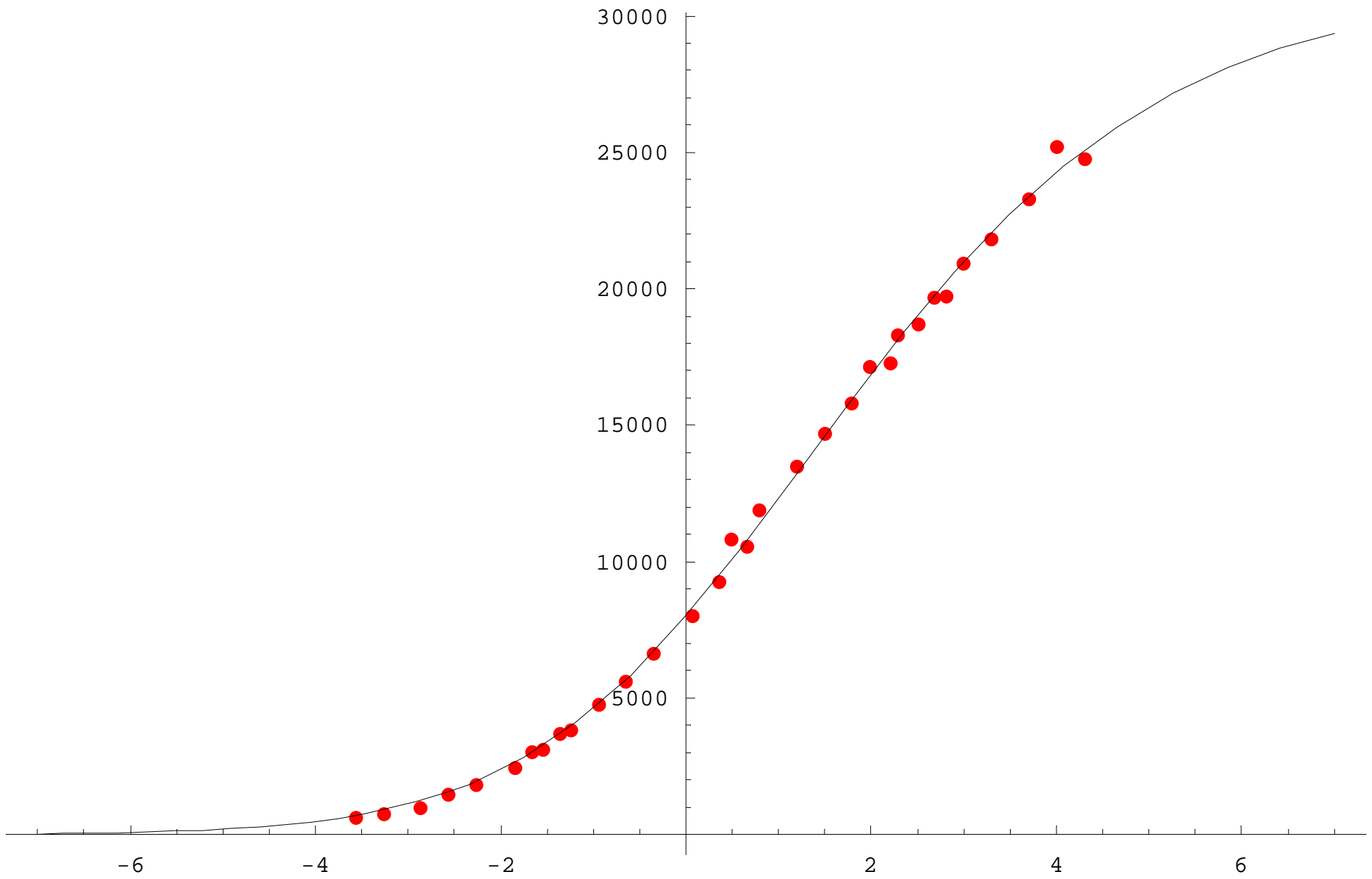
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 31137.2  | 233.768       | {30659.8, 31614.6}, |
| h                       | 1.95788  | 0.0232735     | {1.91035, 2.00541}  |

EstimatedVariance → 104465.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $6.08476 \times 10^9$ | $3.04238 \times 10^9$ |
| ANOVATable → Error | 30 | $3.13396 \times 10^6$ | 104465. ,             |
| Uncorrected Total  | 32 | $6.08789 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.02956 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.833912 \\ 0.833912 & 1. \end{pmatrix}$ ,

|                                   | Curvature  |
|-----------------------------------|------------|
| FitCurvatureTable → Max Intrinsic | 0.0132229  |
| Max Parameter-Effects             | 0.017092 } |
| 95. % Confidence Region           | 0.549166   |





sample: c2v E, model s

28041.3

$$\frac{1}{1 + e^{-0.686699(-1.37549 + x)}}$$

{BestFitParameters → {Emax → 28041.3, λ → 0.686699, xshift → 1.37549},

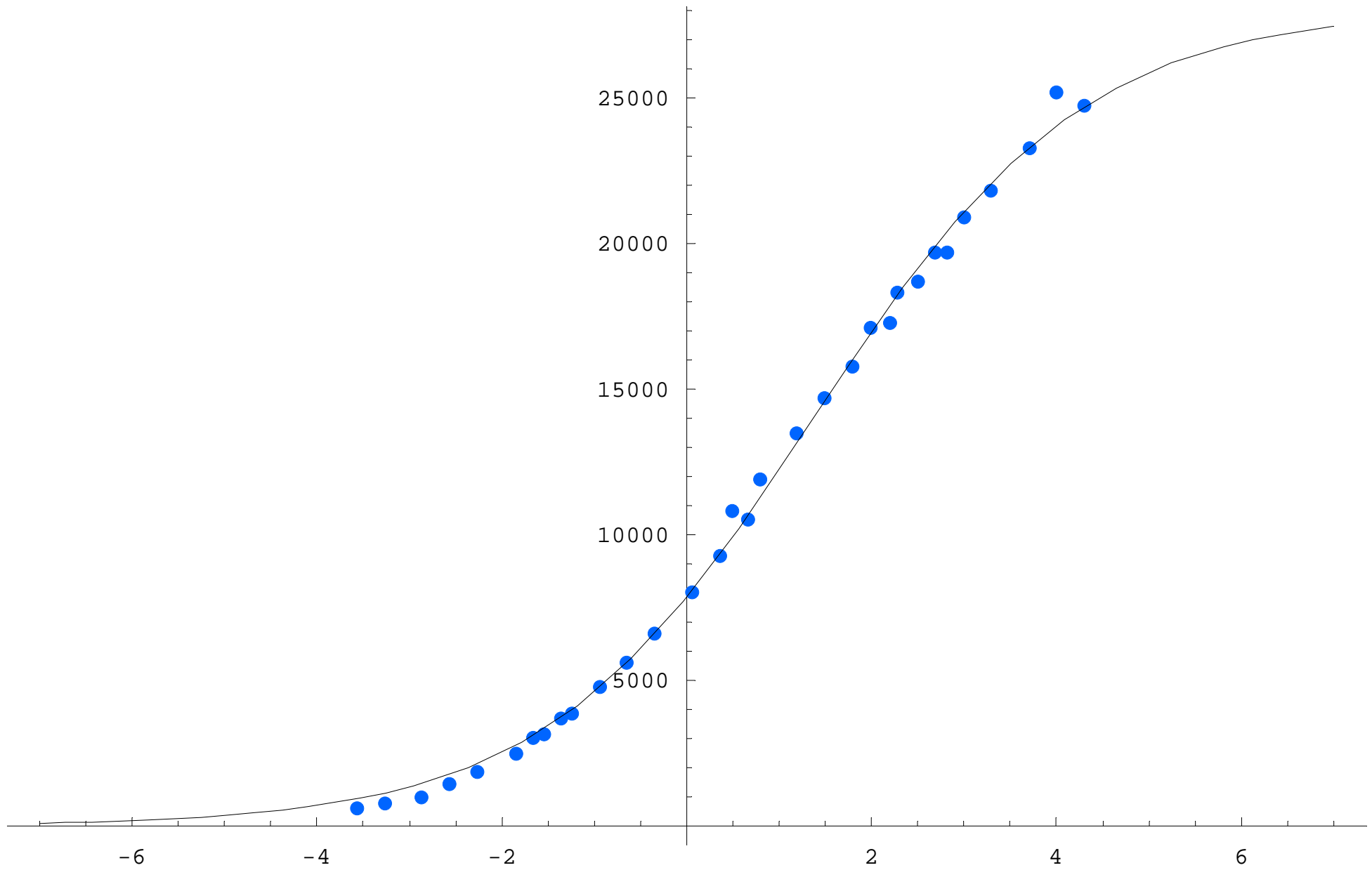
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 28041.3  | 576.872       | {26861.5, 29221.2}    |
|                    | λ      | 0.686699 | 0.0193505     | {0.647123, 0.726275}' |
|                    | xshift | 1.37549  | 0.0779176     | {1.21613, 1.53485}    |

EstimatedVariance → 164502.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $6.08312 \times 10^9$ | $2.02771 \times 10^9$ |
| ANOVA Table → Error | 29 | $4.77055 \times 10^6$ | 164502. ,             |
| Uncorrected Total   | 32 | $6.08789 \times 10^9$ |                       |
| Corrected Total     | 31 | $2.02956 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.850148 & 0.962182 \\ -0.850148 & 1. & -0.823732 \\ 0.962182 & -0.823732 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0308786 |
|                     | Max Parameter-Effects   | 0.317881  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c3 E, model r

32626.4

$$(1 + e^{-0.5 x})^{1.90987}$$

{BestFitParameters → {Emax → 32626.4, h → 1.90987}},

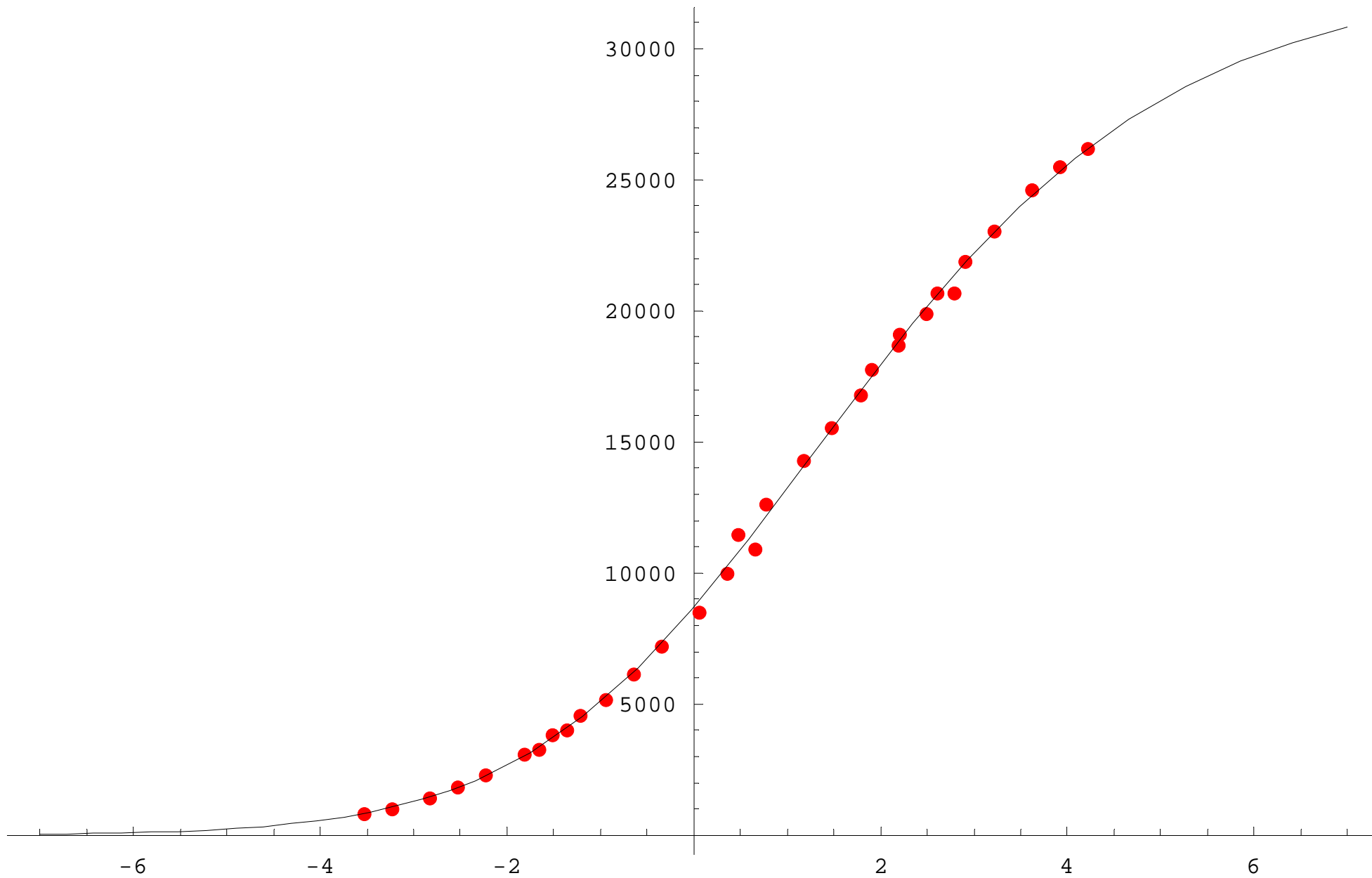
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 32626.4  | 205.091       | {32207.6, 33045.3}, |
| h                       | 1.90987  | 0.0189203     | {1.87123, 1.94851}  |

EstimatedVariance → 80180.5,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $6.73988 \times 10^9$ | $3.36994 \times 10^9$ |
| ANOVATable → Error | 30 | $2.40541 \times 10^6$ | 80180.5 ,             |
| Uncorrected Total  | 32 | $6.74229 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.16378 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.836022 \\ 0.836022 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.010815  |
| Max Parameter-Effects             | 0.0141646 |
| 95. % Confidence Region           | 0.549166  |



sample: c3 E, model s

29698.9

$$\frac{1}{1 + e^{-0.673245(-1.35425 + x)}}$$

{BestFitParameters → {Emax → 29698.9, λ → 0.673245, xshift → 1.35425},

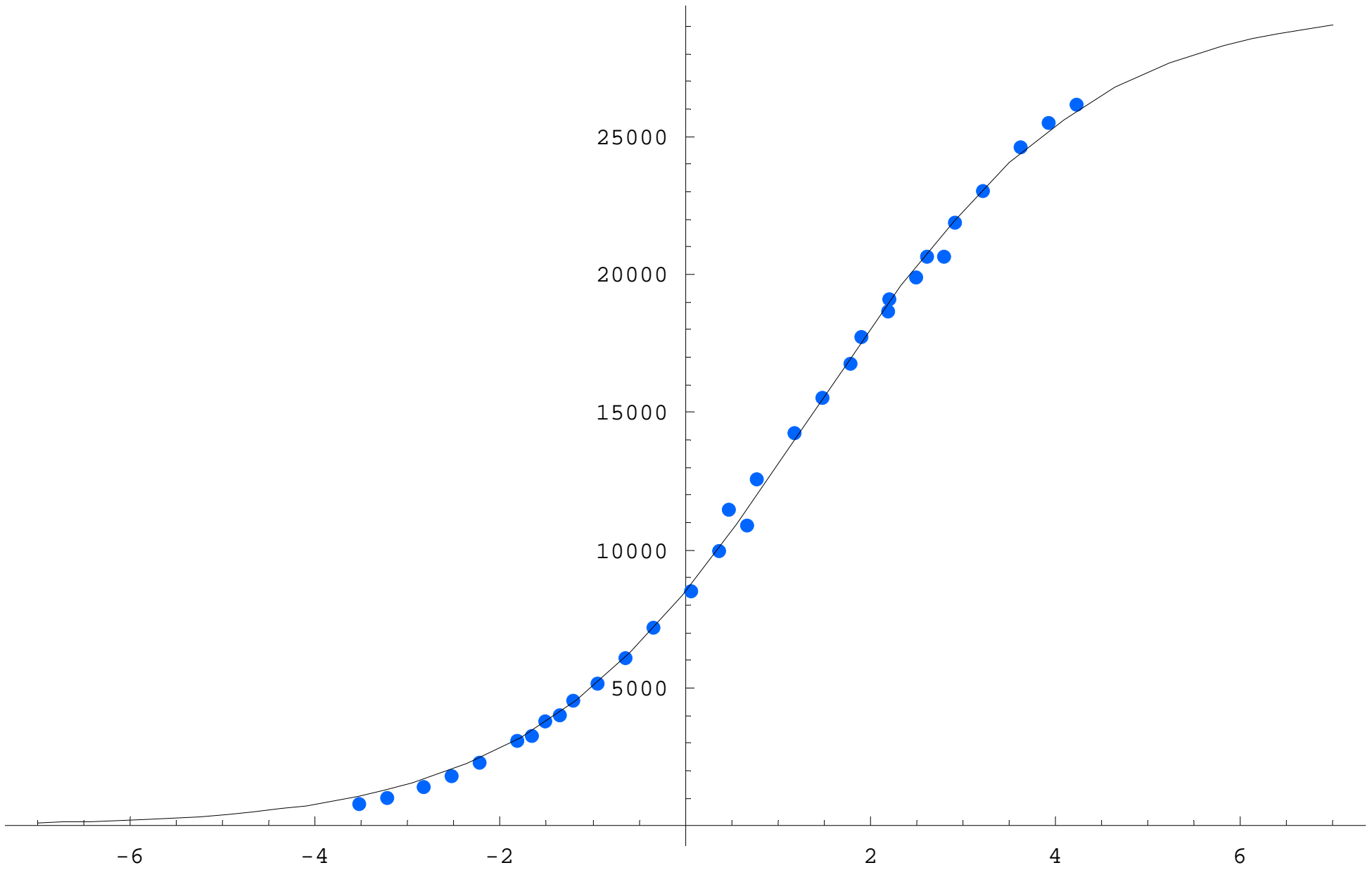
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 29698.9  | 501.936       | {28672.4, 30725.5}    |
|                    | λ      | 0.673245 | 0.0150409     | {0.642483, 0.704008}' |
|                    | xshift | 1.35425  | 0.0644172     | {1.2225, 1.486}       |

EstimatedVariance → 111363.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $6.73906 \times 10^9$ | $2.24635 \times 10^9$ |
| ANOVA Table → Error | 29 | $3.22953 \times 10^6$ | 111363. ,             |
| Uncorrected Total   | 32 | $6.74229 \times 10^9$ |                       |
| Corrected Total     | 31 | $2.16378 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.856809 & 0.966321 \\ -0.856809 & 1. & -0.834505 \\ 0.966321 & -0.834505 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0243408 |
|                     | Max Parameter-Effects   | 0.26232 } |
|                     | 95. % Confidence Region | 0.583805  |



sample: c3v E, model r

34175.

$$\frac{34175.}{(1 + e^{-0.5 x})^{2.03336}}$$

{BestFitParameters → {Emax → 34175., h → 2.03336},

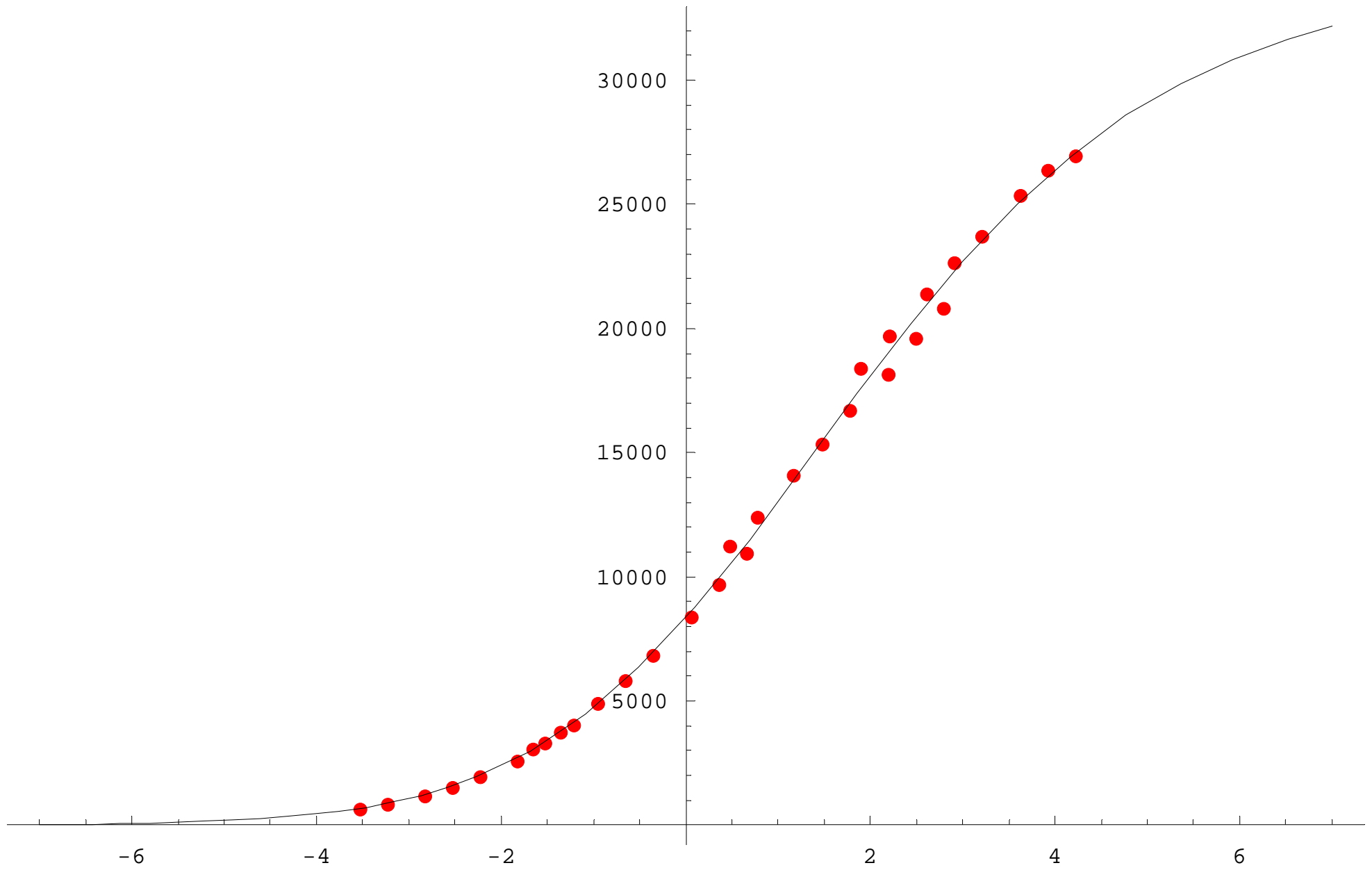
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 34175.   | 318.105       | {33525.4, 34824.7}, |
| h                       | 2.03336  | 0.0290548     | {1.97402, 2.0927}   |

EstimatedVariance → 173495.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $6.91135 \times 10^9$ | $3.45567 \times 10^9$ |
| ANOVATable → Error | 30 | $5.20486 \times 10^6$ | 173495. ,             |
| Uncorrected Total  | 32 | $6.91655 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.35017 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.842772 \\ 0.842772 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0161256 |
| Max Parameter-Effects             | 0.0208326 |
| 95. % Confidence Region           | 0.549166  |





sample: c3v E, model s

30705.7

$$\frac{1}{1 + e^{-0.693139(-1.46453 + x)}}$$

{BestFitParameters → {Emax → 30705.7, λ → 0.693139, xshift → 1.46453},

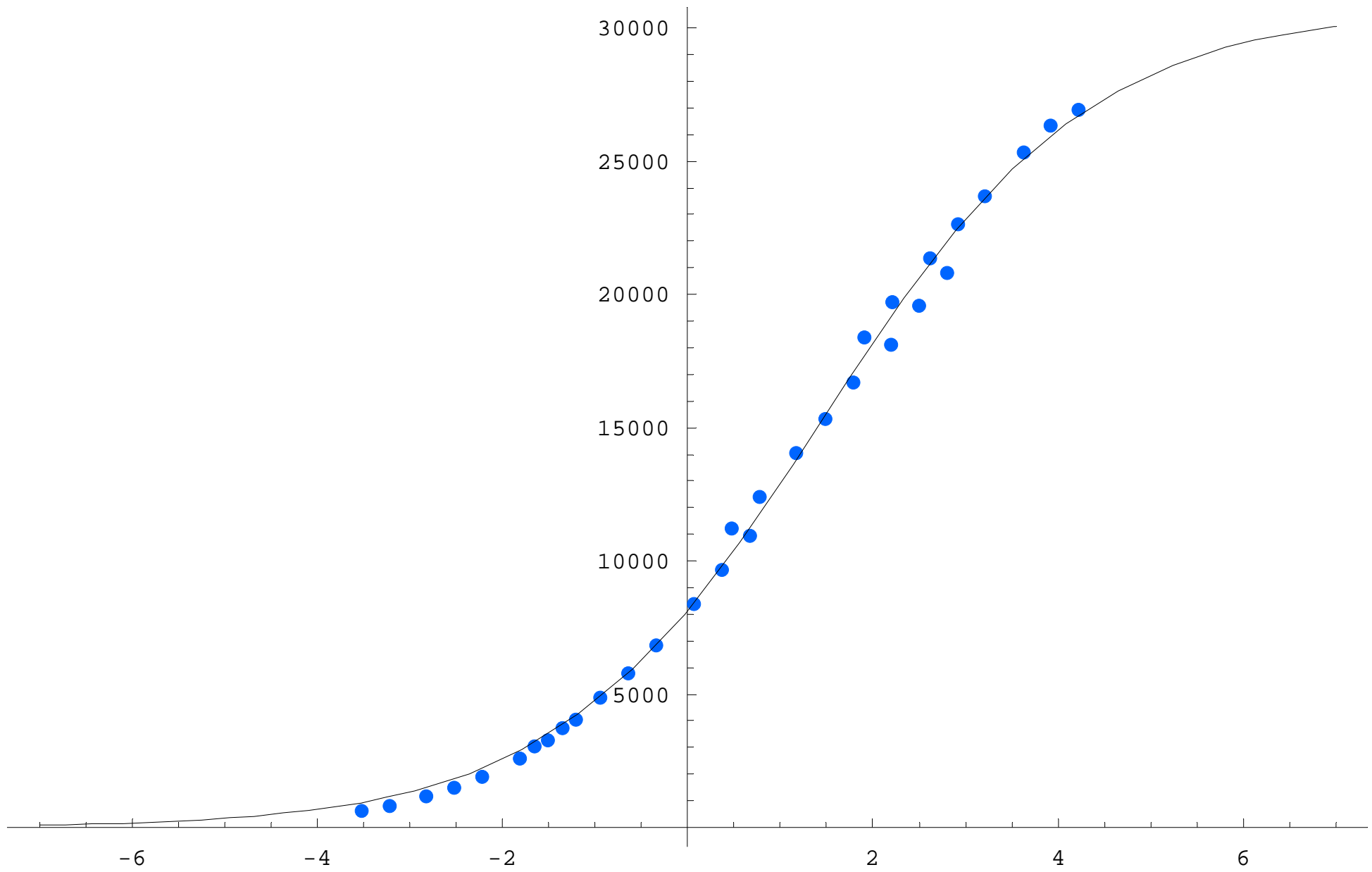
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 30705.7  | 731.279       | {29210.1, 32201.4}   |
|                    | λ      | 0.693139 | 0.0215108     | {0.649144, 0.737133} |
|                    | xshift | 1.46453  | 0.0878688     | {1.28482, 1.64424}   |

