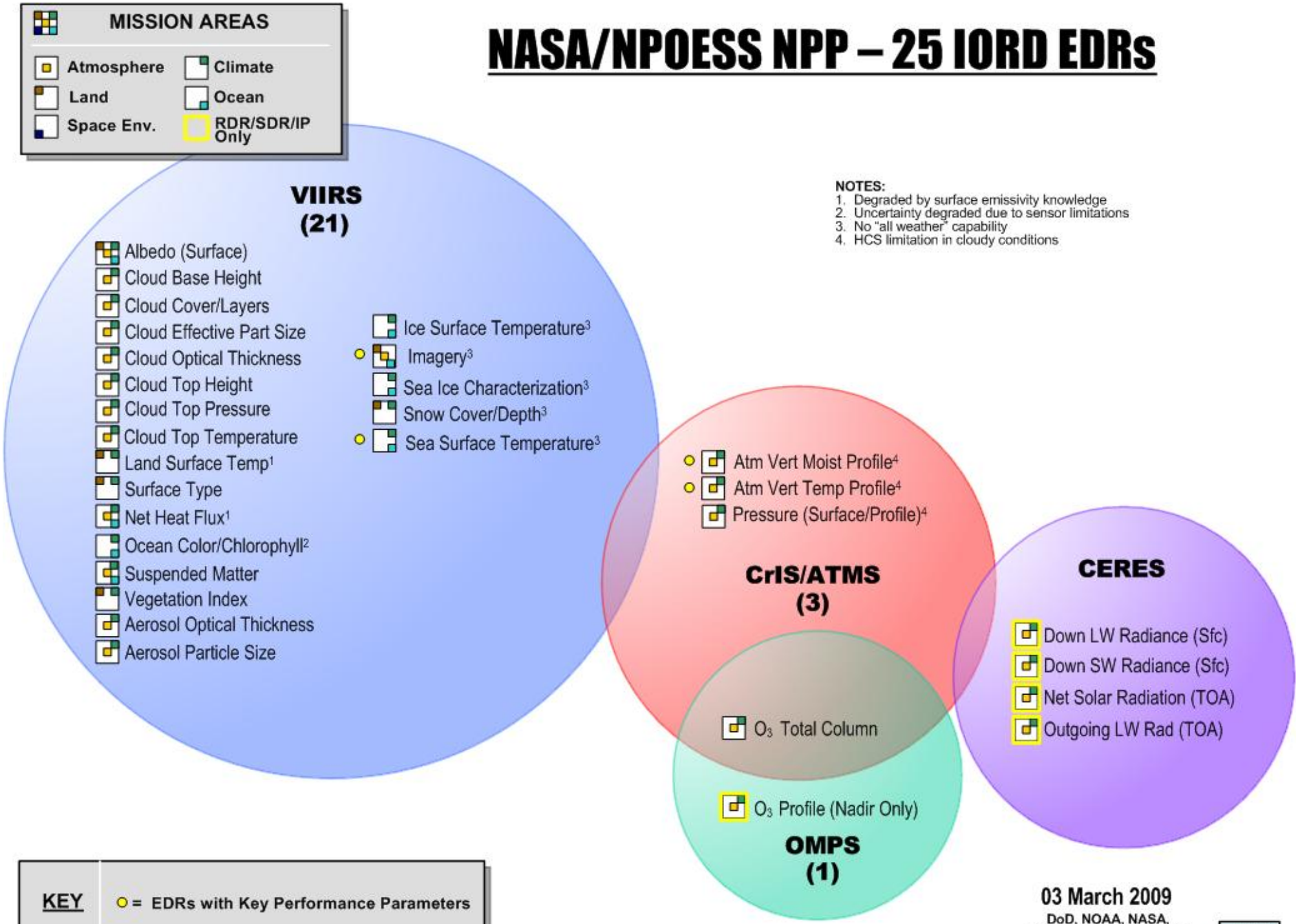
NASA/NPOESS NPP – 25 IORD EDRs



NOTES:
1. Degraded by surface emissivity knowledge
2. Uncertainty degraded due to sensor limitations
3. No "all weather" capability
4. HCS limitation in cloudy conditions

