HIRDLS

SW-HIR-2019

HIGH RESOLUTION DYNAMICS LIMB SOUNDER

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Subject/Title:

HIRDLS Level 2 Data Flow

Description/Summary/Contents

Keywords:

Purpose of this Document:

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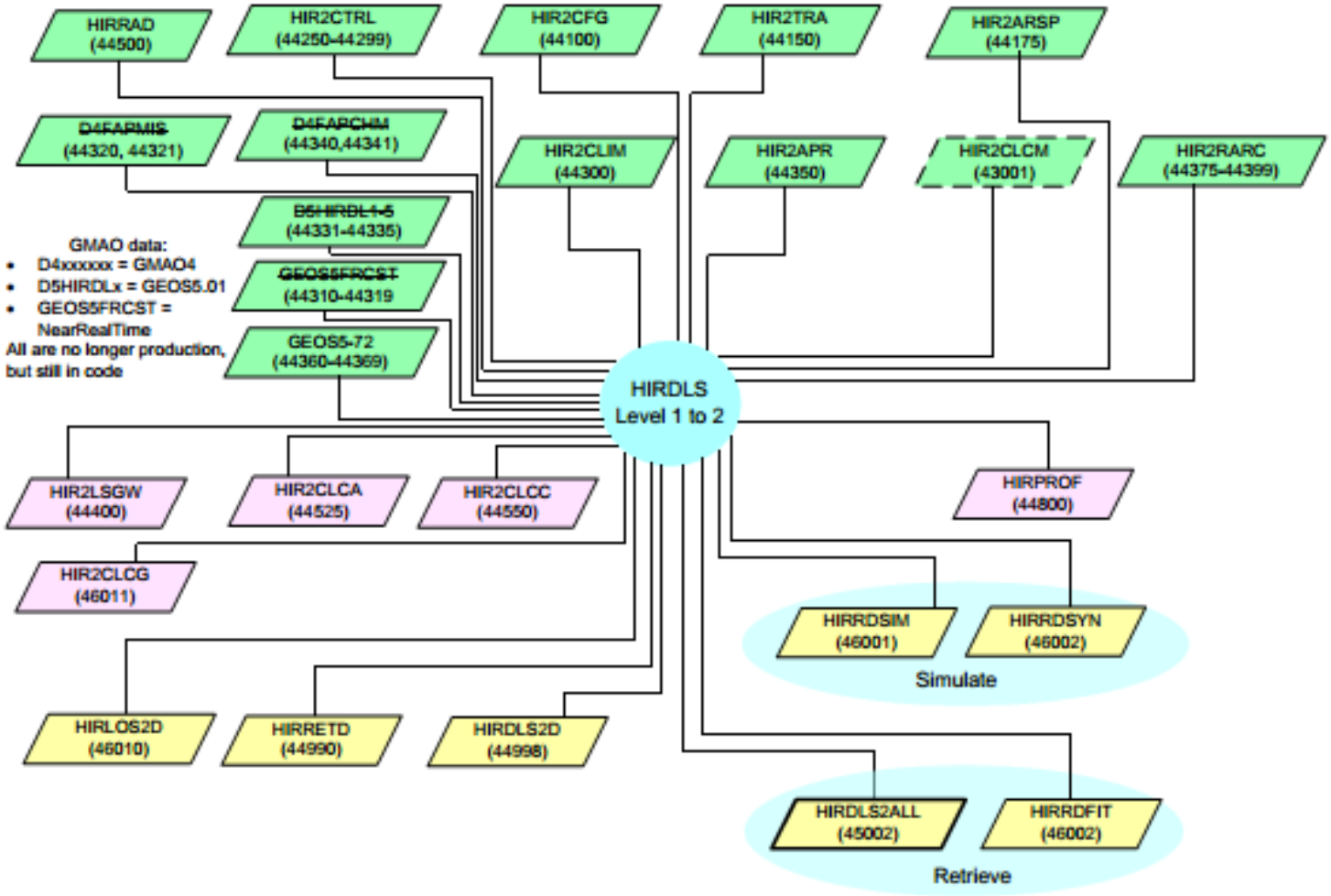
EOS



File definition files are same number with a 50000 instead of 40000 number
MCF files are 60000 instead of 40000