EstimatedVariance → 227795.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $6.90994 \times 10^9$ | $2.30331 \times 10^9$ |
| ANOVA Table → Error | 29 | $6.60606 \times 10^6$ | 227795.               |
| Uncorrected Total   | 32 | $6.91655 \times 10^9$ |                       |
| Corrected Total     | 31 | $2.35017 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.853903 & 0.966484 \\ -0.853903 & 1. & -0.833002 \\ 0.966484 & -0.833002 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0332859 |
|                     | Max Parameter-Effects   | 0.362113  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c4 E, model r

26851.1

$$(1 + e^{-0.5 x})^{1.74554}$$

{BestFitParameters → {Emax → 26851.1, h → 1.74554},

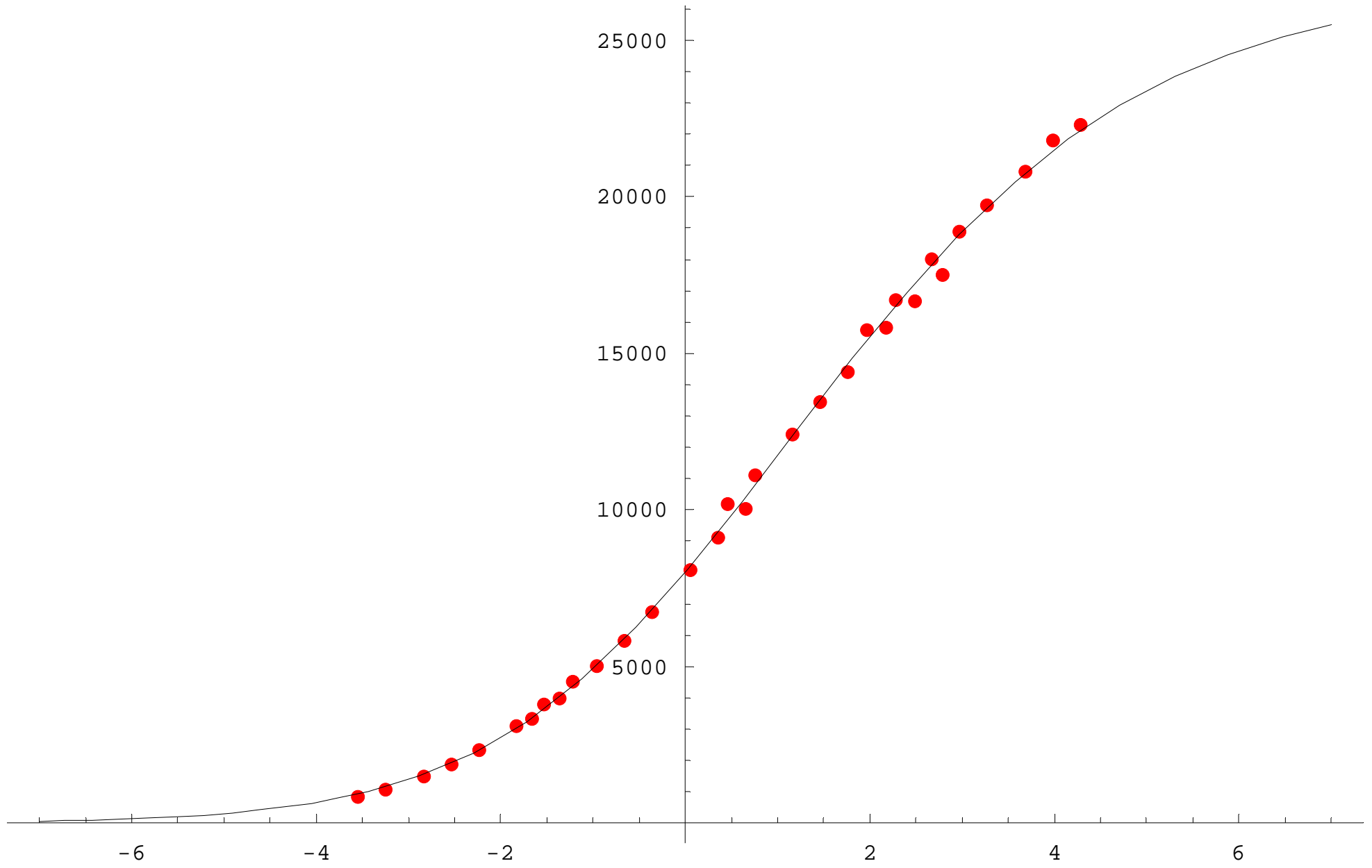
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 26851.1  | 168.409       | {26507.2, 27195.} , |
| h                       | 1.74554  | 0.0180358     | {1.70871, 1.78238}  |

EstimatedVariance → 64346.6,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $5.04807 \times 10^9$ | $2.52403 \times 10^9$ |
| ANOVATable → Error | 30 | $1.9304 \times 10^6$  | 64346.6 ,             |
| Uncorrected Total  | 32 | $5.05 \times 10^9$    |                       |
| Corrected Total    | 31 | $1.50486 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.822171 \\ 0.822171 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0107056 |
| Max Parameter-Effects             | 0.0144192 |
| 95. % Confidence Region           | 0.549166  |



sample: c4 E, model s

25338.6

$$\frac{1}{1 + e^{-0.629542(-1.26515 + x)}}$$

{BestFitParameters → {Emax → 25338.6, λ → 0.629542, xshift → 1.26515},

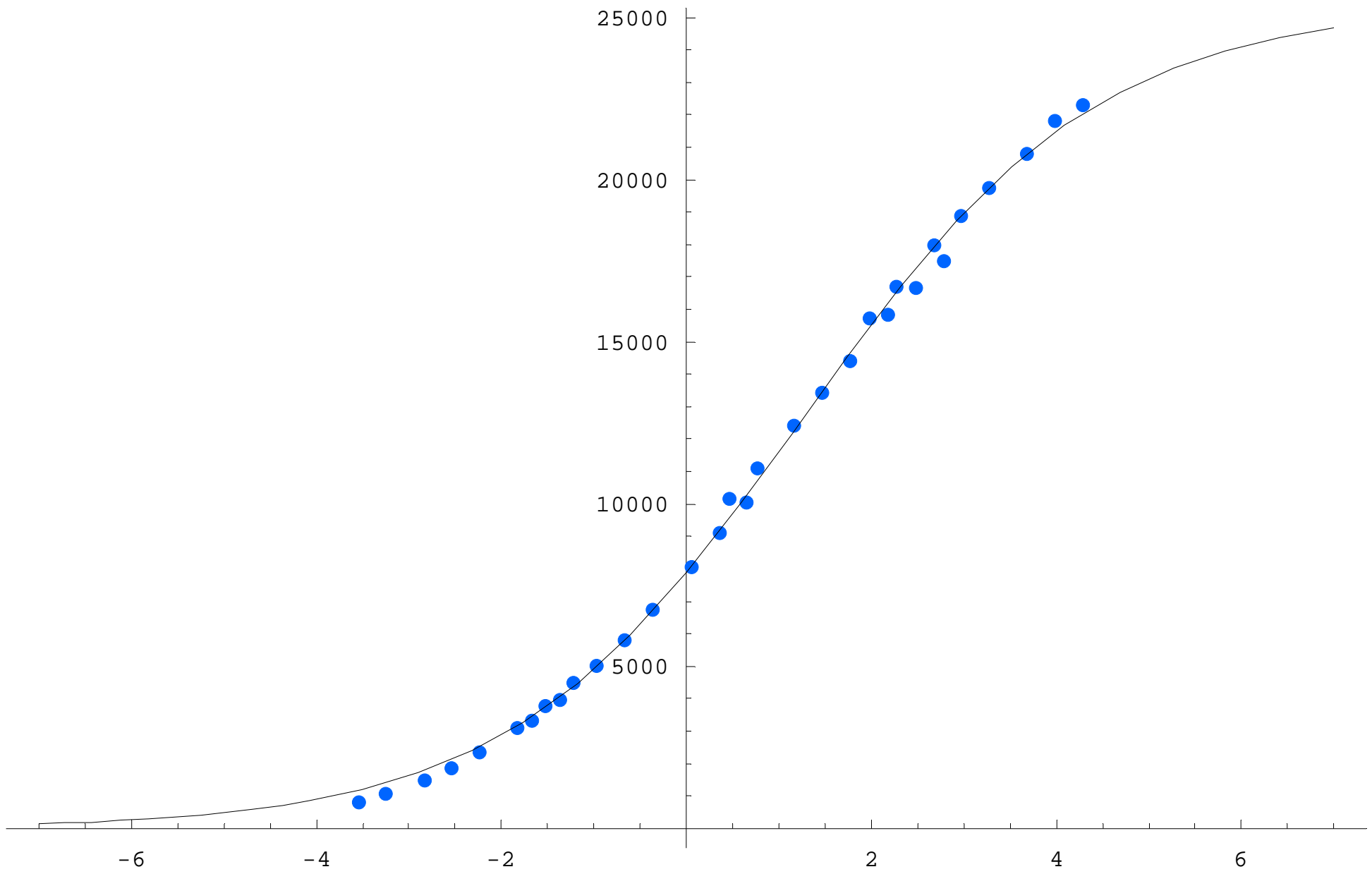
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 25338.6  | 463.801       | {24390., 26287.2}     |
|                    | λ      | 0.629542 | 0.0151597     | {0.598537, 0.660547}' |
|                    | xshift | 1.26515  | 0.0742654     | {1.11326, 1.41704}    |

EstimatedVariance → 91955.3,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $5.04733 \times 10^9$ | $1.68244 \times 10^9$ |
| ANOVA Table → Error | 29 | $2.6667 \times 10^6$  | 91955.3               |
| Uncorrected Total   | 32 | $5.05 \times 10^9$    |                       |
| Corrected Total     | 31 | $1.50486 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.864141 & 0.968526 \\ -0.864141 & 1. & -0.844008 \\ 0.968526 & -0.844008 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0262385 |
|                     | Max Parameter-Effects   | 0.291619  |
|                     | 95. % Confidence Region | 0.583805  |



sample: c4v E, model r

29041.8

$$(1 + e^{-0.5 x})^{1.89185}$$

{BestFitParameters → {Emax → 29041.8, h → 1.89185},

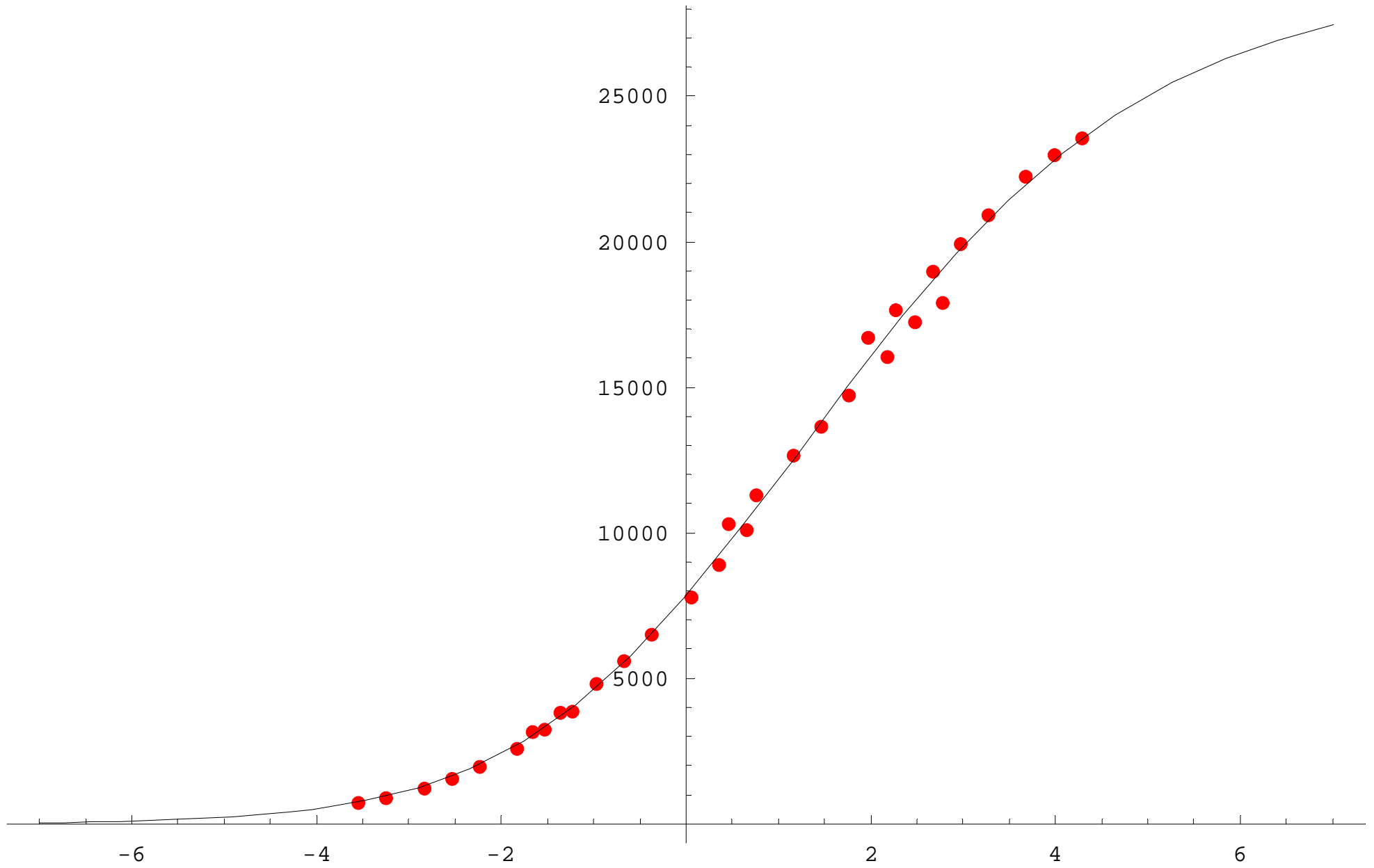
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 29041.8  | 276.995       | {28476.1, 29607.5}, |
| h                       | 1.89185  | 0.0287857     | {1.83306, 1.95064}  |

EstimatedVariance → 153433.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $5.44015 \times 10^9$ | $2.72008 \times 10^9$ |
| ANOVATable → Error | 30 | $4.60298 \times 10^6$ | 153433. ,             |
| Uncorrected Total  | 32 | $5.44475 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.75318 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.830641 \\ 0.830641 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0165423 |
| Max Parameter-Effects             | 0.021704  |
| 95. % Confidence Region           | 0.549166  |





sample: c4v E, model s

26732.6

$$\frac{1}{1 + e^{-0.662277(-1.37236 + x)}}$$

{BestFitParameters → {Emax → 26732.6, λ → 0.662277, xshift → 1.37236},

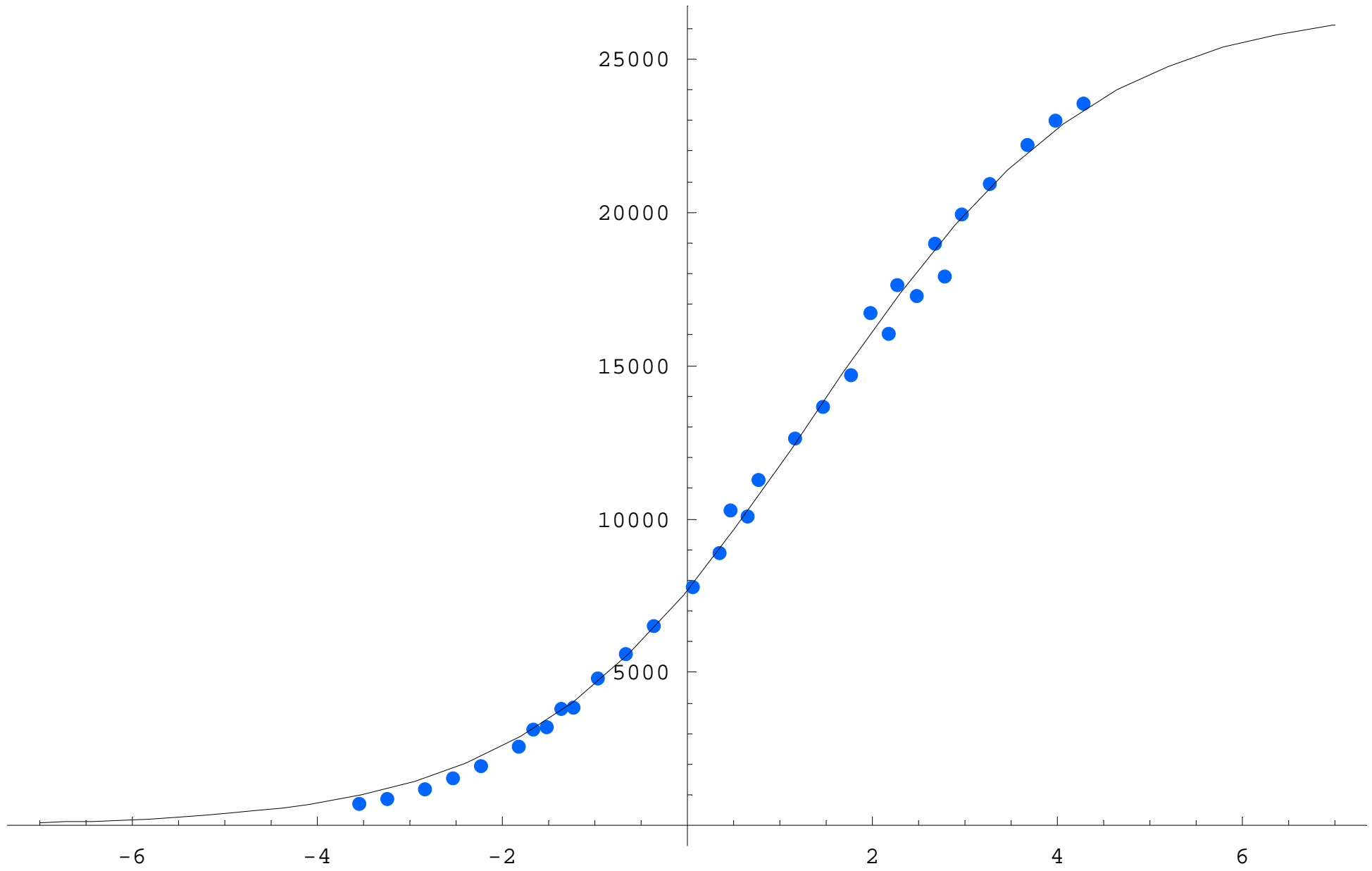
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 26732.6  | 670.041       | {25362.2, 28103.}     |
|                    | λ      | 0.662277 | 0.0219165     | {0.617452, 0.707101}' |
|                    | xshift | 1.37236  | 0.0971519     | {1.17366, 1.57106}    |

EstimatedVariance → 198310.,

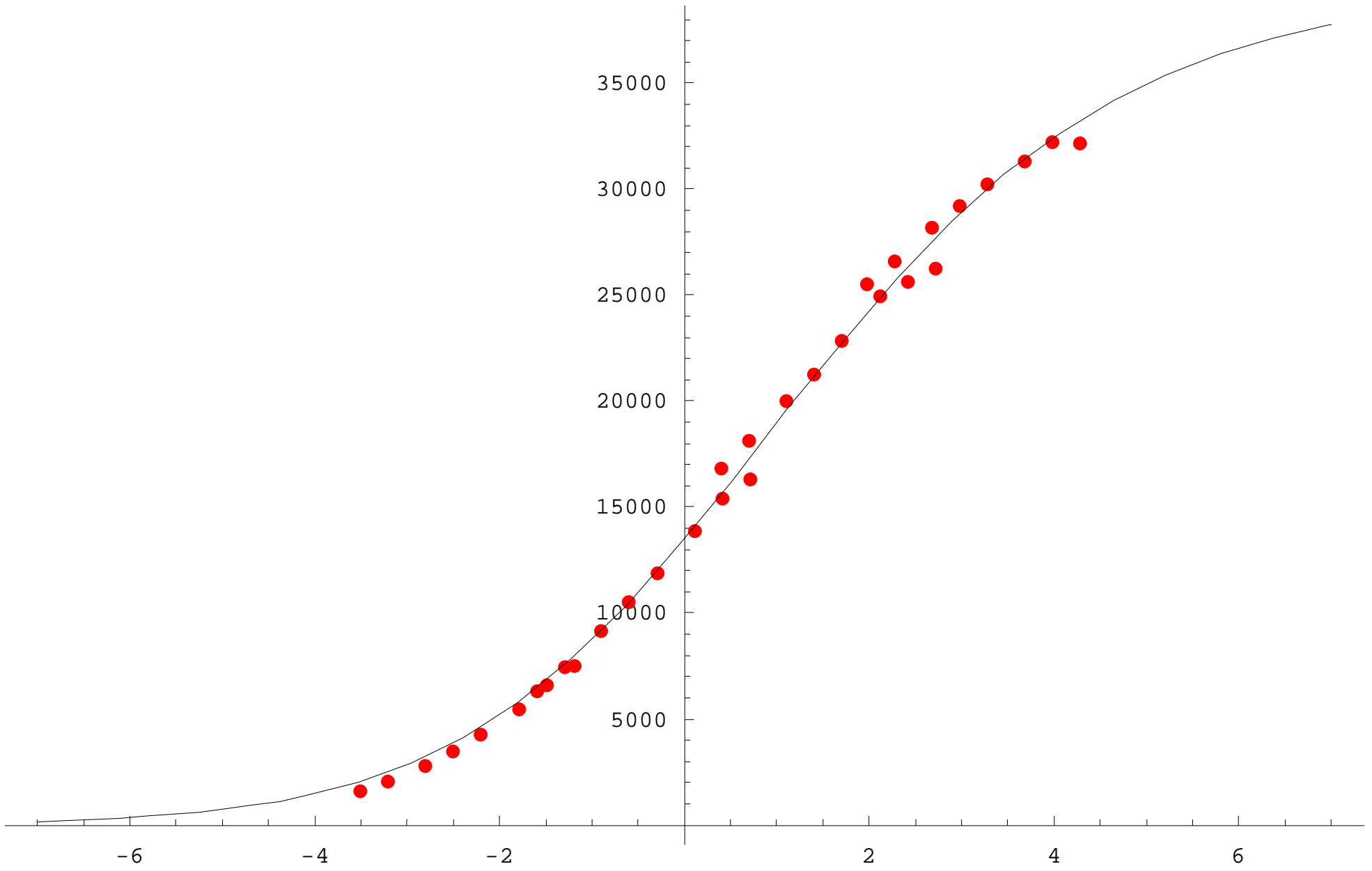
|                     | DF | SumOfSq               | MeanSq              |
|---------------------|----|-----------------------|---------------------|
| Model               | 3  | $5.439 \times 10^9$   | $1.813 \times 10^9$ |
| ANOVA Table → Error | 29 | $5.751 \times 10^6$   | 198310. ,           |
| Uncorrected Total   | 32 | $5.44475 \times 10^9$ |                     |
| Corrected Total     | 31 | $1.75318 \times 10^9$ |                     |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.85714 & 0.96639 \\ -0.85714 & 1. & -0.835993 \\ 0.96639 & -0.835993 & 1. \end{pmatrix},$

|                     | Curvature               |            |
|---------------------|-------------------------|------------|
| FitCurvatureTable → | Max Intrinsic           | 0.035976   |
|                     | Max Parameter-Effects   | 0.389087 } |
|                     | 95. % Confidence Region | 0.583805   |







sample: A3 E, model s

35563.6

$$\frac{1}{1 + e^{-0.660575(-0.755628 + x)}}$$

{BestFitParameters → {Emax → 35563.6, λ → 0.660575, xshift → 0.755628},

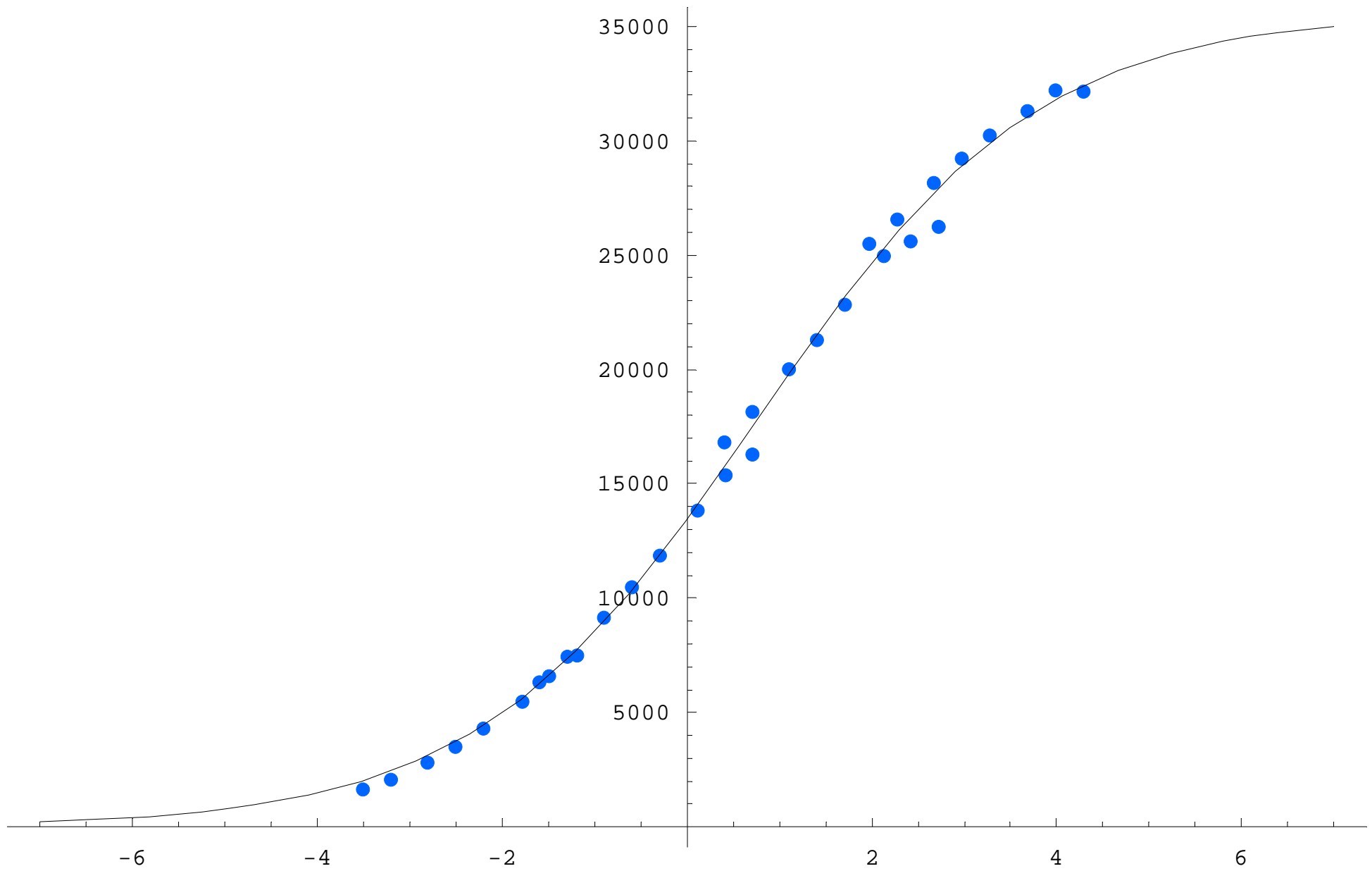
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 35563.6  | 678.378       | {34176.2, 36951.1}   |
|                    | λ      | 0.660575 | 0.0205114     | {0.618625, 0.702526} |
|                    | xshift | 0.755628 | 0.0784412     | {0.595197, 0.916058} |