KEY ○ = EDRs with Key Performance Parameters

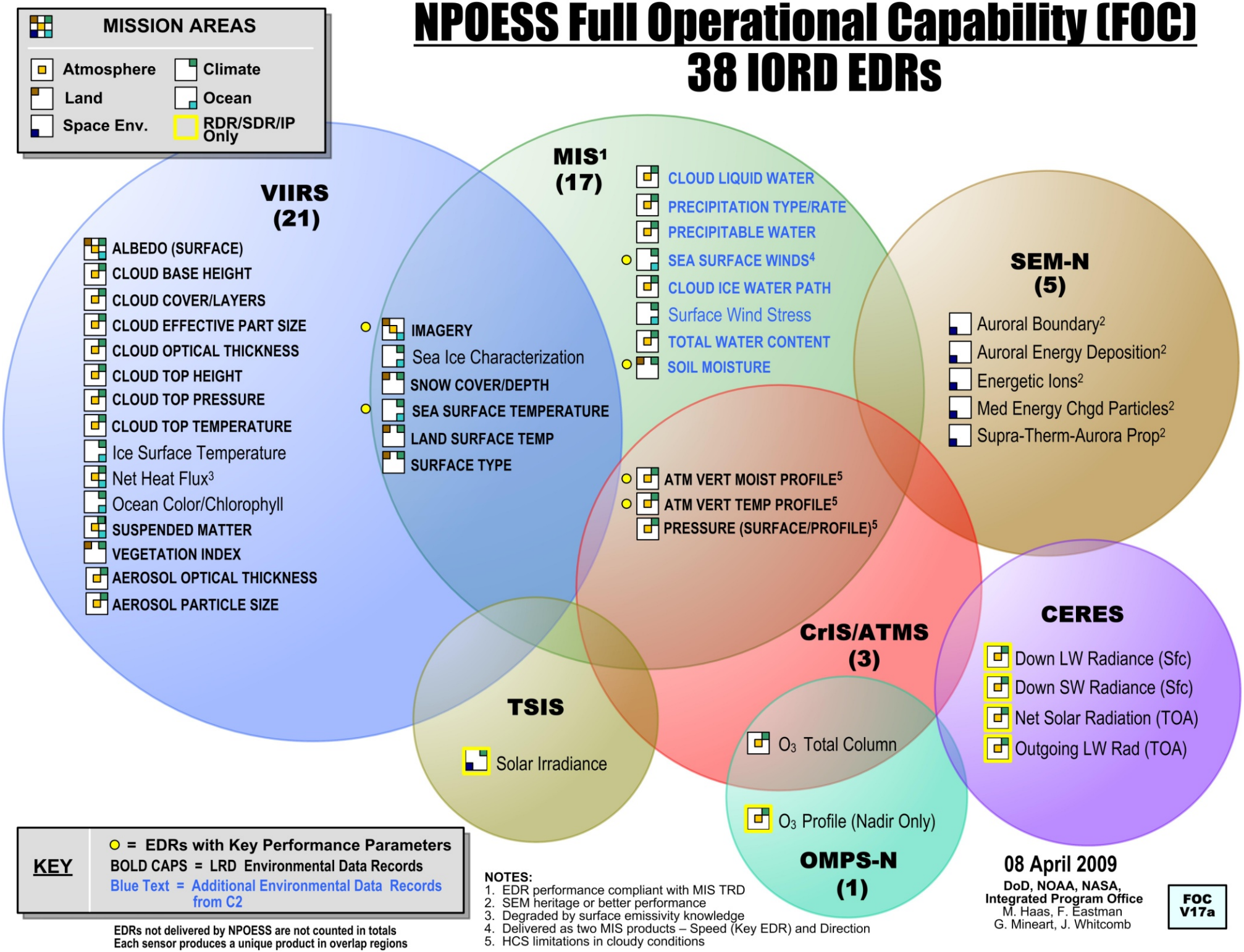
EDRs not delivered by NPOESS are not counted in totals
Each sensor produces a unique product in overlap regions

