Calibration discussion

- We have explained about
  -the results of pre-flight calibration
    -- All Sensors were working fine.
    -- All parameters necessary for L-1 algorithm were fixed.
    -- Sensitivity decreasing phenomenon over the saturation light level on Ocean Channels in VNIR2
  -calibration groups and its activities
  -schedule of initial checkout

- Discussed in the ocean group

(We need to discuss with other Groups)

Calibration Discussion

- A/I

prepare a basic pre-flight characteristics of GLI as "Reference Handbook for PIs" before launch.

Including:

(1) Spectral Characteristics of each bands (already opened)

(2) S/N, NE⊿T

(3) Dynamic Range

with sensitivity decay characteristics by over-saturation effect

(4) Near-cloud behavior **(Stray light by strong incident radiance)**

(5) Polarization sensitivity **(analyzed for witness samples)**

(6) Reflectance vs. scan angle characteristics

(analyzed for witness samples)

Calibration Discussion

■ Announcement for PIs

welcome you for discussion in Cal WG.

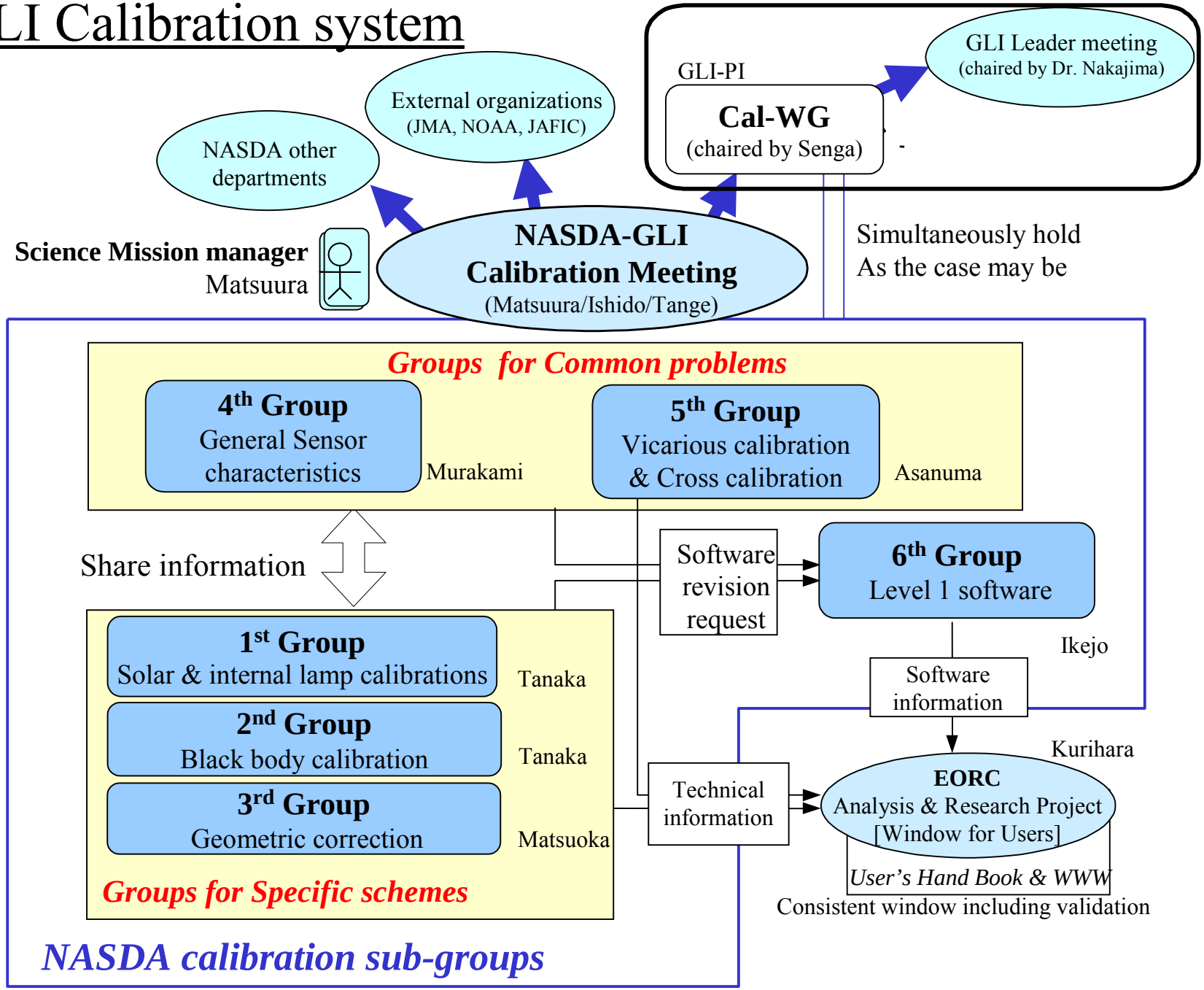
■ Future Planning

1. Publish details of pre-flight characteristics & on-orbit behavior as “Technical Report” ASAP.
2. Further analysis for PFT & MDET (huge data set)
3. Prepare the on-orbit calibration including calibration data archiving system