EstimatedVariance → 355776.,

|                     | DF | SumOfSq                  | MeanSq                |
|---------------------|----|--------------------------|-----------------------|
| Model               | 3  | $1.22297 \times 10^{10}$ | $4.07656 \times 10^9$ |
| ANOVA Table → Error | 29 | $1.03175 \times 10^7$    | 355776.               |
| Uncorrected Total   | 32 | $1.224 \times 10^{10}$   |                       |
| Corrected Total     | 31 | $3.2462 \times 10^9$     |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.846269 & 0.948219 \\ -0.846269 & 1. & -0.801186 \\ 0.948219 & -0.801186 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0365634 |
|                     | Max Parameter-Effects   | 0.323788  |
|                     | 95. % Confidence Region | 0.583805  |



sample: A3v E, model r

38583.8

$$(1 + e^{-0.5 x})^{1.65539}$$

{BestFitParameters → {Emax → 38583.8, h → 1.65539},

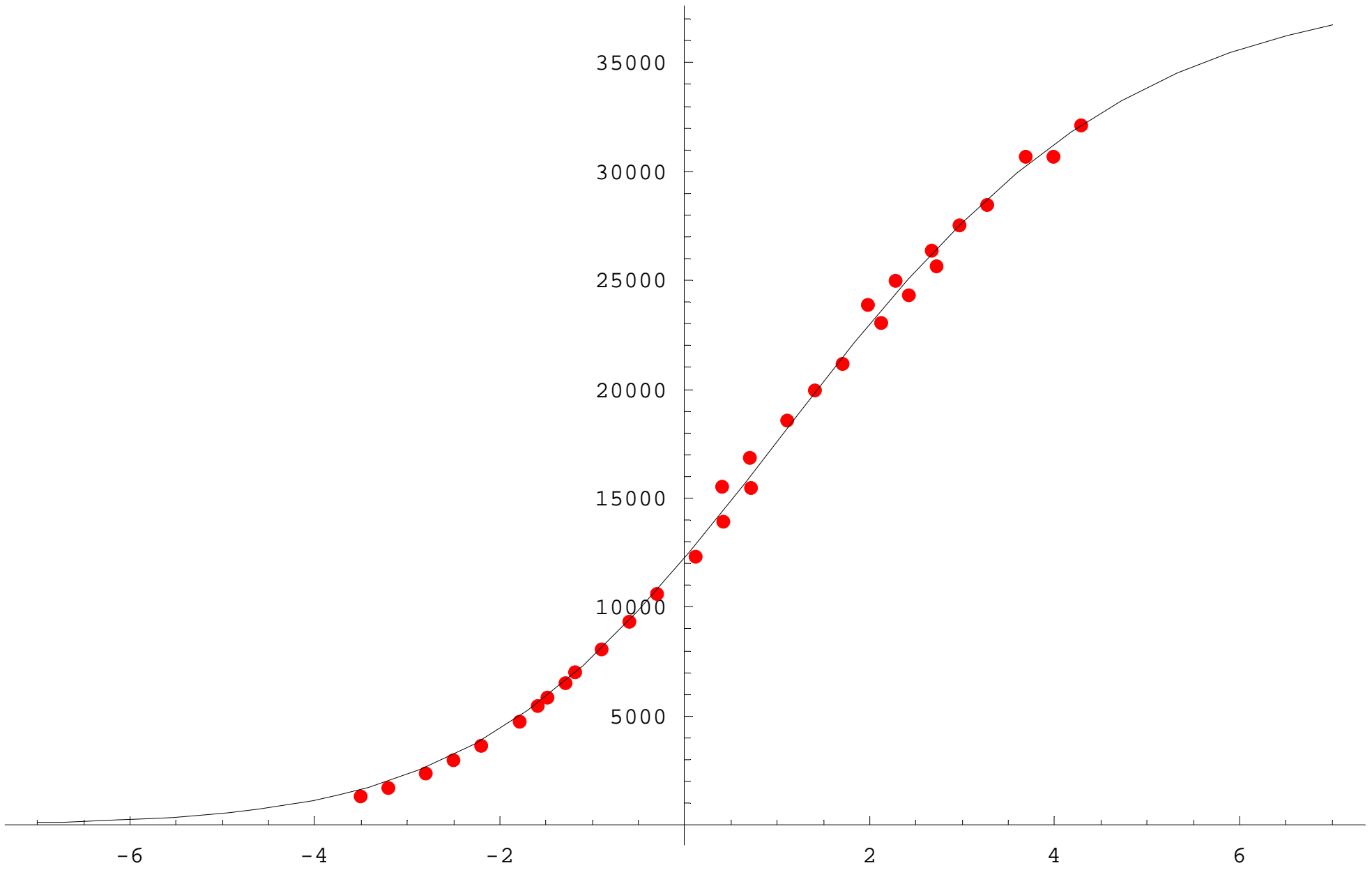
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 38583.8  | 314.502       | {37941.5, 39226.1}, |
| h                       | 1.65539  | 0.022502      | {1.60944, 1.70135}  |

EstimatedVariance → 240303.,

|                    | DF | SumOfSq                  | MeanSq                |
|--------------------|----|--------------------------|-----------------------|
| Model              | 2  | $1.09394 \times 10^{10}$ | $5.46972 \times 10^9$ |
| ANOVATable → Error | 30 | $7.20909 \times 10^6$    | 240303. ,             |
| Uncorrected Total  | 32 | $1.09467 \times 10^{10}$ |                       |
| Corrected Total    | 31 | $3.08432 \times 10^9$    |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.818157 \\ 0.818157 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0135077 |
| Max Parameter-Effects             | 0.0182447 |
| 95. % Confidence Region           | 0.549166  |





sample: A3v E, model s

35238.5

$$\frac{1}{1 + e^{-0.65177(-0.992012 + x)}}$$

{BestFitParameters → {Emax → 35238.5, λ → 0.65177, xshift → 0.992012},

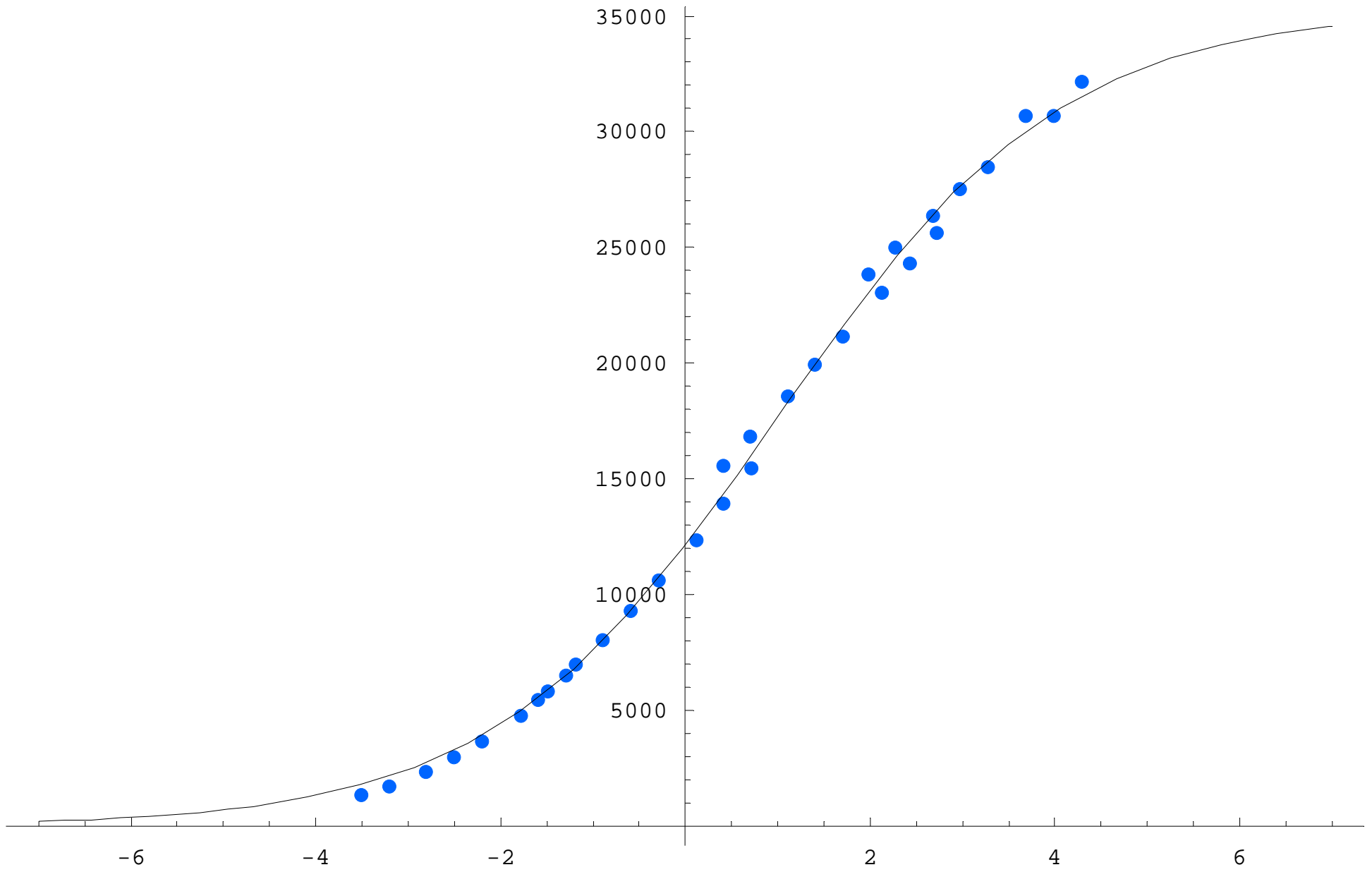
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 35238.5  | 685.033       | {33837.4, 36639.5}   |
|                    | λ      | 0.65177  | 0.0188552     | {0.613207, 0.690333} |
|                    | xshift | 0.992012 | 0.0788224     | {0.830802, 1.15322}  |

EstimatedVariance → 283889.,

|                     | DF | SumOfSq                  | MeanSq                |
|---------------------|----|--------------------------|-----------------------|
| Model               | 3  | $1.09384 \times 10^{10}$ | $3.64614 \times 10^9$ |
| ANOVA Table → Error | 29 | $8.23279 \times 10^6$    | 283889.               |
| Uncorrected Total   | 32 | $1.09467 \times 10^{10}$ |                       |
| Corrected Total     | 31 | $3.08432 \times 10^9$    |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.853334 & 0.957875 \\ -0.853334 & 1. & -0.82081 \\ 0.957875 & -0.82081 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0328938 |
|                     | Max Parameter-Effects   | 0.319255  |
|                     | 95. % Confidence Region | 0.583805  |



sample: B3 E, model r

38271.1

$$(1 + e^{-0.5 x})^{1.52016}$$

{BestFitParameters → {Emax → 38271.1, h → 1.52016},

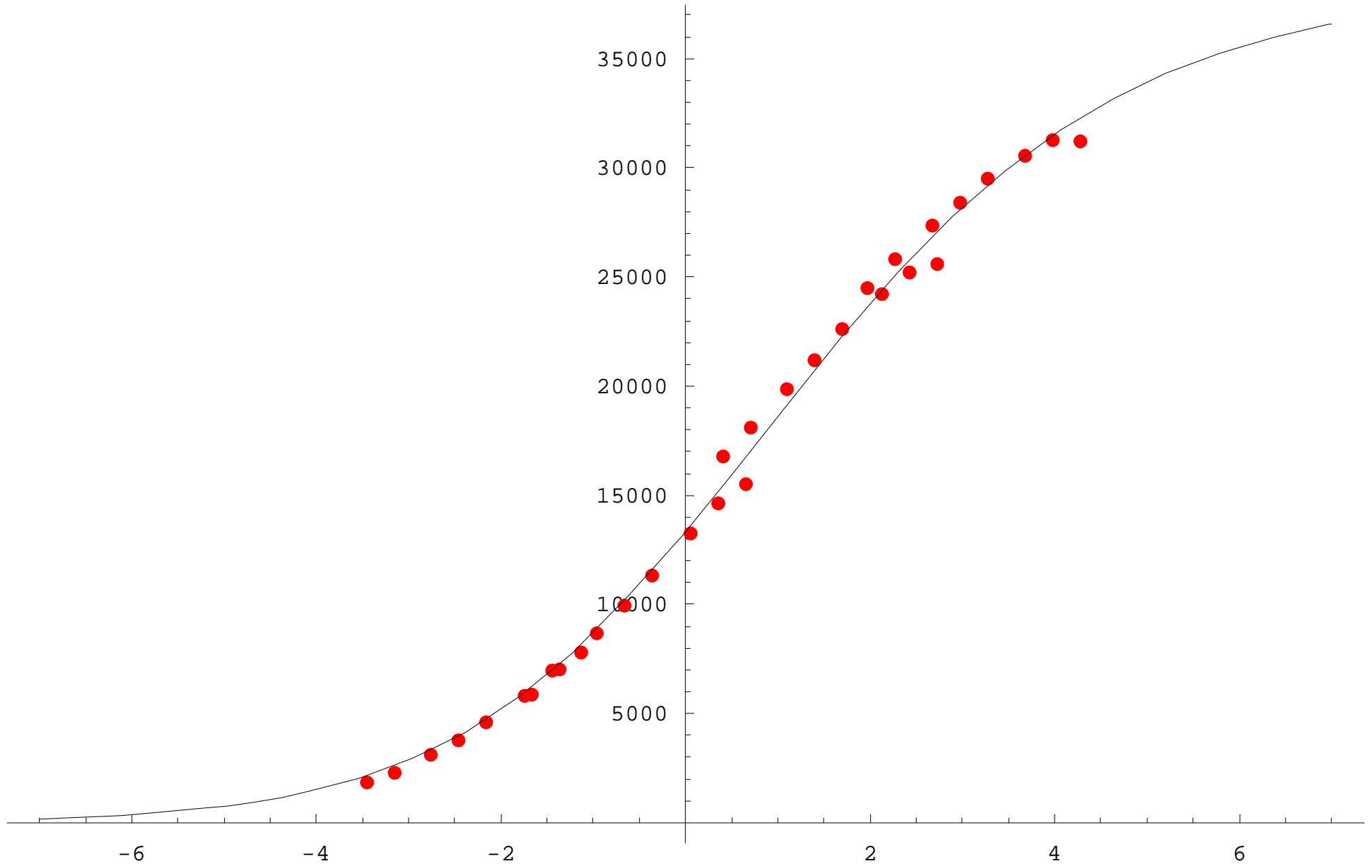
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 38271.1  | 379.856       | {37495.3, 39046.9}, |
| h                       | 1.52016  | 0.0259761     | {1.46711, 1.57321}  |

EstimatedVariance → 396956.,

|                    | DF | SumOfSq                  | MeanSq                |
|--------------------|----|--------------------------|-----------------------|
| Model              | 2  | $1.16352 \times 10^{10}$ | $5.81759 \times 10^9$ |
| ANOVATable → Error | 30 | $1.19087 \times 10^7$    | 396956. ,             |
| Uncorrected Total  | 32 | $1.16471 \times 10^{10}$ |                       |
| Corrected Total    | 31 | $3.0317 \times 10^9$     |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.808507 \\ 0.808507 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.015811  |
| Max Parameter-Effects             | 0.0224296 |
| 95. % Confidence Region           | 0.549166  |



sample: B3 E, model s

34560.5

$$\frac{1}{1 + e^{-0.654436(-0.716045 + x)}}$$

{BestFitParameters → {Emax → 34560.5, λ → 0.654436, xshift → 0.716045},

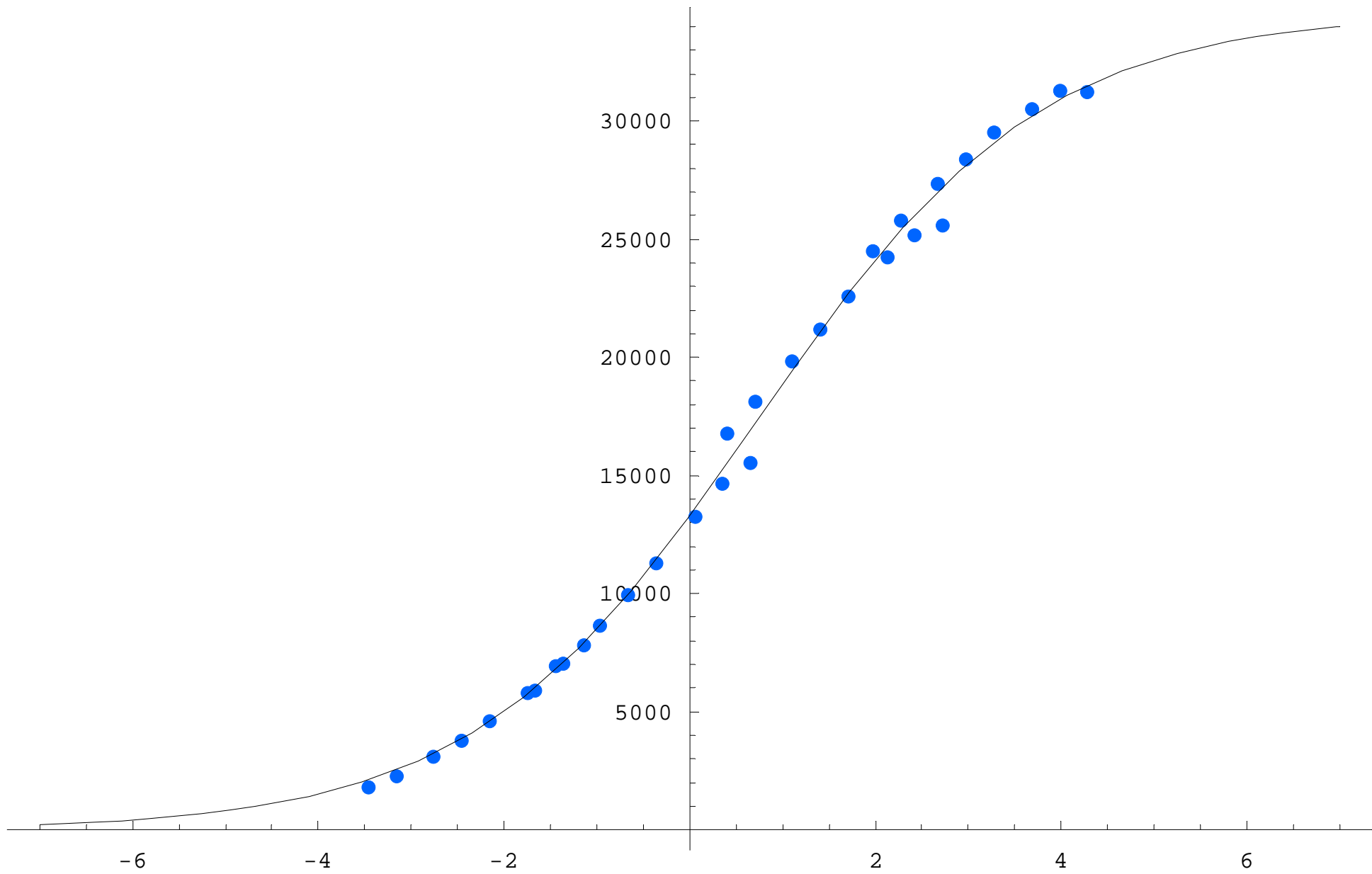
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 34560.5  | 664.736       | {33200.9, 35920.}     |
|                    | λ      | 0.654436 | 0.0205124     | {0.612484, 0.696388}' |
|                    | xshift | 0.716045 | 0.0801302     | {0.55216, 0.879929}   |

EstimatedVariance → 342773.,

|                     | DF | SumOfSq                  | MeanSq                |
|---------------------|----|--------------------------|-----------------------|
| Model               | 3  | $1.16371 \times 10^{10}$ | $3.87905 \times 10^9$ |
| ANOVA Table → Error | 29 | $9.94041 \times 10^6$    | 342773. ,             |
| Uncorrected Total   | 32 | $1.16471 \times 10^{10}$ |                       |
| Corrected Total     | 31 | $3.0317 \times 10^9$     |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.848641 & 0.948593 \\ -0.848641 & 1. & -0.804962 \\ 0.948593 & -0.804962 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0372794 |
|                     | Max Parameter-Effects   | 0.330206  |
|                     | 95. % Confidence Region | 0.583805  |



sample: B3v E, model r

37817.1

$$(1 + e^{-0.5 x})^{1.53149}$$

{BestFitParameters → {Emax → 37817.1, h → 1.53149}},

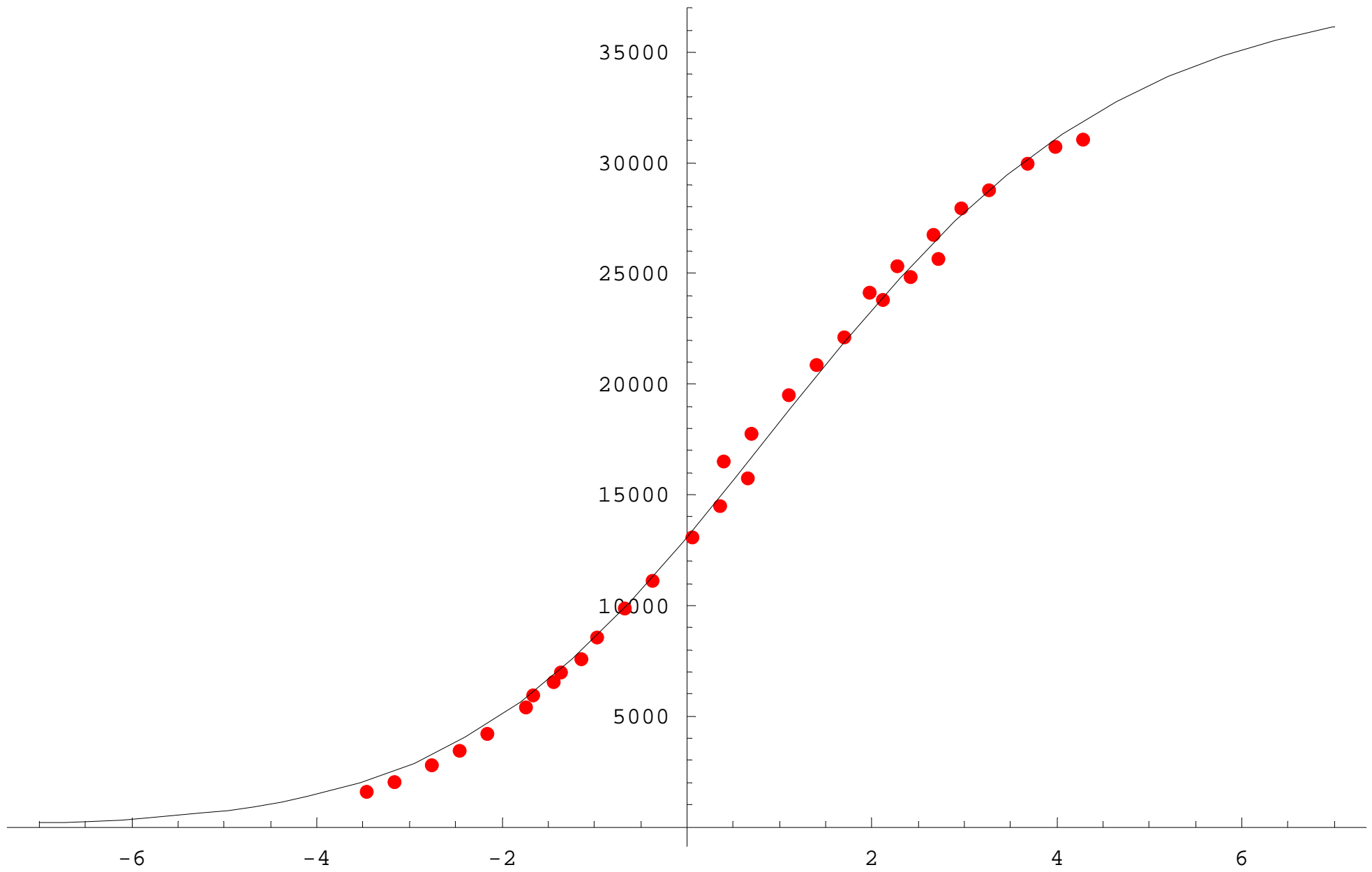
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 37817.1  | 338.056       | {37126.7, 38507.5}, |
| h                       | 1.53149  | 0.0235001     | {1.48349, 1.57948}  |