03 March 2009

DoD, NOAA, NASA,
Integrated Program Office
M. Haas, F. Eastman
G. Mineart, J. Whitcomb

NPP V17

NPOESS Full Operational Capability (FOC)
38 IORD EDRs



KEY

○ = EDRs with Key Performance Parameters
BOLD CAPS = LRD Environmental Data Records
Blue Text = Additional Environmental Data Records from C2

EDRs not delivered by NPOESS are not counted in totals
Each sensor produces a unique product in overlap regions

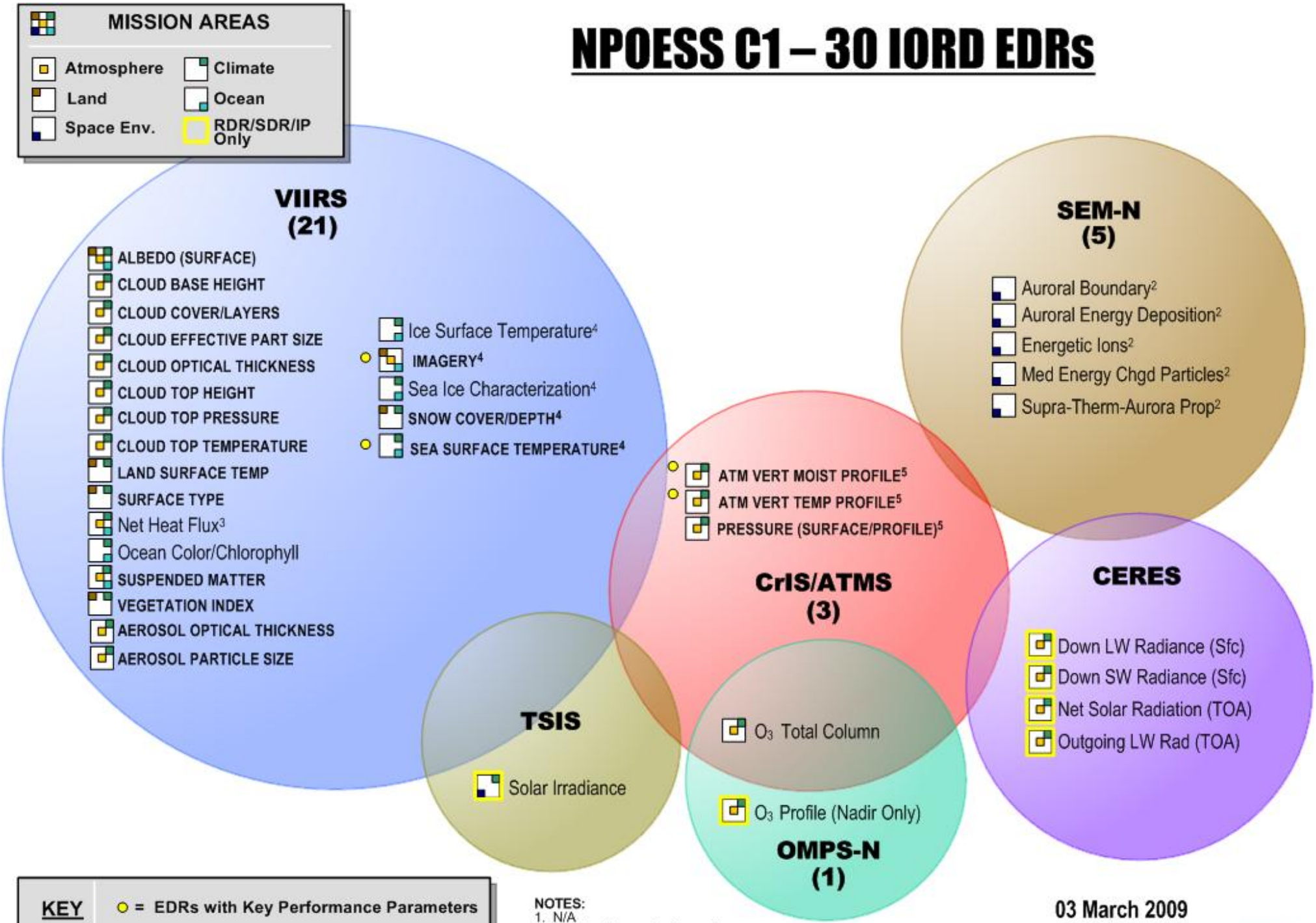
NOTES:
1. EDR performance compliant with MIS TRD
2. SEM heritage or better performance
3. Degraded by surface emissivity knowledge
4. Delivered as two MIS products – Speed (Key EDR) and Direction
5. HCS limitations in cloudy conditions