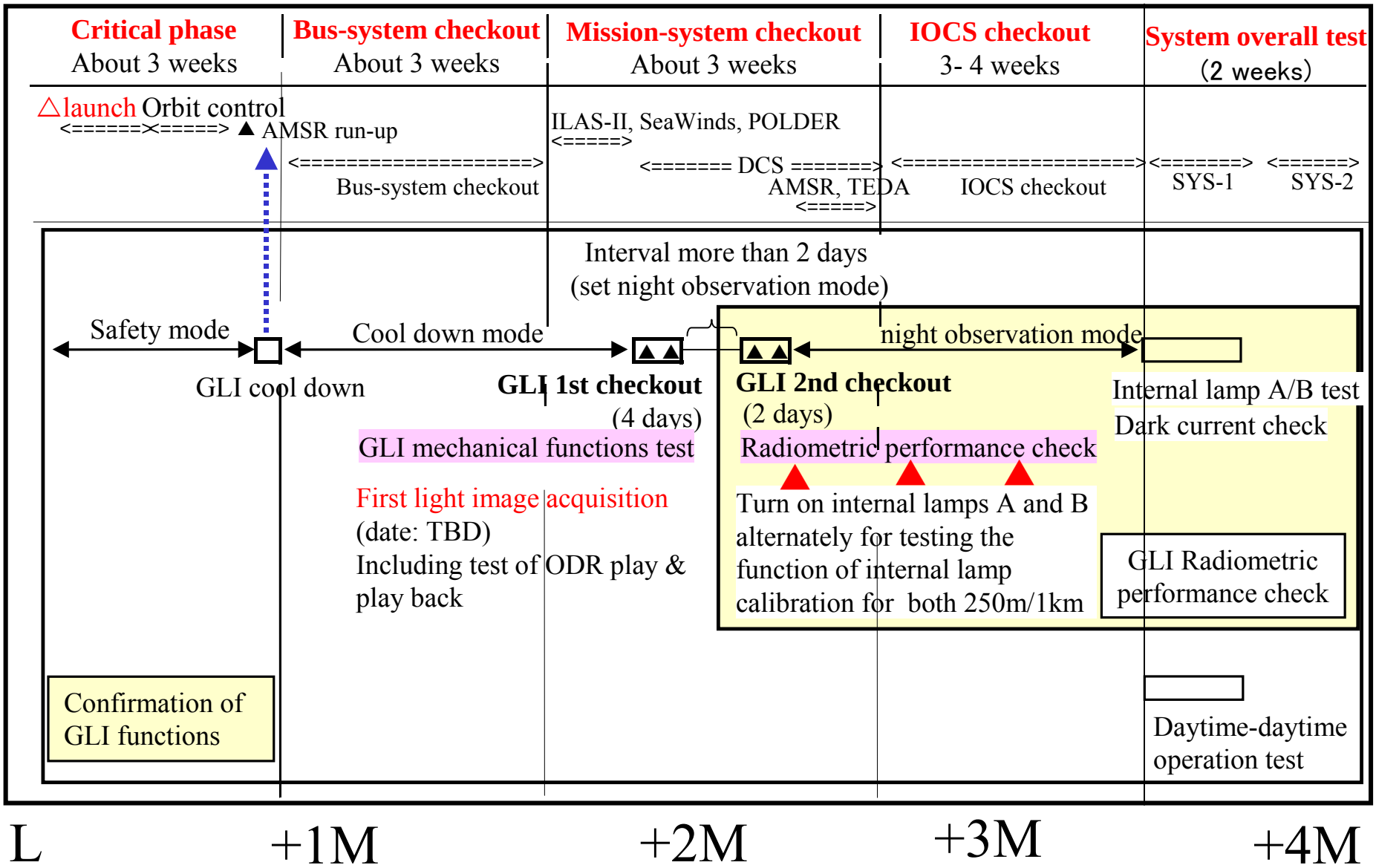
GLI Mission Data Evaluation Test (Dec. 2000 – Mar.2001)

	parameters	PFT (1998-1999) Ambient VN/SW	PFT (1998-1999) Ambient MT	PFT (1998-1999) T/V VN/SW	PFT (1998-1999) T/V MT	Mission Data Evaluation Test Health check for VN/SW	Mission Data Evaluation Test Adidtional Analysis
1	Scan angle	○	◇	◇	◇	evaluate using MTF data	Analysis with witness sample
2	S/N	○	—	○	—	Same as PFT	—
3	NEΔT	—	◇	—	○	—	—
4	Dynamic Range, Linearity	○	—	○	○	Same as PFT	PFT Analysis
5	MTF	○	◇	○	○	Same as PFT	—
6	Polarization Sensitivity	○	—	—	—	—	PFT Analysis
7	Stray light	○	○	—	—	—	PFT Analysis
8	Flare	◇	—	—	—		
9	Optical Allignment	○	○	—	—	analyze MTF data	—
10	Inter band Registration	○	○	○	○	analyze MTF data	—
11	Deviation of the sensitivity	○	◇	○	○	Same as PFT	—
12	Internal Lamp Callibration	○	—	○	—	Same as PFT	—
13	Black Body Calibration	—	—	—	○	—	—
14	Solar Light Calibration	○	—	—	—	—	—
15	Thernal Band Output	—	◇	—	—	Same as PFT	—
	○: test data, ◇: Reference data						