EstimatedVariance → 311289.,

|                    | DF | SumOfSq                  | MeanSq                |
|--------------------|----|--------------------------|-----------------------|
| Model              | 2  | $1.12817 \times 10^{10}$ | $5.64087 \times 10^9$ |
| ANOVATable → Error | 30 | $9.33867 \times 10^6$    | 311289. ,             |
| Uncorrected Total  | 32 | $1.12911 \times 10^{10}$ |                       |
| Corrected Total    | 31 | $2.97931 \times 10^9$    |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.80914 \\ 0.80914 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0142764 |
| Max Parameter-Effects             | 0.0202033 |
| 95. % Confidence Region           | 0.549166  |





sample: B3v E, model s

33752.5

$$\frac{1}{1 + e^{-0.66788(-0.687191 + x)}}$$

{BestFitParameters → {Emax → 33752.5, λ → 0.66788, xshift → 0.687191},

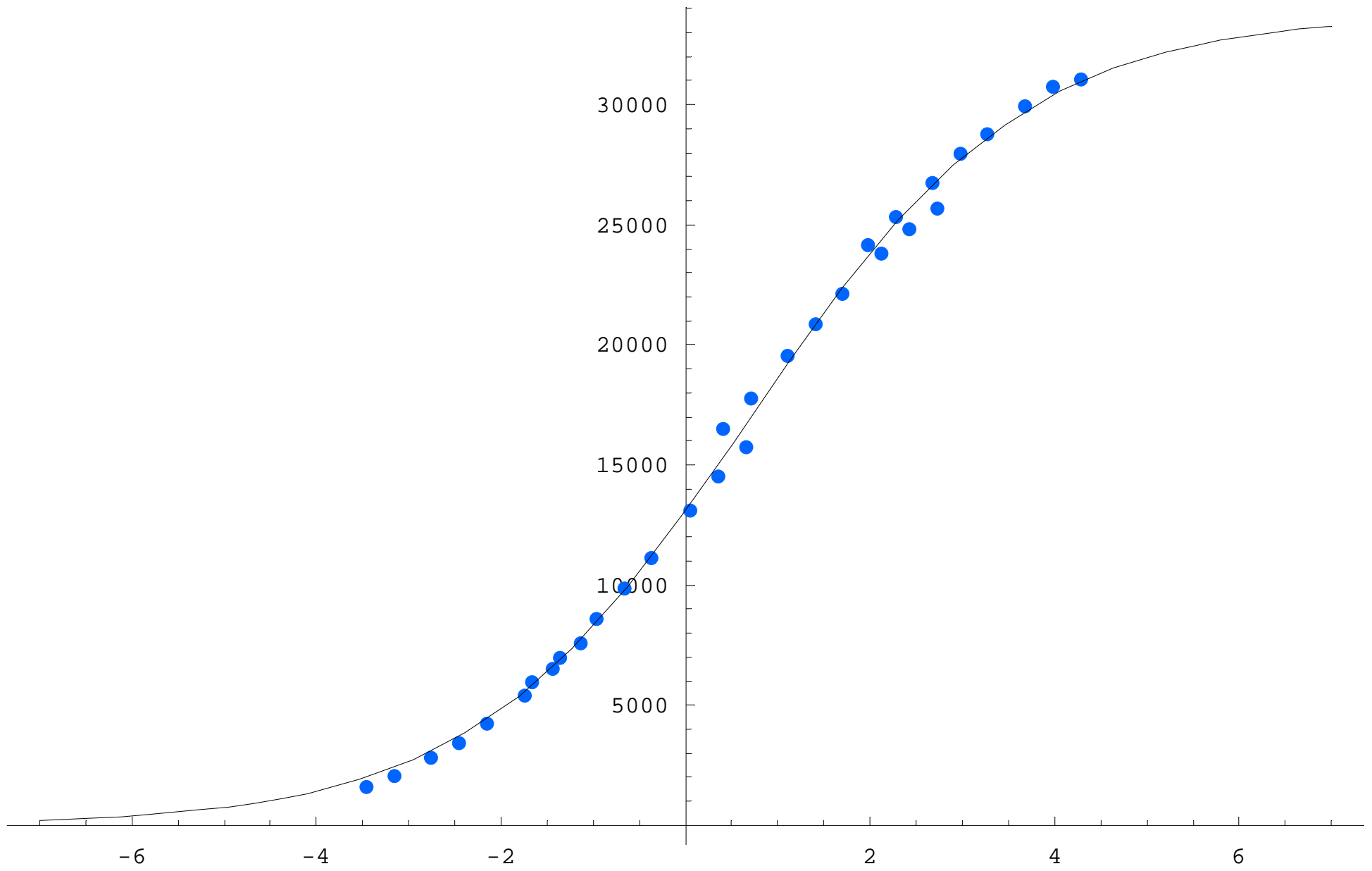
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 33752.5  | 537.97        | {32652.2, 34852.7}   |
|                    | λ      | 0.66788  | 0.0178042     | {0.631467, 0.704294} |
|                    | xshift | 0.687191 | 0.0658061     | {0.552602, 0.82178}  |

EstimatedVariance → 243738.,

|                     | DF | SumOfSq                  | MeanSq                |
|---------------------|----|--------------------------|-----------------------|
| Model               | 3  | $1.1284 \times 10^{10}$  | $3.76134 \times 10^9$ |
| ANOVA Table → Error | 29 | $7.06839 \times 10^6$    | 243738.               |
| Uncorrected Total   | 32 | $1.12911 \times 10^{10}$ |                       |
| Corrected Total     | 31 | $2.97931 \times 10^9$    |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.843869 & 0.944352 \\ -0.843869 & 1. & -0.796032 \\ 0.944352 & -0.796032 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0321503 |
|                     | Max Parameter-Effects   | 0.273827  |
|                     | 95. % Confidence Region | 0.583805  |



sample: B4 E, model r

37912.

$$(1 + e^{-0.5 x})^{1.52837}$$

{BestFitParameters → {Emax → 37912., h → 1.52837},

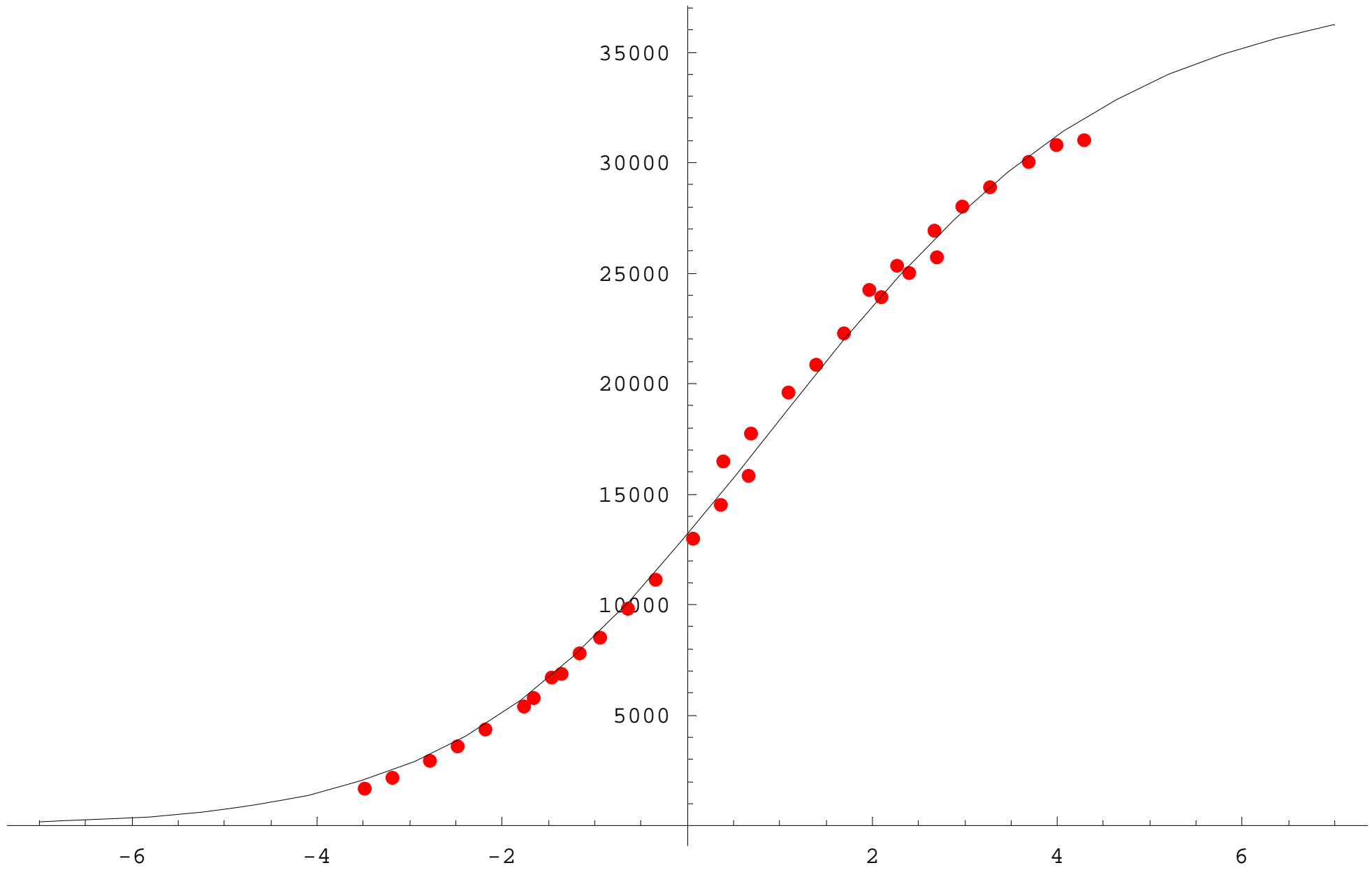
|                         | Estimate | Asymptotic SE | CI                 |
|-------------------------|----------|---------------|--------------------|
| ParameterCITable → Emax | 37912.   | 337.388       | {37223., 38601.} , |
| h                       | 1.52837  | 0.0233491     | {1.48069, 1.57606} |

EstimatedVariance → 309471.,

|                    | DF | SumOfSq                  | MeanSq                |
|--------------------|----|--------------------------|-----------------------|
| Model              | 2  | $1.13412 \times 10^{10}$ | $5.67061 \times 10^9$ |
| ANOVATable → Error | 30 | $9.28414 \times 10^6$    | 309471. ,             |
| Uncorrected Total  | 32 | $1.13505 \times 10^{10}$ |                       |
| Corrected Total    | 31 | $2.98289 \times 10^9$    |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.809598 \\ 0.809598 & 1. \end{pmatrix}$ ,

|                                   | Curvature  |
|-----------------------------------|------------|
| FitCurvatureTable → Max Intrinsic | 0.0142756  |
| Max Parameter-Effects             | 0.020043 } |
| 95. % Confidence Region           | 0.549166   |



sample: B4 E, model s

33928.1

$$\frac{1}{1 + e^{-0.665331(-0.693708 + x)}}$$

{BestFitParameters → {Emax → 33928.1, λ → 0.665331, xshift → 0.693708},

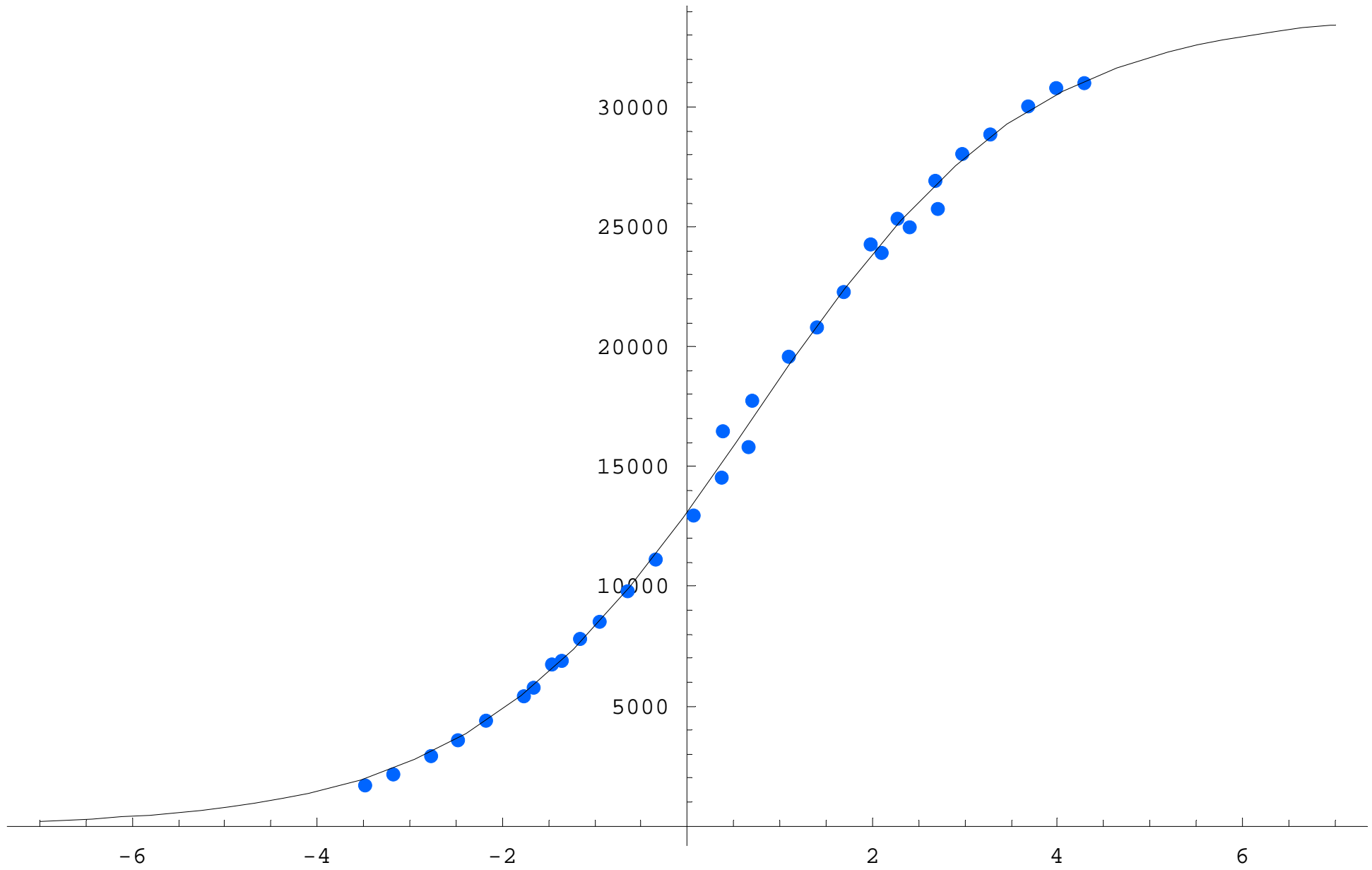
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 33928.1  | 525.042       | {32854.3, 35001.9}   |
|                    | λ      | 0.665331 | 0.0171404     | {0.630275, 0.700387} |
|                    | xshift | 0.693708 | 0.0638885     | {0.563042, 0.824375} |

EstimatedVariance → 228629.,

|                     | DF | SumOfSq                  | MeanSq                |
|---------------------|----|--------------------------|-----------------------|
| Model               | 3  | $1.13439 \times 10^{10}$ | $3.78129 \times 10^9$ |
| ANOVA Table → Error | 29 | $6.63025 \times 10^6$    | 228629.               |
| Uncorrected Total   | 32 | $1.13505 \times 10^{10}$ |                       |
| Corrected Total     | 31 | $2.98289 \times 10^9$    |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.843921 & 0.945053 \\ -0.843921 & 1. & -0.796577 \\ 0.945053 & -0.796577 & 1. \end{pmatrix},$

|                     | Curvature               |          |
|---------------------|-------------------------|----------|
| FitCurvatureTable → | Max Intrinsic           | 0.030848 |
|                     | Max Parameter-Effects   | 0.264715 |
|                     | 95. % Confidence Region | 0.583805 |



sample: B4v E, model r

39388.7

$$(1 + e^{-0.5 x})^{1.55378}$$

{BestFitParameters → {Emax → 39388.7, h → 1.55378},

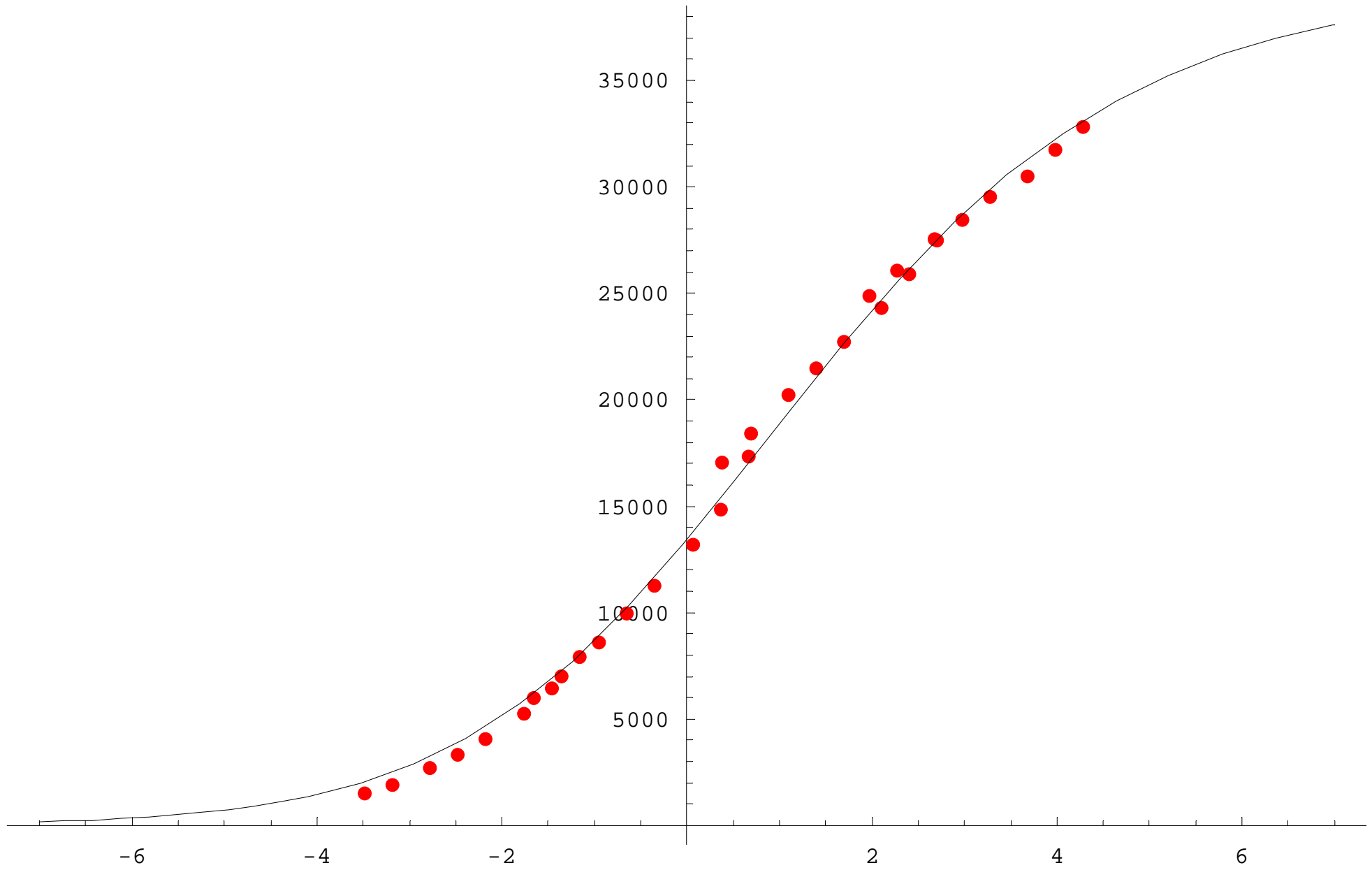
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 39388.7  | 362.878       | {38647.6, 40129.8}, |
| h                       | 1.55378  | 0.0244124     | {1.50392, 1.60364}  |

EstimatedVariance → 350107.,

|                    | DF | SumOfSq                  | MeanSq                |
|--------------------|----|--------------------------|-----------------------|
| Model              | 2  | $1.20523 \times 10^{10}$ | $6.02614 \times 10^9$ |
| ANOVATable → Error | 30 | $1.05032 \times 10^7$    | 350107. ,             |
| Uncorrected Total  | 32 | $1.20628 \times 10^{10}$ |                       |
| Corrected Total    | 31 | $3.24998 \times 10^9$    |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.811012 \\ 0.811012 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0148569 |
| Max Parameter-Effects             | 0.0207476 |
| 95. % Confidence Region           | 0.549166  |





sample: B4v E, model s

34690.5

$$\frac{1}{1 + e^{-0.684915(-0.672515 + x)}}$$

{BestFitParameters → {Emax → 34690.5, λ → 0.684915, xshift → 0.672515},

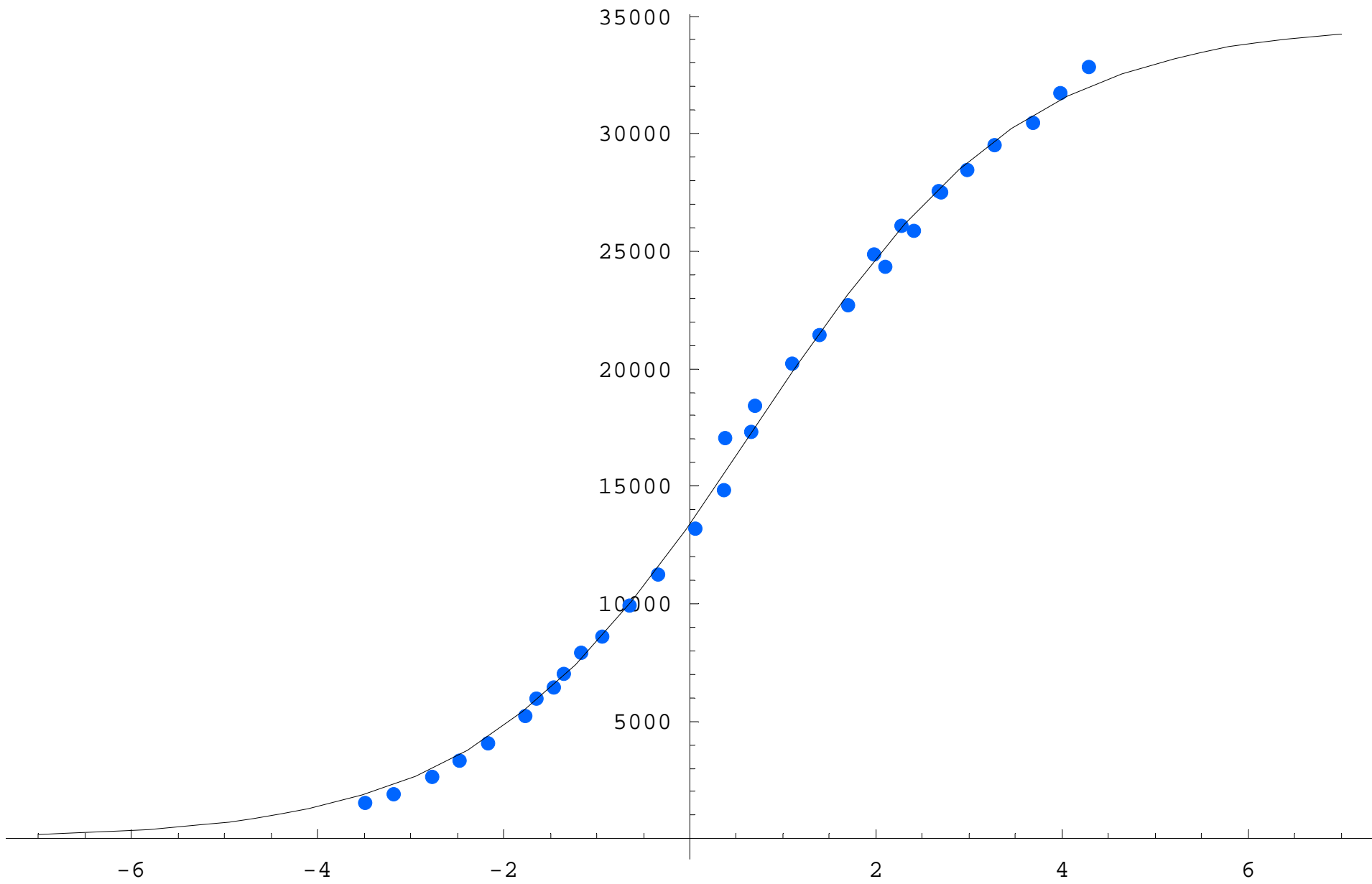
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 34690.5  | 516.749       | {33633.7, 35747.4}   |
|                    | λ      | 0.684915 | 0.0175166     | {0.64909, 0.720741}  |
|                    | xshift | 0.672515 | 0.0606155     | {0.548542, 0.796487} |