08 April 2009

DoD, NOAA, NASA,
Integrated Program Office
M. Haas, F. Eastman
G. Mineart, J. Whitcomb

FOC V17a

NPOESS C1 – 30 IORD EDRs



KEY

○ = EDRs with Key Performance Parameters

BOLD CAPS = LRD Environmental Data Records

EDRs not delivered by NPOESS are not counted in totals
Each sensor produces a unique product in overlap regions

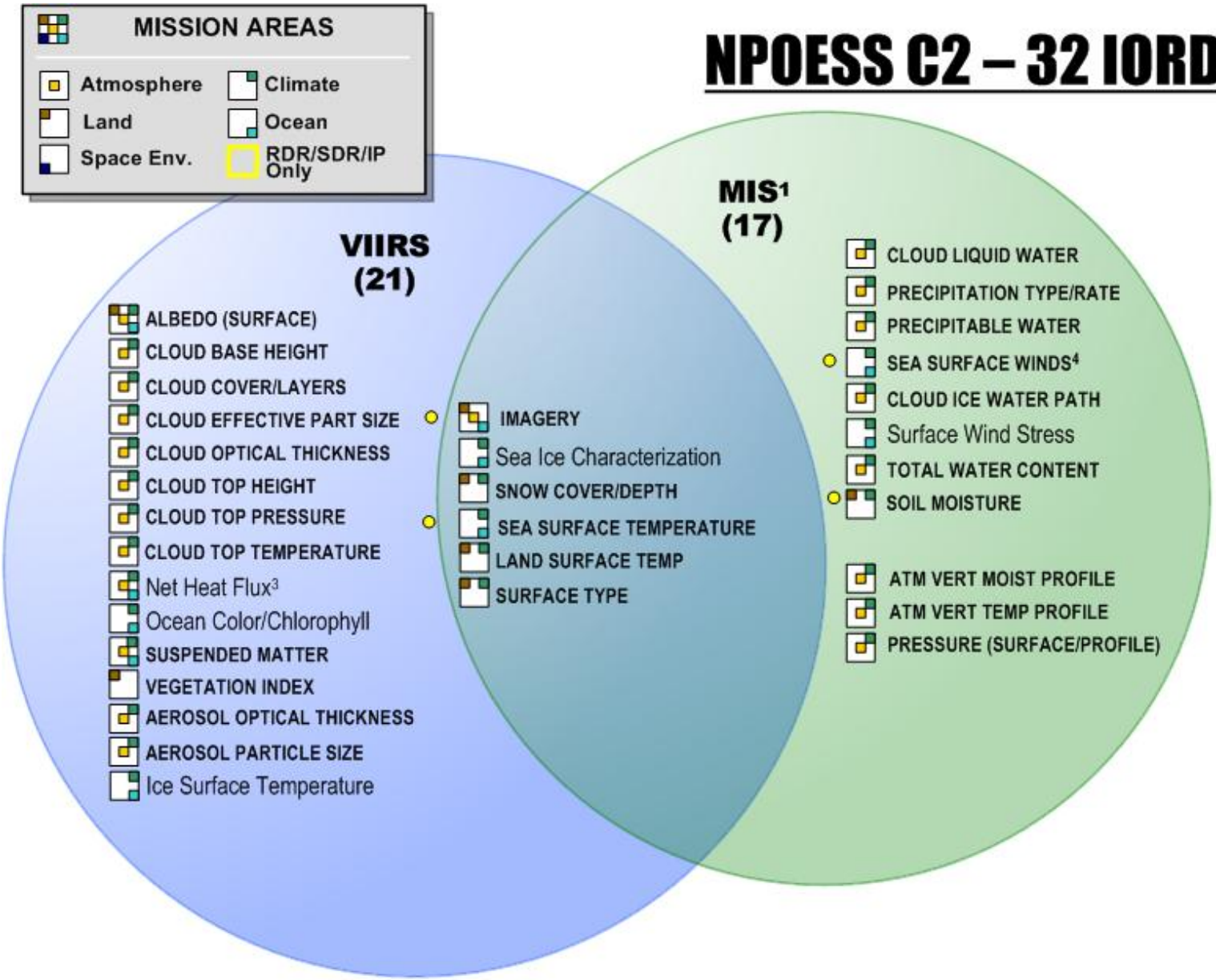
NOTES:
1. N/A
2. SEM heritage or better performance
3. Degraded by surface emissivity knowledge
4. No "all weather" capability
5. HCS limitation in cloudy conditions

