ZSWZ AD 2.1 机场地名代码和名称 Aerodrome location indicator and name

ZSWZ-温州/龙湾 WENZHOU/Longwan

ZSWZ AD 2.2 机场地理位置和管理资料 Aerodrome geographical and administrative data

1	机场基准点坐标及其在机场的位置 ARP coordinates and site at AD	N27° 54.6' E120° 51.2' Center of RWY				
2	方向、距离 Direction and distance from city	123° GEO, 21.9km from Wenzhou branch of ICBC				
3	标高 / 参考气温 Elevation/Reference temperature	5.1m/31.6° C (AUG)				
4	机场标高位置 / 高程异常 AD ELEV PSN/ geoid undulation	RWY center/-				
5	磁差 / 年变率 MAG VAR/Annual change	4° W/-				
6	机场管理部门、地址、电话、传真、 AFS、电子邮箱、网址 AD administration, address, telephone, telefax, AFS, E-mail, website	Wenzhou Airport Group CO. LTD. Nr.1 Airport Street, Wenzhou 325024, Zhejiang province, China TEL: 86-577-96555 FAX: 86-577-86374941 Website: www.wzair.cn				
7	允许飞行种类 Types of traffic permitted(IFR/VFR)	IFR/VFR				
8	机场性质 / 飞行区指标 Military or civil airport & Reference code	Civil/4D				
9	备注 Remarks	Nil				

ZSWZ AD 2.3 工作时间 Operational hours

1	机场当局(机场开放时间) AD Administration (AD operational hours)	H24
2	海关和移民 Customs and immigration	HS or O/R
3	卫生健康部门 Health and sanitation	HS or O/R
4	航行情报服务讲解室 AIS Briefing Office	H24
5	空中交通服务报告室 ATS Reporting Office (ARO)	H24
6	气象讲解室 MET Briefing Office	H24
7	空中交通服务 ATS	H24
8	加油 Fuelling	H24
9	地勤服务 Handling	H24
10	保安 Security	H24
11	除冰 De-icing	Nil
12	备注 Remarks	Nil

ZSWZ AD 2.4 地勤服务和设施 Handling services and facilities

1	货物装卸设施 Cargo-handling facilities	Platform lorry, container, platform collation, towing vehicle, luggage conveyor truck, dolly, forklift			
2	燃油 / 滑油牌号 Fuel/oil types	Nr.3 jet fuel			
3	加油设施 / 能力 Fuelling facilities/capacity	Rufueling truck (35000L/45000L/47000/L) and hydrant cart , 13.3L/s			
4	除冰设施 De-icing facilities	Nil			
5	过站航空器机库 Hangar space for visiting aircraft	Nil			
6	过站航空器的维修设施 Repair facilities for visiting aircraft	Line maintenance: for A319/320/321, B737-300/400/500/600/700/800			
7	备注 Remarks	AC/DC power supply unit, AC power supply unit, double-pipeline air supply unit, aircraft towing vehicle			

ZSWZ AD 2.5 旅客设施 Passenger facilities

1	宾馆 Hotels	At AD
2	餐馆 Restaurants	At AD
3	交通工具 Transportation	Taxis, airport shuttle bus
4	医疗设施 Medical facilities	First-aid equipment at AD(4 ambulances on duty), comprehensive hospital adjacent to AD
5	银行和邮局 Bank and Post Office	At AD/ Nil
6	旅行社 Tourist Office	Nil
7	备注 Remarks	Nil

ZSWZ AD 2.6 援救与消防服务 Rescue and fire fighting services

1	机场消防等级 AD category for fire fighting	CAT 8		
2	援救设备 Rescue equipment	Fire fighting facilities: main rapid foam truck, main foam truck, heavy foam truck, dry-chemical tender, chemical supply tender, emergency rescue vehicle, lighting illumination truck, command car, ambulance, air cushion, cutter, hydraulic scissor, mobile surface operation devices, hanger, towbar Rescue equipment: ambulance, material supply vehicle, command car, first-aid case, ambulance stretchers, telephone recording, portable respirator, electrocardiograph, medical suction equipment, interphone		
3	搬移受损航空器的能力 Capability for removal of disabled aircraft	Mobile surface operation devices(6m × 17=102m), rescue hangers(for A319/320/321, B737-700/800/900, EMB190), towing rods(for A319/320/321/330/300, B737/747/757/767/777, EMB145/190, MD82/90), towing ropes, secure ropes, twining ropes truck, crosstie, steel.		
4	备注 Remarks	Nil		

ZSWZ AD 2.7 可用季节 - 扫雪 Seasonal availability-clearing

1	扫雪设备类型 Types of clearing equipment	Besom, shovel, snow fluid truck
2	扫雪顺序 Clearance priorities	Nil
3	备注 Remarks	Nil

ZSWZ AD 2.8 停机坪、滑行道及校正位置数据 Aprons, taxiways and check locations data

	停机坪道面和强度	Surface:	Stands Y3. Y4: Asphalt; Others: Cement concrete		
1 特別坪道面和强度 Apron surface and strength		Strength:	PCN 104/F/B/W/T (stands Nr. Y3, Y4) PCN 78/R/B/W/T (south of C6, stands Nr. Y1, Y2) PCN 52/R/B/W/T (north of C6)		
		Width:	21 m: C7; 23m: B, C6, C8; 28.5m: rapid TWYs of A5-A7(The interception angle with RCL is 28°) 31m: A2, A8;39m:A4(connect TWY B and RWY), gate way of A5-A7(The interception angle with RCL is 90°); 60m: C5, C4, C3, A4(connect TWY B and apron), C2		
2	滑行道宽度、道面和强度 Taxiway width, surface and strength	Surface:	Cement concrete: TWY A2, B(BTN A2 & A4), C7,N of center line of TWY C6, C4, C3, A4(connect TWY B and apron), C2 Asphalt: TWY A4(connect TWY B and RWY),A5-A8, B(BTN A4 & A8),C5, S of center line of TWY C6,C6, C8(22.5-80m W of center line of TWY B)		
		Strength:	PCN 118/F/B/W/T: TWY C6&C8(asphalt part) PCN 104/F/B/X/T: TWY A4(connect TWY B and RWY),A5-A8 PCN 104/F/B/W/T: TWY B(BTN A4 & A8),C5 PCN 78/R/B/X/T: TWY A2 PCN 78/R/B/W/T: TWY B(BTN A2 & A4), C4, C3, A4(connect TWY B and apron), C2 PCN 52/R/B/W/T: TWY C7, TWY C6&C8(concrete part)		
3	高度表校正点的位置及其标高 ACL location and elevation	Nil			
4	VOR/INS 校正点 VOR/INS checkpoints	Nil			
5	备注 Remarks	Taxiway shoulder: 10.5m(B.C2. C3. C4 . C5. C8. A2. A4. A5. A6. A7. A8); 8.5m(C7); 7.5m(C6)			