EstimatedVariance → 244630.,

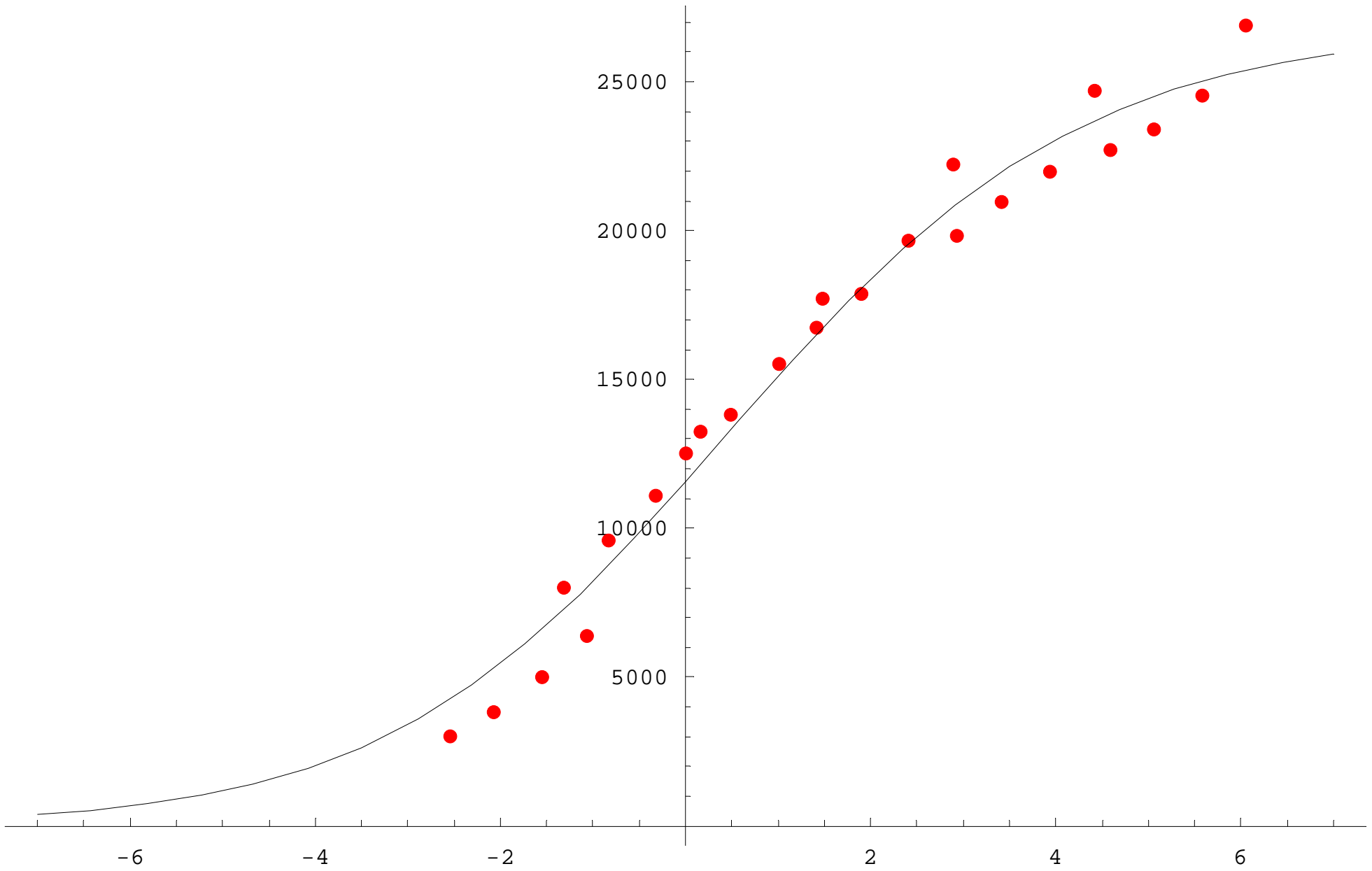
|                     | DF | SumOfSq                  | MeanSq                |
|---------------------|----|--------------------------|-----------------------|
| Model               | 3  | $1.20557 \times 10^{10}$ | $4.01856 \times 10^9$ |
| ANOVA Table → Error | 29 | $7.09428 \times 10^6$    | 244630.               |
| Uncorrected Total   | 32 | $1.20628 \times 10^{10}$ |                       |
| Corrected Total     | 31 | $3.24998 \times 10^9$    |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.837316 & 0.939368 \\ -0.837316 & 1. & -0.784667 \\ 0.939368 & -0.784667 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0311733 |
|                     | Max Parameter-Effects   | 0.25441   |
|                     | 95. % Confidence Region | 0.583805  |







sample: 16 E, model s

25382.2

$$\frac{1}{1 + e^{-0.611604(-0.262771 + x)}}$$

{BestFitParameters → {Emax → 25382.2, λ → 0.611604, xshift → 0.262771},

ParameterCITable →

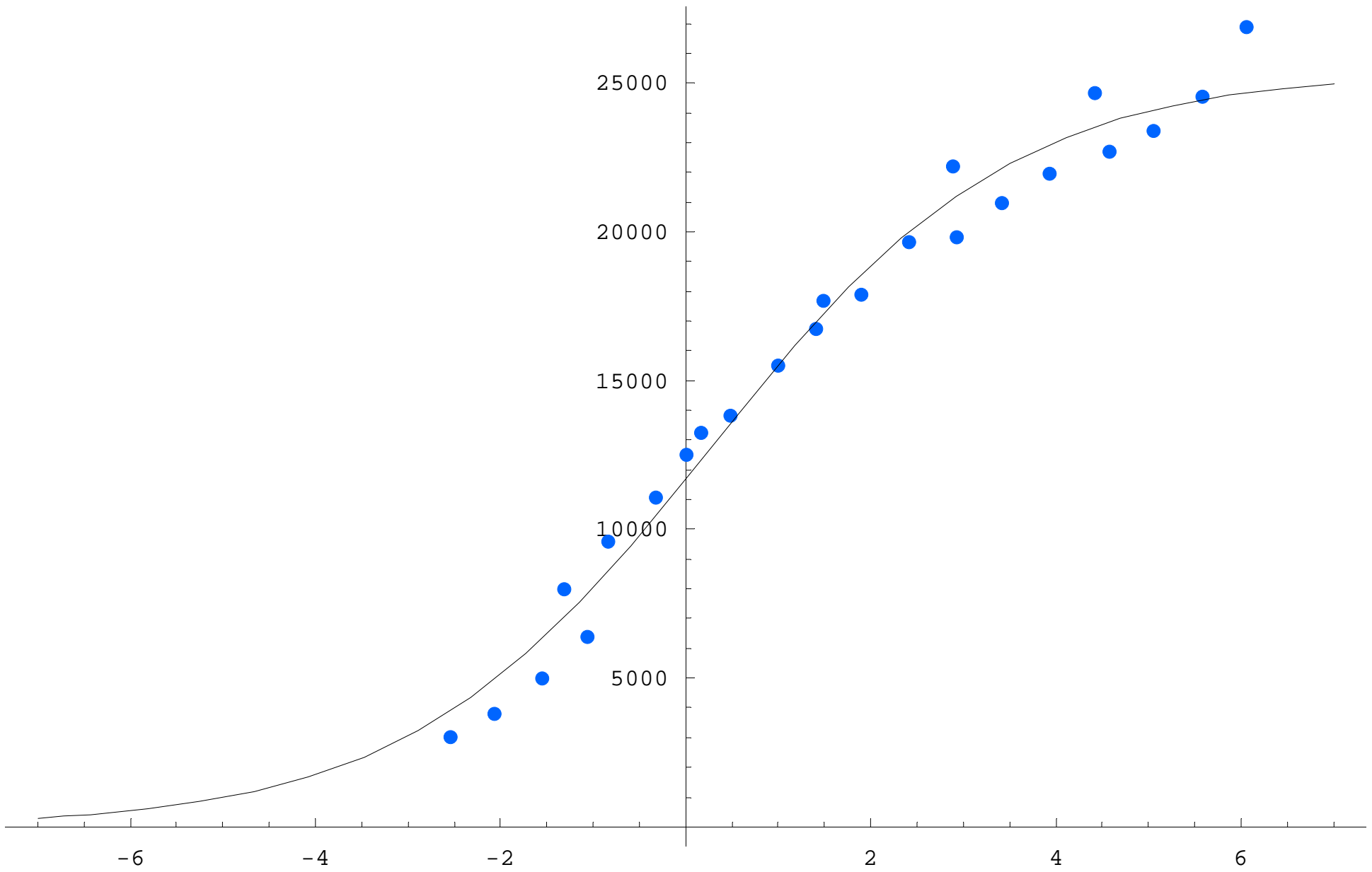
|        | Estimate | Asymptotic SE | CI                     |
|--------|----------|---------------|------------------------|
| Emax   | 25382.2  | 738.921       | {23845.6, 26918.9}     |
| λ      | 0.611604 | 0.0499531     | {0.507721, 0.715487}   |
| xshift | 0.262771 | 0.148034      | {-0.0450828, 0.570624} |

EstimatedVariance →  $1.13366 \times 10^6$ ,

|                     | DF | SumOfSq               | MeanSq                  |
|---------------------|----|-----------------------|-------------------------|
| Model               | 3  | $7.22474 \times 10^9$ | $2.40825 \times 10^9$   |
| ANOVA Table → Error | 21 | $2.38068 \times 10^7$ | $1.13366 \times 10^6$ , |
| Uncorrected Total   | 24 | $7.24855 \times 10^9$ |                         |
| Corrected Total     | 23 | $1.18416 \times 10^9$ |                         |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.777463 & 0.842284 \\ -0.777463 & 1. & -0.620876 \\ 0.842284 & -0.620876 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.10222   |
| Max Parameter-Effects             | 0.581366  |
| 95. % Confidence Region           | 0.570501  |



sample: 2 E, model r

29558.5

$$(1 + e^{-0.5 x})^{1.2389}$$

{BestFitParameters → {Emax → 29558.5, h → 1.2389},

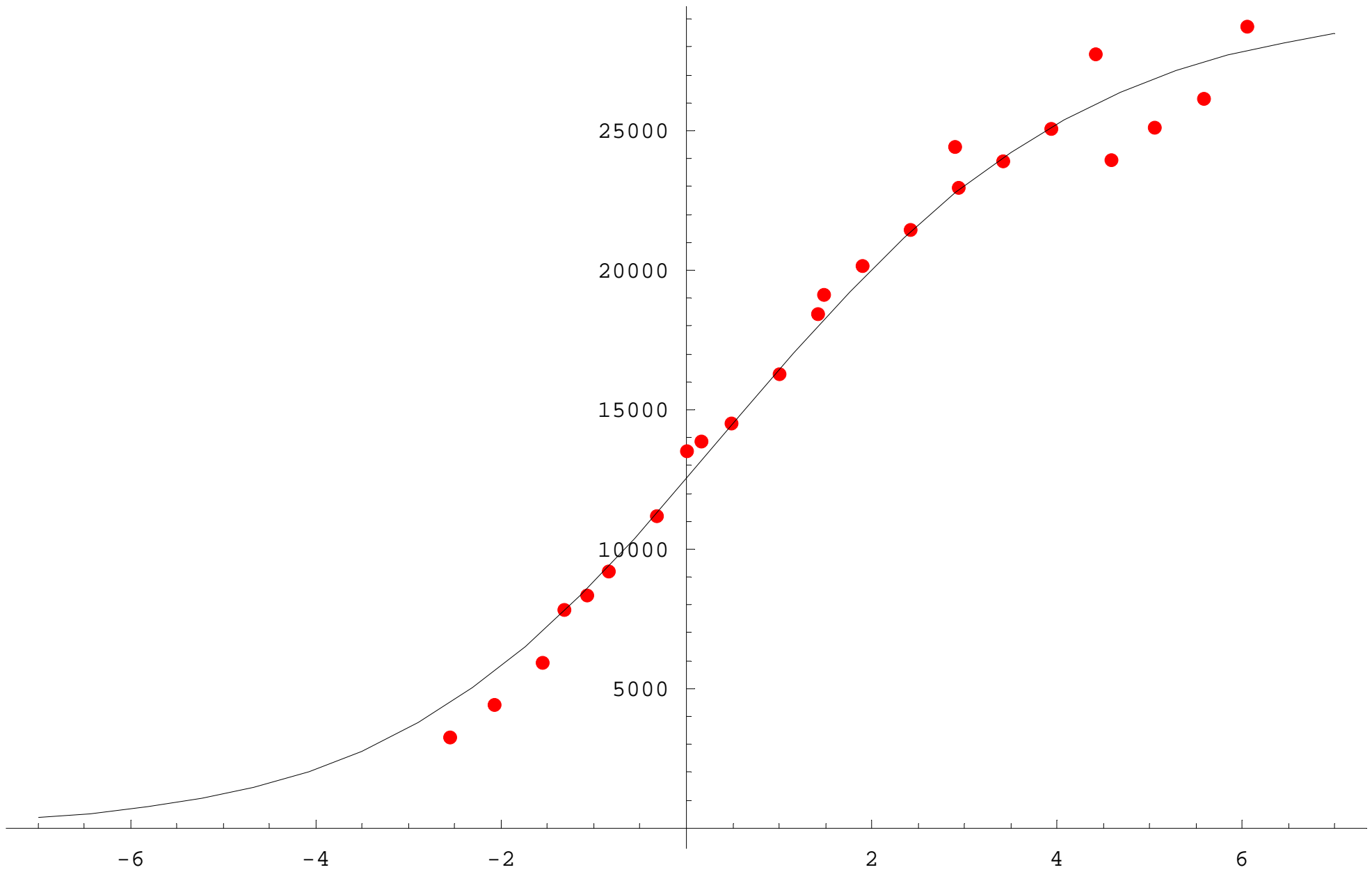
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 29558.5  | 469.332       | {28585.1, 30531.8}, |
| h                       | 1.2389   | 0.0462284     | {1.14302, 1.33477}  |

EstimatedVariance →  $1.08207 \times 10^6$ ,

|                    | DF | SumOfSq               | MeanSq                  |
|--------------------|----|-----------------------|-------------------------|
| Model              | 2  | $8.62128 \times 10^9$ | $4.31064 \times 10^9$   |
| ANOVATable → Error | 22 | $2.38056 \times 10^7$ | $1.08207 \times 10^6$ , |
| Uncorrected Total  | 24 | $8.64509 \times 10^9$ |                         |
| Corrected Total    | 23 | $1.44139 \times 10^9$ |                         |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.708632 \\ 0.708632 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0251448 |
| Max Parameter-Effects             | 0.0411558 |
| 95. % Confidence Region           | 0.538901  |





sample: 2 E, model s

27533.6

$$\frac{1}{1 + e^{-0.644291(-0.264812 + x)}}$$

{BestFitParameters → {Emax → 27533.6, λ → 0.644291, xshift → 0.264812},

ParameterCITable →

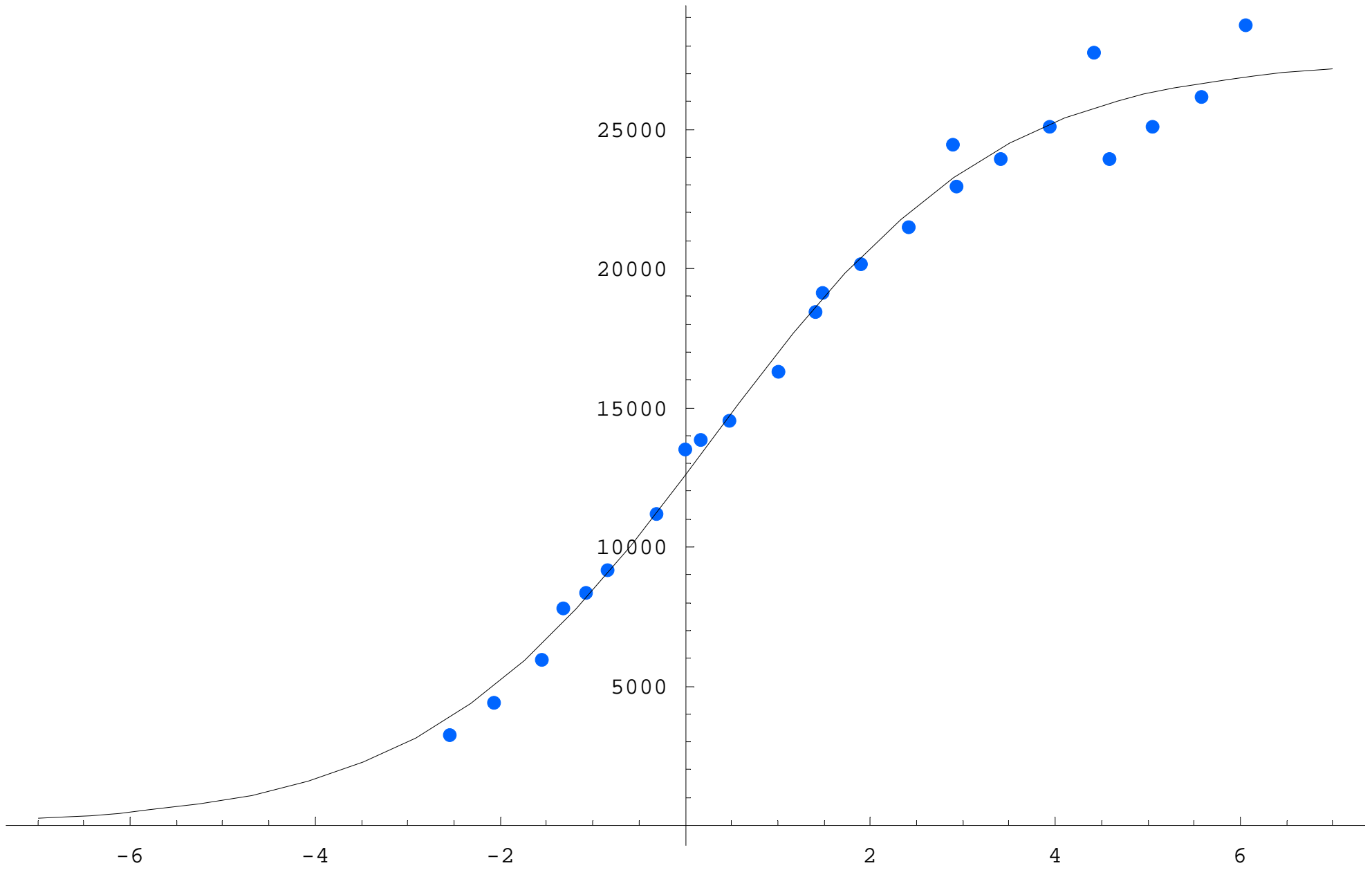
|        | Estimate | Asymptotic SE | CI                    |
|--------|----------|---------------|-----------------------|
| Emax   | 27533.6  | 601.829       | {26282., 28785.1}     |
| λ      | 0.644291 | 0.0409465     | {0.559138, 0.729444}  |
| xshift | 0.264812 | 0.109461      | {0.0371757, 0.492447} |

EstimatedVariance → 863562.,

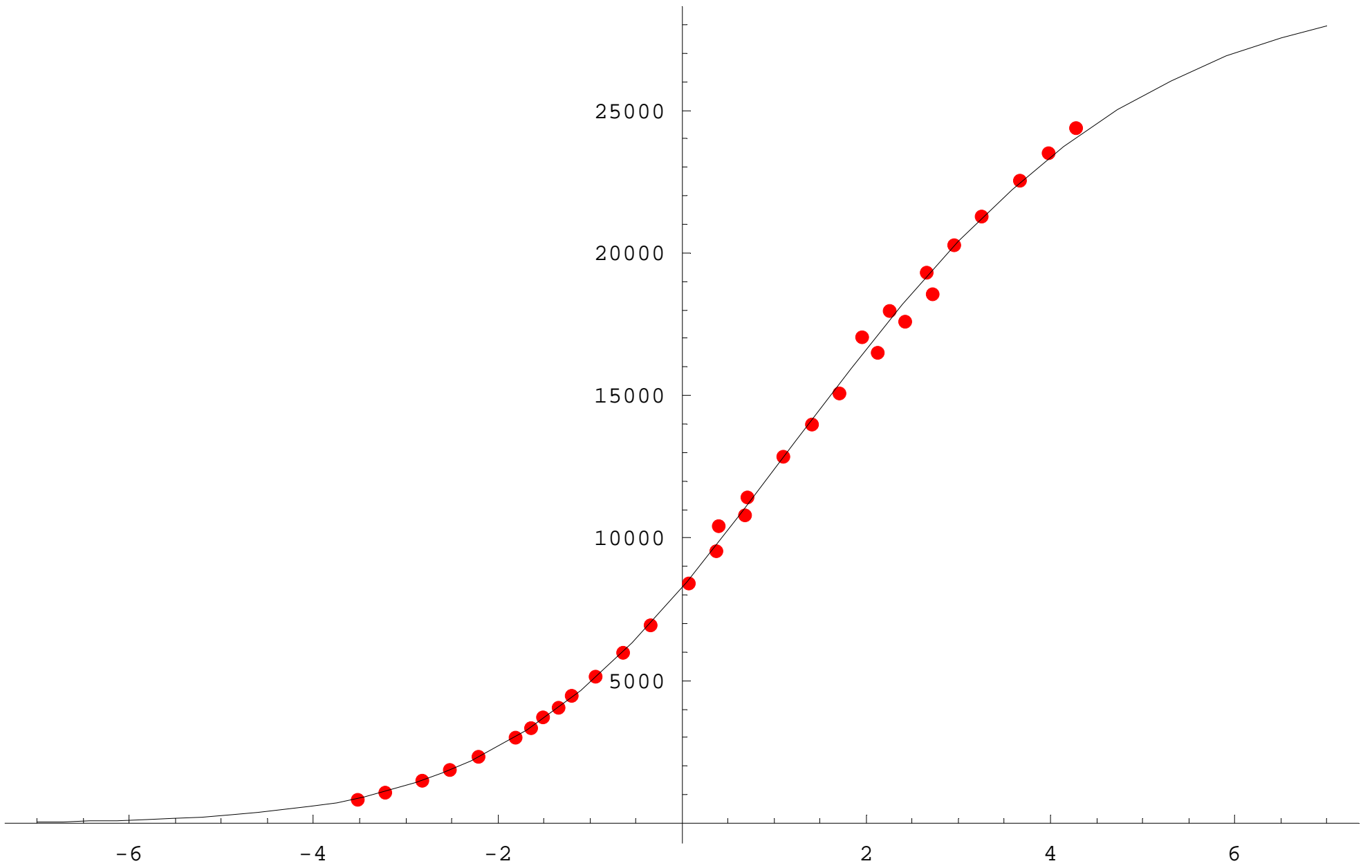
|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $8.62695 \times 10^9$ | $2.87565 \times 10^9$ |
| ANOVA Table → Error | 21 | $1.81348 \times 10^7$ | 863562.               |
| Uncorrected Total   | 24 | $8.64509 \times 10^9$ |                       |
| Corrected Total     | 23 | $1.44139 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.758289 & 0.823662 \\ -0.758289 & 1. & -0.593528 \\ 0.823662 & -0.593528 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0817409 |
| Max Parameter-Effects             | 0.427168  |
| 95. % Confidence Region           | 0.570501  |







sample: A1 E, model s

27641.

$$\frac{1}{1 + e^{-0.643229(-1.36125 + x)}}$$

{BestFitParameters → {Emax → 27641., λ → 0.643229, xshift → 1.36125},

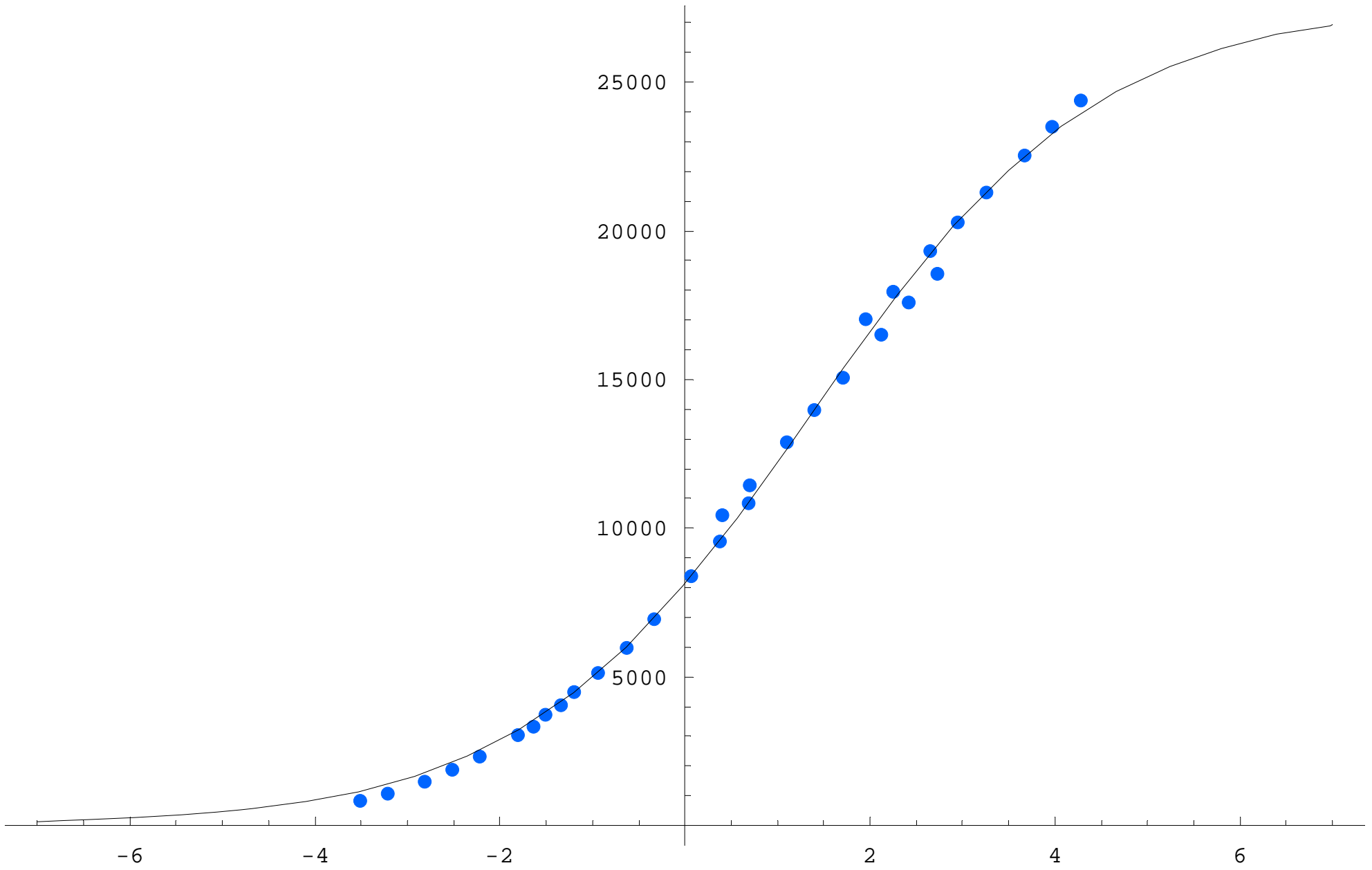
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 27641.   | 573.279       | {26468.5, 28813.5}    |
|                    | λ      | 0.643229 | 0.0172351     | {0.607979, 0.678478}' |
|                    | xshift | 1.36125  | 0.0818239     | {1.1939, 1.5286}      |

EstimatedVariance → 134275.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $5.73753 \times 10^9$ | $1.91251 \times 10^9$ |
| ANOVA Table → Error | 29 | $3.89397 \times 10^6$ | 134275. ,             |
| Uncorrected Total   | 32 | $5.74142 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.77896 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.861742 & 0.969143 \\ -0.861742 & 1. & -0.845217 \\ 0.969143 & -0.845217 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0286477 |
|                     | Max Parameter-Effects   | 0.322479  |
|                     | 95. % Confidence Region | 0.583805  |



sample: A1v E, model r

29607.3

$$(1 + e^{-0.5 x})^{1.94167}$$

{BestFitParameters → {Emax → 29607.3, h → 1.94167}},

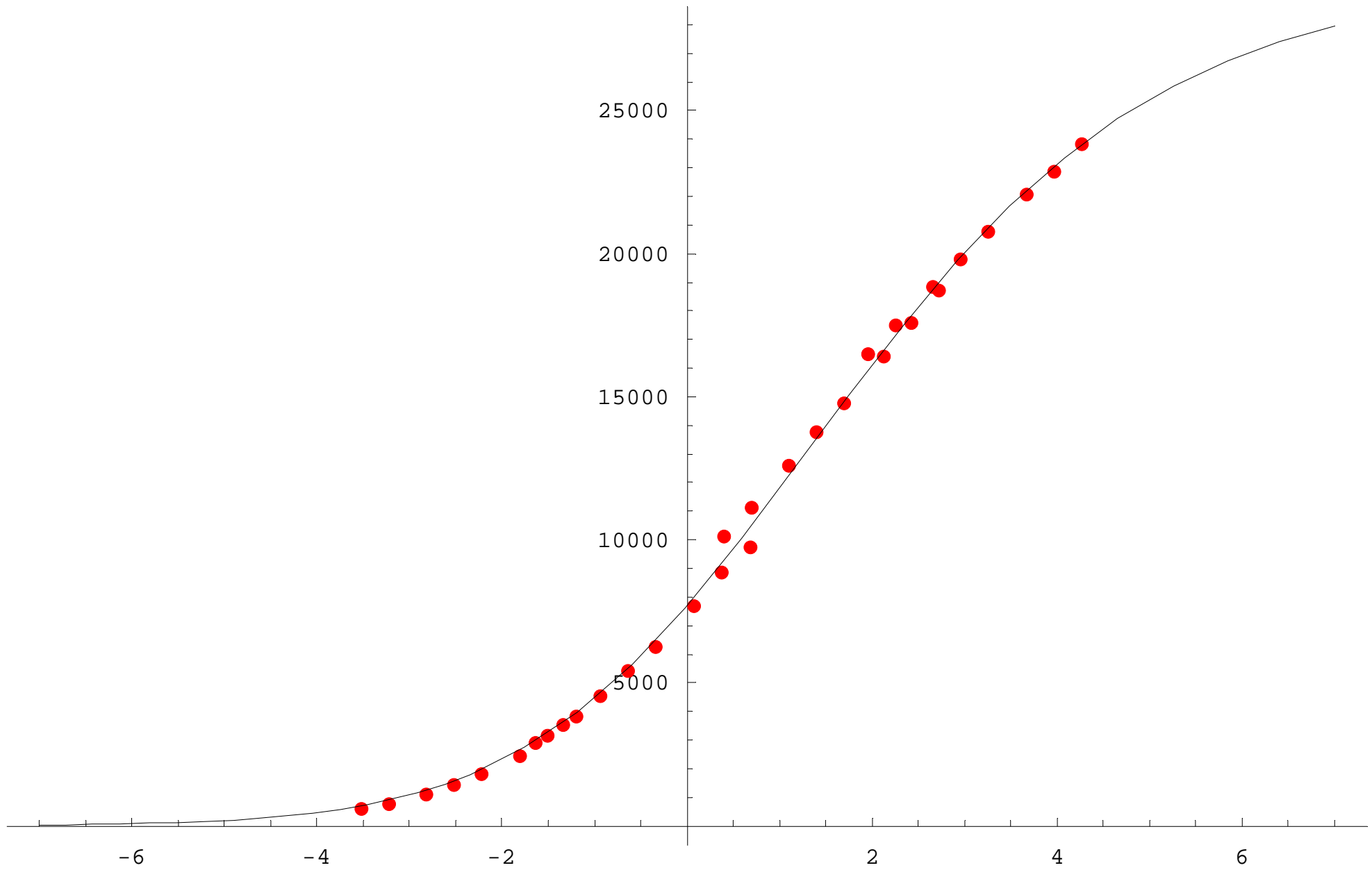
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 29607.3  | 227.072       | {29143.5, 30071.} , |
| h                       | 1.94167  | 0.0232489     | {1.89419, 1.98915}  |