03 March 2009

DoD, NOAA, NASA,
Integrated Program Office
M. Haas, F. Eastman
G. Mineart, J. Whitcomb

C1
V17

NPOESS C2 – 32 IORD EDRs



KEY

○ = EDRs with Key Performance Parameters

BOLD CAPS = LRD Environmental Data Records

EDRs not delivered by NPOESS are not counted in totals
Each sensor produces a unique product in overlap regions

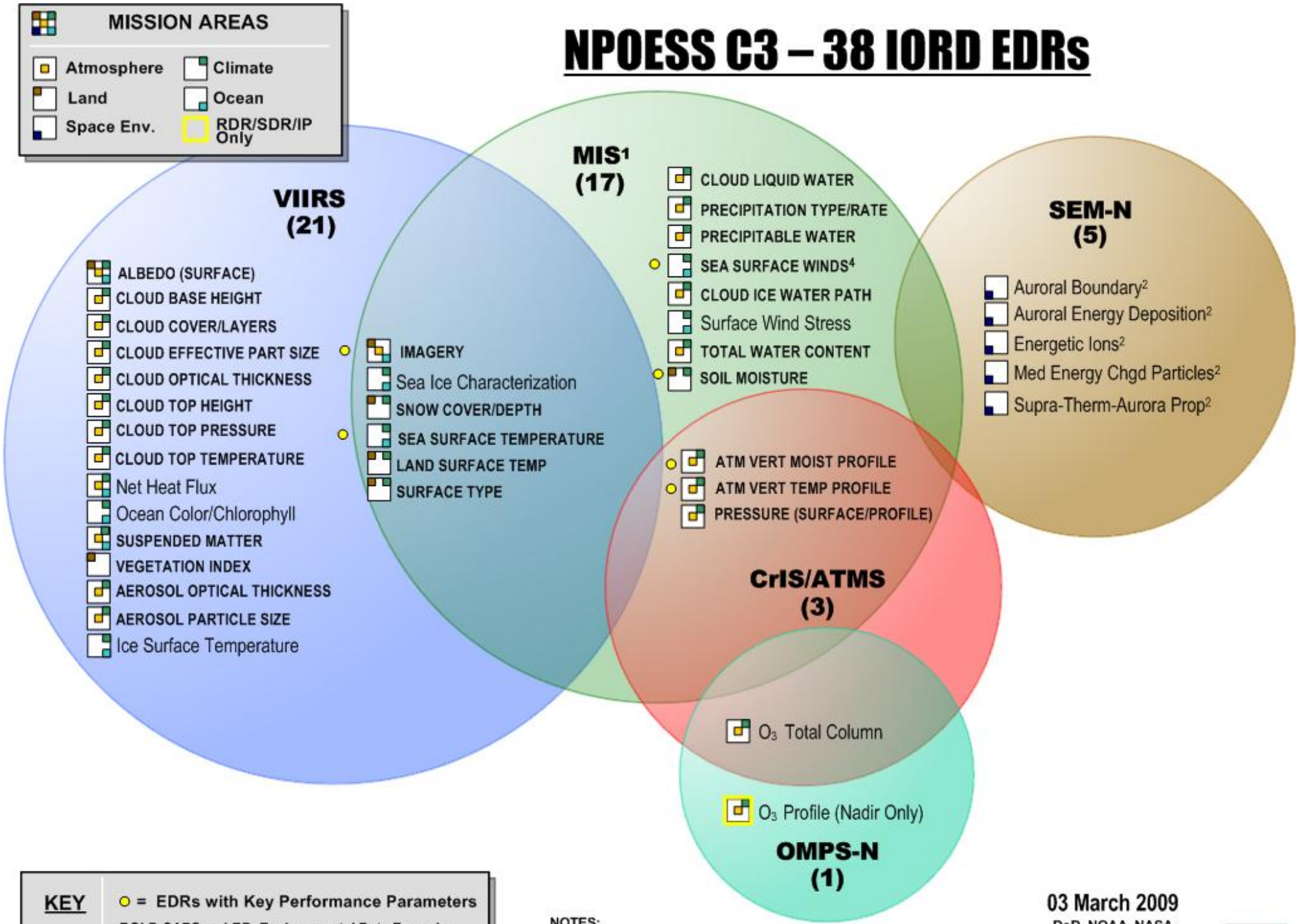
NOTES:
1. EDR performance compliant with MIS TRD
2. N/A
3. Degraded by surface emissivity knowledge
4. Delivered as two MIS products – Speed (Key EDR) and Direction