ZSWZ AD 2.9 地面活动引导和管制系统与标识

Surface movement guidance and control system and markings

1	航空器机位号码标记牌、滑行道引导线、航空器目视停靠/停放位置引导系统的使用 Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands	Taxiing guidance signs at all TWYs. Aircraft stand identification sign board at apron. Guide lines at all aprons. Viisual docking guidance system at stands Nr.204-224, instructions refer AD2.24-2A, 2B, 2C, 2D, 2E. Marshalling assistant for other stands.				
	跑道和滑行道标志及灯光 RWY and TWY marking and LGT	RWY markings	RWY designation, TDZ, THR, center line, edge line, aiming point			
		RWY lights	Center line, edge line, THR, RWY end			
2		TWY markings	Center line, edge line, RWY holding positions, intermediate holding positions, 'NO ENTRY' sign, TWY shoulder			
		TWY lights	Edge line, RWY guard lights, center line			
3	停止排灯 Stop bars	Located in TWY A5, TWY A6 and TWY A7, near TWY B.				
4	备注 Remarks	Blue apron edge line lights,apron lighting, sign board for RWY intersection				

ZSWZ AD 2.10 机场障碍物 Aerodrome obstacles

Obstacles v	Obstacles within a circle with a radius of 15km centered on the RWY center						
序号 Serial Nr.	障碍物类型 (* 代表有灯光) Obstacle type (*Lighted)	磁方位 BRG (MAG)(degree)	距离 DIST(m)	海拔高度 Elevation(m)	影响的飞行程序及起飞航径区 Flight procedure/take-off flight path area affected		
1	*Lighting rod	032	2600	17.7			
2	TWR	033	14495	151.5			
3	TWR	037	13432	185.2	RWY03/Take-off path		
4	Antenna	038	1292	20.1	RWY21/ILS/DME final approach		
5	TWR	038	13773	216.2	RWY03/Departure,missed approach RWY21/GP INOP, VOR/DME final approach		
6	TWR	038	13914	204			
7	MT	038	13799	200	RWY03/Take-off path		
8	Antenna	207	1291	20.1	RWY03/ ILS/DME final approach		
9	MT	236	10823	405	RWY03/GP INOP, VOR/DME final approach		

序号 Serial Nr.	障碍物类型 (* 代表有灯光) Obstacle type (*Lighted)	磁方位 BRG (MAG)(degree)	距离 DIST(m)	海拔高度 Elevation(m)	影响的飞行程序及起飞航径区 Flight procedure/take-off flight path area affected
10	MT	236	10902	405	
11	TWR	252	11426	592.1	RWY03/Initial approach
12	Antenna	266	10197	711.1	
13	MT	266	7228	430	
14	MT	267	11174	707	RWY21/Holding, arrival, missed approach
15	TWR	271	7900	458	RWY03/ Arrival
16	Antenna	273	5839	263.5	
17	Antenna	281	7747	393.6	
18	MT	285	7341	316	
19	*TWR	298	704	67	
20	MT	306	9846	218	
21	*TWR	316	929	39.7	RWY03/21/GP INOP, VOR/ DME final approach
22	*TWR	317	10023	217	
23	*TWR	318	9965	188	
24	*TWR	324	10587	183.6	
25	*TWR	324	10710	191	
26	Antenna	326	5061	307.6	
27	*TWR	327	795	32.1	
28	Antenna	327	6117	291	
29	*TWR	329	10893	184	
30	*TWR	329	11043	191	
31	*TWR	336	11159	184.2	
32	*TWR	336	11387	187	
33	Antenna	342	11481	327.9	
34	*Chimney	354	9717	214.7	
35	*Chimney	355	9781	244.8	
36	*Chimney	356	9840	245.1	

序号 Serial Nr.	障碍物类型 (* 代表有灯光) Obstacle type (*Lighted)	磁方位 BRG (MAG)(degree)	距离 DIST(m)	海拔高度 Elevation(m)	影响的飞行程序及起飞航径区 Flight procedure/take-off flight path area affected
37	*Chimney	356	9840	245.1	

Obstacles between two circles with the radius of 15km and 50km centered on the RWY center						
序号 Serial Nr.	障碍物类型 (* 代表有灯光) Obstacle type (*Lighted)	磁方位 BRG (MAG)(degree)	距离 DIST(m)	海拔高度 Elevation(m)	影响的飞行程序及起飞航径区 Flight procedure/take-off flight path area affected	
1	MT	004	28216	785.8	RWY21/Initial approach RWY21/RNP arrival	
2	MT	010	44471	997		
3	MT	014	30462	765		
4	MT	017	25654	754	RWY21/Initial approach	
5	MT	020	19947	451	RWY21/ILS/DME, VOR/DME intermediate approach	
6	MT	022	29675	630	RWY21/Initial approach	
7	MT	023	42937	716		
8	MT	028	16410	235		
9	MT	058	42747	357		
10	MT	080	26278	391	Sector RWY03/Holding RWY21/Holding, arrival	
11	MT	109	19133	331	RWY03/21/Holding, arrival	
12	MT	162	30242	203	RWY03/21/Arrival	
13	MT	221	37041	657	RWY03/21/Arrival	
14	TWR	228	27032	167	RWY03/Initial approach, intermediate approach	
15	MT	243	40486	630	RWY03/Arrival	

序号 Serial Nr.	障碍物类型 (* 代表有灯光) Obstacle type (*Lighted)	磁方位 BRG (MAG)(degree)	距离 DIST(m)	海拔高度 Elevation(m)	影响的飞行程序及起飞航径区 Flight procedure/take-off flight path area affected
16	MT	249	47332	748	Sector RWY03/Arrival RWY21/Holding, arrival
17	MT	260	23905	537	RWY03/Arrival
18	MT	265	49962	1026	RWY03/ Holding, arrival RWY21/Arrival
19	MT	275	34546	935	RWY21/Arrival
20	MT	280	23481	694	RWY03/Arrival
21	MT	290	41567	750	
22	*BLDG	302	18761	168	
23	*BLDG	305	21808	333.4	
24	*BLDG	308	21802	156	
25	*BLDG	311	21220	153.2	
26	*BLDG	312	21091	153.2	
27	MT	317	30552	600	
28	MT	330	42616	1027	RWY21/Arrival, initial approach
29	MT	343	49758	1054	Sector RWY03/21/Arrival
30	MT	348	25768	810	RWY03/ Holding, arrival RWY21/Initial approach
31	MT	359	17778	502	RWY03/Departure