EstimatedVariance → 97447.8,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $5.4395 \times 10^9$  | $2.71975 \times 10^9$ |
| ANOVATable → Error | 30 | $2.92343 \times 10^6$ | 97447.8 ,             |
| Uncorrected Total  | 32 | $5.44243 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.79484 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.833926 \\ 0.833926 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.013115  |
| Max Parameter-Effects             | 0.0169522 |
| 95. % Confidence Region           | 0.549166  |





sample: A1v E, model s

26148.

$$\frac{1}{1 + e^{-0.704878(-1.28003 + x)}}$$

{BestFitParameters → {Emax → 26148., λ → 0.704878, xshift → 1.28003},

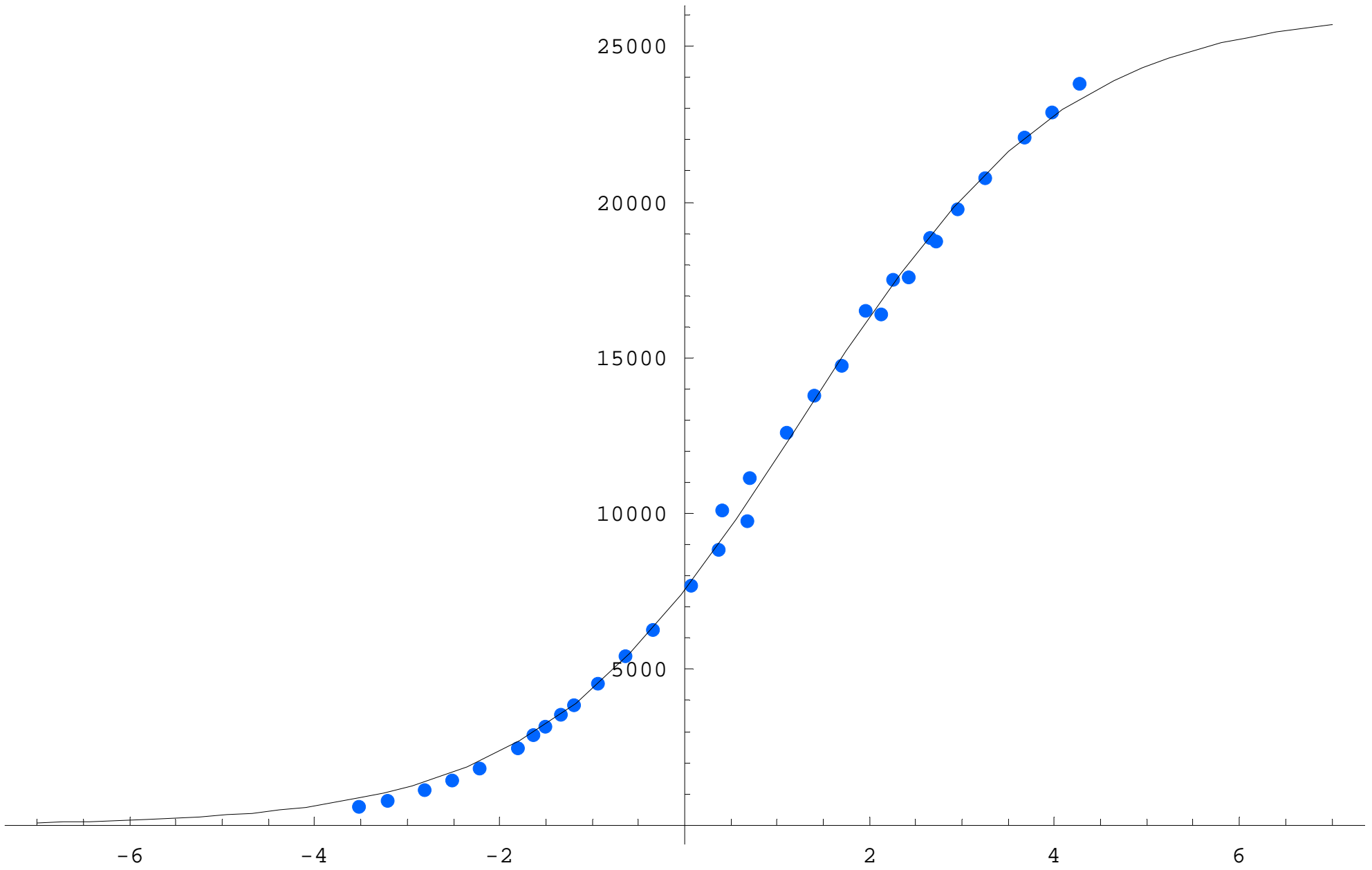
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 26148.   | 468.347       | {25190.1, 27105.9}    |
|                    | λ      | 0.704878 | 0.0180618     | {0.667938, 0.741819}' |
|                    | xshift | 1.28003  | 0.0669987     | {1.143, 1.41706}      |

EstimatedVariance → 123651.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 3  | $5.43884 \times 10^9$ | $1.81295 \times 10^9$ |
| ANOVATable → Error | 29 | $3.58587 \times 10^6$ | 123651. ,             |
| Uncorrected Total  | 32 | $5.44243 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.79484 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.844409 & 0.957624 \\ -0.844409 & 1. & -0.815285 \\ 0.957624 & -0.815285 & 1. \end{pmatrix}$ ,

|                     | Curvature               |            |
|---------------------|-------------------------|------------|
| FitCurvatureTable → | Max Intrinsic           | 0.0286078  |
|                     | Max Parameter-Effects   | 0.277518 } |
|                     | 95. % Confidence Region | 0.583805   |



**sample: A2 E, model r**

29068.4

$$(1 + e^{-0.5 x})^{1.89922}$$

{BestFitParameters → {Emax → 29068.4, h → 1.89922},

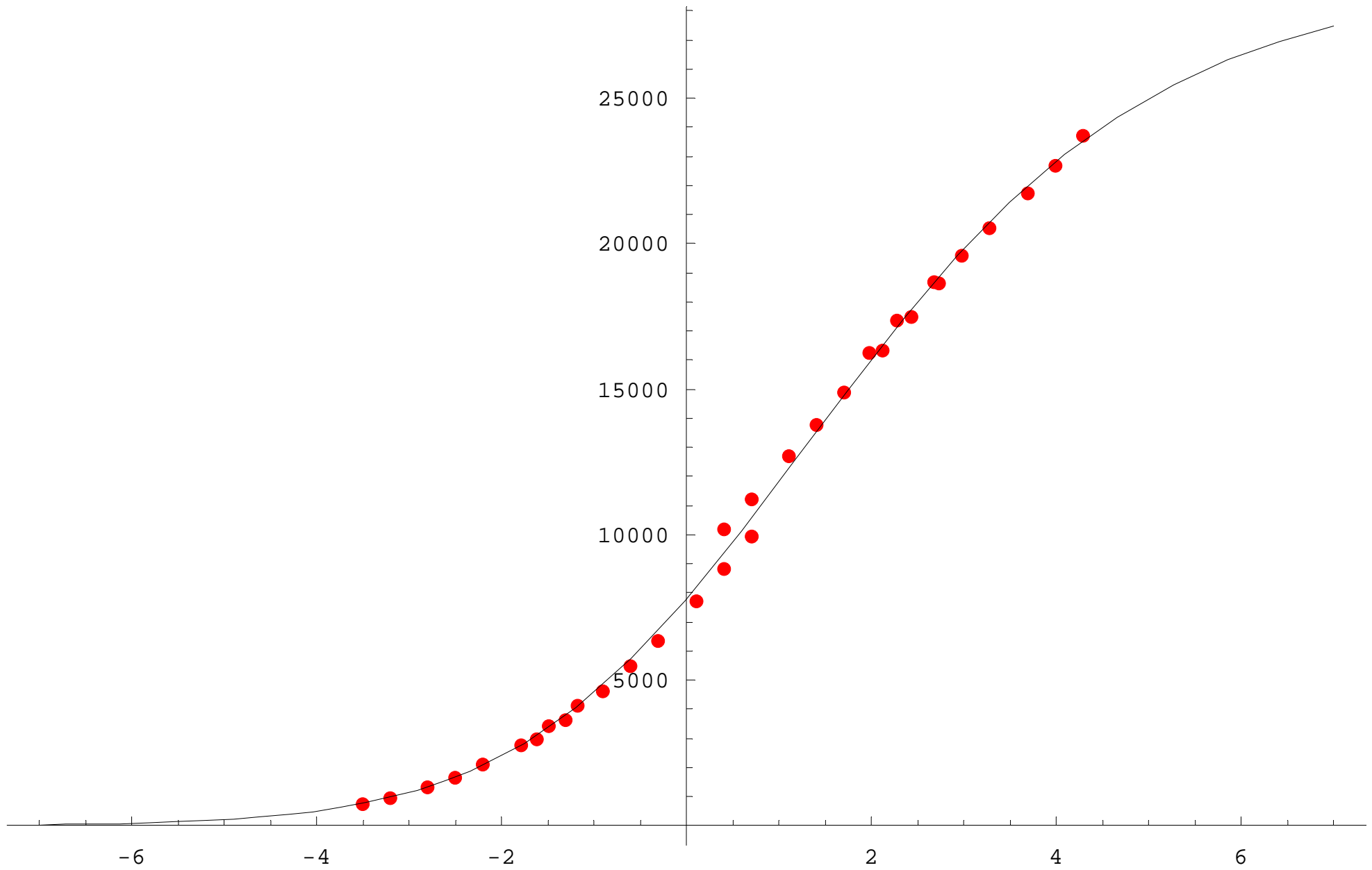
|                         | Estimate | Asymptotic SE | CI                 |
|-------------------------|----------|---------------|--------------------|
| ParameterCITable → Emax | 29068.4  | 223.125       | {28612.7, 29524.}, |
| h                       | 1.89922  | 0.0230012     | {1.85225, 1.9462}  |

EstimatedVariance → 98282.7,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $5.39529 \times 10^9$ | $2.69764 \times 10^9$ |
| ANOVATable → Error | 30 | $2.94848 \times 10^6$ | 98282.7 ,             |
| Uncorrected Total  | 32 | $5.39824 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.72614 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.831158 \\ 0.831158 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0130669 |
| Max Parameter-Effects             | 0.0169608 |
| 95. % Confidence Region           | 0.549166  |



sample: A2 E, model s

26056.5

$$\frac{1}{1 + e^{-0.687584(-1.27884 + x)}}$$

{BestFitParameters → {Emax → 26056.5, λ → 0.687584, xshift → 1.27884},

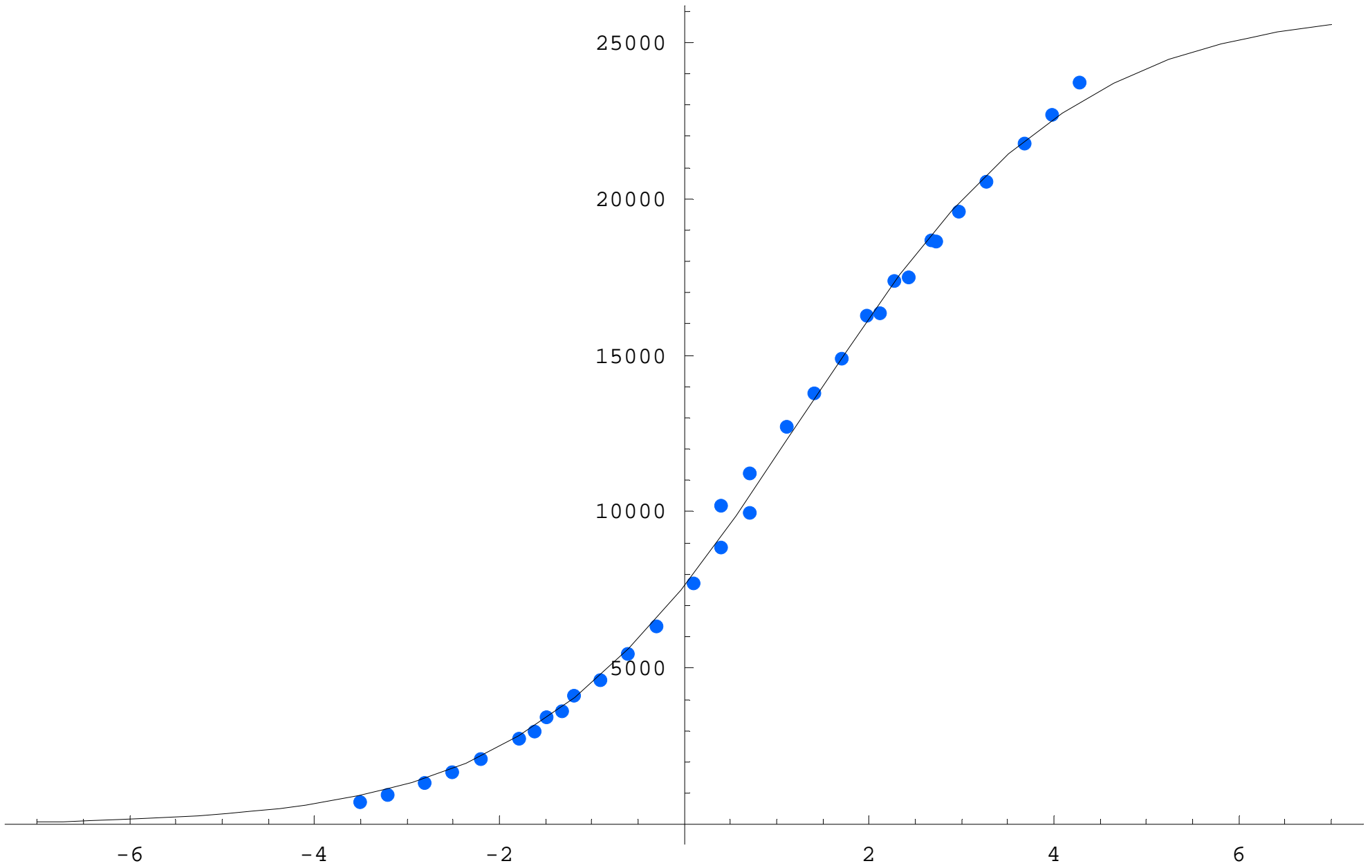
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 26056.5  | 473.441       | {25088.2, 27024.8}   |
|                    | λ      | 0.687584 | 0.0176103     | {0.651567, 0.723602} |
|                    | xshift | 1.27884  | 0.0691563     | {1.1374, 1.42028}    |

EstimatedVariance → 119738.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $5.39476 \times 10^9$ | $1.79825 \times 10^9$ |
| ANOVA Table → Error | 29 | $3.4724 \times 10^6$  | 119738.               |
| Uncorrected Total   | 32 | $5.39824 \times 10^9$ |                       |
| Corrected Total     | 31 | $1.72614 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.849031 & 0.960174 \\ -0.849031 & 1. & -0.822598 \\ 0.960174 & -0.822598 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0283747 |
|                     | Max Parameter-Effects   | 0.283723  |
|                     | 95. % Confidence Region | 0.583805  |



sample: A2v E, model r

29793.2

$$(1 + e^{-0.5 x})^{1.91977}$$

{BestFitParameters → {Emax → 29793.2, h → 1.91977},

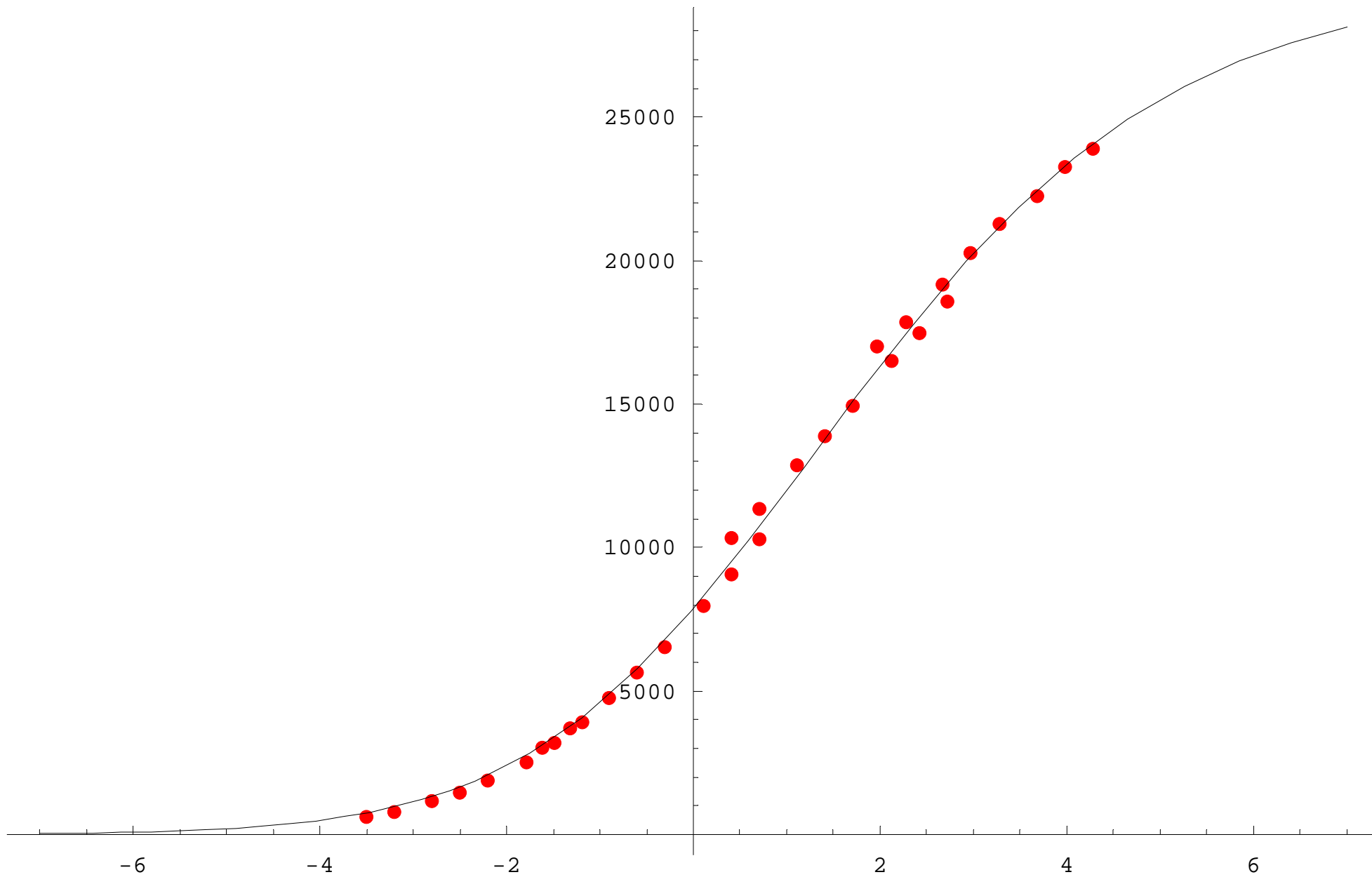
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 29793.2  | 259.564       | {29263.1, 30323.3}, |
| h                       | 1.91977  | 0.0262732     | {1.86611, 1.97343}  |

EstimatedVariance → 130738.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $5.60365 \times 10^9$ | $2.80182 \times 10^9$ |
| ANOVATable → Error | 30 | $3.92213 \times 10^6$ | 130738. ,             |
| Uncorrected Total  | 32 | $5.60757 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.825 \times 10^9$   |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.832238 \\ 0.832238 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.014851  |
| Max Parameter-Effects             | 0.0192208 |
| 95. % Confidence Region           | 0.549166  |





sample: A2v E, model s

26306.3

$$\frac{1}{1 + e^{-0.703801(-1.24915 + x)}}$$

{BestFitParameters → {Emax → 26306.3, λ → 0.703801, xshift → 1.24915},

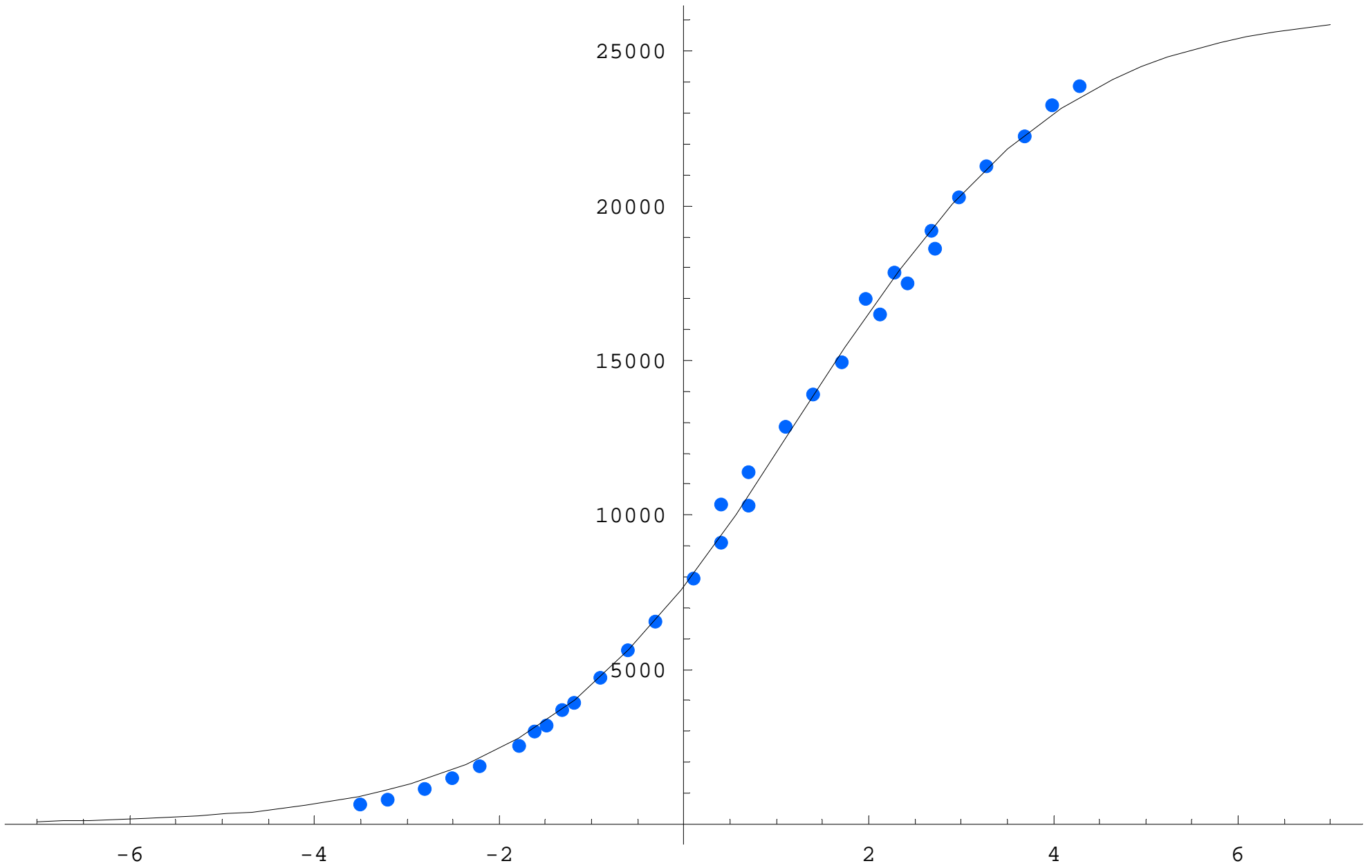
|                    |        | Estimate | Asymptotic SE | CI                  |
|--------------------|--------|----------|---------------|---------------------|
| ParameterCITable → | Emax   | 26306.3  | 524.182       | {25234.2, 27378.4}  |
|                    | λ      | 0.703801 | 0.0203638     | {0.662153, 0.74545} |
|                    | xshift | 1.24915  | 0.0749295     | {1.0959, 1.40239}   |