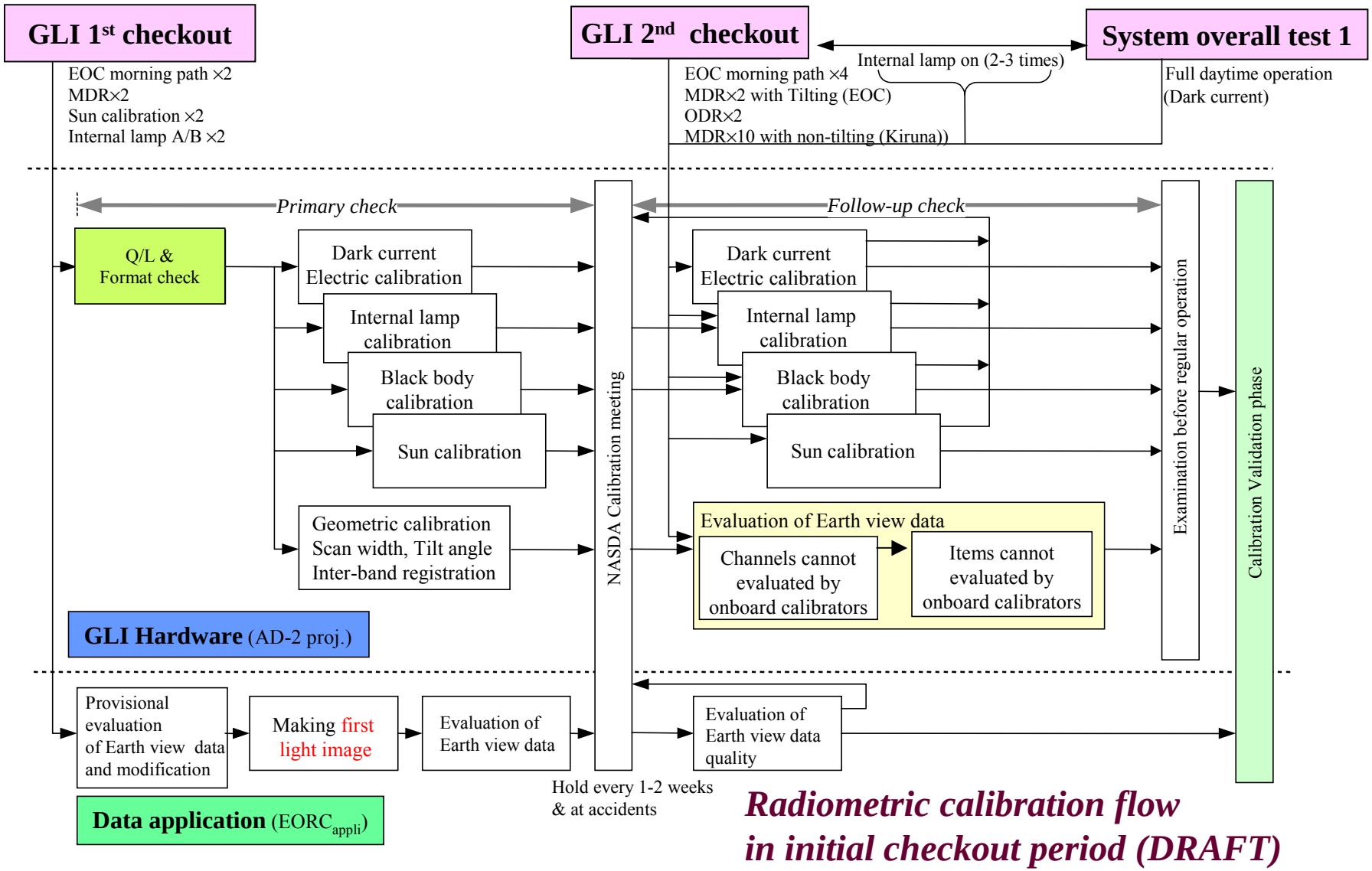
GLI Calibration system



Outlines of GLI Initial Checkout



Flowchart of GLI initial checkout



Radiometric calibration flow in initial checkout period (DRAFT)

Calibration activity in GLI cal/val phase (~L+12M) & Implementation schedule to Level 1 software **(DRAFT)**