ZSWZ AD 2.11 提供的气象信息、机场观测与报告

Meteorological information provided & aerodrome observations and reports

ext
WOS

ZSWZ AD 2.12 跑道物理特征 Runway physical characteristics

跑道号码 Designation s RWY NR	真方位和磁方 位 TRUE & MAG BRG	跑道长宽 Dimensions of RWY (m)	跑道强度 (PCN), 跑道 道面 / 停止道道面 RWY strength (PCN), RWY surface/SWY surface	着陆入口坐标及 高程异常 THR coordinates and geoid undulation	跑道着陆入口标高 ,精密进近跑道接 地地带最高标高 THR elevation and highest elevation of TDZ of precision APP RWY
1	2	3	4	5	6
03	028.22° GEO 032° MAG	3200 × 45	78/R/B/X/T Concrete/	Nil	THR 5.1m TDZ 5.1m
21	208.22° GEO 212° MAG	3200 × 45	78/R/B/X/T Concrete/	Nil	THR 5.1m TDZ 5.1m
跑道 - 停止 道坡度 Slope of RWY-SWY	停止道长宽 SWY dimensions (m)	净空道长宽 CWY dimensions (m)	升降带长宽 Strip dimensions (m)	无障碍物地带 OFZ	跑道端安全区长宽 RWY end safety area dimensions (m)
7	8	9	10	11	12
0%	Nil	Nil	3320 × 300	Nil	240 × 140m
0%	Nil	Nil	3320 × 300	Nil	240 × 140m

Remarks: Runway shoulder 7.5m; 60 × 60m anti-blast pad (concrete) on the both ends of RWY.

ZSWZ AD 2.13 公布距离 Declared distances

跑道代号 RWY Designator	可用起飞滑跑 距离 TORA (m)	可用起飞距离 TODA (m)	可用加速停止距离 ASDA (m)	可用着陆距离 LDA (m)	备注 Remarks
03/21	3200	3200	3200	3200	Nil
03	2400	2400	2400	3200	FM A4(conduct after ATC clearance)
Remarks:					

ZSWZ AD 2.14 进近和跑道灯光 Approach and runway lighting

跑道 代号 RWY Desig nator	进近灯 类型、 长度 APCH LGT type LEN INTST	入口灯 颜色、 翼排灯 THR LGT colour WBAR	目视进近坡 度指示系 (跑眼 近 (), 就	接地地带 灯长度 TDZ LGT LEN	跑道中心线灯 长度、间隔、 颜色、强度 RWY Center line LGT LEN, spacing, colour, INTST	跑道边灯长 度、间隔、颜 色、强度 RWY edge LGT LEN, spacing, colour, INTST	跑道末端 灯颜色 RWY end LGT colour	停止道灯 长度、颜 色 SWY LGT LEN, colour
1	2	3	4	5	6	7	8	9
03	CAT I* 900m LIH	Green Yes	PAPI Left/3°	Nil	3200m** spacing 15m	3200m*** spacing 60m	Red	Nil
21	CAT I* 900m LIH	Green Yes	PAPI Left/3°	Nil	3200m** spacing 15m	3200m*** spacing 60m	Red	Nil

Remarks: * SFL

ZSWZ AD 2.15 其它灯光, 备份电源 Other lighting, secondary power supply

1	机场灯标 / 识别灯标位置、特性和工作时间 ABN/IBN location, characteristics and hours of operation	Nil
2	着陆方向指示器位置和灯光; 风速表位置和灯光 LDI location and LGT, Anemometer location and LGT	Nil
3	滑行道边灯和中心线灯光 TWY edge and center line lighting	Blue TWY edge lights, green TWY center line lights(except for C6, C8)
4	备份电源 / 转换时间 Secondary power supply/switch-over time	Dual feed, diesel engine driven generator/<15 sec
5	备注 Remarks	Nil

^{**0-2300}m White VRB LIH, 2300-2900m Red/White VRB LIH, 2900m-3200m Red VRB LIH

^{*** 0-2600}m White VRB LIH, 2600-3200m Yellow VRB LIH

ZSWZ AD 2.16 直升机着陆区域 Helicopter landing area

1	TLOF 坐标或 FATO 入口坐标及高程异常 Coordinates TLOF or THR of FATO Geoid undulation	Nil
2	TLOF 和 / 或 FATO 标高 (m) TLOF and/or FATO elevation (m)	Nil
3	TLOF 和 FATO 区域范围、道面、强度 和标志 TLOF and FATO area dimensions,surface, strength, marking	Nil
4	FATO 的真方位和磁方位 True and MAG BRG of FATO	Nil
5	公布距离 Declared distance available	Nil
6	进近灯光和 FATO 灯光 APP and FATO lighting	Nil
7	备注 Remarks	Nil

ZSWZ AD 2.17 空中交通服务空域 ATS airspace

名称 Designation	横向界限 Lateral limits	垂直界限 Vertical limits	备注 Remarks
Wenzhou Tower	A circuit, 2 arcs with radius 13km centered at centers of both RWY THRs and 2 parallel lines of 13km form RWY centerlines.	SFC-600m (QNH)	
Fuel Dumping Area	N2740E12045- N2740E12100- N2730E12100- N2730E12045	Above 3000m	
Altimeter setting region and TL/TA	A circle with a radius of 25km centered on Wenzhou VOR/DME(WNZ).	TL 3600m TA 3000m 3300m(QNH > 1031hPa) 2700m(QNH \le 979hPa)	

ZSWZ AD 2.18 空中交通服务通信设施 ATS communication facilities

服务名称 Service Designation	呼号 Call sign	频率 Frequency (MHz)	工作时间 Hours of operation	备注 Remarks
1	2	3	4	5
ATIS		127.05	H24	D-ATIS available
APP	Wenzhou Approach	119.625 (132.15) AP01	H24	Nil
APP	Wenzhou Approach	120.25 (132.15) AP02	BY ATC	Nil

