小端模式

帧头

02 01 04 03 0f 0a 08 07 magic world
00 00 06 03 sdk version
0A 02 00 00 帧长
~~00 00~~
42 16 0A 00 platform
01 00 00 00 帧数(Tag)
AD 1F 84 A8 运行时间
04 00 00 00 支线目标数
03 00 00 00 TLV数目
00 00 00 00 subFrame Numbe

TLV1
- 01 00 00 00 Tag1
- 34 00 00 00 TLV长(payload字节数)
- payload1

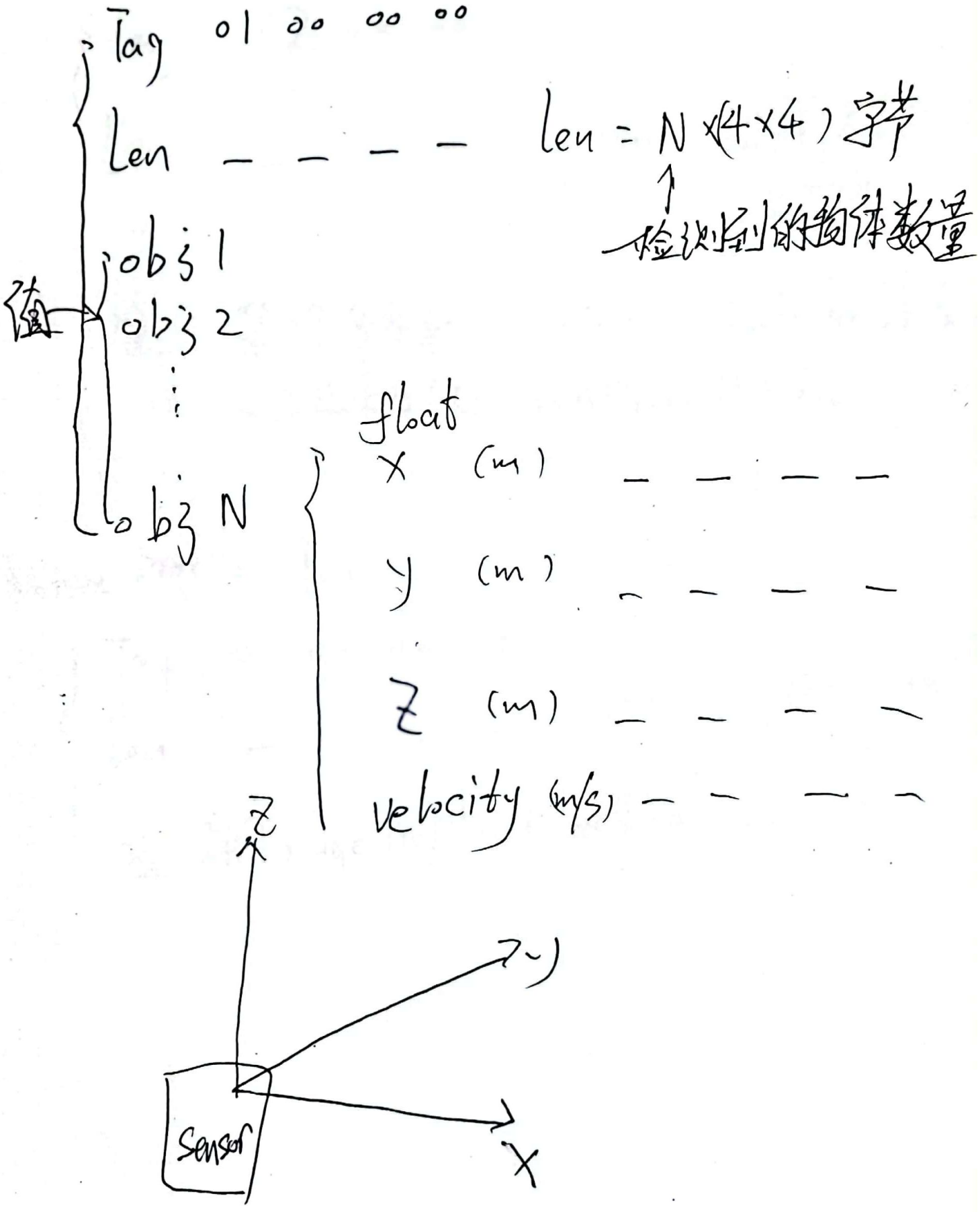
TLV2

⋮

TLV K

帧尾 0f 0f ···· (一帧长度为32的倍数)
0~31字节

Detected objects TLV



range profile TLV

- Tag 02 00 00 00
- len ---- len = 范围FFT尺寸(256) × 2字节
- 值：第0个多普勒(静止对象)处的轮廓点数组，这些点表示以Q9格式表示的以米为单位的距离

Noise profile TLV

- Tag 03 00 00 00
- len ---- len = range FFT size (256) × 2字节
- 值：与用 range Profile，对象是最大速度对象.

Azimut static heat map TLV

Tag 04 00 00 00

Len _ _ _ _

值: Imag(ant0, range0), Real(ant0, range0), …,

Imag(ant N-1, range0), Real(ant N-1, range0),

…

Imag(ant0, range R-1), Real(ant0, range R-1), …,

Imag(ant N-1, range R-1), Real( ),

len: r-FFT size (256) × 虚拟天线数量 × 2 × 2 字节

range doppler heat map TLV

Tag 05 00 00 00

len _ _ _ _

值: X(range bin 0, doppler bin 0), …,

X(range bin 0, doppler bin D-1),

…

X(range bin R-1, doppler bin 0), …,

X(range bin R-1, doppler bin D-1).

len: r-FFT size × d-FFT size × 2 字节

Stats TLV

- Tag 06 00 00 00
- Len 18 00 00 00 — len=24=6×4字节
- 值：uint32_t
  - 帧间处理时间
  - 传输输出时间
  - 帧间处理边距
  - interChripProcessingMargin
  - activeFrameCPULoad
  - 中断间CPU负载

Detected points side info TLV

- Tag 07 00 00 00
- Len — — — — — len=N×2×2字节
- 值：
  - obj1
  - obj2
  - ⋮
  - objN
    - 信噪比 (dB) — —
    - 噪声 (0.1dB) — —

Temperature stats TLV

- Tag 88 00 00 00
- Len ---- len = 4+7
- 值
  - uint32_t tempReportValid
  - rlRfTempData_t 温度数据

Azimut elevation static heat map TLV

- Tag: 08 00 00 00 (未使用)
- Len: ---
- 值