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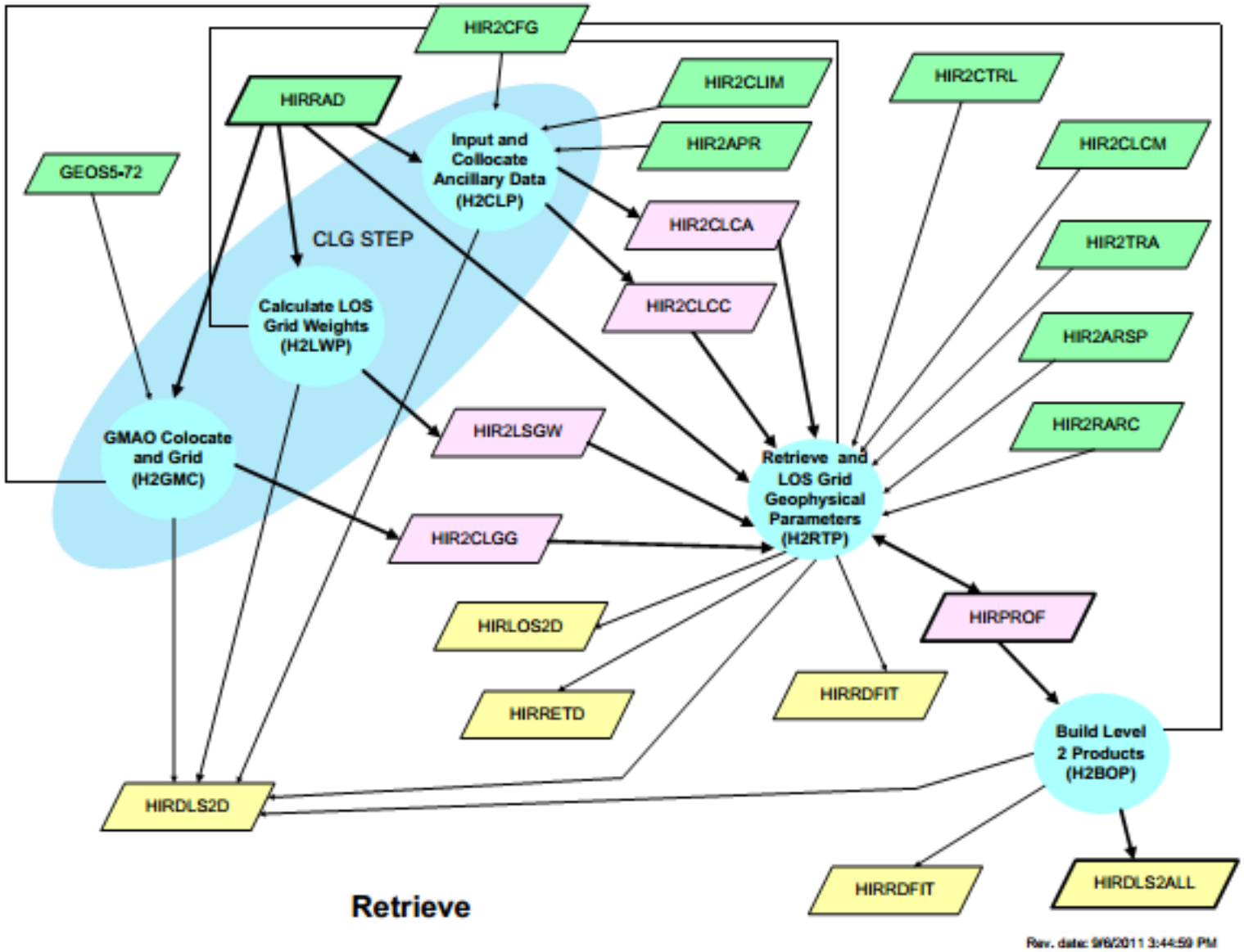
HIR2CFG
HIRRAD
HIR2CLIM
HIR2CTRL
HIR2APR
HIR2CLCM
GEOS5-72
Input and Collocate Ancillary Data (H2CLP)
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HIRRDFIT
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Retrieve
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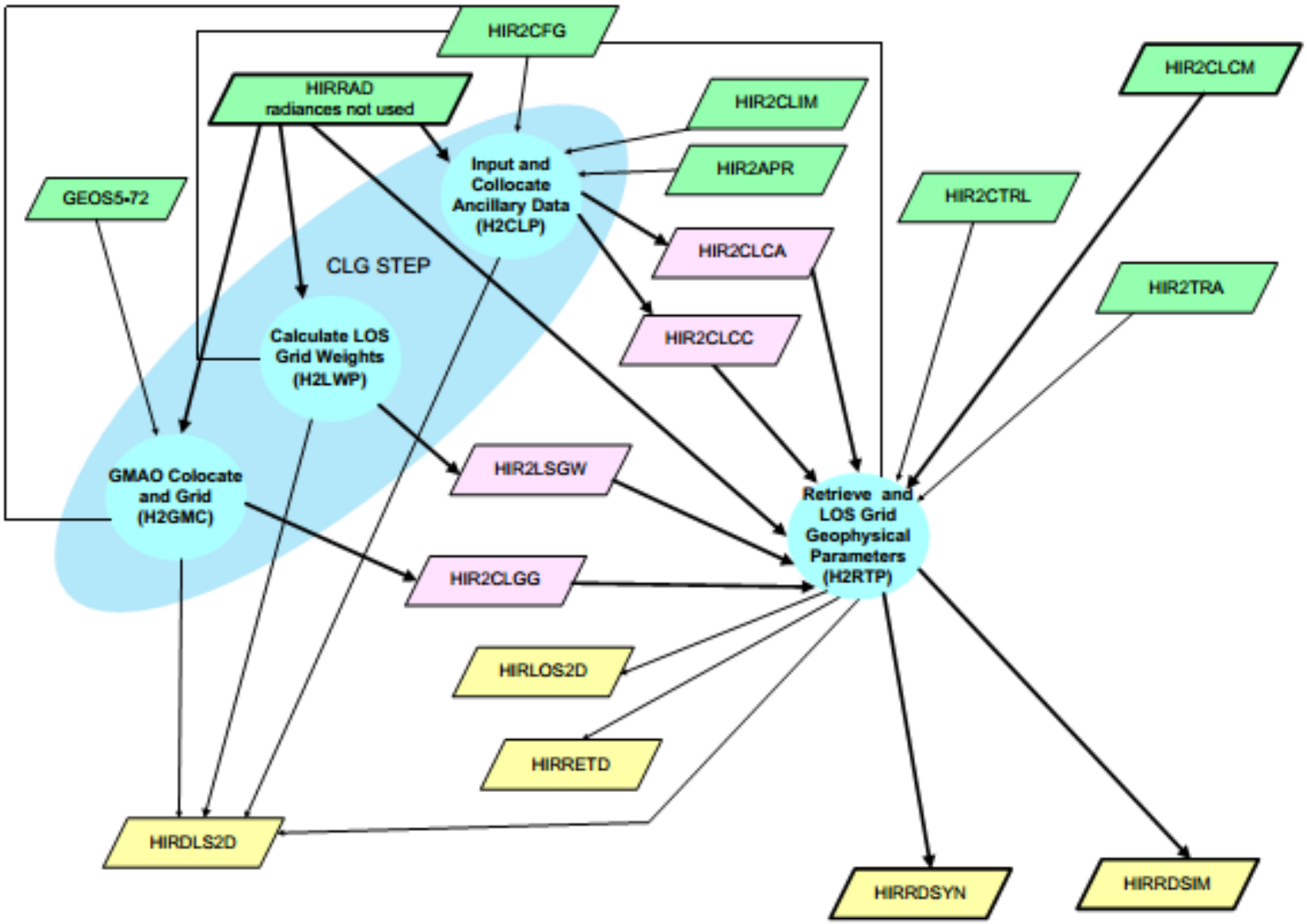