EstimatedVariance → 160668.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 3  | $5.60291 \times 10^9$ | $1.86764 \times 10^9$ |
| ANOVATable → Error | 29 | $4.65937 \times 10^6$ | 160668. ,             |
| Uncorrected Total  | 32 | $5.60757 \times 10^9$ |                       |
| Corrected Total    | 31 | $1.825 \times 10^9$   |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.844261 & 0.956535 \\ -0.844261 & 1. & -0.813845 \\ 0.956535 & -0.813845 & 1. \end{pmatrix}$ ,

|                     | Curvature               |          |
|---------------------|-------------------------|----------|
| FitCurvatureTable → | Max Intrinsic           | 0.032479 |
|                     | Max Parameter-Effects   | 0.31158  |
|                     | 95. % Confidence Region | 0.583805 |



sample: B4 E, model r

33597.3

$$(1 + e^{-0.5 x})^{1.77244}$$

{BestFitParameters → {Emax → 33597.3, h → 1.77244},

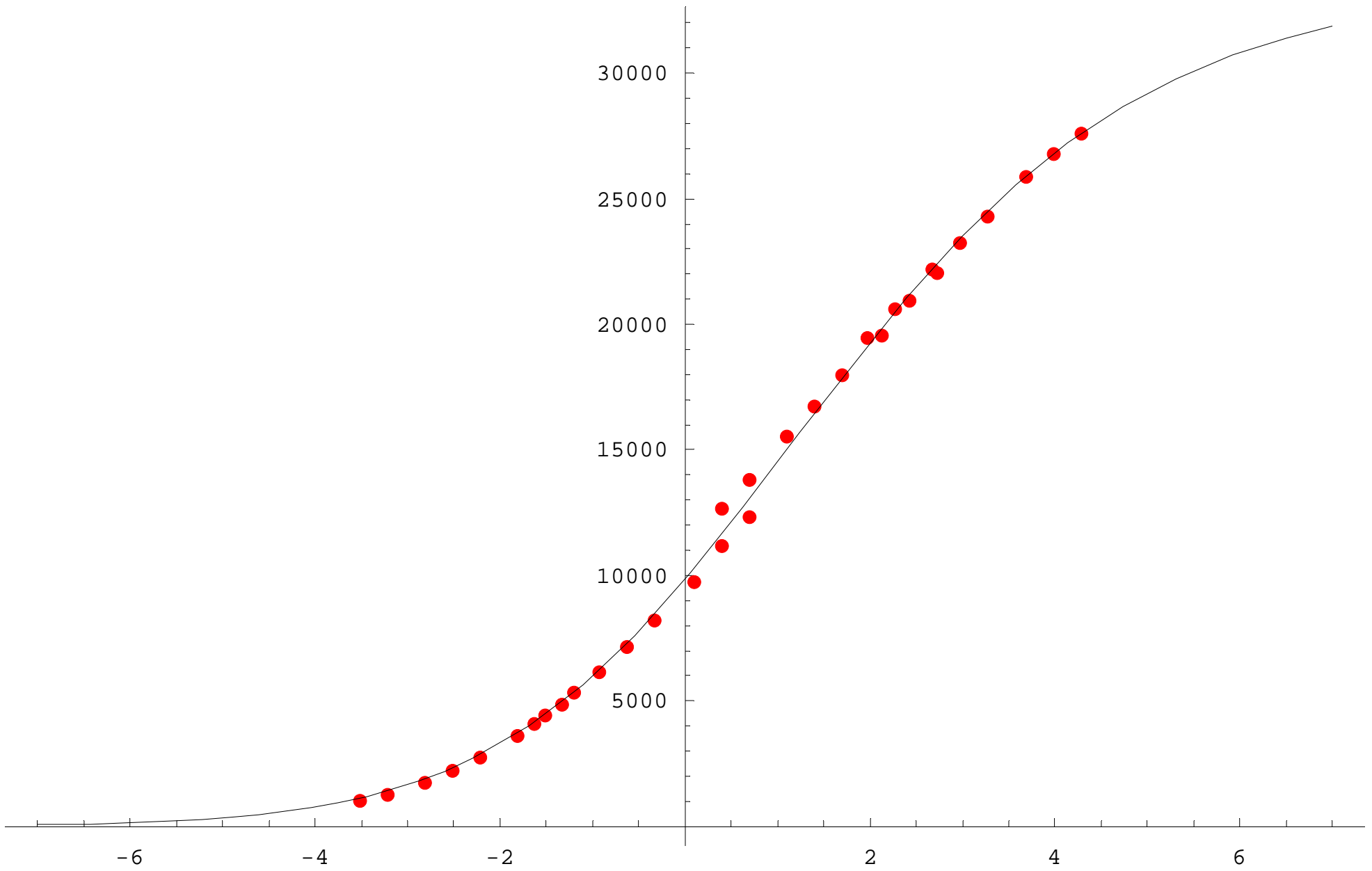
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 33597.3  | 225.219       | {33137.3, 34057.2}, |
| h                       | 1.77244  | 0.019293      | {1.73304, 1.81184}  |

EstimatedVariance → 111486.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $7.73305 \times 10^9$ | $3.86653 \times 10^9$ |
| ANOVATable → Error | 30 | $3.34457 \times 10^6$ | 111486. ,             |
| Uncorrected Total  | 32 | $7.7364 \times 10^9$  |                       |
| Corrected Total    | 31 | $2.33505 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.824122 \\ 0.824122 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0113216 |
| Max Parameter-Effects             | 0.0150125 |
| 95. % Confidence Region           | 0.549166  |



sample: B4 E, model s

30538.6

$$\frac{1}{1 + e^{-0.665216(-1.15334 + x)}}$$

{BestFitParameters → {Emax → 30538.6, λ → 0.665216, xshift → 1.15334},

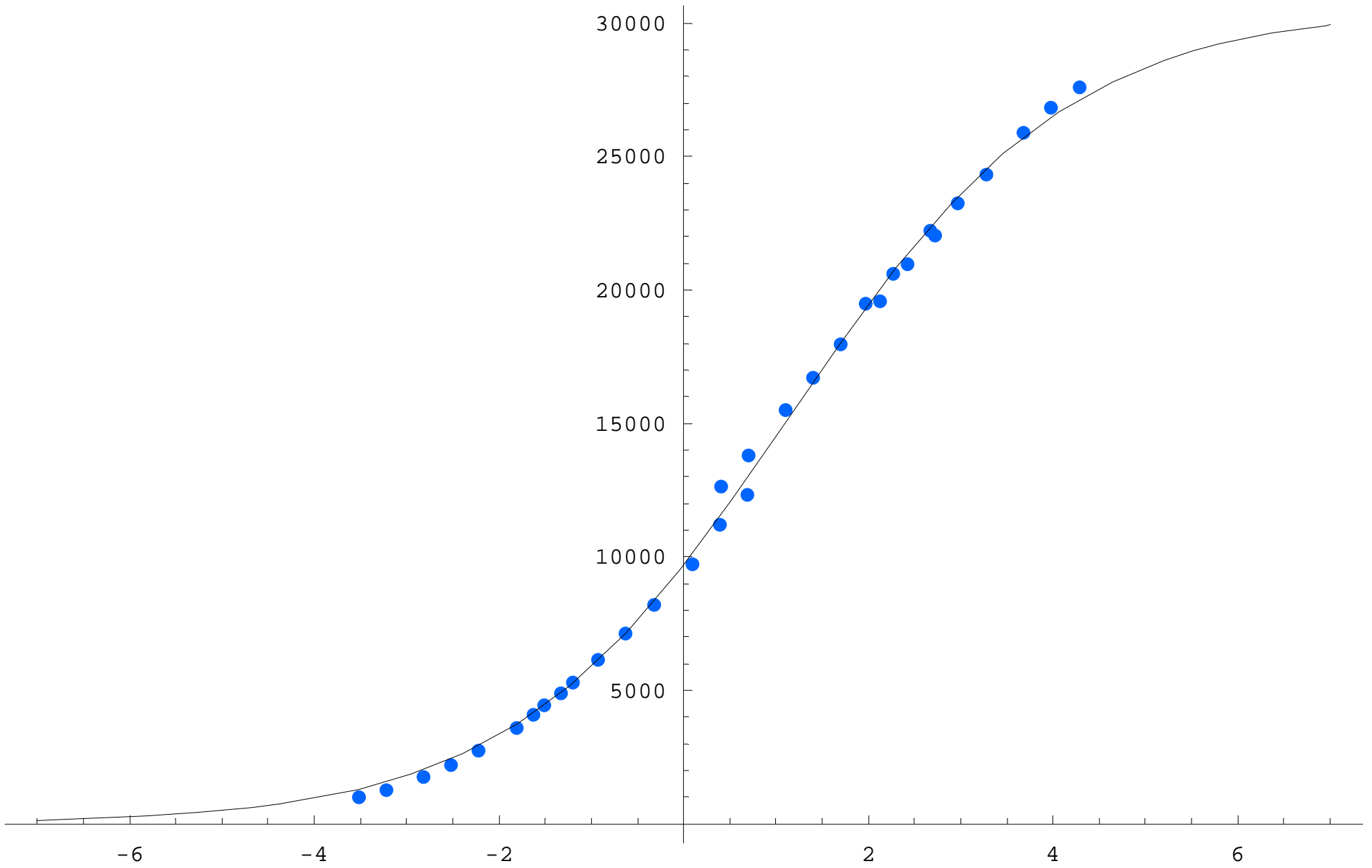
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 30538.6  | 515.471       | {29484.3, 31592.8}   |
|                    | λ      | 0.665216 | 0.0160632     | {0.632363, 0.698069} |
|                    | xshift | 1.15334  | 0.0665594     | {1.01721, 1.28947}   |

EstimatedVariance → 146660.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $7.73214 \times 10^9$ | $2.57738 \times 10^9$ |
| ANOVA Table → Error | 29 | $4.25313 \times 10^6$ | 146660.               |
| Uncorrected Total   | 32 | $7.7364 \times 10^9$  |                       |
| Corrected Total     | 31 | $2.33505 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.85223 & 0.960105 \\ -0.85223 & 1. & -0.824015 \\ 0.960105 & -0.824015 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0270941 |
|                     | Max Parameter-Effects   | 0.2694    |
|                     | 95. % Confidence Region | 0.583805  |



sample: B4v E, model r

33637.5

$$(1 + e^{-0.5 x})^{1.87453}$$

{BestFitParameters → {Emax → 33637.5, h → 1.87453},

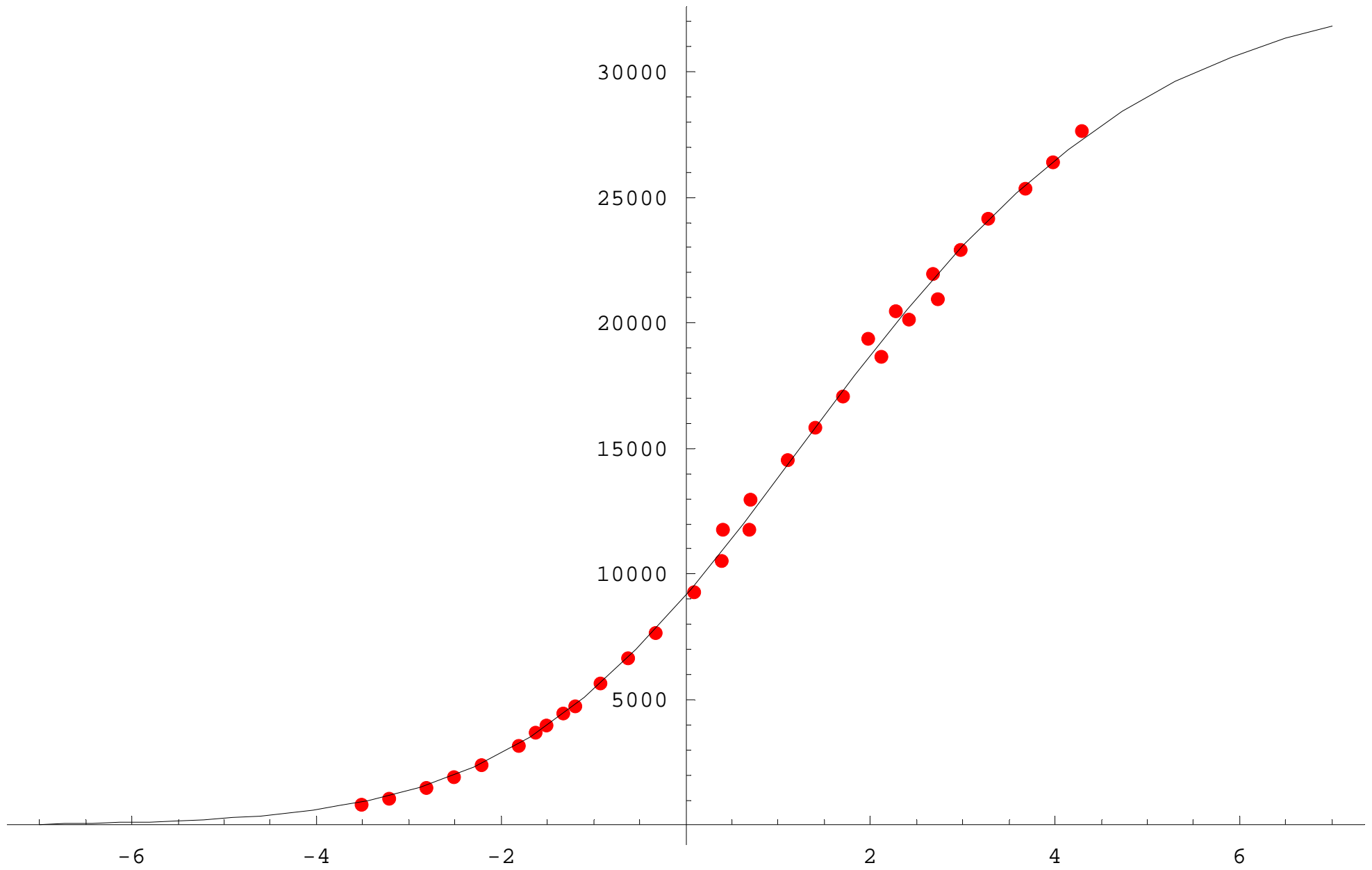
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 33637.5  | 268.362       | {33089.4, 34185.5}, |
| h                       | 1.87453  | 0.0237414     | {1.82605, 1.92302}  |

EstimatedVariance → 145129.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $7.31704 \times 10^9$ | $3.65852 \times 10^9$ |
| ANOVATable → Error | 30 | $4.35387 \times 10^6$ | 145129. ,             |
| Uncorrected Total  | 32 | $7.32139 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.32142 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.829688 \\ 0.829688 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0136056 |
| Max Parameter-Effects             | 0.0177377 |
| 95. % Confidence Region           | 0.549166  |





sample: B4v E, model s

30742.4

$$\frac{1}{1 + e^{-0.667327(-1.32007 + x)}}$$

{BestFitParameters → {Emax → 30742.4, λ → 0.667327, xshift → 1.32007},

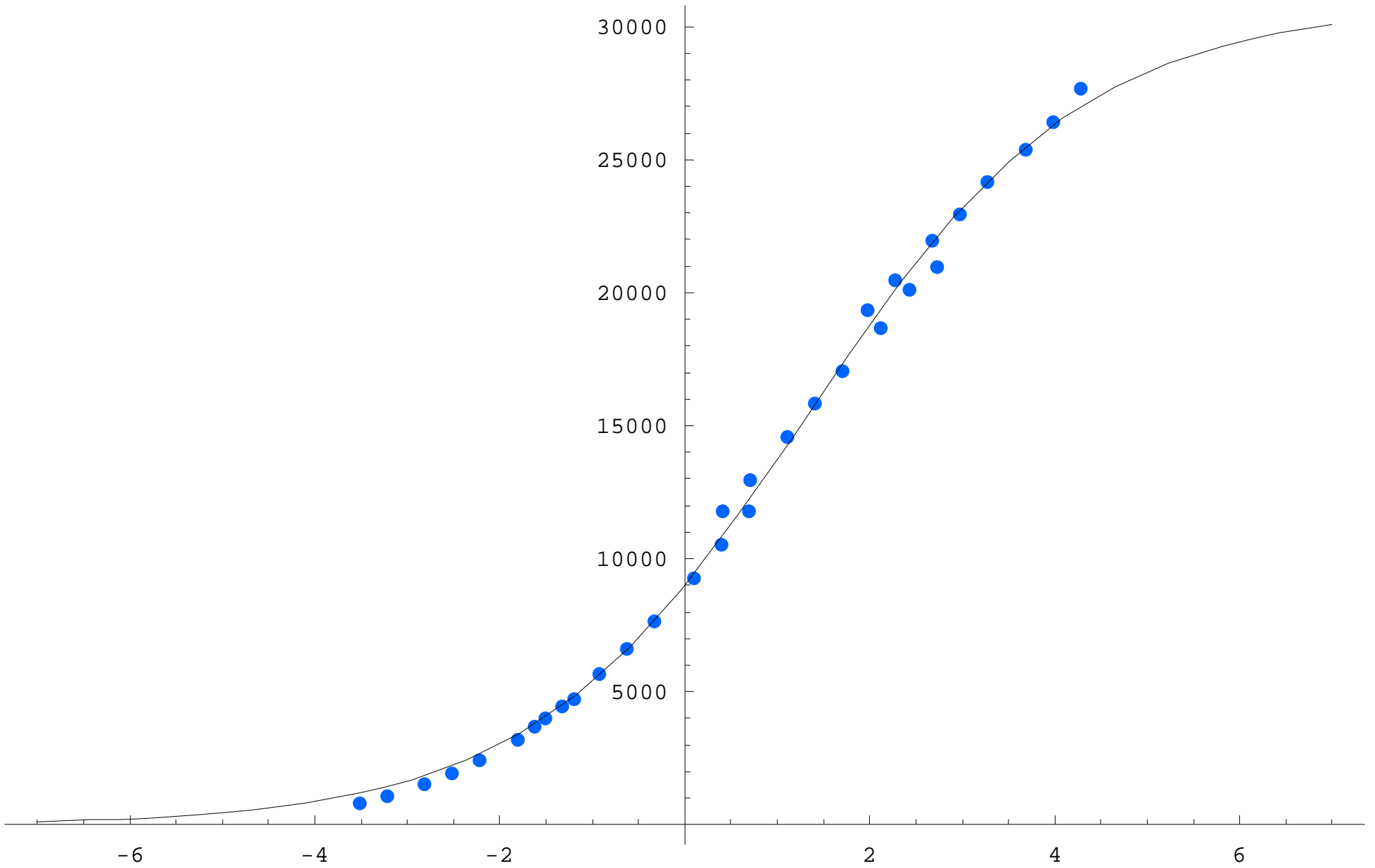
|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 30742.4  | 643.641       | {29426., 32058.8}     |
|                    | λ      | 0.667327 | 0.018937      | {0.628596, 0.706057}' |
|                    | xshift | 1.32007  | 0.0809867     | {1.15443, 1.4857}     |

EstimatedVariance → 196497.,

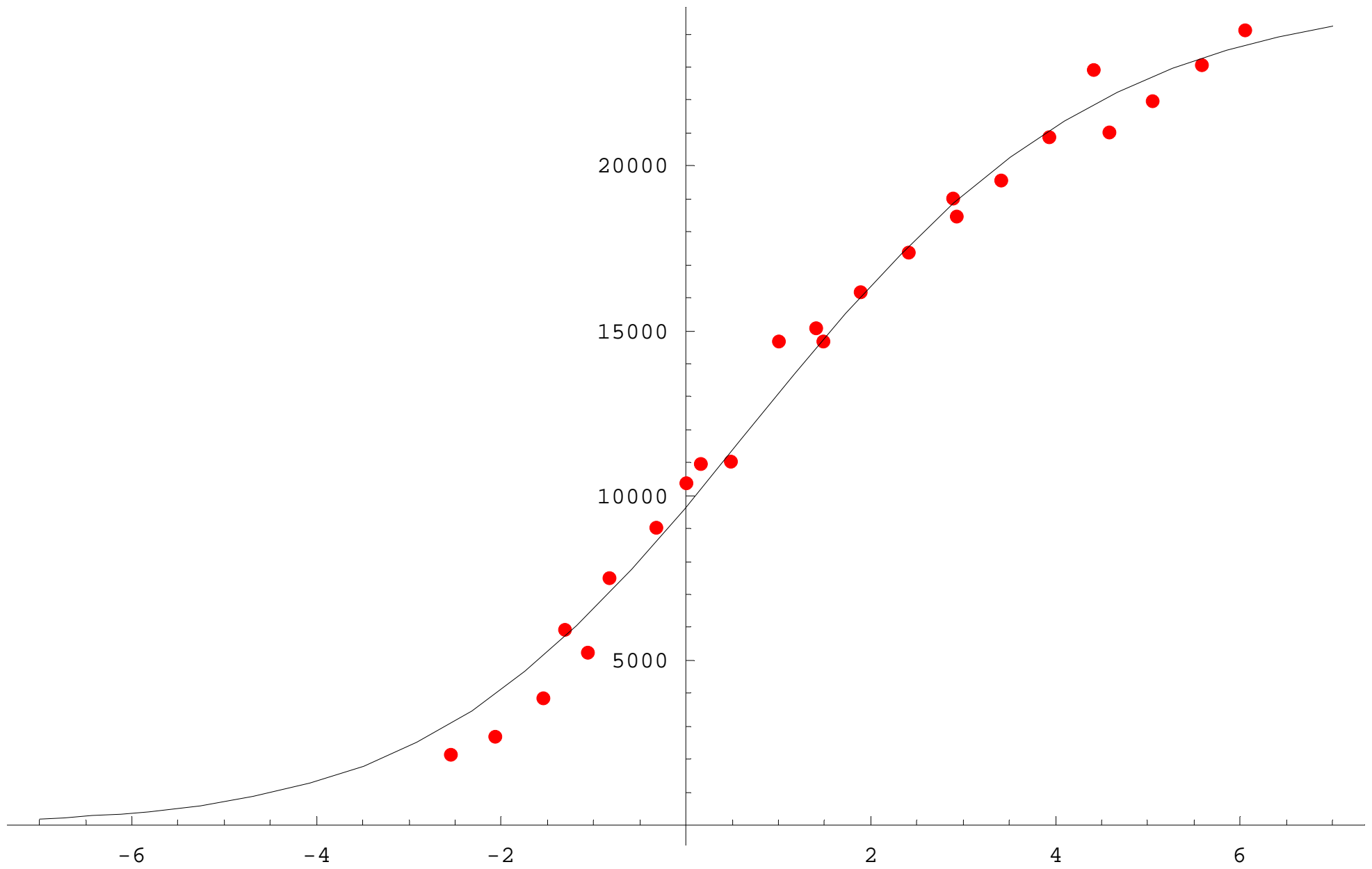
|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 3  | $7.3157 \times 10^9$  | $2.43857 \times 10^9$ |
| ANOVATable → Error | 29 | $5.69841 \times 10^6$ | 196497. ,             |
| Uncorrected Total  | 32 | $7.32139 \times 10^9$ |                       |
| Corrected Total    | 31 | $2.32142 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.854747 & 0.964401 \\ -0.854747 & 1. & -0.832913 \\ 0.964401 & -0.832913 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0309283 |
|                     | Max Parameter-Effects   | 0.32614 } |
|                     | 95. % Confidence Region | 0.583805  |







sample: 4 E, model s

23710.4

$$\frac{1}{1 + e^{-0.630533(-0.597167 + x)}}$$

{BestFitParameters → {Emax → 23710.4, λ → 0.630533, xshift → 0.597167}},

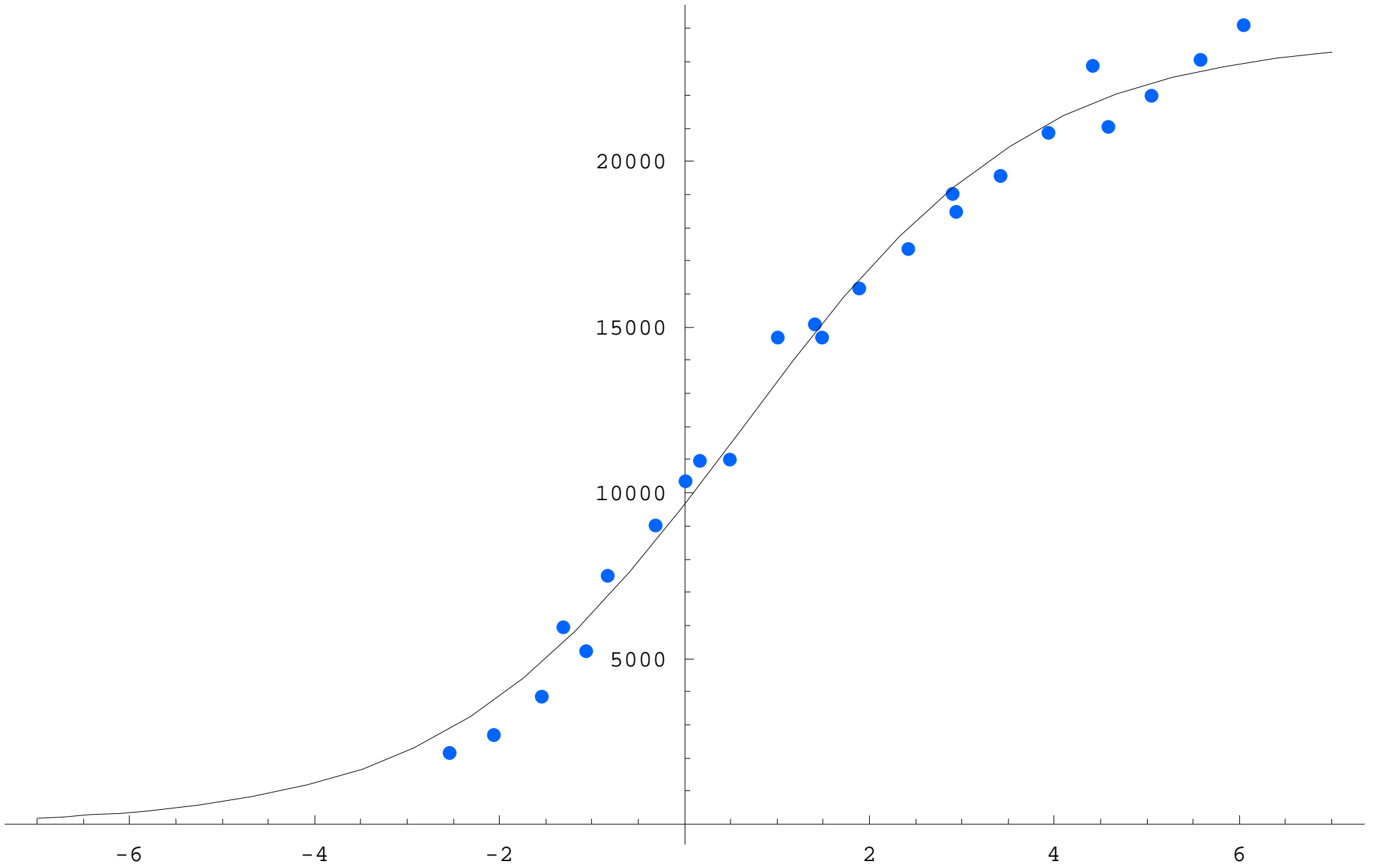
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 23710.4  | 567.733       | {22529.8, 24891.1}   |
|                    | λ      | 0.630533 | 0.0394599     | {0.548471, 0.712594} |
|                    | xshift | 0.597167 | 0.119103      | {0.349479, 0.844855} |