服务名称 Service Designation	呼号 Call sign	频率 Frequency (MHz)	工作时间 Hours of operation	备注 Remarks
APP	Wenzhou Approach	127.975 (132.15) AP03	BY ATC	Contact ZSWZAP01 when ZSWZAP03 U/S.
TWR	Wenzhou Tower	118.875(118.2)	H24	DCL available
GND	Wenzhou Ground	121.85	0030-1300	Nil
EMG		121.5	H24	Nil

ZSWZ AD 2.19 无线电导航和着陆设施 Radio navigation and landing aids

设施名称和类型 Name and type of aid	识别 ID	频率 Frequency	发射天线位置、 坐标 Antenna site coordinates	DME 发射天线 标高 Elevation of DME transmitting antenna	备注 Remarks
1	2	3	4	5	6
Dongshan VOR/DME	DST	109.2MHz CH 29X	N27° 45.0′ E120° 37.8′	39m	VOR/DME: R021° - R041° clockwise U/S. DME: Beyond 21NM of R032° U/S
Wenzhou VOR/DME	WNZ	116.4MHz CH 111X	N27° 55.8′ E120° 51.8′ 1000m FM northern end of RWY, extended RCL	16m	
LOC 03 ILS CAT I	IKN	110.3MHz	032° MAG/ 310m FM RWY 03 end		
GP 03		335.0MHz	120m E of RCL 315m inward THR RWY 03		Angle 3° RDH15m
DME 03	IKN	CH 40X (110.3MHz)		12m	Co-located with GP
LOC 21 ILS CAT I	IWZ	108.7MHz	212° MAG/ 310m FM RWY 21 end		
GP 21		330.5MHz	120m E of RCL 315m inward THR RWY 21		Angle 3° RDH15m
DME 21	IWZ	CH 24X (108.7MHz)		12m	Co-located with GP
Remarks:			ı	1	1

ZSWZ AD 2.20 本场飞行规定

ZSWZ AD 2.20 Local traffic regulations

1. 机场使用规定

所有技术试飞需事先申请,并在得到空中交通管 制部门批准后方可进行。

1. Airport operations regulations

2. Use of runways and taxiways

Each and every technical test flight shall be filed in advance and conducted only after clearance has been obtained from ATC.

2. 跑道和滑行道的使用

2.1 跑道, 滑行道使用限制/TWYs limits:

跑道,滑行道/RWY,TWYs	航空器翼展限制 / Wing span limits for aircraft	机身长度限制 / Fuselage limits	主起落架外轮外侧间距 / Outer main gear wheel span
RWY,TWY (except TWYs C6,C8)	<65m	<76m	<14m
TWY C6	<52m	<62m	<14m
TWY C8	≤ 60.3m	<63.7m	<14m

2.2 跑道等待位置

- 2.2.1 航空器在进入跑道前必须在指定的跑道等待位置处等待管制员的指令。
- 2.2.2 航空器未获得管制员许可, 机头越过跑道等 待位置时, 应立即向管制员报告。
- 2.3 塔台根据跑道实际运行情况,将安排航空器在 A4滑行道与跑道交叉口使用非全跑道起飞,如航 空器驾驶员不能接受非全跑道起飞,请立即告知 管制员

2.4 跑道运行规则

- 2.4.1 起飞航空器从接到管制员进跑道指令到对 正跑道时间应控制在 60s 以内。如机组认为无法 在上述要求的时间内完成,须在到达跑道外等待 点之前向塔台管制员说明(湿跑道或污染跑道除 外)。
- 2.4.2 落地航空器应尽快退出跑道,从接地到滑出 跑道时间应控制在 50s 以内。如机组认为无法在 上述要求的时间内完成,须在建立航向道前通知 进近管制员。

2.2 Runway-holding position

- 2.2.1 Aircraft shall stop and wait for the instruction of TWR at the relative runway holding positions.
- 2.2.2 Aircraft shall report to TWR when the nose of aircraft exceeds holding position without instruction.
- 2.3 ATC would(shall) arrange non full-length taking-off procedures for aircraft at the intersection of A4 and RWY in accordance with the RWY actual operation situation. If aircraft can not accept non full-length taking-off procedures, inform ATC immediately.

2.4 General rules for using runways

- 2.4.1 Departure aircraft shall finish RWY alignment within 60s from holding position. If flight crew can not fulfill, pilot shall inform TWR before entering the RWY(except for wet or contaminated RWY).
- 2.4.2 All landing aircraft shall fully vacate RWY within 50s after touchdown. If flight crew can not fulfill, pilot shall inform APP controller before localizer is established.

- 2.4.3 落地航空器应尽快脱离跑道, 脱离跑道后应 及时向塔台管制员报告已脱离跑道和脱离所使 用的滑行道。
- 2.4.4 在转换跑道方向过程中,短时使用跑道顺风分量超过3.5m/s,但不大于5m/s时,管制员将该信息通知相关航空器的驾驶员。航空器驾驶员应该根据机型性能或者运行手册,决定是否使用管制员安排的顺风跑道起飞或者着陆,并将决定告知管制员。
- 2.5 航空器途经以下区域,需注意如下事项:
- 2.5.1 使用 03 号跑道落地的航空器从 A6 快滑脱离 跑道应特别注意 C7 滑行道关闭, 航空器脱离跑道 后应在 B 滑行道前等待进一步的滑行指令。
- 2.5.2 A4滑行道贯穿机坪、B滑和跑道,滑行时应 当注意观察道口和标识牌,避免连续滑行误入跑 道,造成跑道入侵。
- 2.6 对机组的要求:
- 2.6.1 听清并重复管制员的滑行指令,尤其界限性指令,发现疑问及时向管制员证实。
- 2.6.2 当机组误操作滑错方向或者路线时,应立即停止滑行并向管制员报告。
- 2.6.3 当航空器在起飞或者着陆后,航空器驾驶员发现本航空器部件可能损坏,怀疑影响跑道运行时,应立即通知管制员。

- 2.4.3 Landing aircraft shall vacate RWY as soon as possible. Pilot should report to TWR the chosen vacating taxiway and 'runway vacated' after vacated.
- 2.4.4 During changing the direction of RWY in use, if downwind speed exceeds 3.5m/s and below 5m/s, ATC may instruct aircraft downwind take-off or downwind landing for a short time. Pilot shall inform controller if decide not to take-off or landing on downwind RWY allocated according to aircraft performance or operation handbook.
- 2.5 Please be caution when passing areas below:
- 2.5.1 Landing aircraft using RWY 03 and TWY A6 should notice that C7 is closed, waiting on B after vacated until receiving further taxi instruction.
- 2.5.2 TWY A4 links across the apron, TWY B and runway. Taxi with caution about the intersection and mark in order to prevent runway incursion from happening.
- 2.6 Requirement for the crews:
- 2.6.1 Listen carefully and readback the ATC's taxi instruction, especially the limitation instruction. Confirm to ATC without delay if you have any doubt.
- 2.6.2 When taking wrong direction or route due to misoperation occurs, stop taxi immediately and report to ATC.
- 2.6.3 Inform ATC immediately if any debris from aircraft may affect the safety operation for runway concerned by pilot during taking-off or landing.