03 March 2009

DoD, NOAA, NASA,
Integrated Program Office
M. Haas, F. Eastman
G. Mineart, J. Whitcomb

C2
V17

NPOESS C3 – 38 IORD EDRs



KEY

○ = EDRs with Key Performance Parameters

BOLD CAPS = LRD Environmental Data Records

EDRs not delivered by NPOESS are not counted in totals
Each sensor produces a unique product in overlap regions

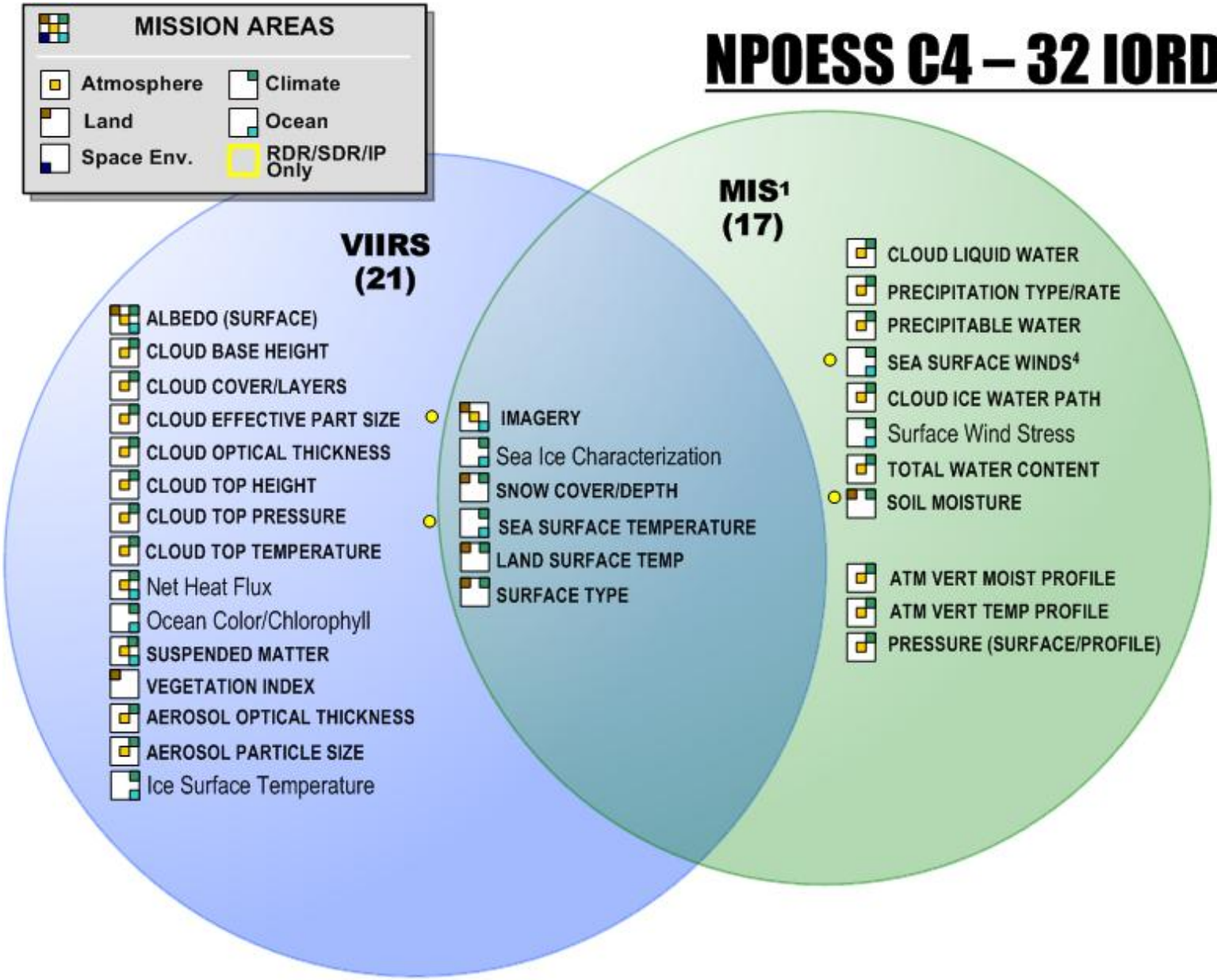
NOTES:
1. EDR performance compliant with MIS TRD
2. SEM heritage or better performance
3. N/A
4. Delivered as two MIS products – Speed (Key EDR) and Direction

03 March 2009

DoD, NOAA, NASA,
Integrated Program Office
M. Haas, F. Eastman
G. Mineart, J. Whitcomb

C3
V17

NPOESS C4 – 32 IORD EDRs



KEY

○ = EDRs with Key Performance Parameters

BOLD CAPS = LRD Environmental Data Records

EDRs not delivered by NPOESS are not counted in totals
Each sensor produces a unique product in overlap regions

NOTES:
1. EDR performance compliant with MIS TRD
2. N/A
3. N/A
4. Delivered as two MIS products – Speed (Key EDR) and Direction

