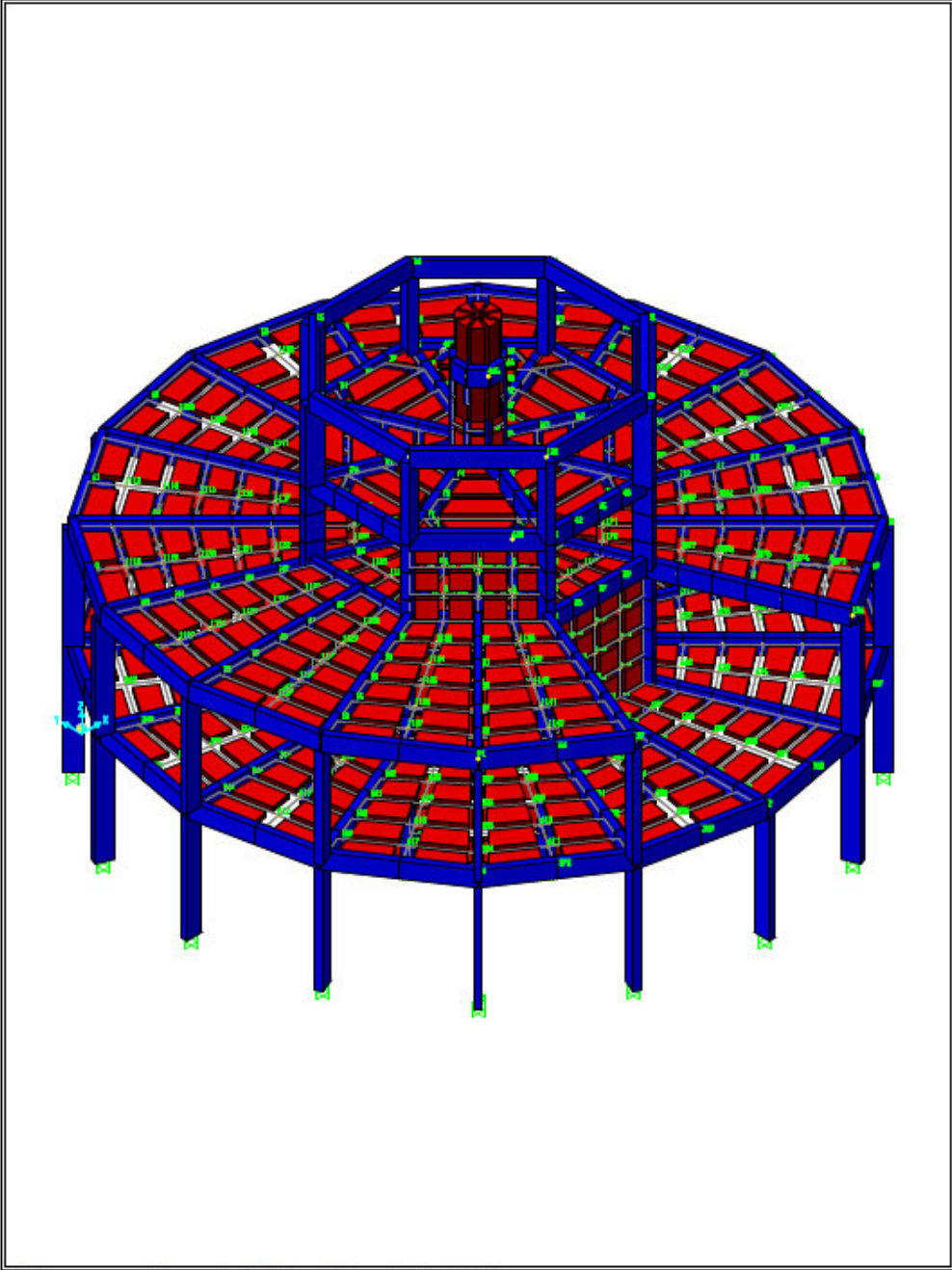


**Infrastructure for Doppler weather Radar
Project at Chirapunjee
Architect: BEL, Bangalore**



3D MODEL

Design Codes and Standards:

- a) IS 456-2002 Plain and Reinforced Concrete- Code of Practice**
- b) National Building Code of India 2005 (NBC 2005)**

Design Loading:

Dead load:

- a) Self-weight of framing + concrete slab+ floor finish.**

Live load:

- a) Live load 300kg/sq**

Wind & Seismic loads:

- a) IS 875 part 3, code of practice for design loads (other than earthquake) for buildings and structures**
- b) IS 1893 (Part 1): 2002, criteria for earthquake resistant design of structure .225g governs lateral design**

Other Criteria

- 1) The Building is designed for having a minimum natural frequency of 7 hz.**
- 2) Deflections limits : Maximum tip deflection of 0.05 (12 mm)**

3



Figure 3. Radome assembly above the equator

2



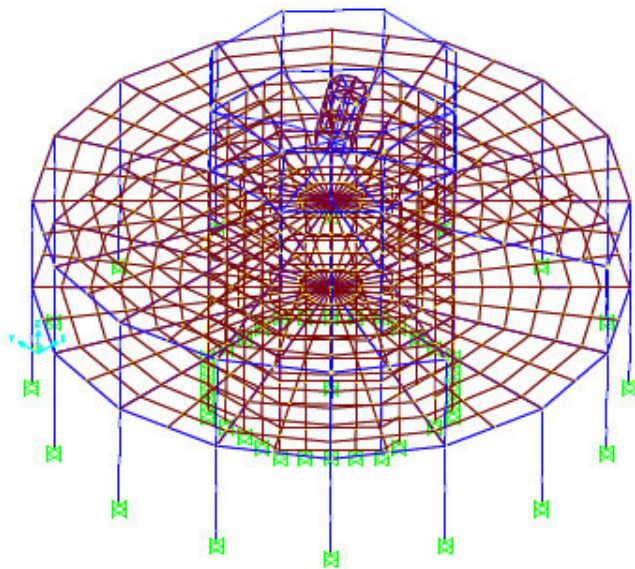
Figure 2. CSIR-NAL's DWR Radome assembly below the equator level

4



Figure 4. View of the fully assembled Radome from a distance

SITE PHOTOS



SAP2000 v8.1.2 - File:mod001 - Deformed Shape (MODAL) - Mode 1 - Period 0.13543 - Kgf, m, C Units

TABLE: Modal Periods And Frequencies						
OutputCase	StepType	StepNum	Period	Frequency	CircFreq	Eigenvalue
Text	Text	Unitless	Sec	Cyc/sec	rad/sec	rad2/sec2
MODAL	Mode	1	0.119	8.417	52.884	2796.738
MODAL	Mode	2	0.118	8.457	53.137	2823.564
MODAL	Mode	3	0.089	11.198	70.361	4950.729
MODAL	Mode	4	0.087	11.452	71.953	5177.185
MODAL	Mode	5	0.087	11.509	72.316	5229.581

THANK YOU