Simulate

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List of L2 Files

INPUT to L2

HIRRAD – HIRDLS radiances (with cloud information)
HIR2CTRL – Control files which direct the retrieval – one for each set of retrievals (currently using 2)
HIR2CFG – Configuration file – contains information for the PCF
HIR2TRA – transmittance information used by retrieval
HIR2ARSP – File used in aerosol (RAR) step
GEOS5-72 – GEOS 5.1 files
HIR2CLIM – climatology file (used if "C" in control file)
HIR2APR – apriori file
HI2CLCM – Colocated model/MLS file (used if "M" in control file) created by standalone MLSColloc program
HIR2RARC – control file for aerosol (RAR) step(s) (currently just using 1)

INTERMEDIATE

HIR2LSGW – Line of sight weights file (output from LSP step, input to RTP)
HIR2CLCA – colocated apriori file (output from CLP step, input to RTPI)
HIR2CLCC – colocated climatology file (output from CLP, input to RTP)
HIR2CLCG – colocated GMAO file (output from GMC, input to RTP)
HIRPROF – output profiles on altitude grid (output from RTP, input to BOP) Not output during simulate

OUTPUT from L2

HIRDLS2D – output diagnostic files (one from each retrieval step)
HIRRETD – output binary file containing retrieval debugging information (optional output from RTP)
HIRLOS2D – output HE5 file containing snapshot of LOS2D structure before call to retrieval – UNIX cp after every retrieval step

OUTPUT from simulate run

HIRRDSIM – simulate file with noise (output from RTP) same format as HIRRAD
HIRRDSYN – simulate file without noise (output from RTP) same format as HIRRAD

OUTPUT from retrieval run

HIRRDFIT – forward model generated radiances (optional output from BOP) same format as HIRRAD
HIRDLS2ALL – output profiles on pressure grid (output from BOP) contains all species which were retrieved