03 March 2009

DoD, NOAA, NASA, Integrated Program Office
M. Haas, F. Eastman
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C4 V17

NPOESS Certified Program – Demanifested EDRs

MISSION AREAS

- Atmosphere
- Climate
- Land
- Ocean
- Space Env.
- RDR/SDR/IP Only

SESS (8)

- Auroral Imagery
- Electric Fields
- Electron Density Profile
- Geomagnetic Field
- In-situ Plasma Fluctuation
- In-situ Plasma Temp
- Ionospheric Scintillation
- Neutral Density Profile

ERBS (4)

- Down LW Radiance (Sfc)
- Down SW Radiance (Sfc)
- Net Solar Radiation (TOA)
- Outgoing LW Rad (TOA)

APS (4)

- AEROSOL PARTICLE SIZE
- Aerosol Refractive Index, Single Scatter Albedo, Shape
- Cloud Particle Size/Distrib

OMPS-L (1)

- O_3 Profile (Limb)

ALT (2)

- OCEAN WAVE CHARACTERISTICS
- Sea Surface Height

KEY

○ = EDRs with Key Performance Parameters

BOLD CAPS = LRD Environmental Data Records

03 March 2009

DoD, NOAA, NASA, Integrated Program Office
M. Haas, F. Eastman
G. Mineart, J. Whitcomb

DM V17