3. 机坪和机位的使用

3. Use of aprons and parking stands

3.1 机位限制 /Limits for aircraft parking on the following stands:

停机位 /Stands	航空器翼展限制 / Wing span limits for aircraft	机身长度限制/ Fuselage limits	滑入滑出方式 / Enter and exit by	不能同时使用的机位 / Stands can not be used simultaneous
Nr. 1	≤ 36.00m	≤ 44.50m	taxi in and push back	
Nr. 2-9	≤ 47.57m	≤ 54.94m	taxi in and push back	
Nr. 10	≤ 47.57m	≤ 48.51m	taxi in and push back	
Nr. 11, 12	≤ 36.00m	≤ 46.50m	taxi in and push back	

Nr. 14-22, 24, 25	≤ 36.00m	≤ 44.00m	taxi in and out by itself	
Nr. 13, 23	≤ 23.25m	≤ 36.24m	taxi in and out by itself	
Nr.23A	≤ 60.3m	≤ 63.7m	Aircraft A330-200/300 taxi in via TWY B offset curve to TWY C8 by itself; taxi out via TWY C8 to TWY B.	Stand Nr.23-25 & TWYs by the east
Y1-Y4	≤ 47.57m	≤ 54.94m	taxi in and out by itself	
201-206,224- 227, 209, 211- 218, 220	≤ 36m	≤ 45m	taxi in and push back	
207,208,219、 221、223	≤ 48m	≤ 55.5m	taxi in and push back	
210、222、230、 231、 207A、208A	≤ 65m	≤ 76m	taxi in and push back	
228、229	≤ 52m	≤ 62m	taxi in and push back	

3.2 滑行线限制 /Taxiing lanes limits:

滑行线 /Taxi lane	航空器翼展限制 / Wing span limits for aircraft	主起落架外轮外侧间距 / Outer main gear wheel span
TWY L1, L3-L5, C3(W of TWY C),C4(W of TWY C)	<36m	<9m
TWY L2(S of TWY C6), C3(E of TWY C), C4(E of TWY C), C2, C5, C, A4	<65m	<14m
TWY L2(N of TWY C6), C8(W of TWY L1),C6	<52m	<14m
C8(E of TWY L1)	≤ 60.3m	<14m

3.3 Y1-Y4机位使用

3.3 Limits for stands Nr.Y1-Y4

3.3.1 Y1-Y4为用于备降的临时机位, 停放B767和 3.3.1 Nr.Y1-Y4 are temporary stands for alternate. A300及以下机型;

Maximum aircraft for stands Nr.Y1-Y4 are B767 and A300.

3.3.2 Y1-Y4滑行路线

3.3.2 Stands Nr.Y1-Y4 taxiing route

STAND NUMBER	TAXI IN APRON
Y1/Y2	TWY A2 (nose to North)
Y3/Y4	TWY A8 (nose to South)

Remarks: 1.Embark/disembark passengers and maintenance service is forbidden on stands Nr.Y1-Y4.

2. Occupying emergency passageway is forbidden when stand Nr. Y3 is in use.

3.4 滑行路线 / Taxiing route

RWY IN USE	TAXI IN APRON	TAXI OUT APRON
RWY03	TWYC8	TWYC6
RWY21	TWYC6	TWYC8

Note:

- 1. Arrival aircraft shall be guided by follow-me vehicle into apron; departure aircraft shall apply for follow-me vehicle from ATC.
- 2. Actual taxiing route shall follow ATC constructions.
- 3.5 发动机试车,需经机场运行管理部指挥中心和塔台管制许可,并在指定的地点进行。严禁在廊桥附近和客机坪试大车。
- 3.6 相邻机位禁止两架航空器同时运行。
- 3.7 进离场航空器在机坪运行发生冲突时,原则 上,离场航空器的滑行具有优先权。
- 3.8 成功完成 DCL 服务的机组仍需向管制员复诵 跑道代号和起始爬升高度信息,复诵频率为 DCL 报文中 "NEXT FREQUENCY"所示频率。
- 3.9 14、24、231号机位为隔离机位。
- 3.10 为降低碳排放及噪音,所有停靠廊桥机位的 航空器建议关闭 APU,使用 400Hz桥载电源及飞 机专用空调设备。以下特殊情况除外:
- 3.10.1 桥载设备发生故障,不能提供服务;
- 3.10.2 航空器因启动发动机而需开启APU;
- 3.10.3 航空器进行APU的维修检测活动;
- 3.10.4 遇到影响航班安全、正常运行的特殊情形,例如极端天气、专机保障、航班过站时间不足等有关情况。
- 3.11 温州机场航站楼桥载设备具体参数

- 3.5 Engine run-ups are subject to AOC and ATC clearance, and shall be carried out at a designated location. Fast engine run-ups in the vicinity of boarding bridges or on apron are strictly forbidden.
- 3.6 On adjacent parking stands, two ACFT forbidden to move simutaneously.
- 3.7 When there is a conflict between departure aircraft and arrival aircraft at the apron, the taxiing of the departure aircraft has priority in principle.
- 3.8 Pilot shall repeat the runway designator and initial climb altitude after finish DCL, the repeating frequency is the frequency of "NEXT FREQUENCY" shown in the DCL message.
- 3.9 Isolated stands: Nr.14, 24, 231.
- 3.10 All aircrafts parking on boarding bridge stands should turn off APU and use bridge equipment (400Hz) and special air conditioning. Except for the following circumstances:
- 3.10.1 Bridge equipment is unavailable;
- 3.10.2 Aircraft needs APU to start up engine;
- 3.10.3 APU is under maintenance;
- 3.10.4 In case of exceptional circumstances influencing the operation safety, such as extreme weather, special plane support, insufficient flight transition time.
- 3.11 The 400Hz ground power and ground air conditioner see the table below:

