## 1.1 Error Messages

Due to erroneous operations or calculations PhoX creates different error messages. Possible reasons or advices to solve the problem are listed below:

Error code	Description
1001	File not found The entered file name could not be found Check spelling and possible problems with access rights (e.g. for server disk space). Also check if the desired file really exists.
1002	Invalid file name The entered file name does not match the Windows rules for correct file names. Check hard drive name, server name or file name.
1003	File access error The file cannot be accessed due to a problem with access rights. Checkif the file is already used by any other program and close it in case. Check your read and write rights.
1004	Invalid file format The file does not consists of correct data or the data is stored in a wrong format (e.g. coordinates, project file etc.). Possible error sources are invalid decimal character (dot or comma), tabs within the text file, empty file or others. Special input formats can be defined in the PhoX program options.
1005	File format is (not yet) supported The format of the image file cannot be loaded by PhoX. Save the file under another format such as JPEG, TIFF oder BMP.
1006	Image file not found The entered file name could not be found Check spelling and possible problems with access rights (e.g. for server disk space). Also check if the desired file really exists.
1007	Error in contour file The text file with data of measured image contours (edges, lines) does not match the required format.
1008	Warning: very large image size The loaded images exceed the limit of 500 MB of RAM so that some function do not work or work only with certain limitations. If images are temporarily not used the associated bitmaps should be removed from the project tree. The image data is not

	lost and can be reloaded at any time.
2001	Singular equation system For an adjustment process a singular normal equation matrix exists. Possible reasons can be insufficient distribution of observations (e.g. control points, image points). Check the input observations (measured values) and activate in program options a more detailed output logfile in order to identify the problem.
2002	Maximum number of iteration exceeded (warning) The warning will be displayed if an adjustment process does not converge. Check all input data and optionally increase the number of permitted iterations.
2003	Too small number of observations or points The adjustment cannot be started because the number of observations is smaller than the number of unknowns.
2004	Invalid data of interior orientation The current image has no valid data of interior orientation, e.g. a wrong camera constant (must be negative), a wrong sensor format or inconsistent camera.
2005	Invalid data of exterior orientation The current image has no valid data of exterior orientation, e.g. a singular rotation matrix. Check exterior orientation data in image properties.
2006	Function not defined The selected function is not defined or not yet implemented.
2007	Invalid data of stereo model The selected stereo model has inconsistent data, e.g. no assigned images or the same image as left or tight image.
2008	Invalid data of relative orientation The selected stereo model has inconsistent data, e.g. identical images left and right or aa base line of zero.
2009	Collinearity equations cannot be calculated The denominator of the collinearity equations is equal to zero. Possible reasons are that object point and perspective center are identical, or the object point lies in the image plane
2010	Invalid point distribution The spatial distribution of image or object points is not valid or very weak, e.g. if point lie on a common straight line or if they build are very small area.

2011	No initial values found for space resection
	For space resection no starting values could be computed. A typical reason is a bad
	configuration of image and object points,
2012	No convergency
	The adjustment does not converge.
2013	Invalid images for stereo model
	The images assigned to a stereo model have inconsistent data
2014	No hight model assigned
	The calculation of orthophotos or measurements by monoplotting cannot be performed because a digital height or surface model has not been selected.
2015	Monoplotting cannot be performed
	The measurement of object points by monoplotting fails because there is no
	intersection of an image ray with the surface. Possible reasons are erroneous surface
	models (triangles, DTM), missing orientation data of the image or an image
	measurement that points to a point outside the surface model.
2016	Function is not yet implemented
	The desired function is not available.
3001	Error at point measurement
	Error for image point measurement. Possible reasons are a too small measurement
	window, so that a point pattern cannot be covered completely. Other possible reasons
	are low contrast, unsharp images or occlusions that disturb the point pattern.
3002	Points outside window or image
	The point to be measured lies outside the measurement window, or outside of the complete image.
3003	Resulting point coordinates outside window or image
	The result of a point measurement lies outside the measurement window or the image.
3004	Undefined template
	There is no template available for the measurement method Template Matching.
3005	Maximal permitted deviation exceeded
	The calculation of a point center has led to a standard deviation that is higher than the permitted limit.
3010	No points above threshold
	There are not enough image points with greyvalues above the selected threshold. The

	threshold can be adapted in the program options.
3020	Measurement method is not defined The selected function is not defined or not yet implemented.
3030	No edge found The measurement of lines or contours has failed.
3040	Invalid nodes for contour measurement The entered nodes for contour measurements are not valid.
3041	Maximum permitted curvature for contours exceeded The line following process for contour measurement was interrupted since the curvature of the line is too high.
3042	Maximum permitted number of contour points exceeded The maximum permitted number of contour points has been exceeded and the measurement was terminated.
3043	No edge found for contour measurement There were no sufficient edge points for contour measurement.
3044	Contour points too close The measured points of a contour are too close to each other.
3050	No point code detected A coded target can not be detected, e.g. due to bad contrast.
3051	Point number cannot be decoded The number of a coded target could be decoded into a valid point number.
4001	Not enough memory There is not enough available memory space (RAM).
4002	Invalid input The entered value was not correct. Check spelling and/or permitted range of values.
4003	Invalid object The selected object has invalid properties.
5001	Invalid colour format of image The current image consists of an invalid colour format that is not supported by PhoX, e.g. 32 bit images. Use another image processing program and save the image with a valid format, e.g. greylevel image with 8 bits or true colour images with 24 bits.

5002	Invalid filter size The selected filter size is not supported.
5003	Invalid image address There is no access to image data in memory.
5004	Invalid image size The size of the image is not valid. The minimum size of rows or columns is 1, the maximum size is 10000.
5005	Invalid template size The loaded template image has an invalid size. Template images but have at least 3x3 up to 255x255 pixels, with odd numbers of rows and columns. Templates may have rectangular shapes (e.g. 7 x 19).
5006	Invalid image window for matching The reference window and/or the search window for matching and correlation is not valid.
5007	Correlation coefficient is too low A correlation function has resulted with a a correlation coefficient below the minimum threshold which has been defined in Edit/Options/Image measurement/Correlation $\rightarrow$ Threshold.
9000	Invalid license file The license file PhoX.plf is either corrupted or consists of invalid characters
9001	Invalid MAC address The current license of PhoX does not match the physical MAC address.
9002	License period exceeded The licensed period for using PhoX is exceeded.
9003	Invalid dongle The installed dongle is not valid or cannot be detected.
9004	Invalid license options The current PhoX version is not compatible with the license file.