

Table 1. Robust Test Cases for ERBE-like PGE CER2.1P1

Test	Purpose
Too few daily input snow files	Verify PGE will not run with > 10 missing days/month
Wrong number of parameters	Verify PCF generator parameter error detector, exit (152)
PCF for job not found	Verify exit (198) in case PCF instance is not there

Table 2. Robust Test Cases for ERBE-like PGE CER2.2P1

Test	Purpose
Covers Closed	Verify next delivery for initial FM6 capability
First Light	Verify ability to process mixture of good data and large number of fill values
Year/Decade Boundary	Verify ability to handle change of year/decade in data date during job
Correct Snow/SCC file selection	Verify ability to select dynamic anc files for data edition
Wrong number of parameters	Verify PCF generator parameter error detector, exit (152)
Wrong Snow Flag Case	Verify failure in case of incorrect snow flag input, exit (152)
Wrong ADM bin structure Flag Case	Verify failure in case of incorrect ADM bin flag input, exit (152)
Wrong SCC algorithm Flag Case	Verify failure in case of wrong SCC algorithm flag input, exit (152)
Wrong Offset Flag Case	Verify failure in case of incorrect 'offset' flag input, exit (152)
Wrong combination of flag values	Verify failure in case of 'original' spectral algorithm w/ 'thermal' offsets, exit (152)
Wrong Data Date entry format	Verify exit (152) in case data date is short or long
Unknown instrument	Verify exit (152) in case \$INST is FM6
Unknown satellite	Verify exit (152) in case \$SAT is unrecognized
Wrong Data Date month (not 01-12)	Verify exit (152) in case data month is impossible
Wrong satellite/parameter combination	Verify exit (200) in case \$SAT is NPP & xtrk-only is set
Input data not found	Verify exit (140) in case data instance is not on DPO
PCF for job not found	Verify exit (198) in case PCF instance is not there
ES8 HDF generation unsuccessful	Verify exit (239) in case HDF generator fails
ES8 plot generation unsuccessful	Verify exit (250) in case ES8 plotter fails

Table 3. Robust Test Cases for ERBE-like PGEs CER2.3P1 and CER2.3P2

Test	Purpose
Year/Decade Boundary	Verify ability to handle change of year/decade in data date during job
February in a Leap Year	Verify ability to calculate no. of days in all months
Correct Snow/SCC file selection	Verify ability to select dynamic anc files for data edition
Wrong number of parameters	Verify PCF generator parameter error detector, exit (152)
Wrong Snow Flag Case	Verify failure in case of incorrect snow flag input, exit (152)
Wrong ADM bin structure Flag Case	Verify failure in case of incorrect ADM bin flag input, exit (152)
Wrong SCC algorithm Flag Case	Verify failure in case of wrong SCC algorithm flag input, exit (152)
Wrong Offset Flag Case	Verify failure in case of incorrect 'offset' flag input, exit (152)
Wrong combination of flag values	Verify failure in case of 'original' spectral algorithm w/ 'thermal' offsets, exit (152)
Wrong Data Date entry format	Verify exit (152) in case data date is short or long
Unknown instrument	Verify exit (152) in case \$INST is FM6
Unknown satellite	Verify exit (152) in case \$SAT is unrecognized
Wrong Data Date month (not 01-12)	Verify exit (152) in case data month is impossible
Wrong satellite/parameter combination	Verify exit (200) in case \$SAT is NPP & xtrk-only is set
Input data not found	Verify exit (140) in case data instance is not on DPO
PCF for job not found	Verify exit (198) in case PCF instance is not there

Table 4. Robust Test Cases for ERBE-like PGE CER2.4P1

Test	Purpose
Mislabeled channels in SRF input file names	Verify PGE detects mismatch between name & content
Wrong number of parameters	Verify PCF generator parameter error detector, exit (152)
PCF for job not found	Verify exit (198) in case PCF instance is not there
Bad date, pre-dates Terra launch	Verify PCF generator does not accept dates before Dec 1999, exit (152)
Wrong Instrument	Verify PCF generator only works with Terra, Aqua and NPP, exit (152)
Wrong Edition parameter	Verify PCF generator works with Ed3 and G only (152)
Instrument / Satellite mismatch	Verify PCF generator only works NPP-FM5 exit (152)
Instrument / Satellite mismatch	Verify PCF generator only works with Aqua-FM3 or Aqua-FM2 exit (152)
Instrument / Satellite mismatch	Verify PCF generator only works with Terra-FM1 or Terra-FM2 exit (152)

Table 5. Robust Test Cases for ERBE-like PGE CER3.1P1

Test	Purpose
Minimum input data days not available	Verify failure to run when < 15 EID6 inputs for month
Minimum input data days are available	Verify ability to run when 15 EID6 inputs for month
Year/Decade Boundary	Verify ability to handle change of year/decade in data date during job
Edition3	Verify ability to process 'Xtrk' inputs from SS 2.0
Input data not found or cannot be opened	Verify exit (201) in case input data not available
Wrong number of parameters	Verify PCF generator parameter error detector, exit (152)
Wrong Data Date month (not 01-12)	Verify exit (152) in case data month is impossible
PCF for job not found	Verify exit (198) in case PCF instance is not there
ES4/9 HDF generation unsuccessful	Verify exit (239) in case either HDF generator fails
ES4 plot generation unsuccessful	Verify exit (250) in case ES4 plotter fails

Table 6. Robust Test Cases for ERBE-like PGE CER3.2P1

Test	Purpose
Year/Decade Boundary	Verify ability to handle change of year/decade in data date during job
2/3 instruments available	Verify failure to run when requested data is missing
3/3 instruments available	Verify ability to run 3 instruments together
Edition2	Verify Edition2 processing
Edition3	Verify Edition3 processing
Input data not found or cannot be opened	Verify exit (201) in case input data not available
Wrong number of parameters	Verify PCF generator parameter error detector, exit (152)
Wrong Data Date month (not 01-12)	Verify exit (152) in case data month is impossible
PCF for job not found	Verify exit (198) in case PCF instance is not there
ES4/9 HDF generation unsuccessful	Verify exit (239) in case either HDF generator fails
ES4 plot generation unsuccessful	Verify exit (250) in case ES4 plotter fails

ERBE-like Revision Record

The product Revision Record contains information pertaining to approved section changes. The table lists the date the Software Configuration Change Request (SCCR) was approved, the Release and Version Number, the SCCR number, a short description of the revision, and the revised sections. The authors are listed on the document cover.

ERBE-like Revision Record

Version Number	Description of Revision	Table(s) Affected
V1	<ul style="list-style-type: none">• Intial version of robust test cases for PGEs CER2.1P1, CER2.2P1, CER2.3P1, CER2.3P2, CER2.4P1, CER3.1P1, and CER3.2P1.	All