机位 /Stands	400Hz 电源功率 / 400Hz power supply(KVA)	400Hz 电源台 数 /Number of 400Hz power	航空器地面空调功率 / Aircraft ground air- conditioner power(KVA)	航空器地面空调台数/Number of ground air-conditioners
1	90	1	116	1
2-8	90	1	174	1
2 0 4 - 2 0 6 2 0 9 2 1 1 - 218 220 224	90	1	117	1
2 0 7 、 2 0 8 、 219、221、223	90	1	161	1
210、222	90	2	117	1
210\ 222		2	161	1

4. 进、离场管制规定

- 4.1 进、离场管制规定
- 4.1.1 进场管制规定

着陆航空器脱离跑道后及时向塔台管制员报告 已脱离跑道和脱离所使用的滑行道。

- 4.2 离场管制规定
- 4.2.1 航空器取得塔台许可后方可推出开车,并在 5分钟之内执行,否则机组需重新申请。
- 4.2.2 在得到滑行许可时, 航空器应向管制员复诵分配的二次应答机编码并开启二次应答机。
- 4.2.3 航空器起飞后首次联系进近时, 机组应向管制员通报离场方式。

5. 机场的 II/III 类运行

无

6. 除冰规则

无

7. 平行跑道同时仪表运行

无

8. 警告

4. Air traffic control regulations

- 4.1 Air traffic control regulations for arrival aircraft
- 4.1.1 Landing aircraft must report 'Have vacated RWY'and the taxiway used to TWR after vacating RWY.
- 4.2 Air traffic control regulations for departure aircraft
- 4.2.1 Aircraft shall contact TWR for push-back and start-up clearance and conduct within 5mins, otherwise, apply for the clearance again.
- 4.2.2 pi1ot shall verify and set the designated SSR when cleared for taxiing.
- 4.2.3 Departure aircraft shall report the designated SID or visual departure upon initial contact with APP.

5. CAT II/III operations at AD

Nil

6. Rules for deicing

Nil

7. Simultaneous operations on parallel runways

Nil

8. Warning

无

Nil

9. 直升机飞行限制, 直升机停靠区

无

9. Helicopter operation restrictions and helicopter parking/docking area

Nil

ZSWZ AD 2.21 噪音限制规定及减噪程序

ZSWZ AD 2.21 Noise restrictions and Noise abatement procedures

无

Nil

ZSWZ AD 2.22 飞行程序

ZSWZ AD 2.22 Flight procedures

1. 总则

- 1.1 除经温州进近或塔台特殊许可外,在温州进近管制区和塔台管制区内的飞行,必须按照仪表飞行规则进行。
- 1.2 本场 PBN 飞行程序为主用的进场和离场飞行程序,传统程序为备用程序;RNAV ILS/DME飞行程序为主用的进近程序,传统程序为备用程序。
- 1.3本场PBN进、离场飞行程序需具备RNP1运行 资格,凡不符合本场PBN飞行程序运行要求的航 空器,需在首次联系时告知管制员。
- 1,4温州进近实施雷达管制时,凡具备RNAV1运行 资格的航空器,在得到管制员许可后可以沿本场 PBN进、离场飞行程序飞行。
- 1.5 管制部门将通过 ATIS 告知本场正在使用的进 近程序。

1. General

- 1.1 Flights within Wenzhou Approach Control Area and Tower Control Area shall operate under IFR unless special clearance has been obtained from Approach or Tower.
- 1.2 PBN flight procedures are primary and conventional procedures are secondary procedures. RNAV ILS/DME approach procedures are primary, the conventional procedures are secondary procedures.
- 1.3 Aircraft should have the qualifications of operating RNP1 when conducting arrival and departure flight procedures, if unable, pilot shall inform the controller at the first contact.
- 1.4 Under APP radar control, aircraft that have the qualifications of operating RNAV1 could follow arrival/departure PBN flight procedures according to ATC's instructions.
- 1.5 ATC will inform the aircraft about the approach procedure in use via ATIS.

2. 起落航线

起落航线在跑道东侧, A, B类航空器高度300米, C、D类航空器高度400米。

2. Traffic circuits

Traffic circuits shall be made to the east of runway, at the altitude of 300m for aircraft CAT A/B, and 400m for aircraft CAT C/D.

3. 仪表飞行程序

3. IFR flight procedures

- 3.1 温州进近管制区范围内有飞行在各类高度上的航空器, 航空器飞行时应严格按照管制员的指令上升或下降。
- 3.2 未得到管制员的等待指令, 航空器无需进入进、离场飞行程序中的等待程序。
- 3.3 根据空中交通情况,管制员可以指挥航空器在 指定的航路、导航台或定位点上空等待或做机动 飞行。

4. Radar procedures and/or ADS-B procedures

instructions and within designated area,

procedure if it's not designated by ATC.

by ATC.

Radar control within Wenzhou APP has been implemented. The minimum horizontal radar separation is 6km.

3.1 Ascent/descent of aircraft within Approach Control Area

shall be conducted in strict compliance with controller's

3.2 Aircraft would not be necessary to join the holding

3.3 Aircraft may, according to air traffic, hold or maneuver

on an airway, over a navigation facility or a fix designated

4. 雷达程序和 / 或 ADS-B 程序

温州进近管制区域内实施雷达管制。航空器最小水平间隔为6千米。

5. 无线电通信失效程序

- 5.1 航空器到达温州进近区域后,下降到 2400 米 (QNH) 向 DST台归航。加入等待程序,等待10 分钟。机组根据机场通播情况或者自行决定使用 03/21号跑道,按相应的仪表进近程序进行着陆。
- 5.2 已经进入进近的航空器继续进近着陆。

5. Radio communication failure procedures

- 5.1 When an airborne communication equipment failure is confirmed, descend to 2400m(QNH) flying to Dongshan 'DST' to join the holding procedure, hold 10 minutes following the standard holding procedure, then land to RWY03 or RWY21 according to the standard IAP.
- 5.2 Aircraft in the initial approach happen to communication failure continue landing according to the standard IAP.

6. 目视飞行程序

- 6.1 目视飞行可直接进、离本场。
- 6.2 目视盘旋只准在机场东侧进行。

6. Procedures for VFR flights

- 6.1 Use visual approach to arrival and depart airport directly.
- 6.2 Visual circle holding only conducting to the east side of airport.