EstimatedVariance → 619319.,

|                     | DF | SumOfSq               | MeanSq                |
|---------------------|----|-----------------------|-----------------------|
| Model               | 3  | $5.87457 \times 10^9$ | $1.95819 \times 10^9$ |
| ANOVA Table → Error | 21 | $1.30057 \times 10^7$ | 619319.               |
| Uncorrected Total   | 24 | $5.88758 \times 10^9$ |                       |
| Corrected Total     | 23 | $1.12896 \times 10^9$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.775178 & 0.856581 \\ -0.775178 & 1. & -0.65044 \\ 0.856581 & -0.65044 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0786304 |
|                     | Max Parameter-Effects   | 0.454021  |
|                     | 95. % Confidence Region | 0.570501  |



sample: 5 E, model r

23851.8

$$(1 + e^{-0.5 x})^{1.45825}$$

{BestFitParameters → {Emax → 23851.8, h → 1.45825},

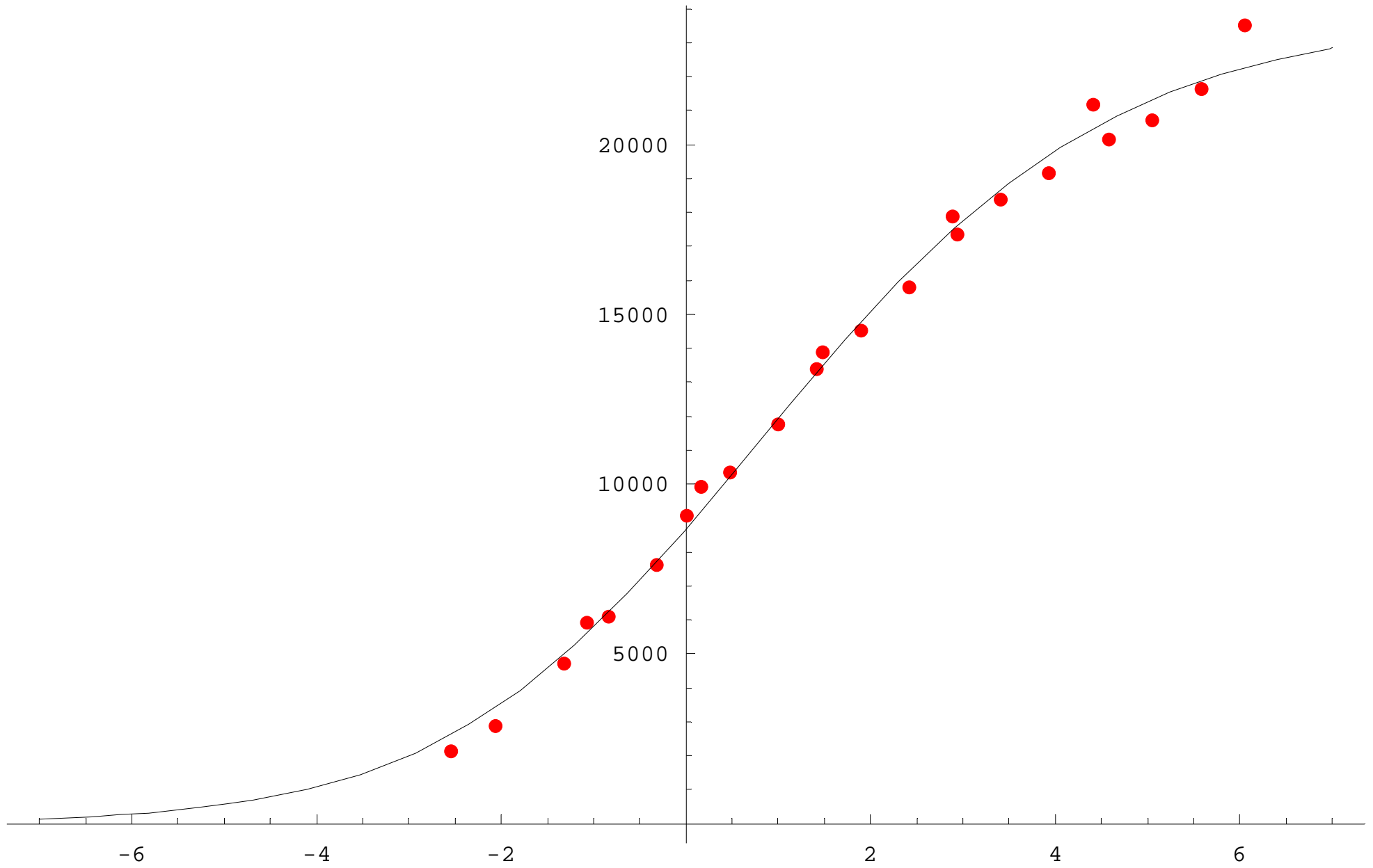
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 23851.8  | 241.177       | {23350.2, 24353.3}, |
| h                       | 1.45825  | 0.0335369     | {1.38851, 1.52799}  |

EstimatedVariance → 249873.,

|                    | DF | SumOfSq               | MeanSq                |
|--------------------|----|-----------------------|-----------------------|
| Model              | 2  | $5.0521 \times 10^9$  | $2.52605 \times 10^9$ |
| ANOVATable → Error | 21 | $5.24733 \times 10^6$ | 249873. ,             |
| Uncorrected Total  | 23 | $5.05735 \times 10^9$ |                       |
| Corrected Total    | 22 | $9.29024 \times 10^8$ |                       |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.718509 \\ 0.718509 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0177108 |
| Max Parameter-Effects             | 0.0267921 |
| 95. % Confidence Region           | 0.537076  |





sample: 5 E, model s

23436.3

$$\frac{1}{1 + e^{-0.564715(-0.956634 + x)}}$$

{BestFitParameters → {Emax → 23436.3, λ → 0.564715, xshift → 0.956634},

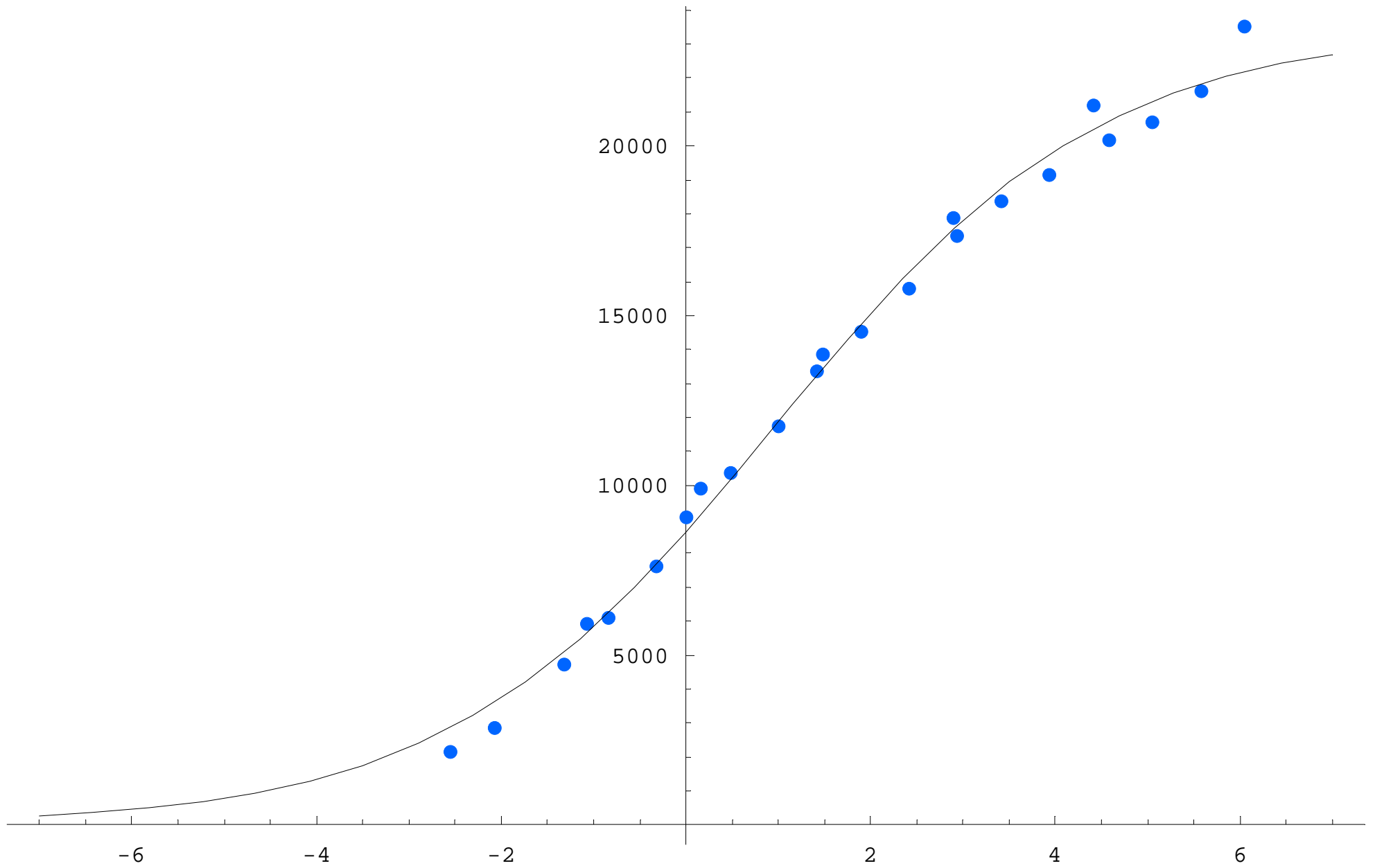
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 23436.3  | 528.196       | {22334.5, 24538.1}   |
|                    | λ      | 0.564715 | 0.0286044     | {0.505047, 0.624382} |
|                    | xshift | 0.956634 | 0.11401       | {0.718813, 1.19445}  |

EstimatedVariance → 312942.,

|                    | DF | SumOfSq               | MeanSq               |
|--------------------|----|-----------------------|----------------------|
| Model              | 3  | $5.05109 \times 10^9$ | $1.6837 \times 10^9$ |
| ANOVATable → Error | 20 | $6.25885 \times 10^6$ | 312942. ,            |
| Uncorrected Total  | 23 | $5.05735 \times 10^9$ |                      |
| Corrected Total    | 22 | $9.29024 \times 10^8$ |                      |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.82344 & 0.907073 \\ -0.82344 & 1. & -0.730973 \\ 0.907073 & -0.730973 & 1. \end{pmatrix},$

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0574149 |
|                     | Max Parameter-Effects   | 0.439639  |
|                     | 95. % Confidence Region | 0.568109  |



**sample: 6 (bis) E, model r**

26613.

$$(1 + e^{-0.5 x})^{1.3474}$$

{BestFitParameters → {Emax → 26613., h → 1.3474},

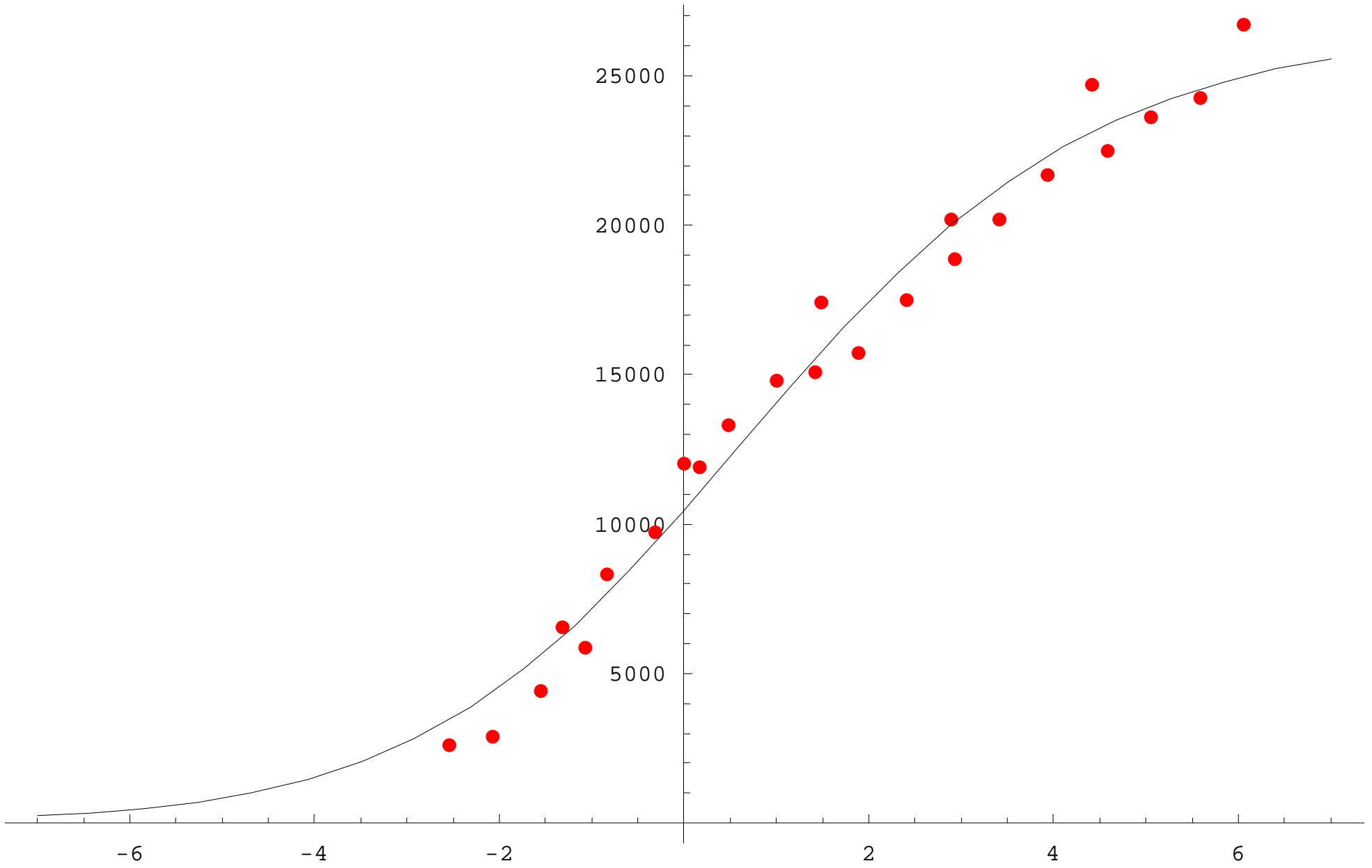
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 26613.   | 515.009       | {25544.9, 27681.} , |
| h                       | 1.3474   | 0.0593914     | {1.22423, 1.47057}  |

EstimatedVariance →  $1.23299 \times 10^6$ ,

|                    | DF | SumOfSq               | MeanSq                  |
|--------------------|----|-----------------------|-------------------------|
| Model              | 2  | $6.63795 \times 10^9$ | $3.31897 \times 10^9$   |
| ANOVATable → Error | 22 | $2.71257 \times 10^7$ | $1.23299 \times 10^6$ , |
| Uncorrected Total  | 24 | $6.66508 \times 10^9$ |                         |
| Corrected Total    | 23 | $1.23353 \times 10^9$ |                         |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.709931 \\ 0.709931 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0319758 |
| Max Parameter-Effects             | 0.0513096 |
| 95. % Confidence Region           | 0.538901  |



sample: 6 (bis) E, model s

26051.9

$$\frac{1}{1 + e^{-0.559107(-0.721874 + x)}}$$

{BestFitParameters → {Emax → 26051.9, λ → 0.559107, xshift → 0.721874},

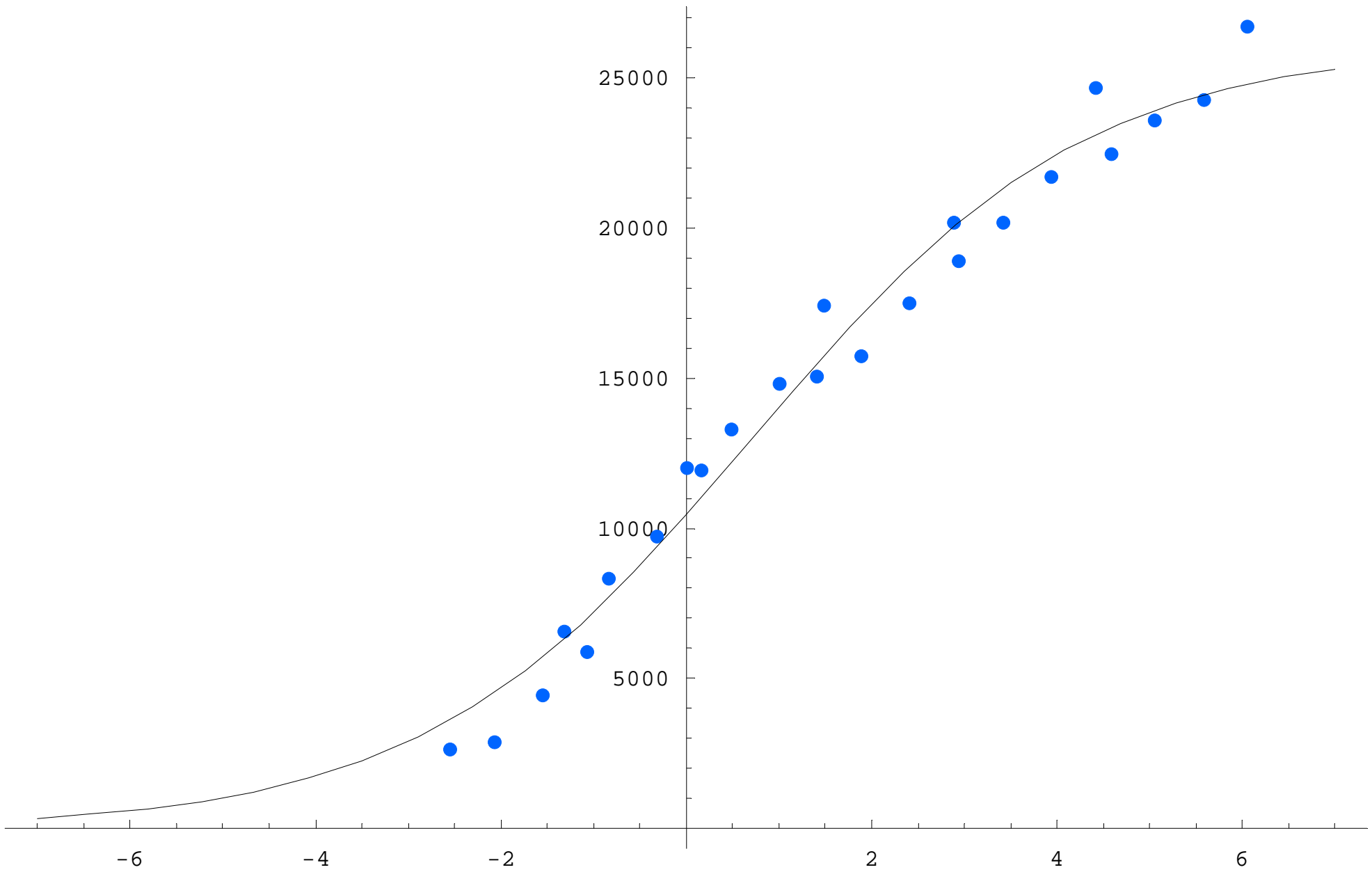
|                    |        | Estimate | Asymptotic SE | CI                   |
|--------------------|--------|----------|---------------|----------------------|
| ParameterCITable → | Emax   | 26051.9  | 1047.16       | {23874.2, 28229.6}   |
|                    | λ      | 0.559107 | 0.0519934     | {0.450981, 0.667233} |
|                    | xshift | 0.721874 | 0.208383      | {0.288519, 1.15523}  |

EstimatedVariance →  $1.40062 \times 10^6$ ,

|                     | DF | SumOfSq               | MeanSq                  |
|---------------------|----|-----------------------|-------------------------|
| Model               | 3  | $6.63566 \times 10^9$ | $2.21189 \times 10^9$   |
| ANOVA Table → Error | 21 | $2.94131 \times 10^7$ | $1.40062 \times 10^6$ , |
| Uncorrected Total   | 24 | $6.66508 \times 10^9$ |                         |
| Corrected Total     | 23 | $1.23353 \times 10^9$ |                         |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.817931 & 0.90078 \\ -0.817931 & 1. & -0.723552 \\ 0.90078 & -0.723552 & 1. \end{pmatrix}$ ,

|                     | Curvature               |          |
|---------------------|-------------------------|----------|
| FitCurvatureTable → | Max Intrinsic           | 0.109042 |
|                     | Max Parameter-Effects   | 0.786771 |
|                     | 95. % Confidence Region | 0.570501 |



**sample: 9 (bis) E, model r**

27509.2

$$(1 + e^{-0.5 x})^{1.45474}$$

{BestFitParameters → {Emax → 27509.2, h → 1.45474},

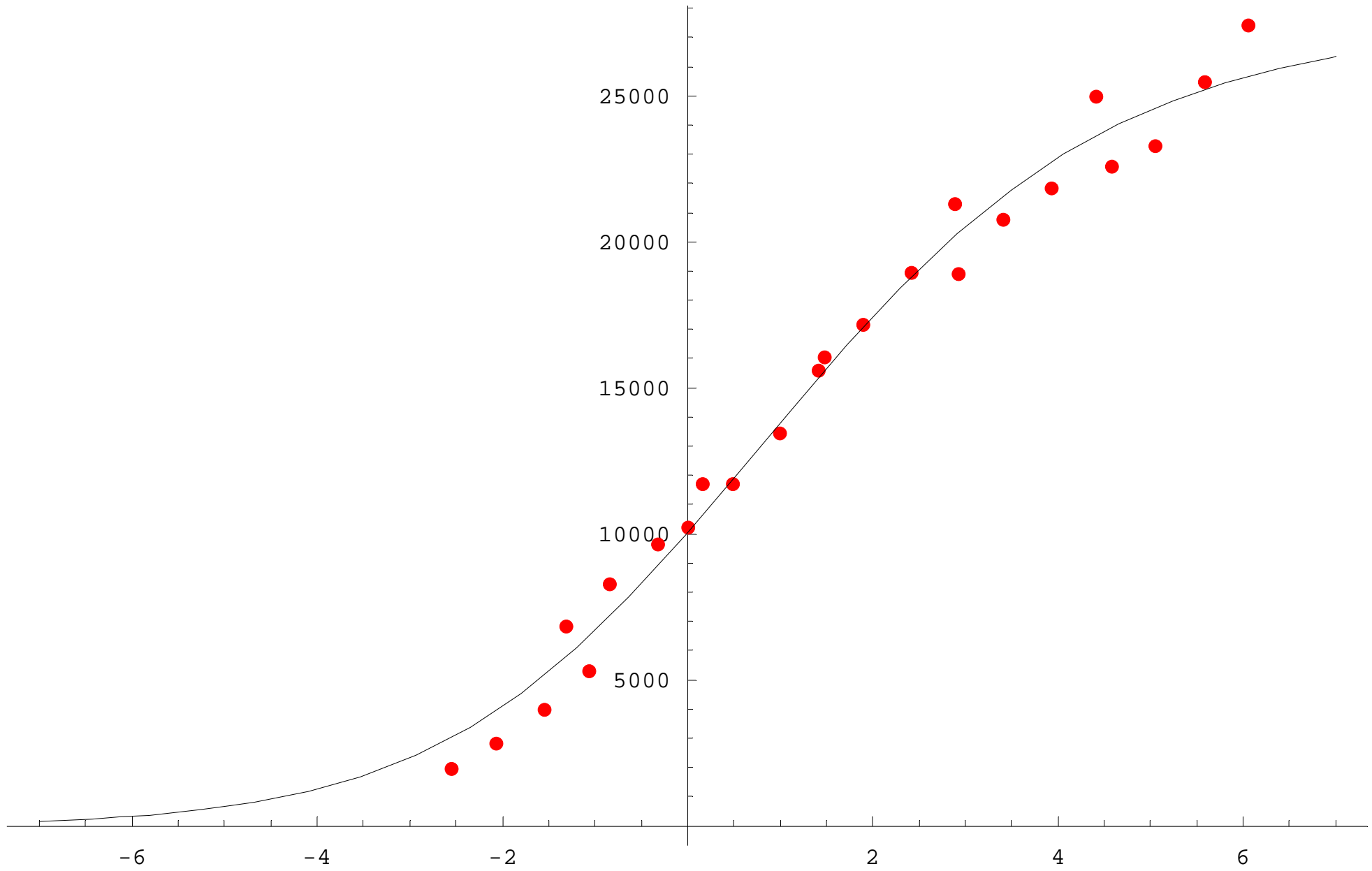
|                         | Estimate | Asymptotic SE | CI                  |
|-------------------------|----------|---------------|---------------------|
| ParameterCITable → Emax | 27509.2  | 484.083       | {26505.3, 28513.1}, |
| h                       | 1.45474  | 0.0567884     | {1.33697, 1.57251}  |

EstimatedVariance →  $1.03194 \times 10^6$ ,

|                    | DF | SumOfSq               | MeanSq                  |
|--------------------|----|-----------------------|-------------------------|
| Model              | 2  | $6.75688 \times 10^9$ | $3.37844 \times 10^9$   |
| ANOVATable → Error | 22 | $2.27028 \times 10^7$ | $1.03194 \times 10^6$ , |
| Uncorrected Total  | 24 | $6.77958 \times 10^9$ |                         |
| Corrected Total    | 23 | $1.36812 \times 10^9$ |                         |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & 0.711897 \\ 0.711897 & 1. \end{pmatrix}$ ,

|                                   | Curvature |
|-----------------------------------|-----------|
| FitCurvatureTable → Max Intrinsic | 0.0302159 |
| Max Parameter-Effects             | 0.0475473 |
| 95. % Confidence Region           | 0.538901  |





sample: 9 (bis) E, model s

26709.5

$$\frac{1}{1 + e^{-0.580295(-0.891474 + x)}}$$

{BestFitParameters → {Emax → 26709.5, λ → 0.580295, xshift → 0.891474},

|                    |        | Estimate | Asymptotic SE | CI                    |
|--------------------|--------|----------|---------------|-----------------------|
| ParameterCITable → | Emax   | 26709.5  | 954.672       | {24724.2, 28694.9}    |
|                    | λ      | 0.580295 | 0.0470357     | {0.482479, 0.678111}' |
|                    | xshift | 0.891474 | 0.181347      | {0.514342, 1.26861}   |

EstimatedVariance →  $1.18606 \times 10^6$ ,

|                     | DF | SumOfSq               | MeanSq                  |
|---------------------|----|-----------------------|-------------------------|
| Model               | 3  | $6.75468 \times 10^9$ | $2.25156 \times 10^9$   |
| ANOVA Table → Error | 21 | $2.49072 \times 10^7$ | $1.18606 \times 10^6$ , |
| Uncorrected Total   | 24 | $6.77958 \times 10^9$ |                         |
| Corrected Total     | 23 | $1.36812 \times 10^9$ |                         |

AsymptoticCorrelationMatrix →  $\begin{pmatrix} 1. & -0.810341 & 0.89949 \\ -0.810341 & 1. & -0.723387 \\ 0.89949 & -0.723387 & 1. \end{pmatrix}$ ,

|                     | Curvature               |           |
|---------------------|-------------------------|-----------|
| FitCurvatureTable → | Max Intrinsic           | 0.0963995 |
|                     | Max Parameter-Effects   | 0.676184  |
|                     | 95. % Confidence Region | 0.570501  |