7. 目视飞行航线

无

7. VFR route

Nil

8. 目视参考点

无,

8. Visual reference point

Nil

9. 其它规定

9. Other regulations

- 9. 直升机飞行限制, 直升机停靠区
- 9.1 直升机在本场起降时需按照目视飞行规则实施,如实施仪表飞行规则须事先获得管制员许可。
- 9.2 目视气象条件下,管制员目视直升机和相关 航空器、直升机目视相关航空器或者直升机与相 关航空器之间均能保持目视,可以采用目视间 隔
- 9.3 离场直升机在B滑与机库(或各道口)交叉口,向北(或向南)起飞,保持目视左转(或右转)。向西离场的直升机飞Y点(龙湾区政府,N275620 E1204800)上升到修正海压高度450m,到达Y点后直飞七都岛(N275900 E1204700)后沿瓯江飞行;向东离场的直升机飞 Z 点(N275310 E1205427)上升到修正海压高度300m,到达Z点后直飞作业区或航路。
- 9.4 西面进场直升机由市区沿瓯江飞七都岛,而后直飞Y点保持目视下降到修正海压高度450m,到达Y点后直飞W点(龙湾博物馆,N275534 E1204951)保持目视下降自行掌握,在接到进一步管制指令前在W点以西等待,待管制员发出进一步指令且目视相关航空器无影响后直飞B滑与机库(或各道口)交叉口的落地点。东面进场直升机直飞Z点下降到修正海压高度300m,到达Z点后直飞X点(机场东侧高速公路,N275414 E1205250)上空保持目视下降到200m,在接到进一步管制指令前在X点以东等待,待管制员发出进一步指令且目视相关航空器无影响后直飞B滑与机库(或各道口)交叉口的落地点。
- 9.5 直升机在机场起降时,须主动避让其他正在起飞、降落或滑行的航空器。
- 9.6 直升机通过其他进离场航空器的航径前应注意尾流。
- 10. 区域导航飞行程序相关数据

- 9.Helicopter operation restrictions and helicopter parking/docking area
- 9.1 Helicopter departures or lands at local airport according to the visual flight rules. Conducted by instrument flight rules only when permission from ATC is granted.
- 9.2 Under visual meteorological condition, visual separation is available if ATC can keep visual contact with helicopter and relevant aircraft, helicopter can keep visual contact with relevant aircraft or helicopter and relevant aircraft can keep visual contact with each other.
- 9.3 Departure helicopter takes off at intersection of TWY B and hangar (or other taxiway), heading north (south), keeping visual contact and turn left (right). West-outbound helicopter direct to point Y(Longwan Government Building, N275620 E1204800) and climb to 450m on QNH, flies direct to Qidu Island (N275900 E1204700) after passing Y, then along the Ou River. East-outbound helicopter direct to point Z (N275310 E1205427) and climb to 300m on QNH, direct to operation area or route after passing Z.
- 9.4 West-inbound helicopter flies from downtown to Qidu Island along the Ou River, then direct to point Y and descend to 450m on QNH, after passing Y direct to point W (Longwan Museum, N275534 E1204951), and wait at west side of W until further ATC instruction is received. When further instruction is received and relevant aircraft is cleared by visual confirmation, direct and land at the intersection of TWY B and hangar(or other taxiway). East-inbound helicopter direct to Z and descend to 300m on QNH, then direct to point X (the highway on the east side of airport, N275414 E1205250) and descend to 200m, and wait at east side of X until further ATC instruction is received. When further instruction is received and relevant aircraft is cleared by visual confirmation, flies direct and land at the intersection of TWY B and hangar (or other taxiway).
- 9.5 When departs or lands, helicopter must voluntarily avoids other departing, landing or taxing aircraft.
- 9.6 Caution with the wake turbulence when crosses other departing or landing aircraft's path.

10. Data for RNAV flight procedures

Waypoint list

ID	COORDINATES(WGS-84)	ID	COORDINATES(WGS-84)
WZ324	N280000E1195204	WZ507	N273618E1204856
WZ401	N275112E1210730	WZ508	N274104E1205151
WZ402	N275927E1203906	WZ509	N274909E1205646
WZ403	N274842E1202616	WZ602	N280222E1205553
WZ404	N274106E1202947	WZ603	N280603E1205807
WZ405	N273949E1203411	WZ604	N280247E1210457
WZ406	N273948E1210730	WZ605	N275622E1210108
WZ411	N274711E1203900	WZ606	N280854E1205951
WZ421	N281224E1204023	WZ607	N281144E1205348
WZ422	N275741E1204520	BEGMO	N280000E1215000
WZ431	N280516E1204948	BZ	N280606E1193342
WZ501	N274950E1204819	DST	N274500E1203748
WZ503	N274421E1204501	OKATO	N273506E1213436
WZ504	N273935E1204208	REMIM	N285130E1204424
WZ505	N273449E1203916	RUPOX	N270736E1201118
WZ506	N273132E1204604		

Waypoint sequence for RWY 03 arrival

BEG-51F	(IF) BEGMO † 8400 or by ATC	WZ401 ↑ 5500 or by ATC	WZ509 † 1800 or by ATC	WZ508 MAX 380kmH	WZ507
	WZ506	WZ505 ↑ 1800	WZ504 ↑ 1200	WZ503 750	
BZ-51F	(IF) BZ	WZ403 † 2100	DST † 1200 MAX 380kmH	WZ503 750	
LJG-51F	(IF) RUPOX	WZ405 † 1800	DST † 1200 MAX 380kmH	WZ503 750	
LJG-52F (by ATC)	(IF) RUPOX	WZ505 † 1800 MAX 380kmH	WZ504 † 1200	WZ503 750	

OKA-51F	(IF) OKATO † 6300 or by ATC	WZ406 † 5500 or by ATC	WZ508 MAX 380kmH	WZ507	WZ506
	WZ505 ↑ 1800	WZ504 ↑ 1200	WZ503 750		
SHZ-51F	(IF) REMIM	WZ402 1 1800	DST † 1200 MAX 380kmH	WZ503 750	

Waypoint for RWY 03 holding procedure

(HM) DST	1500	Fly over point	099° (inboundangle)	Right turn direction	MAX 400kmH
(HM)WZ508	ALT by ATC	Fly over point	212° (inbound angle)	Left turn direction	MAX 400kmH

Waypoint sequence for RWY 21 arrival

BEG-61F	(IF) BEGMO † 8400 or by ATC	WZ401 ↑ 5500 or by ATC	WZ605 ↓ 1200 MAX 380kmH	WZ604 ↓ 1200	WZ603 950
BZ-61F	(IF) BZ	WZ324	WZ403 ALT by ATC	DST 3000 or by ATC	WZ605 ↓ 1200 MAX 380kmH
	WZ604 ↓ 1200	WZ603 950			
BZ-62F	(IF) BZ	WZ324	WZ403 ALT by ATC	WZ422 † 1800	WZ605 ↓ 1200 MAX 380kmH
	WZ604 ↓ 1200	WZ603 950			
BZ-63F (by ATC)	(IF) BZ	WZ324	WZ403 ALT by ATC	WZ422 † 1800	WZ607 ↑ 1500 MAX 380kmH
(by AIC)	WZ606 ↑ 1200	WZ603 950			
LJG-61F	(IF) RUPOX	DST 3000 or by ATC	WZ605 ↓ 1200 MAX 380kmH	WZ604 ↓ 1200	WZ603 950
LJG-62F (by ATC)	(IF) RUPOX	DST 3000 or by ATC	WZ422 † 1800	WZ607 ↑ 1500 MAX 380kmH	WZ606 † 1200
(by AIC)	WZ603 950				

OKA-61F	(IF) OKATO ↑ 6300 or by ATC	WZ406 ↑ 5500 or by ATC	WZ605 ↓ 1200 MAX 380kmH	WZ604 ↓ 1200	WZ603 950
SHZ-61F	(IF) REMIM	WZ421 ALT by ATC	WZ402 ALT by ATC	WZ422 ↑ 1800	WZ605 ↓ 1200 MAX 380kmH
	WZ604 ↓ 1200	WZ603 950			
SHZ-62F (by ATC)	(IF) REMIM	WZ421 ALT by ATC	WZ607 ↑ 1500 MAX 380kmH	WZ606 ↑ 1200	WZ603 950

Waypoint for RWY 21 holding procedure

(HM) DST	ALT by ATC	Fly over point	065° (inbound angle)	Right turn direction	MAX 400kmH
(HM) 605	ALT by ATC	Fly over point	032° (inbound angle)	Left turn direction	MAX 400kmH

Way point sequence for RWY 03 departure

BEG-51X	(CF) WZ602 032° MAX 350kmH +4%	WZ431 † 900	WZ422	WZ401 ↑ 5500 or by ATC MAX 400kmH	BEGMO † 9000 or by ATC
BEG-52X	(CA) 300(m) 032° MAX 350kmH	(DF) WZ401 † 5500 or by ATC MAX 400kmH Right turn direction	BEGMO † 9000 or by ATC		
BZ-51X	(CA) 300(m) 032°	(DF)WZ501 MAX 350kmH Right turn direction	DST ALT by ATC	WZ324	BZ
BZ-52X	(CF) WZ602 032° MAX 350kmH +4%	WZ431 ↑ 900 MAX 350kmH	DST ALT by ATC	WZ324	BZ
LJG-51X	(CA) 300(m) 032°	(DF) WZ501 MAX 350kmH Right turn direction	DST ALT by ATC	RUPOX	
LJG-52X	(CF) WZ602 032° MAX 350kmH +4%	WZ431 † 900	DST ALT by ATC	RUPOX	

OKA-51X	(CF) WZ602 032° MAX 350kmH	WZ431 † 900	WZ422	WZ406 ↑ 5500 or by ATC MAX 400kmH	OKATO † 6000 or by ATC
OKA-52X	(CA) 300(m) 032° MAX 350kmH +4%	(DF) WZ406 ↑ 5500 or by ATC MAX 400kmH Right turn direction	OKATO † 6000 or by ATC		
SHZ-51X (By ATC)	(CF) WZ602 032° +4%	WZ431 ↑ 900 MAX 350kmH	WZ421 ALT by ATC	REMIM	
SHZ-52X	(CA) 300(m) 032°	(DF) WZ501 MAX 350kmH Right turn direction	WZ402 ALT by ATC	WZ421 † 2100	REMIM
SHZ-53X	(CF) WZ602 032° +4%	WZ431 † 900 MAX 350kmH	WZ422	WZ402 ALT by ATC	WZ421 ↑ 2100
	REMIM				

Waypoint sequence for RWY 21 departure

BEG-61X (By ATC)	(CF) WZ503 212° ↑ 700	WZ411	WZ422	WZ401 ↑ 5500 or by ATC MAX 400kmH	BEGMO † 9000 or by ATC
BEG-62X	(CA) 300(m) 212°	(DF) WZ401 ↑ 5500 or by ATC MAX 400kmH Left turn direction	BEGMO † 9000 or by ATC		
BZ-61X	(CF) WZ503 212° ↑ 700	DST	WZ324	BZ	
LJG-61X	(CF) WZ503 212° ↑ 700	DST	RUPOX		
LJG-62X (By ATC)	(CF) WZ503 212° ↑ 700	WZ505 1 1600	RUPOX		
OKA-61X	(CA) 300(m) 212°	(DF) WZ406 ↑ 5500 or by ATC MAX 400kmH Left turn direction	OKATO † 6000 or by ATC		
OKA-62X (By ATC)	(CF) WZ503 212° ↑ 700	WZ508	WZ406 ↑ 5500 or by ATC MAX 400kmH	OKATO † 6000 or by ATC	

SHZ-61X	(CF) WZ503 212° ↑ 700	WZ411	WZ402 ALT by ATC	WZ421 ↑ 2100 or by ATC	REMIM
Note: The path code is TF except special explanation.					
"CA" : course to an altitude, "CF" : course to a fix, "DF" : Direction to a fix					

ZSWZ AD 2.23 其它资料

ZSWZ AD 2.23 Other information

机场飞行区内有鸟类活动,机场使用驱鸟设备和 Aerodrome Authority resorts to dispersal methods with 人工驱赶。

dispersal equipment or manual works to reduce bird activities.

鸟类活动季节(时间) Time of activity	活动区域、方向 Direction of activity	飞行高度 (m) Flight altitude(m)	鸟群特征 Activity habit
Spring	From south to north	0-500	Medium and small birds/ bevy
Autumn	From north to south	0-500	Medium and small birds/ bevy